

World Forests XIII

Peter K. Aurenhammer

Development Cooperation Policy in Forestry from an Analytical Perspective

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Development Cooperation Policy in Forestry from an Analytical Perspective

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Peter K. Aurenhammer

Development Cooperation Policy in Forestry from an Analytical Perspective

 Springer

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*For
my daughters Anneli and Rosmarie
my wife Helene
and
my parents*

Foreword

This extensive work proves that Peter K. Aurenhammer is digging deep into forest development policy. He discovered both numerous highly relevant theories as well as inspiring cases about forests and people from around the world. The mosaic of theoretical and empirical knowledge has already found important readers. The basis for the study is a project funded by the Austrian Ministry of Forestry. The Ministry expected and Aurenhammer delivered relevant insights into the complex task of bilateral forest aid policy. Furthermore, this study is Aurenhammer's written thesis for his PhD studies at the Chair of Forest and Nature Conservation Policy at the Georg-August-University of Göttingen, Germany. The scientific board was highly pleased by the theoretically sound and empirically rich arguments of the book.

The reader might realize that Aurenhammer's thinking and the book are too complex to be grasped overall and all at once. But each chapter provides information that is valuable in its own right. All of the individual theoretical arguments and empirical proofs are well based and shed light on the political process of forest development policy. Both readers with theoretical interests as well as those interested in forest issues from a practical point of view will discover important information and inspiring thoughts in this book.

Forest and Nature Conservation Policy
at the Georg-August-University of Göttingen

Max Krott

Preface

This book is divided into seven cohesive and self-explanatory chapters (Fig. 1). Hence, the reader can pick out any chapter of interest, without reading previous ones. Chapter 1 (Methodological Approach, Definitions and Selection of Empiricism) and Chap. 7 (Discussion and Conclusions) are of relevancy to the whole book, as the overall research in this book is introduced and conclusions are drawn about it. They provide the ‘cohesion’ for the specific research issues, addressed in Chaps. 2, 3, 4, 5, and 6. A more popular scientific integrity of the book is provided by its preface and résumé. These parts provide the reader with a fast overview on the content and results of this research or discuss results from a more general perspective.

Chapter 1 provides with an overview on the methodological approach and definitions used by this research. It explains the empirical basis, relevant for the whole book. Other relevant theoretical approaches are also discussed.

*Halting deforestation has been key to forest development cooperation for decades and foresters today have some hope, that climate aid could provide new opportunities to tackle this problem. Therefore, in Chap. 2, the initial guiding question taken from practice is: Are ‘foresters’ able to spend forest aid on those countries, most relevant to the halting deforestation? Besides an overview on the causes of deforestation and the inclusion of the issue in donors’ policies, the chapter provides the reader with an extensive analysis on the countries and country types, the aid is disbursed to. Thereby, factors, like ‘human development’, ‘perceived corruption’, ‘civilization’, ‘democracy’ and ‘economic development’, are considered. Also thematic prioritization of forest aid is given attention to. *Political factors*, external and internal to the forest sector, are determined. It is discussed, whether they prevail over *problem pressure*. From an analysis of a decades’ forest aid, conclusions are drawn on how future ‘*climate aid*’ is expected to be distributed and prioritized.*

Chapter 3 focuses on actors’ potential for change (impact potential) in forest aid. The chapter theoretically defines and empirically identifies influential actors in bilateral forest development cooperation, holding competencies in policy and program formulation and financing. It assumes that an actor’s potential for change (in the direction of the program) depends on capacities and willingness. The selection of influential actors and the description of their impact potential in forest

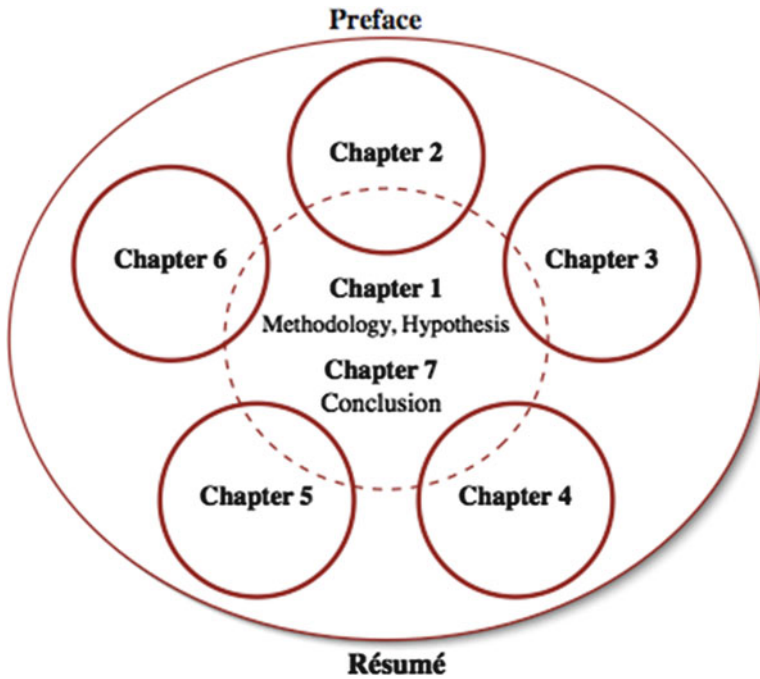


Fig. 1 Structure of the book and reading guide (Source: Own figure)

aid base themselves on network and organizational factors. It assumes a clear dominance of governmental actors over policy and intervention level networks, as realist foreign policy theory prescribes (foreign policy as a domain of states). Special emphasis is given to actors' competency in *forest information and know-how transfer*. Also, an overview on *financial flows* to key implementation actors is given. Finally, conclusions are drawn on strong actors' potential for change in forest development policy and cooperation.

Chapter 4 defines *networks and subsystems* and stresses the relevancy to address these in policy research. It provides the reader with a theory-based approach to subsystems in *foreign policy* and how these are interlinked through gateways at various decision levels. It assumes that the influence that actors of different subsystems can attain depends on their integration into the other subsystems and on how independently they can make decisions within the subsystem they belong to. It shows empirically which actors attain *gateway* positions (gateway actors). Forest sector relevant processes and policy factors, triggering decisions upon *framing elements* and affecting the forest sector policy, are described. Results provide answers to *key questions from praxis*, such as whether 'foresters' can establish a viable forest sector subsystem and whether their ('forester's') influence can reach out to superior decision levels – and if so, under what conditions. It is assumed institutionalized structures at the forest sector, but also at superior subsystems, play a crucial role in that respect.

Chapter 5 draws more attention to the *intervention level* and provides the reader with a comprehensive, though focused insight in to the role actors play, their interests, capacities and power relations. This offers also a rich basis for examples, useful to the understanding of more theoretical chapters. It examines whether forest aid interventions lead to major *changes in the income* of rural communities and households in seven countries worldwide (Bhutan, Nepal, Honduras, Nicaragua, Kenya, Tanzania, Uganda). Then, emphasis is given to the assumption that the outcome depends on the *potential for change influential actors hold*, especially on the willingness and capacities of influential intervention actors. It challenges the principle of poverty alleviation and income generation by assuming that changes in socio-economic conditions of the poor can be derived from circumstances created in the interest of powerful actors. It is also discussed whether the *ownership of soil* explains changes in income from forests or trees.

Finally, *Chapter 6* engages in a theoretical discussion on ‘*capacity building*’, ‘*ownership*’ and ‘*empowerment*’, with emphasis on *forest information and know-how transfer*. It builds on empiric results from forest development policy and project analysis and on theoretical approaches (among others Bourdieus’ habitus and field theory). It argues capacities are present in any society, but *influential actors* aim at facilitating change of social entities and their interrelation to forests through networks. Thereby, they construct new capacities, while others are destructed. The potential of actors, involved in various fields, to do so, depends largely on their capacities (i.e. knowledge) (Chap. 3). They act in networks, which determine their influence (Chaps. 3 and 5). Three *phases of knowledge transfer* are distinct and empirically grounded. Finally, building on empiric research, a *typology of mechanisms of change* is derived, showing the variety of social niches in which an actor can contribute to change.

Chapter 7 provides us with *conclusions* to the main hypotheses addressed in this book. Results are summarized, supporting or withdrawing the hypotheses. Results are then discussed, for instance, by making *recommendations for policy actors* or by describing the consequences these results will bring, in the light of the prevailing *paradigms of forestry aid policy*.

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This research was conducted between 2008 and 2011, in order to obtain a PhD from the Georg-August-University Göttingen. I would like to thank *Prof. Dr. Max Krott* (forest policy) and *Prof. Dr. Otmar Höll* (international policy) for their supervision, their advice and the intensive discussions conducted throughout this research. I would also like to express my gratitude to *Prof. Dr. Renate Bürger-Arndt* (nature protection) for acting as a member of the examination committee and for the interesting discussions on nature conservation in forest development policy. At this point, I would like to extend my appreciation to all colleagues from the Georg-August-University of Göttingen for all the open and inspired exchange and discussions.

My interest towards this subject began however in 2006, when I worked at the Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management (BMLFUW). My task was to work on the topic of international forest development and know-how transfer, within the unit for forest research and education. The ministry was interested in promoting collaboration and exchange between stakeholders, working with, or interested in, international development of forests and related sectors. This was based on the Austrian National Forest Programmes' Forest Dialogue, specifically on the section on 'Austria's international responsibility for sustainable forest management'.

Thanks to the motivation and openness from especially, *Mr. Rudolf Themessl*, the then Head of Division IV/2 at the BMLFUW, and to the subsequent funding of a research project (10/2007–09/2010) on the topic of 'Analyses of forest related development cooperation policy and suggestions for innovative solutions for future policies', by the *BMLFUW*, the basis for my doctoral thesis could be provided.

The research included also a high number of expert interviews and field research in Bhutan, Nepal, Nicaragua, Honduras, Tanzania, Uganda and Kenya as well as in Austria, Finland, Germany and Sweden. I am thankful to all the 592 people from 246 actors (including actor units) in these 11 countries, who participated also in the personal expert interviews, for taking their time and for the serious, intense and open discussions.

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Glossary and Acronyms

AA	Federal Ministry for Foreign Affairs, Germany
AAC	Annual Allowable Cut
Actor influence	is a function of → power factors and → informational factors
Actors (political)	persons or organizations contributing to political decisions
ADA	Austrian Development Agency
ADC Austria	Austrian Development Cooperation (Society)
ADC GmbH	Austrian Development Cooperation (Consultancy)
AFE-COHDEFOR	State Forest Authority, Honduras (today → ICF)
AGRI	Agriculture for Development Network
AHT	a German consultancy
Analytical theory	theory that attempts to explain the (non-)occurrence of social or political → change through detailed analysis, grounded on → actors and their role in achieving or preventing change; it describes and explains concrete actual contents, impacts or results of social or political action and compares these to various discourses, views or goals of actors and their programs – rather than setting itself → normative goals in order to explain how such goals (or → paradigms) can be reached (normative theory)
ANR	Amani Nature Reserve, Tanga, Tanzania
ANRICA	Austrian Natural Resources Management and International Cooperation Agency
Austroprojekt GTZ GmbH	an Austrian consultancy
AUT	Austria
B1, 2	villages in Bhumtang district, Bhutan
BGBI	Bundesgesetzblatt (Federal Act)
Bi-governmental	between two governmental organizations (actors)
Bilateral	between two parties (actors)

Bi-multilateral cooperation	is a special form of bilateral cooperation, implemented through an international organization, where the financing of a clearly separable action or of cooperation is still attached to a certain donor and a certain recipient government
BISEP-ST	Biodiversity Sector Program for Siwaliks and Terai
BKA	Federal Chancellor Office
BMaA	Ministry for Foreign Affairs, Austria
BMeiA	→ BMaA
BMELV	Bundesministerium für Ernährung, Landwirtschaft und Verbraucherschutz, Federal Ministry for Food, Agriculture and Consumer Protection, Germany
BMLFUW	Federal Ministry for Agriculture, Forestry, Environment and Water Management, Austria
BMZ	Ministry for Economic Cooperation and Development, Germany
BOKU	University of Life Sciences (Bodenkultur) in Vienna, Austria
Bridge	a special form of interconnection by a → broker
Broker	an → actor, who is the only (or only influential) → gateway actor to another → subsystem, interconnects with one or more other actors of the initial subsystem
Capacities	necessary circumstances or abilities of a social entity to recognize an issue (cognition), to formulate a problem or an expectation, to find a solution and then to implement it; capacities consist of → power factors and → informational factors
CARE	a → NGO/NPO
CBFM	Community-Based Forest Management
CD	Country Desk
CEPAL	Comisión Económica para América Latina
CEPF	Critical Ecosystem Partnership Fund
CET	Change Explanation Types
CF	community forestry organisation
CFDP	Churia Forest Development Program
CFMP	Community Forestry Management Plan
CFR	Community Forest Reserve
Change	difference in social or natural factors that can be empirically observed, when two points in time are compared; whether change is considered positive, neutral or negative depends on the extent to which it fits to the social entity's (actor's or person's) subjective perception of what is → 'development' or how 'development' should look like

Communities	groups of people or households within a locally restricted geographical area, independent to their legal character
CORET	Conifer Research and Training Program
CPI	Corruption Perception Index
CRS	Creditor Reporting System (of the → OECD/→ DAC)
DAC	Development Assistance Committee (of the → OECD)
DB	Development Bank
DC	developing countries
DCP	development cooperation policy
DDC	Department for Development Cooperation
Decision networks	interlinkage of the organizations, actually deciding upon a certain issue
Decision-making levels	hierarchical levels of the foreign policy system, where certain decisions are made, whereby one or more (competing) → policy subsystems or → policy networks are involved
DED	Deutscher Entwicklungs-Dienst
Development cooperation policy	covers all bi-governmental, bilateral and, through international organizations, multilaterally implemented aid measures, especially of the technical and financial kind, which are implemented on the basis of concrete project support programs or financial contributions
Development policy	is foreign policy with ‘developing countries’ and consists of a number of subsystems: → development cooperation policy; foreign trade policy; foreign culture policy and foreign security policy
Development	is the process towards an economical, financial, political or social stage, at which a certain set of normatively, idealistically or subjectively defined (often interest or value driven) factors must be achieved
DFO	District Forest Office
Direct integration	an integration through own → gateway actors
DzFO	Dzongkhag (District) Forest Office, Bhutan
Dzongkhag	a district in Bhutan
EAFCMP	Eastern ARC Forest Conservation and Management Project
EAMCEF	Eastern ARC Mountains Conservation Endowment Fund
EC	European Commission

ECOTEC GmbH	an Austrian consultancy
EEU	Environmental Economics Unit, University of Gothenburg
EfD	Environment for Development Initiative
ESNACIFOR	National Forest School, Honduras
ETFAG	European Tropical Forests Advisory Group
ETFRN	European Tropical Forest Research Network
Ethnocentrism	a → normative behaviour, whereby the setting of standards is based on the belief in or assumption of the superiority of one's own social or cultural group
EUCADEP	East Usambara Conservation and Agricultural Development Project
EUCAMP	East Usambara Conservation Area Management Programme
EUCDP	East Usambara Conservation and Development Project
EUCFP	East Usambara Catchment Forest Project
EUFLRP	East Usambara Forest Landscape Restoration Project
Eurocentrism	→ ethnocentrism, whereby the setting of standards is based on the belief or assumption of the superiority of European society or culture
EWA	an Austrian → NGO/NPO
External actors	→ actors, not directly involved in the intervention
FADCANIC	Fundacion para la Autonomia y el Desarrollo de la Costa Atlántica de Nicaragua, a Nicaraguan → NGO/NPO
FAO	Food and Agriculture Organization
FBD	Forestry and Beekeeping Division of the → MNRT, Tanzania
FCG	a Finnish consultancy
FDP	forest development policy (or forestry development policy)
FECOFUN	Federation of Community Forestry Users of Nepal
FEHCAFOR	small landowners organisation, Honduras
FIN	Finland
Financial assistance	involves mainly direct financial support without priority to technical (expert) advice
Finnfund	a Finnish → GO
FinnIDA	Finnish International Development Agency
FM	village from the Francisco Morazán district of Honduras
FMU	Forest Management Unit
FOCALI	Forest, Climate and Livelihood Research Network
FORED	Forest Research and Development Program
Forest actor	a person or organization fully or mainly operating in the forestry sector
Forest policy	a policy, formulated for the forestry sector
Forestry	→ see forest actor
Forestry aid policy	→ see forestry development policy

Forestry development policy	such a part of or a subsystem of a donors' development cooperation policy, where a donor government (co-)financed forest-related aid measures, implemented on a bi-governmental, bilateral or bi-multipilateral basis
Forestry policy	→ see forest policy
Formin	Finnish Ministry for Foreign Affairs
FPC	Forest Protection Committee
Framing elements	constitute decisions made on thematic, recipient country or financial scope, taken by influential → gateway actors of a superior → system part
FRMP	Forest Resources Management Program
FSC	Forest Stewardship Council
FTP International	a Finnish consultancy
FTP	foreign trade policy
FUG	forest and water user groups
FZ	financial assistance
Gateway	is an interconnection between two → subsystems and is constituted by at least two → actors or two organizational units of the same actor
Gateway actor	is an actor or its organizational unit, holding a → gateway position in one of the two → subsystems
GDP	gross domestic product
GEF	Global Environmental Fund
GER	Germany
GFA	a German consultancy
GITEC	a German consultancy
GIZ	Gesellschaft für Internationale Zusammenarbeit, Germany ('umbrella' organization of → GTZ, → Inwent, → DED)
GO	governmental organization
GOPA	a German consultancy
Gross deforestation	deforestation of natural forests, not including a possible 'compensation' due to plantations
GTZ	Gesellschaft für Technische Zusammenarbeit
ha	hectare
HDI	Human Development Index
HH	household(s)
HHD	high human development (→ HDI)
Hilfswerk Austria	an Austrian → NGO/NPO
HORIZONT 3000	an Austrian → NGO/NPO
ICF	State Forest Authority, Honduras
ICRAF	World Agroforestry Centre
IDA	International Development Association (→ WB)
IFF	Intergovernmental Forum on Forests

IFMP	Integrated Forest Management Program
IFMP-G	Bhutan–German Integrated Forest Management Program
IGO	International Governmental Organization
IIZ	an Austrian → NGO/NPO
Impact potential	an actor's potential to have an impact on change in forest aid (policy or projects); see also → potential for change
INAFOR	National Forest Authority, Nicaragua
Indirect integration	an integration through other → actors in gateway positions
Indufor	a Finnish consultancy
Informational factors	factors that determine the informational relevancy of an → actor, comprise of general and forest-related information
INGO	international nongovernmental organization
Integration	the way an → actor has access to the decision-making in a superior → subsystem/with → direct integration and → indirect integration being distinct
Intervention actors	→ actors, with of course the exception of → local actors, directly involved in the intervention
Inwent	Internationale Weiterbildung und Entwicklung GmbH
IO	international organization
IPCC	Intergovernmental Panel on Climate Change
IPF	Intergovernmental Panel on Forests
IPP Stuttgart	a German consultancy
IRO	International Research Organization
Irreplaceability	competency an → actor gains with respect to formal or informal decision-making within a → policy network
ITTO	International Tropical Timber Organization
IUCN	International Union for Conservation of Nature
JFM	Joint Forest Management
K 3	local → communities in Kitale district, Kenya
K1, 2	local → communities in Kisumu district, Kenya
KfW	Kreditanstalt für Wiederaufbau
KOBÜ	Coordination Offices of the → ADA
KVTC	Kilombero Valley Teak Company
LDC	Least Developed Countries
LHD	Low Human Development (→ HDI)
Local actors	→ actors, such as communes, → communities or individual households or farmers, directly or indirectly involved in, or effected, by the intervention
LTP	Longuza Teak Plantation
M1	local → communities in Masaka district, Uganda
MAFOR	Sustainable Use and Management of Coniferous Forests in Honduras, a national project of → PROCAFOR

Mautner-Markhof Agroservice	an Austrian consultancy
Mayagna	indigenous tribe of Nicaragua
Mestizo	people of mixed European and Latin American ancestry
Metsähallitus Consulting	a Finnish consultancy
MfFA	Ministry for Foreign Affairs, Sweden
MHD	Medium Human Development (→ HDI)
Miskitu, Miskito	indigenous tribe of Nicaragua
MMM	Ministry for Agriculture and Forestry, Finland
MNRT	Ministry of Natural Resources and Tourism, Tanzania
MoA	Ministry of Agriculture, Bhutan
MS	Marginal States
Multilateral aid	if the donors, recipients and actions cannot be clearly (financially) linked to each other
NALEP	National Agricultural and Livestock Extension Program, Kenya
NDF	Nordic Development Fund
NGO/NPO	a nongovernmental and non-profit organization
NIC	newly industrialized countries
Normative	tending to create or prescribe standards, that is, how → ‘development’ should/must look like and what factors need to be considered to achieve ‘development’ and comparing the present state to a supposed final state, whereby the divergence to the ideal is then valued (good or bad; civilized or primitive; developed or un(der)developed)
NRDCL	Bhutanese State Forests
OA	official aid
ODA	official development aid
OECD	Organization for Economic Co-operation and Development
ÖED	an Austrian → NGO/NPO
OEZA	Österreichische Entwicklungszusammenarbeit (Austrian Development Cooperation); an ‘umbrella’ term, used for the two organizations → ADA and → <i>BMaA</i> Ministry for Foreign Affairs, Austria
ÖFSE	Österreichische Forschungsförderung für Internationale Entwicklung (Austrian Research Foundation for International Development)
OOF	other official flows
Ownership (1)	the legal right of possessing something (legal and economical term)

Ownership (2)	to hold a stake or have a say in political or social (decision-making) processes (policy term)
Paradigm	a set of → normative factors, assumptions or ideas that serve as a pattern or model for social or political action
Participation process	is a formal or informal process, led by a (major) → gateway actor, in order to exchange views and interests, to get advice or to base decisions on a broad consensus, thereby giving other → actors the opportunity to participate in policy- and decision-making (i.e. on → framing elements)
PFMP	Participatory Forest Management Project
Policy cycle	a theoretical model describing policy making by a number of phases, following one after the other
Policy field	a field, network or system part, where concrete political decision making by → actors is taking place
Policy field analysis	studies the concrete contents, determinants and impacts of political action
Policy network	→ see policy field
Policy system	→ see policy field
Political factor	any argument (i.e. based on capacities or interests), leading to a political decision/any important aspects, a → subsystem's influential → gateway actor uses to base decision-making upon → framing elements
Potential for change	the chance that an actor can and will contribute to the achievement of goals, set in political programs or projects, depends on → capacities and → willingness
Power factors	factors that determine the power of an → actor; comprise of financial and material support, → trustworthiness and → irreplaceability
Problem pressure	seriousness of a problem
PROCAFOR	Regional Forest Program for Central America
PRSP	Poverty Reduction Strategy Paper
RAAN	Northern Autonomous Atlantic Region, Nicaragua
RC	recipient country
RECOFTC	the Centre for People and Forests; Regional Community Forestry Training Center
REDD	Reducing Emissions from Deforestation and Forest Degradation
RELMA	Regional Land Management Unit (at → ICRAF, Kenya)
RESAPP	Regional Environment and Sustainable Agriculture Productivity Program (E-Africa)
RFI	Rainforest Initiative (Austria)
RNR-RC	Renewable Natural Resource Research Centres, Bhutan
S1, 2	local → communities in Sembabule district, Uganda
SA	Sector Advisor

SCC	a Swedish → NGO/NPO
SFA	Swedish Forest Agency
SFM	Sustainable Forest Management
SIANI	Agricultural Research and Policy Network
SIDA	Swedish Agency for International Development
SIDS	Small Island Developing States
SLU	Swedish Agricultural University
Stakeholders	persons or organizations contributing to political decisions
Stora Enso Forest Consulting Ltd.	a Finnish consultancy
Structure (network)	comprises of nodes and vectors, actors and their interrelations
Subsystem	a part of a → (policy) system
SWE	Sweden
System	→ see policy field
T1, 2	local → communities in Tanga region, Tanzania
TAF	Tanzanian Association of Foresters
Technical cooperation	involves mainly technical (expert) advice rather than direct financial contributions
Terra Consulting Ltd.	a Finnish consultancy
TFCG	Tanzanian Forest Conservation Group
TFCMP	Tanzanian Forest Conservation and Management Project
Trustworthiness	centrality of the trust position of an → actor within a → policy network
TT	Tenure Types
TWICO	Tanzanian Wood Industries Cooperation
TZ	Technical Assistance
U1	a → CF in Udayapur district, Nepal
UN	United Nations
UNCED	United Nations Conference on Environment and Development
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
UNFF	United Nations Forum on Forests
VFR	Village Forest Reserve
Vi/SCC	→ SCC and → Vi-Agroforestry
Vi-Agroforestry (Vi-skogen)	a Swedish → NGO/NPO
VLFR	Village Land Forest Reserve
VP	Van (Forest) Panchayat
W	villages of a valley in Wangdi district, Bhutan
WB	World Bank

- Willingness is the will of an → actor to contribute to the achievement of goals set in political programs or projects and is that part of an actor’s interests, coinciding/matching with the program’s or project’s goals (figuratively, the intersection of an actor’s interests and a program’s goals)
- WWF World Wildlife Fund
- y year

Chapter 1

Methodological Approach, Definitions and Selection of Empiricism

1.1 Introduction

Bilateral, bi-governmental development cooperation in forestry, in other words development cooperation agreed upon between a donor's and a recipient's governmental institutions, is practised already for many decades. However, many problems, such as deforestation and forest degradation, have to date been tackled with limited success.

Forest development policy (FDP) is not a large field, as globally only about 1% of total official development aid (ODA) is provided to the forestry sector (1973–1998) (OECD 2000). However, with respect to donors' bilateral net disbursements in FDP, differences in the priority of this sector can be observed (c.p. Table 1.1; c.p. Aurenhammer 2008, 2010). Obviously, forest actors have different opportunities to address global forest problems.

Therefore, many practical questions arise: What can 'foresters' actually achieve, in the context of international forest development, and to what extent they are able to influence international development policy and to contribute with their know-how to a halt in global deforestation and sustainable forest management? Can the type of decision-making actors, attaining competency in programme formulation and financing for FDP, explain the differences in donors' priorities? How they select recipient countries and how does this selection affect foresters' possibilities? How is forest know-how transferred within policy and project networks and does it matter? Can forest actors gain influential positions in decision networks, and if so, under what conditions?

Therefore, it is interesting to analyse the different policy fields of donors, with respect to forest development policy. In order to do this, a methodological framework, following the policy cycle, is developed below.

Table 1.1 Comparison of forest development policy's relevancy: average annual net disbursements (ODA) to forest-related cooperation (1994/5–2005)

Donor	Forest aid (million €)	Forest aid as percentage of total aid	Forest aid in €/capita	Total aid (million €)
Austria	1.6 ± 63%	0.38 ± 59%	0.20 ± 63%	494 ± 19%
Finland	15.8 ± 27%	4.64 ± 43%	3.00 ± 29%	391 ± 24%
Sweden	13.0 ± 48%	0.79 ± 64%	1.48 ± 50%	1,820 ± 15%
Germany	60.5 ± 18%	1.12 ± 17%	0.74 ± 18%	5,649 ± 6%

Source: Aurenhammer 2010

1.2 Definition of the Object of Investigation

Conceptual definitions are necessary for a theoretical understanding of policy field analysis (c.p. Schubert and Bandelow 2009). The following determines what forest development cooperation policy (FDP) means and how FDP will be used in this research. Actors or stakeholders in this research are generally defined as ‘persons or organizations, contributing to political decisions’ (after *ibid.*).

1.2.1 Theoretical Deduction of the Definition of Forest Development Policy

Development policy is a subsystem of foreign policy (c.p. Höll 2006). This research therefore defines bilateral, bi-governmental forest-related development cooperation policy (in what follows is called ‘forest development policy’ or FDP) as a subsystem within an overall system of foreign policy.

Subsystem development policy consists of a number of subsystems itself: development cooperation policy, foreign trade policy, foreign culture policy and foreign security policy (c.p. *ibid.*).

Development *cooperation* policy thereby ‘covers all bi-governmental, bilateral and, through international organisations, multilaterally implemented aid measures, especially of the technical and financial kind, which are implemented on the basis of concrete project support programmes or financial contributions’ (*ibid.*).

Subsequently, **forest development policy (FDP)** is defined as ‘such a part of or a subsystem of a donors’ development cooperation policy, where a donor government (co-)financed forest-related aid measures, implemented on a bi-governmental, bilateral or bi-multilateral basis’.

Cooperation is bilateral if there are actors from two countries – the donor and the recipient country – involved. As this research focuses on governmental cooperation, the donor and recipient actors that are cooperating are governmental institutions (for instance, the Finnish Ministry for Foreign Affairs and the Ministry of Natural Resources and Tourism of Tanzania). Hence, it is about bi-governmental cooperation, excluding other bilateral options of cooperation, such as cooperation between non-governmental organisations of the donor and recipient country. By limiting

the analysis to bi-governmental cooperation, this does not mean other actors (are) could not be part of these cooperations.

Bi-multilateral cooperation is a special form of bilateral cooperation, implemented through an international organisation, where the financing of a clearly separable action or of cooperation is still attached to a certain donor and a certain recipient government. If the donors, recipients and actions cannot be clearly (financially) linked to each other, this is called multilateral aid (and not part of this research).

In this research, there is hence a focus on the bilateral part of FDP. Also, emphasis is given to technical over financial cooperation (assistance).

1.2.2 Theoretical Integration into the Bilateral Foreign Policy System

Bilateral development cooperation policy is formulated in a foreign policy system consisting of three major, interlinked parts: first, the donor's subsystems, including its FDP; second, subsystems of the recipient country, where the recipients' foreign policy and national forest (development) policy is formulated; and third, joint networks or system parts, at various policy levels (i.e. bilateral negotiations), down to the political–technical intervention level (c.p. Annex 1; further elaboration: Chap. 4).

This research focuses on the first and third type of system parts, in order to describe and explain FDP.

1.3 An Overview on Relevant Theories and Their Role in This Research

Before going into the details of the methodological approach and describing the hypotheses selected for this research, other relevant theoretical approaches need to be briefly introduced and shown how the approach used in this research, based on **analytical theory**, is linked to other theoretical approaches as well as how it provides added value to them.

As described above, FDP can be seen as a subsystem of the overall (bilateral) foreign or international policy system. More specifically, it is subsumed under the development policy. Consequently, **foreign and international policy theories** as well as **development theories** shall be shortly introduced.

1.3.1 Foreign Policy Theories

Foreign or international policy theories explain how relationships between modern states work and what actors are involved in the policymaking. Foreign policy was 'invented' (Cardinal Richelieu is seen as its 'inventor', c.p. Burckhardt 1935) with

the emergence of modern, national and territorial states (1648, Westphalien peace) (c.p. Krippendorff 2000). However, it cannot be seen as a natural part in the history of all states or societies (ibid.).

While, in ancient China, the Mandarin bureaucracy (state philosophy of Kongfutse) built on the principle that *the basic function of a ruler is to secure the material and spiritual basis of its subjects* (people) (hyper-sovereignty of China: centre of the world), the principle of the Western modern state was (initially) in the *strengthening of the state with all imaginable means, regardless of their moral abjection/damnability*, since *'the human is undying, his salvation he finds after his death; the state is not undying, its salvation it will find on this Earth – or not at all'* (Krippendorff 2000). In contrary to Asian philosophy, Krippendorff (2000) therefore sees in Western states' internal policy the continuation of foreign policy with other means.

The role of actors and power is recognised in foreign policy theory. Since this research focuses on a system of bilateral foreign policy, the principle units of foreign policy are national states. The principles of the modern territorial, national states, following Richelieu, are external oriented (c.p. Burckhardt 1935) and had stood in contrast to principles of the Holy Roman Empire of Ferdinand II, considered to be domestic oriented, religion and church based (Krippendorff 2000). A central form of power of the nation state is the sovereignty (after Bodin); however, Krippendorff (2000) sees only the USA and China holding full sovereignty (after Bodin). However, as during Richelieu's times, and also today, the national state is only *one* possible form of social systems, according to Giddens (pp. 216ff, see esp. pp. 218, 236, 238, 250 in ibid. 1997; c.p. pp. 80, 110ff, 1030ff, see also pp. 430ff, 548ff, 635ff, 815ff, ibid. 2009).

Since the above-mentioned historical beginnings of foreign policy, a number of mainstream theoretical schools have evolved, all claiming to be able to explain the 'making of' foreign policy. In principle, three **schools of foreign or international policy theory** can be distinguished as (1) realism, (2) institutionalism and (3) idealism. Similarly after Rittberger and Zangl (2004), four models of international policy can be distinguished: (1) anarchy of states, (2) world hegemony, (3) world state and (4) 'global governance' (governing the world without (a world)state).

In **classical realism** (represented by Morgenthau; Hobbes, Machiavelli), only the state is an actor. It neglects societal or internal differences between states. Classical realism believes in the continuous power seeking of nation states, in an anarchic 'self-helping' system with a continuous security dilemma and needed power equilibrium. Later, influenced by the theory of complex interdependencies, *neorealism* evolved (scholars are Kissinger, Huntington, Mearsheimer). Also here, actors are states, but also international law and to some extent international organisations play a role. Humans are not considered evil but being in a security dilemma. The initial theoretical discussion focussed on the sustaining of the power equilibrium and polarities, already during the division of Africa by Bismarck, further on the Cold War and the Domino Effect (scholars are Craig, George). Nuscheler (2005) makes a distinction between unilateralism (unipolar), bipolar or tripolar systems and multilateralism (multipolar) but also other concepts, like the triadisation of the world

or the regionalisation of the world. With respect to *colonialism and industrialisation*, Komlosy (2004) describes the Atlantic and Orientalic trade triangles. According to Komlosy (2004), once the ‘Third World’ is made dependent, why should their development be made possible? Siefert et al. (2006) introduce ‘The End of Space’. *Post-colonialism and interdependency* concepts are considered by Nyerere (pp. 25ff, cit. in Nohlen and Nuscheler 1993): ‘Africa produces what it is not consuming and consumes, what it is not producing’. War (direct force) is a form of power/coercion not applicable to Development Policy. War is the continuation of foreign policy with other means (after Clausewitz 1832, cit. in Krippendorff 2000).

In reaction to classical realism, **idealism** developed, namely, *normative idealism* (scholar, i.e. Kant). Here, actors are societies of people. Key concepts are based on ideals, values and norms. From this evolved also *constructivism* (scholars are Lewin, Giddens, Wendt, Zürn, Müller). According to constructivism, actors can be states, persons or institutions with an emphasis on structure – actor interaction. A further form is *social constructivism* (scholars are Haas, Finnemore and Sikkink). Here, actors are seen as rational acting and self-interested according to their values, norms and ideas. Societal actors, like epistemic communities and advocacy networks (Haas 1992), are of significance (c.p. also advocacy coalitions after Sabatier 1993). Also *critical theory* (scholars are Marx, Lenin; Galtung, Senghaas, Wallerstein) can be attributed to the school of idealism but derives from imperialism theory.

Although some authors group **institutionalism** under idealism, this school can be considered as a separate one, as it already includes several variations. Originally, it was derived from the *theory of complex interdependencies* (scholars are Keohane, Nye), with the opinion that the regulation of anarchy is only possible by states and international organisations (scholar, i.e. Friedrich). They focus on the analyses of power in concrete problem fields. A later form is *liberal institutionalism or neo-institutionalism* (scholars are Keohane, Rittberger). Again, in *transactionism*, the role of values and trust in communication and exchange relations is given the priority (scholar, i.e. Deutsch). *Neo-liberalism* puts emphasis on the rule of collective choice and problem condition (common aversion vs. common interest). Welfare subjects in international policy (where under forestry classifies), according to Rittberger and Zangl (2004), are more complicated policy fields, as they involve dilemma games (prisoner’s dilemma) with or without distribution conflicts.

This research borders on the approaches of realism and idealism. It is therefore located in the school of *institutionalism*. That is because it recognises organisations, people and institutions as potential actors. It believes that actors are rational and self-interested and act according to their power sources, but it also acknowledges that their will to act depends on interests, values and ideologies. It also recognises the structure – actor – interrelation (i.e. system theory, organisational and network factors) and the importance to focus on the power relations within a problem field.

This research *avoids the normative or idealistic concepts of ‘development’* that aim to define what ‘development’ should/must look like. Instead, it builds on theoretical approaches, more affiliated to the schools of realism or institutionalism, focusing on actors that have subjective reasons to create ‘change’. In its *theoretical approach to ‘change’*, this research aims to explain who enhances or prevents ‘changes’,

how and why, and how these ‘changes’ look like, which can be consequently evaluated against the various normative views, concepts or paradigms of ‘development’. This research applies **actor-centred, analytical theory**.

Therefore, in this research, FDP is not about ‘developing forests and people’ but is an ‘interest driven facilitation of changes of social entities and their interrelation with forests’. When we better understand which actors create what (social and political) changes and why (i.e. formulate and implement political programmes), we will then be able to evaluate the normative concepts, paradigms and definitions of ‘development’ by various actors, including the part of sciences’ normative development theories. This is believed to provide fruitful and interesting results.

Focussing on forestry or forest-related development cooperation, we will analyse a field related to *the issue welfare*, (rather than security or governance,) being issues distinct in the literature (c.p. Rittberger and Zangl 2004). As noticed above, this issue field is considered more tricky in international policy (see *ibid.*). Actors cannot oversee its complex interdependencies as easily as they can do with security issues (with the exception of terrorism).

Besides the concept of welfare, also the concept of *well-being* should be mentioned (c.p. Millennium Ecosystem Assessment; see, i.e. Wood and Newton 2005; c.p. Bhutan’s attempt to estimate the gross national happiness in addition to the gross national product; see also poverty approaches in Chap. 5).

1.3.2 Development Theories

Development theories, most of them *normative* concepts, related to economic theory, international trade theory, later also incorporating social and environmental concepts, explain what should be done to achieve a certain, normatively defined ‘development’ (goal) (i.e. growth maximisation, environmental protection, gender equality) or how ‘development’ should or must look like (including the actors participating in decision-making). Development theories thereby have a moral-practice orientation, an *ideological* orientation (in addition to an influence from real-political developments), and are based on a specific institutional framework (macroeconomic development, Bretton Woods) (c.p. Leys 1996).

Such theories are valuable in reflecting their own normative concepts, models or paradigms against reality, but they do not provide us with an understanding of how things work in reality and why they work only in a certain way (usually not conform with normative concepts or models). While research based on such normative theories can highlight issues that ‘must be changed’, it leaves open the how, if such changes can be implemented in reality (or why they have not been implemented already). Nevertheless, all these theories, concepts and paradigms are *valuable*, as they discuss ‘world views’, forms of potential future changes, regardless of the actors or people of today deeming them to be necessary. They provide us also opportunities to make tests, if actors and people really formulate and implement their activities according to such goals.

The following summarises some of the important **development theories** to date (c.p. Fischer et al. 2004; Komlosy 2004; Kolland 2004). From the 1940s to 1960s, so-called growth theories, *modernisation theories* or phase theories promoted rapid industrialisation (i.e. Rostow 1960). Since the 1950s, ‘Cepalism’, ‘import substituting industrialisation’ (ISI), ‘*protectionism theory*’, Keynesianism and New Deal theories have been developed (i.e. Prebisch 1950). Between the late 1950s and 1960s so-called *dependency theories* evolved, with three different schools of thought. One is the continuation of Cepalism, other research focused on more ‘pessimistic concepts’, like opting out of the world-market system (i.e. Senghaas 1974, 1977; Khan 1980; Galtung 1997). The third school developed from world-system theories (i.e. Senghaas 1979; Wallerstein 1995), theories of ‘neoimperialism’, ‘structural dependency’ and ‘unequal exchange’ (i.e. Emmanuel 1969; Mandel 1973; Amin 1976) and scholars with a focus on socio-economic development (i.e. Feldbauer and Parnreiter 1999; Boris 2001). During the 1970s, *ecological aspects* were introduced, and at the beginning of the 1980s, it became popular to think that the ‘Third World would disappear’ (Menzel 1992).

Since the 1990s, *neo-liberalism* (‘free trade’) and ‘*new modernisation theories*’ (gender, environment and sustainability aspects) (c.p. Fischer et al. 2004) have become more important. CEPAL developed the concept of ‘systemic competitiveness’ (‘good governance’, also *neo-structuralism* or Nuevo Cepalismo) (c.p. Eßer et al. 1994). Also ‘*pessimistic*’ studies (i.e. Esteva 1992; The End of the ‘Grate Theories’ in Menzel (1992); ‘left Keynesianism’ (Bello 2002)) returned. Other concepts are the ‘planetary contract’ (George 2001) or imperialism–theoretical approaches (i.e. Biel 2000; Petras and Veltmeyer 2003).

Above shows the broad variety of theoretical approaches to development. ‘Development is not a universal, globally applicable principal’ (pp. 42–43 in Fischer et al. 2004). **In this research**, we have a neutral attitude to all of the above theories. They provide us with normative input from a macro-level perspective, which can only be analytically meaningfully discussed, if the research focuses on *micro- and meso-level, actor-centred approaches*.

Most of the above development theoretical approaches, attempt to explain the reasons for (present) poverty and ‘underdevelopment’ by normatively defining the (future) ‘development’ that needs to be aimed at (subsequently describing measures that need to be taken to reach that goal). Due to methodological deficiencies, a.o. normative, one-dimensional approaches; ahistorical character; and lack in empirical foundation (c.p. Kolland 2004), these ‘great theories’ have lost their practical relevancy (c.p. Menzel 1992).

Instead, we now use actor-centred, analytical theory, interested in explaining (for concrete settings) the who and the how of the creation of various forms of (present/past) (non-)change (which may be anticipated as ‘development’ or ‘non-development’), thereby explaining the (present/past) differences, roles or positions of various involved/affected people, actors or states. These roles or positions of actors can then be discussed in terms of how they fit to various paradigms of ‘development’ and in terms of what needs to be done to possibly change a certain actor’s position in order to achieve a certain change. While actor-centred, analytical

theory can evaluate as to whether certain normative concepts exist/are practised in reality or not, it cannot determine what normative concept is the best, because, realistically and as mentioned earlier, there is no single, universal, globally applicable ‘development’ (c.p. pp. 42–43 in Fischer et al. 2004) that is the best for all (people, actors, states).

As noted above, such normative concepts of ‘development’ are used by various actors, in governmental programmes, by international organisations as well as by ‘normative scientists’ – that is, scholars of critical theory even belief in the ‘normative duty of science’ to provide us with orientation for political actions (c.p. p. 81 in Fuchs-Heinritz et al. 1994, in Kolland 2004), contrary to actor-centred analytical theory. Development research in the school of positivism claims a ‘correct definition of development’, in contrast to postmodern research, which holds universal definitions of development impossible (c.p. p. 40 in Novy 2005).

Many general as well as forestry-related ‘development theories’ are **phase models**, thereby social–mechanical perceptions of ‘development’ and are teleologic, as they are aiming at a certain goal – a perfect or at least satisfactory final state – be it socialism, capitalism; forest industrialisation or forest protection; which is normative (c.p. *ibid.*). They are ‘universal development concepts’ (in contrast to ‘particular development concepts’). The present state of a society is then always compared to a supposed final state, whereby the divergence to the ideal is then equalled to and determined as the ‘grade of un- or underdevelopment’ – for instance, primitive versus civilised societies; preindustrial versus industrial versus post-industrial societies; and community organisation versus society organisation (c.p. p. 41 in Novy 2005). ‘Without doubt, the perception, that there would be an end-point to history, a goal worthwhile aspiring to, is strongly viewed through European-North-American glasses’ (p. 41 in *ibid.*, own translation). This type of approach is called ethnocentrism (*ibid.*) or with respect to Europe, eurocentrism.

For **analytical, actor-centred research**, it is important to not get caught in positivism, by creating ‘definitions of development’ that are universal or social liberal (c.p. *ibid.*). ‘Interpretative social research allows us to escape the dualism of universal vs. particular development’, it calls for ‘a revision of the relationships between goals and means and between theory and practice’ (p. 45 in *ibid.*). The instrumental rationality in positivism experiments with either the goals of ‘development’ (then it is normative) or with the means (operationalising the set of problems), while acknowledging ‘development’ as an open-ended process allowing for an empirical–analytical explanation of ‘change’, induced by/as a consequence of actors’ initiatives in practice (c.p. p. 45–46 in *ibid.*). In other words, ‘(...) development does not mean the same for all, interests compete’ and recognising that ‘development becomes political, a question of power and a matter of liberation from structures that confine the diversity of human action’ (after p. 46 in *ibid.*, own translation).

Also with respect to forestry and forestry development, the above normative concepts are applied in research and reflected as ideologies in policies. In forestry terminology, these (competing) concepts emerge, that is, as goals for industrialised forestry, biodiversity protection, enhancing of scientific forestry, community forestry, reducing of emissions from deforestation and forest degradation. However, whether

there exists a real difference in policy formulation and implementation or the decision-making actors use (parts of) these concepts as symbolic policy is still to be analysed. Is it because of ideals or solidarity that certain concepts are supported by the decision-making actors or is it rather depending on the actors, their capacities and interests, determining what concepts are followed and maybe also implemented in practise?

1.3.3 *Paradigms of 'Forestry Development'*

The following provides us with an overview of the paradigms or goals with respect to 'development' in forestry. It bases itself, among others, on Dargavel et al. (1985), Mery et al. (2005, 2010), Palo and Lehto (2012) and Persson (2003). An overview of the various paradigms or goals in policies is provided in Aurenhammer (2008) and Shepherd et al. (1998).

Dargavel et al. (1985) describe the 'forestry of development and underdevelopment of forestry'. They distinguish between three main '*modes of modern forestry in underdeveloped countries*' (pp. 1–2 in *ibid.*): *colonial, industrial and social*. They also recognise the (previous) existence of a traditional mode of forestry (*ibid.*).

According to Dargavel et al. (1985), 'competing paradigms of development (...) stimulated the trial of new policies' (p. 2 in *ibid.*) as well as in FDP. New policies (social forestry) have been *added* to old ones (industrial forestry).

They conclude that 'many of the institutions, values and beliefs woven into colonial forestry have persisted' (p. 1 in *ibid.*) and that the same goes for the institutions and values of industrial forestry, in the time of social forestry activities. They thereby nicely reveal the importance of power relations and the reproduction of powerful actors as well as the historical construction of actors' capacities. They describe, for instance, powerful actors as drivers for change in the respective 'modes of forestry'.

However, these 'modes of forestry' do not represent *the* (natural/only) process of 'development'. They do also not (necessarily) indicate changes in the actors' roles or positions. They are paradigms or goals, incorporated in actors' policies. They might also be linked to (normative) concepts or theories of 'development'. Whether and to what extent policies are based on such concepts or theories, or are only of symbolical character, is another question.

Forest transition theories provide us with concepts, trying to explain the pathway(s) from deforestation to (a possibly) increasing forest cover (c.p. Farley 2010). These concepts lack an understanding of the factors that lead governments to intervene (*ibid.*). Among scholars of transition theory are Mather, Grainger, Rudel, Lambin and Meyfroidt (i.e. Mather 1992, 2007; Grainger 1995; Rudel 1998; Rudel et al. 2005; Lambin and Meyfroidt 2010). Rudel et al. (2005) introduced two primary pathways to forest transition: the *economic development* and the *forest scarcity pathway*, to which Lambin and Meyfroidt (2010) added three further pathways (see below).

Mather (2001) introduced a typology of *preindustrial, industrial and post-industrial* forestry, used by Palo and Lehto (2012) to describe a transition process towards ‘sustained yield forestry’ or ‘sustained industrial forestry’, which they determine or assume to be the goal of ‘forestry development’. They refer also to Kuhn’s (1962) revolution of *scientific paradigms*, to be of value for understanding this transition process. They hence apply normative assumptions on how forestry ‘development’ should look like and that this transition process is determined by the occurrence of such paradigms or goals. With reference to North (1990), Palo and Lehto (p. 33, 2012) assume ‘that the state of property rights of forests and the overall governance have been decisive on the success or failure of sustainable forestry’. They thereby assume (normatively define) *sustainable forestry* is (has to be) the only or dominant goal/objective of the actors engaged in development policy, as to measure possible success or failure.

Of course, even though private property rights have been taken note of under the United Nations Declaration of Human Rights (Cheneval 2006), what if it is the goal and interest of the influential actors to sustain governmental ownership and prevent private property rights? How ‘forestry development’ will look like under such conditions? Is there any other ‘forestry development’ imaginable other than ‘Western conditions’, applying ‘Western models’? Is it so easy to say, if the system does not fit, ‘forestry development’ is not successful, nor is it worth to look for a model that fits to the system to make ‘forestry development’ successful (as long as it does not promote circumstances that conflict severely with ‘core Western beliefs’)? However, even then, the question remains – successful for whom? Even among ‘Western countries’, the understanding of what is SFM in practice varies often greatly not to mention the way benefit is allocated (c.p. boreal forestry of Canada and Finland).

Palo and Lehto (2012) conclude, a.o., that missing stumpage markets and prevailing state ownership and corruption prevent the (Finnish) model of ‘*sustained yield industrial forestry*’ to be applicable, in most tropical countries. However, cheap stumpage means also cheap export and cheap local industry supply, both in favour of powerful actors and elites, and may also mean the satisfaction of basic needs of the public – until resource scarcity occurs. It could be argued that the above obstacles are rather symptoms of decision-making and power structures, beyond national borders. Also the definition of an ‘efficient property rights structure’ (ibid.) is normative, as any property rights structure is efficient for some actors and some purposes when at the same time being inefficient for other actors and other purposes.

Palo and Uusivuori (p. 3, 1999, italics added) note, that the remaining *forests* ‘*need to fulfill increasing and conflicting functions*, ranging from the provision of livelihoods for local communities, to the production of raw material for the world’s forest industries and ultimately, to the protection of the global environment’. In many countries, sustainable forest management and conservation is undervalued compared to forest conversion, and hence, the value of forests is being underrepresented in economic accounting and political decision-making (ibid.). The economic value of forests gets recently more attention (i.e. carbon sequestration and

biodiversity), and in politics, the concept of environmental security is seen as an alternative paradigm (ibid.). They remind that the continuing importance of forests in international affairs is to a large part being determined by the *willingness* of developed and developing countries *to cooperate more fully in the management of forests* (ibid.).

Mery et al. (2005) argue, in their book 'Forests in the Global Balance: Changing Paradigms', that forests are no longer seen only as a source of timber but rather as complex ecosystems that sustain livelihoods and provide a range of products and environmental services and it would be widely recognised that 'forests can contribute to poverty alleviation, rural development, biodiversity maintenance, and healthy ecosystems' (p. 14 in ibid.). According to them, 'these *new views* on the role of forests emerged due to increasing *societal pressure*' and 'there has been a *desire to promote sustainable socio-economic development* through the pursuit of national interests, based on holistic collective agreements *by all stakeholders*' (ibid., italics added).

In contemporary society, Mery et al. (2005) note scientific debates led to the emergence of a new paradigm: sustainable (forestry) development, replacing the sustained yield paradigm. Policymakers have been pressured by this new social paradigm, to develop, adopt and agree upon new programmes (c.p. ibid.). Forestry development shall now focus on forests as a source of livelihoods and human well-being, on healthy ecosystems for sustainable forest management (SFM), on integrating forestry with other sectors and on sharing forest benefits more equally (ibid.). However, 'cumbersome bureaucracies, corruption and a lack of forest development policies prevent an *efficient* application of the principles of *sustainable forest management*, challenging the achievement of the new paradigm' (p. 18 in ibid., italics added). *Participatory decision-making* by civil society needs to be emphasised, in contrary to older models of forest governance, where *decision-making* is *dominated by the state* – which is *no longer acceptable in many parts of the world* (ibid.). Also the recognition of the potential of *traditional knowledge* to 'assist in *increasing the welfare* of world societies' (p. 16 in ibid., italics added) is a concept, emerging. Though more attention should be paid to traditional knowledge, contemporary society fails to 'link *useful* traditional knowledge with 'mainstream' dominant knowledge' (p. 18 in ibid., italics added).

Mery et al. (2010) provide us with suggestions on forestry policies that promote sustainable development and well-being, based on *scientific knowledge*. According to them, the foremost paradigm of the last two decades is of *sustainable forest management* (SFM) (ibid.) and that there is an 'urgent need to broaden the concept of SFM through a more integrated notion of *social and natural resource management*' (p. 13 in ibid.). Mery et al. (2010) state SFM has still not been extensively applied globally, despite the considerable efforts made in the 1990s.

Though primary interest is put on as an identification for the main drivers of change and emphasis is placed on analysing policies (...) and how policy goals translate into 'tangible progress in SFM at the local level', Mery et al. (2010) provide us with only a limited insight into the role of influential actors in this respect (actors as drivers of change).

Galloway et al. (2010, in Mery et al. 2010) find a need for new strategies and approaches in forestry development, with respect to climate change, ecosystem services, forest-based energy production, to name a few. They highlight the need for careful planning and implementation of sustainable management of fuelwood, an increase in economic benefits to the rural producers, an increasing ability of forestry activities to generate profitable income, an increase in participation and cooperation in forest-related decision-making, the taking *advantage* of local knowledge, the granting land tenure and/or the establishment of long-term use rights, the reduction of forest fragmentation and restoration of landscape integrity, ecosystem-based adaptation, the capturing of compensation for positive externalities provided by forests and the ‘recognizing the existence of human diversity and the need to be cognizant of the implications of this diversity to forestry development initiatives’ (p. 494 in *ibid.*) (*ibid.*).

‘To be lasting, forestry development must be rooted in local social structures, economies, and values’, state Galloway et al. (p. 491, 2010). On the other hand, they note that global problems must be dealt in a multilateral fashion (*ibid.*). They also conclude that the affects of various changes will be most severe to people in less developed regions, who ‘lack adaptive capacity’ due to ‘poverty, political and institutional marginalisation and geographic isolation from the centres of power’ (*ibid.*).

Also, capacity building would be crucial for the various actors and the need for *broad participation* is highlighted frequently, however at the same time arguing that ‘attention should be aimed at approaches in which *central authorities, local governments, and (...) educational and training institutions* intersect for producing *meaningful* engagement, and progress towards *strategic goals*, such as poverty alleviation and sustainable forest management’ (p. 495 in *ibid.*, italics added). Governmental institutions shall facilitate responsible forest management and conservation and favour the development and consolidation of small and medium forest enterprises (*ibid.*).

With regard to climate change, they (*ibid.*) note, both *science-based and local knowledge* will need to be considered in managing forests for adaptation (*ibid.*), while for success of climate related initiatives, these ‘*will have to gain ownership* in less developed countries; in other words that they identify with and *embrace* the mechanisms envisioned and *the “rules of the game”*’ (p. 498 in *ibid.*, italics added) and ‘*new professionals* need to (...) provide *leadership* to interdisciplinary efforts to promote and consolidate *SFM*’ (p. 499 in *ibid.*, italics added). ‘National policies should promote forest adaptation into the framework of sustainable forest management’ (p. 497 in *ibid.*).

Lambin and Meyfroidt (2010) describe three paths for ‘forestry development’ or transition: a *globalisation* path, a state forest policy or *government-led* path and a *smallholder/tree-based* land use intensification path. Based on empirical research, they have distinguished these paths, putting more emphasis on to the actors of ‘development’ (c.p. Farley 2010; Palo and Lehto 2012).

Persson (2003) distinguishes *two ‘schools’ of forest aid*: on one hand, that of the *stopping of deforestation and conserving* forests and, on the other hand, one that sees

forests being used as for the well-being of humans (*subsistence and sustainable forest management*).

In what follows, emphasis is given to **Dargavel's modes of forestry** (Dargavel et al. 1985). These or similar perceptions of changes of paradigms are common in the literature and practice/policies (c.p. Aurenhammer 2008; see empirical data of this research; Shepherd et al. 1998; Malla 2009; Bahuguna 2009; Ojha 2009, all in CFIW 2009).

Colonial forestry furthered imperial purposes, setting up forest departments, 'dedicating' the best forests to state forestry while removing existing uses, introducing 'scientific management' and ensuring profitability for the administration and/or concessionaires, be it in Java for the Dutch or in India for the British Empire (Dargavel et al. 1985). Colonial demands for change threatened the traditional mode of forestry practised so far. Military engineers' interests to ensure government supplies, various officials' interest in conservation of forests for catchment protection and against waste and high colonial officials' affiliation to forestry in their home countries played key roles (Dargavel et al. 1985).

The 1864 created Indian Imperial Forest Service was staffed initially with German foresters, and later British students were sent to Germany and France, consequently local training based largely on German and French methods of the 'scientifically advanced form of forestry' for large-scale and long-term production of industrial wood. Accordingly, natives' 'rights' were reinterpreted as natives' privileges with regard to forest products. The Indian model was extended to colonies around the world. 'The forestry that was constructed (...) had some clearly defined characteristics that were shared almost world-wide' (p. 8 in *ibid.*) – well, at least by the strong actors of colonial period, who defined their approach of 'development', based on their interests to create certain changes. These characteristics include technically monolithic forestry, management by a corps of professional officers and supporting colonial and imperial economies (Dargavel et al. 1985). Patterns of colonial forestry maybe of relevancy again, according to theories of neoimperialism.

Industrial forestry was introduced by 'aid and advice' mechanisms of the United Nations, especially the Food and Agriculture Organisation (FAO), who translated general development policies into forestry terms. From a development theoretic point of view, industrialisation theory (more concretely diffusionist theory) believed benefits would diffuse through a society following capital investment in industrialisation. However, this alone does not allow conclusions as to whether actual diffusion of benefits was necessarily in the interest of the influential political actors, formulating and implementing policies. Nonetheless, industrial forestry was characterised by the creation of new forest resources for local industrialisation (exotic, artificial afforestations/plantations, mainly *Pinus* spp. and *Eucalyptus* spp.) in addition to harvesting natural forests. It involved breeding, fertilisation, enlargement and mechanisation of logging operations – 'forestry became science' (p. 9 in *ibid.*) – followed by sawmilling and the pulp and paper industry development. (Dargavel et al. 1985)

According to Saari (1949), the objective of industrial forestry is *sustained yield forestry*. Sundberg and Silversides (1988) define the *maximisation of profit* as the

objective, and Palo and Lehto (2012) note industrial forestry requires privatisation of forest property as well as that the majority of domestic roundwood production is used by the local industry. Further, both state and market control is presupposed and that needs an institution of property rights that has to be created by the state (*ibid.*). The FAO recommended the *idea* of ‘progressive forestry’ to their members in 1949 (FAO 1949/1950, cit. in Palo and Lehto 2012).

In forestry, it was Westoby JC (1962), building on Hirschman’s (1958) linkage analysis, developed for resource-rich developing countries (c.p. Palo and Lehto 2012), who believed investment in forest-based industry would ‘trickle-down’ and diffuse easily, as the forestry sector were strongly interlinked with most other parts of the economy. The international and bilateral aid agencies acting now globally affected larger areas than during imperialistic colonial forestry, especially due to their dominant financial role. ‘It seemed as though the forestry of ‘developing’ countries became the forestry of the aid agencies’, so Dargavel et al. put it (p. 10, 1985). Industrial forestry/plantations would *per se* promote economic activity in rural areas. The foresters’ development theory of ‘arboreal determinism’ believed plantations automatically attract industry.

Besides the agencies and governments, Dargavel et al. (p. 14 in *ibid.*) found industry owners to be the key actors: ‘Public planting became a form of subsidy to the rich who predominantly owned (...) industry’. Local people obviously did not: ‘Large-scale industrial operations overwhelmed any use by local people’, rarely their resistance was effective (p. 15 in *ibid.*). With reference to India, they note (*ibid.*), ‘policies of village level rural development in the Gandhian tradition were pursued concurrently but sometimes conflictingly with industrialization’, which terms well as an example of different definitions of ‘development’ (Dargavel et al. 1985).

Social forestry policy was introduced thereafter, emphasising rural rather than urban and industrial sectors, ‘basic needs’ and the importance of energy supplies (c.p. *ibid.*). According to Dargavel et al. (1985), the shift in focus of policies only slowly percolated to aid agencies forestry sector (where the industrial model was still implemented). In the late 1970s, social forestry and rural community development were increasingly promoted by policies; in 1980, the FAO stated the new model of forestry would be directed towards rural development and the eradication of poverty, emphasising self-reliant mechanisms and forestry activities to be based on endogenous decision-making as well as full participation of the rural poor (*ibid.*). It was assumed that increased physical supply of firewood would provide widely distributed benefits, when at the same time social and political problems were largely ignored (*ibid.*). The new form of forestry was promoted by (international) aid agencies and sold in project packages (p. 17 in *ibid.*). ‘Community forestry’ was defined and imposed a particularly Western perception of village society, implying collective decision would be made for the collective good, self-reliance in the community aimed at and village woodlots were to provide benefits, that would be equitably distributed among the local community (*ibid.*) (Dargavel et al. 1985).

While aid agencies stressed various forms of social forestry, the old assumptions of industrial forestry were never questioned by the agencies – the benefits were to percolate into all of the rural society, even though old, imperial structures were

chosen as the vehicles for implementing these ‘social’ projects (Dargavel et al. 1985). Other assumptions of social forestry were that the legal status of land would correspond to the actual status of ownership, resulting often in privatisation of communal land by larger farmers, having it reforested at no cost (ibid.).

Contrary to the assumptions that social forestry supports the poor, they got often displaced (i.e. grazing use) (ibid.). Decision-making processes with villages were overseen, as well as their destruction by previous processes (i.e. colonialism) and other obstacles (to the goal of ‘developing’ the rural poor) were the reproduction of class structure, the weak participation of the ‘poorest’, the provision of free labour by the ‘poorest’, the focus on the large and most progressive farmers, too simplistic assumptions about the production and distribution of primary products and the change of the traditional labour relationships, identified by Dargavel et al. (1985).

To Dargavel et al. (1985), it remains unclear if social forestry has a positive or negative impact on poverty. They quote it (p. 22 in ibid.) as ‘an external intervention in villages and also in nations’ (which qualifies of course for all above modes), an idea that ‘was formed at an international level with western perceptions of “problems” at village level’. They conclude, ‘The objectives of decreasing poverty through increasing access to resources of fuelwood and fodder can not be met through the existing social structures which ensure that those who are exploited remain exploited’ (ibid.). The main role they admit to social forestry is to release industrial forestry from social pressure (ibid.).

Their conclusion that the ineffectiveness of policies – among others related to social forestry – is due to the ‘*theoretical inadequacy*’ of theories (i.e. p. 23 in ibid.) may be true, if, that is, theoretical assumptions have not considered all relevant variables – but it has considerable shortcomings. First, they either assume theory and policy to be equivalents or that policy considers precisely (all aspects of) the theoretical/research conclusions.

Secondly, they ignore the possibility that policy includes goals only for symbolical reasons, while real action focuses on other areas/goals, so that the reality of policy formulation processes could be a reason for the ‘ineffectiveness’ of policy – so far one normatively determines that policy has to focus on social forestry (or whatever) in order to be efficient.

Thirdly, it ignores that policy formulation and implementation processes are not equivalents, and therefore, ‘ineffectiveness’ (with respect to the normative goal) could result also from implementation processes. Given the fact, researchers being also part of society, it should also be questioned if and to what extent changes in policies are influenced by research (theories) and if and to what extent the research is (theories, hypothesis) influenced by/based upon developments in practice (i.e. changes in policy).

If research aims at explaining if and for what reason changes in policies (goals, policy themes) occur – rather than describing observed ‘changes’ – it should analyse the politics behind them, hence the actors involved in policy formulation and implementation processes and whether they, their role or influence has changed or varies with regard to certain policies (whereby ‘efficiency’ is dependent on actors and their roles, in contrary to normatively set goals).

The above has shown, that there exists a broad variety of ‘forestry development’ paradigms, used in science and mentioned in policies, and there is no consensus as to what is the best (single or mix of) goal(s) (c.p. also Palo and Lehto 2012). With Dargavel et al. (1985), it can be argued new goals or paradigms have been rather added to old ones than replacing them totally.

For this research, all the above ‘forestry development’ paradigms, modes or policy goals are equally ‘applicable’. They are considered normative inputs to actor-centred analytical research. The latter can contribute to the theoretical and practice discussion, by describing the *actors involved and their roles* in policy formulation and implementation processes. This also allows for conclusions as to whether such paradigms are met in reality of decision-making processes. Actor-centred analytical research cannot provide us with an answer to what paradigm (or what mix of goals) is in general ‘better’ or more ‘appropriate’ for ‘development’. It can show *what goals are feasible or are likely to be implemented* under current policymaking conditions and explain what policymaking structures underlie the recent focus on certain goals. Normative goals can be used to create analytical categories/typologies for analysing possible differences in policy formulation and implementation – for instance, between forest industry and forest conservation policies and projects.

1.3.4 Power Theories

Besides the principal importance of above theories, arguing for concepts, paradigms and goals of ‘development’, an actor-centred analytical theory needs to put focus on **power theory**. While international policy theories do that on a more macro-level, in this research, it is necessary to explain policy- and decision-making processes also on a meso- and micro-level – for national development policies as well as for implementation activities, like projects. An overview on power theories with relevancy for analytical power theory is given in Krott et al. (2011 in review).

Generally, power theories originate from Machiavelli and Hobbes, followed by Weber (1964), defining power as to carry out an actor’s will despite resistance (focus on bureaucracy/authority vs. resistance). Weber was followed by Dahl (1957, focus on communities), Bachrach and Baratz (1977, two faces of power) and Lukes (1974, three faces of power; c.p. also Boulding 1989). Clegg (1989) identifies three circuits of power. Other scholars are Toffler (1990), Etzioni (1975), Gaventa (1980) and Mann (1986). More recently scholars like Arts and van Tatenhove (2004, three layers of power) and Hasanagas (2004, power as a function of organisational and network factors) elaborated on power, with respect to environmental and forest policy. With respect to *forest development policy*, Hasanagas was applied by Devkota (2010) and Maryudi (2011).

According to Sadan (pp. 53ff, 2004), with Foucault, following Nietzsche, power is to be understood as layers, to be peeled away, and does not depend on resistance. For Giddens (1984), power is defined by human action and structure, as a continuum

of autonomy and dependence. Bourdieu (a.o. 2001) contributes to power research with his habitus–field theory and capital theory.

For the **concept of change** applied in this research, it is important to understand that power is the capacity to bring about change, and though will is ineffective without power, power is only randomly effective without will (Deutsch 1963). Therefore, analysing the potential for change, for support of FDP by an actor, we need to incorporate *capacities* (power, information = influence) and *will(ingness)* (based on interests, values, norms, ideologies). Capacities are defined as ‘necessary circumstances or abilities of a social entity to recognise an issue (cognition), to formulate a problem or an expectation, to find a solution and to implement it’. Interests are diverse, structured and often situation dependent. Willingness instead is limiting actors’ interests to those interests coinciding with a (governmental) programme. Actors are social entities, organisations and individuals.

This research is, as mentioned above, theoretically linked to the school of institutionalism of foreign policy theory, as it recognises *organisations, people and institutions as potential actors*. Also among power theories, this research is related strongly to institutionalism – between purely realistic/actor-related power-resistance (Weber 1964) and purely structure-related (loss of the role of actors, domination of structure) theories (c.p. Ekholm and Friedman a.o. 1995, Friedman and Hannerz 1991, both cit. in Kreff 2003; Hannerz 1992) – and it identifies itself closely with approaches of Clegg (1989), Bourdieu (a.o. 2001) and Hasanagas (2004). Therefore, it recognises *structure–actor interrelation*.

This research links power to organisational and system theory, hence considering *organisational and network factors* (i.e. Hasanagas 2004: third party actors’ capacities; Pelikan and Halbmayr 2000; Blanda 2009; Bourdieu a.o. 2001; Gotschi et al. 2007). It agrees on the need to focus on power relations *within a problem field*, highlighted by neo-institutionalism (c.p. Rittberger and Zangl 2004). This research stresses the need to recognise both power sources but also the will to act (more along with ‘modern’ power theory). *The will to act* links to interests and values/ideologies, namely, also to normative development theories (norms internalised/represented by actors). That is already in Weber (1964), in so far as he considers power as carrying out an actor’s will, despite resistance, whereby the activation of power is dependent on a person’s will, even in opposition to someone else’s. The importance of an actor’s will is emphasised also by Deutsch (1963) and by Pelikan and Halbmayr (2000).

In order to combine *macro- and micro-perspectives* (policy and project level), this research builds mainly on Bourdieu (1987, 1993, 1998, 2001), Gotschi et al. (2007), Pelikan and Halbmayr (2000), Blanda (2009), as well as Hasanagas (2004), whose approaches are referred to below and in the respective chapters.

Blanda (2009) applies and further develops Pelikan and Halbmayr’s (2000) ‘situative action theory’, developed for the health-care sector and modified for the rural development and forestry sector. It includes willingness to analyse how actors can be influenced/hindered in their willingness to act. This approach was theoretically appealing because it was already successfully applied to the forestry sector and it put emphasis on the factor willingness. The difficulty is in the plurality of

‘egocentric’ situation analysis, even within a similar, broader context (i.e. forestry). This is positive, as it reveals complex interdependencies and perceptions about third party actors’ interests (i.e. that might lead to non-action), but creates difficulties with respect to the diverse structure of a single actor’s interests. It is hence preferred to reduce complexity by focusing on governmental programmes, also because this research is on bi-governmental cooperation.

Gotschi et al. (2007) build on Bourdieu (1987, 1993, 1998, 2001) and transformation scientist (i.e. Obrecht 2004), stressing ‘development’ cannot be normatively defined. With Giddens (1984; pp. 65ff, 1997), action depends on the potential of an actor to create change of an already existing situation or process. The definition of a ‘potential for change’ therefore includes the conditions of cognition and hegemony, willingness and influence/power through third party actors and gained influence/dependencies (interdependencies) (c.p. also Rittberger and Zangl 2004; Prittwitz 1990). Bourdieu’s habitus–field theory and capital theory provide a profound basis for this research, also because Bourdieu undertook ethnological research in the Maghreb region. His theories build on Marx, Weber, Durkheim and Husserl, and he distinguishes himself from structuralism (Althusser, Foucault) and subjectivism (Sartre) (c.p. pp. 222ff in Treibel 2004).

According to Bourdieu (a.o. 2001), structure is not per se existing. He criticises the personification of collectives – it is acting individuals that make/constitute the structure and keep it up (a ministry is not an acting instance). In this respect, this research does not follow Bourdieu (ibid.) fully, as it recognises, along with the theory of institutionalism, organisations/collectives as acting social entities. Instead, it is found useful to apply the habitus–field theory also on organisations, not only on individuals (being habitus carriers in a social field). A habitus is connecting history, social integration and concrete action or behaviour. It is a general basic attitude or disposition towards/within the world, a collective class-unconsciousness. A habitus is also defined as the incorporation of objective structures.

For Bourdieu, ‘class’ (after Marx) is not central (p. 228 in Treibel 2004) but is a social space (fields). Social space is distinct into the ‘probable class’ (non-powerful) and the power field (companies, politicians, intellectuals). In social space (fields), capital is available in three convertible forms and accumulated by individuals; these forms are needed to implement power: economic, cultural and social/symbolic capital. Holding a power position means holding capital. A precondition for change are informed, competent and self-critical individuals.

Gotschi et al. (2007) apply Bourdieu (a.o. 2001) theoretically and provide with empirical research results on development cooperation policy (programmes) and projects in the rural development (agriculture and forestry) field. The applicability of Bourdieu in policy and project research, in the rural/forestry development fields, makes it even more appealing for this research.

Hasanagas (2004) combines organisational and network factors and builds thereby on organisational and system theory as well as new institutionalism. He focuses on actors and social interactions, determining power taking the factors irreplaceability, trust, incentives and information into account. The application of his approach is further elaborated below.

1.4 Methodological Approach and Hypotheses

This section provides us with an overview of the methodological approach and selected hypotheses of this research (more details in Aurenhammer 2011; see also the chapters referred to in this book).

In order to describe and explain forest development policy (FDP), this research uses **policy field analysis** (policy framework) as a guiding approach. Policy field analysis studies the concrete contents, determinants and impacts of political action (Schubert and Bandelow 2009). It questions what political actors do, why they do it and what they finally achieve (*ibid.*, after Dye 1976, *cit. in ibid.*). Political actors in this research are individuals and organisations (the unit of analysis remains however with organisations).

Policy is determined by concrete political contents, in the form of political programmes, aims and goals. In contrast to polity or politics-related research, policy field analysis aims to *explain concrete political results* (*ibid.*). In policy field analysis, the dependent variable is the policy, while independent variables are polity and politics. Policy analysis can, for instance, answer questions such as why at a given time does a country give priority to disbursements in forest aid or does not, explaining this with the political system given (polity) and with certain political processes (politics). Policy field analysis can also *compare* for instance why forest aid disbursements are high in one political system (*i.e.* Finland) but less relevant in another (*i.e.* Austria) (*c.p.*: *ibid.*).

Usually, policy field analysis is seen as a problem- as well as interaction-oriented science (*c.p.* Scharpf 2000, *cit. in: ibid.*). It is interaction-oriented, because it *analyzes concrete political decision-making processes* and how they are achieved in practice (Schubert and Bandelow 2009).

The methodological approach lends, generally, from the **policy cycle model** (*c.p.* p. 75ff in Jann and Wegrich 2009, in Schubert and Bandelow 2009). Despite scientifically well-discussed restrictions (*c.p.* p. 102ff in *ibid.*), the model is a useful tool for building the analytical structure for this research (*c.p.* pp. 81, 84, 104 in *ibid.*). However, the policy cycle model addresses a very broad research area (policy formulation, policy implementation, impact of interventions and outcome of interventions), so it is necessary to select main research questions and to focus on these in more detail. This research does not intend to develop a system model, explaining every aspect of the policy cycle in FDP.

Programme formulation is the initial phase of the policy cycle. As a result, policies (political programmes) are formulated. But how do donors set (different) priorities? According to the policy cycle, political action is seen as a *process of problem solving* (or addressing) – *policymaking* (p. 75 in *ibid.*). It is therefore necessary to find out *what problems are defined and if the problems really matter* (*c.p.* p. 101 in *ibid.*). A key question in the political sciences is: Is it really the seriousness of a problem (problem pressure) that gets it on to a political agenda and laid down in policies or is it due to political factors (*i.e.* capacities, interests) (*c.p.* pp. 87–89 in *ibid.*)? Prittwitz (1990) shows the ‘objective problem pressure’ is

hardly a dominant factor for the intensity of problem elaboration at the political level (c.p. p. 87 in Jann and Wegrich 2009, in Schubert and Bandelow 2009), from research on environmental policy.

Hence, the **forest problem definition** constitutes the first part of analysis in this research. After Prittwitz (1990), Hypothesis 1 is formulated. It takes into account that the forest policy subsystem is not the only policy level to be considered in foreign policy research (c.p. above, after p. 884 ff in Höll 2006). So, it is assumed that:

Hypothesis 1: In the definition of forest problems, *political factors* (from the general policy field, other sector policies and also from within the forestry sector) *prevail over forestry sector's problem pressure* (i.e. combating deforestation).

Since also *other problem pressure than forestry related* may influence the definition of forest problems, Hypothesis 5a is formulated (see below) and further specified in Chap. 2.

As already noted above, the capacities and interests of the governmental actors (i.e. bureaucracy) as well as other actors need to be considered, in order to be able to describe and explain the formulation of programmes in the FDP. For instance, governmental actors can dominate the programme formulation, but they can also include other actors, formally or informally, into the decision-making process. But which actors, interests or capacities are taken into account and why?

So, to answer the research question – *How are programmes formulated?* (c.p. p. 93 in Jann and Wegrich 2009, in Schubert and Bandelow 2009) – it is necessary to initially analyse *which actors are involved in the programme formulation*. The extent to which other actors are involved and the influence that they can attain, can be explained by their capacities and interests (c.p. p. 91 in *ibid.*).

The actors involved and how influential they are can be described, using the *theoretical construct of networks*. Thereby, the actors' composition can vary in networks (policy networks, decision networks, interest networks) of different policy fields but also countries (c.p. p. 92 in *ibid.*; p. 155 in Howlett and Ramesh 2003), which explains differences in programme formulation of donors.

Furthermore, to answer how programmes are formulated, an analysis actually cannot restrict its attention to single phases of the policy cycle. In order to attain competences, *actors have to gain influence in decision-making processes* (decision networks) at large. An analysis of such networks (theoretical constructs) always incorporates several phases (which in practice are inseparable or overlapping). It is not the intention to do separate analysis for these phases, as *policymaking can be understood as a negotiation process incorporating all phases within network relations* (c.p. pp. 89–97 in Jann and Wegrich 2009, see esp. p. 96, and pp. 191–199 in Schneider 2009, both in Schubert and Bandelow 2009). Rather, analysis focuses

on policymaking at a ‘policy level’ on one hand and a ‘policy implementation level’ on the other.

The former describes the *influence of actors in the forest aid policy network of the donor country* (not limited to donor country actors), to provide answers on the (formal and informal) competences actors gain in programme formulation and financing. Though this analysis at the ‘policy level’ incorporates (actors engaging in) problem definition, agenda setting, policy formulation and policy evaluation phases (and feedback loops from the policy implementation phase), *its main focus lies on explaining policy (re)formulation* (see Chap. 3).

Again, the ‘policy implementation level’ is not independent from the above but focuses on the analysis of *bilateral intervention networks*, hence the competences actors gain within *policy implementation* (see Chaps. 5 and 6, with emphasis on forest know-how).

Hence, in the second part of this analysis (Chaps. 3, 5 and 6), it is important to provide answers to **who the influential actors are** that gain competences in these networks (c.p. pp. 101, 105 in Jann and Wegrich 2009, in Schubert and Bandelow 2009).

The theoretical approach to and definition of ‘influential actors’ as well as of their ‘potential for change’ is provided in the relevant chapters (based mainly on Hasanagas 2004; Pelikan and Halbmayer 2000; Gotschi 2007, in Gotschi et al. 2007; Bourdieu a.o. 2001; Giddens a.o. 1984; Martinez-Diaz and Woods 2009).

‘Influential actors’ (strong actors) can be determined by *network factors*, and their ‘potential for change’ can be further described by *organisational factors*. Network approaches are not limited to exchange theoretical or institutionalist perspectives; rather, actors can hold/obtain institutional and/or functional positions (c.p. also pp. 195–197 in Schneider 2009, in Schubert and Bandelow 2009).

For this part of analysis, two hypotheses can be derived and formulated, from the above theoretical assumptions. With respect to types or *compositions of actors in policy networks*, and referring to the *dominancy prescribed to governmental actors by realistic foreign policy theory* (i.e. Morgenthau and Thompson 2008), Hypothesis 2a assumes:

Hypothesis 2a: Forest development policy and intervention networks are the *domain of governmental actors*, with regard to both programme formulation and financing as well as forest information.

Because the policy field’s area of competency is forestry and because with reference to above (c.p. p. 92 in Jann and Wegrich 2009, in Schubert and Bandelow 2009; p. 155 in Howlett and Ramesh 2003), it can be assumed that *dominant governmental actors will also incorporate other actors*, for instance, *holding capacities*

in forest-related know-how; **Hypothesis 2b** assumes that forestry actors reach high influence in forest aid policy as well as intervention networks.

Influential actors of forest aid policy (i.e. governmental and forestry actors) will hence contribute to the formulation of programmes. As they hold strong capacities and interests (willingness), their ‘potential for change’ in the direction of the programme will be high. This means that these influential actors will moreover aim to *address the changes targeted at, in the goals of these programmes*. They will do so, *as far as the goals coincide with their own interests (willingness)*. In this respect, influential actors will constantly try to reformulate the programme, for better accordance with their interests (and capacities), and will defend already reflected interests. Hence, Hypothesis 3 assumes:

Hypothesis 3: *Influential stakeholders will obtain a strong potential for change in the direction of the programme, because they hold strong independent capacities, and/or they can gain necessary added capacities from third party actors as well, because they engender strong willingness to support.*

Still with reference to *policy formulation, but with a stronger link to policy implementation*, in a third part of analyses (Chap. 4), the **link to superior and parallel policy subsystems** and their implications on forest aid policy is given emphasis.

The importance to analyse subsystems in policy research is addressed by various authors, though with varying theoretical approaches (i.e. Howlett and Ramesh 2003; Howlett et al. 2009; c.p. also Sabatier 1993; Sabatier and Jenkins-Smith 1993). It follows also the definition of a foreign policy system consisting of different system parts (c.p. above, pp. 884ff after Höll 2006).

A ‘three-dimensional model’ is developed, describing the interlinkage of superior and parallel policy subsystems within an ‘overall’ system of bilateral foreign policy (Chap. 4).

This is necessary, as research on policymaking today may not ignore the *parallel interaction of various cycles, policy fields* (here: subsystems) *and actors* (c.p. p. 103 in Jann and Wegrich 2009, in Schubert and Bandelow 2009). Rather, it is agreed that various policy concepts are discussed, decided upon and implemented at various levels (here: decision-making levels) of the political–administrative system and in various arenas (here, subsystems, networks, participation processes) and that these various processes influence each other (p. 103 in *ibid.*).

Theoretically grounded (a.o. Höll 2006; Howlett and Ramesh 2003; Howlett et al. 2009; Bourdieu 1987, 1993, 1998, 2001; Gotschi et al. 2007; Kreff 2003; Long 1997; van Ufford 1997), this part therefore focuses on describing the ‘position’ of *forest aid policy subsystems within the overall system and its interlinkages to*

superior and parallel policy subsystems or networks. It thereby also adds explanatory value beyond actor-related results (i.e. determination of influential actors). Actor-centred approaches go beyond actor-related analysis and take structural, institutional or systemic factors into account (p. 191 in Schneider 2009, see also pp. 195–197, in Schubert and Bandelow 2009). For instance, ‘actor-centred institutionalism refers to the structural positions, institutional contexts as well as the action orientations and forms of interaction of participating actors’ (ibid., own translation).

Actors’ involvement or composition in networks or subsystems as well as existing structures (gateway actors and gateways) at/between various decision-making levels need to be considered. This helps, to understand better, how superior decision-making levels narrow the frame for the FDP. Thereby, the model enables a move away from a view of a ‘two-dimensional’ subsystem of actors in the FDP (necessary for the identification of gateways) to a ‘three-dimensional model’ of the FDP within the overall bilateral foreign policy system.

This is important too because interdependences between subsystems of the foreign policy system correspond with actor constellations that can be ‘multilevel and fragile, or simply hard to oversee’ (c.p. p. 103 in Jann and Wegrich 2009, and pp. 121, 125 in Heinelt 2009, both in Schubert and Bandelow 2009). Therefore, an analysis of the decision-making levels and subsystems (influential actors and actors integrated) as well as their interconnection (by gateway actors) can contribute to a better understanding of the overall policymaking in the foreign policy system.

A gateway is an interconnection between two subsystems and is constituted by at least two actors or two organisational units of the same actor. There can occur more than one gateway between two subsystems. A gateway actor is an actor or its organisational unit, holding a gateway position in one of the two subsystems.

Hence, in accordance with the above, it is theoretically implied *subsystems at various decision-making levels* (determining certain framing elements and formulating interests) do exist: Rather than an integrated ‘overall’ system of bilateral foreign policy, their exist subsystems at various decision-making levels, determining framing elements, based on political factors or interests (**Hypothesis 4a**).

Framing elements constitute decisions on thematic, recipient country or financial scope, taken by influential gateway actors of a superior system part. Political factors or interests include any important aspect that a subsystem’s influential gateway actor bases its decisions on framing elements upon (no matter, where they derive from – own or third party actors’ aspects are taken into account).

Influence between subsystems is distinct into *top-down and bottom-up influence*, as well as influence between parallel subsystems of a donor and recipient country, expressed in a number of *bargaining processes*.

In accordance to the theoretical approach, described further in Chap. 4, **Hypotheses 4b to 4f** (see Chap. 4; see pp. 13–14 in Aurenhammer 2011) provide us with additional assumptions on the influence between subsystems and their actors. For instance, hypothesis 4b assumes superior subsystems’ actors’ top-down influence as being dependent on their integration into lower-level subsystems as well as on their independence from other actors, in their decision-making. Thus, when superior subsystems’ (actors’) influence is high, then also the influential actors

of the lower-level (i.e. forest policy) subsystem can act only within the framing elements, set by the superior subsystem (Hypothesis 4c).

The integration can be direct (through own gateway actors) or indirect (through other actors in gateway positions). Decision-making is independent, if no other actors have to be included in the decision-making by the actor, through ‘participation processes’. A *participation process*, is a formal or informal process, led by a (major) gateway actor, in order to exchange views and interests, to get advice or to base decisions on a broad consensus, thereby giving other actors the opportunity to participate in policy- and decision-making (i.e. on framing elements).

The forest policy subsystem is a lower-level subsystem. Nevertheless, lower-level subsystems’ and its actors have influence on the superior levels. Hypotheses 4d and 4e provide us with assumptions on to what such bottom-up influence depends on.

Forest policy subsystem’s actors are directly integrated, if they are part of participation processes in superior subsystems. They can be indirectly integrated, if there exists a gateway actor in the forest policy subsystem transferring their interests to superior levels.

Further, between each level of decision-making, there are *intermediary decision-making processes*, where the donor and the recipient country actors bargain with each other.

These bargaining structures represent theoretically subsystems of the overall bilateral foreign policy system. However, they should be regarded rather temporary or institutionalised networks (because they cannot be attributed to the political system of one country). As such, they are integrated into the top-down framework, but also the bargaining networks at various levels are interconnected (c.p. Hypotheses 4f).

Also with the above application of policy field analysis, an explanation to the varying relevancy of forest aid policy (i.e. expressed in aid disbursements, presence of forest aid policies) can be given, *comparing* political systems (polity) of donors (c.p. p. 6 in Schubert and Bandelow 2009) and subsequent political processes (politics). Hence, this also contributes to the testing of Hypothesis 2b, enabling for a further specification, under what structural conditions, within the overall system (direct/indirect bottom-up influence), forest actors can be more/less influential.

The fourth part of analyses (Chaps. 2 and 5) focuses on (explaining) the *outcome of FDP, with respect to overarching political problems or goals* in foreign aid policy, such as poverty alleviation and income generation. It examines the **link of forest aid to poverty alleviation**.

This is relevant, as it can be assumed FDP as a lower-level subsystem will have to accord with political problems or goals, defined at superior subsystems, in order to gain acceptance (legitimation). It will be therefore in the interest of FDP’s actors to strive for a respective outcome.

Similarly/consequently, with respect to *output*, policy implementation (at various levels) will clearly link or focus the distribution of their financial resources (aid) to the poorest countries. This is an aspect already considered in Chap. 2, with respect to other than forest-related problem pressure (elaborating on problem definition/programme formulation).

In the above-mentioned chapters, further specifications are given and two hypotheses (**Hypotheses 5a and 5b**) are formulated. They include assumptions about the

linkage of forestry interventions and local income generation on one hand (outcome, Hypothesis 5b) as well as on the linkage of forest aid disbursements to poverty alleviation on the other hand (output, Hypothesis 5a). Hypothesis 5a includes some variations (continuations) elaborated further in Chap. 2.

The major focus of Chap. 5 is following the assumption that the role of influential actors explains changes or non-changes in local income generation (see Hypothesis 6).

Similarly, as actors holding a *high* ‘potential for change’ in the direction of the programme will address the changes targeted at in the goals of the programme, which explains their integration into programme formulation and leads on to programme implementation and hence output (interventions), actors at the ‘policy implementation level’, holding a *high* ‘potential for change’ in the direction of the intervention, *will address the changes targeted at in the goals of the intervention* (that should lead to a desired outcome). The alleviation of poverty is such a goal.

Therefore, the *influential implementation actors’ ‘potential for change’* will be the major explanatory (independent) variable (further distinguished into different capacities and willingness) *for changes or non-changes in local socio-economic conditions*, namely, either reaching of the goal of poverty alleviation or not (outcome). Other variables are described in Chap. 5.

Depending on the actors’ capacities and interests (willingness), they are able to set the frame for changes or non-changes. Their interests (willingness) are (is) assumed to thereby play a more important role (as the capacities of influential actors are usually high).

With reference to the potential to reach the desired outcome – or in other words, *to explain the outcome* – it is therefore assumed that (further described in Chap. 5):

Hypothesis 6: Changes (or non-changes) in socio-economic conditions of the poor can be explained by the interests (willingness) of or frame set by the influential actors of forest interventions.

It is further assumed that thereby the occurrence of changes (or non-changes) is independent from soil ownership (state vs. private).

By analysing the frame set through actors’ capacities and interests (willingness) from a grassroot level (forest aid interventions), Chap. 5 provides us also with a thorough understanding of social and political interactions and responses. Thereby, it also contributes to a better understanding of the policy implementation, the reaction of the target group (impact) and the reaction of the system (outcome) (c.p. pp. 84–85 in Jann and Wegrich 2009, in Schubert and Bandelow 2009).

In a separate part, the excursus of Chap. 6, being outside the flow of theory, methodology and empirical analysis of this research, the know-how transfer through ‘capacity building’ in recipient countries, is analysed. The chapter has a thematic link to the research, as its findings contribute to a better understanding of impact and outcome. Its hypotheses are discussed within the text (no numbers), in the chapter itself.

Table 1.2 provides us with an overview of the **aggregates of hypotheses** on which the analysis of forest development policy (FDP) is based upon. It shows what chapters address what hypotheses and what methods are put to use in this regard.

The analysis of FDP focuses on the forest problem definition (programme formulation); on the actors, gaining influential positions and holding high potential for change in the policy and intervention networks (programme formulation); on the link of FDP to superior and parallel policy subsystems (programme formulation and implementation); as well as on the link of FDP to poverty alleviation (outcome). These areas are derived after Schubert and Bandelow (2009) and Krott (2005), and from these areas, analytical aggregates of hypotheses are built.

The hypotheses are further described, specified and grounded theoretically in the respective chapters. This table can only present simplified the main hypotheses. The methods are described shortly in the individual chapters as well and are more comprehensively discussed in this chapter (see empirical approach).

1.5 Empirical Approach

1.5.1 Analysis of Statistical Secondary Data

In a secondary analysis, the researcher applies already existing data to test hypotheses (Schnell et al. 1993).¹ The key problem is to excess adequate data (ibid.). Possible sources for secondary data are statistical databases (ibid.) but also documents and literature (c.p. also Jahn 2006).

The data sources used have been the databases from the German Federal Ministry for Economic Cooperation and Development, the Finnish Ministry for Foreign Affairs and the Austrian Development Agency as well as the Swedish International Development Agency. Below is an attempt to explain briefly how the secondary data were collected and how they were further processed. For a more detailed description, see Aurenhammer (2008, 2011). The data were received between 2006 and 2008, from the above authorities, using standardised methods of data collection (see operationalisation of ‘forest aid’).

Reference to sources of documents and literature for secondary data analyses is made below, in a separate section.

1.5.1.1 Objectives of Analysis from Secondary Data

The main objectives of secondary data analysis (statistics and documents) are to provide us with a general overview and to gain an analytical structure of existing data, with the following aims:

- To enable well-founded, comparative information (i.e. on processes, programmes and disbursements of donors)

¹For more details, see Aurenhammer (2008, 2011).

Table 1.2. Theoretical framework for the analysis of forest development policy

Analytical aggregates of hypotheses	Main hypotheses (simplified)	Methods				
		Chapter	Analysis of secondary data	Quantitative network analysis	Qualitative telephone and expert interviews	Field research, participatory observation
Forest problem definition (<i>programme formulation</i>)	<i>Hypothesis 1:</i> In the definition of forestry problems, political factors prevail over forestry sector's problem pressure	2 (4)	✓	✓	✓	
Influential actors and their potential for change (<i>programme formulation</i>)	<i>Hypothesis 2a:</i> Forest development policy and intervention networks are the domain of governmental actors <i>Hypothesis 3:</i> Influential stakeholders will obtain a strong potential for change, because they hold strong individual capacities and/or they can gain necessary added capacities from third party actors as well, because they engender strong willingness to support	3 (4) (6)	✓	✓	✓	✓
Link to superior and parallel policy subsystems (<i>policy implementation and formulation</i>)	<i>Hypothesis 4a:</i> Their exist subsystems at various decision-making levels <i>Hypothesis 4b:</i> Top-down influence is high, if superior subsystem actors' are integrated into the lower-level subsystems and if they are independent in their decision-making from other actors <i>Hypothesis 4c:</i> Given high top-down influence, also the influential actors of the lower-level (i.e. forest policy), subsystem can act only within the framing elements, set by the superior subsystem Hypotheses 4d and 4e deal with bottom-up influence Hypothesis 4f deals with bargaining processes	4 (2) 4 4	✓	✓	✓	✓

(continued)

Table 1.2 (continued)

Analytical aggregates of hypotheses	Main hypotheses (simplified)	Chapter	Methods			
			Analysis of secondary data	Quantitative network analysis	Qualitative telephone and expert interviews	Field research, participatory observation
Link to poverty alleviation (<i>policy outcome</i>)	<i>Hypothesis 5a</i> : The majority of forest aid is disbursed to the poorest countries	2	✓	(✓)	(✓)	✓
	<i>Hypothesis 5b</i> : Forestry interventions will lead to poverty alleviation at a local level	5	✓	✓	✓	✓
	<i>Hypothesis 6</i> : Changes (or non-changes) in socio-economic conditions of the poor can be explained by the interests (willingness) of or frame set, by the influential actors of forest interventions	5	✓		✓	

Source: Aurenhammer (2011)

✓ = method used, (✓) = limited use of method, (2...6) = compare with other chapters

- To create the bases for answering, and further specification, of research questions (for the later methodological approach)
- To generate new data, already enabling us to partly answer research questions (test hypotheses) and to enable the building of typologies (i.e. project types), necessary for further analytical approaches

1.5.1.2 Operationalisation of ‘Forest Aid’ for Statistical Analysis

All of the donor countries’ secondary data on official development aid (ODA) were received and analysed. Austria also provided data on official aid (OA) and non-governmental contributions as well as other official flows (OOF), which was received and separately analysed (see Aurenhammer 2008). If not otherwise specified (see also Aurenhammer 2011), data in this research only refer to analyses of ODA.

Under ‘development countries’, such countries are covered (after OECD-DAC), which are eligible to get ODA. These countries are listed in the Annex 1 (OECD-DAC). To gain an objective overview over the possibly range of ‘forest-related’ projects, data were analysed in two bounds. The first (lower bound) is strictly defined by only including disbursements to forest subsectors (codes: 321**²: forestry; 32162: forest industry). The second (upper bound) also includes disbursements to other (sub-)sectors, if their title or project description includes certain keywords (i.e. forest, wood, tree) or equivalent expressions in the respective native language (for more details, see Aurenhammer 2011).

1.5.1.3 Material for Statistical Analysis

The sources of secondary data, for analysis in this research, were databases of donor countries (data collection from 2006 to 2008).

The data of OECD-DAC/CRS databases were tested in 2006, but due to various lacks, they could not be utilised (c.p. Aurenhammer 2011).

National databases (at least some) included more information (i.e. on thematic area, short description, implementation organisation) than the OECD-DAC database. Also, data on disbursements were needed, not on commitments.²

The secondary data was received between 2006 and 2008. It was provided by the Austrian Development Agency, the German Federal Ministry for Economic Cooperation and Development, the Finnish Ministry for Foreign Affairs and the Swedish International Development Agency, respectively.

1.5.1.4 Limitations of and Error Estimation for Statistical Analysis

Information on limitations and error estimation for statistical analysis is given in Aurenhammer (2011).

²The interests were more with the actual (net) disbursements of a donor, than with its commitments, dependent on the political career of a theme.

1.5.2 Document Analysis

Document analysis is a common method of analysis in comparative, empirical social sciences (c.p. Jahn 2006). It can be applied in various forms, quantitatively and qualitatively (ibid.). The principal approach is to define the data that is to be raised from the source (ibid.).

In order to analyse the forest-related policies, programmes and projects and to provide us with more qualitative input to test hypothesis of the research, documents were collected in donor countries (Austria, Finland, Germany, Sweden) and recipient countries (Bhutan, Honduras, Kenya, Nepal, Nicaragua, Tanzania and Uganda).

These included policy documents of all kinds, including forest (related) sector policies, programmes, guidelines and alike, as well as programme/project documents, evaluations, midterm reviews and similar, from the respective donor countries and the recipient countries focused on, in later field research.

Besides electronically available documents, also non-electronically published and internal documents, as well as archive material, were collected or received from governmental officials (ministries, agencies) and their archives but also from experts and non-governmental organisations (who hold relevant documents). With regard to some projects, archive material of three decades was collected.

The excess to documents and archive material was complicated only by Austrian governmental officials, where relevant material could not be received for years.

In addition, related literature and other sources (i.e. organisation databases, for instance, the ÖFSE Organisationsdatenbank, are available online, at <http://www.eza.at/search2.php?tar=o>) were utilised.

Scientific literature was collected mainly from the libraries of Göttingen University and University of Vienna, including electronic archives of scientific journals.

1.5.3 Selection of Projects for Quantitative and Qualitative Analysis

The **first selection** of projects for quantitative and qualitative (network) analysis was based mainly on the following factors, applying the **most different approach** (c.p. Jahn 2006):

- Cover the most important thematic categories and project implementation types the donors are engaged in.
- Cover the largest possible percentage of donors' forest aid disbursements with the projects selected.
- If possible, cover all recipient country types. Cover as many recipient countries as possible.
- Include least developed countries (LDC) and such countries where deforestation is critical.

- Cover a maximum diversity of implementation actors who are also within project implementation types (i.e. different governmental agencies, non-profit and for profit non-governmental actors and research actors).
- Make sure to cover each of the four donor countries with several projects.

Altogether, for the quantitative network analysis and qualitative telephone interviews, **27 projects/programmes** (or aggregations of inter-related, follow-up interventions) were selected. These **covered 20% of the forest aid disbursements** (1994/5–2005) of the four donors. All project implementation types, recipient country types and thematic types could be covered.

Recipient countries included Albania, Argentina, Bhutan, Bolivia, Botswana, Brazil, Burkina Faso, Cameroon, Chile, China, Cote d'Ivoire, Ethiopia, Honduras, Indonesia, Malaysia, Mozambique, Namibia, Nepal, Nicaragua, Tanzania, Thailand, Tunisia as well as the Central American Region (focus on Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua), the Lake Victoria Region (Kenya, Rwanda, Tanzania, Uganda) and the Africa Region at large. Four project countries were chosen, as they reflected extremes in a matrix of Human Development (HDI) and Perceived Corruption (CPI) (Cote d'Ivoire; Argentina; Chile; Burkina Faso). Nine German, 7 Finnish, 6 Swedish and 5 Austrian projects were covered.

Out of these 27 projects, **24 projects could actually be analysed** (quantitative network analysis and qualitative telephone interviews). Analysed was the influence of actors from donor, recipient and third countries as well as international organisations. A project in Argentina (GTZ), a project in African region (African Academy of Sciences, Sida) as well as a project in Botswana (Finnish NGO/NPO) could not be further considered, due to limited or no quantitative data being made available.

In a **second selection**, eight projects, covering seven countries (Bhutan, Nepal, Nicaragua, Honduras, Uganda, Tanzania, Kenya), were chosen for more extensive qualitative research through expert interviews and field research. Criteria for their selection were:

- Conformity of the recipient country or region with Austrian policy
- Quality of quantitative data as well as qualitative information and literature existent
- Access to actors, language and local support
- Coverage of the major project types

With respect to **donor's policy networks**, analyses were done for all four donors (Austria, Finland, Germany, Sweden).

1.5.4 Quantitative Network Analysis

Network analysis is applied to describe and explain social relations and actions resulting from these. It aims at the mapping of all units of a network (nodes) and their interrelations (vectors) (c.p. Schnell et al. 1993).

Usually, networks analysed are partial networks, contrary to total networks. Limitations are among others, the difficulty to clearly boarder networks (c.p. *ibid.*), as described below.

1.5.4.1 Objectives of Quantitative Network Analysis

The main objective of quantitative network analysis was to gain empirical data from policy and project networks to be able to:

- Estimate the influence of actors (by power and information factors)
- Get knowledge about the actor composition of networks
- Be able to describe what factors make actors influential
- Reduce the number of actors for expert interviews
- Identify gateways

1.5.4.2 Operationalisation of ‘Forest Development Cooperation’ for Quantitative Network Analysis

Section 1.2 describes theoretically where development cooperation policy and FDP can be found and how they are **integrated into a larger system**.

As FDP is a fairly small sector, it is important to use methods of data collection, enabling us to empirically excess such ‘tiny’ networks and develop a clear approach to **how to bound FDP** (initially normatively) from overall forest economic and trade policy as well as superior foreign policy subsystems, as there is likely to be some overlapping. This is necessary to guarantee the quality of data (to raise data on FDP and not on other subsystems).

Therefore, in collecting the data, it is important to bound the networks (subsystems), despite interdependencies between subsystems or interlinkages between networks.

The approach applied to network analysis in this research focuses on very specific networks, namely, initially normatively defined FDP networks. Networks are constituted of actors (nodes) and their interrelations (vectors). Such interrelations can, however, be overlapping with other subsystems. It must be assumed that influence is exerted also through actors from other subsystems. This is elaborated in more details in Aurenhammer (2011).

1.5.4.3 Application and Limitations of Quantitative Analysis and Potential for Improvement

Building on Hasanagas (2004), the estimation of **actors’ overall influence was derived from the sum of third party actors’ assessments on how important an actor was to them**, *in terms of financial and material support provided* (directly or indirectly), *in how trustworthy an actor was regarded* (the centrality of the actors’

trust positions in the network) and in *how irreplaceable an actor was formally and informally* (legal, customary, societal or other decision-making dependence). The estimation of actors' relevancy in terms of information was measured in the same way, for the variables *general information* and *forest-related information and know-how*, hence reflecting a form of centrality measure. Both, the power and the information estimates provide us with a picture of the role and influence various actors hold in a network. In addition, this could be tested by the *actors' overall influence*, also based on third party actors' assessments, and by the *actor's own assessment* of its influence.

The quantitative network analysis was done with **questionnaires**, either sent electronically (via e-mail), filled out in telephone interviews or, rarely, in the occasion of meetings. For a more detailed discussion on the application of this method and the restrictions to quantitative analysis encountered, see Aurenhammer (2011). Many of these restrictions could be overcome by combining the network analyses with other methods (triangulation of methods). With qualitative expert interviews, document analysis and field research, quantitative estimations were improved and further grounded.

1.5.5 *Qualitative Telephone and Expert Interviews*

Telephone interviews constitute a useful method for preliminary data collection and to access people (actors) otherwise not accessible for questioning. It can be also better accepted compared to traditional methods (c.p. Schnell et al. 1993). The selection of interviewees is determined by the methodical approach of network analysis.

For expert interviews, semi-structured individual and (in field research) also group interviews were applied. These constitute methods for interviews that are structured, based on preliminarily prepared questions (c.p. Schnell et al. 1993).

The actors involved and interviews undertaken are listed in Aurenhammer (2011).³

1.5.5.1 **Objectives of Interviews and Methodical Approach**

The main objective of qualitative **telephone interviews** was simply to provide us with the best possible overview of the actors' experiences in and with forest development cooperation policy and projects. Besides some guiding questions, these interviews were open. Additional information can be found from Aurenhammer (2011).

³The list of actors is available from the author for research purposes.

Expert interviews' main objectives were:

- To overcome the limitations of the above methods and gain from the more comprehensive qualitative information and experiences of actors in policy and project networks
- To further ground quantitative estimations, by interviewing the identified strong actors, but also to cross-check for actors estimated as weak or not being identified from quantitative analysis
- To deepen the understanding of the role various factors play to determine actors' influence
- To diversify/specify factors of importance (i.e. what kind of forest-related information the actors provide)

The expert interviews were semi-structured and based on sets of guiding questions. The kinds of questions used, depended on the background of the expert, whereby mainly **three types** of question were distinct (though combinations occurred):

- Is the actor engaged on the policy level (question targets the donors' and/or recipients' and/or joint policy subsystems)?
- Is the actor expert to the planning of or to the subject of the policy?
- Is the actor or person expert at the intervention level (political–technical issues of certain projects)

In **field research**, the visits to project sights were combined with expert interviews and group interviews, as appropriate. Important for field research and local expert interviews in recipient countries was to gain excess through local, forest-related experts.

1.5.5.2 Limitations of Qualitative Analysis

More detailed information on the qualitative analysis and its limitations can be gained from Aurenhammer (2011). Generally, qualitative analysis turned out to be very useful, in situations, where quantitative data collection revealed difficulties. Qualitative expert interviews and field visits have shown to be indispensable methods to get excess to and relevant information from many actors, especially such from recipient countries.

Without qualitative information, many of the quantitative estimations would turn out to be difficult to explain and to put into context (**triangulation of results**).

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Chapter 2

Forestry Problems Versus Political Factors – The Domination of Political Factors over Problem Pressure –

2.1 Introduction and Methodological Approach

The ‘climate change’ crises have provided the environmental and forest aid community already for some years with new hope for financing their expert’s development model, called ‘sustainable forest management’ (SFM), and for reducing deforestation and forest degradation (REDD) around the world. Even the rather disappointing results from the Copenhagen conference have not managed to change this, after almost two decades of international forest dialogue, starting at the Rio Conference (UNCED, in 1992), which led to more vigorous flows, also in bilateral forest aid (c.p. Aurenhammer 2008) for some time, and thereafter continuing through forest-related panels and forums (IPF/IFF, UNFF). Nonetheless, hardly any larger sources of financing could have been found, not to talk about a halt in deforestation (c.p. pp. IX, 7 – 9 in Persson 2003). Today, foresters once more are supposed to be able to ‘save the world’, but all on their own. But the world just disregards the priorities set by foresters’ expertise and forestry interests.

Although deforestation is seen as a key issue, addressed in the donors’ aid policies in various ways, for many decades (c.p. p. 1 in Persson 2003), this chapter will show that there exist serious obstacles in the foreign (aid) policy framework itself that make it impossible to actually efficiently address this forestry and ‘development’ problem.

This chapter aims to explain the **definition of forest problems** (dependent variable) **by political factors and problem pressure** (independent variables). Both political factors and problem pressure can occur at **three policy levels**: the forest sector policy, other sectors’ policy and the general policy level (see Fig. 2.1). As a key forest problem, **deforestation** is chosen. With Prittwitz (1990), it can be argued that problem pressure alone cannot explain the definition of forest problems (i.e. deforestation), rather political factors (i.e. capacities, interests) will prevail.

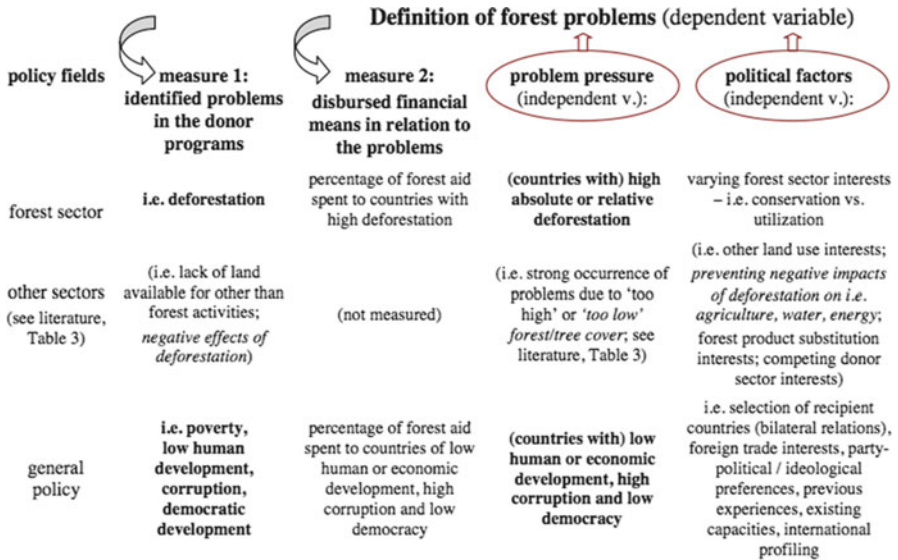


Fig. 2.1 Political factors and problem pressure explain the definition of forest problems (Source: Aurenhammer 2011)

Therefore, **Hypothesis 1** argues: In the definition of forest problems, *political factors* (from the general policy field, other sector policies and also from within the forest sector) *prevail over forest sector's problem pressure* (i.e. combating deforestation).

However, also **problem pressures other than forest related** may influence the definition of forest problems. Therefore, also problem pressures from other sectors or the general policy field, relevant or interdependent to the forest problem pressure (here: high deforestation), need to be recognised. This chapter includes problem pressure from the general policy field to its analysis. Other sectors' problem pressure is diverse and has a relevancy for the forest problem definition (i.e. deforestation) only, if such sectors are negatively affected by deforestation. However, at the same time, many of these sectors are major sources of deforestation (c.p. Table 2.1).

In order to do take general policy fields' problem pressure into account, further hypotheses are formulated. One of the major goals and legitimisations of development policy is to **contribute to the alleviation of poverty**. Poorest countries and

Table 2.1 Reasons for deforestation

Aggregates of factors	Factors	Authors
<i>Forest sector internal</i>	Commercial logging , firewood, charcoal, non-timber forest products production, traditional subsistence utilisation of forests, forest policies and governance , corruption in the forest sector, 'socialistic forestry'	Formin 1998 ; p. 7 in Kummer 1992 ; Gillis 1988 ; Sulaiman 1977 ; p. 11 in Persson 2003 ; p. XIII in Fairhead and Leach 1998 ; Blaser and Robledo 2007 ; Palo and Lehto 2012
<i>Forest sector external</i>	Agriculture : commercial crop and livestock production, commercial shifting cultivation, traditional subsistence shifting cultivation, traditional subsistence permanent cultivation, critically discussed: migrant farmers' shifting cultivation vs. traditional shifting cultivation Mining Hydropower Commercial interests : land to grow a product or speculate on land near to roads and new settlements, including those benefiting from new settlements (banks and retailers) Consumer demands from the 'First World' and critical discussed: foreign trade Growth of road network	p. 421 in Haigh et al. 1990 ; Formin 1998 ; Conklin 1957 , cit. in: Kummer 1992 , p. 7; Kummer 1992 ; Fairhead and Leach 1998 ; Palo and Lehto 2007 ; Viitanen 1996 ; Saastamoinen 1996 , and Laakkonen 1996 , all in: Palo and Mery 1996 ; Blaser and Robledo 2007 ; Persson 2003 ; p. 490, 495 in Galloway et al. 2010 , and pp. 235ff in Lobovikov et al. , both in Mery et al. 2010 ; p. 4 in Palo and Uusivuori 1999
<i>General: social, political, historical factors</i>	Migration (into, within and out of forests), conflicts (wars, civil wars, permanent insecurity or anarchical resource capture), military demands Corruption in contrast to the 'mode of control' (i.e. high social control vs. high absolutist and/or military and/or monopoly control) ^a Population (critically discussed) and population growth Development of subsistence in contrast to market economies Tree theft Political incentives : 'granting' pioneer settlement Changes in societal structures and a weakened position of traditional leaders, impact of rapid economic development and subsequent social changes Establishment of reserves leading to erosion of local use rights Insecurity in tenure rights	p. 420 in Haigh et al. 1990 ; Fairhead and Leach 1998 p. 7 in Kummer 1992 ; Aurenhammer 2010b ; Pant 1922 , cit. in: Haigh et al. 1990 , p. 420; Formin 1998 ; Persson 2003 ; p. 33 in Palo and Lehto 1996 ; Horne 1996 , both in Palo and Mery 1996 ; EC 2007 : ENRTP More critical with respect to the population factor: pp. 312–318 in Ali and Benjaminsen 2004 ; pp. XV–XVI in Fairhead and Leach 1998

Source: Aurenhammer 2011

^aInterestingly, Kummer (1992) finds corruption to be a less significant factor in explaining deforestation in Africa, which does neither fit to the ranking of the Corruption Perception Index nor to the results of the research central to this book.

such of low human development shall be given priority. If general policy addresses these ‘poorest’ countries, **alleviation of poverty is regarded as a means to reduce deforestation** (at some point of development’).¹

Hence, **Hypothesis 5a** argues: *Forest aid* is clearly linked to poverty alleviation as the majority of its *disbursements* are *provided to the poorest countries* (i.e. LDCs).

Further goals of development policy are to combat corruption and to facilitate democratic development. The interdependence of corruption or democracy and deforestation will be shown.

It is therefore argued (continuation of Hypothesis 5a) that **forest aid** is also clearly linked to the combating of corruption and to democratic development, as the majority of its **disbursements** are **provided to the most corrupt and least democratic countries**.

In order to elaborate on the interdependency of general political factors on deforestation, this chapter provides us with an overview on the type of countries with the highest deforestation (or loss in forest or tree cover). It will categorise these countries into key types, with regard to their ‘human development’ (Human Development Index, HDI), the ‘perceived corruption’ in these countries (Corruption Perception Index, CPI), the cultural or religious ‘civilisation’ they belong to as well as their ‘economic development’. Further, it will be shown, how much money flows to these countries (disbursements of bilateral forest development aid), referring to results of research on forest aid from Austria, Germany, Finland and Sweden over a period of 10 years (1994/1995–2005).

This chapter will also provide some answers to the question, whether priorities in the policy and programme formulation of bilateral aid are influenced by the forestry (aid) community or not, whether bilateral aid gives at all any priority to the ‘seriousness of an issue’ (problem pressure) or whether priorities are derived from a different level of foreign (aid) policy.

The results are based mainly on analysis of secondary data (see Chap. 1), that is, donor’s disbursement statistics and donor’s political programmes, as described comprehensively in Aurenhammer (2011). Statistical raw data on bilateral forest aid disbursements (1994/1995–2005), derived from national databases, were received between 2006 and 2008, from the Austrian Development Agency, the German Federal Ministry for Economic Cooperation and Development, the Finnish Ministry

¹ This is discussed controversially in literature.

for Foreign Affairs and the Swedish International Development Agency. Political programmes (in the period from ≤ 1995 –2010) from the above actors as well as the Austrian Ministry for Foreign Affairs, the Gesellschaft für Technische Zusammenarbeit (GTZ), the Kreditanstalt für Wiederaufbau (KfW), the Swedish Ministry for Foreign Affairs and the (former) Finnish International Development Agency (FinnIDA) were analysed. With regard to political factors, empirical examples are drawn from qualitative network analysis, expert interviews and field research (see Chap. 1; Aurenhammer 2011).

This chapter will show that:

- Foreign aid policy, as a part of foreign policy (pp. 884ff in Höll 2006, in Dachs 2006), sets the policy framework for forest aid policy, and so the choice of partner countries will not be made according to problem pressure (c.p. Jänicke and Mönch 1988, in Schmidt 1988; in contrary to Prittwitz 1990). Therefore, efficient ‘problem solving’ is not possible, and political factors prevail as factors of problem pressure.
- The priority setting of thematic issues (‘problems’) within foreign (aid) policy is still being exposed to conflicting sector interests. On the one hand, ‘sectors fight’ for recognition within a foreign (aid) policy, and at the same time, in recipient countries, the sector forestry or more generally ‘forest use’ is responsible for large areas of land, and that land is an object of land use conflicts and change, often due to other sectors’ interests, in the name of so-called development.
- Further, the priority setting of issues within the forest aid policy (i.e. forest utilisation vs. preservation) is due to varying interests and helper’s capacities (see Prittwitz 1990) of donor actors.

2.2 Problem Pressure: Global Deforestation

Deforestation is defined as the loss of (natural) forest cover within a certain period of time. The global annual deforestation equalled an area of about 15.2 million hectares of natural forests during the 1990s (FAO 2001). Currently (2000–2005), this value is somewhat lower, at 13 million hectares (FAO 2005). Related to the forest cover of the USA – of around 300 million hectares (747 million acres) – this amounts to an annual deforestation of up to 5%. Between 1990 and 2000, the **absolute** annual deforestation in the ‘top’ 15 countries amounted to 9.3 million hectares or 61% of the total global deforestation of natural forests.

It is Brazil, Indonesia, Sudan, Zambia, Mexico, the Democratic Republic of the Congo, Myanmar, Nigeria, Zimbabwe, Argentina, Peru, Cote d’Ivoire, Malaysia, Cameroon, Venezuela, Colombia, Bolivia, Ecuador, Angola, Paraguay, Ghana, Botswana, Nicaragua, Madagascar, Papua New Guinea, Thailand, Mali, Kenya, Uganda and the United Republic of Tanzania, **only 30 countries, that account for around 11.1 million hectares** (equal to Germany’s total forest cover!) or **73–85% of the world’s deforestation of natural forests.**

If the political problem is to safeguard global forest cover, forest aid needs to focus on the above countries.

Less known might be that in **relative** terms (meaning the annual deforestation of natural forests, relative to the total forest cover of a specific country), especially Burundi, Haiti, Saint Lucia, El Salvador, Micronesia, Comoros, Rwanda, Niger, Togo, Cote d'Ivoire, Nicaragua, Sierra Leone, Mauritania, Nigeria and Zambia are deforested most rapidly. Their annual relative deforestation (deforestation rate) lies between -9.0 and -2.4% (according to FAO data for 1990–2000; see FAO 2005)!

If the political problem is to safeguard the national forest cover of a country, forest aid needs to focus on the above countries.

Noteworthy: Nigeria, Cote d'Ivoire and Nicaragua are relevant when considering both political problems.

Reasons for deforestation are plentiful. Impacts on forest derive from within the forest sector, from sectors external to forestry and derive from more general, that is, social, political and historical factors (c.p. Table 2.1).

As seen from below (Table 2.1, c.p. Blaser and Robledo 2007), the main reasons for deforestation lie outside the forest sector (c.p. p. IX, 16 in Persson 2003): 'The main cause for deforestation is not the need for wood, but the need to use the land for something other than growing trees'.

Also, other authors argue that the strongest drivers of change for forests and forestry are often generated outside the forest sector (c.p. p. 490, 495 in Galloway et al. 2010, in Mery et al. 2010; p. 235ff in Lobovikov et al. 2010, in *ibid.*; p. 4 in Palo and Uusivuori 1999).

There exist, however, controversial views to the extent of which the forestry sector itself can be considered the 'evil', when referring to problems like forestry sectors' corruption or socialist forest 'management', as drivers for deforestation (c.p. Palo and Lehto 2012).

2.3 Problem Pressure: Deforestation, Development and Corruption

Corruption can be seen as one of the major factors leading to (excessive) deforestation, as highlighted by Lloyd C. Irland (Irland 2008; Irland 2010, in ITTO 2010). According to Irland, almost half of the globe's entire forest area is in nations exhibiting

Table 2.2 Distribution of countries with high absolute or relative deforestation among three classes of corruption (Transparency International, CPI 2005)

Groups of countries ^a	Classes of corruption (CPI 2005) ^b		
	CPI <3	CPI <5	CPI >5
30 Countries with highest absolute deforestation	<u>22</u>	6	2
15 Countries with highest relative deforestation	<u>8</u>	2	0

Source: Aurenhammer 2011

^aFour countries are represented in both groups (Cote d'Ivoire, Nigeria, Nicaragua, Zambia)

^bSome countries are not mentioned in the CPI (2005)

'rampant corruption', reaching a Corruption Perception Index (CPI) of only 3.0 or lower. Another 26% of the global forests are governed by nations reaching values of up to 5.0%, and only 10% refer to forests in nations with a CPI of above 5.0.

When categorising the aforementioned countries of high relevancy with regard to absolute and/or relative deforestation, using the **Corruption** Perception Index (Transparency International: CPI 2005; see Table 2.2), 26 of them can be rated as countries with 'extremely high corruption' (Cote d'Ivoire, Nigeria, Haiti, Myanmar, Angola, Sudan, Democratic Republic of Congo, Paraguay, Kenya, Indonesia, Cameroon, Venezuela, Papua New Guinea, Burundi, Niger and Sierra Leone) or 'high corruption' (Bolivia, Ecuador, Uganda, Zambia, Zimbabwe, Nicaragua, Argentina, Madagascar, Mali and the United Republic of Tanzania) with CPIs below 2.5 or 3.0, respectively. Only eight countries achieve 'medium corruption' (CPIs between 3.0 and 4.9: Rwanda, Ghana, Mexico, Peru, Brazil, Thailand, Colombia and El Salvador), and only Malaysia and Botswana reach values of 5.1 and 5.9 so 'relatively little corruption' (for 'developing countries'), keeping in mind that 10.0 is the best value that can be reached.

Therefore taking these results into account, there is a strong correlation between countries with high deforestation and high corruption (according to the CPI corruption index). If problem pressure determines the definition of political problems, then aid has to be focused on the most corrupt countries, thereby combating corruption and halting deforestation.

Often, these countries are considered 'fragile, failing or failed states' (i.e. Angola, Burundi, Democratic Republic of Congo, Haiti, Sierra Leone, Sudan), as also shown by Irland (2008; *ibid.* 2010, in ITTO 2010). The average CPI for the 30 countries with the highest absolute deforestation is 2.82; for those 15 countries with the highest relative deforestation, it is 2.52.

When the above countries are categorised according to their **Human Development** Index ranking (see Table 2.3), it is evident that 57% of the countries with the highest absolute deforestation and 73% of the countries with the highest relative deforestation can be found from the lowest or lower-middle part of the list. Only Mexico, Brazil,

Table 2.3 Distribution of countries with high absolute or relative deforestation among four classes of ‘human development’ (HDI 2005: UNDP 2007)

Groups of countries	Classes of human development (HDI 2005) ^a			
	LHD	MHD I	MHD II	HHD
30 Countries with highest absolute deforestation	7	<u>10</u>	9	4
15 Countries with highest relative deforestation	<u>7</u>	4	3	0

Source: Aurenhammer 2011

^a*HHD* high human development (HDI ≥ 0.8), *MHD* medium human development (HDI 0.5–0.799): upper part (MHD I) and lower part (MHD II) and *LHD* low human development (HDI < 0.5)

Malaysia and Argentina can be considered of ‘higher human development’. Among the countries with the lowest human development are deforestation candidates like Cote d’Ivoire, Nigeria, DR Congo, Burundi, Niger, Sierra Leone, Zambia and Rwanda.

Hence most of the countries with high deforestation are considered as having a quite ‘low human development’ rating. If problem pressure determines the definition of political problems, then aid has to be focused on the ‘least developed countries’, thereby addressing both the improvement of human development and the halting of deforestation.

Another categorisation, from an ‘**economic development**’ point of view (see Table 2.4), after McCormick (2001) and Danzinger (2005) (both in Jahn 2006), shows that of the countries with *high absolute deforestation* and with the *highest relative deforestation*, 27 and 53%, respectively, are considered as very poor, so-called ‘marginal states’ (i.e. Angola, Democratic Republic of Congo, Haiti, Mauritania, Myanmar), 43 and 40%, respectively, are considered as ‘developing countries’ (i.e. Cote d’Ivoire, Nigeria, Sudan, El Salvador, Ecuador, Nicaragua, Micronesia) and 30 and 0%, respectively, are ‘newly industrialised countries’ (i.e. Indonesia, Mexico, Brazil, Malaysia).

Hence most of these countries are economically very poor. If problem pressure determines the definition of political problems, aid has to be focused on the less economically developed countries, thereby addressing both poverty alleviation and halting deforestation.

From the 30 countries with highest absolute deforestation, 40% have a GDP per capita of less than US \$750, 30% less than US \$2,000 and another 30% more than US \$2,000. Regarding the 15 countries with the highest relative deforestation, 67% have less than US \$750, 13% less than US \$2,000 and 20% above US \$2,000.

In relation to **democratic development**, 12 of the 30 countries with high absolute deforestation can be considered as ‘democracies’ (i.e. Ghana, Indonesia,

Table 2.4 Distribution of countries with high absolute or relative deforestation among classes of 'economic development' and GDP/capita^a

Groups of countries	Classes of 'economic development'			Classes of GDP/capita (in 2003)		
	MS	DC	NIC	US \$ <750	US \$ <2,000	US \$ >2,000
30 Countries with highest absolute deforestation	8	<u>13</u>	9	<u>12</u>	9	9
15 Countries with highest relative deforestation	<u>8</u>	6	0	<u>10</u>	2	3

Source: Aurenhammer 2011

^aSome countries are not classified in Jahn (2006). Classes of 'economic development' after McCormick (2001) and Danzinger (2005). Data on GDP/capita of 2003, from World Bank (2004), cit. in: FAO 2005

Nicaragua, El Salvador, Mexico, Brazil) after Jagers and Gurr (1995) and three as 'established democracies' (Botswana, Colombia, Papua New Guinea) after Lijphart (1999). The countries remaining (15) were not specified regarding their democratic status, by the authors.

According to the democracy index 2009, by Campbell and Pözlbauer (2010), 9 out of these 30 countries reach medium level of democracy, 12 are among the lowest third of countries listed and further nine countries are not included in the index. Jagers and Gurr (1995) list Indonesia, Paraguay, Nicaragua, Madagascar and Kenya as democracies, in contrary to Campbell and Pözlbauer (2010), where they are among the lowest third of countries listed.

Out of the 15 countries remaining uncategorised after Jagers and Gurr (1995), one (Ecuador) is ranked as medium democracy and seven (Zambia, Nigeria, Venezuela, Malaysia, Mali, Uganda, the United Republic of Tanzania) are among the lowest third of countries (see Campbell and Pözlbauer 2010). Seven countries remain unclassified (Sudan, DR of Congo, Myanmar, Zimbabwe, Cote d'Ivoire, Cameroon and Angola); however, most of them are either failed or fragile states rather than 'democracies' (c.p. also p. 194 in Irland 2008). To summarise, six countries are regarded as at least 'medium-level democracies', seven countries cannot be regarded as democracies at all, and for five countries, the available literature disputes as to whether to consider them 'medium-level democracies' or not, and seven countries remain unclassified.

From the 15 countries with the highest relative deforestation, only two were considered 'democracies' (Jagers and Gurr 1995). After Campbell and Pözlbauer, five countries were classified as among the lowest democratic states and only one country as being a medium democratic state (the remaining nine were not included).

The above shows that the level of democracy cannot be clearly linked with deforestation. However, democratic countries often have lower corruption ratings and higher human and economic development values. If problem pressure (deforestation) is to determine the definition of political problems, then focusing forest aid on countries with high deforestation will only partly give priority to the 'least democratic' countries.

In applying a typology of ‘**civilisations**’ (after Huntington 1996) of religious or cultural character, we find that 33% of the countries with a high absolute deforestation belong to the ‘African civilisation’, 33% to the ‘South American civilisation’ (often better developed and less corrupt), 13% belong to the ‘Islamic civilisation’ (Mali, Sudan, Indonesia, Malaysia), which appear to be inhomogeneous in comparison to the above classifications, 10% to the ‘Islamic African civilisation’ (Kenya, Nigeria, United Republic of Tanzania), 7% to ‘Buddhist civilisation’ (Thailand, Myanmar) and Papua New Guinea belongs to the ‘Western civilisation’.

It can be concluded that most deforestation occurs in countries belonging to the African civilisation that are not considered democratic as well as in countries belonging to the Latin American civilisation, which on the contrary are mostly considered democratic. If problem pressure is to determine the definition of political problems, aid has to be focused principally on African countries, thereby addressing both democratic development and the future halting of deforestation. Latin American countries on the other hand are countries that are already considered, for the most part as, democracies (no general policy problem pressure).

Additionally, there can be noticed frequent occurrences of Small Island Developing States (SIDS) being among countries with the highest relative deforestation value (Haiti, Comoros, Micronesia, Papua New Guinea, St. Lucia), as well as countries belonging to the group of ‘landlocked developing countries’ (Bolivia, Paraguay, Burundi, Botswana, Mali, Niger, Rwanda, Zambia, Zimbabwe, Uganda).

2.4 Identified Problem: Development Cooperation Programmes and Deforestation

Frequently, donors include aspects of deforestation and forest degradation into their development cooperation policies, but they are not being fulfilled (efficiently), because the problem pressure is subsidiary to political factors!

Donor policies often use deforestation as a scapegoat to appeal for increased funds and even ‘sometimes to justify outside intervention’ (p. 2 in Persson 2003). Two ‘schools’ of forest aid can be distinguished from one another (p. 15 in *ibid.*): (1st) stopping deforestation and conserving forests and (2nd) forests should be used for the well-being of humans (subsistence and sustainable forest management).

Persson (p. 16 in *ibid.*) questions whether the desire to reduce deforestation is a strong reason (factor) to increase support to forestry. After many decades of cooperation, only a few countries’ deforestation could be ‘stabilised’ whereby a major factor for this stabilisation seems to be due to very strong social controls in the given

country (p. 39 in *ibid.*; see also pp. 16–19 on ‘Development in quantity and quality of forests.’). Recipient governments are required by donors to embrace ideals such as gender equality, environmental protection, sustainability, etc., only to adopt these ideals perfunctorily as jargon, to grab the donors’ attention and to capture popular imagination, hence justifying aid in both countries (c.p. p. 117 in *ibid.*).

Deforestation is a key issue of many aid policies. Although many donors address it, substitutional and recycling interests of so-called ‘Helper’s interests’ can be distinguished from one another (see Prittwitz 1990). With regard to deforestation, aid policies dominated by substitutional interests will entertain other possibilities (raw materials) to replace forest products, while the prevailing ‘recycling interest’ policies will focus on more efficient methods of firewood utilisation or more improved techniques of heat and electricity production from wooden biomass.

The Austrian policies, for instance, address deforestation mainly as a so-called gross-cutting policy issue along with environmental issues. They argue that the extensive use of firewood causes deforestation and erosion problems, and therefore, they are in support of other forms of energy, especially hydropower (see, i.e. ADC n.d. a, b).

In contrary to this, for instance, Finnish policies argue with unsustainability in the use of forest products, referring to the underutilisation of forests (when compared with the annual increment) and the need for monitoring forest use or the creation of reliable forest inventories. ‘An overall problem in the management of Mozambique’s forests is the poor knowledge of the resource base’, forests need to be managed sustainably, for the benefit of all, and ‘forest inventory and management are a part of this endeavour’ (pp. 12, 30 in Formin 1998). ‘For about 15 years better planning has been used as a panacea for reducing deforestation’ problems, ‘forests should be saved fast, by careful planning’; however, deforestation has not retarded, and sustainable forestry management is rarely practised on more than an experimental scale (p. 8–9 in Persson 2003).

The eventual emerging policy on REDD (reducing of emissions from deforestation and forest degradation) is also called ‘avoided deforestation’, and incorporates both types of donor interests. Institutional arrangements (decentralisation, community management) are seen as critical for the success of any REDD policy in order to ensure that adaptations have ramifications on a field level and in local communities (see EC 2007: ENRTP, annual action programme 2007).

Policy development on the avoiding of deforestation in relation to climate change and the support of community forestry and forest policy reforms are aims of EC funding (EC 2007). ‘Avoiding deforestation would be among the lowest cost mitigation options to avoid increasing CO₂ emissions and possibly also increasing carbon sinks. At the same time, other benefits like biodiversity conservation, poverty reduction and climate change adaptation could also be enhanced’, according to Simula (2008).

It is estimated that the potential for climate change mitigation measures of forestry activities in non-Annex I countries amounts to 3,900 million tonnes of CO₂ per year (in 2030) for reduced deforestation, 3,910 million tonnes for forest management and 3,370 million tonnes regarding afforestation (IPCC 2007). The key Helpers’ interest behind REDD policy is therefore also a ‘recycling’ interest: improved efficiency of forest products harvesting and utilisation, starting or improving on

‘sustainable forest management’ and a positive ‘valuation’ of forestry and forest land, through the additional sinks for carbon sequestration from afforestations (recycling other sectors’ negative externalities, here CO₂).

Globally, UNFCCC (2007) estimates that the investment needs for ‘climate aid’ (REDD, sustainable forest management, afforestation/reforestation) amount to US \$21 billion annually (for developing countries). The main beneficiaries of REDD are indicatively estimated to be in the Asia-Pacific region (40%), followed by Latin America and the Caribbean (31%), while only 21% are estimated to go to Africa (UNFCCC 2007, cit. in: Simula 2008, p. 60).

Finally, it has to be noted that the occurrence of forest issues in poverty reduction strategy papers (PRSPs) and CRS (c.p. p. 83–84 in Simula 2008) varies among recipient countries, although within this chapter, it is not possible to flesh this matter out.

2.5 Definition of Problems Through the Distribution of Forest Aid

Research on forest development policy, from Austria, Finland, Germany and Sweden to 78 different recipient countries, over a period of 10 years, shows (see Fig. 2.2) that only around 18% of the disbursements went to countries with a ‘very low human development’ (LHD) and 22% to the lower-middle category (MHD II), but 45% went to the upper-middle category (MHD I) and 15% to countries within the category of ‘high human development’ (HHD). In addition to this, the amount received by a single country tends to increase with its ‘human development’ ranking. However, one must keep in mind that the CPI in the category of ‘lowest human development’ reached an average of 2.7, the category of ‘high human development’ reached an average CPI of 3.8.

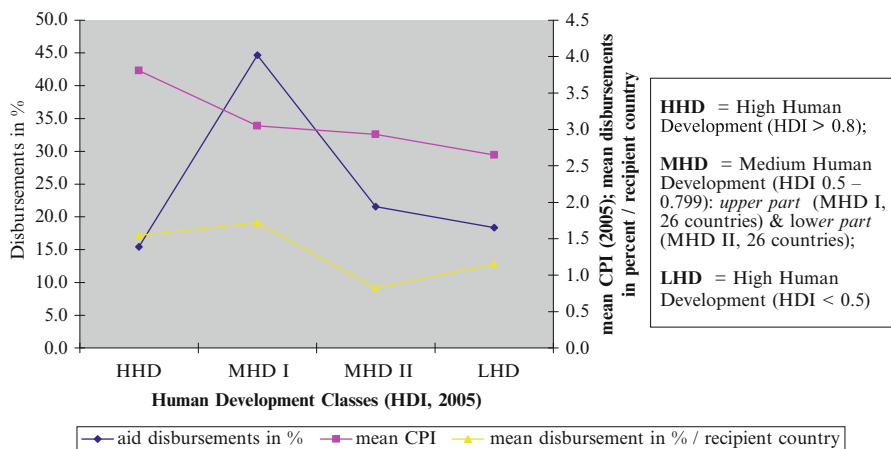


Fig. 2.2 Corruption Perception Index (2005) and forest aid disbursements by classes of human development (HDI 2005: UNDP 2007) (Source: Aurenhammer 2011)

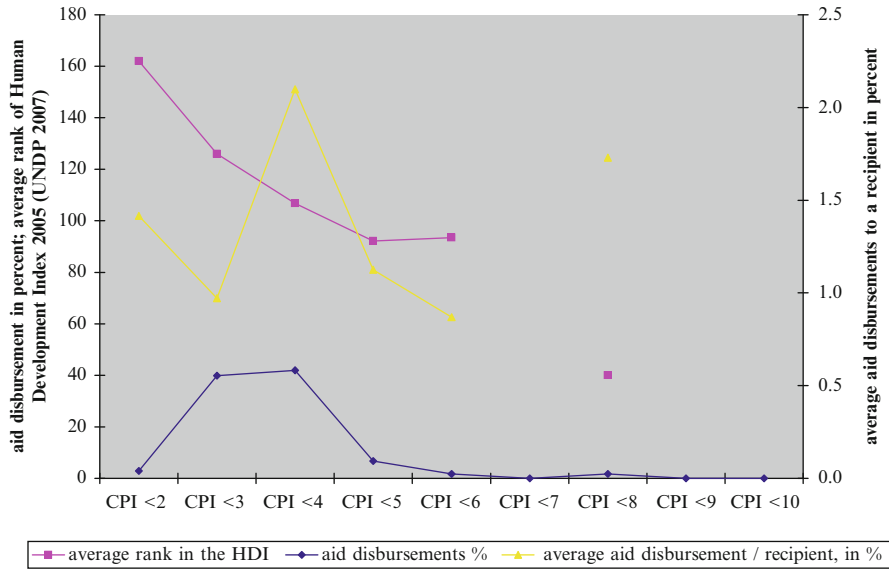


Fig. 2.3 Human Development Index and aid disbursements (ODA) in per cent, for intervals of the Corruption Perception Index (CPI) (Aurenhammer 2011)

As only 18% of forest aid is spent on the least developed countries, the definition of political problems is neither influenced by the general political problem pressure (low human development priority) nor by the forest problem pressure (high deforestation) – being interlinked. This supports Hypothesis 1 and rejects Hypothesis 5a.

While disbursements to countries with a CPI <2.0 were very low, countries with a CPI between 2.1 and 3.9 would receive the most aid (80%), and once again ratings between 4.0 and 10.0 received little disbursements (see Fig. 2.3).

As 80% of forest aid is spent on moderately (CPI 2.1–3.9) corrupt countries, it cannot be clearly said if in the definition of political problems, general political problem pressure (high corruption) is taken into account. Similarly, forest problem pressure (high deforestation), being interlinked with high corruption, does not play a clear role. Baring out the most corrupt countries provides limited support for Hypothesis 1 and Hypothesis 5a (part on corruption).

To conclude, the four donors have spent 67% of their forest aid on recipient countries that belong to the ‘upper half’ of ‘human development’ (HHD and MHD I), and 80% of their forest aid went to countries with high corruption, but aid to countries with extreme corruption (CPI <2.0) was less again.

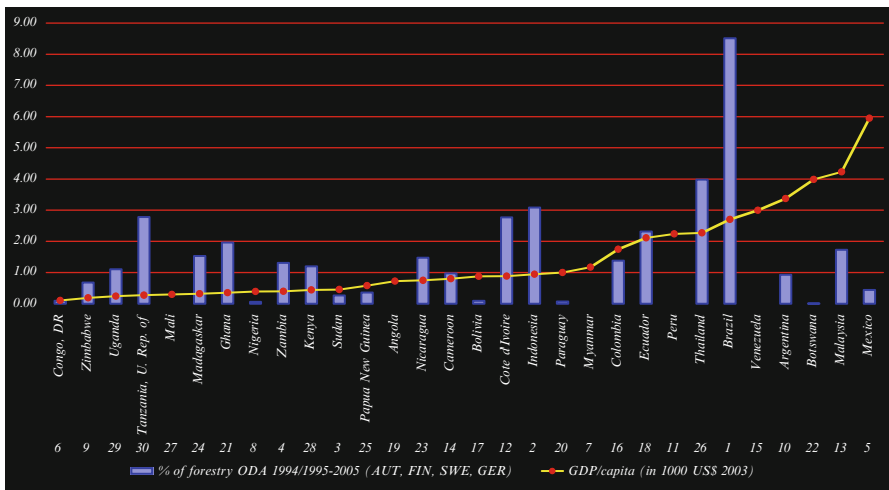
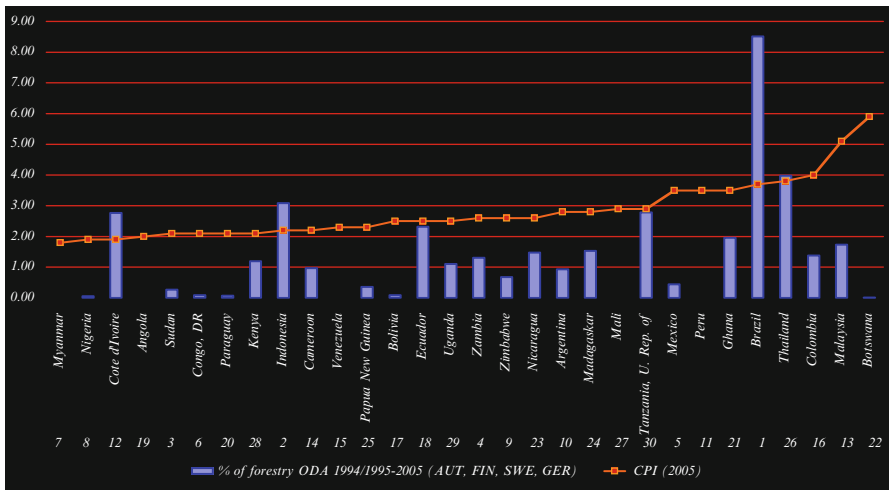
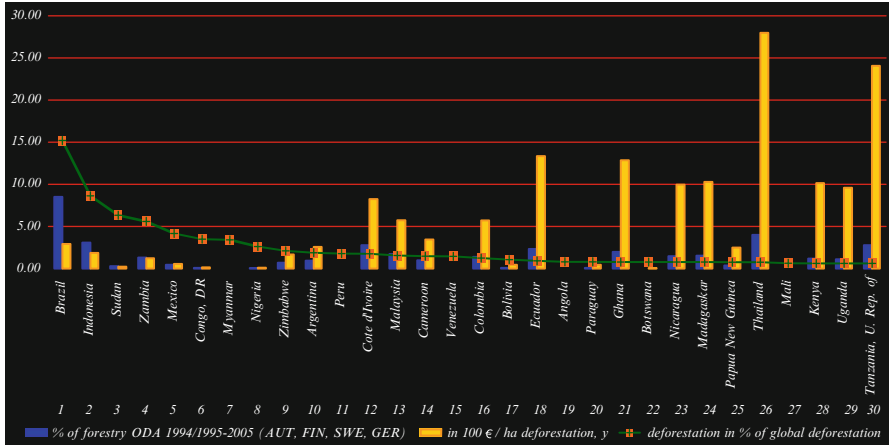
With respect to the countries' most relevant to deforestation it can be shown that *only 21 and 39%* of the total forest aid was disbursed to the *15 and 30 countries* with the highest absolute loss in forest cover, *respectively*. The 15 countries with the highest relative loss in forest cover received only around 6% of the donors' total forest aid. This supports Hypothesis 1, namely, that forest problem pressure (high deforestation) does not determine the political problem definition.

Out of the 39% of the overall disbursements that are addressed to these 30 countries, 12 were spent on countries with high human development (HHD), which are often also countries of higher economic development and also rather low corruption (Brazil alone 8.5), another 12 were spent on countries of the upper-middle category (MHD I), only eight went to the lower-middle one (MHD II) and only seven per cent points went to the 'least human development' (LHD) category. Cote d'Ivoire, Nigeria, Haiti and Myanmar with CPIs of 1.8–1.9 receive hardly any support (Cote d'Ivoire 2.77 per cent points, Nigeria 0.06 per cent points, the others none). It must be concluded that out of the 41 countries of critical importance, with regard to absolute and/or relative loss in forest cover, 22 countries have not received any, or <0.5%, of the total aid to forestry of the four donors considered, over a 10-year period.

As only few deforestation relevant countries are being addressed by forest aid and those that are being considered are mainly higher-developed ones, not being the most corrupt countries, this supports Hypothesis 1 and rejects Hypothesis 5a (parts on poverty alleviation and corruption).

Figure 2.4a–c **compare problem pressure** (global deforestation relevancy, corruption, poverty) **to problem definition** (through forest aid disbursements) for the 30 countries with the highest absolute deforestation. A comparison of problem pressure (national deforestation relevancy) and problem definition (through forest aid disbursements), for the 15 countries with the highest relative deforestation, is given in Fig. 2.5. **It can be seen that disbursements vary highly and many countries receive (hardly) any forest aid.**

Fig. 2.4 (a) Comparison of problem pressure (global deforestation relevancy) and problem definition (through forest aid disbursements), for the 30 countries with the highest absolute deforestation (Source: Aurenhammer 2011). (b) Comparison of problem pressure (corruption and global deforestation relevancy) and problem definition (through forest aid disbursements), for the 30 countries with the highest absolute deforestation (Source: Aurenhammer 2011). (c) Comparison of problem pressure (poverty and global deforestation relevancy) and problem definition (through forest aid disbursements), for the 30 countries with the highest absolute deforestation (Source: Aurenhammer 2011)



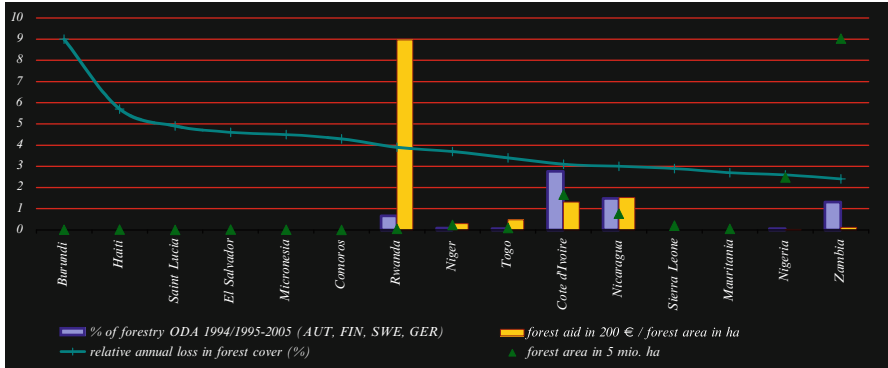


Fig. 2.5 Comparison of problem pressure (national deforestation relevancy) and problem definition (through forest aid disbursements), for the 15 countries with the highest relative deforestation (Source: Aurenhammer 2011)

Figure 2.4a shows that donor disbursements do not follow a logical decline relative to a countries’ global deforestation relevancy. The first ten countries do receive considerably less aid, taking into account their global deforestation relevancy. Several countries do not receive any aid. Using the average annual forest aid disbursed per hectare of annual deforestation, values divert from 12 euros in Nigeria to 2,800 euros in Thailand.

Figure 2.4b and c show that disbursements coincide with a decrease in corruption and poverty, rather than being focused on the most corrupt (low CPI) or most ‘poor’ (low GDP/capita) countries.

Figure 2.5 shows that most of the 15 countries with the highest national deforestation rate do not receive any, or hardly receive any, forest aid. Comparing recipients’ forest aid over a decade, per hectare of remaining forest, values divert from 23 euros per hectare in Zambia (with a high absolute forest area) to 1,800 euros per hectare in Rwanda (with a low absolute forest area).

2.6 Prioritisation of Forest Aid Through Political Factors

The distribution of the four donors’ aid among countries of high importance for reducing deforestation, which is claimed to be among the core aims of forest aid policy, does not fit to the logical decline of aid along the decline in the countries’ importance with regard to the absolute or relative deforestation, as can be seen from Figs. 2.4a and 2.5 above. Neither, save a few exceptions (40.5% of Austrian aid to Nicaragua, 9.6% of German aid to Brazil), can we detect major amounts of aid spent to any of these countries. Further, in total, these donors spent only 21% on the 15 countries that account for 57% of global (gross) deforestation or 39% only to the 30

countries that account for 73% of global (gross) deforestation.² Many countries, indeed, did not even receive aid.

This is shown above and supports Hypothesis 1, as forest sector's problem pressure (as well as general problem pressure) does not determine the definition of political problems. Hence, political factors must play a dominant role in the definition of political problems (in forest and general aid).

Therefore, donors' forest aid as well as foreign policy in general must set other priorities, not related to deforestation at least (and obviously also not to the 'poorest' and 'least developed' countries). Some of these political factors and considerations are discussed below. The broad variety of factors and the systems and processes leading to political problem definition and determining policymaking at large are focussed on in Chap. 4.

Among the **general political factors** involved in FDP are the handling of or engagement with failed states and the privileging or selection of countries due to foreign trade interests, political preferences, positive experiences from previous engagements and the existing and institutionalised donors' capacities.

It can be argued that some of the above countries are failed states or (post)-conflict countries, which explains why there's a lower donor interest and little possibility of foreign policy and aid activity.

Some of the countries, again, seem to be privileged due to other foreign political and aid political or even forest aid political reasons (i.e. foreign trade development): Brazil, Indonesia, Mexico and Malaysia belong to these.

Nicaragua has been a core cooperation country with, among others, Austria over a long period of time. This dates back to the support of the Sandinistas by Austrian socialist governments. Also, non-profit organisations had engagements in Nicaragua already earlier than the government. It is for these reasons rather than for reasons related to forest aid that (also) forest-related engagements were undertaken in Nicaragua.

Similarly, it can be seen that the recipient countries receiving most disbursements from donors, with regard to a very specific forestry issue (thematic area),³ do very well. For a comparison of the four donors Austria, Finland, Germany and Sweden, see Table 2.5. The table shows the problem definition through forest aid disbursements (prioritised recipients with regard to a certain thematic area). Although not giving a full overview on all donors' cooperation, this leads to the conclusion that the priority of the thematic issue in a recipient country (problem pressure) is not the major criteria why foreign policy (foreign aid policy) starts or how it is formulated.

The selection of the recipient countries is given priority before thematic issues, and this selection is based on interests or priorities other than forestry-related ones. The only exception appears to be the priority to promote 'forest protection, preservation and biodiversity', which tends to be focused on in Tanzania and in Brazil and 'forest certification and eco-labelling', which is a global issue. But both issues have one

²Gross deforestation means deforestation of natural forests (not including a possibly compensation due to plantations).

³Thematic areas are derived from content analysis of policies and from the descriptions of interventions in aid statistics (c.p. Aurenhammer 2008).

Table 2.5 'Most important' recipient countries, with respect to disbursements within specific thematic areas, by donor country (*forest-related ODA, 1994/1995–2005, upper bound*)^a

Thematic area	Austria	Sweden	Finland	Germany
Non-wood forest products	(Namibia, Philippines)	–	(Africa, reg., (Kenya))	–
Sustainable forest management	Bhutan , Nicaragua, Papua New Guinea	(Larvia, Asia, reg., Lithuania, Vietnam, Lao, America Belarus)	Vietnam, Lao, America (South)	Chile , Indonesia, Ghana
Forest education and research	Bhutan , Nicaragua, global	Ethiopia , Africa, reg., global	Africa, sub-Saharan , Mozambique, Tanzania	Vietnam, Lao , Argentina, global; Gambia, Gabon
Afforestation, reforestation, tree nurseries	Burkina Faso , Uganda, Pakistan, Senegal	Central America , Tanzania, India, Ethiopia, Poland, Malaysia	(Turkey, Indonesia, Uganda)	China , Vietnam; Brazil
Agro-/community-/village-/social forestry	(Indonesia, Nicaragua, Rwanda)	India , Africa Lake Victoria, Zambia, Kenya, Africa reg.	Lao ; South Africa, Rep.	Honduras, Indonesia, Philippines, Central African Rep.
Forest knowledge, information, PR	Lao, Austria	(Vietnam, Ukraine, Nicaragua, Bosnia-Herzegovina, Belarus)	–	–
National forest programmes	–	(Global, ((India)))	America (N/Central) , Namibia, Tanzania, global	Colombia
Restructuring of/advice to state forests/ departments	(Serbia and Montenegro)	Nicaragua	Namibia	Malaysia , Vietnam, Madagascar, Cambodia, Indonesia
Forest inventory, planning, measurements	–	Global , Bolivia, Tanzania, Larvia, Armenia	Mozambique , Namibia	(Zimbabwe, Bosnia-Herzegovina, Asia reg.)
Combating forest fires	–	(Macedonia)	Burkina Faso , Namibia	Indonesia , Mongolia

Small–medium enterprises (forestry, low-mechanised industry)	(Nicaragua)	(Ethiopia)	(Malawi, China, Guatemala)	–
Indigenous forest projects	Nicaragua, Cameroon, Colombia	–	–	(Philippines)
Forest certification, eco-labelling	(LLDCs unspecified)	(Global, West Africa, Asia, reg.)	–	Global
Lumber, further wood-processing industry	Mozambique, Nicaragua	Bolivia, Chile, Russia	(Zimbabwe, Malaysia, Thailand)	–
Forest protection, preservation, biodiversity	Brazil, Tanzania	Global, Tanzania	Tanzania, Brazil, Asia, reg.	Brazil, Cote d'Ivoire, Ghana, etc.
Pulp, paper, card, particle board industry	–	–	Thailand, China, Mexico	China
Forestry-related funds/trust funds	–	Lao, India, Vietnam	Vietnam	–
Participation support (conferences)	–	Africa, reg., Vietnam	(Global)	–
Plantations and hydrocultures	–	Nicaragua, Asia, reg., (Costa Rica, Malaysia)	–	(Sri Lanka, China, Brazil)

Aurenhammer 2008

Explanations on the formats used in the boxes:

Recipient country names in brackets: indicate that the disbursements attached to the(se) countries within the specific thematic area (or to the overall thematic area) are comparatively low; hence, the 'importance' of the issue is low

Bold: indicates a country that received a major amount of a donor's disbursements within the specific thematic area; if also underlined, the value reached 100% (all flows)

Italics: indicate that a country could receive (according to OECD) only official aid (OA) – those countries have only been included in the Swedish data; in the case of Ukraine, it is a combination of OA and ODA (due to frequent status changes of Ukraine during that period)

Boxes marked in grey: show the grade of similarity of recipient countries within a thematic area, comparing donors; the darker, the more similarities

*The upper bound includes also disbursements for activities that only partially include forestry issues.

thing in common that they are of high international (policy) relevancy and attractive ways of aid ‘profiling’, at least as long as these issues are maintained on the global agenda. They are ecological issues that are easily conveyed to the taxpayer and treated as a matter of ‘global interest’ by many, not only foresters. Also, disbursements to forest industrial activities focused mainly on China; in other words, in the prioritisation of China, one can find some similarities in the comparison of donors in that specific thematic area.

As Table 2.5 demonstrates, the mentioned donors obviously have some recipient countries, which appear more frequently across thematic areas and receive higher proportions of the disbursements within a specific thematic area (i.e. Austria: Bhutan, Nicaragua), reflecting the priorities set out on a ‘country selection level’ of foreign policy.

The table shows also how donors cover (or do not cover) different thematic areas within their forest aid policy (i.e. Austria: ‘indigenous forest projects’; Germany and Finland: ‘forest industries’). This supports the assumption that, besides limitations to the effective solutions of problems (i.e. combating deforestation) due to superior political factors, within the forest (aid) sector, other varying interests also occur.

It can be concluded that **the decision-making processes** (i.e. problem definition, policy formulation) **must be driven by factors other than problem pressure**, namely, that strong stakeholders will dominate the formulation and financing of development cooperation (policies and programmes). This occurs in decision networks, at different levels of policy formulation, where influential actors that dominate the knowledge transfer will gain strong positions. However, in the context of this chapter, these issues cannot be elaborated on in more details, but other chapters (see Chap. 4) will give further insight into this, building on results from quantitative and qualitative research (Aurenhammer 2009, 2010a).

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Chapter 3

Actors' Potential to Have an Impact on Change in Forest Aid

3.1 Introduction and Methodological Approach

This chapter describes who the influential stakeholders are in bilateral forest development cooperation, holding formal and informal competencies in policy and programme formulation and financing.

It explains an actors' potential for change (potential to impact) in the direction of programmes' *goals* by its capacities and its willingness (see Fig. 3.1) and assumes that:

Hypothesis 3: *Influential stakeholders will obtain a strong potential for change in the direction of the programme goals, because they hold their own strong, independent capacities and/or they can gain necessary added capacities from third-party actors as well as because they engender strong willingness.*

With regard to the overall influence of actors (strong actors), it is further assumed that:

Hypothesis 2a: *In bilateral, bi-governmental forest development cooperation, there shall exist a clear dominancy of governmental actors over the policy and intervention¹ level networks,*

¹ Intervention level networks are considered in Chap. 6.

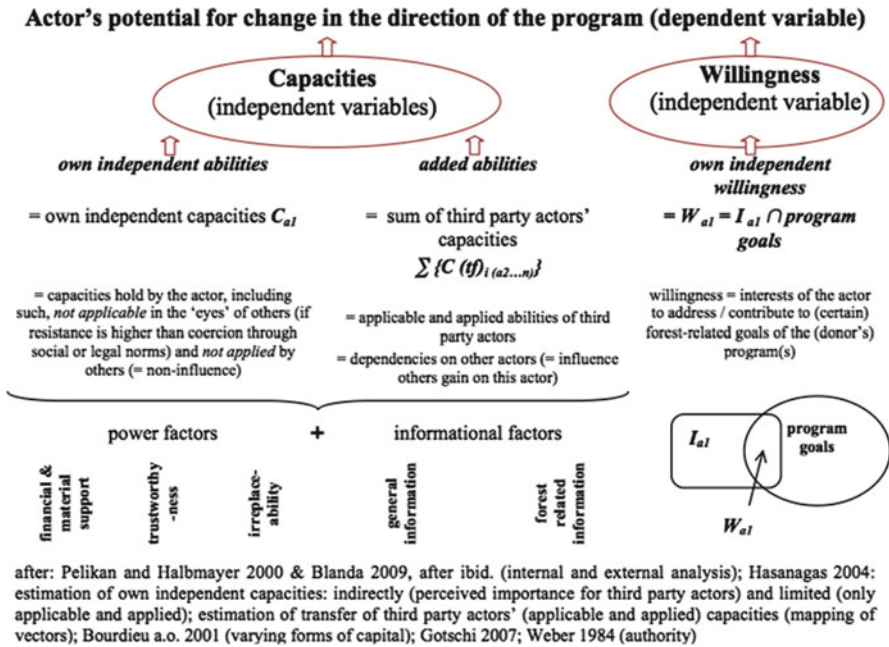


Fig. 3.1 Actors' potential for change in the direction of the programme (Source: Aurenhammer 2011)

just as realist foreign policy theory prescribes (foreign policy as a domain of states) (c.p. i.e. Morgenthau and Thompson 2008). Network approaches, however, do not limit the range of actors that may participate in such networks and are therefore well suited to the testing of any possible variety of types of actors involved in these networks and to analyse what their position or role is within these networks.

Given, the sector policy of forestry, it is further assumed that:

Hypothesis 2b: *Forest actors reach high influence in forest aid policy as well as intervention² networks.*

A forest actor is any social entity, whose main interest, agenda or legal competency is to engage in forest issues, be it through own material and/or immaterial capacities.

After a theoretical definition of influential (strong) actors, this chapter presents us with an empiric selection of the strong actors, based on network analyses. It provides an overview on the dominant actors that hold formal and informal competencies in policy and programme formulation and financing at large. With regard to interventions

² Intervention level networks are considered in Chap. 6.

(aid projects, programmes), see Chap. 6. Therefore, emphasis is placed on what power and informational factors (after Hasanagas 2004), in the following called capacities, make actors influential. Specific attention is paid to the factor of forest-related know-how and information.

An **actor's potential for change** basically reflects the influence an actor has gained and can bring to bear on either other actors or on the policy field at large in order to change 'issues', according to the actor's will. In other words, an actor's potential for change *is the potential an actor holds to impact forest aid policy and thereby contribute to a change that is in the personal interest of the actor*. Since this chapter analyses the potential that actors hold to contribute to change in the direction of the donors' programme(s), it reflects the influence an actor has gained and can bring to bear in order to contribute to a change of forest-related issues, in the direction of the programme (following the programme goals). Thereby, an actor's interests are limited to such interests, coinciding with the programme (definition of willingness). Interests beyond those coinciding with the programme are not considered in the determination of actors' willingness. This means, actors can also have other interests, not conforming to the goals of the programme. They can also have fully divergent interests and will then not contribute to change in the direction of the programme goals, but may well contribute to other changes or even try to prevent change as emphasised in the programme. Since such actors do hold independent capacities and do have their own independent will/interests, they may well facilitate other forms of change.

The potential for change is thereby largely dependent on the actor's own independent capacities and interests (if applied and applicable, independent capacities constitute influence within a policy network) as well as the capacities obtained from/through third-party actors (such capacities create forms of influence or dependence) (c.p. Fig. 3.1 and Table 3.1).

The **network analysis** takes both sources of power into account, mapping the real and virtual (i.e. trustworthiness) exchange of or transmission of (only applied and applicable) capacities (power and information factors), and estimates each actors' potential for change (overall influence within the network) from the sum of third actors' assessments (a sum of vectors) (c.p. Table 3.1). For example, the estimated power of an actor in relation to the factor 'financial capacities' does not measure the actors' own independent financial capacities, but the power third-party actors perceived the actor to hold, due to (a) the actor applying (providing) independent financial capacities to third-party actors and/or (b) because the actor provides and manages financial capacities of others, so that they only indirectly gain incentives from the actor, and/or (c) because the actor is a gateway for them to excess financial capacities from others.

The **actor's own independent capacities** ('structural aspects' of the nodes)³ are described qualitatively. Also, based on secondary data analysis, an overview on the financial transfers to various implementation actors is provided (financial capacities

³Organizational factors.

Table 3.1 Measurement of an actor's potential for change (in the direction of the donor's programme)

Empiric selection of strong actors, based on network analysis	Empiric description of strong actors' by organisational factors	Empiric description of capacities gained from third-party actors
= Sum of capacities transferred to third-party actors $\Sigma\{C(tf) \rightarrow i(a_2...n)\} \cong C_{a1}$	= Capacities an actor actually holds C_{at} = Willingness an actor engenders W_{at}	= Sum of capacities received from third-party actors $\Sigma\{C(tf)_{i(a_2...n)}\}$
Quantitative estimation of actors' own independent capacities (after Hasanagas): (a) Includes independent and gained third-party actors' capacities, transferred (b) Transferred are only such capacities between two actors, which are being applied and applicable (depending on interests/willingness of both actors)	Qualitative description of actors' own independent capacities and willingness (interests in relation to programme goals), based on expert interviews and field research as well as document analysis; the basis for the selection is the estimation of overall influence of actors, by quantitative network analysis	Qualitative description of added third-party actors' capacities (interdependencies), based on expert interviews and field research, as well as preliminary quantitative information from secondary data analysis and quantitative network analysis

Source: Aurenhammer (2011)

of third-party actors). These descriptions provide us with a more complementary understanding of the quantitative results from network analysis.

Because **interests** are diverse, structured and often situation-dependent, in this chapter, we focus on that part of interests coinciding with donors' programme(s), namely, **willingness**. A better overview on interests and the role of influential stakeholders is provided in Chap. 4, based on empirical and qualitative descriptions of various intervention cases. Also, Chaps. 5 and 6 discuss interests in relation to various 'arenas of influence' and 'capacity construction'.

The network analysis builds on the work of Hasanagas (2004), taking into account the factors most relevant with regard to both **power and information**. The network analysis included 132 stakeholders from four donor countries (Austria, Finland, Germany and Sweden) and 35 recipient countries, covering 31 of the largest activities of these donors (see Chap. 1 for more details).

Estimations from quantitative network analysis (on actors own and added capacities) were then further found (triangulation of data) by qualitative telephone and by semi-structured expert interviews as well as through field research. Expert interviews covered 182 actors from four donors and seven recipient countries, in four policy networks and nine intervention networks. Also, results from secondary data analysis (i.e. on financial flows) were used, to describe the transfer of capacities to third-party actors (for more details, see Chap. 1).

3.2 Theoretical Definition of Strong Stakeholders

Building on Hasanagas (2004), the estimation of **actors' overall influence** was derived from the sum of third-party actors' assessments on how important an actor was to them, in terms of financial and material support provided (directly or indirectly), in how trustworthy an actor was regarded (the centrality of the actors' trust positions in the network) and in how irreplaceable an actor was formally and informally (legal, customary, societal or other decision-making dependence).⁴ The estimation of actors' relevancy in terms of information was measured in the same way, for the variables' general information and forest-related information and know-how, hence reflecting a form of centrality measure. Both the **power and the information** estimates provide us with a picture of the role and **influence** that various actors hold in a network. In addition, this could be tested by the actors' overall influence, also based on third-party actors' assessments, and by the actor's own assessment of its own influence.

⁴Though the factor of irreplaceability can derive also from other capacities (i.e. in scarcity of technical knowledge providers – as one example in the quantitative questionnaire), the application of network analysis has shown that actors usually perceive and link irreplaceability to *legal, customary, societal or other decision-making dependences*. This is also because the number of actors relevant for providing forest know-how is comparatively large in the networks so that no one can gain (quasi)-monopoly in know-how supply (equal to irreplaceability).

All these factors are forms of material or immaterial capacities and reflect not the actors' actual capacities (i.e. how trustworthy, knowledgeable, wealthy, rule-making the actor really is/could be), but the **centrality of the actor** within a specific network context, restricted by (1) the actors' ability to provide capacities (i.e. information, money, rules), (2) the actors' willingness to do so, both 'node characteristics', and most importantly for the 'vector-based' analysis (3) the 'value' that is attached to certain capacities of an actor within the network, by others, or not. In other words, that means the **demand** for or interest in certain capacities of the actor, from third-party actors.

Capacities, in this chapter, are defined as 'necessary circumstances or abilities of a social entity to recognise an issue (cognition), to formulate a problem or an expectation, to find a solution and to implement it'. Such circumstances or abilities are for instance of financial or material kind (forest, car, infrastructure) or non-material (intellectual property; knowledge; traditions; physical: time, power; human: manpower).

Blanda (2009) uses four levels (after Pelikan and Halbmayr 2000) for a **situation analysis** of a social entity's (person, actor, state) ability to implement its own or others' (external) ideas or solutions (in an Austrian rural development case). The first two steps consist of an **internal analysis** (can an entity bring about changes or not; does the entity wish to make changes or not). The first part covers the actors' capacities; the latter part contains the question on the actors' interests or preferences. Also, the **external analysis** has two levels. Firstly, the question is as to whether or not other entities can make the solution possible by offering their available capacities. Secondly, analyses must be made as to whether or not others will be willing to support this solution as well (covering others' interests), to provide capacities, but also if the social norms and rules will allow for this solution or idea to be implemented. This theory-based, but very practical, tool shows what critical role capacities play and how entities can be influenced and hindered in their willingness and ability to find and implement their own solutions to a problem.

Also **in development cooperation and policy, it is not the 'development' that is aspired to**. This term 'development' cannot be objectively defined (only ideologically and normatively, which is not acceptable to analytical research). Instead, actors thrive for 'change', which can be objectively measured, but has a subjective explanation (c.p. also pp. 36ff⁵ in Gotschi 2007, in: Gotschi et al. 2007; p. 26 in Barraclough and Ghimire 1995; pp. 42–43 in Olivier de Sardan 1997).

Therefore, influential stakeholders will sell it as an objective, natural way or solution for '*the development*', just like a leaf develops out of the bud. Hence, forest development cooperation is not about the 'development of forests and people', but

⁵ Gotschi (ibid., p. 41) redefines 'development' later as 'describing the *process of change* of society', while 'development cooperation' 'is then the reflected *interference in these processes of change*' (own translation, italics added). More accurate could be to use 'should be ...' instead of 'is' or not to use 'reflected' in the definition.

it is rather an interest-driven facilitation of *changes* of social entities and their interrelation with forests.⁶

Influential actors of forest aid policy will hence contribute to the formulation of programmes and aim to address the changes targeted at in the goals of these programmes, as far as they coincide with their interests (willingness). In this respect, influential actors will constantly try to reformulate a programme, for better accordance with their own independent interests (and capacities), and will defend already existing interests.

Discussing ‘development’, Gotschi (2007, p. 40 in *ibid.*) refers to Bourdieu and to transformation scientists. According to Obrecht (2004, p. 29), ‘socio-cultural transformation science wants to capture and illustrate **structural changes** in a dynamic time-space-continuum, without presuming the ideological implications of “development” and “transformation”’ (own translation, bold added). Ethnologists and anthropologists also prefer to see ‘development’ as the unfolding of **already existing abilities** (Gotschi 2007, in Gotschi et al. 2007, p. 40).

Also applying Bourdieu’s (1987, 1993, 1998, 2001) understanding of history, ‘**development**’ cannot be normatively defined, since ‘development’ happens anyway, while its future aims are yet undefined and can be **formed by the actors involved** (Gotschi 2007, in Gotschi et al. 2007, p. 39). Though with Bourdieu (1987, 1993, 1998, 2001) it can be argued that ‘development’ always takes place (and does not need external intervention), his ‘**habitats**’ and ‘**fields**’ are not isolated from other external ‘habitats’ and ‘fields’ (i.e. development cooperation), and therefore a **change of those who are weaker** than the others will take place. Indeed, as Gotschi (2007, in Gotschi et al. 2007, p. 40) states, ‘development is a man-made process, so it must not be understood as following the “laws of nature”, but can be shaped by humans’ (own translation); however, one must question who the **actors** forming ‘development’ are, what their **interests** are (in regard to certain changes or forms) **and** how they gain **potential** to do so? Finally, the dominant model of ‘development’ will tend to be based on, introduced by, reproduced and so forth by the most influential stakeholders that interconnect various ‘fields’ through the networks they work in (and thereby effect ‘habitus’ *pl.* from all these ‘fields’).

⁶ In example: ‘Farmers’ as well as governmental officials’ attitudes on the Imperata grass in Indonesia have to be seen as a part of comprehensive belief structures that do not only base on the plants and the country but also on *the relations between the farmers and the state*’ (c.p. Dove 1986, cit. in: Lukas 2002, p. 280; own translation, italics added). Reforestation programmes have rather undermined the local and sustainable agricultural production systems than improved, that is, the grass-ladang pasture systems (pp. 280, 300; 310, in Lukas 2002).

After Bourdieu (1987, 1993, 1998, 2001), an analysis of society has to recognise that the position different social entities gain within social space, whereby their positions can be determined by varying **capital structures**, allows them to enforce their power or authority (after p. 89 in Weber 1984) on others. Development cooperation stakeholders therefore need to be **positioned within social space** (Gotschi 2007, in Gotschi et al. 2007, p. 40). This can be done by network analysis of policy and project fields,⁷ as applied here (c.p. Martinez-Diaz and Woods 2009).⁸

According to Bourdieu, the social world is constituted by 'fields' that have the tendency to segregate themselves from others and due to the differences in these capacities hierarchies (within and between) 'fields' evolve (Gotschi 2007, in Gotschi et al. 2007, p. 40). The 'field' 'development cooperation' according to Gotschi (ibid., p. 41) however has the duty to influence other 'fields', similar as policy fields do. So, in researching the 'development policy field', one needs to take into account the stakeholders, their capacities, their networks (through which they have influence) and the various 'fields' that can be differentiated.

The definition of the **potential** of a social entity or stakeholder **to change social capacities, structures, situations or processes** (c.p. pp. 9, 14 in Giddens 1984; p. 56 in Giddens 1979, both cit. in: Long 1997, pp. 225–226)⁹ could be described best as a function (here only descriptively) of:

- The potential to recognise 'problems' (thereby, this potential is strongly linked to capacities and should not be confused with 'the making up of problems', as being a definition of 'problems' by powerful political actors¹⁰)
- The potential to deal with this problem alone (hegemony) or to gain thematic leadership (power of definition) within the respective network – both linked to the entities' own material and non-material capacities
- The interests and values an entity has that can be positive, neutral or negative with regard to a 'problem' (also non-change = status quo)¹¹

⁷For the analyses of intervention level networks, see Chap. 6.

⁸However, they apply a different approach and understanding of networks and focus on international organisations and global governance regimes. (i.e. unclear separation of networks and institutions).

⁹'Action depends on the potential of an entity to create change of an already existing situation or process.'/'it is an underlying characteristic of an action that the actor could have acted also differently, at any point of time, be it in a positive sense of a desired intervention into the process of 'happenings of the world' or in a negative sense of a relinquishment' (after Giddens 1984 and 1979, own translation).

¹⁰That is, political definition of tropical forest deforestation/protection constituting a global problem/interest (c.p. p. 11 in Nygren 2000)

¹¹**In this chapter, 'the problem' is defined as/by the changes targeted at in the goals of donors' program(s).** (i.e. alleviating poverty, reducing deforestation, improving forest planning and management, reducing firewood consumption) **The interests and values are therefore restricted to those coinciding with the programme (=definition of willingness).**

- The influence (power) an entity gains through others – in terms of information that others find useful and in terms of gained trust, gained financial/material dependencies of third-party actors and gained irreplaceability

In the research, underlying this chapter, the second and the last factor (b and d from above) will be focused on in the analysis of actors' networks.

Put into a mathematical function, the **potential for change** an actor holds can be estimated as:

$$P_{a1} = f \Sigma \{ \{ C_{a1} * I_{a1} \} * Cg_{a1} * \min. \{ Re_{a1} - Co_{(a2...n)} \} \} \\ + \Sigma \{ \{ C_{i(a2...n)} * I_{i(a2...n)} \} * Cg_{i(a2...n)} * \min. \{ Re_{i(a2...n)} - Co_{(a1...n, \text{without } i)} \} * I_{a1} \}$$

and when $\{ Re - Co \} = He$; and $\Sigma \{ C_i^{(a2...n)} * I_i^{(a2...n)} \} * Cg_i^{(a2...n)} * \min. \{ Re_{i(a2...n)} - Co_{(a1...n, \text{without } i)} \} = \Sigma P_i^{(a2...n)}$, then

$$P_{a1} = f \Sigma \{ \{ C_{a1} * I_{a1} \} * Cg_{a1} * \min. He_{a1} \} + \Sigma \{ P_{i(a2...n)} * I_{a1} \}$$

The above can be *simplified*, as follows:

$$P_{a1} \cong f \Sigma \{ C_{a1} * I_{a1} \} + \Sigma \{ C(tf)_{i(a2...n)} \} \quad (1.1)$$

where P is the potential for change, a1 is the actor analysed (number one), C are the capacities (various, with values each between 0 and 1), I are the interests (a value between 0 and 1) and $i(a2...n)$ stands for a certain actor, from number 2 to n , involved in the network. Cg is the cognition (a value either 0 or 1). Re is the resistance of an actor against Co coercion exerted by others, who restrict the execution (application or applicability) of the actor's capacities (both are values between 0 and 1, but subtracted they must be >0 , as usually there will not occur total coercion by one actor over the other, in peaceful, non-anarchic societies). min is the minimal value from a number of calculations. He is the hegemony factor (or minimal hegemony, >0 and ≤ 1) of an actor. C(tf) stands for capacities actually transferred (under given conditions).

The **overall influence** of an actor (after Hasanagas 2004), as explained above, is estimated by the sum of the values of vectors (transferred capacities) between this actor and third-party actors (derived from mentions/the perception of these third-party actors). Hence, the quantitative network analysis measures the overall influence of an actor as follows:

$$OI_{a1} = f \Sigma \{ \{ C_{a1} + \Sigma C_{i(a2...n)} * I_{a1} * I_{i(a2...n)} \} * I_{a1} * I_{i2(a2...n, \neq i)} \}$$

$$\text{Given that } \{ \Sigma C_{i(a2...n)} * I_{a1} * I_{i(a2...n)} \} = \{ \Sigma C(tf)_{i(a2...n)} \}$$

$$\text{and } \{ C_{a1} + \Sigma C(tf)_{i(a2...n)} \} = C$$

$$\text{it follows that } OI_{a1} = f \Sigma \{ \{ C_{a1} + \Sigma C(tf)_{i(a2...n)} \} * I_{a1} * I_{i2(a2...n, \neq i)} \} = \quad (1.2)$$

$$\text{and hence, } OI_{a1} = f \Sigma \{ C * I_{a1} * I_{i2(a2\dots n, \neq i)} \} = OI_{a1} = f \Sigma C(\text{tf}) \rightarrow i2_{(a2\dots n, \neq i)} \quad (1.3)$$

The quantitative network analysis hence measures the sum of capacities (values of vectors) actually transferred from one actor to another. Thereby, one cannot distinguish between an actor's own independent capacities (C_{a1}) and the capacities that the actor has obtained through a third-party actor ($C(\text{tf})_{i(a2\dots n)}$), however, being not the same actor as the actor that the capacities are transferred to ($i2_{(a2\dots n, \neq i)}$).

For instance, this means if an actor (1) holds own financial resources and administers a third-party actor's (2) financial resources, to then forward financial resources to again another actor (3), this latter actor (3) will usually refer to financial resources received from the initial actor (1) in general. This is because actor (3) cannot be expected to know where and if actor (1) possibly has raised other financial resources.

This means the possible component of **already existing others' capacities** ($C(\text{tf})_{i(a2\dots n)}$) constitutes an error in measurement of both the overall influence of an actor as well as for the estimation of actors' own capacities (C_{a1}), relevant to the potential of change.

It constitutes an error in regard to **overall influence**, as it neglects interdependencies, setting equal an actor's own independent influence, gained from its own independent capacities to that influence gained through a third party only as long as the third-party capacities are available to use. Hence, overall influence always includes a part of indirectly gained influence. Nonetheless, this seems to reflect well the reality of actors' influence in a network (built on independent and indirectly gained influence) – but it is still necessary to keep in mind these two components.

It constitutes an error to regard in the estimation of an **actor's own independent capacities** (C_{a1}), as a quantitative network analysis may overestimate an actor's actual independent capacities. This can however be overcome, that is, by triangulation with data from qualitative analysis (expert interviews, field research).

Comparing

$$\text{formula 1.1} \quad P_{a1} \cong f \Sigma \{ C_{a1} * I_{a1} \} + \Sigma \{ C(\text{tf})_{i(a2\dots n)} \},$$

$$\begin{aligned} \text{to formula 1.2} \quad OI_{a1} &= f \Sigma \{ \{ C_{a1} + \Sigma C(\text{tf})_{i(a2\dots n)} \} * I_{a1} * I_{i2(a2\dots n, \neq i)} \} \\ &= f \Sigma \{ C_{a1} * I_{a1} * I_{i2(a2\dots n, \neq i)} + \Sigma C(\text{tf})_{i(a2\dots n)} * I_{a1} * I_{i2(a2\dots n, \neq i)} \} \\ &= f \Sigma \{ a * I_{i2(a2\dots n, \neq i)} + b * I_{a1} * I_{i2(a2\dots n, \neq i)} \} \end{aligned}$$

shows, indeed, $P_{a1} \neq OI_{a1}$, **but OI_{a1} is similar enough** ($P_{a1} \cong OI_{a1}$) to term as an estimate for P_{a1} . Hence, it can be assumed influential actors are most likely also reaching high potential for change in the direction of the programme (c.p. Hypothesis 3).

For the analysis of the potential for change, hence, an **empirical selection of strong (influential) actors by quantitative network analysis is acceptable**. To analyse the potential for change itself, it is however necessary to determine the respective parts of the function ($C_{a1}; I_{a1}; C(\text{tf})_{i(a2\dots n)}$) separately, with the triangulation of quantitative and qualitative data.

With regard to I_{a1} , as noted, only **willingness** (W_{a1}) is recognised, since $W_{a1} = I_{a1} \cap$ *programme goals* (intersection).

3.3 Capacities of Actors, Based on Network Analyses

Estimations from quantitative network analysis show (see Table 3.2) that:

Mainly governmental actors of both donor and recipient countries gain high or ‘medium’ overall influence within forest development policy (supporting Hypothesis 2a).

These high values for overall influence are explained best by looking at the upper range of the **irreplaceability** factor (formal and informal decision-making competencies) as well as the upper range of the importance factor in regard to the **financial or material support** (incentives) of most governmental actors of donor and recipient countries. Regarding incentives, recipient countries’ governmental actors play a less important role.

Hence, regarding actors’ irreplaceability (formal and informal decision-making competencies) and importance with respect to financial or material support within forest aid policy networks, Hypothesis 2a is supported.

Regarding actors’ **trust centrality** within the network, again it is the governmental actors of donor and recipient countries that is (has to be) trusted in various ways. However, also donor countries’ scientific institutions and consultancies gain often ‘collective trust’. Also, in Austria and Germany, non-governmental, non-profit organisations (NGO/NPOs) belong to the actors holding relatively ‘central positions’ in the trust network. Also, some international organisations are prescribed a more central position within the trust network.

Hence, regarding actors’ trust centrality within the forest aid policy networks, we find only limited support to Hypothesis 2a.

The role actors play, in regard to **general information** (non-subject information) or forest-related information (subject information), is obviously more diversified, especially in Germany. Central positions, due to general information importance, are held, again, by both sides’ governmental actors as well as some scientific institutions and consultancies from donor countries. In Germany, NGO/NPOs from both donor and recipient countries’ as well as recipients’ consultancies also acquire important roles within general information networks.

With reference to **forest-related information**, besides some governmental actors from donor and recipient countries, it is mainly the scientific institutions and consultancies of donor countries, in Germany the NGO/NPOs also (from both sides),

Table 3.2 Capacities of actors in development cooperation policy networks

		C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
		General information				Forest-related information				Trust-	
		AUT	GER	SWE	FIN	AUT	GER	SWE	FIN	AUT	GER
L1	DC: ministry of foreign aff. or dev.	++	+++	0	+++	+	+	0	+++	++	++
L2	DC: embassies, embassy advisors	n.a.	++		+	n.a.	0		+	n.a.	++
L3	DC: coordination offices	+	++	n.a.		0	+++	n.a.		+	+
L4	DC: agencies mgmt/ country desks	++	++		n.a.	0	+++		n.a.	+/++	++
L5	DC: agencies' thematic sections	++	+++	++		++	+++	+		++	++
L6	DC: thematic ministries	0	++		0	0	++		0	0	++
L7	DC: other ministries/ agencies	0			0	0			0	+	
L8	DC: banks or funds	0		0		0		+		0	
L9	DC: forest agency/ assoc./state f.	0		+		0		+		0	
L10	DC: science	++	+	+	+	+++	++	+	+	++	+
L11	DC: consultancies	0	+	++	+	0	+/++	+	+/++	0	+/++
L12	DC: industries, enterprises	0			0	0			0	0	
L13	DC: Klimabündnis	0	n.a.	n.a.	n.a.	+	n.a.	n.a.	n.a.	0	n.a.
L14	DC: public rel/media	0				0				0	
L15	DC: non-profit org.	+	++			+	++			+	+
L16	RC: planning ministries	0	++	0	0	0	0	0	0	0	0
L17	RC: thematic ministries	+	++	+++	++	+	+++	++	++	+	+
L18	RC: forest authorities	0		++		0		+		0	
L19	RC: other local authorities	0		0		0		0		0	
L20	RC: communities/ grass-r.	+				+				+	
L21	RC: consultancies	0	++		0	0	+		+	0	+
L22	RC: science	0	+	+	0	+	+	+	0	0	+
L23	RC: non-profit	+	++		0	+	+++		0	0	+
L24	IO: intergovernmental	+	+++	+	+	+	+++	+	+	+	++
L25	IO: research	0	+	+	0	0	++	+	0	0	+
L26	IO: intern. NGO	0	+	+	0	0	++	+	0	0	+
L27	Other bilateral donors	0	+		0	0	++		0	0	+
L28	Others donors' experts (consult.)	0	0		0	0	0		0	0	0
L29	Multi-donor platforms	0	+			0	++			0	0

Source: Aurenhammer (2009, 2011)

0 = <30%; + = 31–50%; ++ = 51–70%; +++ = >70% of the maximum value within a variable;

DC donor country; RC recipient country; IO international organisations; C Column; L Line;

fin. and mat. supp. financial and material support; AUT Austria; GER Germany; SWE Sweden; FIN Finland

colors highlight the actors with the strongest capacities

C11	C12	C13	C14	C15	C16	C17	C18	C19	C20	C21	C22	C23	C24
worthiness		fin. and mat. supp.				Irreplaceability				Overall influence			
SWE	FIN	AUT	GER	SWE	FIN	AUT	GER	SWE	FIN	AUT	GER	SWE	FIN
+	+++	0	+	+	++	++	+++	+	++	++	++	+	++
	+	n.a.	0		0	n.a.	+		+	n.a.	++		0
n.a.		0	0	n.a.		+	0	n.a.		+	+	n.a.	
++	n.a.	+	++	+++	n.a.	++	++	+++	n.a.	++	++	+	n.a.
		0	0	+++		+	0	+++		++	++	+	
	0	0	0		0	0	0		0	0	+		0
	0	0			0	0			0	0			
+		0		+		0		+		0		0	
++		0		+		0		+		0		+	
+	+	0	0	0	0	0	0	+	0	0/+	0	0	0
+/++	+/++	0	0	0	0/+	0	0	+	0	0	0	+	+
	0	0			0	0			0	0			0
n.a.	n.a.	0	n.a.	n.a.	n.a.	0	n.a.	n.a.	n.a.	0	n.a.	n.a.	n.a.
		0				0				0			
		0	0			0	0			0	+		
+	0	0	0	+	0	0	+	0	0	0	+	+	0
++	++	0	0	+	+	+	+	+	++	0/+	+	++	++
+		0		0		0		+		0		+	
0		0		0		0		0		0		0	
		0				0				0			
	0/+	0	0		0	0	0		0	0	0		0
0	0	0	0	0	0	0	0	+	0	0	0	0	0
	0	0	0		0	0	0		0	0	+		0
++	+	0	+	0	+	0	+	0	+	0	++	0	+
++	0	0	0	0	0	0	0	0	0	0	+	0	0
+	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0		0	0	0		0	0	0		0
	0	0	0		0	0	0		0	0	0		0
	0	0	0		0	0	0		0	0	0		0

that gain higher relevancy. International organisations only seem to play more important roles, with respect to forest-related information, within the German policy network. This may be well founded, at least partly in the organisational structure, considering that Germany's Ministry for Economic Cooperation and Development (BMZ) is less 'separated' into multi- and bilateral forest development cooperation policy (given the instrument of sector initiatives and general forest policy development).

Hence, regarding actors' general and forest-related information relevancy within forest aid policy networks, we find only limited support to Hypothesis 2a.

3.3.1 Overall Influence in the Policy Field 'Forest Development Cooperation'

In Austria, Germany and Finland, the **Foreign Affairs or Development Ministries** are those among the group of 'governmental actors', reaching the highest overall influence. For Sweden, the influence of the Ministry of Foreign Affairs is (until recently) a bit less prominent. In Finland, the government's overall influence is concentrated in the Ministry for Foreign Affairs. There is no agency, and the experts at the Finnish embassies are also the 'organisational units' of the very same ministry.

In contrast, Germany offers a larger number of governmental actors or organisational entities with strong influences: the BMZ, the embassies and their development referees from the BMZ, the Gesellschaft für Technische Zusammenarbeit (GTZ) and the Kreditanstalt für Wiederaufbau (KfW), including their management and subject units as well as local offices (esp. such of the GTZ). Here, the actors KfW and GTZ are subsumed under '**development agencies**'. In 2011, however, the GTZ, the Deutscher Entwicklungsdienst (DED) and the Internationale Weiterbildung und Entwicklung GmbH (Inwent) were merged into the Gesellschaft für Internationale Zusammenarbeit (GIZ).

A similar situation can be found in Austria, where besides the Ministry for Foreign Affairs, the Austrian Development Agency (ADA) founded in 2004, including its coordination offices (KOBÜs), achieves a high overall influence.

Although **donors' governmental actors reach high overall influence** (support to Hypothesis 2a), forest-related governmental donor actors do not, though some actors do hold influential forest units. Hence, Hypothesis 2b must be partly or fully rejected.

Among the **recipients'** governmental actors, the **subject ministries** especially gain a high or 'medium' overall influence in all the networks. Estimations from the

Swedish policy network show that these ministries can even obtain the highest overall influence. This is reflected also in Sweden's distribution of disbursements, where 37% were provided for governmental actors in recipient countries between 1998 and 2005, thereby constituting the largest category within project implementation types of Sweden. This seems also to be consistent with Swedish policy to transfer aid directly to recipients' governmental actors (not necessarily a sector budget or budget support, if bound to its own programmes).

Recipient's governmental forest-related actors reach considerable overall influence. Hence, this supports Hypotheses 2a and b.

Non-governmental actors from donor countries reach rarely 'medium' overall influence. They consider also a combination of a larger number of actors (i.e. various universities, consultancies, NGO/NPOs) whereby the table provides us only with the highest value reached within such a group. Some consultancies in Sweden and Finland, scientific institutions in Austria and NGO/NPOs in Germany reach occasionally 'medium' overall influence.

NGO/NPOs from recipient countries seem to obtain 'medium' influence in the German policy field.

Non-governmental actors reach rarely medium overall influence. Hence, this provides support to Hypothesis 2a.

3.3.2 *Irreplaceability (Formal and Informal Decision-Making Competences) in the Policy Field 'Forest Development Cooperation'*

Most **donor and recipient countries' governmental actors'** high overall influence is grounded in their often high or very high irreplaceability. The Foreign Affairs or Development Ministries of donor countries (with the exception of Sweden) are perceived as especially irreplaceable. The same counts for donor development agencies. Thereby, today, especially the management units and country or regional desks gain high irreplaceability (in contrast to subject units). Subject ministries of recipient countries reach mostly 'medium' or high irreplaceability.

While donors' governmental subject units do not gain high irreplaceability (rejection of Hypothesis 2b), subject ministries of recipient countries do (support to Hypothesis 2b).

Other actors that may reach 'medium' irreplaceability, at least in Sweden's policy network, include other donors' governmental actors (forest agencies, funds) and also consultancies and scientific institutions from donor countries. Generally speaking, NGOs (from donor and recipient countries) do not obtain important roles with respect to irreplaceability in policy networks. Rarely, also multi-governmental and international organisations can achieve 'medium' irreplaceability.

The above shows that governmental actors dominate with regard to the power factor of irreplaceability (support to Hypothesis 2a).

3.3.3 Financial and Material Importance in the Policy Field of 'Forest Development Cooperation'

Governmental actors' (both sides) high overall influence can often be accounted for by their high or very high importance with regard to financial and/or material support (or disbursement). Hereby, it becomes apparent that **development agencies**, and only where no such exist responsible ministries (i.e. the Ministry for Foreign Affairs of Finland), especially acquire this role. However, various other governmental or non-governmental actors do come with (smaller) financial resources that can be used within the policy field. They however do not play any prominent role in the 'overall picture' of these policy networks of bi-governmental cooperation.

Governmental actors gain high importance in forest policy networks, due to their financial and/or material support (support to Hypothesis 2a).

Additionally, actors can also achieve central (sometimes even very influential) positions, even they do not hold own independent financial resources, that is, if they are termed and/or are perceived as **intermediaries (agents)** for the acquisition of financial means. This is a form of 'indirect' financial or material support, which can also be found on the policy level, but is more concretely related to the intervention (project) level.

In the light of co-financing of bilateral projects, multi-governmental and international organisations, as well as the ministries from recipient countries, can also gain some influence. Some donors (i.e. Finland) pay increasingly more attention to the proportion of partner ministries' financial contributions to aid programmes (**co-financing**), as these higher contributions are considered to increase (recipient governments') ownership.

In Austria, even before 2004, the Ministry for Foreign Affairs held the main financial means for aid interventions, where as today it holds only limited independent financial resources, as the bulk of it is administered by the ADA.

Forest actors do not gain importance in forest policy networks, due to their financial and/or material support. Only subject ministries of recipient countries can play some part in such a role (limited rejection of Hypothesis 2b).

3.3.4 *The Centrality of Actors' Trust Position in the Policy Field of 'Forest Development Cooperation'*

Indeed, it is again the **governmental actors** (both sides) gaining the greatest centrality in regard to their trust position in the policy networks. These actors are or have to be trusted in various ways. Nevertheless, donors' scientific institutions and consultancies also gain high centrality with regard to trust. In Austria and Germany, NGO/NPOs also have excess to a 'more central' position within the trust network. Some international organisations are also ascribed a rather central position in trust networks.

Governmental actors gain strong trust positions in the forest policy networks, but they do not dominate with this factor (limited support to Hypothesis 2a).

In the network of Finland, the Ministry for Foreign Affairs is attributed a very central position of trust. In both Finland's and Sweden's policy networks, the **recipients' subject ministries** gain higher positions of trust. Especially in the Swedish network, but also in that of the German, multi-governmental organisations and international research organisations are ascribed a 'more central' trust position than in the Finnish and Austrian networks.

Subject ministries of recipient countries can gain strong trust positions in the Scandinavian forest policy networks (limited support to Hypothesis 2b).

3.3.5 *The Importance of Actors' Information in the Policy Field of 'Forest Development Cooperation'*

The role actors play with respect to general information (non-subject information) as well as subject-related (forest- or tree-related) information seems – especially in Germany – to be distributed over a broader spectrum of actors. With regard to **general information**, governmental actors from both sides, as well as donor scientific institutions and consultancies, hold central roles. In Germany, also NGO/NPOs from both sides as well as some of the recipients' scientific institutions play a greater role within the general information network.

Governmental actors gain high general information importance in forest policy networks, but non-governmental actors do so also (limited support to Hypothesis 2a).

In regard to **subject information** (and know-how), it is mainly the donors' scientific institutions and consultancies that achieve important roles, besides some of the governmental actors on both sides. International scientific institutions did play a relatively important role, especially in the German policy field. This, again,

is partly due to the organisational structure of the BMZ, where multi- and bilateral competencies are 'closer administered' than, for instance, that of Finland, with a more defined separation of these competencies.¹²

In Finland, the Ministry for Foreign Affairs plays a central role in regard to subject information, while in other donor countries, it is the particular **development agencies**,¹³ which attain the highest relevancy in regard to subject information among donors' governmental actors. In Germany, the 'agencies' (GTZ and KfW), as well as their branch offices, hold key positions in regard to subject information, comparable to the importance of Finland's Ministry for Foreign Affairs. Contrary to this, in Austria, only certain subject units of the agency (ADA) gain more importance in subject information, similar to the relatively minor role of the Swedish agency (Sida) over the last decades. The estimations reveal that even in Austria, **Austrian scientific institutions** and **in Sweden the recipients' subject ministries** (constituting however a group of actors) attain the comparatively highest roles in the respective subject information networks.

Governmental actors gain high forest-related information importance in forest policy networks, but there are plenty of non-governmental actors doing so too (limited support to Hypothesis 2a). Also, plenty of forest actors hold strong competencies in forest information (support to Hypothesis 2b).

3.3.6 *Key Forest Information Actors in the Austrian, Finnish, German and Swedish Networks*

Below, the role of actors with regard to subject information is given some more emphasis. Thereby, the most central actors and their subject information relevancy are illustrated by the diameter of circles, which are positioned along the variables (axes) 'overall influence' and 'irreplaceability' (formal and informal decision-making competencies).

In the **Austrian's policy network** (see Fig. 3.2), the aggregate 'ADA' obtains a central, influential position whereby subject information is derived mainly from the environment and natural resources unit. In regard to subject information, highly important, but hardly influential is the position of the University of Life Sciences in Vienna (BOKU), again constituting an aggregate of institutes with varying importance. Also, recipients' subject ministries play a greater role with regard to subject information, at 'medium' influence. The above provides limited support for both Hypotheses 2a and b.

¹² This does not mean that there exists no interrelations between different units in Finland, but merely that there do exist different units (or advisors) within forest sector cooperation.

¹³ Here, the term 'agency' subsumes governmental agencies and governmentally owned companies according to private law.

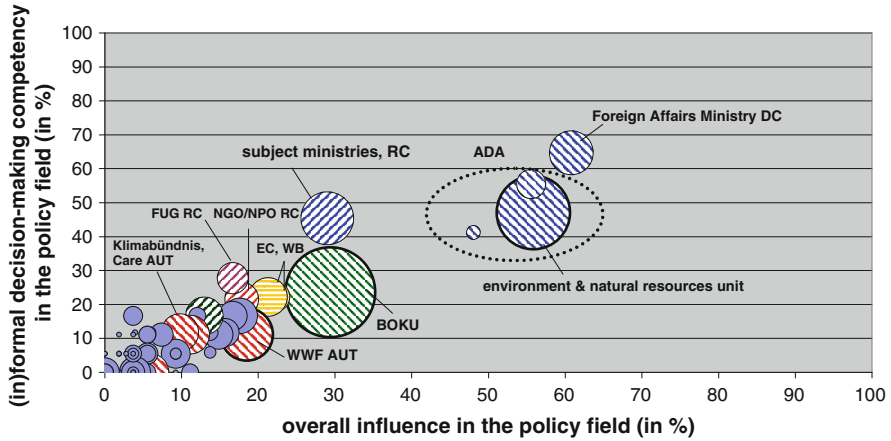


Fig. 3.2 Austria: dependence of actors’ overall influence from forest-related information as well as formal and informal decision-making competencies in the policy field. Legend: *Size of circles*: forest-related information importance of the actor. Lineation from upper-left to lower-right: donor country actors (DC). Lineation from upper-right to lower-left: recipient country actors (RC). Lineation horizontal: regional or international organisations (IO). *Blue*: governmental actors (GO), *Green*: scientific actor (i.e. BOKU). *Red*: NGO/NPO, *Gold*: multi-governmental organisation (Source: after Aurenhammer 2009a)

Others, like the European Commission (EC), the World Bank (WB), the World Wildlife Fund Austria (WWF AUT), recipients’ NGO/NPOs, forest and water user groups (FUG) in recipient countries (RC), the Austrian Klimabündnis (‘climate coalition’) and CARE Austria, do still play a certain role with respect to subject information, but they have already less influence in the policy field.

In **Germany’s policy network** (see Fig. 3.3), the KfW management and subject unit, the GTZ subject unit and the GTZ branch offices in recipient countries as well as recipients’ subject ministries obtain central positions in regard to subject information. Somewhat less important with respect to subject information is the respective sector unit of the BMZ; in return it is more influential. The results provide with support to both Hypotheses 2a and b.

Influential and relevant with regard to subject information are also the WB, development banks (DB) and United Nation’s organisations (UN), here treated as single actor group. Already less influential, but of higher subject information relevancy, are also WWF Germany, recipients’ NGO/NPOs and the Federal Ministry of Food, Agriculture and Consumer Protection (BMELV). Additionally, some international organisations (multi-governmental, scientific and NGO/NPOs) as well as some German consultancies attain greater importance with respect to subject information, though they have hardly any influence.

In **Finland’s policy network** (see Fig. 3.4), the Finnish Ministry for Foreign Affairs, in particular the subject advisors for bilateral forest development cooperation, is of central importance in regard to subject information as well as attaining a high influence. Also, recipients’ subject ministries achieve similar importance

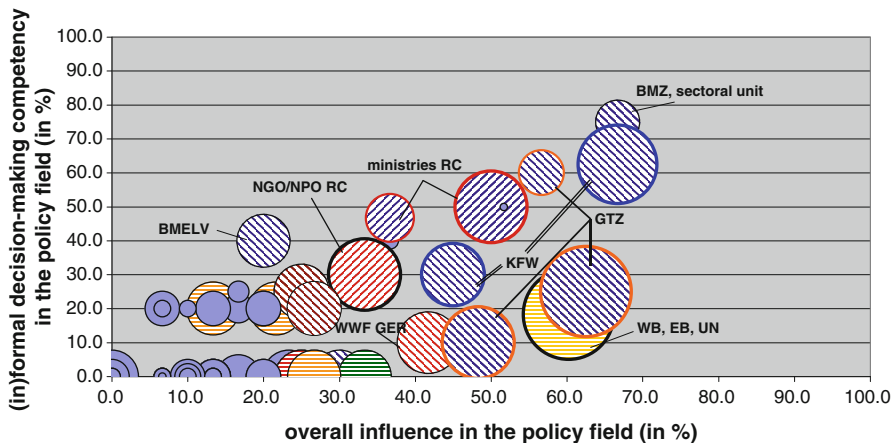


Fig. 3.3 Germany: dependence of actors' overall influence from forest-related information as well as formal and informal decision-making competencies in the policy field. Legend: *Size of circles*: forest-related information importance of the actor. Lineation from upper-left to lower-right: donor country actors (DC). Lineation from upper-right to lower-left: recipient country actors (RC). Lineation horizontal: regional or international organisations (IO). *Blue*: governmental actors (GO), *Green*: scientific actors. *Red*: NGO/NPO, *Gold*: multi-governmental organisation. *Brown*: consultancies, *Bold-coloured circle lines*: associated. organisational units of the same actor (Source: after Aurenhammer 2009a)

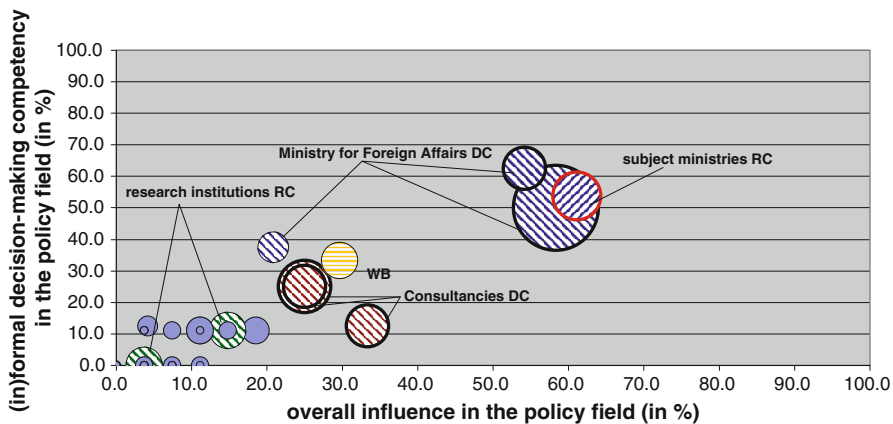


Fig. 3.4 Finland: Dependence of actors' overall influence from forest-related information as well as formal and informal decision-making competencies in the policy field. Legend: *Size of circles*: forest-related information importance of the actor. Lineation from upper-left to lower-right: donor country actors (DC). Lineation from upper-right to lower-left: recipient country actors (RC). Lineation horizontal: regional or international organisations (IO). *Blue*: governmental actors (GO), *Green*: scientific actors. *Gold*: multi-governmental organisation, *Brown*: consultancies (Source: after Aurenhammer 2009a)

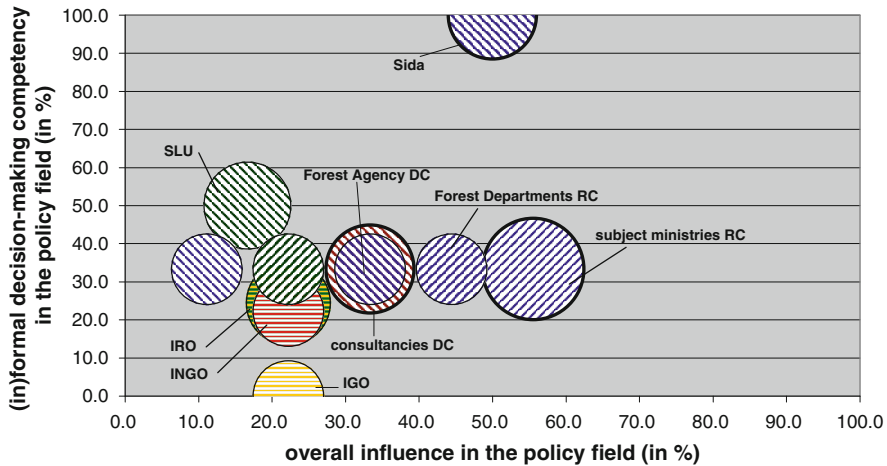


Fig. 3.5 Sweden: dependence of actors' overall influence from forest-related information as well as formal and informal decision-making competencies in the policy field. Legend: *Size of circles*: forest-related information importance of the actor. Lineation from upper-left to lower-right: donor country actors (*DC*). Lineation from upper-right to lower-left: recipient country actors (*RC*). Lineation horizontal: regional or international organisations (*IO*). *Blue*: governmental actors (*GO*), *Green*: scientific actors. *Brown*: consultancies. *Red*: international non-governmental organisations (*INGO*). *Gold*: multi-governmental organisation (*IGO*). *Gold-Green*: international research organisations (*IRO*) (Source: after Aurenhammer 2009a)

(treated as group). Also, the country and regional units of the same ministry still play a larger role regarding subject information and are very influential. Subject experts at the embassies are also held relevant in regard to subject information, but still less influential. Also, several Finnish consultancies, the WB as well as Finnish scientific institutions, gain greater importance regarding subject information, but are also less influential (the latter hardly at all). The above provides with support to both Hypotheses 2a and b.

In Sweden's policy network (see Fig. 3.5), subject information relevancy is reached by recipients' subject ministries especially (treated as group), Swedish consultancies, the Swedish Forest Agency (SFA), at relatively high levels of influence. The Swedish agency (Sida) is also of subject information-related relevancy, but especially obtains an outstanding position with regard to its irreplaceability (formal and informal decision-making competencies) and overall influence.¹⁴

Further, actors with relevancy in subject information at only restricted levels of influence are the Swedish Agricultural University (SLU), scientific actors from recipient countries, international organisations (esp. multi-governmental organisations, international research organisations), the Nordic Development Fund (NDF) as well as the EC (inclusively Europe Aid).

¹⁴This may have changed very recently, with respect to several restructuring measures enforced on SIDA by the Swedish Ministry for Foreign Affairs.

With regard to Sweden's policy network, the above provides us with limited support to both Hypothesis 2a and support to Hypothesis 2b.V

3.4 The Potential for Change, Strong Actors Hold

Table 3.3 shows the **potential for change in forest aid that different actors hold**. The result is based on quantitative and qualitative data on organisational and network factors of selected strong actors (selection according to their overall influence).¹⁵ Below, the results are explained actor-wise, with respect to actors' own independent capacities, particular interests (willingness) and added or gained capacities from third-party actors.

From the results of the below table (explained below), it can be concluded that from the eight governmental donor actors quantitatively identified to obtain comparatively strong overall influence (c.p. Table 3.2: C21–C24/L1–L5), two reach a comparatively high potential for change (Formin, BMZ), another three actors at least moderate potential (GTZ, KfW, Sida) and two actors can achieve only low potential for change (BMaA, ADA).

This does not clearly support or reject Hypothesis 3, assuming strong actors will also obtain a strong potential for change.

BMZ, Formin and also Sida have strong independent financial and decision-making competencies in common as well as excess to third-party actors' capacities. **The combination of these factors seems to lead to a rather high potential for change.** GTZ, KfW as well as many consultancies have strong independent know-how and staff capacities in common and gain their financial resources from third-party actors (contract manner), leading to at least moderate potential for change. The BMaA, ADA and also MfFA have in common with each other to mainly hold decision-making competencies and often only minor willingness. This combination makes these strong actors relatively weak, with respect to their potential for change (compared to other strong actors).

In this respect, Hypothesis 3 is supported since the combination of the 'right' factors obviously matters with regard to the potential for change:

Strong actors' potential for change is high, if they hold strong own independent capacities (especially financial) and are able to excess such third-party actors' capacities (i.e. know-how and staff) complementing their own independent resource pool. At the same time, they will at least hold moderate willingness and therefore actively work on the achievement of goals mentioned in the programme.

¹⁵With respect to Austrian consultancies, they have been included, as the group 'donor' consultancies gained comparatively high overall influence.

Table 3.3 Actors' potential for change in forest aid, based on quantitative and qualitative data

Actor	Independent forest-related capacities $\Sigma\{C_{in}\}$				Independent willingness (W_{in}) = Part of interest coinciding with programme goals	Directly or indirectly gained third-party actors' capacities $\Sigma\{C(tf)_{(in2...n)}\}$			
	Staff and equipment		Legal and other formal DMCs			Know-how	Staff and equipment	Finance	Trust and (in-) formal DMCs
	Know-how	Staff and equipment	Finance	DMCs					
Ministry for Foreign Affairs, Finland (Formin)	++	+	++	++	++	++	++	Δ	++
Ministry for Foreign Affairs, Austria (BMaa)	Δ	0	Δ	+	Δ	Δ	Δ	0	++
Austrian Development Agency (ADA)	Δ	Δ	Δ	+	Δ	Δ	Δ	Δ	+
Ministry for Foreign Affairs, Sweden (MIFA)	Δ	Δ	0	+	+	+	+	0	+
Swedish International Development Agency (Sida)	+	+	++	+	+	+	+	Δ	++
Federal Ministry for Economic Cooperation and Development, Germany (BMZ)	+	+	++	+	+	++	++	0	++
Gesellschaft für Technische Zusammenarbeit, Germany (GTZ, from 2011 GIZ)	++	++	0	+	+	+	+	++	++
Kreditanstalt für Wiederaufbau, Germany (KfW)	++	+	0	+	+	+	+	++	++
Consultancies (Finland, Sweden, Germany)	++	++	0	0	++	Δ	Δ	++	+
Consultancies, Austria	+	Δ	0	0	+	+	+	Δ	Δ
Subject Ministries (recipient countries)	+	+	Δ	++	++	+	+	++	++

Source: After Aurenhammer 2011, based on qualitative and quantitative data
 0 none, Δ minor, + medium, ++ high capacities/interests, DMCs decision-making competencies
 Highlighted values: indicate results/variables, explaining a strong actor's high potential for change best

The above tables' results show also that **recipients' subject ministries**, considered comparatively influential (c.p. Table 3.2: C21–C24/L17), can gain relatively strong potential for change, but this potential for change is based on considerable interdependencies. It seems to be biased towards the programme goals and instruments of donors, considering the majority of capacities being gained from mostly external sources (esp. in regard to finances).

The above supports the relevancy of the factor-independent capacities (esp. in regard to finances), for the potential for change of a strong actor. *Without strong independent capacities, an actor can only hold a strong potential for change, if the actor accepts the interdependencies thereby created.* This adds to the above support to Hypothesis 3 ('right' factors matter).

3.4.1 The Ministry for Foreign Affairs of Finland (Formin)

3.4.1.1 Independent Capacities (Formin)

Quantitative estimations from network analysis (c.p. Table 3.2) show that Formin reaches a high overall influence (ibid.: L1/C24 = 58%) in the Finnish policy field, because it holds strong capacities with regard to forest know-how (ibid.: L1/C8 = 100%), financial and material support (ibid.: L1/C16 = 58%) as well as irreplaceability (formal and informal decision-making competencies) (ibid.: L1/C20 = 63%).

Indeed, Formin holds **high independent capacities in forest know-how and medium capacities in forest-related staff**, as they have two bilateral and one multilateral forest advisor at the ministry, several forest or forest-related advisors at their embassies and, due to their comparatively strong involvement in the forest sector, they have also many non-forest-related staff (i.e. desk officers) aware or experienced in forest-related matters (i.e. from former affiliations) (expert interviews: actors nr. 35, 36, 37; 118, 134, 170, including own observations; p. 12 in Aurenhammer 2010a; ETFAG country update for Finland 2007).

Formin holds **high independent capacities with regard to financial support**, as it is the major source of bi-governmental, bilateral forest aid in Finland. Finland (Formin) disbursed annually 15.8 million euros (1994/1995–2005), 4.64% of its total ODA (c.p. p. 5 in Aurenhammer 2008). There exist clear financial plans, linking planned interventions to planned/committed financial means over the next years (internal documents: actor nr. 37).

Formin holds also **strong legal competencies**, being the only governmental actor, formally responsible for development policy and cooperation (Finnish Government 2010: Valtioneuvoston ohjesääntö, 3rd chapter, §13, in the respective amendment, the last from 2010).

3.4.1.2 Independent Willingness (Formin)

Given the strong anchoring of forest-related cooperation in Finnish (Formin's) policies (i.e. Formin 1987, 1990, 2007, 2008; pp. 13ff in Aurenhammer 2008) and the existing institutionalised structures (forest advisors) as well as other representatives (i.e. the current Minister) who support forest-related cooperation (expert interviews: actors nr. 35, 36, 37; 118, 134, 170), **strong willingness** can be assumed and observed (ibid.).

3.4.1.3 Added Capacities from Third-Party Actors (Formin)

Though Formin holds plenty of its own independent capacities, it **depends on the staff from other actors**, especially **for the implementation of its programmes**. These implementation actors are mainly **consultancies** (expert interviews: actors nr. 35, 36, 37; 118, 134, 170; 19, 28, 29, 33, 39; 168, 187). They implement interventions equivalent to more than 60% of the disbursed aid (c.p. Table 3.4, for further explanation and data per actor see section 3.5; see pp. 61–62 in Aurenhammer 2008).

Consultancies, and also research actors, provide a strong resource pool for forest know-how and staff to get advice from in policymaking processes as well as for implementation (expert interviews: actors nr. 35, 36, 37; 118, 134, 170; 19, 28, 29, 33, 39; 168, 187; i.e. the multi-stakeholder consultation process for the formulation of the new forest sector policy: see Formin 2004a, b, c).

However, except for the staff for implementation, the **strong independent capacities prevent Formin being driven into certain dependencies** (i.e. expert interview: actor nr. 37). Naturally, Formin has an interest to implement its policies and programmes, but it can build and also builds on especially a small number of larger consultancies (ibid.; c.p. pp. 61–62 in Aurenhammer 2008), which in turn are interested in the financial resources, provided by Formin. Though these consultancies have also other activities and sources of income, beyond development cooperation, they are generally interested in this business area (expert interviews: actors nr. 19, 28, 29, 33, 39; 307).

Formin gains also **strong trust centrality and irreplaceability** (formal and informal decision-making competencies) in the perception of the actors of the Finnish forest policy field (c.p. Table 3.2: L1/C12 = max. 100% and L1/C20 = 63%). This can be qualitatively generally supported (i.e. expert interviews: actors nr. 19, 28, 29, 33, 39; 18, 34; including own observations).

3.4.2 The Ministry for Foreign Affairs of Austria (BMaA)

3.4.2.1 Independent Capacities (BMaA)

Quantitative estimations from network analysis (c.p. Table 3.2) show that BMaA reaches high overall influence (ibid.: L1/C21 = 61%) in the Austrian policy field.

This is because it holds strong capacities with regard to irreplaceability (formal and informal decision-making competencies) (ibid.: L1/C17 = 65%), but though holding only minor capacities in forest-related know-how (ibid.: L1/C5 = 41%).

According to qualitative expert interviews (esp. actors nr. 10, 1–4; 105, 127, 189) and own observations, it must be indeed concluded that the BMaA holds (today) only **minor independent capacities in regard to forest-related know-how and quasi no capacities in forest-related staff and finances**. Today, the BMaA has an expert at its unit for environment and sustainable development in development policy, who addresses forest aspects as a part of a crosscutting policy on environment (expert interviews: actor nr. 10). Few experts in the BMaA or experts working today for the ADA (i.e. on rural development) hold experience and expertise in forest-related issues (ibid.).

During the Rainforest Initiative (RFI, 1993–1995), the BMaA had an advisor to manage the special programme (expert interviews: actors nr. 10, 135; c.p. Aurenhammer 2008: 22–24). During the RFI, and also before, the BMaA held **medium independent financial capacities**: that is, for the RFI, 18 million US\$ were committed for 3 years, ten times the amount disbursed in the years before to forest-related activities (c.p. pp. 22 and 5ff in Aurenhammer 2008).

Before 2004, the BMaA was the major source of forest-related finance in Austria (i.e. expert interviews: actors nr. 10, 135; c.p. pp. 5ff in Aurenhammer 2008). Austria (both BMaA and ADA) disbursed annually 1.6 million euros (1994/1995–2005), 0.38% of its total ODA to forest-related interventions (c.p. p. 5 in Aurenhammer 2008). Values are considerably lower from 2001 to 2005 (in 2001 only 0.02%) (pp. 8–9 in ibid.).

Before the establishment of the ADA in 2004, the BMaA (and temporarily the BKA) held the sole **legal competencies** in development policy and cooperation. The legal competencies of the BMaA (today BMeiA) are laid in the Federal Ministerial Act (Austrian Government 1986: BMG, BGBl. 76/1986, 1986, §2, Anlage 3). With the amendment of the Development Cooperation Act (Austrian Government 2003: BGBl. I Nr. 65/2003, 2003) the legal competencies are **'shared'** mainly between the BMaA and the ADA. Since the establishment of the ADA, the practical allocation of competencies and tasks is still at stake (i.e. expert interviews: actors nr. 10, 135; c.p. also SPÖ 2005; see esp. p. 16 in OECD 2009; pp. 4–31 in Rechnungshof 2009).

According to the law (Austrian Government 2003: BGBl. I Nr. 65/2003, §23), 'the Minister for Foreign Affairs has to formulate the 3-year-program for the Austrian Development Policy, in agreement with the Minister for Finance, and after an official hearing by the ADA and the advisory council (§ 7) the program must be presented to the Federal Government and National Assembly for their instruction. The program must include all official development assistance activities of the Federal Government (§ 2 Abs. 1), the priorities of development cooperation **as well as the in each case necessary financial needs'** (own translation, bold added, ibid.).

The relevant documents (i.e. OEZA 2005, 2006a, 2007), however, **do not include any concrete financial plan with respect to the priorities of the programme**.

The BMaA and the Ministry for Finance have not been able to come to an agreement on concrete financial planning, for some time (expert interviews: actor nr. 10), which affects the work of both the BMaA and the ADA subsequently.

3.4.2.2 Independent Willingness (BMaA)

The willingness of the BMaA to address forest-related goals in their aid policy has been fluctuating over the period under consideration ($\leq 1994/1995$ –2010). On average, willingness is of minor importance (expert interviews: a.o. actors nr. 10, 135; 1–4; 105, 127, 189; and below sources).

Still in 1996, forestry was seen as one of the ‘demonstration sectors’ in Austria, with official publications stating ‘**The priority of forestry is self-explanatory. If not in forestry, where else could Austria offer know-how and experience?**’ (see p. 53 in Pilz 1996, own translation). There also existed the RFI programme with its continuation of efforts.

Nonetheless, **later the forest sector lost importance** and is only **now possibly retaining some momentum**, with the next window of opportunity, the climate change agenda, and forestry issues being, at least on paper, taken up into recent environmental and development policy as well as the overall government programme (c.p. BMeiA, BMLFUW and ADA 2009; p. 74 in Austrian Government 2008).

Other earlier Austrian policies placed only minor attention on forestry (OEZA 2003, 2006b; n.d., a, b, c; see also pp. 12ff in Aurenhammer 2008). Often, they define forest-related goals negatively, as substitution goals, reflecting substitution interests (a type of Helpers’ interests after Prittwitz 1990) of other sectors (i.e. hydropower; c.p. OEZA n.d., a).

3.4.2.3 Added Capacities of Third-Party Actors (BMaA)

From the above, it can be concluded that the BMaA has **today** only a **limited interest in gaining forest-related capacities from third-party actors**. Besides, today there is **also limited availability** (as explained below) in the capacities available from Austrian actors.

As already noted, during the **RFI**, the BMaA engaged (in their employment) an environmental advisor of their own. He elaborated, in **informal discussion rounds** with other actors, on the criteria for project selection and financing (c.p. Weingärtner, 1996, personal communication, cit. in: Shepherd et al. 1998, p. 127; i.e. expert interviews: actors nr. 10, 11, 51, 135). More recently, the BMaA led a **multi-governmental (multi-stakeholder) formulation process** on the ‘strategic guideline for environment and development of the Austrian development policy’ (BMeiA, BMLFUW and ADA 2009), the first guideline of its kind involving a broader participatory consultation and being taken note of by the Council of Ministers (08.09.2009) (i.e. expert interviews: actors nr. 1, 3, 10; 12).

In its earlier years, and **during the RFI**, the BMaA, however, **made especially considerable use of the staff and forest know-how capacities of consultancies**,

societies, NGO/NPOs and scientific actors, both in the implementation as well as in programme formulation (i.e. expert interviews: actors nr. 10, 135; 5, 9, 14, 15, 25, 27, 30, 32). As can be seen from below, a few NGO/NPOs, societies and consultancies implemented interventions equivalent to almost all of the disbursed aids (c.p. Table 3.4, for further explanation and data per actor see section 3.5; see pp. 57–59 in Aurenhammer 2008). The below data shows also that today **many of the actors do not exist anymore**, that is, ADC GmbH/ADC Austria, an actor, who implemented the earliest and largest forest-related projects of Austria (i.e. in Bhutan) (ibid.).

In earlier years, **the dependency of the BMaA on NGO/NPOs** for the implementation of policies and programmes was higher than today (i.e. expert interviews: actors nr. 10, 135; 15, 25, 27): For instance, the **interventions of the RFI were solely implemented by NGO/NPOs because** the initiative (special programme) was led due to their pressure and because they were the only actors holding necessary connections to be able to implement the activities in such a short time (Weingärtner, 1996, personal communication, cit. in: Shepherd et al. 1998).

The in part negative experiences from the speedy implementation were a reason for governmental actors as well as NGO/NPOs to question forest-related activities (i.e. expert interviews: actors nr. 3, 10, 131, 190; c.p. also ibid.). Negative experiences, fusions of actors and reduced financial capacities from the government have also led actors to diminish or largely quit their forest-related engagement, especially after the RFI (i.e. expert interviews: actors nr. 5, 10, 15, 16, 25, 27, 30, 32, 131, 135, 190).

The BMaA gains also **strong trust centrality and irreplaceability** (formal and informal decision-making competencies) in the perception of the actors of the Austrian forest policy field (c.p. Table 3.2: L1/C9=57% and L1/C17 = 65%). This can be qualitatively generally supported by own observations and various expert interviews (actors nr. 1–4, 9, 11, 12, 14, 15, 25, 27, 30, 32, 51, 52, 105, 127, 131, 189), across the Austrian policy network.

3.4.3 Austrian Development Agency (ADA)

3.4.3.1 Independent Capacities (ADA)

Quantitative estimations from network analysis (c.p. Table 3.2) show that the ADA (agency and coordination offices) reaches high overall influence (ibid.: L3–L5/C21 = max. 56%) in the Austrian policy field. This is because it holds strong capacities with regard to irreplaceability (formal and informal decision-making competencies) (ibid.: L3–L5/C17 = max. 56%), moderate (but comparatively high) capacities in forest-related finance (ibid.: L4/C13 = 35%) and generally no capacities in forest-related know-how (ibid.: L3–L4/C5 = 14%, 28%), with the exception of a certain subject unit (ibid.: L5/C5 = max. 68%).

Qualitative results (i.e. expert interviews and own observations: actors nr. 1–4, 10, 105, 127, 135, 189) let us indeed conclude that the ADA holds only **minor independent capacities in regard to forest-related know-how and forest-related**

staff and finances. However, the ADA did not exist prior to 2004. Presently, the ADA has two experts in its Environment and Natural Resources Unit, one expert for rural development (including poverty reduction and decentralisation) and few experts in the coordination offices, with some expertise in forest-related issues. They are there to address forest aspects as a part of a crosscutting policy on the environment (expert interviews: actors nr. 1–4, 10, 105, 127, 189).

Though the ADA is the major source for **forest-related finance** since 2004, its **proportion** in the overall period (1994/1995–2005) is **low** (c.p. pp. 5ff in Aurenhammer 2008; and own data, based on analysis of secondary data of the ADA: SB_169_forst.xls; for 2005–2007 additionally AN_240-Forstwirtschaft.xls). This is because disbursements were low from 2001 to 2005 (c.p. pp. 8–9 in Aurenhammer 2008:), and the ADA was established in 2004.

With regard to **shared legal competencies** since 2004, see above (see Austrian Government 2003: BGBl. I Nr. 65/2003, 2003). The practical allocation of competencies and tasks is still at stake (i.e. expert interviews: actors nr. 10, 135; c.p. also SPÖ 2005; see esp. p. 16 in OECD 2009; pp. 4–31 in Rechnungshof 2009), although company concepts state otherwise (ADA 2005: covering 2005–2007; recently ADA 2009: for 2010). Even in the 2010 concept, a contradiction is noted, stating that ‘for processes that need close cooperation between the Foreign Ministry and the ADA, step-wise descriptions **are being developed** that clearly regulate the course of action and competencies’ (p. 12 in ADA 2009, own translation, bold added) – so it seems, after 6 years of existence, the division of competencies is not yet completely clear.

Also, the new company concept (ADA 2009) **does not include ‘plans for personnel and material expenses, for investments and financing’**, as is obligatory by the law (Austrian Government 2003: BGBl. I Nr. 65/2003, §9 Abs. 4); at least, planned financial expenses are not linked to programme goals. The **annual working programmes** (obligatory after §8, Abs. 2), again, **are not being made available** and are not public. ‘The ADA has to formulate an annual working program, **including its working priorities, goals as well as the therefore necessary financial means**, on the basis of the 3-year-program and the other strategic guidelines as well as the company concept’ (ADA 2009, own translation, bold added; c.p. Austrian Government 2003: BGBl. I Nr. 65/2003, §8 Abs. 2). Since the 3-year programme’s ‘long-term’ financial planning is not implemented (see above), this may explain partly the lacks above.

3.4.3.2 Independent Willingness (ADA)

The **willingness** of the ADA to address forest-related issues or goals of aid policy is **minor** (i.e. expert interviews and own observations: actors nr. 1–4, 10, 105, 127, 189), as forest issues are subsumed under a **crosscutting environmental policy**. However, there have been in recent years forest-related interventions that are financed or co-financed through various instruments, that is, projects, NGO/NPO co-financing and public-private partnerships (own data, based on analysis of secondary data of the ADA for 2005–2007: AN_240-Forstwirtschaft.xls; expert interviews: actors nr. 1–4; internal documents: actor nr. 4).

Despite the **limited interest or possibility** – that is, the ADA claims to lack a formal order from the BMA to engage or recognise actively forest-related issues in their work (expert interviews and own observation: actor nr. 1) – **forest-related issues are taken up in recent policies**, that is, environmental and development policy as well as the overall government programme (c.p. BMeiA, BMLFUW and ADA 2009; p. 74 in Austrian Government 2008). However, also the limited independent forest-related capacities in know-how and staff (see above) let us understand how limited the organisational interest is to engage in forest-related activities.

3.4.3.3 Added Capacities from Third-Party Actors (ADA)

From the above, we can conclude that the ADA has **today only limited interest in gaining forest-related capacities from third-party actors**. Besides, today there is **also an only limited availability** (as explained above) in capacities from Austrian actors.

With regard to **financial capacities** (capital and financing), the ADA is provided with capital and an annual basic funding for administrative activities, by law (Austrian Government 2003: BGBl. I Nr. 65/2003, §§6 and 10). Additional administrative and annual operative financing is subject to the annual Federal Finance Act (Bundesfinanzgesetz). As above has shown, however, 'long-term' financial planning is 'half-baked'. A general reduction in funding and an unclear financial disposition result in problems, for instance, even in the short-term planning of ongoing interventions' activities, beyond the current fiscal year (expert interviews: actors nr. 1–3).

The ADA (including cooperation offices) gains **moderate to strong trust centrality and irreplaceability** (formal and informal decision-making competencies) in the perception of actors of the Austrian forest policy field (c.p. Table 3.2: L3–L5/C9 = max. 57% and L3–L5/C17 = max. 56%). The more diverse qualitative results (own observations, expert and telephone interviews across Austrian actors: actors nr. 6–12, 14–16, 25, 27, 30, 32, 41, 50–52, 105, 127, 135, 189) led to a **moderate** result.

3.4.4 *The Ministry for Foreign Affairs of Sweden (MfFA)*

3.4.4.1 Independent Capacities (MfFA)

Quantitative estimations from network analysis (c.p. Table 3.2) show that the MfFA reaches only minor overall influence in the Swedish policy field (ibid.: L1/C23 = 33%). Its influence was perceived to be built on its minor irreplaceability (formal and informal decision-making competencies) (ibid.: L1/C19 = 33%) and minor role in financial capacities (ibid.: L1/C15 = 33%). Its role in regard to forest-related information was perceived as very low (ibid.: L1/C7 = 0%).

Indeed, according to qualitative expert interviews (actors nr. 38, 46–48, 188, 210; 21, 40, 42–45, 49), it can be concluded that the MfFA holds only **minor own**

capacities in regard to forest-related know-how, forest-related staff and none in regard to forest-related finances.

In recent years, the MfFA has only one expert in its department for development policy, coordinating climate change issues, whose work is perceived as relevant for forestry aspects (i.e. expert interviews: actors nr. 38, 47, 21).

While the Swedish Government proposes **the annual budget bill**, the Riksdag decides on expenditures and the government has to implement its decision (Riksdag 2011a). Then the government informs Sida in a ‘letter of appropriation’ on the budget available to the Swedish International Development Agency (Sida). Sida is basically administering all bilateral technical assistance in forestry in Sweden (i.e. expert interviews: actor nr. 47).

With respect to **legal competencies**, the MfFA (consisting of three ministers) has competency in international development cooperation (one minister) (c.p. MfFA 2011a). Competencies of Swedish ministers to make their own decisions are limited in so far, as that decisions have to be made by the government at large, and clear division of responsibilities between ministries and governmental agencies exists (c.p. p. 12 in MfFA 2011b; p. 115 in Jahn 2011). The MfFA has to hence **share its competencies** with the Swedish International Development Agency (Sida) (c.p. Sida 2011).

While Sida was able to work relatively independently from the MfFA for decades (which was reflected in the quantitative results), in recent years, the MfFA had shown to be able to **enforce multiple changes** in the organisational structure and competencies of Sida (a.o. expert interviews: actors nr. 46, 47, 188, 210; c.p. below on Sida). This leads to an average qualitative result of **medium legal capacities of MfFA**, for the period under consideration ($\leq 1994/1995-2010$).

3.4.4.2 Independent Willingness (MfFA)

The willingness of the Swedish Government at large, to address forest-related goals of aid policy, has diminished over the period under consideration ($\leq 1994/1995-2010$). **On average, willingness is moderate** (a.o. expert interviews: actors nr. 38, 46, 47, 188, 210; 49, 21, 40, 42, 43), as further explained below.

There exists **no forest sector policy** as such in Sweden (c.p. p. 20 in Aurenhammer 2008). Relevant forest-related policy documents (i.e. ‘position papers’) were published **by Sida** (i.e. Sida 1999 and with minor relevancy: Sida 2004; see pp. 20ff in Aurenhammer 2008). Thereby, Sida acted relatively independently of the MfFA, until the recent changes in government (a.o. expert interviews: actors nr. 46, 47, 188, 210). From 2008, ‘programmes with political character’ needed to be accepted by the MfFA (ibid., 47). According to the Swedish country report (ETFAG 2006a), the forestry sector was integrated into rural development concepts and integrated natural resource management, where forestry gets ‘easily lost’ (i.e. expert interviews: actors nr. 47, 49).

Besides the Swedish Policy for Global Development (MfFA 2003; see pp. 20ff in Aurenhammer 2008), only of general relevancy, the MfFA announced 13 new

thematic policies, after the change in government, to be developed jointly with Sida (a.o. expert interviews: actors nr. 38, 46, 47, 188, 210). Among these, that is, the 'Policy for Environmental and Climate Issues in Swedish Development Cooperation' (2010–2014) (Swedish Government 2010) is relevant for the forest sector as well and has integrated at least some of the views from the Sida-initiated Forest Initiative (expert interviews: actors nr. 47, 21).

3.4.4.3 Added Capacities from Third-Party Actors (MfFA)

From the above, we can conclude that the MfFA has only **moderate interest to gain forest-related capacities from third-party actors**, as such issues are usually dealt with by Sida. In certain cases, that is, the joint policy formulation, it however can make use of **existing**, comparatively **moderate capacities in forest-related know-how and staff**, from, for instance, Sida (see below on Sida).

Recently, the MfFA has decided to **place the staff in Swedish embassies under their line of command** (from 2010/2011), being currently on the payroll of Sida, and calls for the strengthening of the local staff at embassies while at the same time staff at the Sida headquarters in Sweden are being reduced (expert interviews: actor nr. 188). This can be seen as an attempt to reduce dependencies of the MfFA on Sida, with respect to the implementation of governmental policies, at least as an attempt to increase control.

The MfFA gains only **moderate trust centrality and irreplaceability** (formal and informal decision-making competencies) in the perception of the actors of Sweden's forest aid policy network (c.p. Table 3.2: L1/C11 = 33%, L1/C19 = 33%), mainly due to its marginal role in this network. After the recently enforced reorganisations of Sida, the perception on MfFA's irreplaceability could today, however, be already (at least temporarily) higher (as can be concluded from expert interviews: actors nr. 46, 47, 188, 210).

3.4.5 Swedish International Development Agency (Sida)

3.4.5.1 Independent Capacities (Sida)

Quantitative estimations from network analysis (c.p. Table 3.2) show that Sida reaches only moderate overall influence in the Swedish policy field (ibid.: L4–L5/C23 = 50%). Despite this, Sida is perceived to hold high irreplaceability (formal and informal decision-making competencies) (ibid.: L4–L5/C19 = 100%) and a strong role in financial capacities (ibid.: L4–L5/C15 = 100%). Its role in regard to forest-related information is perceived as moderate (ibid.: L4–L5/C7 = 50%).

Qualitative results show that Sida holds only **moderate independent capacities in regard to forest-related know-how and forest-related staff** (i.e. expert interviews: actors nr. 46–49, 188, 210). In 2008, Sida engaged in about three forest-related

experts at their headquarters (i.e. forest policy advisor at Sida, forest-related teams)¹⁶ as well as three others in embassies and two with the Forest Initiative (at the Swedish Forest Society) (ETFAG 2008a).

Indeed, Sida holds **strong financial capacities**. Sida is basically administering all the bilateral technical assistance in forestry in Sweden (i.e. expert interviews: actor nr. 47). The general budgeting process is described above. Sida disbursed annually 13 million euros (1994/1995–2005), 0.79% of its total ODA (c.p. p. 5 in Aurenhammer 2008). There exist clear financial plans, linking planned interventions to planned/committed financial means over the next years (internal documents, actor nr. 47).

With respect to **legal competencies**, Sida works on the directives of the Swedish Government and parliament and **shares the competencies** with the MfFA (c.p. Sida 2011).

As shown above, the MfFA is able to **enforce multiple changes** in the organisational structure and competencies of Sida though (a.o. expert interviews: actors nr. 46, 47, 188, 210). This leads to a qualitative result of **medium legal capacities of Sida**, for the period under consideration (≤1994/1995–2010).

3.4.5.2 Independent Willingness (Sida)

Similar to that above of the MfFA, a **moderate willingness** can be constituted (a.o. expert interviews: actors nr. 46, 47, 188, 210; 21, 49, 40, 42–45). In Sweden, there exists **no forest sector policy** as such (c.p. p. 20 in Aurenhammer 2008). Relevant forest-related policy documents (i.e. ‘position papers’) are published **by Sida** (i.e. Sida 1999; and with minor relevancy: Sida 2004; see pp. 20ff in Aurenhammer 2008). Thereby, Sida acted relatively independently of the MfFA, until recent changes in government (expert interviews: actors nr. 46, 47, 188, 210). MfFA announced 13 new thematic policies, after a change in government, to be developed jointly with Sida (a.o. expert interviews: actors nr. 38, 46, 47, 188, 210). Among these, that is, the ‘Policy for Environmental and Climate Issues in Swedish Development Cooperation’ (2010–2014) (Swedish Government 2010) is relevant for the forest sector and has integrated at least some of the views from the **Sida-initiated Forest Initiative** (expert interviews: actors nr. 21, 47).

3.4.5.3 Added Capacities from Third-Party Actors (Sida)

For the implementation of interventions, Sida makes use of a greater variety of actors (c.p. Table 3.4, for further explanation and data per actor see section 3.5; pp. 56, 59–61 in Aurenhammer 2008), from forest-related know-how and staff capacities. The table shows that **Swedish non-governmental** (i.e. consultancies, NPOs) actors are

¹⁶ Recently, that is, forestry and natural resource tenure advisor/team for agriculture forestry and food security, forestry advisor/policy department for economic opportunities.

(directly) **subcontracted only for a minor part of forest aid**. Major implementation actors were recipient's governmental actors (see also actor-wise data, below).

As noted above, the willingness of the Swedish Government at large, to address forest-related goals in aid policy, has diminished over the period under consideration ($\leq 1994/1995-2010$) (a.o. expert interviews: actors nr. 38, 46, 47, 188, 210; 49, 21, 40, 42, 43).

This led to a **change in the personnel capacities of Sida and also consultancies** (a.o. expert interviews: actors nr. 47; 49, 21, 40, 42, 43), as forest issues were more and more subsumed under broader concepts (see above; ETFAG 2006a; i.e. expert interviews: actors nr. 47, 49). However, Sida can still obtain **moderate capacities** in forest-related know-how and staff **from Swedish non-governmental actors** (i.e. expert interviews: actors nr. 42-45, 21, 49).

Sida invites occasionally Swedish actors (i.e. NGO/NPO, research, consultancies, enterprises, other governmental actors) to smaller or larger events, where they could position themselves with respect to policies (expert interviews: actors nr. 46-48). In some occasions, the formulation of certain programme documents was outsourced to a consultancy (ibid.). Sida's approach was described as relatively participative (a.o. expert interviews: actors nr. 21, 40, 42, 43, 49).

Recently, with the **Forest Initiative**, forest actors are provided with the possibility to contribute to policy formulation (expert interviews: actors nr. 47, 21). In this respect, the Swedish Forest Society (coordinator of the initiative) and more recently the Swedish Forest Agency provide know-how and staff capacities to Sida (financing from Sida) (ibid.). Through a partnership agreement, the Swedish Forest Agency is also coordinating international forest-related concerns with Sida (also financed by Sida) (ibid.).

The general budgeting process, through which Sida is provided its financial resources, is described above. Besides this, Sida does not receive noteworthy financial resources, with respect to bilateral technical assistance in forestry (indirectly though, i.e. through NGO/NPO co-financing or recipients' governments' co-financing) (expert interviews: actors nr. 46, 47; 44, 45).

Quantitative data show that Sida gains **high trust centrality and irreplaceability** (formal and informal decision-making competencies) in the perception of the actors of Sweden's forest aid policy network (c.p. Table 3.2: L4-L5/C11 = 67% and L4-L5/C19 = 100%). This can be generally supported by qualitative data (a.o. expert interviews: actors nr. 38, 49, 21, 40, 42-45).

3.4.6 The Federal Ministry for Economic Cooperation and Development of Germany (BMZ)

3.4.6.1 Independent Capacities (BMZ)

Quantitative estimations from network analysis (c.p. Table 3.2) show that the BMZ reaches high overall influence (ibid.: L1/C22 = max. 67%) in the German policy field. This is mainly because it holds strong capacities with regard to irreplaceability

(formal and informal decision-making competencies) (ibid.: L1/C18 = max. 75%). Capacities with regard to forest know-how (ibid.: L1/C6 = max. 50%), financial and material support (ibid.: L1/C14 = max. 40%) were perceived comparatively low.

Indeed, the BMZ holds only **moderate independent capacities in forest know-how and in forest-related staff**, as they engage only one expert ('referent') in the responsible subject unit of the ministry, dealing with the subject '**international forest policy**' (i.e. expert interviews: actor nr. 13). This expertise is, however, strengthened, as the BMZ has 'outsourced' capacities to the GTZ, where a team (financed through the BMZ's **sectoral intervention budget**, 'Sektorvorhaben') is headed by and supports the referent of the BMZ (expert interviews: actors nr. 13, 22, 31).

Qualitative results however show that the BMZ actually has **high independent capacities in regard to financial support**, as the BMZ is a major source, ordering and financing technical or financial assistance through the GTZ or KfW (a.o. expert interviews: actors nr. 13, 22, 31). While only a smaller part is provided directly through the sectoral intervention budget, the larger part comes from country budget lines ('Ländervorhaben') (ibid.). The BMZ disbursed annually 60.5 million euros (1994/1995–2005), 1.12% of its total ODA (c.p. p. 5 in Aurenhammer 2008).

The BMZ also holds **strong legal competencies**, being the only governmental actor, formally responsible for development policy and cooperation (BMZ 2011a, b), though also other ministries do engage in (forest-related) cooperation (i.e. BMELV). More generally, the ministries' legal status is derived from the constitution (German Government 1949: Grundgesetz, BGBl. III, GINr. 100-1, Art. 62–65). The forest-related interventions that implement its policies are administered and/or undertaken by the 'agencies' GTZ (since 2011: GIZ) and KfW, on the BMZ's order (BMZ 2011a).

3.4.6.2 Independent Willingness (BMZ)

Forest-related cooperation is **moderately incorporated in German policies** (i.e. BMZ 2003; BMZ 2002a, b, 2004; n.d. a; pp. 13–18 in Aurenhammer 2008). The forestry sector remains important, despite not being anymore included in the priorities of the minister (of the BMZ), and therefore not 'among the big five' in the development agenda (ETFAG 2006b). It is assumed to remain as a '**second category topic**'; thereby, the competency, to strategically lead and plan the forest sector, is still the responsibility of the BMZ (ibid., a.o. expert interviews: actors nr. 13, 22, 31). 'While various sector budgets of high political visibility increased (climate change, energy, health, education), the forest aid budget stayed at the same level' (ETFAG 2008b).

Recently, considerable additional budget has been made available for the protection of global biodiversity including forests (ibid.).¹⁷ REDD and biodiversity are the focus of more recent interest (ibid.; a.o. expert interviews: actors nr. 13, 22, 31, 23, 24, 26). There are signs that '**forest aid**' will be more and more defined

¹⁷ These budget figures (commitments) very broadly subsume forest and biodiversity. Such figures are not comparable, if only forest or forest-related disbursements shall be compared (c.p. Chap. 2 in this volume; also pp. 2ff in Aurenhammer 2008, on the methodology for comparative analysis of secondary, statistical data).

under biodiversity, desertification and climate change (abandoning of the tropical forest marker with the introduction of an OECD Rio marker) (ETFAG 2008b).¹⁸ The forest sector concept (BMZ 2002a) is under revision, for several years already.

The above gives testimony to the **moderate willingness** to engage in forest aid policy and address forest-related goals. The existence of a *forest* referent and assigned GTZ personnel as well as a sectoral budget line (see above) support this as well.

3.4.6.3 Added Capacities from Third-Party Actors (BMZ)

Though the BMZ holds plenty of its own independent capacities, it **depends on the staff and know-how of other actors**, especially **for the implementation of its forest-related programmes**. Besides the staff at the GTZ assigned to the BMZ, over 100 experts (ETFAG 2008b), mainly from **GTZ and KfW**, administer, manage and/or implement interventions, on BMZ's order. However, especially KfW, but also GTZ **subcontracts frequently consultancies** for the implementation (expert interviews: actors nr. 13, 22, 31; 23, 24, 26, 31; 121, 132, 149, 165, 176). GTZ and KfW implement interventions equivalent to basically all disbursed forest-related aids (c.p. Table 3.4, for further explanation and data per actor see section 3.5; see pp. 62, 66 in Aurenhammer 2008).

GTZ and KfW, and also consultancies, provide a strong resource pool for forest know-how and staff (also in field offices) to get advice from in policymaking processes as well as for implementation (expert interviews: actors nr. 13, 22, 31; 23, 24, 26, 31; 121, 132, 149, 165, 176).

However, even though it can be concluded that there exist interdependencies, the **moderate remaining forest capacities in know-how and in staff can help the BMZ to keep a balance**. The BMZ has an interest in the implementation of its policies and programmes, and it can build and also builds on the forest-related capacities of GTZ and KfW, primarily. These are again interested in the financial resources, provided by its majority in the BMZ.

In order to maintain such close interconnections, it is necessary to have good **coordination** between the actors in the policy formulation process and to keep a certain **independence of the administrative implementation and decision-making** (though, i.e. formally engagement happens only on BMZ's order), and this is also put into practice (expert interviews: actors nr. 13, 22, 31; 121, 132, 149, 165, 176). This provides the GTZ and KfW with considerable informal policymaking competencies.

The BMZ gains also **strong trust centrality and irreplaceability** (formal and informal decision-making competencies) in the perception of the actors of the German forest policy field (c.p. Table 3.2: L1/C10 = max. 67% and L1/C18 = max.

¹⁸ Depending on the implementation in database management, this may lead to further difficulties to determine exact forest or forest-related disbursements. If politically or administratively not properly used, it may also lead to a further erosion of the forest sector as such.

75%). This can be generally supported by the qualitative data (expert/telephone interviews and own observations: actors nr. 22, 31; 23, 24, 26, 31; 121, 132, 149, 165, 176; 268, 275, 276).

3.4.7 *Gesellschaft für Technische Zusammenarbeit (GTZ) and Kreditanstalt für Wiederaufbau (KfW)*

3.4.7.1 Independent Capacities (GTZ and KfW)

Quantitative estimations from network analysis (c.p. Table 3.2) show that the GTZ and KfW ('agencies', including local offices) reach high overall influence (ibid.: L3–L5/C22 = max. 67%) in the German policy field. This is mainly because they hold strong capacities with regard to forest know-how (ibid.: L3–L5/C6 = max. 100%). Also, their capacities with regard to financial and material support (ibid.: L3–L5/C14 = max. 67%) and irreplaceability (formal and informal decision-making competencies) (ibid.: L3–L5/C18 = max. 63%) were perceived as high.

Indeed, the GTZ and KfW hold **strong independent capacities in forest know-how and in forest-related staff**, as over 100 experts (ETFAG 2008b) administer, manage and/or implement interventions, on the BMZ's order. With respect to KfW, staff capacities, especially in local offices, are only moderate (expert interview: actor nr. 31). Usually, interventions are subcontracted to consultancies (ibid.).

Qualitative results however show that the GTZ and KfW actually **do not hold independent capacities in regard to financial support**, as the BMZ is the major source of ordering and financing technical or financial assistance through the GTZ or KfW (a.o. expert/telephone interviews: actors nr. 13, 22, 31). An exception is, for instance, the surpluses of the GTZ (since 2011 GIZ), which are, however, entirely reinvested into development interventions (GIZ 2011). Besides governmental sources, the KfW Development Bank can also raise additional funds in the capital markets (KfW 2011).

It is a frequently noticed effect that quantitative results dominate such perceptions of actors that reflect quantitative and qualitative financial dependencies of *subsequent client – agent relationships* (i.e. income from orders of the GTZ, KfW or a recipient's subject ministry, administering BMZ's financial capacities) *or even relationships to actors terming as gateways for financing or order opportunities* – rather than providing with clear quantitative figures on the actual primary sources of financial capacities.

The GTZ and KfW also hold **moderate formal and informal competencies**, as they are the primary actors for the administration, management and/or implementation of forest-related interventions in Germany, and therefore gain also considerable informal competencies in the policymaking process, as explained above (expert/telephone interviews: actors nr. 13, 22, 31; 121, 132, 149, 165, 176). This is despite them being governmentally owned companies (c.p. GIZ 2011; KfW 2011), based on private law.

3.4.7.2 Independent Willingness (GTZ and KfW)

Forest-related cooperation is moderately incorporated in German policies. As explained above, the GTZ (from 2011 GIZ) and the KfW are considerably involved in the formulation process, they act in an advisory function towards the BMZ and they also publish their own programmes and position papers (i.e. BMZ 2002a, b, 2004; n.d. a; KfW 2010; GTZ 2008, 2009a, b). REDD and biodiversity are the focus of more recent interest (ETFAG 2008b; KfW 2010; GTZ 2009a; *ibid.*; a.o. expert interviews: actors nr. 13, 22, 31, 23, 24, 26).

With respect to the overall organisations, the GTZ and the KfW therefore hold **moderate willingness** to engage in forest aid policy and address forest-related goals, in line with German overall policy. As far as their forest experts are concerned, it can be concluded that the organisations are of course interested in utilising their capacities and engaging in areas they are strong in, also in the future, in order to guarantee organisational reproduction.

3.4.7.3 Added Capacities from Third-Party Actors (GTZ and KfW)

Though the GTZ and the KfW hold plenty of their own independent capacities, they **depend on the staff and know-how from third-party actors**, as they (especially the KfW) usually 'forward' (subcontract) considerable parts of intervention implementation to **a few German consultancies** (a.o. expert/telephone interviews: actors nr. 22, 31; 23, 24, 26, 31; 121, 132, 149, 165, 176; 268, 275, 276; quantitative results from policy and intervention network analysis).

For instance, the GTZ has institutionalised exchange processes with consultancies (expert interviews: actor nr. 22), and the GTZ in general is told to 'forward' a considerable amount of their overall turnover to other implementation actors (mainly consultancies) (*ibid.*; c.p. also BMZ n.d. b: paragraph 8). Among the German consultancies mentioned are the GFA, GOPA, AHT, GITEC and IPP Stuttgart (i.e. quantitative results from policy network analysis). The GTZ and the KfW hence can satisfy their resource needs largely from the German consultancy market.

The **major source for forest-related financial capacities** for the GTZ and the KfW is the BMZ, but also other ministries (i.e. BMELV) and multi-governmental or international organisations provide them with orders (a.o. expert interviews: actors nr. 22, 31). The KfW can also raise funds from capital markets (KfW 2011).

Existing interdependencies with the BMZ are explained above as balanced. Interdependencies exist (esp. for the KfW) in a similar way with regard to consultancies.

The GTZ and the KfW gain also **strong trust centrality and irreplaceability** (formal and informal decision-making competencies) in the perception of the actors from the German forest policy field (c.p. Table 3.2: L3–L5/C10 = max. 65% and L3–L5/C18 = max. 63%). This can be generally supported by qualitative data (i.e. expert/telephone interviews and own observations: actors nr. 13; 23, 24, 26, 31).

3.4.8 Donor's Consultancies (*Consultancies: Germany, Sweden, Finland*)

Quantitative estimations from network analysis (c.p. Table 3.2) show that consultancies from Germany, Sweden and Finland reach minor overall influence (ibid.: L11/C22–C24 = max. 27; 33; 33% respectively) in the respective donor's policy field, because they hold strong capacities with regard to forest know-how (ibid.: L11/C6–C8 = max. 63; 50; 63% respectively). They are not important with regard to financial and material support (ibid.: L11/C13–C15 = 0; 0%; max. 33%, respectively) and are usually not perceived irreplaceable (holding strong formal and informal decision-making competencies) (ibid.: L11/C18–C20 = max. 25; 33; 25%, respectively).

Qualitative analysis show that the above consultancies hold indeed **high independent capacities in forest know-how and in forest-related staff**, as they are comparatively large companies, with several forest or forest-related experts working for them (expert/telephone interviews: actors nr. 19, 23, 24, 26, 29, 39, 40, 42, 43).

The consultancies **do not hold own independent capacities with regard to financial support**, as they are usually recipients (contracted, i.e. by a donor or a recipient government) only (ibid.). However, they need to **hold and invest their own capital** to realise their own consulting services, until getting paid for their services by the client (i.e. expert interviews: 19, 29, 39). Consultancies can also **administer such parts of intervention finances** a donor does not (want) to provide directly to recipient governments (i.e. ibid.). This can make them influential in the eyes of third-party actors (who do not know or care where the money comes from) and also because they can gain (limited) informal decision-making competencies through administering for third-party actors' finances.

Consultancies **do not hold legal competencies**. They can only gain informal (decision-making) competencies, through third-party actors.

3.4.8.1 Independent Willingness (*Consultancies: Germany, Sweden, Finland*)

Consultancies have a **strong interest** to engage in forest aid policy and cooperation, in so far, as policy addresses issues, for which they are able to provide capacities for (**willingness**). Consultancies of the above countries generally found their interests well covered in the donor policies (esp. in Germany and Finland) and hence **hold strong willingness** (expert/telephone interviews: actors nr. 19, 23, 24, 26, 29, 39), to a less extent in Sweden (expert interviews: actors nr. 21, 40, 42, 43).

If policies change, consultancies still interested in the implementation of foreign aid interventions have to adapt their personnel and know-how capacities, to retain high willingness (otherwise, they will simply quit with that business area). This describes the Swedish case well until recently (Forest Initiative), where forest-related capacities had diminished (see above).

In contrary, in Finland and Germany, the governmental actors have carried on discussion processes with forest-related consultancies (i.e. expert interviews: actors nr. 22, 37, 19, 23, 24, 26, 28, 29, 33, 39), providing them both with the **possibility**

of incorporating interests (willingness) as much as possible. As consultancies thrive for business, they will always try to get their interests incorporated (if they find a gateway to do so).

3.4.8.2 Added Capacities from Third-Party Actors (Consultancies: Germany, Sweden, Finland)

Consultancies hold plenty of own independent capacities but **depend on financing (contracts) from third-party actors**. Below lists the most important consultancies and the financial flows (forest aid) that they received (including administered financial resources) for implementing interventions (c.p. data per actor from below; see pp. 56ff in Aurenhammer 2008).

In Finland, consultancies implement interventions equivalent to more than 60% of the disbursed aid (c.p. Table 3.4, for further explanation and data per actor see section 3.5). In Germany, the above-mentioned consultancies are subcontracted in considerable parts of GTZ's and KfW's interventions (see above). Swedish consultancies are only rarely directly contracted (c.p. Table 3.4, for further explanation and data per actor see section 3.5), but they are often subcontracted by recipient governments or international organisations (i.e. 21, 40, 42, 43).

Though consultancies hold their independent strong know-how and staff capacities, the above consultancies established and maintain a network of subcontracting partners, so that today they frequently outsource parts to, that is, local consultancies and other actors or jointly implement activities with other donor consultancies (esp. in evaluations) (expert/telephone interviews: actors nr. 8, 19, 23, 24, 26, 29, 32, 39, 40, 42, 43).

Quantitative results show that the above consultancies **reach high trust centrality but they are not irreplaceable** (c.p. Table 3.2: L11/C10–C12 = max. 67; 67; 54%, respectively, and L11/C18–C20 = max. 25; 33; 25%, respectively). This is generally supported by the qualitative expert interviews (i.e. actors nr. 13, 20–22, 30, 31, 34–37, 46, 47, 49, 51).

3.4.9 Donor's Consultancies (Austria)

3.4.9.1 Independent Capacities (Consultancies: Austria)

Quantitative estimations from network analysis (c.p. Table 3.2) show that Austrian consultancies reach **low overall influence** in the Austrian policy field (ibid.: L11/C21 = max. 14%). This is because they do **not gain importance with regard to forest-related information** (ibid.: L11/C5 = max. 12%), in the overall Austrian policy network. They are also not perceived irreplaceable (ibid.: L11/C17 = max. 6%) neither are they regarded as important with regard to financial support (ibid.: L11/C13 = max. 4%).

According to qualitative expert interviews, Austrian consultancies hold, however, **moderate independent capacities in regard to forest-related know-how and**

minor capacities in forest-related staff (expert interviews: actors nr. 5–9, 16, 30, 32, 41). These capacities have diminished in so far, as since 2001 overall forest-related aid has dropped considerably (see pp. 8–9 in Aurenhammer 2008), and after 2004 (with the establishment of ADA), these consultancies found it difficult to get access to Austrian aid resources and to contribute with their forest-related know-how (i.e. expert interviews: actors nr. 5–9, 16, 30, 32, 41).

As noted above, consultancies **do not hold own independent capacities in regard to financial support**, as they are usually recipients (contracted, i.e. by a donor or a recipient government) only. As most Austrian individual consultants or consultancies are comparatively small, they also hold limited capital for pre-investments.

3.4.9.2 Independent Willingness (Consultancies: Austria)

As noticed above, consultancies have a **strong interest** to engage in forest aid policy and cooperation, in so far, as policy addresses issues, for which they are able to provide capacities for (**willingness**) (i.e. expert interviews: actors nr. 5–9, 16, 30, 32, 41).

Austrian forest-related consultancies have found their interests in earlier years well covered, but more recently, after 2004, only insufficiently covered in the Austrian policies (ibid.; c.p. above on BMaA and fluctuating relevancy of policies with regard to forest-related goals/issues). Hence, over the entire period, they **hold moderate willingness** (expert interviews: actors nr. 5–9, 16, 30, 32, 41).

3.4.9.3 Added Capacities from Third-Party Actors (Consultancies: Austria)

Austrian consultancies hold moderate independent capacities, but they **depend on financing (contracts) from third-party actors**. Below lists the most important consultancies and the financial flows (forest aid) they received (including administered financial resources) to implement interventions (c.p. data per actor from below; see pp. 57ff in Aurenhammer 2008). In Austria, four consultancies implemented interventions, equivalent to 37% of the disbursed aid (ibid.).

In earlier years (before 2004), the role of forest-related consultancies was different. Especially **before 2001, the BMaA turned frequently to consultancies** (c.p. data below; see pp. 8–9, 57ff in Aurenhammer 2008). In other words, they had greater access to financial resources than today. In overall, the **finances available** from the Austrian policy network **are minor** (c.p. Table 3.4, for further explanation and data per actor see section 3.5).

Among others, the ADC GmbH administered and implemented large parts of forest-related aid (see below), also subcontracting individual consultants, who provided ADC with forest know-how and staff (i.e. expert interviews: actors nr. 5, 10, 14, 30). This actor, however, does not exist anymore today¹⁹ (c.p. data below; see pp. 8–9, 57ff in Aurenhammer 2008).

¹⁹ At the time of interview, insolvency proceedings were under way.

Those Austrian consultancies still involved in the forest-related aid sector have established and maintain a network of subcontracting partners, which they use and maintain at least temporarily (in times of contracting possibilities), depending also on their own organisational size (individual consultants vs. larger consultancies) (i.e. expert interviews: actors nr. 5–9, 16, 30, 32, 41). However, within the Austrian network, they can **gain only moderate know-how and minor staff-related capacities** (ibid.). As a source of additional capacities, for instance, consultants from other donors or recipient country actors can be used (i.e. expert interviews: actors nr. 8, 41).

Quantitative results show that the above consultancies **reach low trust centrality and are not irreplaceable** in the overall Austrian policy network (c.p. Table 3.2: L11/C9 = max. 12% and L11/C17 = max. 6%). While qualitative data generally support these results (i.e. expert interviews: actors nr. 1–4, 9–12, 14–16, 25, 27, 30, 51, 52), qualitative explanation of consultancies' trust centrality is more complex.

The reason lies basically in the **change in role the Austrian consultancies can play in the Austrian policy network**: While before 2001 they attained a more prominent (implementation and administration) role, thereafter, the remaining consultancies obtained only minor roles (see above) – hence, they are not so much 'entrusted' (less trust centrality) with various activities in this field, compared to the earlier period (ibid.). Further, there occurred considerable differences in the party political acceptance of ADC Austria/ADC GmbH (kind of a first trial of establishment of an agency, as it was finally realised by the ADA model) (i.e. expert interviews: actors nr. 5, 10, 30).

3.4.10 *Subject Ministries of Recipient Countries*

3.4.10.1 **Independent Capacities (recipients' subject ministries)**

Quantitative estimations from network analysis (c.p. Table 3.2) show that the subject (thematic) ministries of recipient countries reach moderate to strong overall influence in the four donors' policy fields (ibid.: L17/C21–C24 = 29; 50; 56; 61%, respectively). Their influence was perceived to build on their moderate to strong irreplaceability (formal and informal decision-making competencies) (ibid.: L17/C17–C20 = 45; 50; 33; 54%, respectively), minor to moderate role with regard to financial support (ibid.: L17/C13–C16 = 9; 17; 44; 41%, respectively) and usually strong role in forest-related know-how (ibid.: L17/C5–C8 = 49; 80; 67; 57%, respectively).

Qualitative expert interviews and personal observations show that subject ministries in recipient countries play a **moderate role in regard to own forest-related know-how and forest-related staff and a minor role in regard to forest-related finances** (expert/telephone interviews with 307 actors), in the respective policy networks.

The role subject ministries play in regard to their **forest-related know-how can be qualitatively further specified**. Qualitative results show that the **type of forest information**, on which the relevancy of these governmental actors builds, is mainly of an **administrative, political, regulative or statistical** nature. It is only to a less extent that their informational relevancy builds on other types of information (i.e. technical, silvicultural, social, socio-economical) (expert interviews on policy and intervention level networks, field observations: actors nr. 10, 11, 13, 14, 15, 17, 19, 22–37, 39–47, 49, 54–77, 110–121, 78–109, 122–143, 144–169 170–187, 188–206, 208–223, 226, 228–246).

In addition, the **financial and personnel capacities** of subject relevant governmental actors are often weak or undergo enhancement processes (i.e. expert interviews and field observations: actors nr. 10, 11, 17, 22, 29–31, 33–37, 41, 46, 47, 49, 54, 105, 118, 135, 149, 165, 168, 170, 178, 189, 190, 209, 210, 97, 103, 107, 111, 113–115, 126, 128, 130, 146, 154, 159, 171, 172, 176, 191, 193–195, 197, 212–216, 228). Frequent **personnel changes often** result in subsequent changes in political programmes, and/or such programmes are seldom completely implemented, in part due to **financial bottle necks** (ibid.). To add to this, **corruption** frequently plays a role in the forest sector (general result, based on qualitative data: expert/telephone interviews, including field visits, with 307 actors).

In most cases, **large parts** (or all) **of the operative budget** of a recipients' governmental forest organisations **are provided for by donor funds** (both credits and grants) (i.e. expert interviews: actors nr. 97, 103, 107, 111, 113–115, 126, 128, 130, 146, 154, 159, 171, 172, 176, 191, 193, 194, 197, 212–216). Often, parastatal forest agencies' **operative budget** and recurrent personnel budget and infrastructure are minor or problematic (i.e. if large parts of the personnel are still on the payroll of the ministry) (i.e. expert interviews: actors nr. 122, 126, 193, 216).

Frequently **competencies** are shared among various governmental actors whose **political programmes are** often contradictory (there seldom exists a Ministry for Forestry, and if so, often a number of other ministries or agencies deal with forest-related matters) (general result, based on qualitative data: expert/telephone interviews, including field visits, with 307 actors).

However, at large, **formal and informal competencies of recipients' subject ministries** or governmental forest agencies **are strong** (expert/telephone interviews with 307 actors). They play a central role in **bi-governmental negotiations** of forest aid programmes (less importantly district or regional level administrations). District forest administration and/or district administration with forest competencies play a more central role in the political–technical readjustment and implementation of such programmes (general result, based on qualitative data: expert/telephone interviews, including field visits, with 307 actors).

Donors' actors hence maintain close relations to recipients' subject ministries; in some cases, joint programme offices are even integrated into the ministerial structures (i.e. Swiss PFMP in Bhutan; expert interviews: actors nr. 58, 97, 106). Aside from their political role in **programme initiation** and **cooperation agreements**, the ministries or agencies play a central role in the continuous **formulation of national policies and acts** (general result, based on qualitative data: expert/telephone inter-

views and field visits with 307 actors). These areas constitute central processes of information exchange, advice and participation, addressed by donors' actors (*ibid.*).

In some countries (i.e. Uganda, Kenya, Honduras, Nicaragua), **forest competencies** have partly or fully been outsourced from subject ministries to **parastatal forest agencies** (i.e. expert interviews: actors nr. 122, 126, 193, 216).

3.4.10.2 Independent Willingness (recipients' subject ministries)

The **willingness** of subject ministries of recipient countries **is generally high**. This can be explained by their generally strong interest in both gaining foreign (financial) support and in agreeing on cooperation (general result, based on qualitative data: expert/telephone interviews and field visits with 307 actors), with respect to certain 'joint' programme goals. Subject ministries show high willingness in especially those 'joint' programme goals, needing major operative financial resources, in order to be able to implement their national policy goals. The **willingness** is diminishing only if benefits of the agreement are overwhelmed by political costs of (other goals of) such agreements. (*ibid.*)

3.4.10.3 Added Capacities of Third-Party Actors (recipients' subject ministries)

Subject ministries hold moderate to strong own independent capacities. However, in order to be able to address 'joint' programme goals agreed upon bilaterally, they need to make use of external capacities, besides their available capacities from their own countries' actors.

Most importantly, they rely on and are provided with a **high amount of external financial resources** (aid and credits) (*ibid.*).

In order to be able to implement 'sophisticated' joint programmes (and to formulate national policies enabling to 'grab for' foreign aid), the subject ministries need to gain at least **moderate external know-how**, complementing their own knowledge capacities. The market for external know-how would be greater, but for the financial resources provided with the limitations to 'buying in' external know-how. Also, external know-how is not always applicable (but may be applied though) (*ibid.*; especially recipient's actors interviews).

Subject ministries can gain **strong support from forest-related staff**, for instance, from their own regional, district or communal forest authorities and donors' actors. Once financial resources are available, the forest authorities' staff will be further educated ('capacity development'), as appropriate, to reach 'joint goals' (i.e. forest inventories, community forestry officers). With regard to special know-how (i.e. technical), subject ministries depend at least partly on external staff (i.e. from donor's consultancies). This is also because highly educated forest staff are rare, and when they exist, such higher-level forest officers do have a good education in terms of 'scientific forest management', but lack the 'field experience' (i.e. remaining forest cover; existing machinery and equipment; existing 'educated' personnel) to implement such knowledge. (*ibid.*)

The subject ministries gain **moderate to strong trust centrality and irreplaceability** (formal and informal decision-making competencies) in the perception of the actors of the four donors' forest aid policy networks (c.p. Table 3.2: L17/C9–C12 = 33; 40; 67; 56%, respectively, and L17/C17–C20 = 45; 50; 33; 54%, respectively). This is generally supported by qualitative results (expert/telephone interviews, including field visits, 307 actors). They gain these positions as they represent the central power in the respective countries, involved in various aspects of policy- and decision-making in the forest-related sector(s), as explained above. Hence, they are formally and informally irreplaceable, and they are to be entrusted (to a higher or lower extent) by any actor undertaking considerable activities or interventions in this sector (ibid.)

3.5 Excursus: Financial Transfers to Various Implementation Actors

Based on the analysis of secondary data, Aurenhammer (2008) provides us with extensive results on the flow of forest-related official development aid. Some of these are described below, to provide a better understanding of financial flows and the role of actors with regard to direct and indirect financial support. These data do not include eventual co-financing from recipient governments, which however is usually of minor importance or in kind (i.e. staff, infrastructure).

Table 3.4 shows the **relative net disbursement for forest-related official development aid** by project implementation type and donor country. These 'project

Table 3.4 Net disbursement for forest-related official development aid by project implementation type and donor country (in percent)^a

Project implementation type	Net disbursement in percent, by donor			
	Aut	Fin ^b	Swe ^c	Ger ^d
1a. Non-governmental donor country projects	97.64	60.51	5.29	Δ
1b. Governmental donor country projects	0.87	37.00	3.63	100.00
2. Governmental recipient country projects	–	–	37.15	–
3. Non-governmental recipient country projects	–	–	11.77	–
4. International projects	1.14	–	16.67	–
5. Other donor countries' projects	–	2.49	0.98	–

Source: Aurenhammer 2008

^aAll values in percentage of net disbursements to forest-related projects from 1994/1995 to 2005, for Sweden from 1998 to 2005

^bThe data for Finland base on the net disbursements to the 15 largest projects (1994–2005), equalling about two-thirds of the total net disbursement

^cSwedish data refer only to 1998–2005. Approximately 25% of the data is not (sufficiently) specified to allow for an allocation to types

^dGerman data is based on an estimation of an expert of the BMZ. Due to this, almost all financial means during the mentioned period were disbursed to governmental donor country projects (GTZ, KfW). Only a very small proportion falls on non-governmental donor country projects (i.e. Churches' institutions)

AUT Austria, FIN Finland, SWE Sweden, GER Germany

types' are based on the kind of actor who holds the financial responsibility for the donor contribution. It can be noted that the donors prefer obviously different types of implementation structures, hence the actors responsible for the financial management.

While in the **Austrian** case most projects are financially managed by their own non-governmental actors, such as consultancies (i.e. 14% ADC GmbH.†²⁰; 11% Mautner-Markhof Agroservice; 8% Austroprojekt GTZ GmbH.; 4% ECOTEC GmbH.), but also largely non-profit organisations (i.e. 16% Horizont 3000 and predecessors ÖED †, IIZ †; 14% ADC Austria † and Hilfswerk Austria; 8% Entwicklungswerkstatt Austria; 7% CARE Austria) and some to their own research organisations (i.e. 2%, BOKU), **Germany** relies on their own governmental (parastatal) institutions (i.e. ~100% GTZ, KfW), though these subcontract frequently to consultancies (i.e. GFA, GOPA, AHT, GITEC, IPP Stuttgart).

In **Finland**, the financial management is mostly with its consultancies (i.e. 33% FCG including FTP International † and Terra Consulting Ltd. †; 25% Indufor including Metsähallitus Consulting † and Stora Enso Forest Consulting Ltd. †), but with respect to financial cooperation, their own governmental institutions are relied upon as well (i.e. 35% Finnfund). The results for **Sweden** reveal a more diversified strategy. More than one-third of the aid is managed by the recipients' governmental actors (i.e. 18% Ethiopian Ministry for Economic Development Cooperation, 15% Lao's Ministry for Agriculture and Forestry), and a relatively large proportion is managed by international organisations (i.e. ~4% both to FAO and ICRAF, ~3% Regional Community Forestry Training Centre for Asia and the Pacific, RECOFTC) (c.p. pp. 56 ff in Aurenhammer 2008).

It can be noticed that **large proportions of aid are managed by only a handful of actors.**

A **financial flow diagram** provides us with an overview of the financial flow from donors to implementation actors and then to the countries or thematic areas, where aid is 'delivered' to (c.p. pp. 63ff in *ibid.*). Figure 3.6 provides us with an **example from Germany** (c.p. p. 66 in *ibid.*). As noticed above, all the aid goes to the GTZ for 'technical cooperation' (54%) and the KfW for 'financial cooperation' (46%). The GTZ's 'share' is spread over a larger number of recipients (but mainly to Indonesia, Honduras, China, Vietnam, Ethiopia, Cote d'Ivoire), while the KfW is more focused on interventions in China, Brazil, Vietnam, Guinea and Tunisia. For the unequal distribution of forest aid among recipients and thematic areas by donors, see also Chap. 2 (c.p. pp. 37–40, 67–102 in *ibid.*).

With regard to the **Austrian aid to Bhutan**, Fig. 3.7 shows the shares from actor groups and subsequently thematic areas concerned (c.p. p. 81 in *ibid.*).

Interesting are also such countries, where only one implementation actor managed all or quasi all of the financial aids over a period of roughly one decade. Such **'implementation monopolies'** can be found, that is, in Austrian aid to Burkina Faso (NGO/NPO: EWA) and Mozambique (ECOTEC GmbH); Swedish aid to Bolivia (Cámara Forestal de Bolivia), Ethiopia (Ethiopian Ministry of Economic

²⁰The sign indicates that the institution does not exist anymore.

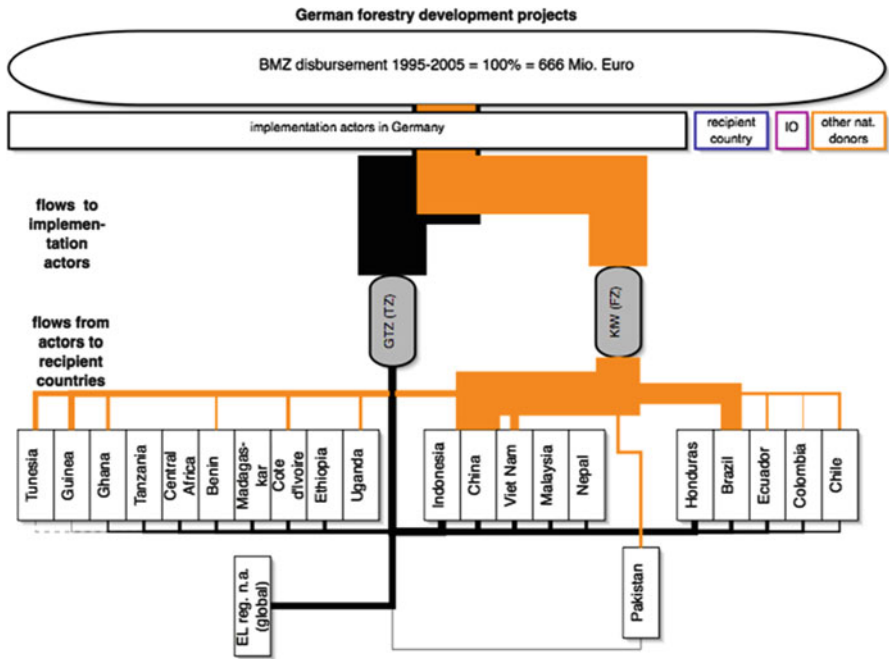


Fig. 3.6 Shares of actor groups in Germany's net disbursements (forest-related ODA, upper bound, 1995–2005) and shares of 'most important' recipient countries in these actor groups' shares (Source: p. 66 in Aurenhammer 2008)

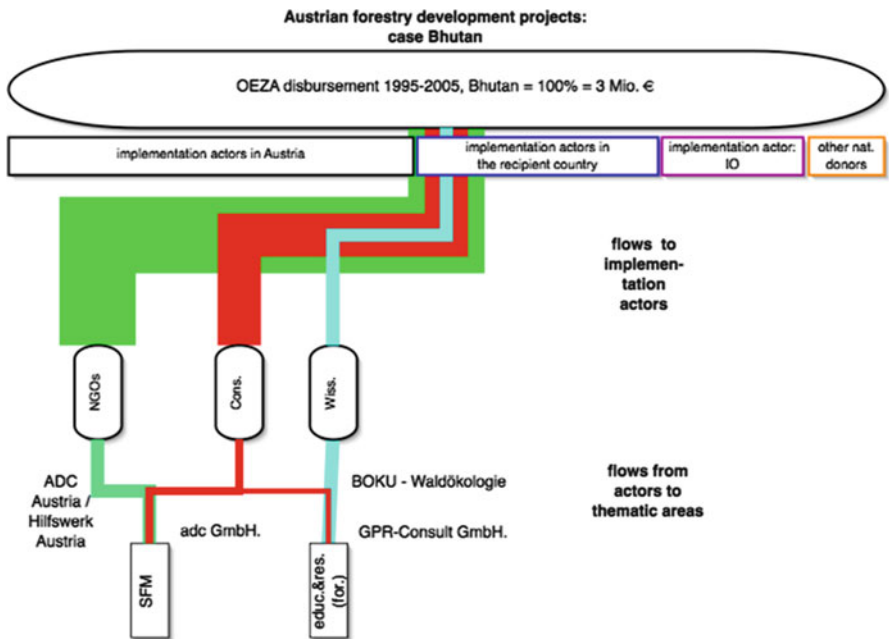


Fig. 3.7 Austria and Bhutan: financial flows to actor groups and thematic categories (Source: p. 81 in Aurenhammer 2008)

Development Cooperation), Lao (Ministry of Agriculture and Forestry) and Kosovo (mainly Scanagri Sweden Ltd.); Finnish aid to Burkina Faso (Scanagri Finland), Thailand (Finnfund) and Zambia (Indufor including Stora Enso Forest Consulting Ltd. †) as well as German aid to Indonesia (only GTZ), Guinea (mainly KfW) and Honduras (only GTZ).

Only the **10 largest projects** demanded for 24 (Germany) to 71 (Austria) percent of the donor's total forest aid (p. 103 in *ibid.*). These 'mega-projects' lasted, on average, 9 years (Germany, Finland; Austria: only 6) and had an average annual budget of 0.2 (Austria), 1.1 or 1.2 (Sweden and Finland, respectively) and 2.0 million euros (Germany).

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Chapter 4

Subsystems of the Bilateral Foreign Policy System and Their Actors' Influence on Programme Formulation and Implementation

4.1 Introduction and Methodological Approach

While Chap. 3 focused on the influence and potential for change of stakeholders within forest development cooperation policy networks and Chap. 6 provides us, among others, with the results for influential stakeholders in various types of forest intervention networks (with emphasis on forest know-how), this chapter will provide us with a more 'three-dimensional' view on the extension of the forest sector subsystem's (or network's) influence, within the overall bilateral, bi-governmental foreign policy system. It analyses the role influential actors (initially identified by network analysis, i.e. in Chap. 3) play, in decision-making (programme formulation and implementation), at various subsystems.

Also with reference to Chap. 2, concluding that apparently there must be external policy factors dominating the forest sector policy, rather than forest sector-related problem pressure, this chapter elaborates on a theoretical approach, describing how influential actors of superior subsystems are enabled to set the frame for the exertion of power by (even the strong actors within) the forest sector policy subsystem.

Building up its theoretical approach (c.p. Sect. 4.2), this chapter describes step by step how and why, theoretically, subsystems and participation processes within subsystems as well as gateways (gateway actors) play a crucial role in the better understanding of decision-making at various levels (and subsequently the overall decision-making).

Hence, initially it is theoretically implied that subsystems at various decision-making levels (determining certain framing elements and formulating interests) do exist.

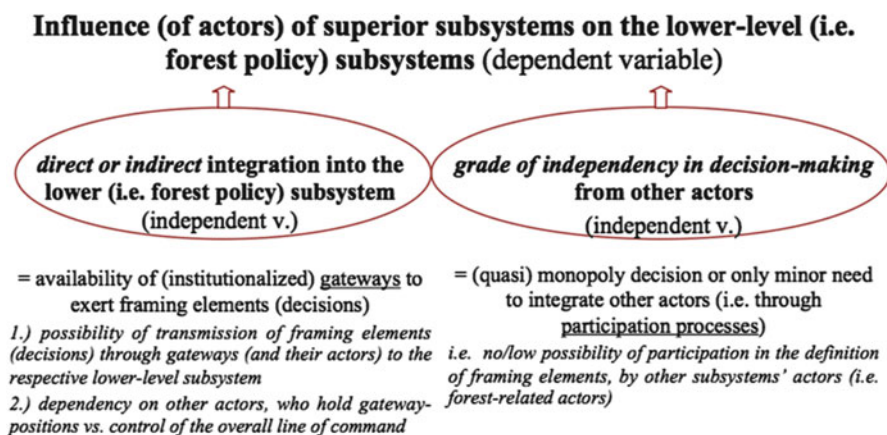


Fig. 4.1 Superior subsystems' actors' influence on lower-level subsystems (*top-down*) (Source: Aurenhammer 2011)

Hypothesis 4a: Rather than an integrated 'overall' system of bilateral foreign policy, there exist subsystems at various decision-making levels that determine framing elements, based on political factors or interests.

Framing elements constitute decisions made on either thematic issues, recipient countries or financial scope, taken by influential gateway actors of a superior system part. **Political factors or interests** include any important aspects a subsystem's influential gateway actor uses to base decision-making upon framing elements (no matter where they derive from – independent or third party actors' aspects taken into account).

Influence between subsystems is distinguished by top-down and bottom-up influences (c.p. Figs. 4.1 and 4.4), as well as influence between the parallel subsystems of a donor and recipient country, expressed in the *bargaining processes*.

Hypothesis 4b: Superior subsystems' actors' influence on lower-level subsystems (*top-down*) is high, if they are integrated into the lower-level subsystems and if they are independent in their decision-making from other actors.

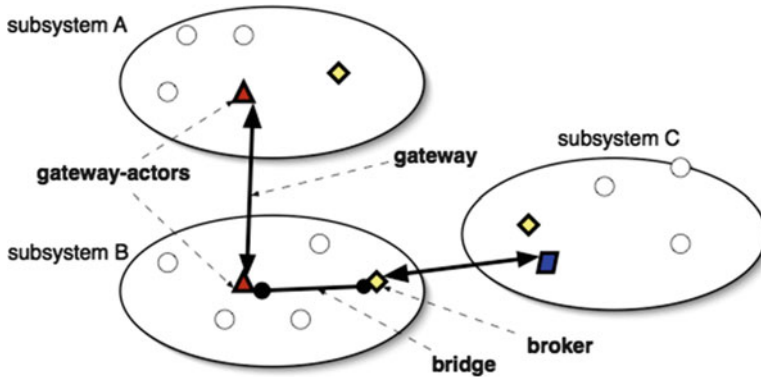


Fig. 4.2 Gateway and gateway actors, bridge and broker (Source: Aurenhammer 2011)

Hypothesis 4c: When a superior subsystems' (actors') influence is high (4b), then the influential actors of a lower-level (i.e. forest policy) subsystem can only act within the framing elements, set by the superior subsystems.

A **gateway** is an interconnection between two subsystems and is constituted by at least two actors or two organisational units of the same actor. There can occur more than one gateway between two subsystems. A **gateway actor** is an actor or its organisational unit, holding a gateway position in one of the two subsystems. Gateway actors on both sides can also be identical. Gateway actors are usually very influential actors in their subsystem (major gateways). If a gateway consists of less influential actors, it is called a minor gateway (minor gateway actors). Subsequently, a major gateway consists of at least one dominant actor (major gateway actor). A special form of interconnection is a **bridge**: An actor, who is the only (or only influential) gateway actor to another subsystem, interconnects with one or more other actors of the initial subsystem. Such a gateway actor is called a **broker**¹ (c.p. Fig. 4.2).

A **participation process** is a formal or informal process, led by a (major) gateway actor, in order to exchange views and interests, to get advice or to base decisions

¹ That is, embassies (and their staff) are often brokers. They hold an influential gateway-actor position in a gateway to the influential recipient country's actors. Therefore, they can term as brokers and bridge between donor actors having no excess to the recipient country's actor(s).

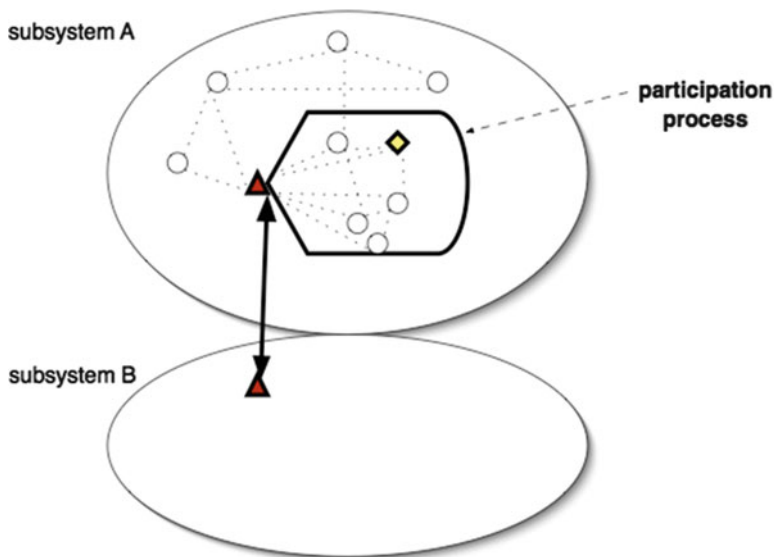


Fig. 4.3 A participation process, initiated by a gateway actor (Source: Aurenhammer 2011)

on a broad consensus, thereby giving other actors the opportunity to participate in policy- and decision-making (i.e. on framing elements). Such processes can constitute ad hoc, temporary or institutionalised networks. Participation processes, led by a minor gateway actor, without the involvement of the major gateway actor, are called **‘isolated’ participation processes** (c.p. Fig. 4.3). If a gateway actor transfers the interests of another actor of the subsystem (i.e. identified from participation processes) to another subsystem (where the other actor is not directly integrated), such a gateway actor enables indirect integration of the other actor, hence terms as broker and provides a bridge.

The forest policy subsystem is a lower-level subsystem. Nevertheless, lower-level subsystems and its actors have influence on the superior levels.

Thereby,

Hypothesis 4d: Forest policy subsystems’ (actors’) influence on superior subsystems (bottom-up) is high, if its actors are directly or indirectly integrated into the superior subsystem.

Hypothesis 4e: When a forest policy subsystems’ (actors’) influence is high (4d), forest-related actors can considerably contribute to the determination of framing elements, made by the superior subsystems.

Further, between each level of decision-making, there are **intermediary decision-making processes, where the donor and the recipient country actors bargain**. These bargaining structures represent theoretically subsystems of the overall bilateral foreign policy system. However, they should be regarded as temporary or institutionalised networks. As such, they are integrated into the top-down framework, but the bargaining networks are also interconnected at various levels.

Hypothesis 4f: Each level of the donor country bargains with the recipient country, within the top-down framework. Hence, the donor's and the recipient's gateway actors (brokers) of such bargaining networks play influential roles, in the decisions on and the reformulating² of framing elements.

It is assumed that a **viable forest policy subsystem** requires excess to institutionalised structures (gateway actors) within and beyond the subsystem: integrating (connecting) itself into the system at large, through gateways. In order to gain excess to gateways (and gateway actors) at various decision levels, actors must be involved in processes. Superior subsystems restrict the decision-making power and scope of lower-level subsystems, by determining policy factors that set the frame (framing elements) and by even exerting power through such gateways.

The following describes the **empirical measurement of the above elements/variables**.

What framing elements are being determined in a certain subsystem (and formulated in policies and implementation programmes) and what political factors or interests play roles in this respect are described empirically, by qualitative data from expert interviews and field research with reference to secondary data – that is, programme documents (c.p. Chap. 1).

Also the influential actors at various decision-making levels (i.e. the gateway actors) are identified empirically, initially based on a selection of the influential actors from quantitative network analysis (c.p. Chap. 3)³ and then on results from qualitative analysis, based on expert interviews (cited in this chapter).

The focus lies thereafter on additional qualitative descriptions of the various subsystems' actor's influence. This includes gateway actors and other influential actors, that is, from participation processes. Thereby, the influence is described empirically, taking the above independent variables into account (c.p. Figs. 4.1 and 4.4). Based on qualitative expert interviews (including from field research) (c.p. Chap. 1), for instance, the various actors' dependency on gateways (gateway actors) for indirect integration and the existence or non-existence of participation processes (for direct

² **With respect to the intervention level, only the part on reformulation applies.**

³ Network analysis, for instance, provides, as a result of mapping actors and their interrelations, with the *gateway actors to other subsystems*.

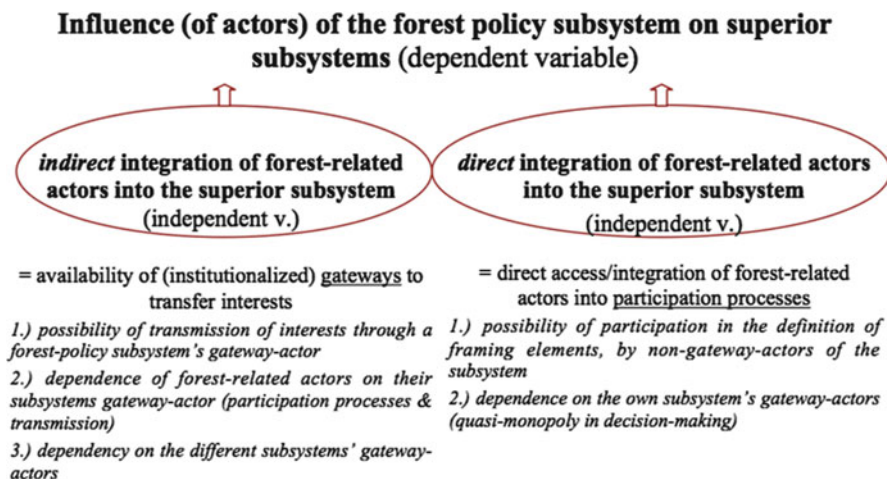


Fig. 4.4 The influence of the forest policy subsystem on other subsystems (*bottom-up*) (Source: Aurenhammer 2011)

integration; dependency on vs. opportunity of participation in decision-making) are described. Emphasis is given to the role of and the effects on forest-related actors (the forest policy subsystem).

What gateways exist and what actors hold gateway positions (gateway actors) as well as what participation processes exist (especially with a relevancy to forest-related actors), at various decision-making levels, are described empirically, by qualitative data from expert interviews and from field research (c.p. Chap. 1).

From this, conclusions are drawn about the dependency and influence of forest-related actors (of the forest policy subsystem) in the overall bilateral foreign policy system.

4.2 Theoretical Approach to Subsystems and Gateways at Various Decision-Making Levels

Networks (theoretical constructs) are characterised by two elements: actors (nodes) and their interrelations (vectors). Together they build the structure of a net. **Networks and subsystems** are regarded largely **synonyms** in this research. Both of them can host various actors, independent of their nationality or legal status.

Development policy is a subsystem of foreign policy (c.p. pp. 884ff in Höll 2006). This research therefore defines bilateral, bi-governmental **forest-related development cooperation** policy (in the following: FDP) as a subsystem within the overall system of foreign policy.

The subsystem development policy consists of a number of subsystems itself: the development cooperation policy subsystem (DCP), the foreign trade policy subsystem (FTP), the foreign culture policy subsystem and the foreign security policy subsystem (c.p. pp. 884ff in Höll 2006).

The **importance to analyse subsystems** in policy research is addressed by various authors, though with varying theoretical approaches (i.e. Howlett and Ramesh 2003; Howlett et al. 2009; c.p. also Sabatier 1993; Sabatier and Jenkins-Smith 1993).

Also, when applying Bourdieu (1987, 1993, 1998, 2001), the **social world is constituted by ‘fields’**⁴ that have the tendency to set boundaries between themselves and others, and due to the differences in field capacities, hierarchies in and between ‘fields’ evolve (c.p. p. 40 in Gotschi 2007, in: Gotschi et al. 2007).

However, due to **interdependencies at various levels of ‘fields’** (here, *policy* subsystems, networks, fields), **adaptations** to dominant issues or influences happen **at several levels of policy** (FTP, DCP, domestic policy) **and society** (c.p. pp. 22, 106ff in Barraclough and Ghimire 1995; Hannerz 1992; p. 118 in Hannerz 1991; cit. in: Kreff 2003; pp. 218, 222–224, 230–235, 245–248 in Long 1997; Ekholm’s and Friedman’s global system approach, in: Kreff 2003, pp. 37ff; pp. 126–142 in van Ufford 1997; 18–29 in Bierschenk et al. 1997).

In this chapter, the **focus is on policy subsystems at various levels of decision-making**, while subsystems or networks that include more ‘societal aspects’ as well are discussed with respect to capacities, especially to know-how, in Chap. 6. For instance, in recipient countries, the distinction can be made between a ‘market system’ and a ‘traditional gift economy system’ (c.p. pp. 184–190 in Richards 2006). The latter however is a largely neglected ‘field’ (c.p. p. 190 in *ibid.*), therefore hardly reflected in a *policy* subsystem by donors or recipient governments.

With the **political definition of sectors** (i.e. forestry, agriculture, health, energy) by strong actors⁵ (c.p. Chap. 3), an essential structural force (Galtung 1969) is exerted upon those structures, namely, societal ‘fields’ or subsystems (i.e. the traditional gift economy; c.p. pp. 37ff in Kreff 2003⁶), which are not interested in or capable of gaining competency in such (‘sector’) definition or formulation processes

⁴Comparable to what is called a subsystem or institutionalised network in this chapter

⁵That is, donors’ over recipients’ governments; recipients’ governments or elites over structures of traditional gift economy; OECD DAC’s sectors, as a statistical instrument of structural force; this research has shown limited evidence for recipients’ governments’ influence on the political definition of ‘sectors’ (i.e. naming) – though attempts to channel donors’ support to own sectors, defined by the recipient, were made in Tanzania.

⁶In Ekholm’s and Friedman’s ‘global systems approach’ (pp. 37ff in Kreff 2003), multinational companies or international organisations are perceived to constitute rather effects of structural changes than acting actors, which is not shared in this research, because too much determinism is placed on a ‘mechanical global system’ over an ‘actor-oriented decision-making’ system in their concepts.

Similarly, Hannerz’s ‘world system’ (1991, p. 118, cit. in: Kreff 2003), consisting of various, overlapping (...) (cultural) networks, is helpful, but in contrary to his approach of centres

(c.p. pp. 106ff in Barraclough and Ghimire 1995; pp. 18–29 in Bierschenk et al. 1997). Hence, this limitation in the approach (i.e. when applying a normative, strong actors' sector definition) should be kept in mind, when below policy subsystems and more administrative decision-making processes are described and analysed (i.e. on sector policy), and will be further discussed in Chap. 6.

As noticed by van Ufford (1997, pp. 126ff), 'special attention should be given to the interconnections or relations between development cooperation institutions at various organizational levels. Each level belongs to an ever longer, and ever more complex chain of interdependent organizations'. Van Ufford's '**organisational levels**' are similar to the '**decision-making levels**' addressed in this research. 'All organizations are intermediates, parts of a larger network, through which financial means flow', and 'development agencies can only operate, because they are connected to other levels'⁷ (p. 126 in *ibid.*, own translation; c.p. also p. 233 in Long 1997).

In this research, the importance of connections between levels is addressed by the theoretical description and empirical identification of **gateways**,⁸ as 'it is necessary to analyze these inter-organizational connections between various levels' (p. 126 in van Ufford 1997), but also the intra-organisational structures, to better understand decision-making relevant to a policy field or subsystem. By doing so,

(global cities), building networks, relatively independent from national or institutional entities, this chapter stresses the need to rely on actors for analysing policy and other actions.

Applying above approaches, it can be argued that to understand 'global changes', it is not necessary to distinguish between subsystems of nation states (and actors as social entities) but rather between, for instance, 'centres of the world' and their elites on one side and 'peripheries' in and across various countries on the other side, which would constitute subsystems within such systems. Though this may indeed sometimes be applicable (i.e. high external dependence of recipient countries' financial budgets may indeed raise the question, whether such a 'recipient countries' subsystem' at all exists), in this chapter, it is assumed that, at least initially and formally, one has to consider nation states as sovereign 'hosts' of national policy formulation and decision-making and bilateral negotiations as 'arenas of influence', as negotiation processes, where governments establish consensus (in a realist's foreign policy view).

Therefore, the decision-making levels, bureaucratic hierarchies and possible stakeholder incorporation processes (institutionalism's view), in both donor and recipient countries, play a central role. However, the joint cooperation networks/subsystems (at various policy levels) may dominate over the recipients' national policy subsystem and its policy formulation in certain cases. This can happen to the extent that the viability of a sovereign recipients' policy subsystem, hence its relevancy or existence, may have to be questioned and its policy rather seen as a result of informal dominancy of external subsystems'/actors' influence in the joint, bilateral/multilateral cooperation policy subsystem. In other words, the (informal) competences for the policy formulation are then held by the strong actors of the bilateral policy subsystems (donor's and recipient's governments), rather than by the actors of the recipient country's policy subsystem at large. Yet, it is the recipient's government that has the (formal) possibility to agree or disagree to a certain policy or intervention (though existing interdependencies). But the elites' 'affinity' to the external donors will, in such cases, be higher than towards the own countries' actors and people (c.p. Hydén 1980, 1983; cit. in van Ufford, 1997, p. 130).

⁷ After Korten and Alfonso (1980), cit. in van Ufford (1997, p. 126).

⁸ However, such gateways can exist between hierarchical subsystems or between parallel ones.

the **questionable view of an integrated ‘overall’ system** (i.e. of bilateral foreign policy) can eventually be **specified by the separation into** (more or less independent) **subsystems** (c.p. *ibid.*, 128), in order to gain a better explanatory value.

Analysis including meso-level subsystems to **reveal the interconnections of governmental and nongovernmental actors** is still rather rare (c.p. *ibid.*: 129–31). Aspects of micro-level interconnection and responses are referred to in Chap. 3 and also in Chap. 6 (i.e. the typology of mechanisms of change). According to Hydén (1980, 1983; cit. in: van Ufford 1997, p. 130), for instance, the growth of Tanzania’s government’s internal power is due to a growth in the ideological consensus with external donors (c.p. Chap. 6: Phases of development cooperation’s capacity transfer; pp. 37ff in Kreff 2003) but also has led to a more autonomous lower-level government and a separation of local from central policy.

FDP, so existent, is hence a smaller or larger subsystem among other sector or thematic policy subsystems of DCP. In order to exist, this subsystem needs to be ‘filled’ with actors and their interrelations.⁹ Yet, it is interesting to see if in all cases the donors’ FDP subsystems really exist and are viable to make decisions and influence other parts of the system.

A subsystem is only viable, if it holds **institutionalised structures** (i.e. gateway actors). It must be integrated into the broader policy system through institutions or their units (gateway actors), acting as **gateways** to other subsystems or decision levels. It will involve policy-relevant **participation processes** that provide for formal or informal interactions between other actors and the gateway actors.

Also, **political factors or interests** from superior system parts as well as from the FDP subsystem itself, leading to decisions being made upon framing elements and resulting in FDP start, modification or termination, need to be identified, in order to prove the FDP subsystem’s actual existence or viability. **Processes** that are of only temporary nature (temporary or spontaneous networks) alone do not constitute a subsystem or an institutionalised network, though they can play important roles (i.e. catalysing or triggering effects), if they have an important gateway actor among their actors or gain excess to other subsystems through other gateway actors.

Similarly, van Ufford (1997, pp. 132–133) stresses the importance of analysing those who have **excess to particular policy subsystems or arenas**, necessary to attain financial resources, to find new organisations and to exert influence through the political definition of development goals and priorities at various levels (equaling **framing elements**, based on political factors or interests). Development organisations and bureaucracies tend to involve a long chain of organisational levels, which entails that at each level superior policies are partly redefined (c.p. pp. 136ff in *ibid.*) and partly restrict the decision-making at lower levels. Therefore, it will be important to **analyse what decisions are made through what decision-level-related networks (or subsystems)** and what **factors generate these decisions** and

⁹Therefore, the FDP subsystem is analysed by network analysis, as seen from the above chapters.

how the various networks and negotiation processes are interlinked with each other (c.p. pp. 133, 138 in *ibid.*).

To add to this, according to Long (1997, pp. 217ff), ‘**social gateways**’ are central, and their analysis constitutes a useful approach to research interventions in rural areas¹⁰ and a core area to any development sociological research (pp. 218, 222 in *ibid.*). Long (pp. 217–218 in *ibid.*) defined them as ‘critical points between various social systems, fields or levels of social order, that reveal (...) structural discontinuities, due to different normative values and social interests’ (own translation). The interacting parties can be made distinct by their power (p. 218 in *ibid.*) and different representative interests. He found it essential to research how the interaction of gateway actors is influenced by other surrounding actors and vice versa (*ibid.*), which reflects processes that are attached to certain gateways, analysed in this research. It is necessary to not restrict an analysis to the gateway actors only but to integrate the broader institutional setting (or framework) and ‘power fields’¹¹ (pp. 218, 246 in *ibid.*).

The importance of a gateway lies in its actor’s ability to **transmit, keep or change social interests, cultural interpretation, knowledge and power** at critical connection or confrontation points (pp. 222–223 in *ibid.*). Their analysis contributes to a better understanding of subsystems within larger ‘global’ systems and of the effects between ‘distant’ parts within such ‘global’ systems (c.p. pp. 233–235 in *ibid.*).

An important **difference between subsystems and networks** is therefore that a network can also exist without institutionalised structures and can describe temporary short-term processes, as well as premature yet evolving subsystems or the remaining structures, from the dying-off stage of a former subsystem.

The existence of (**institutionalised**) **gateways and processes** reveal whether a network is viable and durable enough to be actually called a policy subsystem and able to constitute such a subsystem. The existence of gateways, processes and policy factors also show whether or not in reality certain decision-making levels, of relevancy for the FDP subsystem, exist in the overall system.

Within a subsystem, decision-making is dominated by strong actors (c.p. Chap. 3). However, there exists a **hierarchy of subsystems**. Hence, it can be argued not the power of actors within the subsystem but the structures of the superior (sub)system set the framework for many decisions at lower levels. The structure here refers to both actors (nodes), being themselves a result of **historical interactions** (institutionalisation of historical vectors) within the ‘field’ (c.p. Bourdieu 1987, 1993,

¹⁰ According to Long (1997, p. 222), ‘In rural development such gateways appear especially when the local government or other external organizations intervene, in order to implement a certain development policy or to exert political-administrative control over rural populations and their resources’ (own translation).

¹¹ Such are equivalent to subsystems or ‘arenas of influence’ in this research.

1998, 2001; p. 183 in Bourdieu 1979; pp. 252ff in Bohn and Hahn 2000) and hence power processes, and present interactions (vectors), to a large extent dependent on these historically formed institutions.

So, not the power or influence of actors in subsystems/subnetworks alone is critical to understand overall decision-making but also the structure of their respective superior nets. Structure is thereby defined as the actors and their interrelations, especially as a manifestation of historical, institutionalised power processes. These **dominant structures** change only extremely inertially.¹² This is relevant, as (major) gateway actors constitute the dominant structure of a system and their influence is due to both present existence (manifestation of historical power processes) and present interaction (influence gained from today's power relations).

These **superior structures** (i.e. institutionalised gateway actors) either permit the exertion of subordinate networks actor influence or make it impossible.

Influence, hence, can only be exerted via gateways (between two or more parts of an overall system or network). A major gateway consists of at least one very influential gateway actor. If one of the gateway actors is more powerful, the other gateway actor's subsystem will be to a larger extent integrated, dependent and less confined. If both gateway actors are equally powerful, the subsystems will be less integrated, less dependent and more confined (bordered).

If an institutionalised participation process (arena of influence), linked to a gateway actor, exists in reality, then the analysed subnetwork (i.e. FDP) can be considered a subsystem; otherwise, the respective decision-making level belongs to the domain of the superior system part.

In Fig. 4.5, subsystems, gateways and gateway actors, embedded in the greater bilateral, bi-governmental foreign policy system and the frame set by superior subsystems, are shown (c.p. also Annex 5). The scheme shows **seven gateway-actor positions from the donor's subsystems and the bargaining networks with the recipient country**. Potential gateways with reference to third party countries and international organisations (i.e. donor coordination processes) and gateway-actor positions within recipient's subsystems are not included (for simplification). The recipient's subsystems and gateway-actor positions are, however, a simple theoretical mirroring of the donor's ones.

These gateways are located at various decision-making levels. It is illustrated how superior subsystems and bargaining networks set a more and more narrow **frame to subsystems and networks at lower levels**. These restrictions affect lower-level subsystems of any kind (donor's, recipient's and joint bargaining networks).

¹² That is, retention of the role of Austrian NGO/NPO in the Austrian development policy and their interrelations to respective authorities; the role of consultancies in Finnish development policy; the role of German agencies, though 2011 integrations into the Gesellschaft für Internationale Zusammenarbeit, GIZ; the role of the Swedish International Development Cooperation, though recent restructuring.

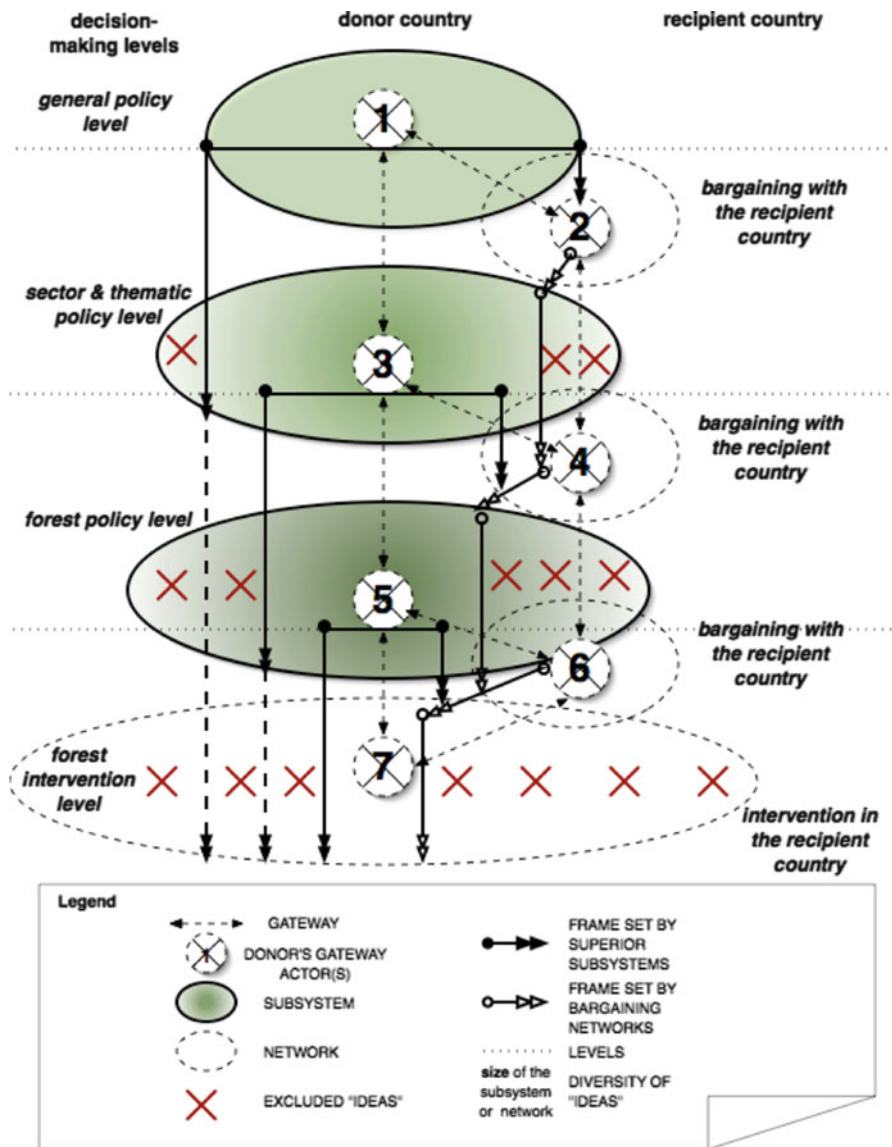


Fig. 4.5 Subsystems of the bilateral, bi-governmental foreign policy system, its gateways and gateway actors, and the frame set by the superior subsystems (Source: Aurenhammer 2011)

4.3 Empirical Description of Actors' Influence for Various Levels' Subsystems and Bargaining Networks

4.3.1 Influential Actors at the General Policy Level

At the **general policy level**, foreign and home affairs' actors decide upon **general framing elements**: They select partner countries and formulate general programmes, including overall thematic, country/regional and (sometimes) financial scope (i.e. OEZA 2005, 2006a, 2007; BMZ 2003; Formin 2007; MfFA 2003, see pp. 13–36 in Aurenhammer 2008; p. 74 in Austrian Government 2008), in subsystems of both the donor and the recipient country.

In a joint bargaining network, high-level bilateral negotiations take place, and general cooperation agreements are negotiated between governmental representatives. Usually, there exists already an older bilateral agreement, basically stating the general intention of the two countries to cooperate and the conditions of cooperation. However, today 'new donors' emerge, like Venezuela (i.e. in Nicaragua), Brazil (i.e. in Bhutan, E-Africa), South Africa, Libya (i.e. in Uganda), South Korea, China and India, which make more and more bilateral cooperation agreements with other countries, from their region or beyond (i.e. expert interviews, including from field research: actors nr. 1, 3, 10, 13, 22, 31, 35–37, 38; 97, 103, 104, 107, 115, 118, 120, 133, 155, 169, 176, 191, 192, 212, 213).

Table 4.1 provides us with an overview of the **influential actors, identified from the general policy subsystems of donors**, constituting major gateway actors (expert interviews: *ibid.*). It shows how these actors are integrated into the lower levels (*ibid.*) and to what extent they involve other actors (informal integration, participation processes) or what other actors hold minor gateway positions, determining own framing elements (i.e. an own budget, an independent partner country selection) (based on detailed analysis from below).

The **results** show (c.p. Table 4.1) the general policy subsystem can be considered as a **state-corporatist subsystem** (c.p. p. 155 in Howlett and Ramesh 2003). The major **gateway actors are independent** from other actors in their decision-making upon framing elements (low bottom-up influence; high top-down influence). They are also able to **exert** these **framing elements**, through gateways, at lower levels (moderate to high top-down influence) (i.e. expert interviews: actors nr. 1, 3, 10, 13, 22, 31, 35–37, 38) (support to Hypothesis 4b, c).

Only in Finland, however, a single actor (though various units) is providing direct integration down to the intervention level (i.e. expert interviews: actors nr. 35–37). In the case of other donors, at some point, dependencies on agencies and their local offices exist, holding lower-level gateway positions (indirect integration) (i.e. expert interviews: actors nr. 1, 3, 10, 13, 22, 31, 38).

The **bottom-up influence of forest-related actors is very low** (c.p. Table 4.1) as they can hardly (directly or indirectly) contribute to the definition of framing elements at the general policy level (i.e. expert interviews: actors nr. 2, 3, 6–9, 11, 14, 16, 19, 21, 23, 24, 26, 28–30, 32–34, 37, 39–45, 47, 49, 51, 52) (support to Hypothesis 4d, e).

Table 4.1 The general policy subsystem: actors, their integration into lower levels and their (in)dependence from other actors

Subsystems/ networks	Integration (direct/indirect) of major gateway-actors into the lower subsystems					(in)dependence from other actors: examples of informal integration, participation processes, existence of minor gateway-actors						
	Austria	Germany	Finland	Sweden	Austria	Germany	Finland	Sweden	Austria	Germany	Finland	Sweden
<i>General policy</i>	BMeiA, BKA	AA, BMZ	Formin	MIFA	(ADA; NGO: RFI)	(GTZ, KfW)						(Sida)
-"- bargaining Sector policy	→	→	→	→					recipient's planning ministries; donor's embassies			
-"- bargaining Forest policy	→	→	→	→								
-"- bargaining Intervention	→	→	→	→								

Source: Aurenhammer (2011); a.o. expert interviews, actors nr. 1, 3, 10, 13, 22, 31, 35–37, 38
BMeiA, *AA*, *Formin*, *Mifa* Ministries for Foreign Affairs; *BKA* Bundeskanzleramt (Federal Chancellor's Office); *BMZ* Federal Ministry for Economic Cooperation and Development; *ADA*, *GTZ*, *KfW*, *Sida* governmentally owned development agencies/companies; *NGO* non-governmental organization; *RFI* Rain-Forest-Initiative; *BMLFUW*, *BMELV*, *MMM* subject ministries of donors; *underlined* forest actors; () minor importance in the overall system; *arrow* indicates direct interconnection into lower subsystems; *dotted line* indicates indirect interconnection into lower subsystems; *italics* (minor) gateway-actor, holding a niche position in the overall system (i.e. small, independent budget)

Results show that the **donor countries' selection of recipient countries** (and vice versa) and the **general policy formulation** (what regions, recipient countries and issues in general) are subject to high-level decision-making processes, by the governments, ministers and director generals (i.e. expert interviews, including from field research: actors nr. 1, 3, 10, 13, 22, 31, 35–37, 38; 97, 103, 104, 107, 115, 118, 120, 133, 155, 169, 176, 191, 192, 212, 213).

Likewise, the following **influential actors** were identified as holding major gateway positions (c.p. position nr. 1, Fig. 4.5) at the donor policy subsystem of the general decision level. Generally, they include governments, prime ministers and Ministries for Foreign Affairs and Development. With limited influence, also governmental agencies are often integrated (i.e. expert interviews: actors nr. 1, 3, 10, 13, 22, 31, 35–37, 38).

In **Austria**, formal decision-making competencies lie with the Ministry for Foreign Affairs (BMeiA) and earlier at some time (1992–1995) with the Chancellor's Office (BKA) (i.e. expert interviews: actors nr. 1, 3, 10), and both were identified as major gateway actors. Also the Austrian Development Agency (ADA) has limited informal influence on the decisions of this level's subsystem (ibid.).

In **Finland**, the Ministry for Foreign Affairs (Formin) and its three ministers (for foreign affairs, foreign trade and development and Nordic cooperation) are gateway actors, making decisions at the donor subsystem, of the general policy level (i.e. expert interviews: actors nr. 35–37).

In **Germany**, the Federal Foreign Office (AA) and the Federal Ministry for Economic Cooperation and Development (BMZ) are the major gateway actors, making decisions at the subsystem of this level (i.e. expert interviews: actors nr. 13, 22, 31). To a less extent (informally), they also incorporate agencies (GTZ, KfW) (ibid.).

In **Sweden**, the Ministry for Foreign Affairs (MfFA) with three ministers (for foreign affairs, trade and international development cooperation) can be identified as major, formal gateway actors, also incorporating, to a lesser extent, the Swedish International Development Agency (Sida) (i.e. expert interviews: actors nr. 38, 46, 47).

Forest-related or relevant **participation processes** on the general policy level are rare, and in general, this decision level is to be seen as a relatively closed, governmental domain (i.e. expert interviews: actors nr. 1, 3, 10, 13, 22, 31, 35–37, 38, 46, 47). It represents a state-corporatist subsystem (c.p. p. 155 in Howlett and Ramesh 2003).

A noteworthy participation process was the Rainforest Initiative (RFI), led by the then Austrian Chancellor, in the context of the UNCED conference in Rio (1992). This provided a strong top-down impulse (see political factors, below) (support to Hypothesis 4b, c) but rather narrow window of opportunity for Austrian actors to address forest-related issues. Especially Austrian and international NGO/NPOs were able to exceed the decision-making at this level and to subsequently influence the setting of framing elements (thematic and financial priority), by the then Chancellor, supporting forest-related cooperation (expert interviews: actors nr. 3, 10, 11, 27, 30, 135). In what follows, the NGO/NPOs were also able to set the

recipient's priorities, to be based largely on their existing contacts (*ibid.*) (support to Hypothesis 4d, e). A generally noticeable peak and subsequent decrease in forest aid of the aforementioned donors, soon after the conference (from 1994/1996), let us assume similar (financial) effects will follow for other donors (c.p. pp. 7–11 in Aurenhammer 2008).

More recently, UNCCC/REDD-related processes provided momentum for another window of opportunity for all of the donor countries (a.o. expert interviews: actors nr. 11, 13, 15, 16, 21, 22, 23, 25, 26, 27, 29, 31, 36, 37, 38, 39, 41, 42, 43, 44, 45, 47, 49, 52, 53). For instance, the GTZ was involved in the examination of the climate change relevancy in all their technical assistance interventions and recipient countries (i.e. expert interview: actor nr. 22), which was to provide them with suggestions for adaptations for future programmes and possibly 'missed out' recipient countries, therefore also relevant for the forest sector (*ibid.*) (support to Hypothesis 4d, e).

In Sweden, a governmental change meant that the MfFA exerts more influence over Sida, among others, by defining 13 thematic policies (i.e. on Climate Change and Environment) (i.e. expert interviews: actors nr. 21, 38, 46, 47) (support to Hypothesis 4b, c).

Also, other **minor gateway actors** and their minor participation processes can be found. They often hold **niches** within the overall bilateral, bi-governmental foreign policy system (i.e. through independent decision-making on smaller budgets, relevant recipient and thematic priorities).

The environmental department of the Austrian Federal Ministry for Agriculture, Forestry, Environment and Water Management (BMLFUW, V/9), the forestry department of the Ministry of Agriculture and Forestry in Finland (MMM)¹³ as well as the German Ministry for Food, Agriculture and Consumer Protection are thematic ministries that do hold some **parallel, separate processes** and have the financial means and the possibility also to determine recipient countries that are relevant to them, including others rather than prioritised by the above non-thematic ministries and agencies. Hence, these actors are able to set minor, parallel framing elements (i.e. expert interviews: actors nr. 12, 13, 18, 22, 31, 34, 37) (**'niche-exception'**, leading to a partial rejection of Hypothesis 4b, c and 4d, e).

In Austria, the University of Life Sciences (BOKU) and NGO/NPOs are also examples of actors that hold niches within the overall system, constituting minor gateway actors and setting independently minor framing elements. While the former holds a niche in international, bilateral (bi-governmental) research cooperation, the latter holds a niche in international, bilateral NGO/NPO cooperation, being part of the bi-governmental cooperation, due to partial co-financing of both the donor's NGO/NPOs and the state. Nevertheless, the BOKU is dependent on financing, and as noticed, the NGO/NPOs depend on co-financing (i.e. expert interviews: actors nr. 10, 14, 15, 25, 27).

The University of Life Sciences (BOKU) has its own strategy on international cooperation (BOKU 2008), including the definition of their own priority regions

¹³ However, the MMM can also administer financial means provided by the Formin (expert interviews: actors nr. 34, 37).

and partner countries, though recognising an existing priority of countries of the ADA and the Federal Ministry for Science and Research (BMWF). Also the NGO/NPOs still hold some flexibility in the choice of countries they engage with, when it comes to co-financing agreements with the ADA (i.e. expert interviews: actors nr. 3, 15, 25, 27). The NGO/NPOs and the Klimabündnis (an association of communes in all provinces, companies, schools and kindergartens and the Coordinator of Indigenous Organizations of the Amazon Basin association) hold strong informal positions in the Austrian policy, the former still largely due to their historical importance (i.e. expert interviews: actors nr. 3, 10, 15, 25, 27, 30, 51, 135) ('niche-exception', leading to a partial rejection of Hypothesis 4b, c and 4d, e).

A number of **political factors and interests** play(ed) an important role in the decision-making processes on framing elements at this policy level, also affecting the forest policy level.

Initially, before the 1980s/1990s, decisions on partner countries and cooperation were rather unguided. There was simple, direct negotiation between respective governmental partners. Much was based on already existing contacts, experiences and party political or personal preferences of decision-makers (i.e. expert interviews: actors nr. 1–3, 10, 20, 30, 35–38, 46–47, 49, 135)

In Austria, the first selections of recipient countries were largely based on above factors (i.e. expert interviews: actor nr. 10). Later, the aim to establish permanent cooperation partners was a further factor for the selection of recipient countries (ibid.). For instance, when Austria (BKA, later Foreign Ministry BMaA) decided between 1992 and 1994 on a list of recipient countries, with the objective to concentrate on eight countries in the south, the selection was largely based on factors like historical context, post-civil-war countries (i.e. Mozambique, Uganda, Nicaragua), existence of an embassy (i.e. Ethiopia, on the suggestion of the BMaA to the BKA) (support to Hypothesis 4b), consideration of NGO/NPO capacities (i.e. Uganda, Nicaragua, Burkina Faso) (support to Hypothesis 4d, e) and other bilateral contacts and experiences and recipients' direct request (i.e. Bhutan) (support to Hypothesis 4f) (ibid.).

This shows that decisions considered what internationally was a 'common rule' (i.e. support to post-civil-war countries), which was in the interest of governments' international profiling. However, this shows also some framing elements are being set at least partly due to influence of (actors of) the international system (not considered in above hypothesis) on (actors of) the bilateral foreign policy system. Besides donor governments' own independent capacities (i.e. existing embassy; existing experiences and bilateral contacts), also the NGO/NPOs (i.e. their capacities) as well as the recipients' governments (i.e. their request) were integrated or considered, when deciding upon the framing element 'scope of recipient countries'.

In Finland, first selections date back to the early 1980s, among the first ones being East African countries (i.e. Tanzania,¹⁴ Kenya, also Ethiopia, later Zambia) but also Vietnam, Egypt and Sri Lanka and with early 1990s also Peru, Nicaragua, Nepal and Namibia (getting independent) (i.e. expert interviews: actors nr. 35–37).

¹⁴ In example, in Tanzania, the first forest program got started, after a visit of the Finnish President.

Similarly to Austria (under Chancellor Bruno Kreisky) (i.e. expert interviews: actor nr. 10) and Sweden (under Chancellor Olof Palme¹⁵) (i.e. expert interviews: actors nr. 38, 44–47), also in Finland (i.e. expert interviews: actors nr. 35–37), socialist governments supported the ‘African socialism’ (i.e. in Tanzania, Zambia, Zimbabwe) or Sandinistas (in Nicaragua).¹⁶ Uganda, having no Finnish embassy, again is hardly addressed in Finnish bilateral cooperation (expert interview: actor nr. 36) (support to Hypothesis 4b: independent decisions by the Chancellors; importance of integration: embassy).

There lies considerable importance in the attitudes and the priority setting of high-level decision-makers, with regard to certain issues, so, for instance, if a minister is in strong support of forestry and rural development issues (i.e. Finland; expert interviews: actors nr. 35–37) or points out the fundamental importance that development cooperation must play in facilitating economic cooperation (i.e. expert interviews: actors nr. 13, 35–38), or if a Chancellor calls for ‘clarification’ of secondary user rights on medical plants for pharmaceutical purposes in the context of development cooperation (i.e. expert interviews: actor nr. 22). In Germany, the forest sector is still important, but it is not considered important enough anymore to be ‘among the big five’ priorities of the minister’s (BMZ) development agenda (ETFAG 2006; i.e. expert interviews: actor nr. 22). Due to frequent changes in the political agenda (national and international) in 2006, a priority ranking of sectors was undertaken (ibid.). It was assumed that ‘forest policy and forest ecosystem management’ would become a ‘second-class topic’ (out of three categories) and stay among the maximum ten thematic areas. As such (second-category topic), it would still remain with the BMZ to strategically lead and plan the forest sector (ibid.) (support to Hypothesis 4b, c).

A certain ‘languishment’ of general policy decisions is related to ongoing interventions, experiences gained (from long cooperation), capacities constructed and institutional self-interests (i.e. of implementation actors) as well as budgetary earmarking for the next couple of years (i.e. expert interviews: actors nr. 1, 3, 10, 13, 22, 31, 35–37, 38, 46, 47) (support to Hypothesis 4d, e; and 4b: regarding budgetary earmarking).

International profiling in the context of international conferences (i.e. UNCED 1992) or with regard to voting on (or into) the UN Security Council and parliamentary interventions¹⁷ (i.e. RFI process in Austria; education and research priority to Swedish policy; i.e. expert interviews: actors nr. 3, 10, 11, 27, 30, 135; 47–49)

¹⁵ Still many places remind us of Olof Palme: that is, the Olof Palme Agroforestry Centre in Kitale, Kenya (Vi-SCC project).

¹⁶ Already 1880/1881 the Austrian Emperor Franz-Josef mediated an independence process and agreed on the independence of the Miskito coast (c.p. Die Presse 2007: ‘Die Helden von der Dschungel-Universität’ print version 27.03.2007).

¹⁷ Usually, the Council of Ministers and the parliament have to be informed on the general development cooperation policy of a donor country. Real interventions are therefore rather rare (c.p. p. 884ff in Höll 2006). Usually, there exists a relatively ‘closed’ parliamentary committee dealing with development policy (c.p. also Marjanovic’ 2009).

and the 'status of a theme' (i.e. illegal logging, biodiversity, deforestation and Voluntary Partnership Agreements of the EU are themes; the German parliament meets with strong interest; i.e. when in 2006 a 'Natural Forests Act' was debated) (ETFAG 2007) are further factors leading to the decisions made on framing elements (support to Hypothesis 4d, e).

There are also a number of political factors, triggering decisions on the general political level that lead to **interruption or ending (phasing out) of cooperation**. Among these are general political developments and armed conflicts in recipient countries (general qualitative results, telephone/expert interviews: 307 actors). Also, changes in the OECD regulations and categorisations of the eligible countries, for receiving official development aid (ODA), can affect donors to phase out such recipient countries, which are no longer recognised as least developed countries (LDCs), especially so for Sweden and Austria (i.e. expert interviews: actors nr. 1–4, 10, 15, 27, 58, 103, 105, 135), while Finland and Germany do focus to a less extent on LDCs (i.e. also address China, Brazil; c.p. pp. 65–66 in Aurenhammer 2008). A number of international agreements, not signed by all countries, do affect the selection or reduction of recipient countries (i.e. Paris Declaration 2005). For instance, Sweden did reduce their number of recipient countries in 2007 strongly, a policy yet to be implemented though (i.e. expert interviews: actors nr. 46, 47, 49) (support to Hypothesis 4b; also: international system's influence).

In the selection of recipient countries, the donor countries cannot decide totally independently. For instance, India terminated its cooperation with a number of smaller donor countries and is also a strong negotiator for larger donors (i.e. telephone interviews: actors nr. 46–48). Other recipients, for instance, Bhutan, choose very selectively their cooperation partners (i.e. expert interviews: actors nr. 10, 30, 103, 105, 135). Bhutan has also not signed the Paris Declaration (2005) and reserves its right to coordinate donor's interests alone (i.e. expert interviews: actor nr. 103) (c.p. Chap. 6) (support to Hypothesis 4f).

4.3.2 *Influential Actors at the Sector Policy Level*

At the **sector policy level**, decisions on framing elements are made, constituting a **further prioritisation of sectors** (thematic scope) and **partner countries** (recipient scope), for development cooperation policy (DCP) and foreign trade policy (FTP). As a result, for instance, **recipient country-specific policies** (on the overall cooperation with a recipient country or with respect to a certain sector) are formulated. Again, subsystems of the donor and the recipient country as well as joint bargaining networks (i.e. bilateral negotiations) can be made distinct (i.e. expert interviews, including from field research: actors nr. 1, 3, 10, 13, 22, 31, 35–37, 38; 97, 103, 104, 107, 115, 118, 120, 133, 155, 169, 176, 191, 192, 212, 213).

With regard to the framing element of **financial resources**, it is important to note that today the sector desks or advisors do not hold the financial means anymore

(budget lines), as it was the case earlier (i.e. Finland, Austria), but the financial means are now with the country or regional desks of respective agencies or ministries (i.e. expert interviews: actors nr. 10, 35–37). Exceptions to this are the MMM in Finland (expert interviews: actor nr. 34), the BMLFUW (V/9) (expert interviews: actor nr. 12), the BMZ sector unit (expert interviews: actors nr. 13, 22, 31), the BMELV (i.e. expert interviews: actor nr. 22) and a certain ADA budget line that can be used for various purposes (i.e. expert interviews: actor nr. 3), representing limited or separate budgets outside the country or regional desks' responsibility.

Sector-specific policies (programmes) can be called 'sector policy', 'position paper', 'guideline' or 'experience report', while **country-specific policies** are, for instance, called 'country strategy' or 'sector strategy' for a specific country (see pp. 13–36 in Aurenhammer 2008).

Table 4.2 provides us with an overview of the **influential actors, identified from the sector policy subsystems of donors**, constituting major gateway actors (expert interviews: actors nr. 1, 3, 10, 13, 22, 31, 35–37, 38, 46–47; 97, 103, 104, 107, 115, 118, 120, 133, 155, 169, 176, 191, 192, 212, 213). It shows how these actors are integrated into the lower levels (ibid.) and to what extent they involve other actors (informal integration, participation processes) or what other actors hold minor gateway positions, determining independent framing elements (i.e. an own independent sector budget, an independent sector-related recipient selection) (based on detailed analysis from below).

The results of Table 4.2 show that the sector policy subsystem can be considered as a state-corporatist or state-pluralist subsystem (c.p. p. 155 in Howlett and Ramesh 2003). The gateway actors are rather independent from nongovernmental actors, but in most cases (Austria, Sweden, Germany), they do depend on other governmental actors (i.e. agencies) in their decision-making upon framing elements (i.e. expert interviews: actors nr. 1, 3, 10, 13, 22, 31, 35–37, 38, 46–47). These agencies provide excess to lower levels and are therefore informally (but often also formally) integrated into the decision-making process (high bottom-up influence) (i.e. expert interviews: actors nr. 1, 3, 10, 13, 22, 31, 38, 46–47; 105, 121, 127, 132, 149, 177, 178, 188, 189, 210).

Hence, the major gateway actors at the sector policy level are often able to exert framing elements only through agencies, providing for gateways to lower levels (moderate top-down influence) (ibid.). However, in Finland's case, a single actor provides for the direct integration down to the intervention level (i.e. expert interviews: actors nr. 35–37; 118, 134, 170, 209). Thereby, the Formin's country desks and embassies hold key positions (ibid.) (support to Hypothesis 4b, c).

Table 4.2 shows further that the **bottom-up influence of forest-related actors is mostly low**, as they hardly can contribute to the definition of framing elements at the sector policy level (i.e. expert interviews: actors nr. 2, 3, 6–9, 11, 14, 16, 19, 21, 23, 24, 26, 28–30, 32–34, 37, 39–45, 47, 49, 51, 52). However, in Finland, forest-related consultancies are engaged in identification missions, and forest-related actors are provided also indirect excess to the sector policy level, through the forest advisors of Formin (i.e. expert interviews: actors nr. 19, 29, 33, 35–37, 39). Also in Germany, indirect excess through forest-related units, of especially the BMZ and

Table 4.2 The sector policy subsystem: actors, their integration into lower levels and their (in)dependence from other actors

Subsystems/ networks	Integration (direct/indirect) of major gateway-actors into the lower subsystems					(in)dependence from other actors: examples of informal integration, participation processes, existence of major gateway-actors				
	Austria	Germany	Finland	Sweden	Austria	Germany	Finland	Sweden		
<i>Sector policy</i>	BmeiA < 2004	BMZ	Formin, CD (& SA)	(MfFA)	ADA (from 2004)	GTZ, KfW & SA; GTZ: i.e. climate change & REDD; (BMELV)	(consultancies: i.e. identification)	Sida (i.e. Climate Change and Environment Policy)		
-"- bargaining	≥ 2004				i.e. environment guideline)					
Forest policy					recipient's planning & subject ministries; donor's embassies' / agencies' local offices' staff & sector advisors					
-"- bargaining					(BMLFUW V/9)			(Forest Initiative)		
Intervention										

Source: Aurenhammer (2011); a.o. expert interviews, actors nr. 1, 3, 10, 13, 22, 31, 35–37, 38
 BMeiA, Formin, MfFA Ministries for Foreign Affairs; BMZ Federal Ministry for Economic Cooperation and Development; ADA, GTZ, KfW, Sida governmentally owned development agencies/companies; BMLFUW, BMELV, MMM subject ministries of donors; CD country desk; SA sector advisor; *underlined* forest actors; REDD Reduction of Emissions from Deforestation and Forest Degradation; / minor importance in the overall system; *arrow* indicates direct interconnection into lower subsystems; *dotted line* indicates indirect interconnection into lower subsystems; *italics* (minor) gateway-actor; holding a niche position in the overall system (i.e. small, independent budget)

the GTZ, is possible (i.e. expert interviews: actors nr. 13, 22). This shows a moderate bottom-up influence (support to Hypothesis 4d, e).

Hence, the results support Hypothesis 4b, as the top-down influence of the sector policy subsystems' major gateway actors is only moderate, because they are usually only indirectly integrated into lower levels and because therefore they need to integrate agencies also directly into decision-making. So, **agencies can often prevent decisions on such framing elements that they are not able or willing to implement** (moderate bottom-up influence) (support to Hypothesis 4c and e).

An exception is Finland, where the top-down influence is high, due to high (direct) integration into lower levels and due to high independency in governmental decision-making, as there exists no agency (support as well Hypothesis 4b, c). Empirical data, however, does not provide substantial answers, to what extent agencies can do so, as the data does not provide us with a comprehensive overview of empirical examples for the entire development policy and its sectors.

As the bottom-up influence of forest-related actors to the sector policy subsystem is low to moderate (the latter in Finland, Germany), forest-related actors do not gain major influence on the decision-making at this level (support to Hypothesis 4d, e).

The following **influential actors, holding major gateway positions** (c.p. position nr. 3, Fig. 4.5), were identified from the donors' sector policy subsystems: respective donors' foreign or development ministries (i.e. expert interviews: actors nr. 1, 3, 10, 13, 22, 31, 35–37, 38, 46–47). Often (except in Finland) agencies hold influential, informal positions (*ibid.*). With regard to the specification of country programme¹⁸ formulation, today only the country¹⁹ and the regional desks or units are responsible, while sector advisors or units hold mostly only advisory competences (see joint bargaining network, below) (*ibid.*).

In **Finland**, such major gateway positions are held by Formin's country desks. When it comes to the formulation of sector-specific programmes, its various sector advisors and embassies' sector advisors function as gateway actors (i.e. expert interviews: actors nr. 35–37, 118, 134, 170, 209). There exist long-term programmes or strategic concepts for the forest sector that identify targeted interventions and their financial needs (i.e. Formin 1987, 1990, 2008).

In **Germany**, formally, major gateway positions are held by the BMZ (i.e. expert interviews: actors nr. 13, 22, 31; 121, 132, 149, 178). However, the GTZ (from 2011 GIZ) and the KfW are strongly involved in the formulation process since they act in an advisory function to the BMZ (*ibid.*) and even publish their own programmes and position papers (i.e. BMZ 2002a, b, 2004, n.d.).

In **Sweden**, until (2008), Sida formulated their own position papers, where as now 'programmes with political character' need to be accepted by the (formal, major gateway actor) MfFA. With recent changes to the development policy of

¹⁸ A country programme is a programme of a donor, covering all ongoing and envisaged development cooperation with a certain recipient (or partner) country.

¹⁹ A country desk is an official unit of the donor agency or ministry, responsible for all development cooperation with a certain recipient (or partner) country.

Sweden (conservative government) and to the organisational structure of Sida, the ministry has restricted the competences of Sida (i.e. expert interviews: actors nr. 38, 46–47, 177, 188, 210) (support to Hypothesis 4b, c).

The new government decided to have 13 new thematic policies, replacing the to-date policies, though Sida is still incorporated in the preparation and formulation (i.e. expert interviews: actors nr. 38, 46, 47). Due to pressure, resulting from the need to shortly replace all thematic policies, during the critical phase of policy change, hardly any possibilities for participation by other (Swedish) actors were in place (i.e. expert interviews: actors nr. 46, 47).

Until recently, Sida used to invite occasionally Swedish actors (i.e. NGO/NPO, research, consultancies, enterprises, other governmental actors) to smaller or larger events, where they could position themselves with respect to policies. In some occasions, the formulation of certain programme documents was outsourced to a consultancy (ibid.). Sida's approach was described as relatively 'participative', by the experts interviewed (i.e. expert interviews: actors nr. 40, 42, 43, 49) (support to Hypothesis 4d, e).

In **Austria**, up until 2003, the BMaA (today BMeiA) held, together with the embassies and coordination offices' experts, the gateway position in the sector policy subsystems, responsible for formulating the specific programmes or guidelines (i.e. expert interviews: actors nr. 10, 105, 127, 135, 189).

From 2004, the BMeiA needs to incorporate (formally and informally) the ADA into parts of the decision-making process at the sector policy level. Thereby, the ADA attains considerable influence from its advisory or policy preparatory functions to the BMaA (i.e. expert interviews: actors nr. 1–3, 10, 105, 127, 135, 189). Since ADA's establishment, the practical allocation of competences and tasks is still at stake (c.p. also SPÖ 2005; see esp. p. 16 in OECD 2009; pp. 4–31 in Rechnungshof 2009).

Hence, the ADA is incorporated in the formulation of specific programmes (ibid.). The incorporation of coordination offices' capacities would be central for the policy formulation by the BMeiA; however, a lack of information exchange has been criticised (i.e. expert interviews: actor nr. 10). The separation of operative and strategic 'business' between the ADA and the BMeiA is only one side of the coin, the possibility and capacity for the formulation of (strategic) programmes the other. Without detailed information on the success or situation of operative interventions, the formulation of reasonable programmes and the exertion of control by the BMeiA remain difficult (ibid.) (support to Hypothesis 4b, c).

In the Austrian and Swedish cases, the ADA (from 2004) and Sida (at least until recently) can be considered as the '**silent' major gateway actors** at this policy level (high integration into lower levels and high informal/formal decision-making competency at the sector policy level).

Forest-related or relevant **participation processes** on the sector policy level are for instance a multi-governmental (multi-stakeholder) formulation process of the 'strategic guideline for environment and development of the **Austrian** development policy' (BMeiA, BMLFUW and ADA 2009), the first guideline of its kind involving a broader participatory consultation and being taken note of by the Council of

Ministers (08.09.2009); therefore, the whole government must adhere to the guideline (i.e. expert interviews: actors nr. 3, 10, 12). Also, the ADA may call for consultants for support in programme formulation (i.e. water sector programmes) (i.e. expert interviews: actors nr. 3, 14, 189, 206, 269) (support to Hypothesis 4d, e; partial support to 4c: attempt to integrate niche actors).

Forestry, as with other environmental issues, belongs to ‘the environment’, which is at present, however, only treated as a cross-cutting issue by the ADA and the BMeiA (i.e. expert interviews: actors nr. 1–3, 10), though ‘preserving the environment and protecting natural resources that form the basis for sustainable development’ is one of three objectives of the Austrian development policy, according to the Federal Act on Development Cooperation (2002, amended 2003) (support to Hypothesis 4b, c; 4d, e: outside its niche, the BMLFUW is weak, as no coherence to forest policy in DCP exists).

A noteworthy aspect in the implementation matrix of the above-mentioned guideline (p. 38 in BMeiA, BMLFUW and ADA 2009) is that **the BMeiA and ADA should actively position themselves for sustainable forest management, in the donor coordination meetings in recipient countries.** If that would prove to be true, in the future, that would also show that forest policy and the BMLFUW as a niche actor (minor gateway) can gain influence also outside their niche (support to Hypothesis 4d, e; partial support to Hypothesis 4c).

It remains to be seen and to be studied from documents how such positioning can work, given the lack of expertise on forest issues of the actors and the local offices’ staff (i.e. expert interviews: actors nr. 1–3, 10; with some exceptions: actors nr. 105, 127, 206), given the fact that forest sector issues are hardly debated in the overall donor coordination meetings (general qualitative result from expert/telephone interviews: 307 actors) and that local staff usually do not consult sector coordination meetings (i.e. forest, environment) that do not coincide with the given sector priorities (i.e. expert interviews: actors nr. 105, 127, 189, 121).

Some other earlier Austrian (sector) policies are relevant for forestry: the ‘rural development sector programme’ (OEZA 2003), the ‘energy for sustainable development guideline’ (OEZA 2006b), the ‘Bhutan sub-programme on energy’ (2005–2007) (OEZA n.d., a) and, to a less extent, the reports on Austrian development cooperation’s thematic priorities (OEZA n.d., b) and on regions and priority countries (OEZA n.d., c) (see pp. 12ff in Aurenhammer 2008).

In **Sweden**, among others, the ‘Policy for Environmental and Climate Issues in Swedish Development Cooperation’ (2010–2014)²⁰ (Swedish Government 2010) is relevant also for the forest sector and has integrated at least some of the views from the Sida-initiated Forest Initiative (i.e. expert interviews: actors nr. 21, 47) (support to Hypothesis 4d, e).

²⁰ It also builds the basis for the Sida initiated and financed Environment for Development (EfD) Initiative. The Environmental Economics Unit (EEU) at the *University of Gothenburg* is the Swedish node in the EfD network. The Environmental Economics Unit is the initiator of the EfD. The EEU manages the initiative and supports the EfD centres through the EfD Secretariat (another example for a *process* at this level).

In **Germany**, the BMELV has to be mentioned as an independent minor gateway actor, initiating its own participation processes (i.e. expert interviews: actor nr. 22).

At the sector policy level, **political factors and interests**, leading to decisions made on framing elements, which influence the forest sector, are (among others):

- The interdependence between forest issues and policies and interventions in the water and electricity sector: that is, Finnish and Norwegian cooperation in Tanzania (expert interviews: actors nr. 35–37, 173, 174, 184), Austrian cooperation in Bhutan (expert interviews: actors nr. 3, 10, 105) and to a less extent Austrian cooperation in Uganda (i.e. expert interviews: actors nr. 3, 10, 14, 189, 206, 269).
- The international reputation affected by 'negative external effects' of the forest sector policy (i.e. Finnish cooperation in Tanzania, in the 1980s), with regard to biodiversity or environment, can lead to a reformulation of policy (i.e. expert interviews: actors nr. 29, 33, 35–37, 170–175, 179–186) (recall: international policy level relevancy).
- The existing contacts, programmes and co-financing opportunities by NGO/NPOs can be relevant in the political prioritisation of sectors (i.e. Austria) (i.e. expert interviews: actors nr. 10, 30, 135) and also apply for the experiences and capacities of donor's consultancies or agencies (i.e. Finland, also Germany) (general qualitative result from telephone/expert interviews: 307 actors). The interest in providing secondary user rights for pharmaceutical plants can trigger prioritisation of biodiversity-related sectors (i.e. Germany) (i.e. expert interviews: actors nr. 22) (support to Hypothesis 4d, e).

4.3.3 *Influential Actors at the Forest Policy Level*

At the **forest policy level**, donors' and recipients' subsystems as well as joint bargaining networks can be distinct. In these subsystems, decisions on framing elements are made, for instance, by **further specifying forest sector (-related) policies** (within sector priorities: thematic, recipient and financial scope). There are also **forest-related interventions identified**, and decisions lead to the implementation, evaluation, modification and termination of interventions (intervention networks) (i.e. expert interviews, including from field research: actors nr. 2–4, 10, 13, 22, 31, 35–37, 46–48; 105, 118, 127, 132, 134, 149, 170; 97–100, 107–109, 113–115, 126, 128, 130, 146, 154, 159, 160, 171, 172, 193, 194, 214–216, 218).

Table 4.3 provides us with an overview of the **influential actors, identified from the forest (related) policy subsystems of donors**, constituting major gateway actors (ibid.). It shows how these actors are integrated into the lower levels (ibid.) and to what extent they involve other actors (informal integration, participation processes) or what other actors hold minor gateway positions, determining own framing elements (i.e. an own forest-related budget, an independent forest-related recipient selection) (based on detailed analysis from below).

The results of Table 4.3 show that the sector policy subsystem can be considered as a **state-corporatist or state-pluralist subsystem** (c.p. p. 155 in Howlett and Ramesh 2003). The formal and/or informal **gateway actors**, at this subsystem, **are mostly governmental actors (agencies)**, obtaining forest expertise (forest-related advisors or units, including local staff), necessary for the forest policymaking process and for the exertion of subsequent framing elements at lower levels (high top-down influence) (i.e. expert interviews: actors nr. 13, 22, 31, 35–37, 47; 105, 118, 132, 134, 149, 170). The **gateway actors, so engage in forest-related policy, do integrate nongovernmental actors** (especially in Finland, Germany, also in Sweden: Forest Initiative; Austria: especially during the RFI), and they are partly dependent on for implementation (i.e. expert interviews: actors nr. 3, 10, 22, 37, 47).

In the **case of Austria** (before 2004), it was not until the founding of the RFI that the BMaA provided an environmental advisor (i.e. expert interviews: actors nr. 10, 12), who then functioned as a gateway actor to the forest-related policy subsystem. Earlier projects were also due to personal interactions between forest experts and the BMaA (i.e. expert interviews: actors nr. 10, 14, 17, 30, 135). After 2004, the ADA and its coordination offices administer(ed) some remaining forest-related interventions (projects) and generally oversee the NGO/NPO co-financing (including forest-related interventions) (i.e. expert interviews: actors nr. 2–3, 105, 127). However, the ADA does not (actively) engage in the forest policy subsystem (i.e. expert interviews: actors nr. 1–3, 10, 105, 127, 189). In this respect, today, the ADA and BMeiA do not consider forest issues as priority (sector/theme) (ibid.) and do (subsequently) hardly enable the integration of forest actors' ideas and interests (ibid.). A noteworthy excess of the Austrian forest-related actors to the upper level subsystems was, hence, only temporarily possible.

Hence, the results support Hypothesis 4b, as the influence of the forest policy subsystems' major gateway actors (where they do exist at this level) is strong, because they are directly integrated into lower levels and because they can decide rather independently on forest policy specifications, though they (voluntarily, informally) integrate, that is, nongovernmental implementation actors also directly into decision-making (support to Hypothesis 4b, and as follows 4c). That provides the implementation actors with the opportunity to transfer their interests to upper levels (enabling for indirect bottom-up influence) (support to Hypothesis 4d) and to support such decisions on framing elements they are able to provide services for. The moderate interdependency between policy and implementation actors leads to a moderate support to Hypothesis 4e and a partial rejection of Hypothesis 4c, although it could also be argued that the integration of implementation actors' ideas, know-how and interests may strengthen the role of the governmental forest advisor in negotiations on upper levels (though empirical data on this lacks).

The following **influential actors, holding major gateway positions** (c.p. position nr. 5, Fig. 4.5), were **identified from the donors' sector policy subsystems**: donors' governmental agencies (in Finland, the Foreign Ministry) including their forest-related advisors as well as the coordination offices and embassies and their forest-related advisors or teams (i.e. expert interviews: actors nr. 2–4, 10, 13, 22, 31, 35–37, 46–48; 105, 118, 127, 132, 134, 149, 170; 97–100, 107–109, 113–115, 126, 128, 130, 146, 154, 159, 160, 171, 172, 193, 194, 214–216, 218).

There exist in the **Finnish and also German** governmental structures many gateway actors at the forest policy level, as there exist many forest advisors or units at ministries, agencies, embassies or branch offices (i.e. expert interviews: actors nr. 22, 35–37). In the more recent **Swedish** subsystem, such forest-related positions are less, compared to earlier years (i.e. forest policy advisor at Sida, forest-related teams)²¹ (i.e. expert interviews: actors nr. 47, 49).

Again, in the more recent **Austrian** subsystem, there is literally no such a gateway actor existent (at least no governmental one), and only limited advisors (i.e. in coordination offices) and few related units could be able to capture such positions (i.e. ADA's environment and natural resources unit; ADA's rural development unit) (i.e. expert interviews: actors nr. 2, 3, 105, 127, 189). In earlier days, the 'Austrian Development Cooperation' (a society named ADC Austria and later ADC GmbH., a limited company) constituted a relevant gateway actor for many consultants, research and NGO/NPO actors, as it was managing the operative activities for the BMaA, before and during the RFI (i.e. expert interviews: 5, 10, 30, 135).

As mentioned above, in **Finland**, there exist long-term programmes or strategic concepts for the forest sector that identify targeted interventions and financial needs (Formin 1987, 1990, 2008). In **Germany**, the 'Sector concept Forest and Sustainable Development' (BMZ 2002a) and the 'Progress Report on the German bilateral development cooperation in the forest sector' (i.e. BMZ 2004) are relevant policy documents (see also BMZ 2002b, n.d.; pp. 12ff Aurenhammer 2008).

While still in 1996, forestry was seen as one of the 'demonstration sectors' in Austria, with official publications stating '**The priority of forestry is self-explanatory. If not in forestry, where else could Austria offer know-how and experience?**' (see p. 53 in Pilz 1996, own translation), and there existed the RFI programme and its continuation of efforts; later the forest sector lost importance and is now possibly retaining some momentum, with the next window of opportunity, the climate change agenda, and forestry issues being, at least on paper, taken up into recent environmental and development policy as well as the overall government programme (c.p. BMeiA, BMLFUW and ADA 2009; p. 74 in Austrian Government 2008).

In **Sweden**, there exists no forest sector strategy as such. Earlier, relevant documents were the 'Position Paper: Sustainable Forestry – A summary of Sida's Experiences and Priorities' (Sida 1999), while the more recent 'Policy and Action Plan for Environmentally Sustainable Development: Sida's Environmental Management System' (Sida 2004) does contain only minor forestry context. According to the Swedish country report (ETFAG 2006), the forestry sector was integrated into rural development concepts and integrated natural resource management, where forestry gets 'easily lost' (i.e. expert interviews: actor nr. 49).

²¹ Recently, that is, forestry and natural resource tenure advisor/team for agriculture forestry and food security and forestry advisor/policy department for economic opportunities.

As mentioned above, with a change in government (from socialists to a more conservative,²² already in their second period), there were set 13 new thematic policies. Yet there is no forest policy in place but some policies addressing forestry sector issues (i.e. Swedish Government 2010). However, also Sida has formulated internal plans for forest interventions and budgets (internal documents: actor nr. 47).

A number of **participation processes, attached to the forest sector policy decision level**, are highlighted in the following.

In **Austria**, the forest aid was relatively low until 1992. In 1991 and 1992, it reached approximately 6.7 million Schillings (12,75 Schillings equalling 1 US\$ in 1997), or 0.1% of the total ODA (0.15% of the bilateral ODA) (BKA n.d.: cit. in: Schreckenber *1998*). Suddenly, this amount was boosted tenfold, when the Austrian Government announced the establishment of a 3-year special programme (**Rainforest Initiative 1993–1995, RFI**), endowed with 200 million Schillings (US\$ 18 million), for the protection of rainforests in developing countries (Pilz *1996*, cit. in: *ibid.*). This was partly also due to public concern in the state of tropical forests, which was also taken up in 1990 by the parliament, considering to pass an act to ban the import of tropical timber from non-sustainable management (Schreckenber *1998*, in Shepherd et al. *1998*).

The handling of such an increased budget in such a short period of time led, however, to problems in the implementation (i.e. expert interviews: actor nr. 3). When the Rainforest Initiative was announced by the Chancellor in 1992, Austria had relatively little experience in the field of tropical forestry projects, and it was not immediately clear how this additional sum of money would be spent (Schreckenber *1998*, in Shepherd et al. *1998*) (support to Hypothesis 4b, c; 4d, e).

In informal processes, criteria for the project selection and financing from the RFI were developed (*ibid.*). ‘On the initiative of the DDC environment adviser, an intensive round of informal discussion was launched involving everybody in Austria interested in tropical forests. This process resulted in the definition of a number of positive and negative criteria for selecting suitable projects to be funded within the Rain Forest Initiative’²³ (*ibid.*; see also pp. 22ff in Aurenhammer *2008*) (support to Hypothesis 4d, e).

Up until 2003, the RFI process and the processes led by the ADC as well as continuing co-financed NGO engagement favoured the involvement of scientific institutions (i.e. BOKU), NGO/NPOs and consultants in the policy and programme formulation. Later, such linkages to gateway actors (i.e. BMaA, ADC) broke down, and the **‘forest sector policy field’ figuratively collapsed** into what remains till recently a largely independent (often co-financed) ‘activity field’, within the policy of mainly a few NGO/NPOs (i.e. Horizont 3000 and the Klimabündnis Austria, CARE Austria and WWF Austria) (i.e. expert interviews: actors nr. 5, 10, 11, 15, 27, 51, 135) (support to Hypothesis 4d, e).

²² Since 2006, the government consists of the Moderate Party, Central Party, Liberal Peoples’ Party and Christian Democrats’ Party. Before, the Social Democrats were 12 years in power.

²³ DDC=Department for Development Cooperation, BmaA: Mr. Weingärtner, environmental advisor.

From 2006, the forest department of the BMLFUW (IV/1) led to a **multi-stakeholder, consultative process on strengthening the forest-related know-how transfer** (as an initiative based in the Austrian Forest Programme and Dialogue), but this process remains largely separated from (superior) major gateway actors (ADA, BMeiA) (i.e. expert interviews: actor nr. 11; own observations) (support to Hypothesis 4b and c, as the attempt of forest policy actors – outside their ‘secure niche’ – to directly influence a superior actor’s policy formulation was successfully isolated, and to 4d and e, since also forest actors’ indirect bottom-up influence is non-existent, because ADA/BMeiA do not provide them with a major gateway actor for this policy field, for the time being), though in 2008 and 2009, the subject found some recognition in policy documents (c.p. BMeiA, BMLFUW and ADA 2009; Austrian Government 2008). With the ongoing climate change debate, forest policy actors are seeing new possibilities to gain momentum for the forest sector policy field, at least within related sectors (i.e. actors nr. 6, 7, 15, 16, 25, 27, 41, 52, 53). WWF Austria and the Austrian State Forests Consulting public company (ÖBF Consulting AG) addressed a position paper to the BMeiA on this matter (i.e. expert interviews: actor nr. 52). An association of interested parties (ANRICA, Austrian Natural Resources Management and International Cooperation Agency) was founded recently to promote international forest cooperation matters (expert interviews: actors nr. 6, 41). This may lead to another (temporary) extension of the forest sector policy field.

In Sweden, the Sida-funded ‘**Forest Initiative**’ is a relevant process, trying to retain the attention of the Swedish development policy addressed to forestry in earlier years, facing a **shrinking forest policy sector field** in the bilateral development cooperation of the last decades (i.e. expert interviews: actors nr. 21, 47, 49). From mid-2009, also the Swedish Forest Agency joined the initiative that is focusing now on five core areas (expert interviews: actors nr. 21, 47):

- The nexus between climate – forests – poverty reduction and bioenergy, by financing-related scientific networks (i.e. the Forest, Climate and Livelihood Research Network, FOCALI)
- Private sector development and poverty reduction (i.e. certification and CSR issues), cooperating with FSC and WWF Sweden
- Institutional infrastructure in the forest sector (good governance), that is, activating Swedish institutions (like SLU, the Swedish Forest Agency), to provide support in areas of need identified by the FAO (i.e. National Forest Programmes, natural resources monitoring)
- Building a functional unit in Sweden, to implement forest-related outlook studies (in the context of poverty reduction) – aiming at a multi-sectoral study in cooperation with various research institutions
- Resource-based development: training at all levels and Sida financing the forest initiative, to underline forests being yet important and to raise its recognition in various strategies and also to actively contribute to the climate debate

While the Swedish Forest Society is directly financed by Sida as the coordinator of the Forest Initiative, the Swedish Forest Agency is now financed by both, from the general partnership agreement it has with Sida, settling the general coordination between Sida and the Forest Agency in international forest-related concerns as well as recently also for their participation in the Forest Initiative (*ibid.*) (support to Hypothesis 4d, e).

In parallel, Sida finances (through the scientific advisory board) three further networks on Agriculture for Development (AGRI), agricultural research and policy (SIANI) as well as the European Tropical Forest Research Network (ETFRN), the latter contribution being phased out (*ibid.*) (support to Hypothesis 4d, e).

In **Finland**, relevant process examples, at this level, are the **multi-stakeholder consultation process for the formulation of the new forest sector policy** initiated by the forest sector advisors of the ministry (Formin) in 2004, involving, among others, consultancies, the forest agency and scientific institutions in several public discussion meetings (i.e. expert interviews: actors nr. 19, 29, 37, 39). Further, **consultancies** are used by Formin in the process of identification of forest sector policy interventions (i.e. expert interviews: actor nr. 37).

Similarly, in **Germany**, regular **consultations with consultancies** are practised by governmental agencies, especially the GTZ, which outsource the implementation of forest interventions frequently to consultancies (i.e. expert interviews: actor nr. 22) (support to Hypothesis 4d, e). Also the independent activities of the BMELV, who also finance the GTZ (*ibid.*), have to be mentioned.

There are plenty of **political factors and interests**, triggering decisions on framing elements, subsequently leading to a start, modification or termination of forest policy, derived from the forest policy level (so there are relevant gateway actors or structures in place, to address forestry). An insight is given also in Chap. 5, with a more detailed description of some interventions.

One noteworthy factor from the donor's forest policy subsystem is, for instance, the conditioning of the integration of specific parts into a programme²⁴ (i.e. community forestry into a forest inventory project for Mozambique; improved environmental standards for an older part of a mill, as a condition for financial support to a new part in the Phoenix pulp mill in Thailand; earmarking financial support to the import of donor's technology, machinery or equipment – in many countries; demanding a change in NGO/NPO policy for continued co-funding), by the respective donor (general, qualitative results from expert/telephone interviews: 307 actors). There are, however, many factors to be considered and looked into from the recipients' subsystems and the joint forest policy bargaining network, discussed below (see also Chaps. 3 and 6).

²⁴ This is apparently not only limited to the forest sector, but here the forest sector is considered. There are other highly competitive cooperation sectors, with a strong relation to economic interests, like, for instance, the energy sector.

4.3.4 *Influential Actors at Joint Bargaining and Intervention Level Networks*

There are **three joint bargaining and intervention level networks** to be distinguished. They refer to bilateral negotiation processes and networks, at the general policy level, sector policy level and forest policy level, and to intervention networks. These networks host several **gateway actors (often brokers)** (positions nr. 2, 4, 6 and 7, Fig. 4.5).

The following **influential actors**, holding major gateway positions (nr. 2, Fig. 4.5), were identified **from the joint general policy bargaining network**: Usually, these are the representatives of donors' Foreign Affairs or Development Ministries (country or regional desks, or higher), their embassies' staff and, to a less extent, staff in coordination offices (ADA) or embassy staff on the payroll of Sida,²⁵ as well as representatives of recipients' planning ministries (i.e. Ministry for Planning, Economic Development, Foreign Affairs, Finance, Gross National Happiness Commission). Also, other actors can be included in delegations. Subject ministries' representatives are rarely concerned at this level (in contrary to the past). At this level, general bilateral agreements are made (a.o. expert interviews: actors nr. 1, 3, 10, 13, 22, 31, 35–37, 38; 97, 103, 104, 107, 115, 118, 120, 133, 155, 169, 176, 191, 192, 212, 213).

The following **influential actors**, holding major gateway positions (nr. 4 and 6, Fig. 4.5), were identified **from the sector and forest policy bargaining networks**: the representatives of donors' agencies and Foreign Affairs or Development Ministries, with special consideration for the country desks and heads at embassies/coordination offices (at the sector policy level) and their coordination or branch offices' sector experts or similar staff at embassies (at both levels). With regard to recipient countries, such actors include the above planning ministries (at the sector policy level) and the subject ministries (in the case of forestry, Ministry of Forestry, Agriculture, Natural Resources and alike) at both levels.

At these levels, a **more specified country programme is agreed upon (sector policy level), and agreements are made for every sector**. With regard to the forest sector, then specifications are made on where the priorities lie within such a joint forestry sector programme (i.e. expert interviews, including from field research: actors nr. 2–4, 10, 13, 22, 31, 35–37, 46–48; 105, 118, 127, 132, 134, 149, 170; 97–100, 107–109, 113–115, 126, 128, 130, 146, 154, 159, 160, 171, 172, 193, 194, 214–216, 218).

At the sector policy level, **agreements on the priority sectors** to be addressed are made, and as a result, a '**joint country programme**' is agreed upon. Sometimes prior or parallel to joint programme negotiations, 'scoping missions' or 'fact-finding missions' are led by donors (i.e. through consultancies) to examine the possibilities for programme or project interventions (ibid.).

²⁵ Which will be from 2010/2011 under the MfFA (expert interviews: actor nr. 210).

Depending on the negotiation power of the recipient country, the usually three sectors are generally agreed upon, and other details can still be modified later. The result is a general document, listing the sectors of cooperation, the total financial amounts and the time frame of the agreement. Further specification is then done sector-wise (i.e. at the forest policy level) (ibid.).

In cooperation with some donors, recipient countries can achieve all or part of their aid managed by their planning or subject ministries (i.e. Swedish and Swiss forest cooperation), depending on their negotiation power (expert/telephone interviews: actors nr. 46–48, 58) (and possibly corruption experiences). Then, also later contracts with consultancies are not done with the donor (i.e. Sida) but directly with the local ministry (i.e. Swedish cooperation) (a.o. expert interviews: actor nr. 40).

The above supports Hypothesis 4f, as **three bargaining processes can be empirically identified**, within the top-down framework, making decisions on framing elements.

To the **respective donor coordination processes** (linked to the above bilateral negotiation networks), Chap. 6 provides us with more insights (c.p. also Aurenhammer 2010). Donor coordination processes, specifically on forestry, are rare (general, qualitative results from expert/telephone interviews: 307 actors).

At the Austrian and Swedish sector policy level, joint assistance and budget support processes gain more importance (i.e. expert interviews: actors nr. 1, 3, 10, 46, 47, 177, 188, 189, 210). Sweden also implements more frequently via international and regional organisations (c.p. p. 56 in Aurenhammer 2008), which then engage in their own processes (networks). Consultancies can be contracted for identification missions (i.e. in Finland, Germany).

The following **influential actors**, holding major gateway positions (nr. 7, Fig. 4.5), were identified **from the intervention network level**, constituting a broader set of stakeholders. On one hand, these are the donors' governmental forest (related) experts at local offices or embassies, usually from their agencies,²⁶ as well as recipient's subject ministries' experts. On the other hand, these are the donors' implementation actors, so far different from those agencies, like the NGO/NPOs (especially in Austria) or consultancies (especially in Finland and Germany) (general, qualitative results from expert/telephone interviews: 307 actors; see also Chap. 3).

Donor countries' actors (from bargaining as well as intervention networks), especially after longer-term interventions in the forest sector, engage in a number of participation processes. Most importantly, donors' (governmental) representatives are actively engaging in the local policy processes relevant to their sector as well as contributing to the process of local expert development and exchange (local expert networks) (general, qualitative results from expert/telephone interviews: 307 actors).

Donor countries' actors are often involved in the **formulation of recipients' forest sector policies**, acts, master plans, silvicultural guidelines, community forestry guidelines and alike (ibid.), and they participate in forest policy, national forest

²⁶ Sida staff at embassies being under the MfFA from 2010/2011; Finland's embassies' experts are under Formin.

programme, REDD and similar (governmental) working groups (of/in the recipient country) (ibid.). This is especially valid for the Finnish and the German forestry cooperation, but with reference to other sectors, it is a rather common activity of all donors (ibid.).

Given the **relative independence of donors' local staff**, it can be frequently found that donors' representatives preferably attend to only such policy processes that are matching with or linked to their personal capacities and expertise (ibid.). Hence, a continuous **reproduction** is noticed, whereby the **local engagement in a certain sector or thematic area is maintained by its core** (especially if given a longer time period of cooperation in one sector), unless or until policy changes occur at higher decision levels (ibid.). At the same time, however, this can lead to a **selective information flow** (to the donor country) on the actual opportunities that arise from the broader local level (ibid.) (support to Hypothesis 4e and f).

For instance, according to a German official (expert interviews: actor nr. 121), it is finally up to the head of the agencies' branch office to decide what issues (cooperation opportunities) are considered as relevant, to be forwarded and suggested to the upper levels (support to Hypothesis 4e and f).

This also leads to a situation where subject ministries, that is, dealing with forestry, may not anymore address a donor's local office, because they experience that there suggestions are not further addressed, if they do not fall under the current priorities of the donor, so they may become reluctant to approach the donor's office at all in the future, as they do not see any sense in spending resources on proposals, in sectors, the donor does not wish to address (i.e. in Bhutan) (expert interviews: actor nr. 97) (partial rejection of Hypothesis 4f, with regard to recipient's actors).

The support to **donor policies that do not clearly relate to certain sectors** (be it that of the donor, the recipient, the OECD), namely, environment, natural resources, rural development, gender, climate change, etc., has a number of effects.

Firstly, it can be used strategically to be able to **subsume a set of sectors** that otherwise needed to be abandoned, in the light of reducing cooperation to three major sectors.

Secondly, a donor country, where the forest sector is strongly anchored within the donor's structures and it succeeds to clearly link (market) the 'real' sectors under a more vague 'cloud', can prove to be viable as **'survival' or marketing strategy for the forest sector**. For instance, the governments of Nepal and Finland agreed in 2007 to expand the water and sanitation sector to cover the cooperation in water and sanitation, environment and forestry sectors, renaming (labelling) the new sector as 'natural resources' (i.e. expert interviews: actors nr. 37, 118) (support to Hypothesis 4f: **policy reformulation**; also in accordance to 4b,c and 4d,e). In many cases, however, the **clear linkage to a weaker sector, like forestry, gets easily lost** (as in the Swedish policy) (i.e. expert interviews: actor nr. 49), or such sectors are 'condemned to an existence' as **cross-cutting policy issues**, hardly to be noticed further (i.e. Austrian policy) (i.e. expert interviews: actors nr. 3, 10).

Third, such **'undefined' sectors can leave more competences to practical determination by the local donor representatives** and experts (as possibly also recipients), as is the case with several donors (general, qualitative results from

expert/telephone interviews: 307 actors). Thereby, it can be noticed that branch offices in different recipient countries may determine 'rural development', 'good governance', 'decentralisation' or alike, in different ways (i.e. water sector activities being a part of rural development, or not) (ibid.)²⁷ (support to Hypothesis 4f; i.e. reformulation of policy).

The **establishment of a pool of local experts** that move from one donors' to the other donor's project and come from, work in between, or finally end up at often key governmental positions, in the recipient country (ibid.), is a very important process that can be followed up by long-term network analyses of a sector's cooperation in a country (i.e. found from forest-related cooperation in Central American countries) (see Annex 6). In this respect, also **regional** (research and education) **organisations** play critical roles and have gained recently more donor support (ibid.). Through, that is, local offices' advisors, such expert networks' local actors can feed their interests into superior subsystems (support to Hypothesis 4d, e); at the same time, they function as justification and legitimisation of (future) cooperation.

Various political factors or interests from the joint forest sector bargaining network and the recipients' forestry policy subsystem exist (see also Chap. 6), leading to decisions made on or the modifications of framing elements (support to Hypothesis 4f). One rather frequent group of factors are those of the 'changes in the recipients' national forest policy and acts'. Such factors can trigger the start, modification and termination of forest policy and cooperation. This group was found to include such factors as logging and export bans, new forms of tenure or management rights founded in acts, change in taxation and subsidies to forest products, change from a production (modernisation) to a conservation policy (i.e. by establishing nature reserves or national parks), policy for the establishment of 'independent' forest research and education institutions (and facilities) or the demand for revenues by newly established forest agencies (general, qualitative results from expert/telephone interviews. 307 actors).

Other political factors or interests related to the recipients' forest sector, affecting cooperation policy, are the existence of minimal capacities (financial and personnel) to enable cooperation, corruption within the forest sector, staffs' personal proliferation (i.e. to enter expert networks) and excess to capacities provided by donors (i.e. maps, inventories, office equipment, exchange programmes and studying opportunities, vehicles) (ibid.).

Political factors or interests that had an effect on forest-related cooperation, identified in the recipients' sector or general policy levels (triggering the decision upon framing elements, i.e. at bargaining processes), are, for instance (ibid.), the number of governmental officials working within the forest sector as compared to other sectors (refers to a national relevancy), the revenues (potentially) generated from the forest sector and related investment needs (amount, amortisation), a higher emphasis on forestry within agriculture (i.e. with changing ministers), increased

²⁷ See also Chap. 6, with regard to donor strategies, and Annexes 2 and 3 for examples of interest spirals in forest cooperation cases.

awareness of environmental and forestry issues in planning ministries (includes Finance, Foreign Affairs, etc.) or, by the president or king, the negative external effects (opportunity costs) of unsustainable forest management to important other economical sectors (water, agriculture, electricity), changes in the legislation for compensation for land and crops (i.e. for abandoned agricultural land to nature reserves or national parks), the existence of local government acts and respective forest-related officials under the district or communal government (i.e. for community forestry), upcoming elections (i.e. presidential), *conflicts and civil wars* (very frequently leading to interruption or termination, i.e. Cote d'Ivoire, Honduras, Nepal), nuclear policy (led usually to interruption or termination; i.e. India, exception: Sweden), human rights policy (i.e. Uganda: parliamentary suggestion of death penalty for third party persons, not reporting sexual interaction between an HIV-positive person and an HIV-negative), exclusion of small donors (i.e. India) as well as direct, governmental interventions (general or specific, but on high level; i.e. Bhutan, Honduras, Chile, Tanzania) (ibid.).

4.4 The Existence of (Forest Policy) Subsystems

The above section could show empirically that **different policy subsystems exist and can be distinct from the 'overall' system of bilateral foreign policy** (support to Hypothesis 4a). They are not isolated, but various (major) gateway actors provide for a vertical and horizontal integration. Depending on their influence, such actors (and their various organisational units) dominate parts or all of the decision-making structure ('line of command').

Subsystems and bargaining networks could be hence identified. Empirically, their existence is also proven, as various framing elements as well as such political factors or interests, leading to decision upon such elements, could be qualitatively described from each of the system parts (support to Hypothesis 4a). Additionally, the existence of subsystem-related participation processes supports this result.

Based on above results of the forest-relevant bottom-up and top-down influence of actors at various decision-making levels, Fig. 4.6 shows the **viability or expansion of forest policy subsystems** (as definitive or vague forest-related subsystems or networks, limited in their expansion by superior subsystems) as well as the **extent or 'area' of forest policy subsystem's actor's influence** (at different levels), **for four donors**. For a more detailed version, including more empirical references, see **Annex 7**.

Only with respect to the **Austrian case**, the **viability (existence) of a forest policy subsystem cannot be proven** (partial rejection of Hypothesis 4a). Rather than constituting a subsystem, there exists a vague network that may temporarily (ad hoc) expand, if a major top-down impulse creates a 'window of opportunity' (c.p. Fig. 4.6).

The remaining forest-related activities are being subsumed into superior subsystems' decision-making (and into the domain of the ADA and BMeiA), treating

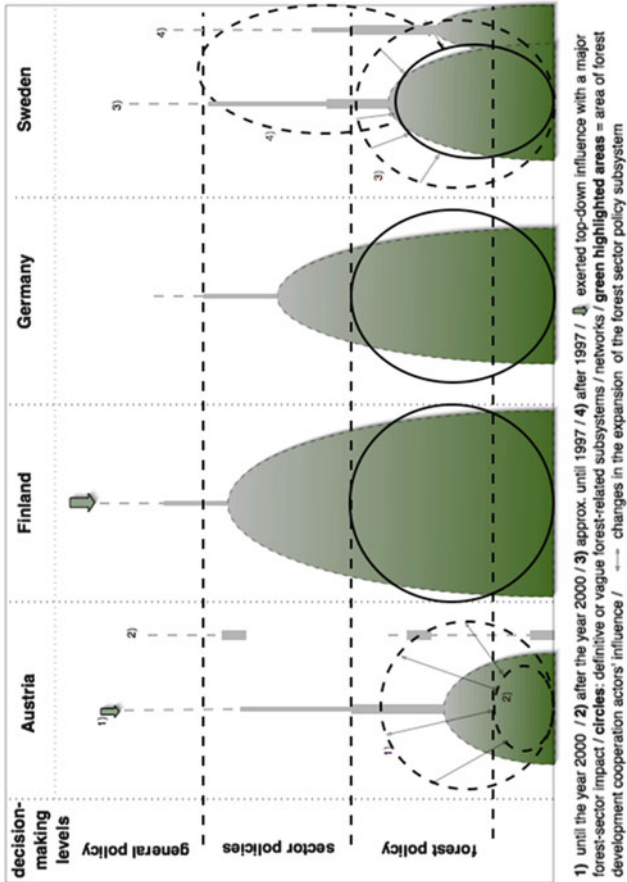


Fig. 4.6 Expansion of the forest policy subsystem and the 'area' of forest actors' influence, in the bilateral, bi-governmental foreign policy system of donors (Source: Aurenhammer 2011)

the forest sector as a cross-cutting issue only. Dominant superior actors are reluctant to provide structures (= a gateway) at the forest policy level, to indirectly integrate the forest policy actors and hardly allow for direct participation in superior sub-systems ('knock-out' framing element).

That leads to ignorance of the forest policy and to a non-coherence of development policy vis-à-vis forest policy, unless another Rainforest-Initiative type of 'event' gives rise to another temporary expansion of the network and provision of a gateway to superior policy levels. Under such conditions, institutionalised structures cannot be built up. Hence, there exists no subsystem (no established network).

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Chapter 5

Poverty Reduction Through Forest Development Interventions? Grass-Root Responses to Forest Aid: Economic Miracles or the Satisfaction of Basic Needs?

5.1 Introduction and Methodological Approach

One of the major goals and legitimisations of development interventions is to contribute to the alleviation of poverty, to increase generated income, to promote market integration and to improve livelihoods. Cooperation thereby targets the poor and the poorest of the poor and strives to include the excluded and the marginalised.

Hence, this chapter assumes (**Hypothesis 5b**) that *local communities and peasant farmers* that were the intended direct or indirect beneficiaries of forest-related interventions, especially after long and continuous cooperation efforts in the same area, *will be found to react and benefit clearly, in terms of a high and increased share in the income derived from forests and trees.*

Therefore, this indicator (income) follows a ‘poverty terminology’ determined by the donor and recipient governments, which is generally based on the market economy-driven policies and interests rather than on the subsistence economy.

Though there have been many approaches to defining poverty (c.p. Chambers 2006; Townsend 2006; Kakwani and Pernia 2000; Nuscheler 2005; Sen 1988), until today, there exists no consistent definition, which is able to describe the multidimensional aspects of poverty (Nuscheler 2005), and there exists no consensus to the definition as well as to the measurement of ‘pro-poor development’ (Kakwani and Pernia 2000). Approaches to poverty include ‘income poverty’ or ‘consumption poverty’ that could be subsumed under more economical, welfare-based concepts.

Other approaches, that is, ‘subsistence’ approaches, consider the lack in material capacities or the excess to assets as well (c.p. Chambers 2006; Townsend 2006). The ‘basic needs’, ‘human well-being’ and ‘capability’ approaches (c.p. Chambers

2006; Townsend 2006; Kakwani and Pernia 2000; Sen 1988) put more emphasis on the multiple dimensions of poverty.

All these meanings of 'poverty' have been constructed by 'us' and 'reflect our power, as non-poor people, to make definitions (...)' (p. 3 in Chambers 2006). Despite the various approaches to poverty, income remains at the core of the concept today (Townsend 2006). Globally, it is the World Bank's \$1/day measure that is constantly used for monitoring poverty, and on national level, most governments define the threshold lines for household income (Fukuda-Parr 2006). Also in the case of the Millennium Development Goals, 'it is the income measure that is most used to gauge trends overall' (p. 7 in *ibid.*).

In contrast to 'income poverty', concepts of 'human poverty' (Human Development Index (HDI), Human Poverty Index (HPI)) try to cover poverty more comprehensively but still fail to include aspects like participation or political freedom (*ibid.*). Despite these indexes being more comprehensive, they cannot be considered objective definitions of development or poverty, as 'any list of categories is inevitably both subjective and ethnocentric' (p. 12 in Ranis et al. 2006).

To state one definition (OECD 2004), poverty can be seen as a multiple form of deprivation, where the poor suffer from a low income, a lack of an effective 'voice' in shaping policies, a lack of access to assets necessary to earn their livelihoods, discrimination and vulnerability to disasters. According to Hobbey (2007), pro-poor policy should promote an enabling political and policy environment as well as ensuring that the voices of the poor are heard in political discussions. Chambers (2006) refers to the multiple dimensions of disadvantages defining poverty, among others, the lack of political clout, of social relations, of material capacities, of time and of access to institutions.

In the initial part of this chapter, analyses will be limited to the more narrow approach of 'income poverty', to test the assumption of forest-related income growth and to see what relevancy income from forests and trees has. This is followed by the assumption that income changes (outcome) can be explained by the frame set by the most influential actors (see Hypothesis 6a from below). In testing this assumption, the empirical descriptions made will also cover other dimensions of 'poverty' other than income.

Hence, in addition to data on quantitative income, also more qualitative descriptions are made, on the (social and political) circumstances that local actors and people face and that determine their livelihoods as well as on the non-monetary values (i.e. leaf-litter collection, grazing, satisfying of various subsistence needs) that forests and trees provide them with, thus putting more emphasis on the 'access to necessary assets' (and changes in circumstances and access possibilities). Finally, it is quantitatively and qualitatively described whose 'voice' is heard, to show if local people are really able to 'shape the policies' and interventions affecting them.

The **outcome** (poverty alleviation or non-alleviation) is defined as the change (or non-change) in forest/tree-related income within communities at large, following economical theory. **Communities** are defined as groups of people or households within a locally restricted geographical area (i.e. a village, a part of a

village, an indigenous community consisting of a number of villages, a commune), independent to their legal character (i.e. a political entity, a tribal entity, a society, a cooperative).

Following economic theory, there exists a bias towards political theory, defining outcome, instead, as the total number of households or people, actually positively or negatively affected by an intervention (in terms of income from forests/trees). Applying economical theory (poverty of groups), it is, hence, theoretically impossible to answer to what extent poverty of individual households or people has changed or whether a change within a group (i.e. community forestry¹), constituting a part of the community, actually has the same effect on all the individuals of the community at large.

In other words, an increase in the relevancy of income from forests/trees at the community level (poverty alleviation at the group level) does not indicate, for instance, how many individuals have been excluded or marginalised, to enable poverty alleviation for possibly only a smaller proportion of the group's population – hence, political-theoretical interests, such as individual poverty reduction, can neither be proven nor rejected.

It is further argued (**Hypothesis 6a**) that any local socio-economic results or changes, achieved throughout the period of intervention, can be explained by the interests (willingness) of or frame set by the most influential actors of development cooperation networks (holding the highest potential for change).

Finally, it is assumed (**Hypothesis 6b**) that the socio-economic changes (in terms of income from forests and trees of the communities or households) are independent of the ownership of soil (of the community or household's lands).

Rather, influential stakeholders strive for reaching such circumstances for socio-economic changes at the community (or household) level that are in accordance with their own interests (willingness) so that the actual ownership of soil is not necessarily a determining factor in the potential of socio-economic change communities and farmers face.

Figure 5.1 shows that the change (or non-change) in the forest-related income for communities (the outcome of forest-related interventions) (dependent variable) depends on the potential for change in the direction of the intervention, among others, towards the goal of poverty alleviation that actors hold (independent variable); it does not depend on soil ownership.

¹In most cases, community forestry does not include all people/households. It may also lead to exclusion of people (from the same or other geographical areas), previously eligible to benefit.

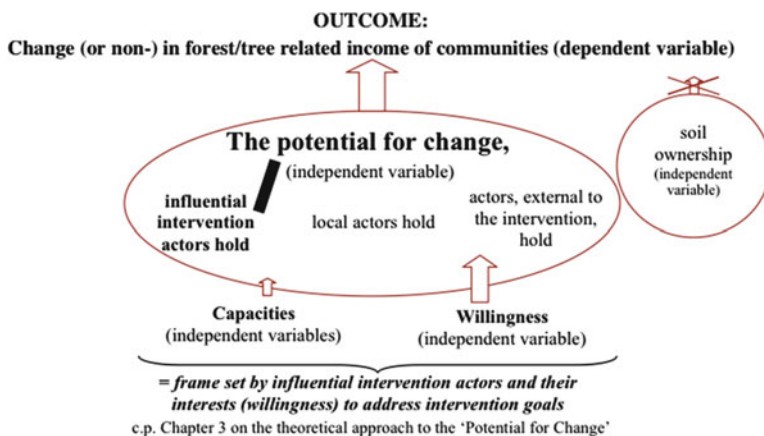


Fig. 5.1 Outcome of forest-related interventions (Source: Aurenhammer 2011)

Among different actors, the potential for change of the **influential intervention actors** will have the most explanatory value. The potential for change of local actors and actors, external to the intervention, will not significantly matter. The factor of **willingness** (to address goals of the intervention) plays a special role in the explanation of changes (or non-changes).

Intervention actors are actors, with of course the exception of local actors, directly involved in the intervention (implementation of the programme). **Local actors** are such communes, communities or individual households or farmers, directly or indirectly involved in, or affected by, the intervention. **Actors, external to the intervention**, are not directly involved in the intervention (implementation of the programme), but they may affect the intervention externally (external changes).

The following provides us with an overview on the **measurement of above variables and methods used** (see Fig. 5.2; c.p. Chap. 1: empirical approach, material and methods).

The **potential for change (potential to have an impact)** that actors hold is quantitatively estimated by an **actors' overall influence**, with reference to results from quantitative network analysis. In addition, actors' sources or mechanisms of influence are qualitatively described, based on expert interviews and field research as well as secondary data (documents, literature). For instance, in order to understand the reasons for changes (i.e. in the interventions, the local conditions), the application or exertion of certain factors of influence is described, where appropriate (i.e. to explain the setting of the frame by influential actors).

As **willingness** is seen as of major explanatory value to local changes (non-changes) in socio-economic conditions, emphasis will be given to a qualitative description of the willingness (interests) of the respective actors, based on expert interviews, field research and secondary data (documents, literature). **In what follows in this chapter, the term 'interests' will be used for 'willingness'**. However, willingness is considered as only that part of an actor's interests, matching with

Outcome	the potential for change	soil ownership
<p>Change in the <u>% of average household income</u> or average annual household income (in €), derived from forests/trees, as the average from the number <u>of households within the community</u>, based on group/individual interviews (field research) and/or secondary data (documents, literature)</p>	<p>Quantitative estimation of the potential for change by actors' <u>overall influence</u>: $P_{at} \equiv OI_{at}$, based on quantitative network analysis</p> <p>Qualitative description of actors' sources / mechanisms of <u>influence</u>, + <u>separate qualitative description of actors' willingness</u>.</p> <p>based on expert interviews, field research and secondary data (documents, literature)</p>	<p>= state or private, based on expert interviews, field research and secondary data (documents, literature)</p>

Fig. 5.2 Measurement of dependent and independent variables (Source: Aurenhammer 2011)

intervention goals. Generally, such goals are being the result of a consensus between multiple actors.

The dependent variable of the **outcome** is measured by the **change in the percentage of average household income, derived from forests/trees** (an average from the number of households within the community). It is based on data from expert interviews and field research (groups and/or individual farmers) and/or on secondary data (i.e. documents, literature; for instance, to gain data from historical dates). The change is assumed to be highly positive, if poverty alleviation is addressed. The comparison of cases from different countries spanning over time (years) within cases is provided in relative terms (percentage) and where available in absolute terms (euros). Thereby these values refer to average household incomes (arithmetic mean). Additionally, data on individual farmers is provided, where applicable and data available (i.e. in cases from Kenya and Uganda, where interventions target single farmers as smallest economical entity).

It is important to notice that, for these outcome estimations, standardised economical approaches are applied. These approaches do not take account of, **not reflect, the actual distribution effects**, being of importance to political analysis. The differences between the real and the arithmetically implied distribution are made explicit by field research and by remarks on limitations provided by ample examples. Data derived from single farmer/household is of course not affected by these limitations (as it is not derived by an arithmetic mean).

The presented cases build on field visits and qualitative expert interviews in seven recipient countries (see Aurenhammer 2011).² The selection of cases³ is not statistically representative, as they are derived from a larger research context, which

²The actors involved and interviews undertaken are listed in Aurenhammer (2011). The list of actors is available from the author for research purposes.

³Annex 4 includes selected pictures to the cases analysed in this chapter.

bases itself on a 'most-different' approach. Within that context, initially 27 interventions were researched quantitatively, covering various types of donor interventions and (covering at the same time) a large part of the disbursements.⁴ However, the selected cases represent a large number of intervention types (c.p. pp. 14ff in Aurenhammer 2009a). They represent two types of recipient countries, namely, interventions in 'riparian states' (Bhutan, Nepal, Tanzania, Uganda) and in 'development countries' (Nicaragua, Honduras, Kenya); two major categories of project implementation (six interventions implemented by non-governmental actors and two by governmental actors of donor countries); and three of four thematic categories (six 'distribution conflict projects', one 'research and education project' and one 'political project').

In addition to the results from above sources, this chapter will base itself on documents and research complementing a more representative picture of certain data or on results or examples from expert interviews with representatives from other donors⁵ and their projects, where possible and relevant.

According to Aurenhammer (2009a, 2010a), no major differences could be found between the various intervention types. Mostly governmental stakeholders, both of donors and recipients, as well as donors' consultancies play key roles in regard to various factors of influence within intervention networks. However, in five of the projects covered here (a German in Nepal, an Austrian in Bhutan, an Austrian in Nicaragua and Swedish ones in Uganda and Kenya), the individual intervention networks show some exceptions, for instance, donors' research and non-profit organisations as well as recipients' non-profit organisations can gain strong influence in certain networks. Hence, emphasis is placed on these exceptions as well.

The majority of development interventions' financial means is usually spent on the technical assistance of donors' implementation actors (governmental or non-governmental) and for the local governmental actors, as incentives (i.e. foreign exchange programmes, infrastructure improvements, recently less on labour costs) or for their 'capacity building', in accordance to the (mostly) bi-governmental programme goals (general, qualitative results from telephone/expert interviews, 307 actors).

Communities or single farmers usually do not receive any direct financial support, rather interventions provide various support for 'capacity building' (i.e. community exchange, meetings of representatives of selected communities), 'institution building' or in-kind incentives (i.e. food) or cover for some costs necessary for such activities (i.e. transportation costs, a community building). So, local communities do not usually receive direct financial benefit from or for forestry-related activities through such interventions (ibid.).

⁴Almost 20% of the net disbursements of Austria, Finland, Germany and Sweden on bilateral forest-related development cooperation between 1994/1995 and 2005 could be covered by these 27 interventions. Most of these belong to the largest interventions during that period.

⁵That is, Switzerland, the Netherlands, United Kingdom

However, according to the various programmes (as cit. in Chaps. 3 and 4), one of the reasons for these various activities that ‘development actors’ provide for the ‘commons’ is to improve their socio-economic situation.

5.2 The Relevancy of Income from Forests and Trees

Table 5.1 shows estimations, of 19 cases,⁶ how income in 2009/2010 was distributed among various sources. In all of those cases, there was at least one development intervention over the last 15 years, and in some of those cases, several inventions even occurred and can be traced as far back as the 1970s (field research, group and individual expert interviews: actors nr. 61, 72, 73, 74, 68, 69; 78–79, 88, 94; 137, 141; 145; 183, 185; 199, 200, 202–205; 219–222; 229–234, 235, 237–243, 236).

The **results** show that the relevancy of income from forests and trees today differs greatly between 0.2 and 60% of the total average income of a household. In many cases, the proportion is generally low (ibid.).

Further, it can be seen that the absolute average annual income of households, coming from forests and trees, remains in many cases at low levels and ranges between 1.4 and, at best, 250 euros. Reducing income by the average expenses and by the opportunity costs the households’ need to bare, when engaging in forest-related activities, shows that only in exceptional cases do households make a positive balance⁷ (ibid.). One has to also consider that an average household size is from five to six people (or even more).

The key forest- or tree-related products differ as well. In many community forestry organisations (CF), the collection of fees for wood extraction (instead of royalties that had to be paid to the government before) determines key sources of income from forests and trees. Only in such cases, where the CF has the available natural resources (stock) and the necessary legal, infrastructural and market conditions, can they obtain larger incomes from selling timber or firewood (ibid.).

In some examples of communities and associated farmer groups, where the main source of income from forests and trees comes from selling seedlings, produced by their own small-scale nurseries, some communities or individuals benefit mainly from forest ferns, grasses, fruits or medical plant collection and marketing (ibid.).

The following will elaborate in more details on these cases. If not otherwise noticed, the below case studies draw on results from qualitative expert interviews and field visits (actors nr. 45–246; Aurenhammer 2009b, 2010b) and quantitative network analysis (Aurenhammer 2009a, 2010a).

⁶These estimations are based on community level interviews in 2009 and 2010. Where available, these base themselves also on bookkeeping of individual communities.

⁷These are estimates that show the average income and net income for a single household. However, such an equal distribution among households (revenues as well as work) cannot be expected and is not so the fact in practice. But these values allow for a more overall comparison between countries and communities.

Table 5.1 The distribution of average annual household income (2009/10) and the relevancy of forests and trees, in various communities, after forest related development interventions

Community cases (country, region)	Sources of income	Forest and tree products (incl. non-timber forest products)	Grains, vegetables, domestic fruits, coffee, tea, spices	Livestock and sea products	Wages (local and distant, off-farm)	Forest and tree related income (before expenses)	Forest and tree related income (after expenses and opportunity costs)	Key forest and tree products
Bhutan, Bhumtang (1) CF		≤2.7	0	0	≥97.3	≤5.3	≤-14.9	Royalties and donations
Bhutan, Bhumtang (2) CF in prep.		Δ	95	0	Δ	n.a.	n.a.	Mushrooms; (royalties)
Bhutan, Wangdi, five villages, non-CF		16	84	0	Δ	110.4	n.a.	Forest ferns, mushrooms
Honduras, Francisco Morazán (1)		60	30	8.5	1.5	n.d.	n.d.	Timber
Kenya, Kisumu (1)		15	35	40	5	54.0	-37.0	Seedlings, firewood, charcoal
Kenya, Kisumu (2)		15	59	21	5	22.5	-39.7	Seedlings, firewood, NTFP
Kenya, Kitale (1)		≤35	45	20	0	n.d.	n.d.	Seedlings, firewood, timber
Nepal, Hetauda (1) CF		≤4.4	0	≤96	≤60	7	-13.7	Royalties
Nepal, Hetauda (2) CF		5.5	0	43	52	20	-1.7	Royalties
Nepal, Hetauda (3) CF		1.9	0	45	54	6.5	-21.3	Forest grasses
Nepal, Siraha (1) CF		0.9	99.9	0	0	1.4	-45.0	Royalties

Nepal, Siraha (2) CF	18	0	82	0	66.5	21.0	Royalties, sale of wood
Nepal, Udayapur (1) CF	0.2	24.9	15	59.9	1.9	-16.3	Royalties
Nicaragua, RAAAN, two Miskito villages	9	6	48	37	n.d.	n.d.	Wild fruits
Tanzania, Tanga (1)	3	87	10	Δ	n.d.	no exp.	Some timber; Amani fee
Tanzania, Tanga (2), two villages	32	60	6	2	114.3	ca. 100	Firewood, some timber, decr.
Uganda, Masaka (1)	≤28	56	14	Δ	≤143 ^a	n.d./[-41.8] ^b	Medical plants; [wood not yet]
Uganda, Masaka (2)	35	5	50	10	250	ca. 210	Firewood, some timber, NTFP
Uganda, Masaka (3)	25	75	0	0	4.8	4.4	Seedlings

Source: Aurenhammer (2011)

^aIn the case of Masaka (1) a max. of 143 euros is income from medical plants (before expenses); there is no data on the expenses of medical plant collection etc. (therefore n.d. on income after expenses); but there are expenses and opportunity costs related to forest management that are not yet covered by income from wood, resulting in a negative balance of -41.8 euros (which refers to the costs of planting, caretaking and guarding of trees, *unbalanced* with income from medical plant collection)

Δ Only of marginal income relevancy; *n.a.* not applicable; *n.d.* no data; *CF* community forestry; *NTFP* non-timber forest product; *HH* household

5.2.1 Cases from Bhutan

Results are drawn from the Bhumtang-1 (B1) village, from the Bhumtang-2 (B2) village and from five villages of a valley in Wangdi (W). B1 is seen (by donors and local officials) as an exemplar community forestry, among the first ones in Bhutan, supported by a **Swiss-funded** programme (PFMP). B2 was affected by several development interventions since 1989/1991 (IFMP, CORET, FORED funded by **Austria**; PFMP)⁸ and applied for community forestry status (draft management plan as of 2009).⁹ The villages of W were involved in a **German-funded** project (IFMP-G).

Quantitative network analysis for CORET and FORED identified the following actors, reaching a high overall influence (>50 out of 100%): the Austrian University of Life Sciences (BOKU) (82%) and the Bhutanese governmental actors, as the Ministry of Agriculture of Bhutan (various divisions) (68%) and the Council of Renewable Natural Resources Research of Bhutan with its Renewable Natural Resources Research Centres (67%). With respect to the IFMP, the influential actors were the Ministry of Agriculture of Bhutan (84%), the Austrian consultants for the Austrian Development Cooperation (ADC) (74%), the Austrian Ministry for Foreign Affairs/the Chancellor's Office (61%) and ADC itself (50%).

5.2.1.1 Relevancy of Income from Forests for Farmers in Bhutan

In **B1** the main source of income is from wages (field research: actor nr. 78–79). The royalties for trees and donations from outsiders, collected by community forestry, represent a proportion of only 2.7% (at best) of an average household's (HH) income (ibid.). This equals (at best) 5.3 euros per HH and year (ibid.). After expenses (including opportunity costs), the balance is –14.9 euros per HH and year (at best) (ibid.), hence no major changes to income distribution.

The major income in **B2** is from crop production (95%) (field research: actor nr. 88). Income from forests and trees is marginal (mushroom collection) (ibid.). There have been no major changes since the 1970s (ibid.). Forests provide for subsistence needs (i.e. fuel wood, timber for construction and shingles) (ibid.).

Also in the villages of **W**, the main source of income is crop production (84%) (field research: actor nr. 94). Income from forests is restricted to forest ferns and mushrooms (16%, at max. 110.4 euros per HH and year) (ibid.).

⁸IFMP=Integrated Forest Management Program. CORET=Conifer Research and Training Program. FORED=Forest Research and Development Program. IFMP-G=Bhutan-German Integrated Forest Management Program

⁹Annex 2 describes the case of B2 as an interest spiral after Prittwitz (1990).

5.2.1.2 Change Factors and Relation to Influential Actors' Interests

Most significant changes in the villagers' socio-economic conditions are due to the construction of feeder roads in B2 (IFMP) and W (IFMP-G)¹⁰ (i.e. field research: actor nr. 88, 94).

The **Bhutanese government** was interested in building these roads¹¹ in order to excess potential forests for economical utilisation (i.e. field research: actors nr. 88, 94; 80–83, 87, 89, 92, 93; 97). While in W the intended forest management unit (FMU) was not realised¹² (field research: actors nr. 92–94), in B2 different types of utilisation methods, targeting at natural regeneration in the overaged (largely rotten) fir forests (*Abies densa*), resulted in extractions of timber, sold in auctions to **Bhutanese entrepreneurs** (i.e. expert interviews and field research: actors nr. 10, 14, 30; 88, 80–83, 87, 89; 97, 99, 105–107, 109). The interest of the Bhutanese government was in this respect to have a self-financing forest regeneration and sanitation extraction scheme and developing silvicultural methods for the utilisation in an FMU (ibid.). There were also attempts made to develop products possible to construct out of relatively rotten stems (i.e. broomsticks), for export to India (i.e. expert interviews and field research: actors nr. 10, 14, 30; 88, 105, 107).

Some of the timber was sold also, at subsidised prices, to satisfy the subsistence needs of **the villagers** (i.e. fire wood, timber for house and monastery construction, shingles) (i.e. expert interviews and field research: actors nr. 10, 14, 30; 88, 89, 97, 105, 107). Since the project built a road, the villagers were interested to have it running close to their village (1994 it was connected) (i.e. expert interviews and field research: actors nr. 30, 88). Some students were given occasional jobs in the road construction, some villagers were (further) trained to be carpenters, and one villager took part in a forest technical training provided in Austria (ibid.).

The interests of the **Austrian actors** (IFMP) had political, prestige, economical and expertise orientations (see below). The project manager of the first phase of IFMP gained through previous engagements the trust of the Bhutanese government and functioned as gatekeeper to the Austrian government (i.e. expert interviews: actors nr. 10, 30, 135). Through party political contacts, the project was set up, on

¹⁰With Japanese funds (JAICA), the road was continued another 5 km (to the village N.).

¹¹Though there was later much criticism, by opponents to the continuation of IFMP from the Austrian side, partly due to the 30% more costly road construction, compared to commonly used Indian techniques, the result is generally honoured by the Bhutanese as the road is still in good condition and the same method ('environmental friendly road construction') is used still in other locations. Some conflicts between experts, managers of the programme and governmental officials (under a new government) from Austria arose from the usage of expensive material to make it possible to construct the road construction through a negative cardinal point (isolate the road with nylon folia from underlying marshland) that otherwise had to be avoided, which was seen (by the experts and the governmental counterpart) to be more cost expensive.

¹²Among others, the amount of broad-leaved trees (a.o. *Quercus* spp.) was seen too high, though there was also chir pine (*Pinus roxburghii*). Also the road was not ready, when the calculations were done.

the decision and in the ‘personal interest’ (ibid.) of the then head of Department for Development Cooperation,¹³ in the Austrian Ministry of Foreign Affairs.

The project was implemented through the **Austrian Development Cooperation** (ADC),¹⁴ much pushed by the then government to operate as an implementation body for development interventions (i.e. expert interviews: actors nr. 5, 10, 30). The first phase of the project was prepared and led by the above expert, who attached several other experts as **consultants** to the project (i.e. expert interview: actor nr. 30). Technical equipment and machinery were bought from Austria, among others¹⁵ (i.e. expert interviews and field research: actors nr. 10, 14, 30, 81–83, 99, 100, 102, 107, 135).

The management activities faced an abrupt stop, when the intended (agreed on by both governments already¹⁶ (i.e. expert interviews: actors nr. 100, 107)) third phase of the project was not implemented, largely due to party political¹⁷ and managerial differences¹⁸ at the donors’ side (i.e. expert interviews: actors nr. 14, 30, 100, 107, 135).

The **Bhutanese government** decided in 1998 to declare a large part of Thrumshingla to be a national park (i.e. expert interviews: actors nr. 87, 97, 100, 107) (eventually motivated also by external funds), affecting areas that were awaited by the forest-related experts to be later made available for the expansion of the management unit and eventually the economically sustainable running of the areas (i.e. expert interviews and field research: actors nr. 10, 14, 30, 80–83, 87, 88, 89, 105–107).

¹³At this time, Austria had just instated a conservative government, and the head of the department was from that same party, while (most of) the bureaucrats were from the social democrats’ party. It was in the party political interest and essential to the personal prestige to establish exemplar cooperation.

¹⁴ADC Austria was a registered society since 1979 (non-profit) but started its actual work in 1989 when it was supported strongly by the Austrian Economic Chamber. In 1996, the ADC Austria was merged with the Hilfswerk Austria International (non-profit). In 1998, the ADC development cooperation Projektmanagement GmbH (for profit) separated from Hilfswerk, while activities of the ADC Austria (non-profit) remained with Hilfswerk. Later, another conservative government created the Austrian Development Agency (ADA).

¹⁵That is, Ganter cable cranes from Austria; carpentry equipment (transportable sawmill) from USA, later sold in by the Bhutanese government in auctions

¹⁶Interviews with Bhutanese governmental officials; the excess of the document was made impossible by the Ministry of Foreign Affairs (2010); the phase was meant to be implemented by national execution.

¹⁷In the meantime, another change of government (social democrats) brought a new head of the department to the Ministry of Foreign Affairs. The promotion of ADC was ceased. This affected also IFMP, as the ministry moved the overall management responsibility of its second phase to another consultancy (architect’s office), ADC remaining as only an expertise provider.

¹⁸(1) Experts and managers changed frequently during the second phase. (2) With moving the overall leadership to another consultancy, experts from Austria and governmental officials of Bhutan noticed a priority shift towards building construction, while the government of Bhutan (Ministry of Agriculture) would have liked to see more emphasis on the silvicultural–technical issues. (3) The Bhutanese government was ‘heavily irritated’ by the fact that an Austrian expert to the programme was sent home by the consultancy head, prior to any consultation with the counterpart, as the expert was highly respected and continuity important.

Also, due to the illegal fellings on the boarder zones to India and due to the following lack in local timber supply, resulting from exports to India due to more competitive prices, a timber export ban was put into force, in 1998 as well (i.e. expert interviews: actors nr. 10, 30, 105, 107).

These changes provided the **Austrian government** with a good opportunity to stop funding (exit strategy) (i.e. expert interviews: actors nr. 10, 30, 105) and with an argument against the possibility of serving future export interests for Austrian sectors' experts.

Since a key value or interest of **the villagers** of B2 was to retain forest health (i.e. field research: actor nr. 88), with the stop of the IFMP, activities securing regeneration could not be finished, and this led to a negative picture of donors' activities and of utilisation at large (i.e. expert interviews and field research: actors nr. 10, 14, 30, 80–83, 87, 88, 89, 100, 105, 107, 135).

The machinery was handed over to the **Bhutanese government** and sold in auctions, and the buildings were given to the **new park management** (i.e. expert interviews and field research: actors nr. 10, 14, 30, 87–89, 105, 107). The villagers of B2 deconstructed a working building¹⁹ to use roofing and other parts for further national park buildings that were constructed thereafter (i.e. field research: actor nr. 88).

The **Austrian government** supported a continuation of the research component which led to the CORET and FORED projects (i.e. expert interviews: actors nr. 10, 14). These still engaged in the area, but their main focus was on research cooperation with Bhutanese governmental research institutions, the **Renewable Natural Resource Research Centres** (RNR-RC) and other governmental actors (i.e. expert interviews: actors nr. 10, 14, 30, 84, 98, 106, 107, 109).

The **Agricultural University of Vienna** (BOKU) implemented these projects, though locally working under the RNR-RC. The Austrian project leader was already an expert involved in the beginning of the IFMP project (i.e. expert interviews: actors nr. 14, 30). Interestingly, BOKU not only gained a key role in know-how transfer (quantitative result: 85%) but also functioned as a gateway for the Bhutanese to (research) funding (quantitative result: 72%).²⁰ For the socio-economic conditions of B2, these projects had no (direct) impact.

5.2.1.3 Unintended Changes: Roads for Potatoes

As mentioned above, the **feeder road constructions led to** major socio-economic changes for the villagers of B2 and W. In both cases, however, these were due to **local innovations in the agricultural sector**. While today (2009) the dominant source of income remains crop production (95, respectively, 84%), there occurred

¹⁹The former project office and guest house

²⁰This explains the strong position of BOKU in regard to financial support, as estimated in the quantitative analyses. However, most donor aid was transferred through BOKU (only a minor part directly through the Bhutanese government), but the aid at first of course came from the Austrian government. This reflects the gatekeeper role of BOKU.

some remarkable changes in the livelihoods of villagers and their income generation strategies (i.e. field research: actors nr. 88, 94).

Before IFMP, in 1991, the villagers of B2 mainly relied on grains, such as barley, buckwheat and sweet buckwheat as a source of subsistence and income (c.p. CFMP 2009). Similarly, before IFMP-G, in 2001, the villages of W²¹ gained their income mainly from rice and butter, as well as from vegetables, chilli, fruits and cheese (c.p. Pradhan 2002). In both cases, after road construction, the villagers turned to **potato production**, not cultivated earlier, being now the dominant agricultural product. Villagers of W now sell their potatoes in the markets of the border town Phuntsholing, for export to India, and buy themselves pork. Also fertilisers can be transported now²² (i.e. field research: actors nr. 88, 94).

Other **impacts of the roads** are the increased extraction of stones, boulders, timber, firewood and other resources by outsiders as well as grazing by outsider cattle (B2, W) (ibid.).

Also, only 12% of the households possess a car (W) (i.e. field research: actor nr. 94); hence, the majority of *villagers cannot equally benefit from the road*. Some people have left the villages. Such migrations include those of wealthy people who hold good jobs in the capital as well as those of the poorest people, who previously worked on rented land and who leave in order to find temporary work (i.e. road constructions) (i.e. field research: actors nr. 88, 94).

Also important is the **impact of electricity** (since 2005 in W). Two transmission lines led to a decline in the land available for leaf-litter collection. Although any private land affected was given due compensation. The need of firewood was reduced by 50% due to electricity and liquefied petroleum gas stoves. Now firewood is mainly used for cooking food for cattle and heating water. Initially, they thought they would gain more working time (light), but instead new forms of entertainment (i.e. TV) emerged, while previously they used to work beside the fire, tell stories and hold prayers (B2; W) (ibid.).

In the 1970s/1980s, forests were still abundant, and the villagers of B2 and W **satisfied** their **subsistence needs** on firewood, construction timber (there was not any systematisation for the use of trees – one took what one needed), grazing and leaf-litter collection from forests (ibid.).

With the **nationalisation** (Forest Act 1969), the official tree consumption was restricted to permits. Presently (2009), the average consumption equals two trees

²¹There do occur differences between villages.

²²Not all households can afford though three packages needed for 0.4 ha cost 26.8 euros (2009). Only two-thirds of the households use chemical fertilisers at present. Most households still use leave litter collection and organic farm yard manure.

per household a year, for which a **royalty** of approximately 0.8 euros has to be paid to the government and five to six backloads of dry firewood/lying deadwood (about 2 m³) is collected. However, the villagers maintain the ability to cover their own subsistence needs also in an **‘informal’ way**, and such need-based use is mostly treated with pragmatism by forest officials (i.e. field research: actors nr. 78–82, 88–89, 92–94).

Similarly from 1995, the Forest and Nature Conservation Act (revised 2006) restricts grazing (tsamdrog) and leaf-litter collection (sokshing) from governmental reserved forests (and eventually such user rights’ registrations were deleted by the government)²³ (i.e. field research: actors nr. 93, 94); however, such activities continue to be practised also without formal rights (2009), in all cases (B1, B2, W) (i.e. field research: actors nr. 78–79, 88, 94).

The **decline in the importance of livestock products** for income generation in W can be partly explained by the ‘criminalisation’ of grazing activities but is mainly due to the land splitting as a result of population increase, resulting in a reduction of cattle per household.²⁴ Hence, also available manure per household declined. So in 2009, butter and cheese were produced by households just to cover their subsistence needs, while in 2001 (c.p. Pradhan 2002), they were still important income sources (i.e. field research: actor nr. 94).

More recently, **community forestry** (CF) gains more importance, legally based on the Forest and Nature Conservation Act (1995).²⁵ Already in 1979, the **4th king of Bhutan** wanted that communities participate more in the management of forests (i.e. expert interviews: actors nr. 58, 97, 107). CF was pushed by **donors** and had initially only slow progress due to little support from the **Bhutanese forest officials** at the start of the PFMP (2002) (i.e. expert interviews: actors nr. 58, 107). However, donors found a gateway to the forest department under the current government (2009) that supports CF strongly, also because now ministers have to account for themselves as being responsible to the public in the elected parliament (i.e. expert interviews: actors nr. 58, 97, 107).

From our cases in B1, a CF was handed over (2003); in B2, a draft CF management plan exists (2009), and in W, no CF exists yet (2009), and villagers maintain to have only recently heard about it (from people in the capital) (field research: actor nr. 94).

In **B1**, 24 households (84 people) manage 46.5 ha (1.94 ha per household), and they are able to gain an average **income from royalties and donations of ≤5.3 euros per household and year** (≤2.7% per household) (field research: actor nr. 78).

²³For instance, in the case of W, 1,500 ha of tsamdrog registered in lokthrums (landownership certificates) still in 2001 was in 2009 deleted.

²⁴In one village, for instance, the population increased from a few households (HH) in 1980s to 26 HH in 2001 and 30 HH in 2009, resulting in a reduction of cattle per HH from 10 to 15 cattle per HH in 1980s to 3–4 cattle in 2009.

²⁵In the 1995 Act, CF had to consist of 50% degraded and 50% good forests, with the revised 2006 Act CF could consist of any type of forests in and around villages and human settlements (MoA 2006: Forest and Nature Conservation Rules of Bhutan 2006. Bhutan, Ministry of Agriculture).

The remaining and main part of the income is generated from wages (*ibid.*). After expenses and opportunity costs, the income balance for CF activities is negative at ≥ -14.9 euros per household a year (*ibid.*).

In addition, they received **subsidies** through PFMP, equivalent to 26.3 euros per household, for 2 years, to pay workers for fire line construction (*ibid.*). A village road towards the bridge was constructed in 2002 with governmental support (machinery), costs for petrol and work were borne by the villagers (85.3 euros per household) (*ibid.*). It may also be noted that the **local elite** is leading the CF and that there exists a marriage of an influential Swiss man into the local elites' family (*ibid.*). The CF is often used as an exemplar CF as it is one of the first ones in Bhutan and regarded to be among the CFs with the greatest potential to selling excess timber (i.e. expert interview: actor nr. 80).

In contrast to the cases in B2 and W, the village (B1) has no direct road connection (no drivable bridge), and agricultural products do not provide for income (field research: actor nr. 78). Though they would like to **sell excess timber** of ten trees per year, they have not yet done so till 2009 (no motorable bridge, no market, no permit, no passing hammer) (*ibid.*). So estimations for income from (sawn) timber sales for 2007 and beyond remain theoretical (c.p. pp. 13ff in Dorji and Phuntsho 2007).

One of the reasons for the villagers of **B2** to apply for a CF was to **prevent the tree theft, the extraction of other material** (i.e. stones) **and the grazing of others' cattle in their forests**. They also want to utilise the forests for their personal needs and to continue, what the IFMP project has not been able to finish, among others, planting the gaps that lack regeneration (field research: actor nr. 88). In contrary to the various experts' opinion, however, they think that the abundant lying dead wood rather hinders than supports the natural regeneration and they will therefore try to utilise these debris (*ibid.*). Selling of timber is currently no priority to them (*ibid.*).

With the creation of a CF, the current 34 households (320 people) will be able to manage 84.6 ha (approx. 2.5 ha per household) (field research: actors nr. 82, 88–89). They will be allowed to use annually on average 27.7 trees per household, according to their draft management plan (CFMP 2009), for the next 10 years (17.8 trees being excess compared to needs).

The community decided to collect a fee (on average 0.76 euros per household, year),²⁶ instead of paying for the same type of trees as a royalty to the government (on average 0.97 euros per household, year) (field research: actors nr. 82, 88–89). Hence, the plan identifies the potential **saving of on average 0.21 euros per household and year** (CFMP 2009).

This, set against the **opportunity costs of the forest management** (field research: actor nr. 88) that is now within their responsibility, could be estimated in a **balance of – 18.1 euros**²⁷ (*ibid.*). In their plan, they also mention their intention to invest 50% of the revenues back into the forest management and 25% for the community

²⁶Only those who use trees finally pay.

²⁷Assuming similar working hours as in other community forestries in this area and assuming that all the annual allowable cut is actually cut and the fees are also paid

forestry user group's management and another 25% for overall community needs (i.e. monastery, student support) (CFMP 2009).

While from an economic point of view, this seems to be unsustainable, the main **guiding interests of the community** (B2) may currently be (based on above results):

- To establish circumstances that ease the formal procedure of getting allotted needed trees (which can involve time-costly procedures)
- To be able to exclude outsiders from the use of their forests, grazing areas, etc.
- To thereby secure their own resource needs, as the annual allowable cut (except for one age-class) is satisfied now from their own forests (field research: actor nr. 88; CFMP 2009) (but this will however not enable them for generating much income from eventual future selling, as therefore the forest area is not large enough)

This is also in line with the **Bhutanese government** (Ministry of Agriculture), which finds **CF may not become too rich and is to provide for the satisfaction of basic needs**, eventually also for **some income** (i.e. expert interviews: actor nr. 97). It is also in line with the current draft forest policy (MoA 2009) that thrives on providing subsidised timber only to remote, far off and disadvantaged areas, since poor people cannot afford the timber (ibid.).

Hence, *as* CF shall replace subsidised timber from governmental reserved forests, it *shall focus on accessible areas* (roads, excess to market) (i.e. expert interviews: actors nr. 82, 90, 93, 97, 107). Again, this allows for the conclusion that CF *does not address the 'poorest' people* (in the most remote areas).

A reduced pressure on governmental reserved forests and forest management units is also in the interest of the **Ministry of Agriculture and the Bhutanese State Forests** (NRDCL)²⁸ (i.e. expert interviews: actor nr. 102). Also, as one official explained, not all communities want CF; they are sometimes pressured into meeting the goals set by the tenth 5-year plan of the government, that is, to reach 4% of forest land managed by communities, but in praxis they cannot really be forced (i.e. expert interviews: actor nr. 97). In 2009 community forestry covered 0.9% of the total forest area (21,025 ha, 8,650 households, 2.43 ha/HH) (i.e. expert interview: actor nr. 58).

When comparing the cases above, one can notice that **in W the income from non-timber forest products, also without CF, reaches up to 16% (up to 110**

²⁸NRDCL explains that rural timber extractions are not always very well coordinated. When coming back to the same lot for management after 10–15 years, one may find hardly any stock left.

euros/HH, y) (field research: actor nr. 94), while the expected income in the planned CF in B2 remains low (the balance negative) (i.e. field research: actor nr. 88). Similarly in the exemplar CF of B1, income remains minor at present (i.e. field research: actor nr. 78). If B1 would be able to sell sawn timber from ten trees annually, this would provide for a net income of 102.8 euros (per HH, y) or 29.4 euros (per villager, y), provided this amount is not needed by the community itself (c.p. pp. 13ff in Dorji and Phuntsho 2007) and lumber prices do not decrease with increased supply on the market. B1 has presently the rights to an excess of 20.9 trees (per HH, y) (blue pine, *Pinus wallichiana*), compared to their annual harvesting limit (c.p. p. 6 in *ibid.*),²⁹ while B2 would have the rights to an excess of 17.8 trees (silver fir, *Abies densa*) (CFMP 2009). Assuming a similar net income from sawn timber as in B1, B2 could get 72.6 euros (per HH, y) or 7.7 euros (per villager, y). Even such eventual income remains minor.

In 2009, the district (**dzongkhag**) of **Bumthang** listed 15 CF (1,212 ha), 5 of which are already established (328 ha). As per household, they provide 1.94–3.01 ha of community forest land (mean 2.47 ha). From these five established, only two (among these the case B1) have yet harvested any trees but only about 8% of the allowable cut since 2003. In addition to these, 92 private forests are registered in this dzongkhag (basically small, between 0.09 and 8.3 ha, only 8 are 1 ha or more). Also a Swiss man, who came in 1960s to Bhutan, owns today the ‘cheese factory’ in Jakar and owns 2.75 ha since 2008³⁰ (Dzongkhag Forest Offices (DzFO) Bumthang 2009).

In the **Dzongkhag Wangdue**, 20 CF are listed (2009), six of which are approved. Eight documented CFs amount for 612 ha, with a mean of 2.12 ha per household, ranging from 0.87 to 3.5 ha. Only one CF (established 2004) utilised some trees (0.43 trees/HH, y) and collected 0.73 euros (per HH, y) since 2004. Five CFs had no production, but a net income ranging between –1.22 and –13.08 euros (per HH, y), for the respective periods of existence (DzFO Wangdue 2009).

In the **Dzongkhag Trongsa**, 12 CF are listed (2009), six of which approved. Nine documented CFs amount for 1,868 ha, with a mean of 3.71 ha per household, ranging from 1.29 to 13.34 (the latter a purely non-timber forest products CF, bamboo and cane collection). Two CF were established already in 2004, collected so far only funds in the form of seed money or fees, equalling 2.63–3.58 euros (per HH, y). One more, established in 2007, collected an equivalent of 0.22 euros (per HH, y). They planted on mostly barren land that has still so little stock that they cannot cover their own needs (DzFO Trongsa 2009).

²⁹However, according to their management plan, the annual difference (excess) between harvesting limit and community needs is referred to as 47 trees (1.99 trees/HH, y), including 10 trees they may cut for selling timber, but they did not do so as of yet (p. 13 in CFMP of B1, 2003–2012). Dorji and Phuntsho (2007, p. 6) show that they have not hardly utilised their forests at all over the first 4 years, so the actual annual excess over this period was 502 trees per year, 20.9 trees per HH and year.

³⁰When the national cadastral survey took place, in this dzongkhag, in contrast to most others, ‘forests’ grown up on agricultural land, not used for agriculture for a minimum of 12 years, were also counted to private agricultural lands, and such ‘private forests’ were recognised up to 25 acres (about 10 ha); the rest was reverted to governmental forest. In most other dzongkhags, all of these forest lands were nationalised.

A 600-ha (13.34 ha/HH) large CF, purely based on bamboo and cane utilisation and the managing of a private nursery, made 12.28 euros (per HH, y) income from nursery selling mainly, fees and handicrafts from these plants (70% of income go to producer, 30% to the CF fund). Another two CFs, established in July 2009, have 2.6–3.0 ha (per HH) and relatively good stock, while one CF restricted itself (by-law) by not harvesting for the first 3 years, although with the intention of later selling too (ibid.).

In 2009, Trongsa 27 private forests were registered, between 0.03 and 0.7 ha (ibid.).

The current third phase of the PFMP programme in Bhutan has no own project infrastructure; it is implemented by the **Ministry of Agriculture** with support of one external consultant (from **Helvetas**) (i.e. expert interview: actor nr. 58). Thereby, 30% of the budget is channelled directly through the ministry, and 70% is governed by Helvetas. The Bhutanese government thereby shall cover 50% of the implementation costs of CF (mainly covering the wages of foresters).

In this phase, the programme supports CF in all dzongkhags, whereby **three to five CFs are promoted in 2009** in each dzongkhag (ibid.). For instance, in Trongsa in 2009/10, the number of CFs supported is planned to be from four to five CFs (PFMP), four CFs (the government of Bhutan) and an additional four, from excess budget for rural development purposes, through the Policy and Planning Division of the Ministry of Agriculture of Bhutan (field research: actor nr. 90).

5.2.1.4 The Ownership of Soil and Changes in the Socio-Economic Conditions in Bhutan

Virtually all the **forest land is owned by the government** (i.e. expert interviews: actor nr. 97). This counts also for CF, who are only allowed to manage and to sell excess timber from CF (ibid.). The only exception is a small proportion of private land, usually beyond 1 ha per household (see above). The presented cases and further data show that **in most cases, forest interventions have not brought any major changes to the local income generation from forests.**

Also, CFs not necessarily provide with more income, even if sawn timber would be sold, than the local use of governmental forests (i.e. for non-timber forest products) can provide (see above). One of the cases (W) has shown in contrast considerable income (≥ 100 euros/HH, y) from non-timber forest products in 2009 (see above), which is based on local tradition or innovation. In W and B2, forest interventions resulted in changes and stimulation of *agricultural* produce and income.

5.2.2 Cases from Nepal

Data were collected from nine community forestries (CFs) and from some other villages (field research: actors nr. 61, 62, 64, 67–70, 72–74) but only from six of the CF data in relation to income were collected as well (field research, group interviews:

actors nr. 61, 68, 69, 72–74). One of them, ‘**Udayapur 1**’ (U1), will be described in more detail (actor nr. 61). The communities from the Siraha and the Udayapur districts have been subject to interventions from **German assistance (CFDP)**,³¹ and the communities of Makwanpur received aid from the **Netherlands (BISEP-ST)**,³² whereby in every district, three communities are located.

Quantitative network analysis for CFDP identified the following actors, reaching high overall influence (>50 out of 100%): the German Gesellschaft für Technische Zusammenarbeit in Nepal (89%), District Forest Offices (67%), Federation of Community Forestry Users of Nepal (FECOFUN, 59%) and Ministry of Forests and Soil Conservation of Nepal: Department of Forests and Foreign Aid Coordination Division (both 58%).

5.2.2.1 Relevancy of Income from Forests for Farmers in Nepal

The income from forests (before expenses) for five communities after programme interventions ranged in **2009 between 0.2 and 5.5% (1.9–20 euros/HH, y)**; in one case (Siraha 2), **by the selling of timber, 18% (66.5 euros/HH, y)** was reached (field research: actors nr. 61, 68, 69, 72–74; c.p. Table 5.1). Also in one other case (not listed, Udayapur; field research: actor nr. 62), a similar absolute income was reached (72.3 euros/HH, y).

In the other cases (field research: actors nr. 61, 68, 72, 73), income is restricted to **royalty collection**; in one case, it comes only from forest grasses (field research: actor nr. 74). However, in the majority of cases after expenses and opportunity costs, net income is estimated at –1.7 to –45.0 euros (per HH/y); in one case (Siraha 2), +21 euros (per HH/y) was reached (field research: actors nr. 61, 68, 69, 72–74).

While in the three cases, from Makwanpur, most income is derived from livestock products and wages (field research: actors nr. 72–74), in Siraha in one case livestock (field research: actor nr. 69) in the other crop products (field research: actor nr. 68) provide with the majority of income, and in our case from Udayapur (U1), 60% of the income is derived from wages (cement factory) (field research: actor nr. 61).

The nine CFs are provided with highly varying areas of forest land: *0.16–3.48 ha* (per HH) (field research: actors nr. 55, 66, 77; 61, 62, 64, 68–70, 72–74). The annual allowable cut (AAC) ranges from *0.58 to 11.57 m³* (per HH) (field research: actors nr. 55, 65, 77). Hence, stock and age-class distributions vary greatly and so does the number of HHs (56–1,442 per CF) (ibid.). Given certain combination (low stock, low diameters, little land area, large population), this results in situations where the CFs *cannot even provide for*

(continued)

³¹CFDP=Churia Forest Development Program

³²BISEP-ST=Biodiversity Sector Program for Siwaliks and Terai

(continued)

the subsistence needs of the HHs (i.e. field research: actors nr. 55, 66, 77; 61, 64, 68, 70, 72–74). This is the case in most of the CFs and is reflected in that *only two of them are able to sell excess firewood or timber* (field research: actors nr. 62, 69; 55, 65). Also, it is only those two CFs that eventually also *reinvest* into the forest management (in real money and more time effort), though major parts tend to flow into *electrification, road construction, irrigation, livestock production and cultural activities* (ibid.).

5.2.2.2 Changes in Community Forestry Income: A Case from Udayapur, Nepal

Referring to our case from Udayapur (**U1**), the community consists of 800 HHs (4,527 people), sharing 402 ha (0.5 ha/HH) with a total stock of 93 or 47 m³/HH. Forty-one percent are major trees, and the AAC is 0.58 m³/HH. The CF was handed over in 1994 (field research: actors nr. 61; 55).

In 2009, the community income is derived by 60% from wages (mainly cement industry), almost 25% from crops, 15% from livestock and 0.2% from **royalties collected by the CF, equally to 1.9 euros (per HH, y)** (field research: actor nr. 61). However, after opportunity costs, the **net income is –16.3 euros (per HH, y)** (ibid.). The average total income is 812 euros (per HH, y) (ibid.), the highest compared to the other cases from Nepal and Bhutan. Most of this income is spent on food and clothing, some on education and health (ibid.).

In 1990, income from forests had still a share of 5%, crops 65% and livestock 25%, but there was no income from wages (no factory yet) (ibid.). While in absolute terms income from forests has not changed, those from wages of course but also those from crops increased, and income from livestock decreased (ibid.).

Understandably, the **income from forests has not changed much before and after the programme intervention**. Major drivers for change came from the **cement industry** (c.p. ibid.). The CF does thinning activities and controls encroachment (field research: actors nr. 61; 55). Grazing has decreased as well (ibid.). They stated to ‘plan to do some income generation for the poor, but most people got involved in the cement factory’ (field research: actor nr. 61).

The project provided three villagers with trainings (two times) and supported in administrative–technical issues. The local FECOFUN (non-governmental, non-profit) supported them as well (ibid.).

5.2.2.3 Forest Interventions and Influential Actors’ Interests in Nepal

According to quantitative estimations the **GTZ**, the **District Forest (DFO)**, the **Ministry of Forest and Soil Conservation** and **FECOFUN** gained most influence in the CFDP network (see above). **Donors** in general have **pushed for community**

or social forestry systems in Nepal (i.e. expert interviews and field research: actors nr. 26, 54–57, 65, 71, 75, 77, 110–112) and have built up influential but still rather dependent (external financing), non-governmental actors (i.e. expert interviews and field research: actors nr. 26, 57, 112).

GTZ was the first donor addressing the highly **conflicted Terai** region (i.e. expert interviews: actors nr. 56, 113), which also led to differences between the models of forest management in Terai between some DFOs and the ministry (i.e. expert interviews: actors nr. 55, 56, 77). Some experts even note an eventual cumulative impact of such grass-root mobilisation on the change from a monarchy to a republic (i.e. expert interviews: actor nr. 56).

The **Nepalese governmental actors** however still hold a key position in the formulation of forest management ‘practices’ and their circumstances (i.e. legal-administrative) (i.e. expert interviews and field research: actors nr. 55–57, 59–77; 111–115). Several types of community or people involvement (community forestry, participatory forest management, protected areas forest management and leasehold forestry) are more or less established and supported by various actors and through different donors’ interventions (i.e. expert interviews: actors nr. 54–57, 65, 71, 75, 77, 110, 112–115, 117–119, 121). However, the conflicting situation in the Terai was still unresolved in 2009, even though a new governmental policy is on the way (ibid.).

The cases described above show that *in CF, the equal distribution of options is not given*, even in the best cases, when able to sell timber; the forest area provided does not allow for any economic miracles.

The main **reasons for the government to support CF** are, besides various benefits from programmes (also the preparation of satellite based maps), to stop the encroachment and deforestation, followed by erosion of large parts of governmental owned forest, by handing over strategically important forests to groups, which then prevent others also from continuing deforestation within and beyond those forests (i.e. Udayapur; i.e. expert interviews and field research: actors nr. 55–56, 65, 75, 77, 113–115).

Though this does not always lead to economic profits for the communities yet (see above), at least it reduces environmental impacts in a number of cases (i.e. field research: actor nr. 55; own observations). Thereby the speculation is of course with the time availability of ‘cost-free’ labour from the local population.

The **forest administration** thereby ‘saves’ considerable amounts of money (if available at all) and solves the problem of restricted governmental human and technical resources (i.e. field research: actors nr. 55–56, 65, 77; own observations), being otherwise unable to solve the problem alone. Thereby a decrease of the pressure on national forests, combined with new activities/responsibilities in administering community forestry (ibid.), also provides the forest officials with more

secure future job opportunities in their profession (own interpretation), which would diminish, if forests would continue to diminish as well (ibid.).

Further, the government can also earn taxes from timber sales, and in some districts, these have reached already noteworthy levels (i.e. field research: actors nr. 55, 77, 81–82).³³ This is especially relevant, where the government has literally no capacities to undertake much utilisation of national forests (i.e. because these are over-harvested, technical equipment lacks, etc.) (i.e. field research: actors nr. 55, 77). Finally, the retained forest cover will prevent the fertile agricultural soils from erosion and silting up, which would be a major socio-economic disaster (i.e. field research and expert interviews: 55, 56, 65, 67, 75, 77, 111, 113–115).

5.2.2.4 The Ownership of Soil and Changes in the Socio-Economic Conditions in Nepal

The above cases focus on community forestry that do not hold land tenure over their forests (state), only user/management rights in regard to the biomass (i.e. expert interviews: actors nr. 56, 113). The above cases and the below expanded view show that **only limited income effects are reached**. Hence, the **government largely controls the circumstances of income generation from forestry**.

Pokharel and Byrne (2009, 2009a: pp. 4, 10) provide us with an overview about the ownership of forest land, dead wood, litter and above- and below-ground biomass for **nine types of tenure arrangements**. In government-managed forests (ca. 67% of all forest land), community forestry (ca. 21%), leasehold forestry (ca. 0.2%), religious forests (ca. 0.01%), collaborative forestry (n.d.), buffer zone community forestry (n.d.), protected areas and conservation areas (ca. 12.2%) are all on national forest land.

The soil belongs to the government, and only private forestry (ca. 0.04%) holds a right to the soil as well. Community forestry holds the right in both to the above- and below-ground biomass, leasehold forestry only in above-ground biomass and

³³In 2008, the Nepalese national treasury received from governmental forests in Udayapur district revenues equals to 1,518 euros, when at the same time the total revenue from community forests is estimated at 1,518 euros (including private forests: 4,554 euros), of which the treasury receives taxes amounting to 197 (592) euros, respectively. Hence, 28% of the treasury's income from the forest sector in Udayapur comes from private and community taxes. The district of Udayapur receives ten times the amount from governmental revenues for forestry (15,180 euros), 7.2 times the overall financial flow to the treasury (DFO Udayapur 2009).

Looking at Makwanpur district, the treasury received in 2008 from the governmental forests 12,992 euros. Private and community forestry had revenues of 26,522 euros, providing 3,978 euros in taxes to the treasury. Hence, 23.4% of the treasury's income is from private and community taxes. At the same time, the treasury pays 52,623 euros to the districts' forest sector. This is equal to four times the revenues from governmental forests and 3.1 times the overall financial flow to the treasury (DFO Makwanpur 2009).

In comparison, the revenues from national forests in Bumthang district (Bhutan) amount to 20,885 euros, 1.6 times that in Makwanpur and 13.8 times that in Udayapur.

collaborative forestry, where government and the group hold to the above-ground biomass. The right to above-ground biomass (i.e. forest management) is at least partly with communities or people in about 21–33% of the total forest area (the latter, if it is assumed, all conservation areas' forests are co-managed by communities) (ibid.).

A broad overview on **economic relevancy of CF** is given in Pokharel et al. (p. 3 in 2009b). There exist 14,439 CFs in Nepal (2008), with on average 115 HH, 85 ha and only 0.74 ha of forest per HH (c.p. 2.43 in Bhutan in 2009). Economic data on a national level are not provided. From data from three districts (ibid.) for 2008,³⁴ the average income can be calculated at 3.03 euros (per HH), while the expenditure equals 0.9 euros (where opportunity costs are not included), referring to a net income of 2.13 euros (per HH, y).

Using data from 116 CFs formed before 2000 (ibid.),³⁵ in 2008, the average income equals 4.36 euros, the expenditures 1.91 euros, and hence, the average **net income is 2.45 euros (per HH, y)**. However, in 2008, only **19.8% of the expenses were reinvestments back into forestry** (p. 9 in ibid.), and the **income from timber equalled 16.3% of the total income**, while that of non-timber forest products was 9.6%. The income from forest products in 2008 is on average 1.13 euros (per HH, y), the reinvestment to forestry 0.68 euros (per HH, y); therefore, about 60% of the forest revenues are reinvested in forestry (ibid.).

5.2.3 A Case from Honduras

The case addressed is a village from the **Francisco Morazán** district of Honduras (**FM**). Between 1992 and 2003, this village was addressed by **Finnish aid (MAFOR/PROCAFOR)**. The forest land under consideration was owned by the commune (governmental land), which provided households (families) with certain parcels for management, which could be bequeathed to the next generation (i.e. field research: actor nr. 145).

Between 1990 and 2010, major changes in sources of income were achieved. The **income from forests was increased from 5 (1990) to 60% (2010)**³⁶ (ibid.; c.p. p. 644 in Nygren 2005), and this was also a strong increase in absolute terms (field research: actor nr. 145). In the same period, the income from crops and livestock products dropped from 95 to 38.5% (in absolute terms, it remained equally important), while income from on-farm/local wages increased from 0 (in 1990) to 1.5%, respectively (in 2010) (ibid.).

³⁴The Table 5.1 (Profile of CFUGs in 2008: Sample CFUGs compared against national level; see economic aspects) in Pokharel et al. (2009b, p. 3) does not show the average annual income/expenditure, but the average income/expenditure for 2008 (c.p. with data from p. 10 in ibid.).

³⁵Here the authors draw from the Nepal Swiss Community Forestry Project.

³⁶1992: 20–30%, 1997: 50–60% (c.p. p. 644 in Nygren 2005)

The **quantitative estimations** show that the donors' consultancy (experts), working for MAFOR/PROCAFOR, gained strong overall influence (40%) in the regional project network, as did to some extent also the state forest authority (AFE-COHDEFOR; today ICF, 26%); the small landowners' organisation (FEHCAFOR: 18%); the national forest school (ESNACIFOR: 13%), regionally operating; as well as some municipalities (36% as a group). The values are comparatively low because the intervention network covered several countries and 43 actors.

The MAFOR project was established within the **state forest authority**. Forest technicians of the forest authority asked MAFOR to engage also in FM, to give support in 'social aspects'. As a result, local people were organised into cooperatives³⁷ (i.e. expert interviews and field research: actors nr. 145, 146, 149, 151).

In FM, the rural or **indigenous people** did not want to cut any trees, believing in resin products (i.e. expert interviews: actors nr. 144), and got (get) money for this work (i.e. expert interviews/field research: actors nr. 144, 145). The forest authority did not like this nor did the **lumber industry** or **forestry experts** at large (i.e. expert interviews/field research: actors nr. 144, 145, 146, 149, 151).

They view indigenous forms of resin tapping destroy timber quality and prolong 'rotation periods' (accessibility), as they have been practised for several decades, leading to 'overaged' forests (ibid.). They try to push for 'environmental friendly' modern tapping methods, practised not even for one decade, and find their allies in **municipalities**, depending to a large extent (in this case, about two-thirds) on revenues from timber sales (c.p. pp. 77–78 in Larios 2003; field research: actor nr. 145).

However, resin utilisation in FM is the largest in Honduras (30% of total production), and it provides a large proportion of households with little but continuous income, in contrast to timber sales (c.p. p. 645 in Nygren 2005).

At the time of intervention, the **forest authority** had practically no budget³⁸ and depended on money from timber selling (i.e. expert interviews/field research: actors nr. 145, 146, 149, 151). They were under pressure to have auctions and to sell the timber to sawmills, and they 'had no time to emphasise "social forestry development"' (expert interview: actor nr. 146).

A large part of the **community** (i.e. the local cooperative) was 'educated' in sustainable forest management (at least 20% of the population, c.p. p. 78 in Larios 2003), and the project succeeded in making them recognise the potential economic benefits from timber production (i.e. field research: actor nr. 145). During the project, a forest technician's **school** was built up, with more than 300 graduates until it closed after 10 years (some students continued at ESNACIFOR) (ibid.).

Before 1992, all forests (trees) belonged to the **government**, irrespective of the land tenure (also on private soil), and few **large lumber companies** had 'free' excess to felling concessions in the area (expert interviews/field research: actors nr.

³⁷In this location, a major cooperative already existed before MAFOR.

³⁸This was believed to change with the new law, the establishment of the ICF, yet in 2010 the ICF had hardly any budget (for operations) and rather faced a reduction by about 1 Mio euros.

144, 145, 146, 149, 151). The ‘Agricultural Modernization Law’ (1992) transferred the ownership of trees from the forest authority back to the municipality and addressed community participation in management (i.e. expert interviews/field research: actors nr. 144–146).

Hence, according to the municipality, the project developed a forest management plan for 14,340 ha (12,000 m³/year, 0.8 m³ and roughly 1 ha per inhabitant), including management rules for roughly a quarter of the area covered by Mexican yellow pine (*Pinus oocarpa*), while none for the mixed forests (esp. with *Quercus* spp.) (i.e. field research: actor nr. 145).

The **municipality** receives taxes from those who harvest the forest. In 2010, these taxes were at 8.1 euros/m³, of which approximately 1.7 euros were paid as administration fee to the **forest authority** (ICF), by the municipality. The municipality uses the taxes to support the local **forestry management fund**, to finance the school, roads and municipality technicians (ibid.).

In principle, the forests can be harvested by **parcel holders** themselves, by individual contractors or by local micro-entrepreneurs (ibid.). About 1% of the population work as **loggers** (c.p. p. 644 in Nygren 2005). In 2004, micro-entrepreneurs were not involved in the harvesting and trade; it was done through **nine individual contractors** (some external), who were able to pay the administration fee of 50% of the value of the harvested timber in advance to the municipality, as they got a loan from the biggest sawmill industry in Honduras in turn for supplying them the timber (ibid.).

According to the municipality (field research: actor nr. 145), initially (1990) one family/person took all the benefits from forests (sawmill owner). Now (2010), *benefits are distributed to 6 micro-entrepreneurs* (ibid.) (at the beginning of MAFOR still 12–15; c.p. p. 643 in Nygren 2005). Thirty percent of the wood extracted from parcels is today provided to these micro-entrepreneurs; *70% goes to companies in Tegucigalpa and other areas* (field research: actor nr. 145). One out of 25 inhabitants is actively involved in profit-making from timber utilisation (ibid.). Resin tapping remains, however, as an important source of income for a larger part of the population (ibid.).

At the beginning of the project (1992), small groups felled timber with manual saws and sold it to main industries (i.e. expert interviews/field research: actors nr. 145, 146). In 1997, the **project established a sawmill**, after they asked the locals, and they **formed different groups in order to run it** (ibid.). It was emphasised to have a sawmill that belongs to the locals (i.e. expert interviews: actor nr. 146). A sawmill was established, where members from different groups, undertaking charcoal, turpentine, firewood and timber businesses, were shareholders (ibid.).

According to governmental officials, this joint endeavour failed, also because some **external people** (i.e. from Tegucigalpa) obtained leading management

positions (ibid.). Such ‘coyote’ (people who get their income from trade, not production) and other experts drew to the locals a picture of an economic miracle (with \$1 investment, you may get 500% return), to gain attention also from such locals not interested to invest their money before (ibid.).

Another failure was that the project brought outsiders to manage the sawmill technically (i.e. expert interviews: actor nr. 146). An *expert from the donor country* was set to manage it technically (*operator*). The sawmill itself was imported from the donor country, but spare parts were not available. In fact, the *operator owned the sawmill and leased it to the established society*. This was made possible through an arrangement with the president of the society and led to an exclusion of other people from decision-making. After a while, they did not allow AFE-COHDEFOR staff to attend the meetings of the society. The leasing was too expensive for the society, so it decided to buy the sawmill, sold at a high price. The operator however, after selling the mill (through a forest authorities’ auction), insisted the society had to hire an external operator from Siguatepeque, who in 2010 still works in the village as timber trader but has resold the sawmill, due to economic problems.³⁹ *Around 450 local shareholders thereby lost their money* (ibid.).

Corruption in the administration and a **drop in market prices** led to minor mill activity and a debt of 85,000 euros (in 2001) (c.p. p. 78 in Larios 2003; p. 648 in Nygren 2005). The staff was untrained and had no administrative skills, so it failed (so a lumber industry’s representative, expert interview: actor nr. 153). Its board of directors sometimes sold wood to other mills because they got better prices (ibid.).

5.2.4 A Case from Nicaragua

The case addressed indigenous (Miskito)⁴⁰ villages of the RAAN province (Northern Autonomous Atlantic Region) of Nicaragua. Between 1999 and 2002, these villages were addressed by **Austrian aid** (co-financed non-governmental donor country project).

³⁹The municipality holds a valid forest management plan and an environmental permit for a local sawmill. Such permits are valuable, since they are (time-)costly to obtain and it is in the interest of big industries to get a hold on one (c.p. p. 648 in Nygren 2005).

⁴⁰For more information on historical and cultural background of the Miskito, c.p. Howard (1993), Nietschmann (1973), Hale (1994).

The land under consideration is owned by a group of **ten indigenous communities**⁴¹ (private), and one of the project's aims was to get a demarcation process done, which however was not entirely finished, since over some landmarks, there still existed conflict (c.p. HORIZONT 3000: 2002).

Quantitative network analysis identified the following actors, holding high overall influence: FADCANIC (Fundacion para la Autonomia y el Desarrollo de la Costa Atlántica de Nicaragua, a local NGO/NPO) (89%) and the Consejo de Ancianos/Council of Elders (of the various villages and of the area of the '10 Comunidades') (max. 71%). The Austrian NGO/NPO ÖED (Österreichischer Entwicklungsdienst⁴²) co-financed the project. The Austrian non-governmental and governmental donors did not (except financially). FADCANIC was already in 1993/1994 involved in reforestation projects and gained experience (funded by Sweden)⁴³ (expert interviews: actors nr. 135, 136).

In 1910, the **communities** satisfied their subsistence needs from agricultural and sea products, wild fruits, timber and firewood from forests (Caribbean pine, *Pinus caribaea*). After the Second World War (during the 1950s/1960s), **companies from the United States** cleared the area and uprooted the stumps (expert interviews/field research: actors nr. 127, 131, 136, 137, 140, 142, 133, 287; c.p. also pp. 68, 75, 119 in Barraclough and Ghimire 1995). Some local people worked for the companies and earned wages (from what they obtained coffee, sugar, cloth, shoes) as well as income from selling sea products mainly, while the abundance of forest products was very reduced (expert interviews/field research: actors nr. 131, 136, 137, 140–142).

In the 1980s, **large forest fires** occurred, and governmental fire protection measures (brigades, towers) could not prevent large forest destruction (ibid.). As a result of **civil wars** (Sandinista revolution 1974–1979; United States supported counter revolution, 1981–1990), the **youth** lost the respect for the **elders** and the **women**, who play(ed) a crucial role for the reproduction of traditional knowledge (ibid.). The project started in the 1990s with an integrated set of activities, including on forestry (i.e. expert interviews: actors nr. 131, 136, 287). **Hurricanes** Felix and Mitch destroyed the coastal area in 1997 and 1998, respectively (ibid.).

Between 1990 and 2010, the **income from non-timber forest products** (forest fruits) **was decreased from 12 (1990) to 9% (2010)** and also decreased in absolute terms (field research: actors nr. 137, 140, 141; 136). Since there are principally no forests left, there is no income from timber or firewood in this period (ibid.). In the same period, the income from domesticated fruits dropped strongly from 18 to 6%, and sea products gained some more importance, from 40 to 48%, as did income from off-farm wages, from 30 (in 1990) to 37%, respectively (in 2010) (ibid.).

⁴¹Initially 10, today 21 communities, but the name of the institution and its Council of Elders is still called '10 communities' ('10 comunidades')

⁴²The Austrian Ministry of Foreign Affairs moved the project management from ADC to ÖED, an NGO/NPO since 2001 part of HORIZONT 3000.

⁴³Other supporters in forestry in that region were/are UNDP, IUCN (ICUN), IADB and FAO.

While the decreases are mainly due to the impact of hurricane Felix, the non-change in income from timber or firewood is due to various (historical) project-external and local factors (ibid.).

In the course of the Austrian project intervention, **470 ha of land was reforested**, while during the same time, 25 large forest **fires destroyed 602 ha of forest(ed) land**. Due to lack in technical equipment, 79 people in ten communities were not able to secure fire protection (c.p. HORIZONT 3000: 2002). Fires are set in the interest of **local actors** (i.e. traditional subsistence and culture) as well as **external actors** (i.e. conflicts, economical interests), but without control they spread easily (i.e. field research/expert interviews: actors nr. 135–137, 140, 141).

The success of the project was, hence, also limited due to one tradition that is held on by the **Miskito**: the **burning of patches**, to gain fresh grass for livestock and suitable land for vegetables (ibid., own observations). However, today most of the forest is not dense anymore. That is why fires easily spread to huge areas of land. Actually, the area is hardly covered by trees at all, except some pine cultivations, grown to a couple of metres height, if they have not died off due to one or more fire events, and some of the older trees have remained, if not broken by the recent hurricane Felix (ibid., own observations).

The support from **police** against stealing and fire setting is hardly existent, due to the fact that communities would be requested to pay the police for petrol and food in order to even get them to the place of crime. The **provincial and its capital's governments** are reluctant to support the communities from their funds. From a workshop by the **forest authority** (INAFOR), they received four back-carried water pumps, but yet without a vehicle, they cannot effectively fight the fire (ibid.).

The project also aimed at preparing a forest management plan, maps and inventories, which could not be realised due to inter-communal problems (conflicts over finalisation of land demarcation). Domesticated fruit trees and coconut palms were planted. The initial 'communal gardens' approach was changed for such of 'individual gardens'. Five hundred varieties of Icacó (*Chrysobalanus icaco*) and other domesticated fruit trees were planted to protect fluvial topography, the river being also a major water supply for the provincial capital. A furniture-producing carpentry was to be established as well, and all technical equipment was delivered, but due to a lack of three-phase electric power, it could not start (c.p. HORIZONT 3000: 2002; i.e. expert interviews: actors nr. 131, 136).

The project also faced difficulties, because know-how had to be gained from **external experts** and the project could not take the interdependence of their activities from the **district and national governmental and political dimensions** sufficiently into account. In addition, a change of the director of FADCANIC resulted in the exchange of the personnel and a loss in organisational know-how of the implementing organisation in the project's end phase (c.p. HORIZONT 3000: 2002; expert interviews: actors nr. 131, 287). The **Austrian NGO/NPOs** lacked expertise and experience in forestry, and the local governmental frame to support their activities was lacking (expert interviews: actors nr. 131, 287).

In 1987 the **RAAN province** was recognised, at least formally, in regard to its organisational form and language. In 2002 the **indigenous communities gained**

the right on their territories. They got land rights and had to be given land titles, governed by **Councils of Elders as organisational forms** (ibid.).

The **mestizos** (people of mixed European and Latin American ancestry), who settled in the area and were cattle farmers, deforesting large forest areas, were cast out (ibid.). The problems arising were not addressed sufficiently by **NGO/NPOs**, who focused on support and education of indigenous communities but did not work with mestizos (ibid.). The mestizo had the option to either lease the land or to go, but according to the law, if they go, a compensation had to be paid. Unfortunately, the law did not specify who had to pay a compensation, so the mestizo demanded a compensation for their work in clearing the forests and producing arable land, while the indigenous communities demanded the same, from them for destroying the forests (ibid.).

Today the Mayagna⁴⁴ and **Miskito have received their land titles**, either for a single or for a combination of communities. In our case, a group of 10 communities was established (today consisting of 21 communities, but the name remains the same). They must not sell their lands and cannot take a hypothecary credit on these lands. Otherwise, many indigenous people would have sold their lands already, experts claim (i.e. expert interviews: actors nr. 127, 131, 135).

After hurricane Felix, the **government** forbids the communities to sell 'their' timber; they should use it for own needs (house construction), when at the same time trying to sell the timber themselves (i.e. expert interviews: actors nr. 131, 136). According to an Austrian NGO/NPO (expert interviews: actor nr. 131), among others, the **Austrian Development Agency** (ADA) has tried to involve Austrian enterprises to produce pellets for export from the calamity timber, negotiating with the forest authorities. Though this has not been implemented, today the wood is utilised, and some experts suspected this to be in close connection to major **financial support from Venezuela** (i.e. expert interviews: actors nr. 131, 136).

Indigenous communities have, however, also sold standing timber, for example, in the 'Cayos Perlas dispute', an indigenous leader sold timber to a Greek organisation, which was not approved of by the community at large and led to killings (i.e. expert interviews: actor nr. 131). Similar occurrences happened in the Miskito territories, when **Sindicos** (communities' external affairs leaders) got corrupted and spent the money for themselves (i.e. expert interviews: actors nr. 136, 140).

Local experts and lawyers report as well that **political and economical influential elites misuse the legal protection of indigenous lands** in a way, offering them an opportunity to bypass forest law (i.e. expert interviews: actor nr. 142). They lease forest lands from indigenous communities, use fires and clear forests (in a non-indigenous way) for cattle pastures and sell the timber, being at the same time protected by the indigenous rights of clearing forests and using fires, protecting their activities, otherwise being in conflict with forest law (ibid.).

⁴⁴A documentation on ARTE (06.06.2008, Nicaragua – Der Wald der Mayagna) recalls, when 1996 the government of Nicaragua sold 90,000 ha of forests on Mayagna land to a Korean forest company.

5.2.5 *Cases from Uganda and Kenya*

The cases address **farmer groups, cooperatives and individual smallholders** in Uganda (Masaka: M1, Sembabule: S1, S2) and Kenya (Kisumu: K1, K2; Kitale: K3) (field research: actors nr. 202–205; 199; 200; 229–234, 235; 237–243, 236; 219–222). Since 1983, the **Swedish Vi-Agroforestry** (Vi-skogen), a non-governmental, non-profit organisation, works in E-Africa with increasing Swedish governmental aid support (co-financed non-governmental donor country project) (i.e. expert interviews: actors nr. 44, 45, 176, 188, 195, 208, 223, 210, 228). In 2006 Vi-Agroforestry and the **Swedish Cooperative Centre** (SCC) merged and worked on the Lake Victoria Development Programme (2006–2008) and the Regional Environment and Sustainable Agricultural Productivity Programme (RESAPP, 2009–2011) (*ibid.*).

Quantitative estimations show that the non-governmental and non-profit organisations Vi-Agroforestry (89%) and SCC (50%), the Swedish International Development Agency (SIDA, Lake Victoria Initiative) (83%), the Kenyan Ministry of Agriculture (esp. through its NALEP programme⁴⁵) (67%), the World Agroforestry Centre (ICRAF, including the RELMA⁴⁶) (44%) and the Kenyan Forest Action Network (local NGO/NPO) (22%) were among the most influential stakeholders in the project network.

The **land** under consideration was **owned by individual households** (smallholders); hence, it was private (field research: actors nr. 202–205; 199; 200; 229–234, 235; 237–243, 236; 219–222). From 1986 to 1997 (in Kenya), the project worked with its own **central nurseries** (i.e. expert interviews: actors nr. 44, 45, 195, 196, 208, 223, 228). Around 40 nurseries with an annual production of more than 100,000 seedlings, each provided farmers with seedlings for planting (annually around five million seedlings) (*ibid.*).

From 1997, this approach changed towards an **agroforestry approach** (final adaptation 2007), where every farmer had to establish his/her own small nursery (or join a group nursery) and produce at least 20 seedlings annually (*ibid.*). Also direct seeding (sowing of tree seeds) was practised (*ibid.*). They focused on the establishment of farmer groups and organisations (*ibid.*).

This change in approach was also due to pressure from the **Swedish International Development Agency** (SIDA), who in the meantime provided a considerable co-financing effort for the Lake Victoria Region. Additionally, discrepancies with **local governmental actors (forest authorities)** arose, who claimed that the project would ruin the production and marketing of seedlings from governmental nurseries, as the project gave seedlings free of charge to the farmers (i.e. expert interviews: actors nr. 44, 45, 49, 188, 208, 210, 223).

However, the governmental nurseries neither supplied the farmers with the same species of trees, as they were primarily producing economically feasible, exotic plantation species (i.e. eucalyptus and pine), nor did they have sufficient personnel

⁴⁵NALEP=National Agriculture and Livestock Extension Programme

⁴⁶RELMA=Regional Land Management Unit

and vehicle capacities to provide services in the areas covered by the project (i.e. expert interviews: actor nr. 223).

Nevertheless, **SIDA** wanted Vi-Agroforestry to let farmers pay, which an NGO however could not accept, receiving major funding from individuals who paid for the trees to be planted already, so they could not ask farmers to pay 'again' (i.e. expert interviews: actors nr. 44, 45, 49, 208, 210, 223, 228; c.p. p. 9 in Johansson et al. 2010; pp. 14, 56, 59, 68 in Johansson and Nylund 2008).

Finally, this, however, led to a **change in the approach** of Vi-Agroforestry **and in the support to geographic areas** within the SIDA mandate (Lake Victoria) (i.e. expert interviews: actors nr. 44, 45, 49, 208, 210, 223, 228), but due to individual fundraising of Vi-Agroforestry, they could also continue in other areas (i.e. West Pokot) (i.e. expert interviews: actors nr. 208, 210, 223).

Vi/SCC follows today an approach of intensive extension towards groups for 3 years, followed by 3 years of less intensive support and then exit from the programme (i.e. expert interviews: actor nr. 195). The aim of **SIDA** was to strengthen local institutions and not to compete with governmental systems but to complement them (i.e. expert interviews: actors nr. 44, 45, 195, 223).

The change in approaches led to a reduction of staff. For instance, today (2010), 71 people work in Kitale office, while in 1986, more than 400 were employed, with no loss in effectiveness (i.e. expert interviews: actor nr. 223). The staff, however, are and were in its **majority local staff** (ibid.), and with a change from central nurseries and planting to extension services and building up individual services and nurseries, some reduction in quality and quantity of seedlings took place (i.e. expert interviews: actors nr. 44, 45, 223).

Vi-Agroforestry started as a small, privately funded organisation, but with increased funding and increased influence, they had to **fit their activities into the wider policy framework** (esp. SIDA's and government's) (ibid.). Vi/SCC has memorandums of understanding with governmental institutions and has to share their planning and their reports with them (ibid.).

In the context of RESAPP, **SIDA** also pushed them to work through **cooperatives**, but often no such cooperatives existed in Kenya (legal entities, to whom applies the cooperative act), but there existed some farmer groups and other 'social' groups (registered as community-based organisation, at the Ministry of Culture and Social Services, but no legal entities and non-registered, informal ones). These groups functioned as entry points for the activities (i.e. expert interviews/field research: actors nr. 223, 235).

In contrast to Uganda, in Kenya, cooperative movements collapsed in the 1980s, so working with (formal) groups did not always work well in Kenya. Cooperatives are often associated with coffee that did not work so well in Kenya (1970s–1980s). Leadership was often corrupt, and people lost money. **Vi/SCC therefore encourages the formation of farmer groups, bigger umbrella organisations or registered cooperatives** (i.e. expert interviews: actors nr. 223).

Presently also two pilot projects on carbon sequestration (REDD) are done in Kisumu (Kenya) and Kagera (Tanzania). The **carbon fund** (World Bank, carbon buyer) could pay Vi/SCC every 3 years, for the carbon sequestered, by the trees, planted by farmers. Currently (2010), the estimations lie at US \$250 per hectare and

year (US \$3/tCO₂). This would mostly (40–50%) be gained from woodlots, less from boundary planting, intercropping, homesteads and fruit trees (expert interviews: actors nr. 195, 223).

However, **only better-off farmers can afford to plant woodlots** (ibid.; own observations). Vi/SCC however does not make any promises to the farmers, as to the eventual monetary benefits (ibid.). They see it as an additional financial source to strengthen their current activities in supporting agroforestry, that being the benefits for the farmers, and continue to argue for reached soil improvement, increase of agricultural production and income (ibid.).

Cases from **Kenya (K1–K3)** show that there occurred major changes in the **income from forests and trees** (field research: actors nr. 219–222; 229–234, 234; 237–243, 236).

In **K1**, the income increased **from 0 (1987) to up to 35% (2010)** for an average household as well as in absolute terms (**223 euros in 2010**) (field research: actors nr. 219–222). Today 15% of the income is derived from firewood and some timber selling from private gardens, yards and fields, and up to 20%, the selling of tree seedlings from private nurseries contributes to the income (ibid.). Agricultural income increased too (i.e. improved livestock feeding and soil nutrition), when at the same time off-farm wages (50% of income in 1987, from work in estates) did not play any role in 2010 (ibid.).

Formerly, in the area, mainly coffee, corn and maize were produced, in the estates of European settlers, but after independence, the Kenyan government bought the land (at a comparatively small price) from the settlers and people obtained shares so that today an umbrella company exists, held by individual shareholders and separated into village areas, with their own administration, K1 being one of them (field research: actors nr. 219–222; 223).

In **K2** the income from trees increased **from 3 (2003) to 15% (2010)**, also in absolute terms, mainly from selling firewood and seedlings (field research: actors nr. 229–234; 235). In **K3**, it increased slightly from **12 (2006) to 16% (2010)**, corresponding to an increase in firewood and seedlings but also a decline in non-timber forest products, such as indigenous drugs (i.e. herbs for livestock) and wild fruits (i.e. mapera, a wild pear and guava) (field research: actors nr. 237–243; 236).

In both cases (K2, K3), the relevancy of income from wages declined, and the income from crops increased (field research: actors nr. 229–243). While in K3 the income from livestock products remains constant, in K2 it dropped considerably (due to droughts) (ibid.). In absolute terms, the **average annual income from trees is estimated at 22.5 (K3) and 54 (K2) euros per household**; however, after expenses and opportunity costs, the balance is –39.7 and –37 euros, respectively (ibid.).

In 2010, however, in K3 only 100 households (about 7%) hold an individual nursery (the project running there since 2006) (field research: actors nr. 237–243; 236, 228). In K1, where the programme phased out in 2005 with 15 households holding nurseries, in 2010 only 10 households (about 2%) do so, while until 1996 all households were supplied from the projects' central nursery (field research: actors nr. 219–222; 223).

The governmental nursery could not satisfy their needs and even today promotes only exotic species (i.e. Mexican cypress/*Cupressus lusitanica*, eucalyptus/*Eucalyptus* spp., Caribbean pine/*Pinus caribaea*) (ibid.).

While some of the remaining household nurseries gain *annually up to 127 euros from selling seedlings* (i.e. the farmer bought a motorbike from that), others do less well or may only produce for their own needs, mainly due to *water limitations and material costs* (i.e. for seeds, tubes) (ibid.). So, for instance, the former group leader has removed the trees for a fishpond ‘trial’ (ibid.; own observation).

In **K1** Vi-Agroforestry also engaged for some time in establishing boreholes to tackle water restrictions, importing drilling machines and pumps from **Sweden** (i.e. expert interviews: actor nr. 223). But the regulations for water drilling were very strict, so the project could not engage further in it (ibid.). From the two boreholes established in this location, only one still runs (ibid.; own observation). While in one case the corrupt **community leader** removed the pump and sold it, in the other the community at large succeeded to keep the borehole maintained by the community (central bore whole) (field research: actors nr. 219–222; 223).

In this latter case, the *community appointed a caretaker*, who collects 1 Kenyan Shilling per 20 L of water from every user (field research: actors nr. 219). On a good day, he collects 150 Shillings (0.22 euros), from which he *receives about one-third (0.07 euros)*, for standing there *daily* from 6:30 am to the evening (ibid.).

Trees and shrubs planted are fruit trees, fodder trees or bushes, trees for soil improvement through intercropping and trees for firewood and timber production. Such include, for instance, *Grevillea robusta* (silk oak; timber; native: Australia), *Markhamia lutea* (markhamia; a.o. timber, firewood; native species), *Moringa oleifera* (moringa; medical use, bee-forage, vegetable (leaves), water purification (seeds), soil improvement; native: Himalaya), *Sesbania sesban* (common sesban; a.o. firewood, fodder (leaves), soil improvement; native species), *Casuarina cunninghamiana* (river she-oak; timber, firewood; native: Australia), *Gliricidia sepium* (gliricidia; a.o. fodder, soil improvement; native: North-/Central America), *Cordia africana* (Sudan teak; a.o. timber; native species), *Croton* spp. (croton species, multiple use, native) and fruit trees such as mango, papaya, avocado and white supporter. Other native trees, like *Ficus* spp. (fig trees) or *Adansonia digitata* (baobab), were often cut excessively in the past. *Markhamia lutea* used to be there in crop fields (maize, sweet potato, cassava), and *Kigelia pinnata* (sausage tree) and

Sesbania sesban used to be along rivers. Ironically, fig trees were cut, because of shade (agriculture), now they do not cut it because of shade (humans, cattle) (field research: actors nr. 223; 219–222).

In **K3**, in the past, the **government moved people into a settlement scheme** mainly for the production and supply of sugar cane to a nearby industry (field research: actors nr. 237–243; 236, 228). A household produced about 8 ha sugar cane but was only allowed to produce on 1 ha at maximum, for self-subsistence (ibid.). Settlement schemes, loss of tree species and the narrowed agricultural activity resulted in considerable loss of local know-how and capacities (ibid.). Here the project tries to diversify local smallholders' production and marketing opportunities (field research: actor nr. 228). Presently, **K3** is seen by the project as the most successful location in the Kisumu region (ibid.), but separate examples show how the results can vary between different single households.

In one of six *separately visited households* in **K3**, they planted *Sesbania sesban* for firewood production and soil fertility, making coppice after first cut. Three harvests were done in 4 years, providing with 15 euros income each. The trees are planted in lines between tomatoes (on 0.25 acres), which provide with 75 euros (field research: actor nr. 238). *Another* farmer produces watermelon on 0.2 acres, with 64 euros net income, having little trees planted so far (field research: actor nr. 240).

This can be compared to a *household so far not participating*, consisting of a 25-year-old mother of three children practising some agricultural activities and her husband working in the sugar cane company, only rarely at home. They earn 6 euros annually from selling maize and vegetables and 9 euros a months from the husbands' wages. While the wife would like to engage in tree planting, the husband does not allow that, as he has no 'relation' to trees. She was however allowed to plant a few trees next to the house, for firewood and timber (a.o. *Grevillea robusta*) (field research: actor nr. 243).

The cases from **Uganda (M1, S1, S2)** show that the **income from forests and trees** reaches **high shares** but **in some cases also decreased** (field research: actors nr. 202–205; 199, 200). In Uganda, the project started in 1992 (with tree planting), in different districts (i.e. field research: actor nr. 195). Given the size of individual land holdings between 0.2 and 2 ha, farmers were promoted to establish farmer groups and community-based organisations, feeding into networks of regional farmer groups and national farmer organisations (ibid.).

In the cooperative **M1**, the project started the support in 1992 and phased out in 2008 (field research: actors nr. 202–205; 195). In 2007, the cooperative was found, before it was not a legal entity (ibid.). While 80% of the income in 1992 came from selling firewood, charcoal and timber, this was reduced to 32% by 2010 (hardly any from timber), reflecting also a strong absolute decrease in income

(field research: actors nr. 202–205). In the same period, income from the selling of seedlings (at low prices to members) increased from none to 3% (ibid.).

The total average **income from forests and trees in 2010** was therefore **35% (250 euros/HH, y)**, net income (after expenses and opportunity costs) approximately 210 euros (ibid.). The income from wood products was replaced by an increase in income from livestock products (mainly milk, eggs) from 0 (1992) to 50% (2010) as well as from crops, vegetables and fruits (from 0 to 5%) (ibid.). Thereby also the importance of wages (off-farm) was reduced (ibid.).

In the **cooperative of S2**, the project support started in 2009 (field research: actors nr. 195, 196, 200). In 2010 the **income from forests and trees was estimated at up to 28%** (143 euros/HH, y) but restricted to some HHs, (also previously) collecting medical plants (field research: actor nr. 200). The tree planting has not yet yielded any income, but the expenses and opportunity costs were estimated at 41.8 euros (per HH, y) (ibid.). Fifty-six percent of the income was derived from crop production and trade (i.e. tomatoes), 14% from trade with livestock (i.e. goats) and silver fish (ibid.). All members own their own land, but they have no legal documents (ibid.).

Vi/SCC supports farmers of **S1** since 2009 (field research: actors nr. 195–199). The district itself only got **governmental support in forestry** since 2006 (district forest office) and reforested 682 ha since then (planted: pine, eucalyptus; naturally: acacia) (field research: actors nr. 197, 198). Currently (2010), the district has an annual operational budget of 7,500 euros (for forestry) (field research: actor nr. 197). There are no revenues in return yet; most of the income stays untaxed and is not controlled (ibid.). In areas with sparse population, illegal felling remains unnoticed (i.e. by cattle grazers or outsiders, who cut and sell charcoal) and certain areas one (forest officers) cannot risk to go to (*also* due to wild animals and only motorcycles for transport) (ibid.). In contrast to inventory maps, in the field you will find no forests (ibid.). Also here, the district forest office needs to pay the **police or army** daily allowances, lunch, etc., to do patrols, but they do not have enough money to do so (ibid.).

The **district farmer association of S1** gained in 2009 an income of **4.8 euros per household, from selling tree seedlings** (those jointly raised with Vi/SCC are not sold) (field research: actors nr. 199). Reduced by the membership fees, this would equal a net income of 4.4 euros per HH, on average (ibid.). The main source of income (75%) however comes from selling coffee seedlings (ibid.).

5.2.6 Cases from Tanzania

The cases from Tanzania **address four villages in the East Usambaras** (locations **T1, T2**) (field research: actors nr. 183, 185).⁴⁷ They describe the **Finnish donor** interventions from the 1970s/1980s and respectively later interventions by the

⁴⁷Annex 3 describes the cases of Tanzania as an interest spiral, after Prittwitz (1990).

IUCN (EUCADEP/EUCDP, 1987–1997) and by **Finnish** aid (EUCFP) that in its third phase was called **EUCAMP**, taking up the former IUCN project (with Finnish and EC funds), together from 1990 to 2002 (some disbursements until 2005).⁴⁸

Also UNDP (through GEF) and the World Bank funded programmes (through IDA and GEF mainly; FRMP 1992–1999, TFCMP and EAFCMP 2002–2009), establishing the EAMCEF. After amendments in 2007, the **World Bank** financed also the implementation of the Derema Corridor Resettlement Action Plan (c.p. pp. 5–6, Annex 7 in World Bank 2010). Recently also the **World Wildlife Fund Finland and Tanzania** together with the **Tanzanian Forest Conservation Group and WWF/TFCG** implement activities in this area (EUFLRP, co-funded by the Finnish government), for instance, the supporting of village forest reserves (c.p. Sylvander 2010).⁴⁹

Income estimations for 2010 show that crops, vegetables and especially spices are the most important source of income in all the villages, amounting to, in **T1** and **T2**, 87 and 60%, respectively, while income coming from livestock products equals 10 and 6%, respectively (field research: actors nr. 183, 185). **Income from forests** (some timber, firewood, proportion from national park fee) **amounts to 3 and 32%, respectively**, in the former increasing and in the latter strongly decreasing in absolute terms (ibid.). **In T2, this refers to 114.3 euros (per HH, y) derived from forests**, and after expenses and opportunity costs, the net income amounts to approximately 100 euros (ibid.).

According to **quantitative analysis**, done for the EUCFP/EUCAMP interventions, the donors' consultancies (max. 51%) and the forest authorities on national (Forestry and Beekeeping Division (FBD) of Tanzania Ministry of Tourism and Natural Resources, 66%) and regional (Tanga Catchment Forest Office, of the FBD, 60%) levels have been among the most influential stakeholders (overall influence). In some aspects (i.e. forest information), the University of Dar es Salaam and Frontier Tanzania (local non-governmental, non-profit organisation), as well as the established Amani Nature Reserve and (i.e. financing) the Ministry of Foreign Affairs of Finland, belong to rather influential stakeholders.

5.2.6.1 Modernisation Projects: Timber, Coffee and Tea

Initially, in the 1970s/1980s, modernisation projects were supported in this area. **Finnish aid supported the Sikh sawmills** (semi-governmental company, later privately owned by Indians), which also cleared land for tea and coffee production,

⁴⁸**EUCADEP**=East Usambara Conservation and Agricultural Development Project. **EUCDP**=East Usambara Conservation and Development Project. **EUCFP**=East Usambara Catchment Forest Project. **EUCAMP**=East Usambara Conservation Area Management Programme

⁴⁹**FRMP**=Forest Resources Management Program. **TFCMP**=Tanzanian Forest Conservation and Management Project. **EAFCMP**=Eastern ARC Forest Conservation and Management Project. **EAMCEF**=Eastern ARC Mountains Conservation Endowment Fund. **EUFLRP**=East Usambara Forest Landscape Restoration Project

supported by German aid (i.e. Karamjee tea company, owned by Indians)⁵⁰ (i.e. expert interviews/field research: actors nr. 35, 37, 171–175, 179–186).

During this time, that the Finnish people supported the Sikh sawmills, the **local people** never saw any concern by this company (Sikh sawmills) for planting and regeneration as much as they saw for exploitation and utilisation (i.e. field research: actors nr. 183, 185). The villagers were never consulted, and especially local Shambaa tribes could not conform to such exploitations, while certainly, some local but also external people benefited from wage work as timber cutters (i.e. field research: actors nr. 183–185). Some farmers planted cardamom and later maize in the opened areas (ibid. and own observations; c.p. p. 61 in White 2003).

Today many of the areas are utilised for maize production, often underneath teak (*Tectona grandis*) plantations (own observations). As can be observed, still today, in many areas, the forest openings were occupied by and led to a spread of invasive umbrella trees (*Maesopsis eminii*), which have been used in plantations already since the 1960s, for export to India and may gain again importance as artificial carbon sinks (field research: actors nr. 184, 173; own observations).

Initially the **Tanzanian government** saw revenue opportunities from the harvesting of gazetted reserves (i.e. expert interviews/field research: actors nr. 35, 171–175, 179–186). The forests were gazetted though a long time ago (partly already by the Germans, from 1909 and from 1940s by the Tanganyika government) (i.e. field research: actors nr. 184, 173). The area got degraded because it was in the interest of the government to get funds (i.e. field research: actor nr. 184).

The responsible ministry engaged **Jaakko Pöyry** in overseeing the activities, but the replanting never took place (ibid.). The **Tanzanian Wood Industries Cooperation (TWICO) and Sikh sawmills**, those days a semi-governmental subsidiary of TWICO, never did any replanting (i.e. field research: actors nr. 179, 184). The **forest department** failed to ensure good management, being mainly interested in the revenues and thereby forgetting the consequences (i.e. field research: actor nr. 184).

The Sikh sawmills were **supplied with Finnish machinery** (i.e. companies like INFOR and Lahden Rautateollisuus OY, both 1979)⁵¹ (a.o. field research: actor nr. 179, own observations). Finns had a commercial interest, and Sikh sawmills intended to export to Japan, India and Italy (Jaakko Pöyry had no interest in that), so for the meanwhile private successors (**Ply and Panel (T) Ltd.**) (ibid.).

During nationalisation, economy was good (1967–1984/1986), they recall (ibid.), and more people were employed (about 300), so revenues were very little for the state (ibid.). Sikh sawmills did not replant the logged areas, and they were sold then to Masco sawmills, which had ‘no connection to conservation’ either (ibid.).

⁵⁰Before independence, Indians had much more power in the area and even moved out people from the village lands. Also today, tea plays an important role, though the quality is not the best and companies, like the East Usambara Tea Company, work in the area (interviews at villages).

⁵¹But also others: Thomas Robinson & Son Ltd., England; Becker and Van Hüllen

Today, the plywood mill has a production of 1,000 m³ (half of the capacity) and employs 30 permanent and 50 occasional workers (at 2.14 euros per day) (ibid.). In 2009/2010, there was for 1 year no production at all, and just 3 weeks before the field visit to the mill (end of July 2010), the first logs came in again (ibid.). When logs are lacking and production goes down, workers go home again (ibid.). The owners make ‘normally’ losses, as there are currently no export markets and the local ones yield low prices (they produce doors) (ibid.). The mills’ representatives suggest a 10% tax from plantation utilisation that should be reinvested for reforestation (ibid.).

According to villagers, a shift in power relation and decision-making occurred during the time of harvesting, when the **districts enforced decisions on villages**, the latter having no power and no institutions (i.e. field research: actors nr. 183, 185). This proves to be consistent, as the Local Government Act No. 7 (1982) re-established the power of district councils. There was no opportunity for the villages to say whether they liked these activities or not, so harvesting took place in protected, gazetted areas (ibid.). If that exploitation had not been stopped, there would be no forests left today, so local people, governmental officials and environmental organisations maintain (i.e. field research: actors nr. 174, 175, 183–186). But how was the exploitation stopped and policy turned around?

Approximately 30% of the forests of East Usambara have been deforested since the 1970s (i.e. field research: actor nr. 184). The exploitation did have consequences such as the local climate being drastically changed by the open spaces created and the ‘good, old trees’ disappeared and heavy machineries affected the soils, according to the locals and conservation officials (i.e. field research: actors nr. 183–185).

The Finnish consultancy to the project, **Jaakko Pöyry**, suggested that the Sikh sawmills could harvest the forest in the watersheds five times over, but **Norway** funded a separate study through **IUCN** (as they did not want to oppose the Finns), revealing inaccurate inventory results and other restrictions (a.o. expert interviews: actor nr. 173; c.p. esp. pp. 1–28, 45–56 in Hamilton and Bensted-Smith 1989⁵²).

The results of the IUCN study were reported to **FinnIDA** (then Finnish International Development Agency), where after the head of FinnIDA left his job (i.e. expert interviews: actor nr. 173). However, in Tanzania, the then **director of forestry** did not want to stop the logging activities (ibid.). After a highly reputed **Swedish botanist couple** directly addressed the **Tanzanian president**, the activities were stopped (ibid.).

The government imposed national logging bans (1986, 1991, 1994) (i.e. field research: actors nr. 171–173, 179, 182). Also a by then unemployed **Finnish biologist** organised local protest in Finland (i.e. expert interviews: actor nr. 173). With such pressure from international epistemic scientific and conservationist communities, a new era of intervention found its beginnings (ibid.).

⁵²The authors provide us also with a substantial overview on the colonial history.

5.2.6.2 The First Steps of the Conservationists' Era: How to Get the Locals to Believe and Accept the Turn-Around?

With the **complaints by the international community**, the constraints to biodiversity, water and subsequent energy generation as well as agriculture in the region at large, the Finnish donor was 'forced' or realised the duty to bring back the area 'into its normal state' (i.e. expert interviews/field research: actors nr. 184; 35, 29, 33, 180). Finnish and Norwegian donors also engaged in a power plant construction, dependant on the water supply from the mountains (i.e. expert interviews: actor nr. 35, 184). This was, when **IUCN** and later also **Finnish aid**, started their conservation related interventions.

While the **IUCN** funded projects that worked with communities (EUCADEP/EUCDP) in a more integrated way (i.e. agriculture, fishery, forest products), even at their management level, forestry and agriculture were integrated, and long-term activities were given a chance to take their own course, according to governmental officials (i.e. field research: actor nr. 184).

IUCN supplied seedlings (i.e. black pepper, cardamom, sugar cane, pine apple; tree seedlings from Amani village) that now, grown up, provide harvest to the villagers (i.e. field research: actors nr. 183–185). They facilitated agroforestry and terracing to halt further deforestation by intensified maize production and cattle ranging (ibid.).

According to the villages in T2, however, financial resources and skills to establish tree nurseries were lacking (i.e. plastic bags for seedlings) (field research: actor nr. 185). According to villagers of T1, the **IUCN and the EUCFP/EUCAMP** projects provided them with new methods of regeneration and planting (i.e. field research: actors nr. 183). They could now grow exotic trees (i.e. *Grevillea robusta*) (ibid.). While during the IUCN project a priority was given to increase forested land, provide seedlings, etc., the EUCAMP project and **Amani Nature Reserve** (ANR) did not give this idea any priority (ibid.).

Both IUCN and EUCFP/EUCAMP projects included extension services and trained local people to provide such services to other communities (i.e. forest conservation and tree planting). Exchange programmes (i.e. in Usambaras and to miombo forests in lowlands) were offered to learn from each other's experiences. Some commercial benefits were drawn from planting *eucalyptus* (though environmental constraints). Ceremonies in traditional forests and certain holy tree species needed to be taken into account by the conservationists (i.e. field research: actors nr. 183–185).

The Finnish supported **EUCFP**, focused on the conservation of forest reserves. The first phase of EUCFP (1990–1994) was designed without taking the participation of the local communities in natural resource conservation much into account (p. 61 in White 2003). The midterm review suggested then the EUCFP should use a more participatory approach (p. 3 in Mikkola et al. 1993), which led to subsequent changes in the focus of the second phase (1995–1998).

The **establishment of the nature reserves** was **perceived as a product of donors**, who argued that the area had a strong potential for a number of issues in

their programmes, according to local villagers and conservation officials (i.e. field research: actors nr. 183–185). Still today, not all governmental forest reserves are transformed into nature reserves, as wished by the conservation authorities, due to a lack of funding (i.e. field research: actors nr. 184).

Amani Nature Reserve (ANR) was successfully established in 1997, for conservation, training and research, and collaboration with local communities in buffer zones, surrounding the nature reserve, who depended on the area (i.e. gaining some income from licensed tree-felling or collection of medical plants). The reserve supported the local people in income generation projects (i.e. mushrooms, beekeeping, fishing – finger nets for free, for fish ponds, butterfly farming, ecotourism). Within the nature reserves (NR), exploitation is prohibited, but in the utilisation zone (temporary zones), provisions are given to locals to sustain their needs during the establishment of the NR. Since 2000, the ANR is recognised as a **Man and Biosphere Reserve (UNESCO)**. Villages can utilise an area of 100 m around their village for firewood, agriculture or medicinal plants, with a valid management plan (i.e. field research: actors nr. 184).

5.2.6.3 Conservation and Its Costs: Villagers' Struggle for Compensation

A major **problem in the early compensations for ANR establishment** was, according to district officials (field research: actor nr. 182), that from 1990 to 1994, the farmers were not given any documents, and the **Tanzanian government** argued that all have got compensation, but the donors have taken all the documents with them (in Tanzania, no documents would be left) (ibid.). The **Finnish donor**, however, paid the promised part for compensation, but the actual payments from the government are questionable and have led to court cases (ibid.; c.p. also p. 63 in White 2003).

According to Jambiya and Sosovele (2001), **only 20–25% of the total compensation was paid to the farmers**, because some crops were determined as 'non-compensable'. Also the **villagers of T2** remember that, 'complaints went through parliament, legal court, back to parliament and finally a solution was found, paid through the government. The government got adequate funds, some officials "lost" it, so the government had to find funds from other sources' (field research: actor nr. 185).

Due to financial and managerial problems, the IUCN interventions were then merged with the **EUCAMP** project (i.e. expert interviews: actors nr. 35, 37, 29, 33, 175, 265; c.p. also Newmark 2002; Ramsay and Kessy 1996), then funded by the EC and Finland. According to Sjöholm et al. (2001, p. 63), the approach of the project's third phase has been a 'traditional protectionist, command-driven, and a high cost strategy of land acquisitions', while White (2003, pp. 66ff), as well as several project staff (i.e. expert interviews: actor 29), regards this review being too harsh, as the project has also tried to contribute to agroforestry activities (i.e. beekeeping, fishponds, small tree nurseries) and supported the **first village forest reserve (VFR)** gazetted in Tanzania (Mpanga, in 1995). Establishing

the Mpanga VFR, however, excluded **some local user groups**, living close to the forests (p. 122 in Bildsten 2002).

The main focus of the EUCFP/EUCAMP projects was however to provide **aid for conservation**, to establish the Amani and Nilo Nature Reserves and to protect the Derema corridor, being already in 1931 and in 1974 proposed by the Tanzanian government as a governmental forest reserve (i.e. field research: actor nr. 184). The corridor included **agricultural plots of five villages (1,200 people) on 960 ha of land**, which **were to be shifted out in return for compensation** (ibid.). There were no permanent settlements affected, besides agricultural land (ibid.).

According to district officials, during EUCAMP, there was **not enough money available for complete compensation of the people**, who had to quit their agricultural plots for the establishment of Amani and Nilo Nature Reserves, as well as for joining Mlinga, Manga and Mtai governmental forest reserves to build a corridor between them (i.e. field research: actor nr. 182). Finally, 35% of the compensation was to be paid and also was paid, by the Finnish government, while the 65% that the Tanzanian government should have paid was not (fully) provided (ibid.).

Compensation in EUCAMP was based on Tanzanian law, rather than international standards (i.e. of the World Bank). In 2001 the boundaries of the Derema corridor were marked, by a 3-m broad strip, slashing 8.1 ha of agricultural crops, mostly cardamom and some banana crops (p. 8 in MNRT 2006). However, then a conflict arose, as before the compensation of crops lost was based on the Land Acquisition Act (1967), but the project, now being advised by the Permanent Secretary of the Ministry of Lands, was to apply the 'annual income per crop approach' that came in force with the new Land Act No. 4 (1999a), the Village Land Act No. 5 (1999b) and Village Land Regulations No. 86 (2001) (ibid.).

This resulted in an explosion of the expected compensation costs by more than 12 times the initial amount, from approximately 6,650–98,570 euros, later revised to 81,260 euros, using 2010 exchange rates (c.p. pp. 8–9 in ibid.). In March 2002, the crop compensation for the boundary was done from the EUCAMP's budget (c.p. ibid.; p. 63 in White 2003).

These payments yet did not include compensation for the **crop losses inside the proposed forest reserve**. Also due to a mistake in calculation, EUCAMP estimated these compensations to be 571,230 euros (at 2010 rate). However, the production area was much higher, and the compensation had to base itself on new law, taking in to account the losses of 3-year production, until the farmers could re-establish new, mature plants (if they had land to do so) (c.p. pp. 9–10, 18–19 in MNRT 2006).

Applying this, one cardamom plant was valued 20.6 euros (at 2010 rate). An extensive counting exercise was done in 2002, and after this, some farmers (later visited) eventually started to plant new plants as well, before estimation in the field. As a result, the estimated new compensation need was 2.33 million euros (at 2010 rate). After an appraisal (by IUCN and Ministry of Lands), this amount was reduced to 0.83 million euros, approved by the governmental chief valuer in 2003 (35.6% of the initial). However, in 2002 EUCAMP had phased out, concluding, 'the new land law has affected significantly the exercise of Derema reservation' (p. 49 in EUCAMP 2002), the money, hence, being not enough (c.p. pp. 9–10, 18–19 in MNRT 2006).

5.2.6.4 Reallocated World Bank Credits and International Grants to Pay the Commons

After the phasing out of EUCAMP, several donors provided support to finance the compensation or to facilitate its process. **Tanzania's government** committed in 2004 71,400 euros (at 2010 rate); **Finland** offered 160,000 euros, and in 2005 **Conservation International's** Global Conservation Fund committed US \$350,000, and **WWF's** Critical Ecosystems Partnership Fund committed **US \$150,000** for facilitation the process. However, still, by April 2005, only US \$56,000 was transferred to the district's bank (c.p. pp. 10–11 in *ibid.*).

In 2004, the Ministry of National Resources approached the **World Bank** for financing. Also, in the occasion of the 2005 **presidential elections**, the **Tanzanian Ministry of Natural Resources and Tourism** forwarded 50% (0.43 million euros, at 2010 rate; referring to the reduced total from the 2002/2003 process) of the compensation amount, in only 1 week in October 2005, to each affected villager. This was three and a half years after the villagers had to stop their agricultural production and crops in the local climate being overgrown and attacked by pests within only few months. However, the **villagers** did not accept to sign; the amount would equal 50% of their compensation rights, as they did not accept the reduced total value of their crops and claimed after interest rates (pp. 11, 29 in *ibid.*).

In the following, credits from the World Bank that funded the **TFCMP** project were reallocated (2007), and the compensation was based on the bank's policy. The recalculation based on the 2002/2003 counting and addressed the forgone interest rates but also reduced the productivity estimation (from 5 to 3 kg of cardamom in 3 years) and deducted labour costs, yielding to a **total compensation (due by the end of 2006) of 1.95 million euros** (using the 2010 rate). Compensation was calculated for 21 crops, including only five non-tree crops, cardamom, banana, clove, black pepper and cinnamon being among the most important crops (pp. 22–33 in *ibid.*).

According to World Bank (2010, i.e. Annex 7), all the above funds were disbursed until 2010, and the project closed in the end of 2009.⁵³ However, according to the district officials (i.e. field research: actor nr. 182), in 2010, the compensation issue is not resolved totally. The villagers had to agree to payment according to the **bank's policy** and had time for reclamation, but still some **villagers** demand higher crop compensation and there is already a lack in availability of land to move to for land compensation (*ibid.*).

Though the **government** agreed to make 921 ha of idle sisal production land in the lowlands available (c.p. also Annex 7 in WB 2010), equalling three times the agricultural area lost from within the Derema corridor forest (at maximum 1.2 ha

⁵³According to WWF (2010, p. 6), the total amount of compensation was equal to 1.16 million euros (at 2010 rate), while some pages later (p. 10–11 in *ibid.*), the amount of US \$2.762 million plus mixed US \$107,000 is given – approximately 2.12 million euros plus 0.08 million euros (at 2010 rate).

per individual), there is little agricultural land available from the mountains, so the officials say (i.e. field research: actor nr. 182).

Main obstacles would be that **farmers** do not necessarily want to move (their production) to the lowlands, as these soils are not always as fertile, are a greater distance from their villages and do not provide with old forests, necessary for shady cardamom or climbing black pepper production that secures a huge part of income and therefore social security of the villagers. Also, if they take such land, they also would need to pay a registration and demarcation fee of 2.5 euros (at 2010 rate) and would not receive any compensation for their losses (ibid.; c.p. also pp. 24–27 in MNRT 2006).

As previously mentioned, the **compensation process was facilitated by the WWF** (c.p. WWF 2010), also carrying out the **EUFLRP project** (WWF and TFCG), **supporting village forest reserves (VFR)**. In their engagements, they try to cope with the IUCN model, applied by a good compensation model but in form of a short-term–quick-money project, so the conservationists say (i.e. field research: actor nr. 184).

5.2.6.5 New Efforts for ‘Soft’ Conservation by Community Integration

The **EUFLRP** supports the Muheza district since 2009; the district provides one field officer as linkage to the project; technical staff is provided by the district, for the relations to the communities (field research: actor nr. 182). **Farmers** in the district clear their fields using fire; they harvest trees and even cut their mango trees (ibid.). The **district’s forest officers** map trees planted by individual farmers and such in natural forests, to prevent settling of such ‘business’ (ibid.). The **district** has an annual operational forestry budget of 31,400–36,400 euros (2009/10 and 2010/11) in addition to 17,100 euros for salaries, while 71,400 euros of forestry royalties are delivered by the district to the central treasury (ibid.). From the overall district budget, 45% comes from donors, the rest from the Tanzanian government (ibid.).

Within the ANR, 9 out of 130 villages of Muheza district have established (before January 2010) so-called **village forest reserves** (on clan land). **Individual forest reserves** are not yet permitted, because of a lack of awareness of the people (so the district forest officials say). Officially, also in an individual forest reserve, the felling of natural trees requires permission from the district forest office and a letter of demand to the village government. The felling of artificial plantations (i.e. teak, *Tectona grandis*) requires a request to the village government and its given permission. The district forest officials are required to provide hammering and transportation control (field research: actor nr. 182).

Today, Tanzania differs between firstly **Community-Based Forest Management** (CBFM: legal form as village land forest reserve, VLFR, or community forest reserve, CFR) and secondly **Private Forest Management**, where the community and individual household respectively own the land and manage the forest. Thirdly **Joint Forest Management** exists (JFM, legally based on Joint Management Agreement), where the community acts only as a co-manager of the forest (c.p. p. 11 in MNRT et al. 2009).

The **legal basis** for the establishment of VLFRs is provided by the Land Act No. 4 (1999a) and the Village Land Act No. 5 (1999b). In 1975 during the ‘villagisation’ (*ujamaa*) process, **village councils** were created, very much as a lowest level of government, to enforce the resettlements and collectivist agricultural production. In the Local Government Act No. 7 (1982), they got strengthened and could, for instance, set by-laws, after approval from the district councils. Today the Forest Act No. 14 (2002) refers to that legal provision for the development of forest management by-laws by the village councils (c.p. p. 11 in MNRT et al. 2009).

In 2008, **CBFM was practised on 6.7% and JFM on 5% of the total mainland of Tanzania’s forest area**, whereby the CBFM area equals 12% of unreserved forests and the JFM area 13% of the reserved forests (by central or local government) (c.p. pp. 7, 19 in *ibid.*).

In order to **establish a VLFR**, the villagers need to have legal tenure over their land; they need to develop a management plan, to be commented on by the **district council** and commented on and considered by the **director general for Forestry and Beekeeping**. After the management plan is approved by the village assembly, the plan, the by-laws, the minutes and the membership details are ratified by the district council. The VLFR can only then be declared by the **village assembly** and district council. The villagers may then utilise their forests for their own use or for the selling of forest produce, retaining all revenues at a village level. However, still there is **little evidence that the VLFRs have gained tangible local economic returns** from this, for instance, due to elite capture; poorer members might end up even negatively impacted (c.p. p. 44 in *ibid.*) (c.p. p. 13 in *ibid.*).

After 3 years of management in accordance with the plan, the villagers may request the ‘gazettement’ of the VLFR, through the district forest officer, by the director general. This however does not provide them with more or less tenure security. If villages fail to manage their forests according to their plan, their management rights can be withdrawn (by the district council for declared reserves, by the director general for gazetted ones) (c.p. pp. 13–14 in *ibid.*).

It however happens that **districts** ‘slow down’ the process of ratification, due to conflicting interests, including concerns about loss of forest revenues to district councils (pp. 39–41 in *ibid.*).

Given the new law, **villages** are allowed to exist **as formal government structures** and legal corporate entities, with the ability to sue and be sued and to own property as a local community (p. 8 in MNRT et al. 2009). However, in an unstable social climate, **legal titles play often a rather minor role**, while the **critical role of state strategies and local and national power structures prevails** (c.p. p. 76 in Barraclough and Ghimire 1995). Major parts of forests (45%) are still classified as unreserved, representing ‘collective ownership’, without clear ownership of rights (pp. 7, 18 in Zahabu et al. 2009).

In many African countries, however, **customary tenure rights** are still largely respected, even in countries where private landownership has been widely introduced (c.p. p. 95 in Barraclough and Ghimire 1995; c.p. p. 61 in MNRT et al. 2009).

5.2.6.6 Some Outlook: REDD+, Ecosystem Services and Teak Utilisation

Within a period of 15 years, the seriously destroyed forest grew back (secondary though), and the **conservation officials** now look for a way to balance conservation and utilisation. Today, many **donors** say, ‘what you have reached is enough, you shouldn’t be only doing conservation, you can utilise’. Donors told them not to touch the forests for another 10 years (field research: actor nr. 184).

The **conservationists’ objectives** are today to ensure that local communities have their own, satisfactory tree resources outside the NR’s forests (ibid.). They may plant their own teak (*Tectona grandis*). There is a biodiversity preservation zone (77%), natural restoration zone (13%), a local use zone (16%) and the Amani botanical garden (4%). The first management plan for the local usage zone was temporary; if the peoples’ awareness has grown and they are supported well (i.e. seedlings, incentives), within 5–7 years, they should have their own resources (ibid.).

However, the management plan evaluation showed that **locals** have not succeeded so far to be self-sustaining, so the officials say (ibid.). A mistake of the projects was to give seedlings free of charge, so the conservation officials maintain (ibid.). Then the people do not give any value to them and neglect to maintain them (ibid.).

Due to the limited time, of the project’s sustainability, the activities were hardly considered. **Directives from the government** that people should plant their own trees on their own farms, but for the selling of exotic trees, they need legal authorities’ permission, also weaken local people’s abilities. On the other hand, locals tend to look for immediate returns (ibid.).

If trees are planted, they have immediate benefit, but if you provide them with the seeds that they want, even 2 weeks later, you will not find them dispersed on the nursery, so conservation officials contend (ibid.). If communities had freedom of choice, so the conservationists claim, they would go back to exploitation (ibid.). Private companies and some locals steal trees out of the park (no guards) (ibid.).

The key focus of EUCAMP was to sustain Amani Nature Reserve (ANR). They built two guesthouses, as the Tanzanian government did not provide any funds (field research: actor nr. 184). But **ANR was left on its own with revenue collection**. Also, local people should get a percentage of the revenues from ANR; however, this was not considered as a good idea, according to the local conservation officials (ibid.). Only a few people visit the ANR to date, and from the little entrance fees charged, 20% have to be given to the locals, amounting currently, in 2010, to about 143 euros (per village, year)⁵⁴ (ibid.). In contrary, for the **villagers**, this is of course too little money (field research: actors nr. 183, 185), revealing the difficult situation,

⁵⁴MNRT (2006: p. 23) refers to lately 103.6 euros annually for each of the 18 villages in the buffer zone. That would equal 9,286 euros total revenues from entrance and research fees annually, for ANR (prior to deduction by 20%) (all at 2010 rates).

as to whether the ANR can actually contribute notably to the economic income of the villagers.

Officials see other options, for instance, in the **payment for environmental services** (i.e. field research: actor nr. 184). Most of the water for the district's capital (Sigi river to Tanga) comes from these mountains. Protecting the forest cover could be funded by as little as 1 Tanzanian Shilling per litre (1 m³ water would then equal about 0.7 euros) (ibid.). This is also in line with the villagers, who feel the policies of Tanzania are not good, as 'we conserve water and forests, while others gain the benefits' (field research: actors nr. 183, 185). And so the question remains, to whom and in what shares should such payments be delivered?

The **villages of T2** have several woodlots (one VFR) on their village lands and have planted trees on individual yards and agricultural lands (field research: 185). They have a forest guard, whose allowances are paid by the Village Environmental Committee; they undertake forest enrichment plantings and border clearing to prevent forest fires. The area of their VFR equals, however, only 0.37 ha per household (ibid.).

They appreciate WWF/TFCG following up IUCN's efforts (ibid.) but still see some improvements to be made, for instance, through the provision of forest technical equipment (basic tools) and through financial incentives that the project could provide to individual villagers for their effort in tree nursery development, similar to that done by the tea companies for tea seedlings. Up till now, the project provides them with nursery materials and argues that they may sell their seedlings (field research: actor nr. 185).

Such incentives could be 20 Tanzanian Shillings for each eucalyptus tree, raised from the village nurseries and planted (similarly for indigenous species) (ibid.) – that would be 70 trees for 1 euro. Recently, **Norwegian donors** asked them 'to count all those trees on their land and promised to give them money, if they do not cut them' (ibid.). Such initiatives on Reducing Emissions from Deforestation and Forest Degradation (REDD+) will hence be the next external interventions to change locals' interaction with forests; however, the who, the how and the when anybody might get compensation or payments from eventual schemes remain still unclear. And who will pay for the baseline exercise?

For the **villagers**, there is a competition 'tree versus tee' (field research: actor nr. 185). But, as mentioned earlier, the average income from forests (mostly firewood and decreasing tendency) refers **in T2** to annually **107 euros (per HH)**, before expenses, while only 18 euros (per HH, y) comes from own tea production and 7 euros (per HH, y) from occasional wages in tea production (all 2010); however, there was an increase noticed in income from the tea compared to 2000. Agricultural crops (i.e. maize, beans, sugar cane) provide the major stake of income (179 euros/HH, y), but interestingly, spices do not play any role (ibid.).

In the area, various **income generation activities** are facilitated by various stakeholders. **Regional forest officials, UNDP, ICRAF and Lever UK**, which buy the seeds of *Allanblackia stuhlmannii* for soap and food oil production, undertake research on varieties of *Allanblackia* spp., a family including three red-listed species (IUCN), in the East Usambaras still found relatively frequently

(field research: actors nr. 183–185; own observations). In 2006 Lever UK bought 200 tonnes, paying 645 collectors on average 357 euros (at 2010 rate) (p. 56 in MNRT 2006). These activities were in 2010 still ongoing (large storages) (own observations). Utilisation of the seed is not totally new, as the seeds were already used during the First World War as a substitute for butter in chocolate production (p. 3 in Orwa et al. 2009).

The TFCG supports, with the help of **Conservation International** (through the Critical Ecosystem Partnership Fund – CEPF), **World Vision**, **the McKnight Foundation** and others, butterfly farming (field research: actors nr. 184, 185, 175). The TFCG project office collects cocoons and sends them to buyers in Europe and the USA. In 2005, 250 farmers were involved, earning 91 euros per farmer (p. 56 in MNRT 2006). These activities are practised also in 2010 (i.e. villages of T2; own observations).

Only some years after the EUCAMP was closed, in 2002, the **Embassy of Finland** was invited to a meeting, attended by a.o. representatives from universities, the then minister of Natural Resources and Trade and the Tanzanian Association of Foresters (TAF). The issue was that the **Tanzanian government** proposed five forests for privatisation and **Kilombero Valley Teak Company (KVTC)**, a company owned partly by **Finnish (Finnfund) and British (Actis, representing CDC Group, fully owned by DFID) governmental organisations**, was presenting their will to buy and log the Longuza Teak plantation (LTP) in East Usambaras (Longuza, however, was already a plantation in colonial times). A **Finnish consultant** recommended to do the logging, and the Embassy provided money for its assessment. The representatives of the TAF and a lawyer of theirs strongly opposed the intention and claimed it being illegal. The then acting director of Forestry agreed that the cutting should not be done, to the anger of the then minister, who was in support of it (i.e. expert interviews: actor nr. 173).

The media gave some more detail, namely, that the Tanzanian government was in 2005 in an advanced stage of concessioning more than 1,709 ha of teak trees at LTP to a foreign owned firm at nearly a tenth of the timber's worth (AllAfrica 2005). 270,000 m³ of teak was to be sold at US \$38 million, not at US \$14 million, so the foresters opposed the government (ibid.).

In 2008, then councillor for Forestry of the Finnish Embassy in Dar es Salaam argued for the privatisation of governmental owned, weakly managed plantations. The LTP was established as the first concession in the country, on the initiative of KVTC; however, before the negotiations, **first guidelines and modalities for concession establishment** had to be developed, and an up-to-date inventory was not available for valuation either. According to the media, communities of the district were in support of the providing of the concession to the KVTC, claiming that 'they had benefited a lot' from the company, in contrast to TFA concerns (Sharuvembo Word Press 2008).

The preparation of the concession was also part of a broader component on the private sector involvement, financed through the above-mentioned TFCMP project (pp. 5–7 in TFCMP 2005).

5.2.6.7 Conclusion on Local Income Changes and Its Causes in Tanzanian Cases

The **addressed villages have not shown any significant income changes** from forestry. In T2 income from forestry is however comparatively important, though it has a decreasing tendency. Though various forest interventions had an impact on the villages from the 1970s on, it has been shown that non-changes, eventually even a reduction in the income and livelihood security, for some locals, cannot be explained by the villagers' own independent interests. Rather, the **influential stakeholders** of the various intervention networks imposed their strong interests and their 'helper's interests' (c.p. Prittwitz 1990; see Annex 3) that have subsequently changed through interference of other external influential actors' or networks' interests.

5.3 Discussion and Conclusions

The above cases support the **quantitative estimations** from network analyses; thereafter, governmental organisations from donor and recipient countries are generally very influential (do hold a high potential for change). However, they have shown also what other actors can gain strong influence and under what circumstances.

The cases described show further that only in **four out of ten interventions** (c.p. Table 5.2) major positive changes to local income from forestry were achieved (partial rejection of Hypothesis 5).

In five interventions, larger income changes were noticed in **other sectors**.

However, even the interventions leading to high annual average household income from forestry still show that the *absolute income remains* mostly rather *small* and *net income* (after expenses and opportunity costs) *may be even negative*, benefits or income opportunities do *not spread equally among villagers* or communities (i.e. elites, casts, stock in natural resources), and, even at best, forests and trees are *providing rather a more secure basis for a better overall livelihood* than with economic miracles for the poor.

In **non-monetary terms** (i.e. non-priced forest services) and for 'subsistence economy', forests and trees can provide a strong basis for the people and have effects on their agricultural production, water availability and probably also health. Therefore, it is questionable if a definition of poverty, if only or mainly based on monetary income, is a good indicator to measure 'change'. Such a definition neglects that forests and trees have obviously important non-monetary values (i.e. grazing, leaf-litter collection or other subsistence use) to 'poor people'.

Table 5.2 Local income responses to foreign aid interventions and the explanatory value of actor's influence and interests for understanding such income responses

Country	Intervention	Local income change		Actor's influence within networks and whether their direct/indirect interests explain income changes						TT	CET
		Forestry	Non-forestry	Influential actors (A)		Local actors (B)		External actors/networks (C)			
				Infl.	Inter.	Infl.	Inter.	Infl.	Inter.		
Bhutan	IFMP	N	Y	++ ²	N	Δ	Y	++	Y	G	BC
Bhutan	CORET/FORED	N	N	+++ ³	Y	0	N	0	N	G	A
Bhutan	PFMP	N	N	+++ ¹	Y	Δ	N	0	N	G	A
Bhutan	IFMP-G	Y	Y	++	N	Δ	Y	0	N	G	B
Nepal	CFDP/BISEP-ST	N	(Y)	++	Y	0	N	+	Y	G	AC
Honduras	MAFOR	Y	Y	++ ^{2,3}	Y	Δ	Y	0	N	G	AB
Nicaragua	Miskito	N	(Y)	++ ¹	N	+	(Y)	++	Y	P	BC
Uganda	Vi-AF	Y	N	++ ¹	Y	+	Y	+	Y	P	ABC
Kenya	Vi-AF	Y	N	++ ¹	Y	+	Y	+	Y	P	ABC
Tanzania	Usambara	N	N	++ ²	Y	0	N	++	Y	G	AC

Source: Aurenhammer (2011)

(A) = type A, influential intervention actors (primarily governmental); (B) = type B, local actors; (C) = type C, external actors or networks; Infl. = influence; Inter. = interests; TT tenure type; CET Change Explanation Type; N no/minor; Y yes/major; () some; +/+++/+++ some/strong/very strong; Δ little; 0 = no; ¹ = influential actors include NGO/NPOs; ² = ... include consultancies; ³ = ... include research organizations; G government; P private; *highlighted fields/bold*: income changes and explanation factors (forming the CET)

Though, for forest development cooperation, it would be, hence, easier to use non-monetary effects as a political argument, ‘foresters’ are drawn into a political legitimisation of cooperation by monetary effects. This is especially contradictory in the forest sector, targeting smallholder/local levels. But also for development cooperation at large, it is questionable since ‘developing’ economies are often characterised by a parallel system of subsistence and market economy.

Though *even* applying economic approaches to measure outcome (poverty alleviation at the community/group level) leads to the result that **poverty alleviation through forest-related interventions cannot be proven in the majority of intervention cases** (see above), considering the bias to political–theoretical approaches (c.p. Sect. 5.1) – aiming at proving poverty alleviation at the individual level – results actually do not allow to support or withdraw Hypothesis 5 in any of the intervention cases. This is because (the exact) distribution effects remain (from group level data) unclear.

However, the field research provided us also with results, identifying (social and natural scientific) factors that lead to/constitute unequal shares in opportunities and benefits (some are highlighted by boxes). Also examples from individual household data (i.e. from Kenya) show how varied the reality can be for single households.

Table 5.2 provides an overview of the local income responses on foreign aid interventions, various actors’ influence on these project interventions (as a measure of the potential for change) and on whether their direct/indirect interests (willingness) explain(s) income changes (or non-changes).

The table shows that in seven out of ten interventions, the **influential intervention actors’** (mostly governmental) interests (willingness) did explain changes (or non-changes) fully or partly, the latter, if also local actors’ and external actors’ influence (potential for change) has reached explanatory value. However, in three interventions, the influential project stakeholders’ interests (willingness) could not explain the income changes (or non-changes), rather these were due to **local or external actors’ interests** (partial support to Hypothesis 6a).

As can be noticed from the blue highlighted fields, the distribution of explanatory value – as to the explanation of change by actors’ overall influence, as a measure of the potential for change, as well as actors’ interests (willingness) – among the three types of actors (influential project actors, local actors and external actors) varies and allows for a **typology of change explanation types**.

Building on Table 5.2, where a typology of combinations of certain actors’ explanatory interests (willingness) was established, Table 5.3 shows the distribution of the number of interventions with (and without) local income change, among change explanation types (CET) and tenure types (TT). The CETs show by what combination of interests (willingness), held by actors from one or more of the above actor categories (influential project actors, local actors, external actors), changes or non-changes can be explained.

Table 5.3 also shows that there is **no clear dominance of governmental or private tenure types** (land tenure), when it comes to the occurrence of changes in local income. This supports the hypothesis that it is not the land tenure as such determining or guaranteeing the potential for positive local income change, rather it depends

Table 5.3 Distribution of interventions with (and without) local income change among Change Explanation Types (CET) and Tenure Types (TT)

TT			
CET	G	P	Total
A	2(0)	0(0)	2(0)
AC	2(1)	0(0)	2(1)
AB	1(1)	0(0)	1(1)
ABC	0(0)	2(2)	2(2)
BC	1(1)	1(1)	2(2)
B	1(1)	0(0)	1(1)
Total	7(4)	3(3)	10(7)

Source: Aurenhammer (2011)

1,2,3... number of aid interventions; () number of aid interventions where local income changes occur; *G* government; *P* private; *CET* Change Explanation Types (A, B, C and combinations); *TT* tenure types; *A* influential intervention actors (mostly government); *B* local actors; *C* external actors/networks; one type alone = ‘monopoly’ explanation; if A type does not occur = changes not explainable through the interests of the influential intervention actors; B type only = local innovation (other: forms of adaptation/resistance)

on the circumstances that are created and defined by influential actors (be it of the intervention or external ones), as could be seen from many cases above (support to Hypothesis 6a, b).

From seven interventions on governmental land, local income changes occurred in only four cases. While in all interventions on private land such changes occurred, their number is only three. Given this, one could assume the probability of changes to be higher on private land, but due to the non-representative selection, this assumption is weak. Rather it can be said that with four versus three observed cases, no real difference between the tenure types could be found (support to Hypothesis 6b).

In regard to the CETs, it is interesting to find two interventions, where a non-change in local income can be explained by a ‘monopoly’ of the interests (willingness) of influential project actors. On the other hand, there were three interventions that led to income changes that could be explained only by other, than the interests (willingness) of the influential project actors (partial rejection of Hypothesis 6a).

In one of the interventions, the changes could be explained by neither projects’ influential actors’ nor external actors’ interests (willingness), but rather local (spontaneous) innovations emerged, driven by purely local interest (willingness). In all the other types, changes refer to different forms of adaptation or resistance by local actors.

In the majority of interventions (seven), of which six with changes in local income, these income changes could not be sufficiently explained by the interests (willingness) of only one actor type. **This shows that in most cases, the explanatory factors for local income change are diverse and plentiful, and such**

changes cannot be explained by only the influential project actors' interests (willingness)⁵⁵ (partial rejection of Hypothesis 6a).

Finally, it must be noted that the above CETs do provide us with a typology of empirical results, valuable for answering hypotheses, but due to the non-representative and non-comprehensive selection of cases (rather based on a 'most-different approach'), also results are not representative for all development cooperation interventions (which was also not the intention). It can neither be concluded that one of the CETs would be more common than the other nor that there could not be other types (i.e. type C did not occur). However, the empirical results could show that various CETs do exist so that this typology could provide the basis for further research.

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⁵⁵ A simplified overview on the complexity of interests (willingness) involved is given in **Annexes 2 and 3**, with regard to cases from Bhutan and Tanzania, described by 'Helper spirals', after Prittwitz (1990).

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Chapter 6

Excursus: Capacity Construction and Capacity Destruction – Whose Capacities Development Cooperation Builds Upon?

6.1 Reasoning and Link to the Overall Research

This chapter is an **excursus**, contributing to a theoretical discussion and to an innovative further development of theory, relevant to ‘development’ research. It thereby builds on previous chapters’ empirical findings, that is, on influential actors and their potential for change in forest development policy and interventions (cp. Chaps. 3 and 5), and also elaborates on the theoretical approach of the ‘potential for change’ (cp. *ibid.*), with a focus on informational capacities. As an excursus, this chapter, however, is not directly incorporated into the flow of theory, methods and empirical analysis of the research.

It puts previous analytical findings and theoretical approaches into a **broader context of relevant theories** and development theoretical assumptions. It also provides us with further empirical findings (especially on forest know-how: informational capacities) but puts more emphasis on the incorporation of recent meso-theoretical research results (secondary literature). Therefore, this chapter does not demand the same standards of analytical science, as the previous chapters.

Nevertheless, this chapter is thematically linked to the overall research. It focuses on ‘capacity building’, a major goal of development policy, as defined in programmes and interventions (cp. p. 2 in Langthaler 2003), and an area, where development organisations see their core competency (i.e. cp. GTZ 2011). The findings of this chapter contribute substantially to a better understanding of the third and fourth phase of the policymaking process: ‘reaction of the target group’ (impact) and ‘reaction of the system’ (outcome), as a result of policy implementation (cp. pp. 84–85 in Jann and Wegrich 2009, in Schubert and Bandelow 2009).

With respect to ‘reaction of the target group’, this chapter analyses and discusses the **impact of ‘capacity-building’** interventions (on policy and project levels) between the fields (after Bourdieu a.o. 2001) of donor (more influential field) and recipient (less influential field) countries (building on theory and approaches already described/applied in previous chapters: a.o. Hasanagas 2004; Pelikan and Halbmayer 2000; Höll 2006 in Dachs 2006; Howlett and Ramesh 2003; Howlett et al. 2009).

It argues that capacities are present in any society, in contrast to Prittwitz's (1990, esp. p. 225) assumption (or supporters of the Kuznets curve). This raises the question, what then is capacity development for? Again, it can be assumed that influential actors of development cooperation facilitate the change of social entities and their interrelation to forests.

The potential of actors, involved in various fields, to facilitate change depends largely on their capacities (i.e. knowledge) and interests (willingness). That again leads to the assumption that influential actors (holding a high potential for change, cp. Chaps. 3 and 5) construct new capacities, while others are destructed, as an effect of, or necessity to, change social entities and their interrelation to forests (to 'develop'). This theoretical finding develops into a theoretical model, how such a transfer of capacities in development cooperation impacts the less influential field.

Thereafter, this chapter describes forms of impact ('reactions of the target group'), relevant to policy cycle analysis (cp. pp. 84–85 in Jann and Wegrich 2009, in Schubert and Bandelow 2009), that is, phases of changes of the less influential field and a typology of mechanisms of change (a.o. adaptation, resistance), theoretically, meso-theoretically and also with some own empirical results (for implementation at policy and intervention fields).

With respect to 'reactions of the system', this chapter analyses and discusses the **outcome of 'capacity-building'** interventions (on policy and project levels) between 'fields' (after Bourdieu a.o. 2001).

In this respect, forms of outcome are described, relevant to policy cycle analysis (cp. pp. 84–85 in Jann and Wegrich 2009, in Schubert and Bandelow 2009), that is, manifestation/institutionalisation of changed power structures (and their reproduction), establishment of 'modern' institutions (and reproduction of their know-how), non-solving of problems due to symbolic policy, problem shifts and (unintended) side effects (cp. also Prittwitz 1990), exclusion and 'class building'.

The excursus, hence, elaborates on scientific questions relevant to the implementation and evaluation phase of the policy cycle (cp. p. 101 in Jann and Wegrich 2009, in Schubert and Bandelow 2009)

6.2 Introduction

'**Capacity building**' or 'capacity development' is a frequent goal of development cooperation policies and activities (cp. p. 2 in Langthaler 2003). Building the capacities of the government, the people or a 'target group', is believed and literally understood to also increase the 'ownership'¹ of the recipients as well as to 'empower' them.

¹ 'Ownership' when referred here is used rather in a political way than in an economical way.

In reality, however, capacities are rather ‘constructed’ by powerful stakeholders, external to the field (cp. Bourdieu, cit. below), trying to get their experts’ know-how or their model of capacities needed, placed into a foreign environment or field (a recipient country, a commune, a governmental actor) and reproduced by this field (continuity, institutionalisation of activities), in order to achieve better opportunities for future cooperation themselves. When doing so, local social capacities are actually destroyed, destructed, while other capacities may be built up, though maybe only temporarily. Also, environmental capacities are destroyed (cp. Schacter 2000; Fukuda-Parr et al. 2002; pp. 93–94 in Moore 1995; pp. 77–78 in Lund-Thomsen 2003; p. 37 in Bourdieu 1998; p. 178 in Wimmer 1996; Kreff 2003; p. 118 in Hannerz 1991, cit. in: Kreff 2003²).

Development cooperation does not build upon the existing local, social capacities and institutions and does not thrive to facilitate an ‘environment’ in which these capacities could be developed further, for example, where local traditions and know-how could be enhanced or given the chance to be kept alive³ and further developed. This leads finally also to a loss in the global diversity of capacities, thereby to a loss in the potential social or environmental solutions to problems or a loss in the diversity of approaches or instruments to solve problems (local, social innovations) (cp. Cavalcanti 2006; Sachs 1992; Posey 1990, 1992; Esteva 1992; Norris 1997; Lukas 2002).⁴

²The view of a world system consisting of various overlapping (...) (cultural) networks is helpful to analyse the transfer of capacities, but in contrary to his approach of centres (global cities) building networks, relatively independent from national or institutional entities, this chapter stresses the need to rely on actors for analysing policy and other actions. Similarly, Ekholm and Friedman’s global systems approach is helpful, but their perception of multinational companies or international organisations being rather effects of structural changes than acting actors is not shared – yet there seems to be too much determinism to a ‘mechanical global system’ over an ‘actor-oriented decision-making’ in their concepts (actors do not decide as rational as machines; actors and people remain the entities of empirical social sciences, as ‘cities’ or such cannot be interviewed or polled).

³ ‘Kept’, in the sense not to be lost; ‘alive’, in the sense to be given the opportunity to be practised/implemented as well as to be adapted by the social entities and not to stand still (unlike an open-air museum).

⁴ ‘A global monoculture spreads like an oil slick over the entire planet’ (p. 102 in Sachs 1992) and ‘to develop, therefore, one would have to follow the guidelines established by the experience of the industrialized countries’ (p. 309 in Cavalcanti 2006). ‘We are led to think that the options for a decent survival of man on earth are reduced to the paradigm offered by the first world’ (ibid.), but indigenous perceptions (...) show that there are other options (p. 57 in Posey 1990, p. 17 in ibid. 1992). Rather than being static, indigenous people have developed highly adaptive behavioural rules for survival ‘framed within effective institutional bodies’ (p. 318 in Reichel-Dolmatoff 1976; cp. p. 329 in Schweitzer 2002). According to Esteva (p. 9 in 1992), ‘development is a purely Western concept that robs peoples of different cultural frameworks of the opportunity to design their own societal objectives’ (cit. in: Cavalcanti 2006, p. 322).

Similarly, when ‘local innovations’ are talked about, and even promoted by donors and also some researchers (i.e. p. 95⁵ in Gotschi et al. 2007, in Gotschi et al. 2007; cp. pp. 52–53 in Olivier de Sardan 1997), one will notice that their understanding of the term ‘local innovation’ is more reflected by the successful adaptation (or change) of a field (i.e. a community) to an external impact than by the creation of ‘real’, local innovations.

For instance, it is seen as positive if a water pump system was successfully accepted by a community and still works after the programme has stopped, but it is seen as a failure, if the water pump system was not adapted by the social institutions or entities of the village or the water pump system ended up in a chaotic or dysfunctional way, after the external cooperation stopped (i.e. Kenya/Kakamega: KEFINCO Water Supply Development Project in W-Province, Aurenhammer 2010b).

Usually then, the question arises, ‘Why did the pump system fail?’ (cp. p. 7 in Bierschenk et al. 1997; p. 190 in Lachenmann 1997; p. 261 in Rauch 1997), rather than to ask, ‘What kind of local know-how, instruments or approaches exist to maintain water supply and how we can build on them and eventually help to further improve them?’ (cp. pp. 37ff in Bierschenk et al. 1997; Norris 1997). It is hence not the donors’ know-how or techniques that tend to be adapted to fit to the local, social situation, but the social institutions that are expected to adapt to the external know-how and techniques.

This chapter will discuss the terms ‘capacities’, ‘ownership’⁶ and ‘empowerment’ critically; it will provide answers to the question whose capacities are built upon by bilateral, governmental development cooperation of European donors, and it will analyse, give examples and discuss the issue of destruction and construction of capacities by development policy and cooperation. Thereby, this chapter builds on results from research on the European donors’ development cooperation policy and programmes, using forest-related cooperation as an

⁵ Gotschi et al. (2007, p. 95) regards the following *project initiatives and aims* to be understood as social innovations: (1) diffusion of technologies (diversification of farming techniques, products, application of new techniques and tools), (2) development from subsistence to simple market economy (food security and market production, income generation) and (3) institutionalisation of social forms of organisation (building of groups and their registration, institution building and strengthening).

These are, however, rather externally induced/intended changes than (self-reliantly) locally developed innovations, or the adaptation and successful application is regarded as an innovation, contrary to my understanding, where local innovations develop out of local capacities, internally driven. Gotschi et al. (ibid.) further mentions ‘unplanned social innovations’ and refers to Gillwald (n.d., pp. 19ff.), who states that social innovations do not only solve problems (...), but they can also create such, which corresponds to what Prittitz (1990) calls problem shift. In this chapter, local, social innovations are not regarded: (1) external actor-driven adaptations, (2) external actor-dependent survival strategies nor (3) behaviour as an effect on externally actor-induced problem shifts. These forms of ‘innovation’ constitute rather successful strategies of powerful actors or are the effect on powerful actors’ behaviour, but such ‘innovations’ would not develop otherwise.

⁶ ‘Ownership’ when referred to here, is used rather in a political way than in an economical way.

example (Aurenhammer 2008; *ibid.* 2009a; *ibid.* 2010a). While this chapter does not aim to value cooperation or ‘capacity building’ as such, its aim is to contribute to a more critical approach to cooperation and to science with regard to capacities. Such an approach could indeed be seen as a challenge for policymakers, development cooperation actors and scientists.

The research itself is based on a mixture of **methods and sources**. Preliminarily extensive analyses of secondary data on forest-related disbursements from Austria, Germany, Finland and Sweden (1994/1995–2005) to all recipient countries (96 in total) as well as document analysis of these donors’ policies and programme activities (some dating back to the 1970s) were undertaken. In a further step, quantitative network analyses were done (by questionnaires and telephone interviews), in order to gain an overview of the role and influence of stakeholders in decision networks of programme formulation, programme financing as well as selected programme activities.

The network analysis built on the work of Hasanagas (2004), taking into account the factors most relevant in regard to both power and information. The network analysis included 132 stakeholders from four donor countries⁷ and 35 recipient countries, covering 31 of the largest activities of these donors. Finally, qualitative expert interviews and field visits were done Bhutan, Nepal, Nicaragua, Honduras, Kenya, Uganda and Tanzania, covering 182 stakeholders (from ministers to subsistence farmers) and nine activities of these four donors, while also other donors and their activities were taken into consideration during these visits (i.e. UK, Netherlands, Switzerland).

6.3 Capacities, Environment and Change

Capacities, in this chapter, are defined as ‘necessary circumstances or abilities of a social entity to recognise an issue (cognition), to formulate a problem or an expectation, to find a solution and then to implement it’. Such circumstances or abilities are, for instance, of the financial or the material kind (forest, car, infrastructure) or of the non-material kind (intellectual property, knowledge, traditions; physical: time, power; human: manpower).

Blanda (2009) uses four levels (after Pelikan and Halbmayr 2000) for **situation analysis** of a social entity’s (person, actor, state) possibility to actually implement its own or others’ (external) ideas or solutions (in an Austrian rural development case). The first two steps consist of an internal analysis (can the entity do it or not; does the entity want to do it or not). The first part covers the actors’ capacities, and the latter part contains the question about the actors’ interests or preferences. Also, the external analysis has two levels.

⁷ Austria, Finland, Germany and Sweden.

Firstly, the question posed is if others can make the solution possible, or not, by availing of the principal available capacities of third-party actors. Secondly, the question is if others will also be willing to support this solution (covering others' interests), by providing capacities, but also if social norms and rules will allow for this solution or idea to be implemented.

This theory-based but very practical tool shows what critical role capacities play and how entities can be influenced and hindered in their willingness and ability to find and implement their own solutions to a problem.

Also, **in development cooperation and policy, it is not the 'development' that is aspired to.** This term 'development' cannot be objectively defined (only ideologically and normatively, which is not acceptable to analytical research). Instead, actors thrive for 'change', which can be objectively measured but has a subjective explanation. (cp. also pp. 36ff⁸ in Gotschi 2007, in: Gotschi et al. 2007; p. 26 in Barraclough and Ghimire 1995; pp. 42–43 in Olivier de Sardan 1997) Therefore, influential stakeholders will sell it as an objective, natural way or solution for '*the* development', just like a leaf develops out of the bud. Hence, **forest development cooperation** is not about the 'development of forests and people' but it is rather an interest-driven facilitation of changes of social entities and their interrelation with forests.⁹

Discussing 'development', Gotschi (2007, p. 40) refers to Bourdieu and to transformation scientists. According to Obrecht (2004, p. 29), 'socio-cultural transformation science wants to capture and illustrate structural changes in a dynamic time–space continuum, without presuming the ideological implications of 'development' and 'transformation' (own translation). Ethnologists and anthropologists also prefer to see '**development**' as the unfolding of already **existing abilities** (p. 40 in Gotschi 2007, in Gotschi et al. 2007). Also, applying Bourdieu's (1987, 1993, 1998, 2001) understanding of history, 'development' cannot be normatively defined, since 'development' happens anyway, while its future aims are yet undefined and can be *formed* by the actors involved (p. 39 in Gotschi 2007, in Gotschi et al. 2007).

Though with Bourdieu (1987, 1993, 1998, 2001) it can be argued that 'development' always takes place (and does not need external intervention), his '**habitats**' and '**fields**' are not isolated from other, external 'habitats' and 'fields' (i.e. development cooperation), and therefore, a change of those who are weaker than the others

⁸ Gotschi (2007, p. 41) redefines 'development' later as 'describing the *process of change* in society', while 'development cooperation' 'is then the reflected *interference in these processes of change*' (own translation, italics added). More accurate would be to use 'should be ...' instead of 'is' or not to use 'reflected' in the definition.

⁹ For example, 'farmers' as well as governmental officials' attitudes on the Imperata grass in Indonesia have to be seen as a part of comprehensive belief structures that do not only base on the plants and the country but also on *the relations between the farmers and the state*' (cp. p. 280 in Dove 1986, cit. in: Lukas 2002; own translation, italics added). Reforestation programmes have rather undermined the local and sustainable agricultural production systems than improved, that is, the grass-ladang pasture systems (pp. 280, 300; 310 in Lukas 2002).

will take place. Indeed, as Gotschi (p. 40 in Gotschi 2007, in Gotschi et al. 2007) states, ‘development is a man-made process, so it must not be understood as following the ‘laws of nature’, but can be shaped by humans’ (own translation); however, one must question who the actors forming ‘development’ are, what their interests are (in regard to certain changes or forms) and how they gain potential to do so? Finally, the dominant model of ‘development’ will tend to be based on, introduced by, reproduced and so forth by the most influential stakeholders that interconnect various ‘fields’ through the networks they work in (and thereby affect ‘habitus’ *pl.* from all these ‘fields’).

After Bourdieu (1987, 1993, 1998, 2001), an analysis of society has to recognise the position that different social entities gain within a social space, whereby their positions can be determined by **varying capital structures**, allowing them to enforce their power or authority (after Weber 1984, p. 89) over others. Development cooperation stakeholders therefore need to be positioned within a social space (p. 40 in Gotschi 2007, in Gotschi et al. 2007). This can be done by the network analysis of policy and project fields, as applied here (cp. Martinez-Diaz and Woods 2009).¹⁰

According to Bourdieu, the social world is constituted by ‘fields’ that have the tendency to segregate themselves from others, and due to the differences in these capacities, hierarchies (within and between ‘fields’) evolve (p. 40 in Gotschi 2007, in Gotschi et al. 2007).

The ‘field’ ‘development cooperation’ according to Gotschi (2007, p. 41) however has a duty to influence other ‘fields’, similar as policy fields do. So, researching the ‘development policy field’, one needs to take into account stakeholders, their capacities, their networks (through which they influence) and the various ‘fields’ that can be differentiated (compare also Fig. 6.2, below).

The definition of the **potential of a social entity or stakeholder to change social capacities, structures, situations or processes** (cp. pp. 9, 14 in Giddens 1984; p. 56 in Giddens 1979, both cit. in: Long 1997, pp. 225–226)¹¹ could be described best as a function (here only descriptively) of:

- The potential to recognise ‘problems’ (thereby this potential is strongly linked to capacities and should not be confused with ‘the making up of problems’, as being a definition of ‘problems’ by powerful political actors¹²)

¹⁰ However, they apply a different approach and understanding of networks and focus on international organisations and global governance regimes (i.e. unclear separation of networks and institutions).

¹¹ ‘Action depends on the potential of an entity to create change of an already existing situation or process’, and ‘it is an underlying characteristic of an action that the actor could have acted also differently, at any point of time, be it in a positive sense of a desired intervention into the process of ‘happenings of the world’ or in a negative sense of a relinquishment’ (after Giddens 1984 and 1979, own translation).

¹² That is, political definition of tropical forest deforestation/protection constituting a global problem/interest (cp. p. 11 in Nygren 2000).

- The potential to deal with this problem alone (hegemony) or to gain thematic leadership (power of definition) within the respective network – both linked to the entities' material and non-material capacities
- The interests and values an entity has that can be positive, neutral or negative with regard to a 'problem' (also non-change = status quo)
- The influence (power) an entity gains through others – in terms of information that others find useful, and in terms of gained trust, gained financial/material dependencies of third-party actors and gained irreplaceability. Applying the above written provides with **restrictions to** what meaning '**ownership**'¹³ or '**empowerment**' can have in reality. Major questions then arising are the following: whose ownership we are talking about, to what extent different stakeholders hold ownership in the processes of development cooperation and what are the co-benefits or co-interests (driving forces) that lead one stakeholder to provide another one with power (empower).

'Total ownership', according to the above, can only be reached if, whatever action a stakeholder or person takes (i.e. to solve a problem), this action is due to his own cognition of an issue and his own formulation of a problem and this action must be done free of will or in his own interest with personal responsibility. Thereby, the stakeholder must be capable (own capacities) to act on his own or is made capable (other's capacities) to act in that way. Additionally, the stakeholder must not be forced by social norms or rules of society or by other stakeholders. Similarly, an idealistic approach to 'empowerment' would mean that a stakeholder or person is given the (necessary or missing) power (in terms of material or non-material capacities of others). This is to make the stakeholder/person implement an action and develop the measures that the stakeholder/person intends to do, according to his own will, his own cognition and his own formulation. However, for that, the stakeholder/person needs additional capacities. These, following an idealistic approach, could be provided, without creating dependencies or conditioning support (handing over of power).

In the research, underlying this chapter, the second and the last factor (b. and d. from above) are focused on the **analysis of actors' networks**. The guiding research questions are, among others, what actors decide on the formulation and financing of forest development cooperation policies and programme activities; what are the most influential actors in cooperation activities (programmes or projects); and also, how forest-related know-how is transferred in the programme implementation and back to the policymaking level.

The influence of actors was measured by factors of material and non-material capacities, building on results from Hasanagas (2004). Thereby, the influence of an actor was estimated by the sum of the assessments made by third-party actors on the actors' importance with regard to the factors. These quantitative estimates then needed to be further founded by qualitative data. For instance, in the combination of qualitative data on the type of knowledge provided by stakeholders (i.e. from expert interviews, field visits) and the role of the stakeholder, in regard to information, in

¹³ 'Ownership' when referred here is used rather in a political way than in an economical way.

the networks, results were gained to answer the question whose knowledge is predominately used in development cooperation.

‘Ownership’ (in particular, national ownership), according to the definition of the OECD, is ‘The effective exercise of a government’s authority over development policies and activities, including those that rely – entirely or partially – on external resources. For governments, this means articulating the national development agenda and establishing authoritative policies and strategies’ (OECD 2006). And further, the OECD obviously sees a need in clarifying a definition for what it means in the context for donors: ‘For [aid] donors, it means aligning their programmes on [sic!] government policies and building on government systems and processes to manage and coordinate aid rather than creating parallel systems to meet donor requirements’ (ibid.).

In reality, as will be shown later, the ‘aligning’ of a donors’ policies with a recipients’ policies is hardly possible, and the creation of capacities, institutions and systems that meet donor’s requirements and open up future opportunities for (economic) cooperation must be regarded as a key strategy in donors’ development policies. Already, just from their definition, one answer as to why it will never be the ‘recipient driving the car alone’, to use a commonly used convincing metaphor of donor’s policies, is given straight: Governments entirely or partially rely on external resources. So, in the best case, we will face a situation where the recipient drives the car, yes, but obviously a bit nervously watching the reactions of the driving teacher, next to him.

De Valk et al. (2005, p. 1) found that ‘local ownership cannot be created by donor interventions’. They suggest, ‘careful selection of organisations and conditions and content of cooperation can enhance and build on existing ownership of projects by local organizations’ and ‘ownership of projects can be shared between donors, consultants and local organizations: thus co-ownership can be achieved’ (ibid.). These three types of actors were found to be ‘strongly present’ in many projects of the Swedish development cooperation (p. 2 in ibid.). This chapter provides us with more accurate insight of the actors that play influential roles in the projects of the four European countries.

Though their approach differs from the above (based on too idealistic and donor-centred assumptions), they provide definitions to individual, active, passive, organisational and project ownership (pp. 4–6 in ibid.). For instance, they regard the recording of actors’ **attempts to influence** the course of project processes and each other’s behaviour as a measure of active ownership, while here the **ownership of a process** (project) is equalled to the **ability to influence** it (i.e. through information and know-how), determined from network analysis. In other words, if an actor held an influential position, with regard to information in a network, this actor was not only *attempting* to influence the project but was also *able* to do so (willingly or unwillingly). ‘Owning the project also implies the possibility of owning the processes that take place in planning and managing the project’, as de Valk et al. (2005, p. 6) note themselves.

Most technical assistance projects involve the **transfer of knowledge** (p. 5 in ibid.). If they comprise of training and technology transfer, the transfer of knowledge is the main objective, while in other types of projects (i.e. where the consultant is a

Table 6.1 Actor types' role with regard to forest-related information in various types of projects

		Project types			
		Non-governmental donor country projects	Governmental donor country projects	Non-governmental recipient country projects	Governmental recipient country projects
Donor countries	Non profit organisations				?
	Science				
	Consulting, enterprises	+	+		
	Governmental (para-)	+	++	+	?
Recipient countries	Non profit organisations	+			
	Science				++
	Consulting, enterprises			?	+
	Governmental (para-)	+++	+++	?	+
	Sector's associations			+	
	Local communes, communities, grass-root				+
IO	Non profit organisations				
	Science				
	Multigovernmental instit.				
Other donors	Non profit organisations				
	Science				+
	Consulting, enterprises				
	Governmental (para-)				

^aOnly actor types that are among the most frequent within each project type are taken into account.+++ = gained extremely frequently strong information importance/++ = gained frequently strong information importance/+ = gained rather frequently strong information importance (Source: Aurenhammer 2011)

professional advisor), the transfer of knowledge is more indirect and mostly in the form of tacit knowledge (pp. 5–6 in *ibid.*). This chapter (see Table 6.1) shows however that in various types of projects, the most influential actors (i.e. on forest information) remain the same.

Hence, the **ownership of informational processes** is largely held by such influential actors, while less influential ones that do not hold strong enough positions in the policy or project networks cannot influence these processes at will. Whether or not the information or know-how has actually been transferred to or sustained by

Recipient country types		Thematic types						
International projects	Riparian state projects	Newly industrialized country projects	Developing country projects	(Post-) communist country projects	Distribution conflict projects	Research & education projects	Technical & economic projects	Political projects
	+		++	++	++		++	+
+	+	++	++		++		+	++
	+				+			
						++		
+								
+	+++	++	++	++	+++	++	++	++
		++			+			
+								
+								

the less influential (or eventually not even mentioned) actors or people is then only of secondary relevancy while surely of interest to the donor agency. If information has been successfully transferred and has become personal knowledge (p. 6 in *ibid.*), it might be due to other reasons other than ownership of the respective individuals and institutions in the process. In other words, the mere existence of personal knowledge may not give sufficient proof that an actor or person had any influence on or choice in the process and type of knowledge being transferred, and the question remains, did the entity hold (co-)ownership or not?

De Valk et al. (2005, p. 8) distinguish further between ownership of (1) material inputs and outputs, (2) non-material inputs and outputs and (3) objectives and processes. In their study, material inputs are not seen as relevant, as they are subject to the terms and conditions of the aid relationship (ibid.). They note that the transfer of knowledge inputs is done differently in training and consultancy (advise) and these differences 'have implications for the ease with which the local organization *can appropriate* the knowledge in question' (ibid., italics added).

Consequently, the possibility that local organisations may possess and provide their own knowledge input seems to not be counted for. Rather, a definition of an 'ownership' factor is chosen that reflects a normative, donor- or Eurocentric position, however realistic it may be to the practice of development cooperation and policy. Knowledge outputs (ibid.) again similarly induce a relation between acquisition of knowledge and ownership, as questioned above. Defining ownership on objectives being equal to the commitment of an actor to these objectives (ibid.) equals the principle **negation of ownership being derived from the participation in objective setting**, by only seeing it as being derived from the commitment expressed to objectives eventually set by others.

However, analysing the decision competency on objectives, as they are part of policies and political programmes, is central to understanding **ownership on policy as well as project levels**. The ownership of project processes they define as the assumption of responsibility for project formulation, implementation and control (ibid.). Also, this is eventually misleading, as rather the possibility to influence the process can give answers to the degree of ownership as such, rather than the measure of 'responsibility'. As they mention themselves, process ownership refers to decision-making about strategic choices, for example, of resource allocation, which is subject to 'negotiations with the aid provider about the rules and possible variations of resource allocation and reporting' (p. 9 in ibid.). Hence, the question remains, who holds the more influential positions in these processes and negotiations?

Therefore, while contributing to a good discussion of the concept or ideology of 'ownership', findings from de Valk et al. (2005) have to be treated carefully, in the context of their definitions. Concluding, for instance, that local ownership was high, because ownership of knowledge outputs was very high (p. 11 in ibid.), neglects the facts that the successful implementation of the 'change of minds' or transfer of knowledge may not be equalled with (co-)ownership of local actors (see above). According to the results of this research, the only recipient country actors gaining frequently strong positions are governmental actors.

They conclude further that most of the projects they studied can be regarded as successful in terms of knowledge transmission and development (pp. 11–12 in ibid.), certainly true, from the donors' point of view, but this may not necessarily be true from the point of view of certain, local actors. This bias towards a donor's view is further expressed by their suggestions for adjustments of project approaches to national contexts. Thereby, they constitute the view that '**competent organizations** are fewer in Mozambique than in Botswana and (...) more emphasis needs to be placed on (...) the **selectivity** of the project planning attributes', recommending a '**donor driven development**' for Mozambique on one side and a '**national**

ownership’ approach for Botswana on the other (p. 13 in *ibid.*, bold added), thereby indirectly still expressing the need of Mozambique to be made ‘access-able’ for donors’ know-how transfer.

This characteristic is reflected well by the ‘primary interaction phase’, as described below (see Fig. 6.2). According to de Valk et al. (2005, p. 14), the key question is not whether a country is more or less suitable, but whether in that particular national context a **competent**¹⁴ **local organisation** can exist. De Valk et al. (2005, p. 16) do note that the Swedish International Development Agency has a very strong position and a very important role in the overall process, mainly due to their competences with regard to the succession of small projects. Moreover, de Valk et al. (*ibid.*) remind us that the agency also gains their strong position from the **expectations** or aims of local actors concerning further funding and from the approval of new phases dependent on previous performance. They also mention restrictions, for example, donors always have their own (hidden) agenda too (p. 20 in *ibid.*).

Doornbos (2006) also touches on ‘**the quest for appropriate institutional capacity**’, though in the context of complex emergencies and food security, which has somewhat different implications. However, he constitutes the ‘difference between ‘expertise’ and institutional ‘interest’ may actually only be small’ (p. 22 in *ibid.*). Though there are plenty of institutions handling emergency situations, ‘the field as a whole remains largely uncoordinated and often in fact is rather competitive’ (p. 23 in *ibid.*). ‘Indeed, within this overall setting, **questions of institutional prestige, power and pre-eminence**, alongside **established avenues for exchange and collaboration**, often enter the equation when agencies look at their own role in relation to those of others’ (*ibid.*, bold added).

‘**Empowerment**’, according to Nuscheler (2005, p. 623), means ‘the empowerment of people to recognize their rights, fight against repressive structures and be capable to engage in participation’; continuing, ‘(...) it is mainly an aim in the advancement of women.’ This definition, however, is not very clear. It uses the term itself within the definition, and it tends to provide rather a description of activities that are regarded to result in an improved role of the people empowered, than to provide the causal linkages and circumstances under which this ‘handing over of power’ takes place.

‘*Empowerment* has become a widely used word within the organizational sciences’ (p. 666 in Thomas and Velthouse 1990), but ‘the term has been used often loosely, to capture a family of somewhat related meanings’. ‘For example, the word has been used to describe a variety of specific interventions, as well as the presumed effects of those interventions on workers’ (*ibid.*). Wilkinson (1998, p. 46), discussing ‘empowerment’ in the context of human resource management, notes as well: ‘But one needs to question who is empowering whom and why, as well as examining to whom do the benefits (if any) belong?’

Definitely, ‘empowerment’ is also one of the key terms used in development cooperation policy and programmes. Similarly to organisations that thrive on

¹⁴ Who defines what is competent? And competent for what/for the implementation of whose interests/objectives?

making their staff work harder, one could summarise the intention of empowerment in development cooperation, as enabling the people to think and work according to the expectations of the development stakeholders and to make them think that is the best solution for them, rather than to increase self-reliance and build on existing 'powers' (capacities), because the latter could result in the development stakeholders getting replaceable by the people.

6.4 Capacities' Construction and Destruction

While Prittwitz's (1990, see esp. p. 225) normative scheme for **socioecological structure types**, derived from a relation between 'environment-political capacities for action' and 'environmental burden' (or resource consumption), seems indeed to describe well most developed countries' histories (i.e. of deforestation), yet it's general applicability is restricted, since the potential to reach the proclaimed fourth type of the retrieval of ecological stability, especially to what extent this kind of U-turn can be achieved (if at all), varies considerably from nation to nation (i.e. Japan, cp. Kerr 2001). However, for Prittwitz (ibid.), every country on earth is characterised by its very own combination of these two variables and could therefore be classified according to his types.

More importantly, his normative argumentation that societies living close to nature do (did) not hold any of the environmental capacities for action reflects a rather Eurocentric position, much like with typical donor argumentations, and needs more clarification. Indeed, it should not lead to the assumption that these societies did not hold any such aforementioned capacities nor that the gaining of environmental capacities depends 'naturally' on the eventual destruction of nature. Prittwitz (ibid.) obviously refers to the capacity of such societies to deal with external environmental threats, when provoked by industrialising or industrialised countries (i.e. water or air pollution, deforestation).

Also, the overexploitation in many periphery countries ('the South') is often a negative external effect of the developed countries' policies and needs (cp. Strand 2002: wealthy societies' environmental dumping in developing economies), rather than reflecting their own sense of resource hunger. This puts any potential for an environmental and economical U-turn in the developed countries into perspective, since that turn might indeed build on the so-called 'End of Space' (cp. Sieferle et al. 2006) phenomenon: the externalisation of production areas to other regions (cp. ibid.; p. 10 in Doornbos et al. 2000; Kerr 2001; p. 11 in Nygren 2000; p. 275 in Nugent 2006) or on the phenomenon of problem shifts (Prittwitz 1990).

In contrast, this chapter stresses that **for any stage of society, environmental capacities are present**, constructed according to the prevailing social institutions and their policies, but external intervention (i.e. development cooperation) leads to the construction of new social institutions and new capacities, fitting to the demands of an externally driven intervention (so far, these come from a more powerful 'field'), and thereby leads to the deconstruction of the existing social institutions and capacities.

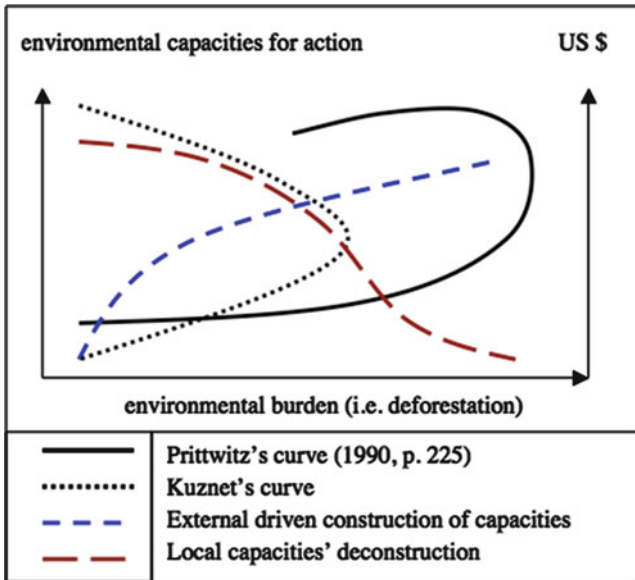


Fig. 6.1 Construction and destruction of capacities (Source: Aurenhammer 2011)

As will be shown later, this is a major strategy for successful introduction, building and reproduction of development cooperation (from the developers' point of view). So, rather than a simple function of increasing capacities along with environmental burden, it is a process of destruction and (re-)construction of capacities and social institutions, a process of change rather than one of 'development', facilitated by the most influential stakeholders of the donor and recipient countries in development (or economic) cooperation, often in accordance to the predominant global agenda, belief or mainstream (climate change, biodiversity protection, neo-liberal economic growth) (cp. p. 18 in Bierschenk et al. 1997; p. 135 in van Ufford 1997).

Figure 6.1 shows the curve according to Prittwitz (1990), a Kuznets curve and two curves, illustrating the **destruction of capacities** by the simultaneous construction of new capacities.¹⁵ That eventually will lead to an even higher environmental

¹⁵The destruction/construction processes could be compared also to Friedman's cycle of civilization and cycle of cultural identity (cit. in: Kreff 2003, p. 43), describing an inverse relationship between the formation of centralistic-imperialistic systems and the constitution and maintenance of diverse (peripheral) cultural identities. Hence, the current domination of the 'western civilization/development model' (Friedman: modernism, hegemony) as the most powerful field or subsystem over other subsystems that are in the mode of cultural decline or resistance, might make place for the development of a new hegemonial subsystem, at the stage of postmodernity, fragmentation and upcoming traditionalism. Unless the dominant subsystem changes, most of the others will be influenced by it (except those forms that are either isolated or reproduce themselves otherwise independently – cp. p. 41 in *ibid.*). The global systems approach thereby offers a combination of dependency and modernization theories.

burden (i.e. if gained efficiency is consumed by additional production). There can also occur some situations (i.e. armed conflicts, anarchy) where ‘capacity wholes’ are created over time. In reality, new waves of destruction and construction continue to appear over and over again, and these two processes happen simultaneously on different levels of ‘fields’ (i.e. global to national, national to district, district to village levels).

The **Kuznets curve** is discussed intensively in the literature, including its restrictions (i.e. Brown and Pearce 1994; Cropper and Griffiths 1994; Escobar n.d.; Shafik 1994). With respect to deforestation and income, Cropper and Griffiths (1994) found out that deforestation continues up to around 5,000 US\$, while in Shafik’s (1994) bell-shaped curve, the turning point, of relative deforestation, is reached at 1,500 US\$ per capita income. It is however important to notice that while the deforestation rate first rises and then declines, the total (natural) forest area declines only and this decline stops at very various points (cp., for instance, the remaining forest cover of Finland or Austria and the Netherlands). Also, there is a qualitative difference between primary forest, cultivated forest (forest cultures of local tree species) and exotic forest plantations. These differences in forest resource capacities go hand in hand with changes (including losses) in the environmental and social capacities of a country. Often, it is the exotic plantation area that compensates for some of the deforestation of natural forests in many ‘developing countries’ (i.e. Aurenhammer 2010b: Eucalyptus and Caribbean Pine in East Africa; cp. pp. 16–17 in Persson 2003, see figures 1 and 2).

Similarly to the above critique of the generalisations made by Prittwitz (1990), Stern (2004) points out that environmental destruction does not always occur alongside economic growth, and vice versa, and that economic growth does not always lead to a release of the environmental burden. For example, certain chemicals might indeed be used less, while on the other hand, ‘new toxics’ appear, or similarly a decrease in energy production from coal may be accompanied by an increase in nuclear energy production.

This refers to the aforementioned phenomenon of **problem shifting** (in space, time, issue), discovered by Prittwitz (1990, pp. 198ff.). It also supports the assumption that new environmental burdens and new social and environmental capacities and institutions will continue to be created simultaneously, rather than the occurrence of the ‘total reduction’ of overall environmental burden, which is hard to measure comparatively over time.

In applying Bourdieu’s (1987, 1993, 1998, 2001) **habitus–field theory**, there appears to be a very fruitful understanding of knowledge transfer, institution and capacity building in development cooperation. Bourdieu (ibid.) differentiates between ‘habitus’ and ‘field’, where the former represents a social entity and the latter an ‘autonomous micro-cosmos within the social macro-cosmos’ (p. 41 in Bourdieu 2001), in which the social entity acts. Habitus and field are interdependent, since the habitus is understood as a personified history and the field is seen as an objectified genesis (cp. pp. 252ff in Bohn and Hahn 2000). The field, the objective structure, is a ‘result of historical forms of practice’, while the habitus ‘is connected with such structures through its reproduction’ (p. 183 in Bourdieu 1979).

Gotschi et al. (2007), in their excellent book, viewing development cooperation through the eyes of Bourdieu, state correctly that it is an essential precondition for development programmes and projects to be adapted to the living conditions of their target groups. However, in practice, this is not the case; rather, it is an idealistic vision on how reality should look like (if cooperation would/could really aim mainly at improving the capacities of the target group). As Hunger (2007, in: Gotschi et al. 2007) notes himself, stakeholders behave in a way aiming to change the prevailing power and capital distribution (within a certain 'field'). 'We, the actors of development cooperation, must understand that habitus and field have to build a unity, for a functioning social praxis', Hunger (pp. 20ff in *ibid.*) notes further, explaining this by an example from **technology transfer**. However, though he is certainly right, the 'field' will not adapt itself to the weaker 'field' or field's habitus¹⁶ (social entities).¹⁷ Building on his example, this chapter elaborates on a schema of phases in development cooperation's capacity transfer (see Fig. 6.2).

'Tools' or instruments are referred to in Fig. 6.2. These are being adapted or changed due to external influences, which leads to the establishment of a new field in the convergency phase. It is this phase when already broad consensus is reached about the tools and instruments to be used in development cooperation. Interestingly enough, this may be indirectly compared to the genetic scientists' hypothesis on cell **receptor availability or unavailability**, enabling or blocking pathogen entry (cp. recent research on mutations in human white blood cell receptors suggests that these mutations may lead to an immunisation against HIV: i.e. Duncan et al. 2005).

According to this, the 'tools' may also be called receptors or entry points that are needed in order to transfer technology or know-how between two initially 'autonomous' fields.

As pictured by Hunger (*ibid.*), the water pump cannot be transferred successfully from one 'field' to another (the donor's country to a village in the recipients' country). This is because the technology fits to the social institutions and capacities of the donors' country and its people only, while the 'fields' and the 'habitus' in a recipient country have their own institutions and capacities. In a 'healthy' situation, such an external introduction will lead to conflicts, at least to the ignorance of the introduced issue (cp. Norris 1997).¹⁸

This will be followed by an adaptation in the less influential field or by a simulated adaptation and therefore abandonment after external pressures 'capitulate'

¹⁶To prevent confusion: habitus (singular and plural).

¹⁷However, contrary to Hunger (p. 30 in *ibid.*), development programmes can certainly change the habitus of effected people or actors, since these programmes change their fields and thereby force, at least in the longer run, most of them to adapt to the new circumstances (if they can). Also, he notices himself (p. 33), Bourdieu's fields show differences in regard to their influence and are to be seen probably also hierarchically (cp. also p. 184 in Richards 2006; p. 22 in Barraclough and Ghimire 1995).

¹⁸Farmers of Togo resisting the introduction of a use of draught animals, wheels, ploughs and traction vehicles, from colonial times to present-day development cooperation, 'have not learned' from its past experiences.

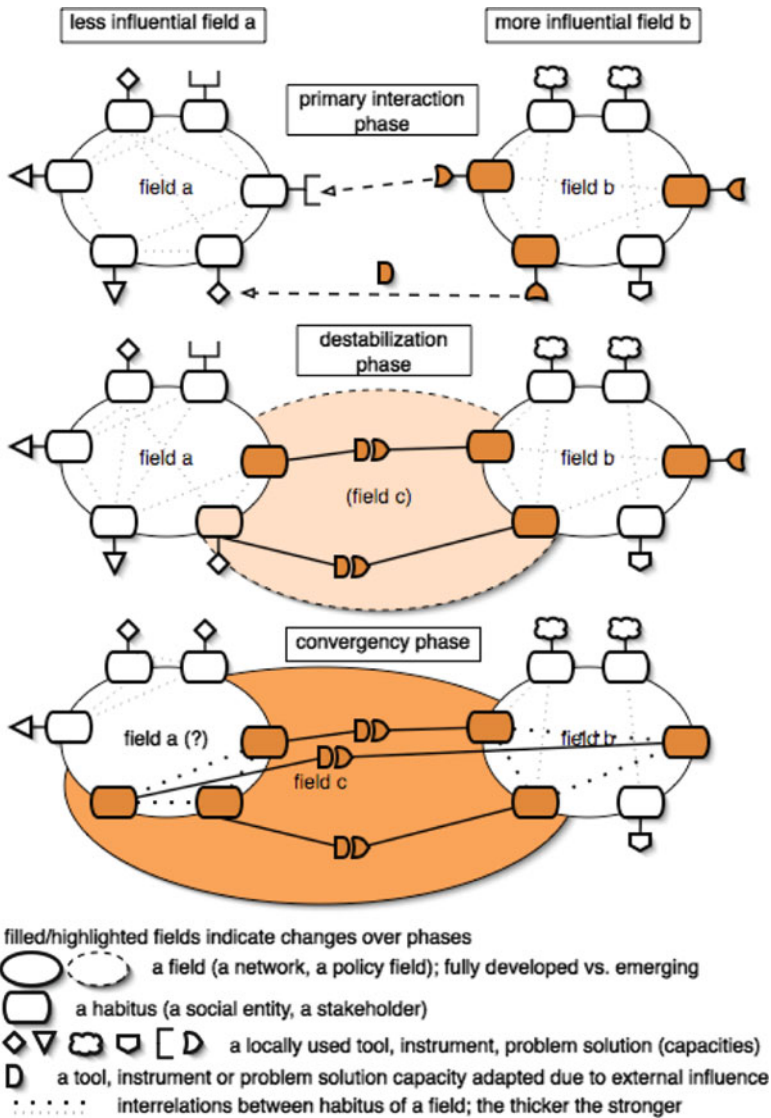


Fig. 6.2 Phases in development cooperations' capacity transfer (Source: Aurenhammer 2011)

(i.e. a donor's financing ends). However, due to interdependencies at various levels of 'fields' (networks, policy fields), adaptations to dominant issues or influences occur at several levels of policy (foreign trade policy, development cooperation policy, domestic policy) and society (cp. p. 22 in Barraclough and Ghimire 1995; pp. 126–142 in van Ufford 1997; pp. 218, 222–224, 230–235, 245–248 in Long

1997; Ekholm's and Friedman's global system approach, in: Kreff 2003, pp. 37ff; Hannerz 1992; p. 118 in Hannerz 1991, cit. in: Kreff 2003).

6.5 Whose Capacities Are Used in Development Cooperation?

Influential stakeholders dominate the transfer of know-how in development policy and cooperation in the forest-related sector. Aurenhammer (2009a, 2010a) showed that both in the policy level (formulation and financing of development programmes/policies) and in the cooperation level (concrete development activities, projects and programmes), governmental stakeholders of both donor and recipient countries hold, most frequently, very influential roles, followed to some extent by donor's consultancies. Their overall influence is due to their strong position within the respective policy or activity fields (the networks), with regard to their financial or material support, their irreplaceability and their high centrality with regard to trust within the network and with regard to the importance they gain within the network, when it comes to general and forest-related know-how and information (ibid. 2009a; 2010a).

Table 6.1 shows that across various **types of projects** – 'project types', focusing on who holds the financial responsibility in the project; 'recipient country types', classifying recipient countries into commonly used groups, referring to their economic development; and 'thematic types', grouping projects of similar thematic area – major differences do not occur. Most frequently, **governmental actors of both sides and consultancies of the donor's side play a key role** when it comes to forest-related information and know-how in forest cooperation.

In other words, their information and know-how, or such information that is channelled through them, is mainly used in development cooperation, while others' know-how and information does not exist or is remaining unused within the networks of cooperation (ibid. 2010a).

So, for instance, in contrary to common belief, local non-profit organisations, grass-root organisations (i.e. local communities) or local scientific institutions only play a minor role when regarding know-how and information transfer in cooperation activities' networks (cp. Clement 2006; p.107 in Barraclough and Ghimire 1995; p. 46 in Olivier de Sardan 1997; Norris 1997). In opposition to the 'imputation' by donors (and recipients' governments), 'ownership' must be held by local communities; these do not attain an important position with regard to forest-related information and know-how transfer. Indigenous, local knowledge does not gain any competency within donors' development cooperation, only the 'development' of *new*, local, forest-related institutions constitutes an important basis for the 'anchoring' of the forest-related know-how transfer from donor countries (Aurenhammer 2010a).

Further qualitative expert interviews (ibid. 2010b) showed differences in the type of forest-related information and know-how delivered or produced by the

most influential stakeholders, with the conclusion that local governmental stakeholders do not play an active role in the transfer of forest-related know-how (i.e. silvicultural, technical information), because their competencies are rather drawn to bureaucratic and policy processes (i.e. bureaucratic/administrative, legal, policy information), and if, however, ‘modern’ silvicultural or technical know-how exists (i.e. at the district forest officer level), the technical, personal and financial resources or even forest resources to implement or transfer this knowledge into practice (in order to test and improve it) are lacking (ibid 2010a, b).

These empirical results fit well to the theoretical description of development cooperation in Gotschi (2007, in Gotschi et al. 2007, p. 43). According to her, the development cooperation **policy field possesses certain capital** (capacities), enabling it to form structures in other fields (compare Fig. 6.2 in this chapter), and when the North interferes in fields of the South to form ‘development’, **dominant power structures are changed**, whereby the more privileged, dominant (southern) actors have it easier to gain from the ‘instrument’ development cooperation, than marginalised actors do. This applies to all levels and areas of development cooperation, according to Gotschi (ibid.).

The position in social space determines an actors’ chance to articulate and to gain resources or capital from development cooperation (ibid.). Project leaders often tend to make use of their expert knowledge and in doing so reach ‘their’ project goals, so it is easier for them to cooperate with groups that possess similar structure or capital (capacities) (ibid.). This domination of, and interest in, the transfer of their own (northern) knowledge and therefore the need for available, **suiting southern structures** can be found from empirical results from Gotschi (ibid., pp. 43–44), from southern Africa, and similar conclusions are also drawn in this research (cp. pp. 8, 14–19, 21, 38 in Bierschenk et al. 1997; p. 52 in Olivier de Sardan 1997; Norris 1997; p. 158 in Ahohounkpanzon 1997; p. 185 in Lachenmann 1997; more controversial: see Rauch 1997).

6.6 Capacity Construction and Destruction at the Policy Level

Examples can be drawn from both the policy and the cooperation levels. Referring to Fig. 6.2, and especially the ‘**primary interaction phase**’, it can be empirically described that one of the major problems at the beginning (and still at later points in ‘development’ and cooperation) that donors face is the fact that there is ‘nobody’ they can work with, yet. As a donor representative explained (Aurenhammer 2010b), when they came to a certain country first in the 1970s, there was nobody to work with, ‘there was only one forest technician working in the government, trained in India’.

Hence, in order to engage in ‘successful cooperation’, it was seen necessary to build up the capacities and the institutions in order to be able to communicate,

transfer and reproduce the know-how of the donors.¹⁹ At this stage (often in riparian states), the governmental stakeholders of the recipient country still hold the highest influence, but external donors can gain high influence by means of offering financial and material resources (cp. Aurenhammer 2009a). That is pretty much what the ‘primary interaction phase’ is all about (cp. also Norris 1997).

The ‘primary interaction phase’ is followed by a **‘destabilisation phase’** (intended or not), where strong stakeholders of both fields (networks) lay the basis for a new field; similarly, the power distribution within the old fields (especially that of the recipient country) changes, and conflicts occur. In this phase, the influential stakeholders of the recipient country are successfully infiltrated, and there exists a consensus between those stakeholders about the (externally introduced) tools that are to be used to solve a specific problem. Governmental stakeholders of both sides gain strong influence in these ‘developing countries’ (cp. Aurenhammer 2009a, b).

This is to be compared to the **hysteresis effect**, where social entities first will try to create such circumstances that have led in the past to desired results (p. 22 in Hunger 2007, in Gotschi et al. 2007; cp. p. 111 in Bourdieu 1993; p. 23 in Bierschenk et al. 1997). Due to this hysteresis effect of the habitus, social practices can often be sustained longer than economic and social circumstances fitting to these (cp. p. 117 in Bourdieu 1993).

The effect can be seen as a protection mechanism and reduces the danger of crises and challenges for a social entity. If the field is however modified by external interventions so much that the habitus (social entities) are unable to adapt, they will become incapable of action (p. 22 in Hunger 2007, in Gotschi et al. 2007; cp. pp. 209ff in Lachenmann 1997). Then, conflicts may arise out of such circumstances (cp. pp. 313ff in Cavalcanti 2006).

Hunger (ibid.) states some examples like governmental interventions forcing nomads to sedentary life or development cooperation, demanding from subsistence farmers to apply market logic, totally unknown to them (see also p. 24 in ibid.; cp. pp. 25–27 in Bierschenk et al. 1997; pp. 183, 203 in Lachenmann 1997). In the ‘destabilisation phase’, hence, certain, strong actors of the less influential field will adapt to or be adopted by the external, more influential field (cp. p. 184 in Richards 2006), while the majority of actors or individuals will remain reacting through the hysteresis effect and ‘create’ or are even drawn into conflicts or will be (further) excluded, even more within the next phase.

In the **‘convergency phase’**, likely to be reached by so-called newly industrialised countries, the new field is established clearly, strong linkages exist between the elites and influential stakeholders of the recipient and the donor country, consensus exists that in principle tools, based on external capacities and know-how, are the key for solving problems.

¹⁹ Compare also the establishment of governmental bodies aligned to ‘international’ demand. So, that is, in Nepal, the Ministry of Forestry established a REDD unit (REDD – Forestry and Climate Change Cell), after REDD issues were high on the ‘development’ agenda (Aurenhammer 2010a), or the Brazilian President set up a special secretariat (SEMA) for the environment, when environmental issues were high on the agenda (cp. pp. 331–332 in Hall 2006).

Similarly, a separation within the ‘old field’ of the recipient country occurs, in terms of interrelations between stakeholders and their participation in processes, which can lead to internal conflicts. At the same time, local tools or instruments to solve a problem are lost or their variety diminishes, they are not gaining necessary attention or support or this endeavour is outweighed by the comparatively huge input of external financial and informational capacities. Interestingly, recipients’ governmental institutions seem to lose ground to donors’ governmental institutions but especially to donors’ consultancies (especially in economic–technical projects) (cp. Aurenhammer 2009a).

As Hunger (2007, in Gotschi et al. 2007, pp. 22–23) states, development cooperation with strong external interventions risks therefore that the intervened field will modify to such an extent that social entities (*habitus*) will be left without adoption to their own field. Such phenomena of inability in reproduction of introduced ‘items’ by the society can be covered for some time by external support or locally simulated behaviour (in the fear to lose support), but when the supporting agent leaves the ‘field’, it remains uncertain whether the social entities (*habitus*) will be able to benefit from such an intervention in the future.

In relation to Bourdieu’s capital theory, Hunger (p. 27 in *ibid.*) describes that projects of development cooperation affect the capital structure and volume of the intervened field, thereby changing the positions of actors in the social space. He concludes, ‘development should not be seen as a way to reach a future goal (which in development cooperation is often related to the already realized model of industrialized countries), but as process, which is derived from the past/prior genesis of the respective society’ (p. 23 in *ibid.*, own translation). Changes in the field or issue need to be anchored in the social reproduction processes as well (*ibid.*). The latter, however, usually does not apply to development policy; rather, only external factors gain high importance.

Research (Aurenhammer 2010a) has shown that the **selection of recipient countries** is determined by political processes outside forest-related development cooperation, not by problem pressure, but by (sector-)external factors, which are often based on historical factors and which determine the selection of recipient countries and thematic priorities. Donors’ governmental institutions still hold the key competencies in the formulation and financing of their (political) programmes, and progress in the ‘empowering’ of the recipient governments has yet not changed much in this respect, though some changes have occurred in the system of cooperation.

Expert interviews (Aurenhammer 2010b) have shown that though in some countries ‘**new modes of cooperation**’ have emerged, in accordance to the Paris Declaration (2005), they have not led to much change when it comes to the influence of recipient countries (governments) on donor’s programme formulation and financing. Still, the donors are seen as main drivers formulating (directly or indirectly) their programmes and deciding on their finances.

Some examples are where recipients’ governments have tried or try to reach a better ‘ownership’, for instance, in Tanzania, where the government (Ministry of Finance) has provided the donor coordination process that was before mainly based on a self-evaluation of the donors, to their surprise, with their own suggestion to

sector distribution and donor involvement, first resulting in some large disagreements. Similarly, in Honduras, the (new) government tried (2010) to streamline development cooperation to their National Development Plan and Vision²⁰ (cp. also chapter 15 in Myrdal 1969; Padrón 1988, both cit. in: van Ufford 1997, p. 137).

However, even in such cases, donors' bilateral cooperation policy remains largely determined by the donors, while recipients rather try to **optimise** the availability of combined internal and external **financial resources** between budget lines (cp. pp. 12ff in Bierschenk et al. 1997). Interestingly, both donors' and recipients' stakeholders explain (cp. Aurenhammer 2010b) that the lack of vision of the recipient countries' representatives is a major reason why 'ownership' gets so difficult.

Indeed, donors often see themselves being pushed into a situation, where they have to determine what sectors they are in, where they step out and where others may overtake. Donor representatives argue that recipients, when asked, not wanting to give the impression of wanting donor withdrawal, imply that they are willing 'to decide this within the donors' group' (ibid. 2010b; cp. p. 32 in Bierschenk et al. 1997).

Though **donor coordination** is commonly seen as an instrument to improve 'ownership' and 'empower' recipient governments, it cannot be seen a prerequisite for influential recipient governments. For instance, unlike the pilot countries of donor coordination (i.e. Tanzania, Uganda, Nicaragua), Bhutan has not signed the Paris Declaration. Nevertheless, the donors enforce a coordination process in their own way in Bhutan. This again, ironically, could be seen as the opposite of 'ownership', as structural force, according to Galtung (1969), being imposed on another government.

To shortly summarise some of the main factors identified that play a role on the policy level, a **donors' policy still depends strongly on** past experiences (i.e. the donor engages 30 years in forest-related cooperation), gained and available expertise (i.e. strong know-how in the home country; variability in the type of solutions for similar problems, depending on the donor), economic interests (i.e. direct, institutional/labour interests; networks; potential future economic cooperation benefits; building up suitable institutional settings in the recipient country to ease or facilitate future economic cooperation), institutionalised structures (i.e. the structure of donor's bureaucracy), historical factors (i.e. former colony) as well as general political preferences of certain parties (i.e. engagement in development cooperation between socialist governments).

'**Successful cooperation**', for instance, in the forest sectors, is seen, from the donors' point of view, as cooperation, where the core issue (forest cooperation) has hardly been changed, but rather marketed successfully as part of a broader policy issue: For example, reforestation efforts evolved into biodiversity issues, community forestry issues or today, a climate change measure, thereby still

²⁰ However, Barraclough and Ghimire (1995, p. 72) note that the Honduran state vacillated between yielding to pressures from powerful national and transnational interest groups and seeking legitimacy among indigenous people, small peasants and landless workers.

remaining a forestry measure to its core (Aurenhammer 2010a²¹; cp. p. 18 in Bierschenk et al. 1997).

These engagements can go on for several decades, during which capacities and institutions are constructed and reproduced in the recipient country and the reproduction of the donors' bodies is thereby guaranteed as well. The institutions induced by these changes (i.e. local consultancies, local non-profit organisations, local farmer unions, newly established ministerial divisions) engage in strong networks with the donors' bodies and aim at their own reproduction and hence vice versa give further reason for future justification (cp. Ojha et al. 2009; pp. 28–29 in Bierschenk et al. 1997: creation of brokers of development cooperation).

Another identified donor strategy is to **specialise** from a more general approach (i.e. 'rural development') to a more clearly sector-oriented approach (Aurenhammer 2010a). In a third strategy, donors focus on the formulation of **generalised policy** or cooperation areas, which may include various sectors. This strategy is counterproductive for a weakly positioned sector within the field of development policy, since, as a cross-cutting issue, it will get lost. Donor countries, thriving for such generalised policies, without ensuring their connection to real sectors, have been found to lose capacities to serve cooperation in these weaker sectors (i.e. Swedish focus on 'rural development' ended up in a loss of capacities in forestry and even agricultural sectors, which are now tried to be retained once again) (ibid. 2010a).

Some factors could also be identified as adding to the influence and **role the recipient government can play** with regard to 'ownership' in development policy. The strength and stability of the recipient countries' government (i.e. Ethiopia, Tanzania; also Uganda and Bhutan) plays a crucial role in the negotiation processes. Tanzania being governed since 1977 by the same party (Revolution Party, CCM), Uganda standing since 1986 under Museveni's rule (National Resistance Army) and Bhutan with its long monarchic tradition, changed, by the king himself, in 2008, to a constitutional monarchy, have all – though they are very different – in common that their governments have stayed predictably stable.

In general, recipient governments that act with a certain pride and caution towards external influences, for instance Bhutan, can reach more 'ownership' in processes of development policy. The unity and integrity of a country (a nation), for instance Bhutan, and also in Tanzania (the latter with common intermarriages, massive resettlements in the past, dying off of local indigenous languages; leaving out the Zanzibar issue), can improve a recipients' position further. In contrary, this can be found to a less extent in Nicaragua (the autonomous regions RAAN and RAAS) or Honduras. In Kenya and Nepal, this factor is currently in its 'testing phase'.

²¹ That is, Austrian/Swiss cooperation in Bhutan (from forest management to scientific forestry, to community forestry), United Kingdom in Nepal (various steps of programme evolution), Finland in Tanzania/East Usambara (from sawmilling to catchment forest management, environmental protection, community activities) and Swedish NGO in East Africa (from planting trees to capacity development, to combined REED measures).

Another important factor for recipient governments, as indicated above, is the political will to develop long-termed programmes ('visions'), as to be found already in a number of countries (i.e. Kenyas' Vision 2030 and Honduras' National Development Plan 2010–2022 and its *Visión de País* 2010–2038). Other countries do refer to a multi-year planning (i.e. Bhutan: 10th Five-Year Plan, 2008–2013), being mostly recognised (by donors) as poverty reduction strategy papers (PRSPs) or similar. 'Visions' are, on one hand, an important step into defining an independent way forwards, for national development, since a lack of visions and self-initiative from (former) recipient governments (i.e. in bilateral negotiations and donor coordination meetings) is often focused on by both donor stakeholders as well as from the recipient countries' side. On the other hand, such 'visions' can be misused easily as 'symbolic politics' or just as modern or trendy or even as a home or foreign affairs' necessity to promote such a 'paper'. Finally, a vision, does not rule out external influence (as often huge interdependencies prevail). Often, visions take on problems that were still not being solved by previous government, and then rather than providing a viable solution, they use the novel logo of 'We have a vision' as a political tool. However, independently produced, long-termed position papers can strengthen the influence of recipients' governments in negotiation processes, as examples from Tanzania, Uganda or Honduras show (cp. Aurenhammer 2010a).

Finally, a low financial dependency (from external financial resources), a high percentage of self-financing of activities and an optimised recipients' budget policy are factors, improving the position and influence of recipients' governments, though these are still factors hardly complied with by most recipients. Nicaragua, for instance, received in 2009 600 million US\$, the highest donor budget in history, with around 1.6 billion US\$ as a total budget, reflecting a budget dependency of 40%. Tanzania too received in 2010/2011 about 800 million US\$ general budget support from donors as well as about 2 billion US\$ project financing by donors, with around 5.5 billion US\$ available from the government revenue (of which about 30% are planned for development financing and 70% for annual, current costs), corresponding to around 50% budget dependency. In Uganda, the dependency on external financing was reduced from around 50% to around 25% (National Development Plan 2010–2014). On a programme or project level, a high self-financing proportion reflects a positive factor in regard to national ownership (cp. p. 12 in Bierschenk et al. 1997).

6.7 Empirical Examples from the Cooperation Level

In the following, empirical examples from the cooperation level will further illustrate and explain the issues or facets of 'capacity construction' and 'destruction', the availability and the loss of local capacities (i.e. knowledge).

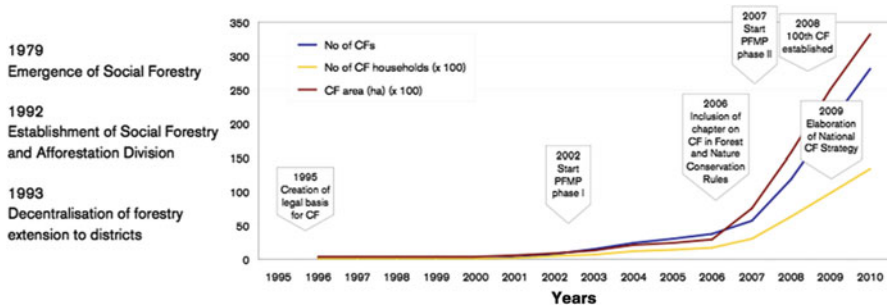


Fig. 6.3 Community forestry development in Bhutan (after PFMP 2011, © Kaspar Schmidt)

6.7.1 Neglected Local (Traditional) Institutions

As stated above, it cannot be argued that there exist no capacities at any stage of ‘development’ in a country, tribe or community. However, it is commonly used in development policy to anticipate the development of capacities, neglecting the availability of existing local capacities or local social institutions. Often, traditional institutions are seen as hindering or conflicting parallel structures (cp. Aurenhammer 2009b) that are hard to incorporate into in principle bi-governmental cooperation that has to cooperate with the political structures.

For instance, in the Swiss-funded participatory forest management programme (PFMP 2011), the ‘development’ of community forestry is described in a figure (see Fig. 6.3), showing the curve of construction of a new form of local, social institutions (called community forestry), as an achievement of the donor (and the recipient government). True, there has not been any community forestry, according to the currently used definition, in Bhutan, before the end of the second millennium, but indeed, there have been local social institutions, households and individuals before, dealing with the ‘management’ of forest resources for various purposes. Similarly, this applies to Nepal.

While these traditional social institutions have diminished for various reasons (external influences, i.e. resettlements, policy change, government formalising institutions by law, conflicts), they can still be found in some areas, especially in the tribes or clans living as (semi-)nomads in the highlands (i.e. Bhutan, Nepal) or in some tribes in East Africa and in some remaining locations of Central America (cp. Aurenhammer 2010a; cases from Nepal: Bichler 2007 and Prammer 2007, both in Gotschi et al. 2007; cases from W-Africa: Polycarp Ibe 2003; Richards 1997; Norris 1997; and from Amazonia: Clement 2006; Allen 2006; Nortcliff 2006; Hall 2006; Tanzania/Kenya: pp. 87–88 in Barraclough and Ghimire 1995; Sahel/Tuareg: Spittler 1997).

In fact, no Western donor has likely more know-how on how to improve traditional subsistence farming systems in, let us say, Nepal than the Nepalese subsistence farmers themselves. Indeed, even rivalry between different models of ‘modern

social institutions' exists between the 'experts of development', for instance, between varieties of 'community forestry', 'joint forest management', 'participatory forest management' or 'leasehold forestry', to state some common examples. The constellation of influential actors and their interests behind each of these models is truly different.

As with the upcoming popularity of community forestry pushed for by influential stakeholders, primarily donors, regardless of initial 'strong scepticism' from local forest authorities (i.e. Nepal, Bhutan, Namibia), eventually even demanded that community forestry must be a part of a larger bilateral forestry programme (i.e. Namibia), in order to finance the whole programme (cp. pp. 104–105 in Barraclough and Ghimire).

In Bhutan, those traditional social institutions (cp. FAO 2000; Wangchuk 1998; Ura 1993; Gyamtsho 1996; pp. 144–149, 196–201, 213–214, 255–256 in Preissel 2004), now becoming rare, include such functions as 'Reesup', 'Chusup', 'Shingsungpa', responsible for certain natural resources, but have been replaced gradually by 'modern' institutions. A 'Reesup' refers to a person given the authority by the Council of Elders of a village to guarantee an adequate supply of firewood and timber for construction for everybody in the community and who could set social sanctions ('Reedum') concerning the use of these resources. Similarly, 'Chusup' refers to a person regulating issues of water supply (today mostly replaced by so-called water user groups). A 'Shingsungpa' counts as responsible for agricultural damages caused by animal husbandry.

Factors, having a long-lasting effect on the decline or loss of such local institutions (thus also their capacities), in the various recipient countries researched, are especially colonisation, nationalisation and large resettlement programmes or migration movements as well as armed conflicts (cp. also Murphy and Steward 1956; Barraclough and Ghimire 1995; p. 187 in Lachenmann 1997; pp. 301ff in Lukas 2002).²²

6.7.2 Construction of 'Modern Institutions' and Capacities

However, development cooperation does not actively engage in the using of existing, traditional institutions and capacities but rather tries to put forwards new forms of (social) institutions. Hence, there is also little information on the destruction of

²² Compare also Murphy and Steward (1956): Accultural and economic dependency due to the rubber boom caused the complete transformation of traditional societies. Compare for Nepal Barraclough and Ghimire (1995, p. 24, see also pp. 98ff): Long-fallow crop rotations of the Tharu people in fertile Tarai were shortened, when they were forced to cultivate marginal areas unsuitable for intensive agriculture, as their lands were alienated for agricultural settlement and forest reserves, while deforestation of much of the remainder further reduced their excess to forest grazing, fuel, litter and fodder. Community forestry and other approaches have not yet been changing that situation notably (Aurenhammer 2009b). Compare Barraclough and Ghimire (1995, pp. 64ff) on Central America.

these traditional (or local) forms and capacities, while modern institutions and their capacities are built up and reproduced, according to the two schools of cooperation (cp. pp. 14–15 in Persson 2003) – forest conservation and forest management – based on instruments of planning and inventory. ‘Traditional ecological knowledge’, so Hall (2006, p. 328), ‘as a component of social capital for promoting economic progress and supplying environmental services, has until recently been almost totally neglected by official planners and policymakers’²³ (cp. also p. 74 in Madeley 2002; pp. 278ff²⁴ in Nugent 2006; p. 46 in Olivier de Sardan 1997; Norris 1997; Lukas 2002)

Lukas (2002) shows that through the joint definition of the *Imperata* grass being a pest, spread by local farmers’ production systems, governments and development organisations defined a ‘development problem’, leading to the discrimination of social organisation and culture of entire tribal communities (p. 310 in *ibid.*). This was initially led by colonial governments and inaccurate results from researchers (pp. 282, 301 in *ibid.*) and is still applied by the governmental officials, who have been trained on that ideology in the past (p. 308 in *ibid.*). Lukas (2002, p. 311) concludes that instead of only counting on Western technological transfer, the high cultural heterogeneity of Indonesia could be used and the elaborated variety of the grass-ladang cultivation could be transferred to other regions, being a highly effective agricultural system.

Along with Barraclough and Ghimire (1995, p. 63), research on the Amazon region concluded that viable alternatives to the present non-sustainable uses of natural resources will have to come primarily from those social groups whose survival is most directly threatened (indigenous); however, this can only be done if sufficient mobilisation around social and ecological issues nationally ‘change radically the present development strategy that encourages destructive resource use for short-term profits’. They further argue that local-level mobilisation and organisation by the victims of ‘development’ is essential, but to reform policies and institutions that

²³ Hall (2006, p. 334) hence finds it important to provide answers to ‘what kinds of social capital already exist among traditional populations’ and ‘what is the role of traditional knowledge in sustaining such capital’ as well as ‘how can development policymakers and practitioners help to build upon existing social capital at the community level’. He found that now local populations play a pivotal role in the design and implementation of strategies in Amazonia. He bases this on the premise ‘that traditional groups have the interest and the power, when engaging jointly with other social-institutional actors, to influence the course of events in their favour’ (*ibid.*). Given the results of this research, the reality still looks different, and there are restrictions to his idea, though still being worthwhile.

²⁴ Contrary to Quiroz (1996, cit. in: Nugent 2006, p. 278), arguing ‘the value of local systems in facilitation development is gradually being recognized by national and international development agencies’, the findings presented in this chapter do not show much influence in local knowledge in such programmes. Nugent (2006, p. 280) finds that if though the term indigenous knowledge is used, this is less to promote indigenous conceptions of indigenous knowledge than to promote assumptions about how indigenous knowledge can be exploited by others (cp. Aurenhammer 2009a: case of Bhutan and production/licensing).

are driving deforestation and social exclusion, they are not sufficient in themselves, but land reforms are also vital.

However, in an unstable social climate, legal titles play often a rather minor role, while the critical role of state strategies and local and national power structures prevails (p. 76 in *ibid.*, referring to El Salvador and Nicaragua). In many African countries, however, contrary to Central America, customary tenure rights are still largely respected, even in countries where private land ownership has been widely introduced (i.e. Kenya) (p. 95 in *ibid.*). Importantly, it is those customary rights that are vulnerable to disruption by commercial penetration and social differentiation (*ibid.*).²⁵

Gotschi et al. (2007, in Gotschi et al. 2007, pp. 94–98) found that two projects in Mozambique affected the social field of ‘their’ target group, by establishing new networks and societal positions (p. 94 in *ibid.*). According to her, thereby ‘social innovations’ are released, because existing behavioural structures have to be adapted to the changed circumstances (*ibid.*). As described earlier, this ‘forced’ adaptation of behaviour may not be equalled to ‘innovation’ (cp. pp. 94, 98 in *ibid.*; see also pp. 23ff in Bierschenk et al. 1997, on administrative vs. endogenous innovations; pp. 46–47 in Olivier de Sardan 1997; p. 186 in Lachenmann 1997); rather, it is an adaptation, or maybe a ‘mutation’, of certain actors of a social field, to survive or to resist changes.

‘Development cooperation projects aim in most cases at introducing technical and/or economical innovation in a region and to achieve change or “development”’ (p. 97 in Gotschi et al. 2007); thereby, the powerful stakeholders ‘change the structures in a certain field and kick off (...) serious social processes’ (p. 98 in *ibid.*). In other words, the powerful stakeholders of development cooperation sell their desired change as ‘innovation’ (and ‘development’). These processes include changes in collective beliefs and values, forms of organisation and power structures (*ibid.*) (cp. also p. 52 in Olivier de Sardan 1997).

6.7.3 *Historically Shaped Relations of Power*

Ballabh et al. (2002) analysed the decline of local resources management institutions in India, comparing Van (Forest) Panchayats (VPs) and more recently evolved Forest Protection Committees (FPCs) of Joint Forest Management (JFM) cases. The capacity of the self-regulated and self-enforced VP institutions degenerated and eroded, when revenue and forest departments increased their control over them (pp. 2165–2166 in *ibid.*). The decision to implement JFM programmes in the VP forest areas eroded the rights of these VPs (p. 2164 in *ibid.*).

²⁵ Therefore (*ibid.*), they see it a major challenge in Africa on ‘how to enable rural communities to retain the socially desirable features of relative equity in excess to land, concern for environmental protection and decentralised local management that customary land systems usually embodied’.

‘The JFM resolution provides wide-ranging powers to the forest department to enable intervention in organizational and management issues of the FPCs’; for instance, most states’ resolutions restrict the development of shared understanding among the members of FPCs, allowing people to form committees to protect only degraded forests (ibid.). The demarcation of an area, the approval of micro-plans and the determination of disposal procedures, for commercially valuable products, all belong to the competencies of the forest department (ibid.), making it irreplaceable.

And, contrary to many community forestry cases (i.e. Nepal, Bhutan), here the forest department can terminate FPCs and dissolve executive committees, without assigning any reasons, and their beat officers are often part of, or affiliated to, the committees (ibid.). In some cases, villagers realised only that they are part of the JFM programme, when the timber was harvested and sold (p. 2165 in ibid.). According to Pandey and Campbell (1996, p. 12, cit. in: ibid.), such centralised decision-making structures militate ‘against the site specific and adoptive management in which prescriptions may have to be modified annually and in order to fine tune’, and innovation is discouraged in such systems.

Hence, reality shows restrictions to the ideas of Lam (1994) and Ostrom (1992) (both cit. in: Ballabh et al. 2002) on the reinforcement of community’s shared knowledge and understanding through various institutional arrangements, since the existence of mere provision of support from external actors does not guarantee that this support will in fact strengthen the people’s institutions (p. 2165 in Ballabh et al. 2002), as is recognised by Ostrom (1994, cit. in: ibid.), stating that externally imposed rules that allocate resources and determine benefits have an added disadvantage in that they may either be ignored by resource users or may lead to conflicts. However, such rules or interferences may also change the institutions to the benefit of the powerful.

Sivaramakrishnan (2000, pp. 61–89) analyses the history and historical factors that lead to changes of forest knowledge in Bengal and argues for a careful historical investigation of the manner in which scientific managerial knowledge emerges in the field of forestry, thereby explaining the scant role of villagers in forest management decisions in JFM of today (cp. p. 10 in Arora and Khare 1994, cit. in: Sivaramakrishnan 2000, p. 62) and how local forest knowledge was replaced by a silvicultural domain in JFM. ‘Scientific knowledge²⁶ was *constructed* in colonial Bengal by valorising certain kinds of knowledge and, thereby, privileging attendant modes of forest management’ (ibid., italics added), what Bayly (1993, cit. in: ibid.) refers to as ‘colonial knowledge’.

Colonial foresters created a body of knowledge (on *Shorea robusta*/sal, the most valuable species of the region), by defining of expertise and manipulation of local structures of authority (p. 62 in Sivaramakrishnan 2000). Working plans came to symbolise scientific forestry, and forest settlements became a prerequisite (p. 65 in ibid.; cp. to schools of cooperation in pp. 14–15 in Persson 2003); however, the

²⁶It was noticed frequently in my field interviews that forest officials talk about ‘scientific management’ or ‘scientific forestry’.

natural regeneration of sal became an elusive goal for scientific forestry by the end of the colonial period (p. 67 in Sivaramakrishnan 2000). Local forest knowledge was moved to the category of folklore, and official research was made the sole arbiter of what constituted progressive innovation (p. 68 in *ibid.*; cp. p. 330 in Hall 2006; p. 154 in Norris 1997; p. 279 in Lukas 2002).

‘This powerful legacy in sal silviculture has carried through into the working of JFM in Bengal today, even though there has been no recent research on natural regeneration and colonial experience in the matter was never satisfactory’ (p. 68 in Sivaramakrishnan 2000; cp. pp. 329ff in Hall 2006),²⁷ which is explained by Escobar (1988, p. 435, cit. in: Sivaramakrishnan 2000) as ‘the demarcation of fields and their assignment to experts (...)’. There is strong evidence that before the British rule, no ruler had such a sustained policy of intrusive exploitation or regulation of forested tracts, so forest science flourished, and in this process, the focus narrowed to management of wood (p. 70 in Sivaramakrishnan 2000).

‘There was a conflicted expansion of knowledge and a contested growth of managerial arrangements through which scientific forestry was professionalized and institutionalized’ with the help of certain programmatic aspects, namely, ‘inventory, protection, regeneration, working plans and silviculture’ (pp. 71, 81–83 in *ibid.*). Similarly to Persson’s two schools of cooperation (2003, pp. 14–15), also Sivaramakrishnan (2000, p. 71) defines two approaches through which scientific forestry was constructed: (1) management by demarcation and exclusion and (2) management by inventory and controlled regeneration. Thereby, ‘*the locus of expertise and direction*’ was moved ‘up and out into the higher echelons of the forest service’ (*ibid.*).

Sivaramakrishnan (2000, pp. 82–83) concludes that the constellations of debates that surrounded scientific forestry in history ‘*remain salient through forest management institutions that emerged then and exist today*’ (italics added). Hence, historical factors play an essential role in the understanding of the construction and destruction of capacities and institutions. Looking at the types of recent development cooperation, they obviously still build much upon those ‘historically constructed realities’; however, the influential actors of today’s cooperation keep on constructing new realities, facilitating changes that may take historical factors into account (i.e. benefit from exiting postcolonial structures, institutions, knowledge systems – cp. Aurenhammer 2010a), but do not necessarily always base themselves nor depend on them. Recalling Bourdieu’s ‘habitus’, the ‘personified history’, one can find historical factors having long-lasting influence, with plentiful effects on present and future exchange between ‘fields’, evolved under different histories.

For instance, the issue of destruction of social capacities and institutions, due to historical factors, can be found from a case along Nicaragua’s and Honduras’s

²⁷ Hall (2006, pp. 329ff) on legitimate knowledge and the development of Amazonia: ‘What counted as legitimate knowledge was outsiders’ knowledge’ (p. 330 in *ibid.*), referring to the modernisation strategies of the 1970s. ‘Traditional knowledge was (...) synonymous with backwardness and underdevelopment’ (*ibid.*).

Caribbean coast, inhabited largely by the Miskito tribe or in a project in Cameroon, targeting Pygmies (see further below) (Aurenhammer 2010b; cp. Chap. 5, on Nicaragua).

With regard to the Miskito case, they live in a coastal area, with lagoons rich in fish and sea fruits; the land had been forested with the world's most southern, natural *Pinus caribaea* appearance. They used to prepare some patches of forest to grow some vegetables, and after the introduction of fire by the Spanish, they used it to burn small areas of forest ground to retain fresh, young grass for their few dairy cattle. They used to collect some firewood and get timber for construction, as needed. At some point (during 1960s), however, US companies cleared the coast from all the pines, and another company took out the remaining stumps and roots, as a raw material for chemical industry (cp. also pp. 68, 75, 119 in Barraclough and Ghimire 1995).²⁸ In addition to that, then also armed conflicts came up, and the young men, returning 'with their guns on their shoulders', did not – in many communities – honour the Council of Elders anymore.

In areas where the Miskito communities were not dependent on the forests, these had several effects. Forests were not recognised anymore as something useful, since they had already been taken by others anyway. By dishonouring the Elders, who play(ed) an essential role in forwarding the traditional knowledge (also on forests and trees), today much of their knowledge (on forests) has already been lost. With a changing environment and a loss in forest cover, information forwarded by women (mothers) to the youth naturally changed too – so today, a man tells, 'My grandmother told me how to plant manioc, not trees' (Aurenhammer 2010b). Indeed, his grandmother, as with any of the Elders, probably never needed to plant trees, since trees were abundant, and now, trees being so scarce, there is little use for former traditional knowledge for the comparatively undisturbed forests of earlier days.

In fact, most of the coastal pine forest areas look today – still – like a desert. Many donors have started efforts, that is, to replant pines and build up watching towers and firefighting capacities, but with limited success. The success is also limited, due to one tradition that was kept on by the Miskito: the burning of patches, to gain fresh grass and suitable land for vegetables. However, today, most of the forests are not dense anymore (i.e. around Bilwi). That is why fires easily spread to huge areas of land. Actually, the area is hardly covered by trees at all, except some pine cultivations, growing a couple of metres in height, if they have not already died off due to the one or more fire events, and some of the older trees have remained, if not broken by the recent hurricane Felix (ibid. 2010b).

Today, the selling of larger pines' lumber occurs, but this is transported from areas far away from the coastal area around Bilwi, cut and prepared by the men, but the chain of custody, including selling in the market, remains in the hands of the women. Still, it is not the Miskito who can be charged with not caring for their forest

²⁸ Their case studies in Central America show clearly how deforestation processes and social institutions at local levels are subordinated to power relationships in national societies (with due respect to international influences) (pp. 68ff in Barraclough and Ghimire 1995).

but the changes in their social capacities and institutions by external influences and historical factors (doubtless also present ones) must be taken into account when engaging in cooperation projects, if a useful result is to be aimed at, with regard to the communities themselves (ibid. 2010b).

In fact, the constant burning has led projects to stop their forest endeavours in this region, wondering why the majority of the cultivations had been burnt at least once, before the project was abandoned (ibid. 2010b).

6.7.4 Availability of and Use for Local (Traditional) Knowledge and the Conditions for Keeping Such Knowledge Alive

Clement (2006) demands for two classes of traditional agroecological knowledge in modern Amazonia. Indigenous Amazonian crop domestication gets little funding compared to research and development on landscape domestication (p. 33 in ibid.). 80% of the traditional Amazonian domesticates are woody perennials, but due to disease, slavery, war and missionisation after contact, a large number of domesticated crop populations, which depended on human intervention, became extinct (p. 38 in ibid.), resulting in both a decline in the diversity of social and environmental solutions (cp. p. 43 in ibid.).

However, traditional human populations still conserve more crop genetic resources than do institutions (ibid.). Fearnside (1999) again makes clear: ‘The limiting factors to gaining income from biodiversity are laboratories and taxonomists, not forests and tribal peoples’, talking about pharmaceutical use.²⁹

Clement (2006, p. 39) stresses the importance of ‘keeping alive’ this knowledge; the utilisation and conservation of these genetic resources – where they still occur – are considered as vital tasks for modern Amazonia, since contrary to agricultural practices imported from temperate zones today, these traditional practices enable for a more sustainable agriculture (cp. pp. 317ff in Cavalcanti 2006; Smith et al. 1998; Smith 2000). Similarly, Hall (2006, p. 329) reminds us of the importance of ‘continued excess and improvements to the application of such knowledge in devising development solutions’ to secure the livelihoods of the people, and Fearnside (2006, p. 166) notes, ‘if traditional communities lose their cultural identities, they are likely to be no more effective in defending the forest than are their non-traditional counterparts’ (cp. also p. 331 in Schweitzer 2002; Wenzel 1991).

Also, Nortcliff (2006, pp. 155–156) concludes that the clearing of forests without knowledge of the soils and their response to development activities will likely

²⁹ He concludes also that appropriate institutional mechanisms are needed to turn these indigenous assets into monetary flows (so, construction of institutions) – but needs to add – *and* to make those flows useful to the traditional peoples involved.

lead to failed developments, and therefore, the wealth of indigenous experience and knowledge in soil and land management should be recognised and incorporated into future development options. According to Hall (2006, p. 329), ‘conservation requires a strong measure of local organization’, building upon ‘the expertise and knowledge of resource users for project and program design and implementation’.

However, the limitations of ‘development’ affect the demand for traditional knowledge (p. 39 in Clement 2006; cp. also p. 340³⁰ in Hall 2006; pp. 276, 282 in Nugent 2006; pp. 185ff in Richards 2006; Lukas 2002). For instance, only low-diversity agroforestry systems are economically attractive (Smith et al. 1998, cit. in: Clement 2006, p. 43), partly because of the current economic model of free-trade corporate capitalism (Daly 1993; Prugh 1995, both cit. in: *ibid.*, p. 43), when diverse systems tend to be more labour intensive, more knowledge intensive (Alteri 1995, cit. in: *ibid.*) and hence more expensive and tend to not allow for an efficient economy of scales (p. 43 in Clement 2006). If new crop products are found to be marketable, their production is soon moved out of Amazonia (pp. 44, 46 in *ibid.*). Nugent (2006, pp. 277–278) reminds that the appeal of indigenous ‘knowledge systems’ lies in the material possibilities they afford to those capable of exploiting them. Further, yet the decisions about how to exploit indigenous knowledge are divorced from the social and cultural priorities of the possessors of that knowledge (p. 282 in *ibid.*).

Yet, according to Richards (2006, p. 181), some donors and international non-governmental organisations see traditional indigenous people, including caboclos (mixed-blood descendants) communities, with regard to their social cohesion and tendency to have longer-term perspectives as well as technical understanding and experience, promising for applying a market-based natural forest management. Thereby, local capacities are ‘pushed’ to put them into use for the markets.

While for the global community market approaches to forest conservation are the least expensive, applying them, most of the costs of conservation are left with the communities – ‘except to the extent that donors and governments subsidize the process through institutional and technical support to the local communities’ (p. 182 in *ibid.*). ‘With indigenous societies increasingly being sucked into the market economy owing to globalization’ (p. 183 in *ibid.*) and being made to experience poverty that threatens to undermine their societies, some actors proposed, environmental and social objectives appear to conveniently coincide with market-based ‘sustainable forest management’ (*ibid.*), very much reminding us of the Kielwasser theory (Rupf 1960).

Richards (2006, p. 183; cp. pp. 183, 188–190, 197–203, 210 in Lachenmann 1997; pp. 278ff in Lukas 2002; see also p. 44 in Kreff 2003) refers to a ‘clash of incentives’, where market integration and Western values are gradually eroding

³⁰ According to Hall (2006, p. 340), the use of traditional knowledge to serve a development agenda *imposed largely by outsiders* is clearly an ever-present risk (i.e. crude knowledge extraction to benefit external but local interests, intellectual property rights over biodiversity, extraction of natural substances for use in pharmaceutical industry) (cp. Posey 2000; Krott and Suplie 2001; pp. 274–275 in Nugent 2006).

indigenous views (with major implications for natural resource management). The local economic model of Indians can be seen as anti-market (Martin von Hildebrand, quoted in Bunyard et al. 1993). Richards (2006, p. 184) notes that the market economy's incentives prevail over the gift economy's ones, as the former incentives appear to be more powerful when the two systems meet, especially among younger people (cp. pp. 22, 127 in Barraclough and Ghimire 1995).³¹ Hence, the stronger field will modify the less powerful one: its habitus, institutions and instruments.³²

6.7.5 *Availability of Local (Traditional) Capacities*

Also, a case of a project in Cameroon clearly shows that the term 'capacity' needs to be dealt with more critically in both development cooperation and research. As a result of commercial cutting of primary forests by a French company years before, an Austrian non-governmental organisation implemented a project aiming at the capacity building of the Pygmies of that area. In fact, the French company had left the area without building schools, as they were obliged to do, continuing cutting elsewhere in the country. No evidence could be found showing an Austrian–French communication, regarding the stopping of the company cutting down Pygmy-inhabited forests, and hence the arrest of the root issue.

Instead, the project then tried to build up the capacities of the Pygmies to enable them to deal with their environment. Not disregarding the efforts being made, however, it is not the Pygmies that had no capacities to deal with their forested environment initially; rather, the company pulled the rug out from under the Pygmies' feet, resulting in them finding themselves in an uprooted situation, where the applying of their capacities was history, resulting further in a perfect argument that the Pygmies' had had no capacities to deal with their environment. Finally, this rather small cooperation was used by the popular media in support of the government saying essentially, 'we have done something for the Pygmies now', rather than it really reflecting the fact that for the Pygmies, little in fact had changed and few of their problems were solved (Aurenhammer 2010b; cp. p. 25 in Barraclough and Ghimire 1995).

In Kenya (i.e. near Kitale), development cooperation faces the effects of the (past) resettlement of tribes from other areas, for instance, in areas where settlement schemes were facilitated after colonisation. The creation of such schemes makes it difficult to join households into groups, which is often demanded or at least facilitated by donors. This is due to differences between tribes but also due to the fact that

³¹ Compare with Emmanuels' theory (1972) of unequal exchange.

³² However, we shall keep in mind that among most post-industrial societies, secular values and self-expression values go hand in hand. Also, among poor nations, traditional values and survival values go together (Inglehart and Baker 2000; Inglehart and Norris 2004); cp. also Schweitzer (2002, p. 324).

a tribe or a clan had specific social institutions that had been destroyed by such resettlements (similarly also in parts of Tanzania³³) (Aurenhammer 2010b).

Also in Kenya, in the area of Kisumu, communities that were participating in an agroforestry programme brought up another factor. They lived close to a formerly state-owned, today privatised sugar cane company, which they, especially in former times, were used to producing for. Actually, they were restricted to produce only sugar cane, despite the very small space they were allowed to use for their own personal vegetable needs.

Before then, they were familiar with many tree species in the forested areas that they could use. Still 20 years ago, forests were rather dense in the surrounding hills. They also were used to cultivating vegetables in-between certain local tree species. Over time, their capacities and know-how on various vegetables and local trees however declined or were not applicable anymore. Due to the restricted cultivation, they lost knowledge on fruits and vegetables, and due to continuous decline in forest or tree cover, some of the local trees they used for intercropping actually disappeared from the area or got very rare. Noteworthy, Anderson (1990) notes that the key to sustainable management is integrated multiple-product management as well as the broad livelihood base that maintains forest societies, and any narrowing of this basis can have serious consequences (cp. p. 25 in Barraclough and Ghimire 1995).

Today, the project tries to ‘construct’ new capacities for these communities, enabling them to diversify in their vegetable and grain production, also towards selling, and trying to retain the importance of trees, as fruit trees (i.e. mango, papaya), fodder trees or bushes, fire or construction wood and soil improvement for intercropping (cp. Chap. 5 on Kenya and Uganda). However, many of the tree species are exotic by nature, though often introduced during the colonial times already, since the availability of seeds, for growing seedlings in nurseries, was very limited or impossible for some of the local, traditional species, being rare or (locally) extinct.³⁴

Indeed, formerly, the locals did not have to think about collecting seed, growing seedlings, grafting fruit trees and planting trees, so these are capacities that they may need to build on, *if* forests and trees are important for them. Their traditional knowledge and capacities are, at least partly, inapplicable under the current

³³ Compare also Barraclough and Ghimire (1995, p. 83) on Tanzania: ‘Villagisation often disrupted customary production and social systems.’ Also, the pressure on surrounding forest areas increased, and governmental attempts to promote agroforestry systems and community forestry led to highly variable outcomes. ‘Villagisation was a direct violation of customary tenure rights to the extent it was coercive (...)’ (ibid.).

³⁴ Also, given that (natural) forests are remaining in only few ‘Water Towers’ of Kenya mainly, Kenya though being a huge country. When comparing this to the rules of seed collection and nursery establishment in Central Europe, where plenty of restrictions have to be taken into account in terms of horizontal and vertical distances of the source of seeds (provenances), the applicability of the reproduction of extremely rare species can be doubted.

conditions, created mostly due to external influences that constructed other capacities (i.e. sugar cane production).

These examples show **that a loss in biodiversity equals a loss in the diversity of problem solutions** and in the variety of tools or instruments available for the locals – but in fact for all humanity (cp. p. 127 in Barraclough and Ghimire 1995; pp. 23–24 in Bierschenk et al. 1997; pp. 301ff in Lukas 2002).

6.7.6 *External Influences Changing Power Structures and Peasants' Strategic Choice*

In that context, Nygren (2000) provides results, analysing the changing role of forests and the practices of peasants towards them in a Costa Rican community. According to her, deforestation is a process of development and power involving multiple social actors, including development experts (p. 11 in *ibid.*). She found local people not being passive victims of global challenges but directly involved in the changes (*ibid.*). However, their involvement is described mainly as either an adaptation to external processes or strategies of survival (but not called innovations though). In that sense, they obviously are part of the occurred changes and processes but still may not have had much influence on the changing circumstances or options of 'development'.

Unequal relations of power and resource excess and control are key factors to the understanding of deforestation as a social process, requiring increasing attention to development and power (p. 12 in *ibid.*), as well as to the complex relationship between the social structure and the cultural construction of nature (Gandy 1996, cit. in: *ibid.*). Therefore, Nygren (*ibid.*) finds it necessary to explore the historically shaped relations of production and power (cp. also Agarwal 1992; Moore 1993, both cit. in: *ibid.*; pp. 54–55 in Lévi-Strauss 1978; p. 66 in Barraclough and Ghimire 1995; pp. 18ff in Bierschenk et al. 1997; p. 45 in Olivier de Sardan 1997; p. 145 in Norris 1997; pp. 322ff in Schweitzer 2002; p. 38 in Kreff 2003, on Ekholm's and Friedman's global systems approach) because peoples' resource management strategies (individual problem solutions) cannot be determined solely by the local culture.

'Natural resource utilization is a social process in which different interest groups, with diverse and often conflicting intentions, confront each other at local, regional, national and global levels' (Schmink and Wood 1992, cit. in: Nygren 2000, p. 12). Nygren (*ibid.*) further argues that '**the social relations of resource utilization are historically and politically constructed**, and the concepts (...) change over time and between different social and cultural actors' (bold added).

This provides support to the hypotheses and concept of this research, namely, to the importance of determining who the most influential actors are that are driving 'development' in the direction of their own interests and in what relation do they stand (in the form of a network, recognising the various levels involved) as well as

to the examination of historical and more recent effects (power factors) through which these actors contributed to the construction and the destruction processes.

Nygren (ibid.) gives an overview of the authors addressing changes caused by state, market and development interventions (cp. Ghimire 1994; Neumann 1997; Ribot 1995; Vivian 1994; see also: Barraclough and Ghimire 1995; pp. 15, 25–27, 29, 35 in Bierschenk et al. 1997³⁵), and others address traditional forest dwellers resource strategies (cp. Peluso 1992a, b; Fairhead and Leach 1994; Fortman 1995; Rocheleau et al. 1995; Roe 1995), giving ‘valuable insight into how ‘outsider’ developers and state officials have tried to exercise their authority over the peoples of the forest and over their natural resources’ (pp. 12–13 in Nygren 2000).

Nygren herself focuses on strategies of migrant settlers, analysing the history of change, deforestation being a process of change in the people’s land tenure and land-use systems, in their social stratification and power relations and in their environmental perceptions and cultural construction.

Nygren’s (p. 14 in ibid.; cp. p. 126 in Barraclough and Ghimire 1995; p. 31 in Bierschenk et al. 1997) research also makes clear that there is no way of classifying rural people or ‘the poor’ into one unique group but that these are rather internally differentiated (i.e. traditional forest dwellers vs. migrant settlers) and clearly based on the construction of social relations and change (same counts for ‘the state’).

So, as found also in the qualitative part of this research (cp. Aurenhammer 2010a), one can be confronted with various ‘personified histories’, forms of social construction, at the same time. This can be observed in a rural area (i.e. variations from forms of pure subsistence to pure market economic existence) but also with regard to governmental institutions (recipient and donor countries). Some local ‘forms of living’ might be better, some worse off under the present power relations in the ‘field’ under consideration. They definitely do not have the same interests and do not apply the same ‘tools’ for problem solving – restricting the applicability of claimed concepts, like ‘pro-poor’ development or ‘national interest’.

Environmental changes are inextricably linked to social and political processes, and the historical dimensions of resource conflicts are essential to an understanding of contemporary struggles (p. 14 in Nygren 2000). ‘Local people *alter* their production strategies, as well as their perceptions of the environment, *within a social context* which is *structured*, but not determined’ (ibid., italics added), reminding us of applying Bourdieu (cp. p. 40 in Gotschi 2007, in Gotschi et al. 2007, cit. above). ‘According to the changes in their natural and political ambience, they try to create strategies of survival and resistance (...)’, maintains Nygren (2000, p. 14) further.

³⁵In their research, most development cooperation activities did not base themselves on ‘a combination of broad variation and selection that enables for an endogenous, sustainable innovation, rather they were *characterized by a blockade of self-organized innovation mechanisms through a massive dominancy of administrative imposed innovations*’ (italics added).

6.7.7 *Mechanisms of Change*

The above written is in support of the theoretical and empirical discussions in this chapter, namely, that external interventions (such as development cooperation) in another social context ('field') force the less influential 'field' and actors to alter (adapt to) their strategies, by constructing new realities (new institutions, changing power relations, policies and programmes). Instead of basing 'development' on self-reliance of the local people, developing their own innovations and diversified problem solutions, they are left with finding ways of survival and resistance (cp. p. 26 in Nygren 2000; pp. 22–23, 35 in Bierschenk et al. 1997; pp. 46–47 in Olivier de Sardan 1997).

Development cooperation may hence both contribute to creating new forms of adaptation (cp. p. 107 in Barraclough and Ghimire 1995³⁶; p. 158 in Ahohounkpanzon 1997; Norris 1997) and help to ease adaptation (i.e. smoothing negative externalities of globalisation or foreign trade policy), thereby constructing capacities and destructing others, or it could – at least in theory – try to facilitate and sustain the variety and creation of local innovations to problems, based on local capacities (which might however be contrary to its key stakeholders' or experts' interests) (cp. also pp. 278–279 in Nugent 2006; pp. 20–21, 24–27, 35 in Bierschenk et al. 1997).

Not to forget, development cooperation may also construct only temporarily capacities/institutions (i.e. well described by the developers' problem with decreasing available capacity in previously trained inventory staff, after such a programme has phased out support, making the next inventory struggling for qualified staff again), without destruction of other capacities (though the factor of bound personal capacity of governmental staff that could do other work instead needs to be considered too).

Resistance (a form of anarchical behaviour) may be another reaction on external intervention or constitute a choice for (the resisting actors) sustaining (more or less) independent development but may also lead to exclusion and loss of power within a social field (cp. Ghimire 1994; Neumann 1997; Peluso 1992a;

³⁶ They state in their chapter on 'grassroots responses to deforestation', local people 'are well equipped by experience and self-interest *to adapt* traditional resource management systems to the requirements of rapidly changing societies, if they are provided with incentives, security and support' (ibid., italics added). Thereby, they assume that external incentives will help attract the interest of the locals, and they – as many authors – provide us with a picture that adaptation is the only mechanism to change. This hypothesis is formulated thereafter: 'Assuming that governments, NGOs and international organisations really want to devise socially and ecologically sustainable alternatives to destructive deforestation – which is by no means always the case – a better understanding of traditional resource management systems and of how local people respond to their disruption, is essential.' However, this chapter showed that local actors, their institutions and knowledge are yet hardly of any relevancy for development cooperation. As they state themselves, those groups most dependent on forests 'have no influence on the policies and market forces contributing to their misery'. Actors as powerful allies for local collective resistance movements always have their own agendas (p. 108 in ibid.).

Escobar and Alvarez 1992; Gadgil and Guha 1994; Escobar 1995; Hass 1993; Rocheleau et al. 1995; Watts 1989; Barraclough and Ghimire 1995; p. 261 in Rauch 1997).

However, Nygren (2000, pp. 14–15) criticises one-sided actor-oriented researchers, who claim that ‘no matter how degraded people might be, they preserve a certain potential for creativity and space for manoeuvre’ (cp. Torres 1992; Valestrand 1991; Verschoor 1994; all cit. in: *ibid.*) and that by stressing people’s capacity to invent and create, such researchers tend to remove agents from structures and to replace determinism with voluntarism.

Right, the structures have to be examined (i.e. by network analyses), and an actors’ position within such networks tells about its potential to change these structures. If that is low, it does not matter if an actor would hold the (i.e. intellectual) capacities to do things differently. What Nygren probably means is it is illusionary to suggest that actors of low influence can eventually sustain or afford ‘independent’ individual development, unless they can raise the awareness of powerful actors (cp. pp. 337–340 in Hall 2006³⁷; pp. 70, 107–108, 126, 130–133 in Barraclough and Ghimire 1995; p. 15 in Bierschenk et al. 1997; pp. 327ff in Schweitzer 2002).

Therefore, this only supports the assumption that development cooperation (or any powerful actors) will not offer overall, equal and interest-free ‘capacity development’ and ‘pro-poor’ development but will base its interventions on strategic selection, depending on the capacities they are interested in, to construct. ‘Local constructions of deforestation are (...) not seen as mere reflections of cultural experience and history, but as the constitution of past and present power relations’ (p. 16 in Nygren 2000).

The case study in Nygren (2000) exemplifies the historical context, as it applies to, maybe not in all details but in its essence, many places elsewhere, also in regard to those studied in this research. Initially, Cabécar Indians lived in the area, practising hunter-gathering and small-scale swidden agriculture and mixed home gardening. Forest areas occupied by indigenous populations were seen as constituting empty space for the exploitation for national wealth. A railway was built (late nineteenth century) and big coffee and sugar cane haciendas established, most of them owned by English and German proprietors, encouraged by the Costa Rican government, in the hope that this would advance international trade.

³⁷Hall (2006, p. 337) argues the articulation of local resource users’ own interests based upon their knowledge and the need to insert these demands into the planning process being a central factor for enhancing social capital. Conventionally, however, impacted groups have not been directly involved in the planning, unless considerable grass-root political pressure occurred. Due to the little degree of political organisation of Amazonians, NGOs have frequently been instrumental in facilitation, articulation and negotiation between communities and external actors, such as government agencies and donors (pp. 337–338 in *ibid.*; cp. Hall 1997; Gaia Amazonas, n.d.: the work of Martin v. Hildebrandt in Colombia, Gaia Amazonas at www.gaiamazonas.org). Limitations are at the same time, however, local populations’ limited management capacity, their social fragmentation and sometimes overdependence on external organisations, such as NGOs (p. 340 in Hall 2006; cp. also p. 71 in Barraclough and Ghimire 1995).

Landless Mestizo people were settled in the area, and this governmental colonisation policy led some labourers on the estates to start pioneering in surrounding mountains (pp. 16–17 in *ibid.*).

This colonisation led to a ‘cultural struggle over knowledge and power regarding the ‘rational’ use of natural resources’ (p. 17 in *ibid.*). The government promoted coffee estates and liberalised privatisation of national forest lands, for the benefit of haciendas, and later began to favour peasant settlement establishment (pp. 17–18 in *ibid.*). ‘The socially constructed role of peasants was (...) to act as pioneers converting virgin forests for the agricultural development of the country’ (p. 18 in *ibid.*).³⁸ These peasant settlers, however, were joined soon by land speculators and absentee landlords, and mechanisms of a second-wave colonisation were created (*ibid.*). Differences in the colonists’ status were great, and the ‘state played an important role in **regulating the opportunities** of different social actors’ (pp. 19 in *ibid.*, bold added; cp. pp. 70, 74ff in Barraclough and Ghimire 1995).

The intensity of deforestation through pioneers (often contracted by absentee landlords) ‘cannot be justified by the need to clear new land to satisfy the food requirements of the expanding local population’ (p. 20 in Nygren 2000), but the stake was with **speculative cattle rising** (*ibid.*), later, with the construction of a penetration road (1950s) also with **logging**, then being a survival strategy for many poor peasants, while the bulk of the profit from timber sales went to certain rich peasants and absentee landlords (p. 21 in *ibid.*). Nygren (*ibid.*) stresses that in this situation, ‘local people had little room to create sustainable forms of forestry’ (cp. also pp. 55ff in Barraclough and Ghimire 1995).

Along with the road, intensive cash cropping for **coffee and sugar cane** was also introduced, increasing the dependence on international markets and the control state institutions’ hold over the local production (p. 21 in Nygren 2000). ‘According to the green revolution ideology (...) people were urged to change from traditional polycultures to monocultural plantations and from green manure to agrochemicals’, so most peasants became producers of coffee and sugar cane, their food cropping activities were marginalised and the participation of woman in agricultural decision-making diminished (p. 21 in *ibid.*), similar to the capacity destruction in the case from Kenya/Kisumu, described above.

In the 1970s, **extensive cattle raising** programmes, supported by international aid agencies, were introduced and effected ‘profound changes in the landscape and social structure’ of the region since the programme favoured large landholders (p. 23 in *ibid.*; cp. also p. 329 in Hall 2006; pp. 67, 76 in Barraclough and Ghimire 1995). Two-thirds of the agricultural land was devoted to cattle raising, though economic return was far below than that of cash crops and food crops (p. 23 in Nygren 2000).

³⁸ Contrary to Brazil or Costa Rica, in other Central American countries, it was less easy for a smallholder to receive a valid land title. Timber production was only in Honduras, a very significant economic activity nationally (comparing Central American countries) (cp. p. 67 in Barraclough and Ghimire 1995).

In the 1980s, ‘deforestation was constructed as a global problem’ (ibid.). Forest protection legislation meant for many big landowners only greater bureaucracy; instead, most primary forests disappeared, and secondary forests were left only in the steepest areas (p. 24 in ibid.; pp. 111–118 in Nygren 1995, cit. in: ibid.). Forestry was made synonymous with **forest protection**, and the new policy was put into effect only with considerable support from international aid agencies and conservation foundations³⁹ (p. 24 in Nygren 2000; cp. Leach and Fairhead 2000).

‘Today the Costa Rican peasants are being urged to engage in community forestry, agroforestry and traditional polycultures’ (p. 24 in Nygren 2000). The international development agencies are placing increasing emphasis on forest protection and environmental conservation in their aid distribution for Costa Rica, while the Costa Rican government is negotiating a reduction of a part of its foreign debt by means of conservation (ibid.; pp. 114–115 in Segura et al. 1997, cit. in: ibid.). ‘This turn-around illustrates how the conceptions of reasonable use of natural resources are historically and politically **constructed**’ (ibid., bold added). Similarly, it can be observed in Tanzania (East Usambara) that the initial engagement of various donors in modernisation activities (forest and tea industry) changed later to conservation activities and community approaches (cp. Aurenhammer 2010a).

Due to these findings, the great influence of external, influential actors, like the recipients’ government and its affiliations to international aid and trade networks’ key actors, on the changes in the field realities and possibilities of local actors, Nygren (2000) shows that in contrary to the lack of awareness of peasants to the value of conservation, constituted by governmental officials (p. 24 in Nygren 1998, cit. in: ibid.; cp. p. 331 in Hall 2006; pp. 95, 106, 111 in Barraclough and Ghimire 1995), it must be rather acknowledged that ‘their world-view corresponds to their life-history as colonists’ (p. 24 in Nygren 2000).

Therefore, Nygren (pp. 24–25 in 2000) concludes, ‘institutional power establishes itself not only in the structures of distribution and accumulation, but also in the cultural **constructions of social representation and social order**’ (bold added), which is in accordance with results of this research (cp. Aurenhammer 2010a). In other words, external influence has made peasants to that what they are and that what they own (capacities). In the process of constructing new institutions and capacities, others are also destructed and lost; likewise, ‘young producers (...) today know little about the forest’ (p. 25 in Nygren 2000), comparable to the examples given in this chapter (Kenya/Kisumu, Nicaragua/Miskito).

As in the Kisumu case, the remaining secondary forests provide today only with few native fruit trees and medicinal herbs (ibid.). The children of an era of aggressive

³⁹Local practices and customary occupations have eroded or got lost in Nepal (a carpentry caste in the hills and a blacksmith caste), due to population pressure that was increased by the exclusion of local people from large parts of forests (pp. 102; 119–120 in Barraclough and Ghimire 1995), while in Bhutan, having as well plenty protection areas, but less population, traditional housing structures (like windows) are still built in the same way.

environmental protection are today interested in afforestation, though their perception of such meaning is not large-scale tree planting, as proposed in programmes, rather planting of fruit trees and shade trees (*ibid.*). According to Nygren (p. 27 in *ibid.*), it is the current greening of the development discourse **that enables further political intervention in rural communities**, while local participation in rural development discourse may shift the attention to understanding of local culture, but ‘with little interest in the social circumstances that construct the people’s land-use practices and knowledge systems’ (Nygren 1998; *cit. in: ibid.*; cp. Schweitzer 2002).

6.7.8 Commercialisation

Another issue, contributing to the constructing and destructing of capacities, is that of ‘commercialisation’. A good example is again the community forestry programme in Bhutan, where donors demand the government to enable and ease the selling and marketing of timber from community forestry, while research (cp. p. 9 in Dorji and Phuntsho 2007) and practice show that many of them (yet, given also the fact that the monetary system was only recently introduced) have not any intention to sell their entire timber or firewood, but rather wish to retain some (easier) formal access to these resources for their own needs (Aurenhammer 2009b).

This shows that donors aim to foster an economic growth mentality and hence (constituting) the need for development cooperation (as formulated into donors’ programmes) to contribute to increased income, poverty reduction and so forth. This may well override the call for ‘ownership’ (also formulated into donors’ programmes), when the people actually have other priorities and beliefs, maybe more attached to happiness (gross national happiness) rather than to a gross national product, or at least to issues that they have gained from their own capacities and knowledge (cp. pp. 313–315, 321–324 in Cavalcanti 2006).

For instance, locals might use a practice of chopping logs into square timber, right where the tree was cut in the forest, wasting more wood than sawing techniques in mills. But on the other hand, this technique is known to result in a slower-decaying timber, than applying sawing techniques, without additional treatments for the timber (which locals of course would have to buy, similarly to chemical fertiliser) (Aurenhammer 2009b). As Padoch and Pinedo-Vásquez (2006, p. 173) stress, local technologies of manipulation of landholdings for timber continue to be little explored, as well as longer-term timber-species management processes.

Contrary to the facilitation of an improved ‘subsistence’ economy (where Western experts may not hold much expertise compared to local farmers), commercialisation issues can drive poor farmers into new problems that they are not able to deal with alone with their acquired capacities and experiences. Examples are a plenty, for instance, from Bhutan, where asparagus markets failed, when the newly promoted products were introduced and ready to sell (Aurenhammer 2009b), or from southern Africa (p. 45 in Gotschi 2007, in Gotschi et al. 2007), where a project

did not build on the (subsistence) needs of farmers, but tried to introduce a certain sort of fruit into the market.⁴⁰

Gotschi (*ibid.*, bold added) reports that local women were sceptical towards this approach, but the project leader argued: **‘Look these are our project goals, if farmers do not meet our criteria they are not our target group.’** These examples are in contrast to Anderson (1990, cited above), as they rather narrow down the livelihood basis of local people or push them into risky (monotonous) market-economical endeavours.

There is also an economic interest from donors and recipient governments (or elites) to opt for future benefits from the construction of new forest-related institutions. Hence, they are building up farmer groups, forest owner groups and similar (i.e. in Central America) that might be able to handle the mobilisation of timber to (future) industries and be used as networks and as a basis for (future) economic cooperation. It should be added here that early experiences of cooperation in forestry (1960s–1970s), well described by modernisation theory of development cooperation, have resulted in the experience (i.e. in Tanzania, Vietnam) that just providing the techniques does not work, if the necessary institutions and capacities are not built up (constructed) to deal with the technology. Hence, the building up of forestry-close, local institutions (i.e. community forestry) became a new priority of forestry cooperation, often accompanied by privatisation (*ibid.* 2010b).

The issue of destruction of existing institutions and capacities by the creation of new, local institutions and capacities is to be discussed not only with regard to community forestry or similar ‘modern institutions’ but also with regard to ‘water user groups’ that are constructed by donor-funded programmes. Water and forest issues are often interconnected, and external influences – no matter how positive they might be – will always result in changes in the existing institutions and capacities. In Uganda, for instance, an Austrian programme created a concept of ‘water user groups’ and developed small towns’ water supply, through tapping of springs and channelling the water from there, directly and fresh, to the town. The spring’s land area needed to be bought first by the commune or town, and effort was made to replant local trees (i.e. *Prunus africana*) to protect the spring (with variable success). Again, the UK supported the development of purification of water from rivers, in Uganda. So, donors build on their know-how and capacities, try to transfer it and thereby create changes in the structure of social institutions and neglect often existing social systems and local capacities, as they do not focus on how to build on these. Thereby, conflicts can arise, for example, when in a rural commune the role of women, to carry water, changes (*ibid.* 2010b).

Donor’s insistence on collective action by communities has resulted in a confounding mixture of the influences of the market system and traditional gift economy institutions, resulting in confusion and ambiguity among community members

⁴⁰ Compare also pp. 241–243 in Milliken 2006: for Amazonian (Yanomami) cases. He sees little chance for modern Yanomami to economically gain from their products or knowledge (introduced fruit production, medicinal plants), except from providing knowledge for conservation purposes.

over excess to resources, according to Chase Smith (1995). Similarly, Chapin (1991) notes that donations have not brought with them the necessary reciprocal obligations and hence deepened the ambiguities and eroded the dignity of indigenous groups.

Richards (2006, p. 189) therefore stresses the importance of analysis of the likely impacts of interventions on the underlying social institutions and argues for leaving traditional systems alone or for helping them to protect them from effects of market forces and focussing market-based support on those parts of their livelihood systems, which have become individualised (i.e. agricultural and handicraft production). To prevent a (further) weakening of the underlying institutional basis, caused by a ‘conflict of incentives’, ‘contract exchange approaches’ should be promoted that are more conformed with indigenous’ reciprocal logic (non-market values provide the stronger conservation incentive for indigenous peoples: i.e. support for relevant policies and laws) (p. 190 in *ibid.*).

However, in a situation where ‘even the most isolated local communities are being increasingly incorporated (...) into broader national and international networks’ (p. 22 in Barraclough and Ghimire 1995), the **ways of transfer and reproduction of ‘external knowledge’ are often unexpected and fast.**

An example from a remote indigenous community in Nicaragua, close to the Honduran border, is that of a young student, trained on modern agricultural knowledge in one of the centres of Nicaragua, who one day came back to the village, where a non-governmental organisation (NGO) tried to support traditional ways of livelihood (Aurenhammer 2010b).

When the young agriculturalist called for fencing the households’ production areas, this was the start of a heavy discussion between the NGO, the traditional villagers and the modern agriculturalist, since such an activity would have run counter the traditional system and the (ideological) goals of the NGO (*ibid.*).

The linkages between different local groups and strata with external social actors play hence an ever greater role in reshaping heretofore relatively isolated communities (p. 22 in Barraclough and Ghimire 1995).

6.7.9 Viability for Belonging to the Target Group

The issue of commercialisation and construction of new groups and capacities leads to another one, namely, the ‘viability criteria’ social entities or communities have to fulfil to ‘belong’ to the target group. This is a major issue because usually a selection is needed anyhow, due to far too limited resources to cover, for instance, all potential communities in a district that want to engage in community forestry. It is not only a matter of limited resources of a donor or a body otherwise financially responsible. Programmes have an agenda and work according to given rules that are not made or influenced (substantially) by local communities (prior to their implementation).

Therefore, it is commonly seen that only those who are found to comply with these formal or informal ‘criteria’ are ‘in’ and regarded to be the ‘target group’ – so the programme comes always (be it to a greater or lesser extent) before (some of) the people, rather than the people defining the programme (cp. also p. 42 in Gotschi 2007, in Gotschi et al. 2007⁴¹; pp. 16–17 in Bierschenk et al. 1997; p. 158 in Ahohounkpanzon 1997). This, per definition, stands in huge contradiction with any serious concept of ‘ownership’ or attempt to use and facilitate local capacities (Aurenhammer 2010b).

Similar to the results from Gotschi (2007, in Gotschi et al. 2007, p. 44), below examples show that belonging to a certain field or group or the adherence to desirable norms (from a developers’ point of view) is profitable (for local actors/people). ‘Those actors, who have already adopted or anchored these norms in their habitus, will be privileged, compared to those actors, who have not attached these norms to their habitus – be it due to their socialization, ethnicity etc.’, so Gotschi (ibid.). Gotschi et al. (2007, in Gotschi et al. 2007, p. 97) describe privileged structures and criteria for the delineation or exclusion in cases from Mozambique, concluding pragmatism and budgetary possibilities playing key roles in the selection process.

For instance, a German cooperation programme stepped down from further cooperation with a commune of the Lenka (Honduras), when they did not take the legal steps in enforcing a previously developed land-use plan, while other communes that did comply with this milestone of the programme continued to receive support. When a Finnish cooperation programme in Nicaragua focused more on forests, they moved to Ocotal region (Nicaragua) since León was too agriculture-dominated (and there was political resistance for a while, by the Honduran government, as to forestry measures, until the chance of stopping financing was on the cusp) (Aurenhammer 2010b).

Another programme, funded by Sweden in East Africa, also uses selection criteria. In areas where they facilitate and support the establishment of groups of farmers, as they prefer to work with formalised groups, they set first a demand that a group of a certain size is formed and formally recognised, but also they follow up whether these groups formed only because of the opportunity of support (or eventually awaited direct financial benefits) and if they are really interested and work with the concept and issues addressed (i.e. marketing of products) or if the people only joined to a group for the sake of money or tend to drop out, after some support was given, not really interested in further improvements. Though

⁴¹ Gotschi lists several methods for participation of target groups but adds that not all ‘participatory’ projects give their target groups’ decision-making competencies or control over the process. ‘The poor’ are not a homogenous group themselves (p. 43 in ibid.), but these groups have it in common to hold a relatively weak position in the social space (after Bourdieu), hence often unable to articulate needs or set steps for improvements of their livelihood, which can constitute a need for development cooperation, according to Gotschi (ibid.). This research however suggests that ‘the poor’ do certainly know themselves well if, how and when they see needs for change, but they might not always try to articulate their will or interest, maybe due to them being aware of their position and possibilities or for other (strategic) reasons.

this is certainly legitimate, it constitutes a restriction, and the restriction is (understandably, from a donors' side) made by the programme that, for example, wants to reach a certain number of trees planted, farmers obtaining a home-based nursery, number of groups established or households covered (ibid. 2010b).

Expert interviews and field visits also showed that donors prefer to select such communities to work with that have the most similar values (kind of 'equality' issue) to what they (the donors) believe what should be done or what is a 'good development'. For instance, communities in a German-funded programme in Honduras consisting of Hispanics were found to be having a more open and trying-out mentality, more interested and 'clever' in marketing products than others, according to a donor representative. In contrary, those indigenous inhabitants, still living according to their traditions, do not understand the need for selling and marketing. Naturally, a programme aiming at saving forests by intercropping coffee under forest around protected areas, by getting benefits also from better marketing of the coffee, leaves aside those 'truly' indigenous inhabitants (Aurenhammer 2010b).

6.7.10 Restrictions of and Through Ideological and Symbolic Policy

Also, local, cultural or religious systems are often poorly understood or not taken enough into account. Sometimes, they however just show that donors' expectations or politically motivated conditions of development cooperation policy and programmes cannot make their cooperation reach goals like 'capacity building' and the 'poverty reduction' of the 'poorest of the poor' or 'excluded'. In a cast system, as applicable in Nepal, field visits and interviews showed that the attempts of a German-funded community forestry programme, to also include lower casts and poorest people, failed (Aurenhammer 2009b).

The programme built on spreading know-how, by training a few people out of the involved communities. However, the prior knowledge (including language knowledge) of better-off families and tribes (mostly also from the higher casts) constituted an easier 'entry point' for such capacity construction measures, compared to often illicit 'low-cast' people. The spread and transfer of donor know-how via such low-cast people would never be successful though they are equivalent to the so-called 'excluded and poorest' ones (ibid.).

As can be seen from the picture below (see Picture 6.1), in a situation during a two-and-a-half-hour interview at a certain community forestry in Nepal, the so-called excluded person sits on the opposite end of the long hall, not taking actively any part in the conversation, even when directly asked to state his opinion. At the same time, the community leaders will try to 'sell him' as a success story, due to his minor community employment (ibid. © Peter K. Aurenhammer).

While this would be considered a success in the eyes of a donors' body, in the eyes of the community, his lack of participation is to be expected, due to the local patterns. Shortly after the interview, a forestry official agreed that 'he would never



Picture 6.1 Reality of excluded people versus idealistic or symbolic attempts to change: participatory field observation in a community of Nepal's Tarai (Source: Aurenhammer 2009b) © Peter K. Aurenhammer

have been trained by the project, because simply nobody would listen to him, and there would be nobody but himself to benefit from the knowledge' (ibid.).

This shows both donor values restricting donors' potential to change issues (i.e. to 'help the poor') and recipient values restricting the applicability of a donor concept like 'ownership' or 'empowerment'. Either way, (Western) donors seem not to be able or do not want to accept existing local social institutions and structures and their values (ibid.).

Placed into a region (Tarai) with actors created through multiple 'historical realities' (cp. p. 24 in Barraclough and Ghimire 1995; see also pp. 98ff in ibid.), the project had little chance to realistically change much and very little impact in regard to the 'integration' or rehabilitation of local Tharu (among others) and their livelihood. The creation of community forestry and other mechanisms in the area has often rather contributed to a further exclusion of traditional Tharu and their natural resource practices. A political solution to that problem is yet a major challenge for Nepal; many conflicts show that, and a new policy is underway. (Aurenhammer 2009b)

Left with restricted access, the survival strategies of many of the Tharu are rather desperate, that is, finding their forests, that they replanted on inappropriate areas, being destroyed by floods (and their rice fields to peter out), if they even have such areas to grow trees (cp. also pp. 101–102 in Barraclough and Ghimire 1995).

Desperate enough, they even cut their mango trees since they cannot access other forests nor afford the firewood from the market (cp. also p. 102 in ibid., cutting mango trees in the hills' region, for food security reasons; pp. 178, 180 in Ahohunkpanzon 1997, dead-ended strategy of felling of palms for income from charcoal selling) (Aurenhammer 2009b). At the same time, few larger farmers hold the best land and receive nearly all the benefits from state credit programmes, irrigation projects and technical assistance (p. 101 in Barraclough and Ghimire 1995).⁴²

⁴²On the overall situation in Nepal, Barraclough and Ghimire (pp. 103–105 in 1995) conclude that few encouraging developments exist. State forest administrators become more flexible. This is however often a result of pressure from foreign aid donors, leaving villagers sceptical as how sustainable these state attitudes can be. Further, foreign aid finances most development programmes and permits a chronic deficit in Nepal's current account balance of payments. India and China have considerable influence on the countries' policies.

Similarly in the above accounts are those regarding the role of women and gender issues at large. Due to the neglect of the role of women, as being part of an ‘old-grown’ local, social system, where women represent certain social institutions or roles, we find that programmes often tend to fail.

For instance, in a project funded by Austria in Uganda (near Kasese), the trees were to be planted by women. However, for the local tribes, planting something on a piece of land is equal to owning the land, when at the same time women are not allowed to own land, resulting in the men uprooting the plantations. Obviously, the implementing body tried to sell ‘gender’ to the donor, with a – for them – negative experience that this ‘did not work’ with forestry, so the *trees* did not get a second chance. Similarly also, accounts to a project, financed by Finland, in Kenya, focusing on bore holes for wells, which were also weakly integrated into overall local institutions (duties and benefits sharing, after establishment), so most of them are today broken (for various reasons) in that area (Aurenhammer 2010b; cp. p. 87 in Barraclough and Ghimire 1995, on Tanzania; pp. 21–22 in Bierschenk et al. 1997; p. 154 in Norris 1997).

Also, Gotschi (2007, in Gotschi et al. 2007, p. 44) describes similar issues, when the legal ownership of a storage hall was not realised as in the collective ownership of the commune but transferred to that of a local leader, leading to conflicts.

Comparable outcomes are seen from an initially private Swedish project (1983–1986), reforesting successfully, with the help of Turkana tribes’ people, in an area on Turkana territory, though later introduced political boundaries diverted from the tribal boundaries, so that now, when the forest is restored, close-by Pokot people claim rights. A solution to the future resource use rights is not in sight (also not politically), and violent conflict over this forest could only be prevented, since the NGO keeps visiting the area and thereby feeds to the illusion of still observing the project that actually has phased out a long time ago already, when new engagements in other areas were started (Aurenhammer 2010b; cp. also p. 145 in Norris 1997).

6.7.11 *Problem Shifts Through Unintended Side Effects*

As a result of these external interventions, unintended side effects occur, as Prittwitz (1990) describes them as problem shifts in space, time or issue. To give only one example, how this also changes the capacities and local institutions, a German-funded programme in Bhutan is described shortly (Aurenhammer 2009b; for another see i.e. p. 93 in Barraclough and Ghimire 1995; cp. also p. 18 in Bierschenk et al. 1997; cp. also Annexes 2 and 3).

The aim of the programme was to analyse and eventually establish a number of state forest management units. Such activities were followed by the programme also in a valley occupying a few villages. Previously, the valley had no road. Now, a forest/agricultural road was built, in order to enable potential economic use of the forests. However, the road was not ready when the calculations were made, showing

the area to be not economically sustainable enough to be used (obviously also due to large proportion of broadleaved trees).

However, today, 10 years after the programme, there is still no forest management unit, but the road has been extended a bit further by Japanese funds, and the existence of the road has totally changed the agricultural production of the valley, from a formerly *rice* and butter, also vegetables, fruits and cheese dominated (cp. Pradhan 2002; Chap. 5, on Bhutan), and from mainly local subsistence and collective harvesting system to a *potato*-dominated agriculture, based on selling to nearby markets and further to India, in exchange for gaining some pork meat. However, the benefits of the road are clearly restricted to those (higher for those) being better off, holding a vehicle themselves, studying and working in Thimphu.

Though some small farmers that were dependent on larger ones and produced under hard conditions on borrowed land could now leave to eventual off-farm jobs (totally left the valley for jobs like road construction), their labour capacity was lacking, helping out the others (or, with improved mechanisation, they may not be needed anymore and fall thereby into working migration, similarly for the younger generations). Forest-related activities of the farmers have not changed much, though changes in forest policy and legislation and the establishment of a community forestry have not been considered yet (2009) (Aurenhammer 2009b).

Unintended side effects were identified, among others, by Gotschi et al. (2007, in Gotschi et al. 2007, p. 95) as unplanned social innovations. For example, Gotschi et al. (ibid.) mention the change of power and decision-making competencies from 'old' traditional structures to 'new' functions (like a president of a club). However, this cannot be regarded as a local, social innovation; rather, it constitutes an externally induced change. This distinction needs to be made so as to not contribute to the more ideological use of the term 'innovation'. If the local people had themselves come to the conclusion that a new form of social institution would be needed to solve certain problems, then it could be regarded as a local, social innovation.

Local, social innovations are, for instance, when Tanzanian farmers responded to the scarcity of wood induced by the massive influx of workers for the coffee industry, to their area, by planting small woodlots (cp. pp. 90; 114; 125 in Barraclough and Ghimire 1995) or villagers defined for themselves a rule that any migrant has to plant one tree per year, as shown in a Kenyan example (Aurenhammer 2010b).

Again, referring to Gotschi et al. (2007, above), the fact that those farmers that had participated in the first project had better opportunities in the second is rather an external effect, very much in line with strategies and interests of powerful actors.

Similarly, it can be found (i.e. in Central America), too, that donor agencies tend to hire local staff that have gained already experience in other donor projects and these staff tend to circulate back to local ministries and may be employed from there again for other projects or even used as an entry point to the ministry. So, the development of networks and the career of individual experts within these can

be followed up well over time (cp. Aurenhammer 2010b) and has little to do with innovations but with strategies of powerful actors.

6.8 Conclusions

Gotschi (2007, in Gotschi et al. 2007, p. 44) notes that development cooperation that only focuses on working with those groups to whom their norms (eventually) fit best, risks to further contribute to societal differences and conflicts (cp. also Gotschi et al. 2007, in *ibid.*, pp. 94–98). It is however a fact that fitting to existing desired norms constitutes a prerequisite of the accumulation and delivery of – economical, cultural and symbolical – privileges (p. 132 in Bourdieu 1998). According to Gotschi (2007), it is therefore a challenge for ‘development cooperation’ to reflect their own position and effects of their interventions in various ‘fields’: ‘Though development cooperation is as an actor part of the game, it should not be its duty to take part in the game, rather it should look through the game and create new rules for the game’ (own translation).

However, though this is certainly desirable, in (recent) practice, this does not appear to be applied (nor to be applicable), among others, because ‘development cooperation’ is not an actor in its own; it consists of a number of more or less powerful actors, who are willing or in some cases cannot prevent themselves from being part of the game (if they are not, they are not powerful in *this* game) and who always have also their own independent interests (cp. p. 48 in Olivier de Sardan 1997).

So, also Gotschi (2007, pp. 44–46) had to conclude that, along with Bourdieu, development cooperation remains a contradiction in itself because **it does not fit to human nature to act against the logic of ones’ own ‘field’** (cp. p. 225 in Bourdieu 1998; p. 39 in Bierschenk et al. 1997); hence, there is little hope that development cooperation as it is practised today will reach much outcome in terms of a more ‘equitable’ or ‘just’ world that could be ‘free of poverty’ and exist ‘sustainably’. This also provides an answer to the question raised by Komlosy (2004, in Fischer et al. 2004, p. 65, own translation), ‘if and under what circumstances for a region – if it has once been roped into dependency on the centres of the world economy – “a catching up development”,⁴³ according to the model of the centres, is at all possible.’

To conclude these empirical findings, some aspects need to be described, namely, why dealing with the concept of ‘ownership’⁴⁴ and of local capacities (i.e. know-how) is especially tricky in the field of environment and forestry.

⁴³ With ‘catching up’, the author refers to the narrowing of the gap that exists economically, financially, politically and socially between a country and the so-called ideal ‘developed state’, represented by Western states.

⁴⁴ ‘Ownership’, when referred to here, is used rather in a political way than in an economical way.

Not any 'field' can be considered isolated from outside development, and hence, various influences occur simultaneously from various external 'fields'. A globally common mainstream (cp. p. 127 in Barraclough and Ghimire 1995) towards a market economy and the plentiful interdependencies caused by it,⁴⁵ do not hold back on a village in Bhutan either. However, Bhutan is a rather positive example in terms of its natural resources management and protection, and yet it has taken comparatively careful steps in 'development' or, better, change, balancing exogenous and endogenous influences and fostering an awareness and environment for keeping its own traditions alive.

But in many countries, one faces different types of people and communities, more or less adapted or addicted to the 'economic miracle' they hope to achieve someday.⁴⁶ There again, development cooperation that addresses environmental and forestry issues will face strong opposition, from those benefiting from externalising accumulated environmental costs to others or from those who are simply living from hand to mouth, taking care of their every day's needs in a 'newly constructed' world of growth, not even caring about their environment or about a few trees here or there, even when they see themselves through walking longer distances to the edges of the leftover forest every year (i.e. Nepal), not even if they realise that drinking water is slowly disappearing (i.e. Nicaragua/Miskito) – these are so-called dead-ended survival strategies.

Initiating an environmental or forestry programme under such conditions, hence, will also call for some pressure from the donors' side; however, the donors (and local elites) should not forget the causal linkages, initially leading to such a 'development' (i.e. externalisation of agricultural production to developing countries).

When faced with a situation, where local or indigenous know-how is lost, like in the examples above, and if this know-how cannot be retained, what else can a donor do other than constructing new capacities and new institutions. However, again, such an engagement cannot be used as justification for the initial causes that lead to the loss of local know-how and capacities, namely, by colonisation, developed countries and corrupt elites as well as by development cooperation itself.

In this context, it is both, from a developmental–theoretical as well as practical point of view, interesting and challenging how to deal with the 'chameleon mentality' of some 'target groups' (cp. also Southgate 1998; p. 117 in Barraclough and Ghimire 1995; pp. 51–52 in Olivier de Sardan 1997).

⁴⁵ For instance, Barraclough and Ghimire (1995, pp. 94–95) note that in countries with rapidly growing urban populations, these depended increasingly on imported food paid for in a large part by agricultural and timber exports and 'aid' from rich countries with troublesome agricultural surpluses. Peasants not producing for export faced shortened rotations and decreasing yield from marginal lands. Natural hazards and fickle international markets and foreign aid did not improve the situation. Similar is also documented in the film 'We Feed the World' (Austria, 2005, Wagenhofer et al., Allegro Film/Hoanzl).

⁴⁶ Compare the polarisation between environmental conservation and plantation forestry, between ideologies of a static, romanticised tradition (how can you demand those poor ones to remain as they are?) and a model of progressive economic success (everyone can have his Mercedes Benz one day).

For instance, in a village of the Lenka tribe (Honduras), it was obvious that they had discontinued with their traditional indigenous ways of living⁴⁷ and moved towards a mentality of adapting perfectly to the incoming opportunities in terms of money and support by donors. In the past, dozens of non-governmental organisations and governmental donors have stayed there, with the result of finding that the people were changing their priorities ‘like shirts’ and hence discontinuing adopted mentalities whenever funds or benefits stopped (Aurenhammer 2010b).

Now, one needs to worry less about the discontinuation, than about the ability of the people to claim to the donor that he is doing exactly what they want (though often, this might not be too difficult, since not much is questioned by donors). Local people immediately figure out what the donor is interested in, and donors do not get any negative feedback from the locals, relating to the issue that donors want to put forwards. Worrying in such a situation is, indeed, how, given such a ‘chameleon mentality’, someone could find out what these people – really – want and are interested in (assuming, that someone cares). That could be of interest for development researchers, ethnologists and historians, who may contribute to a better understanding of the real interests and local capacities of such people.

Finally, the issue of needing to institutionalise everything must be criticised as well. As mentioned by donor development experts (Aurenhammer 2010b), the need of development policy to come up with results and find an outcome, that is, in form of an institutionalisation of farmer associations, is often taken too seriously (and as a consequence, programmes are discontinued). Indeed, malfunction of the creation or continuation of an institution does not necessarily mean anything ‘bad’.

As described theoretically above, it can be rather seen as a healthy, natural reaction or opposition of the ‘field’, to something that has tried to enter into it, where the malfunction does not refer to a failure of the project as such but indicates that the instrument used was not applicable and did not comply to the local social institutions and capacities existing (cp. p. 261 in Rauch 1997).

Hence, **further research of the existing local, capacities and institutions is needed** (and how they can be used as a basis for development, rather than changed according to external needs) if development cooperation shall function in the benefit of the people and if development cooperation attempts to consider ‘local ownership’ important.

⁴⁷ However, in accordance with Schweitzer (2002, p. 330), it must be noted that the traditional way of living is not static, but a dynamic process, and hence present and future models of culture are in so far traditional as they are oriented to the theory and practice of the past, without reproducing (‘conserving’) it. Hence, determination of traditional behaviour in the modern context (i.e. subsistence economy in today’s context) should not be left to external bodies, that is, environmental protectionists or the government (pp. 329, 331–333 in *ibid.*), but maybe hence best defined by the tribal community(ies) themselves, in all its variety (social differentiation) (cp. p. 325 in *ibid.*).

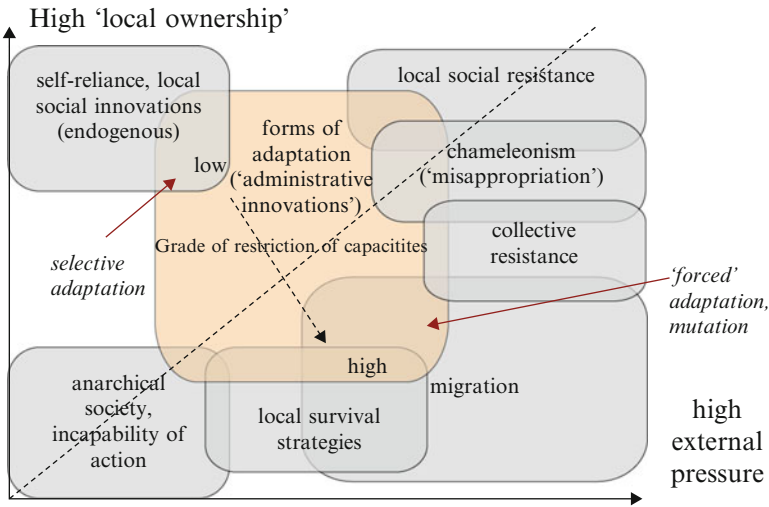


Fig. 6.4 Typology of mechanisms of change (Source: Aurenhammer 2011)

6.8.1 A Typology of the Mechanisms of Change

Summarising the empirical findings, a typology of the mechanisms of change (see Fig. 6.4) can be derived. It consists of *social niches in a two-dimensional space of 'ownership' and 'external pressure'* (i.e. influence, dependencies, force) in which social entities can either realise (1) local social innovations based on self-reliance; (2) various forms of local, social adaptations, including pretended adaptations ('chameleonism'); (3) local, social resistance or anarchical behaviour (cp. p. 261 in Rauch 1997); (4) local survival strategies, not driven by natural disasters (i.e. cutting down mango trees)⁴⁸; (5) migration survival strategies (cp. pp. 121–122 in Barraclough and Ghimire 1995); or finally (6) total anarchical disorder of society (i.e. in post-civil war situations).

The choice of what or which combination of mechanisms can be selected by social entities is reflected in the third dependent variable, **the grade of restriction of capacities** (as the opposite of high social creativity or flexibility or diversity in

⁴⁸ Natural disaster-driven survival strategies (i.e. Lachenmann 1997) are treated here as self-reliance and local, social innovations. 'Survival' in this context means action to be taken due to external socio-economic and/or political pressure, narrowing the implementability of own solutions, so that suboptimal, often in medium or long run, dead-ended strategies or actions are taken (also, i.e. pp. 207–208 in Lachenmann 1997 – survival strategies based on overexploitation, driven by market integration).

problem solutions) (cp. on typologies of transformation: p. 23 in Bierschenk et al. 1997 – i.e. endogenous and administrative innovations; pp. 44, 49ff in Olivier de Sardan 1997 – selection and ‘transformation’ in form of (mis-)appropriation⁴⁹; cp. also p. 158 in Ahohounkpanzon 1997; Norris 1997; i.e. pp. 262–263 in Rauch 1997)

As is shown also by Barraclough and Ghimire (1995, pp. 106ff) as well as by many other authors cited in this chapter, the main focus of development cooperation and research is on adaptation. The legitimacy for adapting traditional (local) livelihoods to change and its actual implications for various social entities should be analysed in more depths. Moreover, the relative ignorance of other mechanisms of change needs to be given further attention.

If policy or research is to target local self-reliance and self-realisation, it will have to focus more on the facilitation of local innovations, creativity and flexibility and it will have to aim at a diversification of problem solutions, and it will thereby *construct* (serve) a(nother) common future. Similarly, Olivier de Sardan (1997, pp. 52–53) concludes that the analysis of ‘spontaneous’ innovations,⁵⁰ created without intervention by agents of development cooperation, is to be regarded a necessary additions to the conventional research conceptions of development-ethnology, which focuses mainly on the reactions of farmers to external innovation activities.

There will probably be circumstances when a facilitation of adaptation can be legitimate, for instance, with relation to (certain) natural disasters, nonetheless with a certain measure of caution in order to avoid the problem of the ‘**making of victims**’ (cp. pp. 98–99 in Spittler 1997).

Highly technical, interest-driven adaptation needs tend, however, to be mostly ideologically biased and may be legitimate from the donor’s point of view (and some influential actors in the recipient’s country) but often fail to reach **broad legitimacy in the recipient country** as such.

There are several factors leading to a very narrowed legitimacy of development interventions of donors in ‘developing countries’. For instance, the often intransparent and highly ideologically driven symbolic policy of donor countries (cp. Rauch 1997), in reality, hardly reaches the common people in donor countries; both factors being due to highly closed policy systems as well as to the restricted public interest in development issues (cp. p. 6 in Langthaler 2003). This is with the exception of catastrophes, if and for the time they gain media attention.

Mostly **adaptation-driven development policies cannot be expected to be beneficial for pre-industrial societies**; along with Barraclough and Ghimire (1995, pp. 127ff), it seems to be ‘quixotic to expect local collective actions by members of pre-industrial societies to be able to resist successfully their eventual incorporation into industrial-based national social systems’, when at the same time ‘this incorporation into the expanding world system is responsible for most deforestation in developing countries’.

⁴⁹ An example of misappropriation was described in Nepal, where farmers used the toilets provided as market stalls. Examples of non-appropriation are called ‘white elephants’.

⁵⁰ An example is given by Norris (1997, p. 144), where donkeys now pull carts made from sheet metal and wheels from rims and tyres of cars.

The problem shifts created by such adaptation interventions will provide for much ‘needs’ for further, future interventions and attentions to ‘development’ problems, such as ‘environmental security’, being already on the agenda even today.

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Chapter 7

Discussion and Conclusions

This chapter provides us with conclusions to the main hypotheses addressed in this book. Results are summarised, supporting or withdrawing the hypotheses. Results are then discussed, for instance, by making recommendations for policy actors or by describing the consequences these results will bring, in the light of the prevailing paradigms of forest aid policy.

In this book (see Hypothesis 1), it was assumed that in the **definition of forest problems**, political factors (from the general policy field, other sector policies and also within the forest sector) prevail over the forest sector's problem pressure (i.e. combating deforestation).

This is supported because it is clearly shown that problem pressure does not matter. This is true for both forest-related problem pressure (i.e. high absolute or relative deforestation) and problem pressure derived from the general policy field (i.e. low economic development, low human development, high corruption).

Results show, indeed, that only few countries, critical to deforestation, are addressed by forest aid. So, the 15 and 30 countries with the highest absolute loss in forest received only 21 and 39% of the total forest aid, respectively. Similarly, the 15 countries with the highest relative loss in forest cover received only 6% of the donors' total forest aid. Only 18% of forest aid is spent on the least developed countries, though they have high deforestation and low economic development (high poverty). With regard to corruption, the result is unclear. Though 80% of forest aid is spent on relatively corrupt countries, the most corrupt ones receive hardly any aid, despite their high deforestation and rather high corruption (problem pressure).

It can be concluded that the decision-making processes (i.e. problem definition, policy formulation) must be driven by other factors other than problem pressure, namely, that strong stakeholders will dominate the formulation and financing of development cooperation (policies and programmes).

If forest development policy (FDP) had to aim at reducing deforestation, and thereby at alleviating poverty, combating corruption and improving economic as well as human development, decision-makers would need to put more emphasis on the countries most critical to deforestation. Therefore, 'problems' in contrary to

various political factors or interests would need to be put *first* in decision-making processes of development policy in general. This is, however, unlikely to happen (as further specified below).

If forest aid policy is meant to receive more attention on its actually achieved or realistically achievable results, goals and ‘problems’, being defined ‘by policy’, should be specified, prioritised and reasoned more clearly. A clear description on restrictions, limitations and obstacles of emphasised instruments/measures, that is, due to interdependences or conflicting interests, should be given *if* goals are meant to attain more than a symbolic character. As problems are rarely fully solved (phenomenon of problem shift), attention needs to be put on to these obstacles and arising problems, as well as on their effects on the goal itself, and on whether or not they can be reduced or halted.

If development policy aims at **putting ‘problems’ first**, it has to focus and concentrate on the respective countries relevant within certain ‘problem areas’, rather than following concepts of either spreading the risk over (or gaining prestige from) a high number of countries in cooperation or cutting down on the number of recipient countries in general (to those, being for various political reasons, of highest interest to the donor).

Taking into account the above results, below consequences can be drawn. *If* forest aid, or the recently promoted ‘climate aid’, had to eradicate poverty and reduce deforestation, this goal cannot be efficiently achieved, unless the overarching foreign policy frame will enable forest aid policy to address the extremely poor, extremely corrupt countries, failed states or states in conflict. However, as above results show, priorities on recipient countries and thematic areas simply are not set by the forestry (aid) actors. Forestry ‘problems’ cannot be addressed there, where they would be most serious.

Additionally, ‘climate aid’ will not focus only on forestry issues. Many interests and sectors other than forestry relevant will try to get their share too; agriculture and renewable energy sectors will not be left out. Again, this will influence the choice and priorities that can be set in regard to forest aid.

Further, large countries, especially those with higher economic development (i.e. newly industrialised countries) will be prioritised. Among these, for instance, Brazil, Mexico and Malaysia are also of great importance in regard to deforestation. Nevertheless, exactly because these countries are already economically rather strong, they have it much easier to cope with this issue on their own; they do not need aid, but rather economic cooperation could address the issue, which is actually also a major aim of development cooperation, to proceed into economic cooperation. *If* this is so and *if* development policy aims at supporting the ‘least developed’ countries, countries with ‘high development’ must not receive aid but may be encouraged through economic cooperation and bound (in-)to (legally binding) international agreements to serve possible ‘climate and anti-deforestation goals’.

If the enabling of small-scaled, sustainable forest enterprises and the managing of forests in a sustainable way, taking into account naturally growing species and natural regeneration, are to be given priority in forest aid policy, risks should be minimised, not to polarise further conservation and industrial plantations.

‘Developing countries’ that have not been losing much or any of their forest cover or that have given much priority to nature protection (i.e. Bhutan) may turn out to be the losers of that ‘game’ – of a policy that ‘pays the polluter’. Therefore, *if* policy had to aim at halting deforestation and ensuring sustainable forest management and conservation, it must be ensured that ‘climate aid’ does not turn into a disincentive for those countries. Mechanisms of financing for ‘sustainable forest management’ and for nature protection must be considered too, in parallel. A focus on (only) climate-related objectives in forest aid policy may possibly exclude countries that have already addressed deforestation. This may not only hinder the forest-rich countries from accessing finances but it may also lead to the exclusion of drylands and other low carbon intensity forest lands (cp. also Simula 2008 cit. in: Chap. 2).

Also (smaller) countries with a rapid deforestation rate, which might not have much part globally, in absolute deforestation, can be easily ‘overseen’, as results have shown. Some of these (i.e. Micronesia, Haiti, Comoros) are considered ‘Small Island Developing States’ (SIDS) and might even disappear as a result of climate change. Some might therefore also think there is no sense in supporting them by saving their forests anyway. Again, Haiti is an extremely corrupt place (CPI 1.8) and has not done much for saving its own forests in history. Today, 95% of Haiti’s forests are gone, while in 1925 they had a forest cover of 60% (Heritagekonpa Magazine n.d., cit. in: Chap. 2).

Forest development policy and intervention networks are a **domain of governmental actors**, with regard to both programme formulation and financing as well as forest information, as assumed in this book (Hypothesis 2a). This gains only limited support, due to unclear results.

Results, supporting the hypothesis, show that governmental actors (donor, recipient country) indeed gain high or medium overall influence in policy networks. Instead, non-governmental actors reach rarely medium overall influence. Governmental actors attain also high formal and informal decision-making competences, in policy networks. They gain high importance in financial and/or material support, in policy networks.

Results, limiting the support of the hypothesis, show that with regard to their trust-centrality, governmental actors show varying results, in policy networks. They can gain strong trust-centrality, but they do not dominate in this respect. Also, with regard to forest-related information, governmental actors show varying results, in policy networks. They can gain strong positions, but non-governmental actors do so too. In the Austrian and Swedish network, governmental actors do hardly attain strong positions; in the Finnish and German ones they do.

Though it is argued (cp. Mery et al. 2005, cit. in Chap. 1) that governmental actors shall no longer dominate decision-making in forest development policy, these results, however, show that they remain at high overall influence, attain strong decision-making competences and are of high importance when it comes to financial or material support.

If forest development policy had to emphasise ‘new modes of forest governance’, that is, participatory decision-making by all stakeholders and by civil society, decision-makers would need to share more of their decision-making power with

non-governmental actors and people. These would need to gain a bigger say in the overall process of bilateral, bi-governmental cooperation (i.e. more **transparency** and more **direct forms of democracy** in decision-making), or the bi-governmental kind of cooperation would need to be rethought through policy, for instance, in favour of more civil society-based cooperation or in favour of supporting other entities than recipients' national-governmental entities (i.e. direct support to districts, towns, communes, tribes).

On the other hand, *if* governmental actors (as any others) are to engage in forest aid, they would also need to **sustain their own, individual expert capacities**. Results show that where governmental actors do not hold any relevancy in regard to forest information, they cannot or are not willing to engage in forest aid strongly.

It was assumed (Hypothesis 2b) that **forest actors** reach high influence in forest aid policy as well as in intervention networks. The hypothesis must be rejected, despite the factor of forest-related information.

Results show clearly that forest-related governmental donor actors do not attain high overall influence, in the policy network, and only development agencies' or ministries' forest units do. Though subject ministries of recipient countries attain high formal and informal decision-making competences in the policy network, donors' governmental subject units do not. Generally, forest actors do not gain importance in forest development policy networks, due to their financial and/or material support; only subject ministries of recipient countries can play some role in this regard. Subject ministries of recipient countries can gain strong trust positions in the Scandinavian forest development policy networks.

In contrary to the above, plenty of forest actors hold strong forest-informational competences in policy networks.

If donor's forest actors' role in (forestry) development policy had to be strengthened, among others, they would need to create and maintain 'forest development networks' in recipient countries and in their respective donor country (cp. Aurenhammer 2010a, cit. in: i.e. Chap. 1, for suggestions to Austrian forest actors).¹ Results show that for a 'successfully' established forestry (bi-governmental) development policy field, it is 'vital' not only that governmental donor bodies sustain their own independent forest capacities but also that they enable and support networking and exchange with governmental and non-governmental forest actors.

If cooperation had to aim at especially engaging governmental actors and training/educational institutions (cp. Galloway et al. 2010, cit. in Chap. 1), governments (of donor or recipient countries) would need to maintain their own forestry research capacities. Therefore, they would need to emphasise freedom of research and the active incorporation of research results into project formulation and implementation. Additionally, the networking and exchange between governmental and research

¹ This report provides us with various detailed suggestions for the Austrian forest and development cooperation actors, using the results of this research. The extensive empirical data and results provided in this book allow for even further suggestions. However, such suggestions depend strongly on the actor they are made for (i.e. a recipient government, a donor agency, a local community or a donor NGO/NPO).

organisations would need to be enhanced. This has proven ‘vital’ to forest aid policy networks of donors and to the role of their research institutions (cp. Aurenhammer 2010a, cit. in: i.e. Chap. 1). However, results show that role is being restricted to the relevancy of research institutions in regard to forest information and to their trust-centrality in policy networks.

However, focusing on governmental and research/educational institutions in policy or intervention networks may disadvantage other actors and other types of knowledge other than scientific ones. *If science-based and local, traditional knowledge* had to be considered in forest development policy (cp. Galloway et al. 2010, cit. in: Chap. 1), local communities and their traditional knowledge would need to gain (noteworthy) competency in policy or intervention networks. Results show that this is not the case, which may also be due to the fact that ‘considering’ (traditional knowledge) is usually understood as by it being a *means to increasing the welfare of world societies* (Mery et al. 2005, cit. in Chap. 1) and thereby being limited to *useful* (ibid.) knowledge that can be taken *advantage* of (Galloway et al. 2010, cit. in Chap. 1).

It becomes clear that ‘scientific forestry’ as well as the various paradigms of forest development engaged by it (i.e. sustained yield forestry, sustainable forest management, forest conservation, mitigation of climate change) – whatever their exact meaning may be in different countries or for different actors – hinders traditional knowledge and its institutions from gaining (or rather maintaining) power and rather provides the basis for binding power to ‘newly’ constructed systems of experts from governmental and non-governmental actors, who distinguish themselves from such traditional forms of knowledge.

With regard to financial flows, it can be noticed that the donors prefer obviously different types of **implementation structures**, hence, the actors responsible for the financial management. ‘Implementation monopolies’ can be found from all donors, in Finland and Austria usually of a non-governmental character.

Also, with regard to the intervention level, governmental actors of both donor and recipient countries hold most frequently very influential roles, followed to some extent by donor’s consultancies. Across various types of projects – ‘project types’, focussing on who holds the financial responsibility in the project; ‘recipient country types’, classifying recipient countries into commonly used groups, referring to their economic development; and ‘thematic types’, grouping projects of similar thematic area – major differences do not occur. Most frequently, governmental actors of both sides and consultancies of the donor’s side play a key role, when it comes to forest-related information and know-how in forest cooperation.

Influential stakeholders will obtain a strong potential for change in the direction of the programme because they hold strong independent capacities and/or they can gain necessary added capacities from third party actors as well as because they engender strong willingness, as assumed in this book (Hypothesis 3). The hypothesis gains only limited support (unclear results). However, the comparison only took the most influential actors into account. They will still have much higher potential for change, than actors, being hardly influential at all. There are some specifications to be made, as described below.

Results show that from the eight governmental donor actors quantitatively identified to obtain comparatively strong overall influence, two reach a comparatively high potential for change (Formin, BMZ), another three actors at least moderate potential (GTZ, KfW, Sida) and two actors can achieve only low potential for change (BMaA, ADA).

In this respect, Hypothesis 3 is supported since the combination of the ‘right’ factors obviously matters with regard to the potential for change: Strong actors’ potential for change is high, if they hold strong independent capacities (especially financial) and are able to excess such third party actors’ capacities (i.e. know-how and staff) complementing their own resource pool. At the same time, they will at least hold moderate willingness and therefore actively work on the achievement of goals mentioned in the programme.

Also with respect to recipients’ subject ministries, support is given to the relevancy of the factor, own capacities (especially in regard to finances), for the potential for change of a strong actor. Without strong own capacities, an actor can only hold a strong potential for change if the actor accepts the interdependencies thereby created. This adds to the above support to Hypothesis 3 (‘right’ factors matter).

The results on above hypothesis reveal that despite the strong own independent capacities of an actor and regardless of the availability of capacities from third party actors, it is the willingness of each of the actors, especially that of the most influential actors, that plays a crucial role in achieving goals, determined in the programme. Hence, only if there exist enough influential actors in the policy field, who are also strongly willing to support certain ‘development’ goals, there is a high chance, a high potential that the change, adhered to, will also take place. In this regard, it is interesting, when Palo and Uusivuori (1999, cit. in: Chap. 1) remind us, that the continuing importance of forests in international affairs is to a large part being determined by the willingness of developed and developing countries to cooperate more fully in the *management* of forests.

Coming to subsystems, it was argued as follows in this book (Hypothesis 4a): Rather than an integrated ‘overall’ system of bilateral foreign policy, **their exist subsystems** at various decision-making levels, determining framing elements, based on political factors or interests. The hypothesis can be supported, with the exception of the Austrian forest policy subsystem.

Results show that, indeed, different policy subsystems exist and can be distinct from the ‘overall’ system of bilateral foreign policy. They are not isolated, but various (major) gateway actors provide for vertical and horizontal integration. Depending on their influence, such actors (and their various organisational units) dominate parts or all of the decision-making structure (‘line of command’). Also, various framing elements as well as such political factors or interests, leading to decision upon such elements, could be identified from each of the system parts. Additionally, the existence of subsystem-related participation processes supports this result.

Only with respect to the Austrian case, the viability (existence) of a forest policy subsystem cannot be proven. Rather than constituting a subsystem, there exists a vague network that may temporarily (ad hoc) expand if a major top-down impulse creates a ‘window of opportunity’.

Further assumptions addressed the **top-down and bottom-up influence** between subsystems and their actors and on what that influence depends (Hypothesis 4b–e). Results show that these hypotheses can be generally supported, with respect to general, sector and forest policy levels. However, the analysis leads to some specifications (further assumptions). Additional quantitative data to the mainly qualitative results would be needed to strengthen the results.

The top-down influence from the *general policy level* is high because major gateway actors are rather independent from other actors in their decision-making and they can exert framing elements through gateways at lower levels. The bottom-up influence of forest actors is low. They can hardly contribute to the definition of framing elements at the general policy level. There, however, exist niches for actors at the general policy level, where they are not affected by dominant actors' framing elements (*'niche-exception'*, partial rejection of Hypothesis 4b–e). There are also framing elements that impact on the general policy level from the international system.

If development policy had to put problems first (i.e. of the forestry sector), decision-making processes at the general policy level would need to incorporate relevant actors more strongly and allow for setting framing elements according to problem areas (i.e. selection of recipient countries).

At the *sector policy level*, major gateway actors are rather independent from non-governmental actors, but in most cases (Austria, Sweden, Germany) they do depend on other governmental actors (i.e. agencies) in their decision-making upon framing elements. These agencies are providing excess to lower levels and are therefore informally (but often also formally) integrated into decision-making (high bottom-up influence). Hence, the major gateway actors at the sector policy level are often able to exert framing elements only through agencies, providing for gateways to lower levels (moderate top-down influence). Bottom-up influence of forest-related actors is mostly low, as they hardly can contribute to the definition of framing elements at the sector policy level (some exceptions in Finland and Germany). Outside their niche, niche actors are weak, as no coherence to forest policy in development cooperation policy exists.

If forest actors had to strengthen their position, they would need to achieve higher influence at the general and sector policy level (i.e. by strengthening their network in the donor country, by building up forest-related expertise in governmental donor organisations), to build on existing niche actors (i.e. a ministry for forestry with certain, separate budget lines) and to build up forest experts in international organisations (cp. Aurenhammer 2010a, cit. in: Chap. 1). It would be essential for forest actors to, at least in the long run, create an independent forestry field at the highest possible level, where forestry maintains a strong core and is represented by concrete activities in programmes as well as possibly gains or retains an independent budget line, covering at least a part of the activities financing.

The top-down influence of the *forest policy subsystems'* major gateway actors (where they do exist at this level) is strong because they are directly integrated into lower levels and because they can decide rather independently on forest policy specifications, though they (voluntarily, informally) integrate non-governmental

implementation actors also directly into decision-making. That provides the implementation actors with the opportunity to transfer their interests to upper levels (enabling for indirect bottom-up influence) and to support such decisions on framing elements, which they are able to provide services for. The moderate interdependency between policy and implementation actors leads to a moderate support to Hypothesis 4c and a partial rejection of Hypothesis 4e, although it could also be argued that the integration of implementation actors ideas, know-how and interests may strengthen the role of the governmental forest advisor in negotiations on upper levels (though empirical data on this lacks).

If forest actors had to strengthen their position, governmental donor organisations (ministries or their agencies) would need to establish and maintain opportunities to exchange views, expertise and interests with forest actors.

It was further assumed (Hypothesis 4f) that each level of the donor country bargains with the recipient country, within the top-down framework. Hence, the donor's and the recipient's gateway actors in such **bargaining networks** play influential roles, in the decision on and reformulation² of framing elements.

Generally, the hypothesis can be supported. However, a more exact answer could be reached, that is, from participatory observation in bilateral negotiations and meetings (so far possible). These still remain a bit of a 'black box'. Documents on such bargaining processes have only been available from a limited number of cases. So, the quality of the qualitative data depends on their reliability.

Results show, indeed, that three bargaining processes can be identified, within the top-down framework, deciding upon framing elements. Their actors do gain strong positions. Many political factors are identified, leading to decisions on or reformulation of framing elements. However, besides these bilateral bargaining, also donor coordination processes exist, though yet of minor relevancy to the forest sector. Also do donors engage in budget support and joint assistant strategies (also rare in forestry), where bargaining processes differ.

Strong donor actors can apply 'survival' or marketing strategies for the forest sector, expanding other sectors to cover also forestry (policy reformulation). 'Undefined' sectors can leave more competences to practical determination by local donor representatives and experts (as possibly also recipients) (policy reformulation/modification).

With regard to the **link of forest aid to poverty alleviation**, in this book it is argued (Hypothesis 5a) that forest aid is clearly linked to poverty alleviation as the majority of its **disbursements** are provided to the poorest countries (i.e. LDCs). This must be clearly rejected. Similarly, it is assumed that forest aid is also clearly linked to combating of corruption and to democratic development, as the majority of its disbursements are provided to the most corrupt and least democratic countries. There exists only partial support to the corruption part. The factor democracy was not analysed.

Results show that only 18% of forest aid is spent on the least developed countries. Therefore, low human development does not matter. Forest aid spares out the

² With respect to the intervention level, only the part on reformulation applies.

most corrupt countries but yet provides 80% still to relatively corrupt countries (result unclear). Only few countries with relevant deforestation are addressed by forest aid, and those being considered are mainly higher developed ones and hardly the most corrupt countries (parts on poverty alleviation and corruption). There is no clear link between deforestation and democracy. So the part on democracy was not analysed.

If forest development policy had to aim at improving **human development**, decision-makers would need to put problems first (give priority to problem pressure) in their decision-making and focus disbursements on those countries with the ‘lowest’ human development (cp. above).

Further in this book, it is assumed (Hypothesis 5b) that **local communities** and peasant farmers that were the intended direct or indirect beneficiaries of forest-related **interventions**, especially after long and continuous cooperation efforts in the same area, will be found to react and benefit clearly, in terms of a high and increased share of the income derived from forests and trees. The hypothesis cannot be rejected nor supported because of the bias of economical approaches (group poverty) to political theory (individual poverty).

Results show that only in four out of ten interventions major positive changes in the local income from forestry were achieved. However, even the interventions leading to high annual average household income from forestry show that the absolute income remains mostly rather small and net income (after expenses and opportunity costs) may be even negative, benefits or income opportunities do not spread equally among villagers or communities (i.e. elites, casts, stock in natural resources), and even at best, forests and trees are rather providing locals with a more secure basis for a better overall livelihood, than with economic miracles for the poor.

Though, *even* applying economical approaches to measure outcome (poverty alleviation at the community/group level) leads to the result that poverty alleviation through forest-related interventions cannot be proven in the majority of intervention cases (see above), considering the bias to *political-theoretical approaches* (cp. Sect.5.1) – aiming at proving poverty alleviation at the individual level – results actually *do not allow to support or withdraw Hypothesis 5b in any of the intervention cases*. This is because (the exact) distribution effects remain (from group level data) unclear.

If cooperation had to aim at **community forestry** measures or alike (as a measure to increase local income), decision-makers would need to ensure that – more importantly than tenure types – influential actors do not take advantage of the results. They would also need to ensure that economic activity – also in the long run – is at all feasible (i.e. size of community forests) as well as that benefits spread equally among the local people involved. Side effects, interdependencies and limitations need to be taken more into account. Obstacles and conflicts, arising from traditional systems, can be reduced rather by adapting the ‘modern’ measures to the traditional system than by adapting the traditional system to the modern economy (although this may mean a discrepancy to Western values). *If* cooperation had to target the ‘**poorest of the poor**’, ways to increase their engagement and share in benefits need to be found; similarly, the obstacle needs to be solved, that while ‘poorest’ people

live often in hardly accessible areas, community forestry often focuses on villages more adjacent to roads, being 'less poor'.

If local ownership had to be aimed at in development policy, actors would need to ensure first that *income generation from forestry* lies in the priority of the local people (in contrast to complex networks of social and environmental exchange, barter economy and subsistence economy, (semi-)nomadic 'management' systems, etc.). Actors would need to build on existing local knowledge and structures rather than building up structures in order to implement their own interventions, and they would need to ensure that benefits are distributed equally and do not mainly support the interests of third party actors. Decision-makers would need to ensure that the majority of the local people have the willingness to engage in such activity and are made able to apply their own independent capacities, to build on existing structures, and that they hold considerable stake in the planning and implementation of the intervention. At best, it should be their project, given support by the donor, rather than a donor's project made accepted (afterwards) by the people.

The above was followed with the assumption that the **roles of influential actors can explain changes or non-changes** in local income generation (Hypothesis 6): Changes (or non-changes) in socio-economic conditions of the poor can be explained by the interests (willingness) of or frame set by the influential actors *of forest interventions*. There is no clear support for this hypothesis. Obviously, local socio-economic changes need to be explained by a variety of actors and their willingness.

Results show that in seven out of ten interventions, the influential intervention actors' (mostly governmental) interests (willingness) did explain changes (or non-changes) fully or partly. However, in three interventions, the influential project stakeholders' interests (willingness) could not explain the income changes (or non-changes); rather, these were due to local or external actors' interests.

In regard to the Change Explanation Types, it is interesting to find two interventions where the non-change in local income can be explained by a 'monopoly' of the interests (willingness) of influential project actors. On the other hand, there were three interventions that led to income changes, but could be explained only by other, than the interests (willingness) of the influential project actors.

In the majority of interventions (seven), of which six with changes in local income, these income changes could not be sufficiently explained by the interests (willingness) of only one actor type. This shows that in most cases the explanatory factors for local income change are diverse and plentiful and such changes cannot be explained by only the influential project actors' interests (willingness).

If (forest) development policy intends to more clearly and reliably outline what is the real **potential of** its development programmes and especially **interventions**, these would need to be formulated in a manner recognising the various factors that can impact the form of change adhered to by the intervention actors; the obstacles and restrictions that will be faced; the differences in opinion, interest or practice of other actors; and thereby the limitations of ownership of the programme or intervention.

If development policy had to build on **local ownership**, the local actors influence on interventions as well as the recognition of their interests would need to be taken

more into account. Results show that this hardly happens to a sufficient extent, which may at least partly explain failures of interventions and lack of willingness of local actors.

It was further assumed (specification of Hypothesis 6) that the socio-economic **changes** (in terms of income from forests and trees of the communities or households) **are independent from the ownership of soil** (of the community or household's lands). The hypothesis is supported, but the results are rather indicative than representative.

Results show that there is no clear dominancy of governmental or private tenure types (land tenure) when it comes to the occurrence of changes in local income. From seven interventions on governmental land, local income changes occurred in only four cases. While such changes did occur in all the interventions on private land, their total number was only three.

If development policy had to 'successfully' focus on local income generation from forestry, donors would need to ensure that third party, influential actors do not influence in the outcome according to their own interest and take advantage of the results, which is more important than the existing type of tenure. In other words, not only are the legal tenure rights important; in many countries, it is rather the implementation of such rights that can be affected directly and especially indirectly by influential actors.

For instance, indigenous communities, holding private, community property rights on their land, may be 'forced' to cheaply lease their (afforested) land to influential actors or their agents if they cannot get credit on their land and are not able to sell it (who then cut the timber and raise cattle). Farmers may hold private property rights, but if they cannot pay the high taxes to the commune, to be paid before the felling (and selling) of the trees, they will depend on rich subcontractors, traders and sawmillers, claiming most of the benefits. So the tenure rights alone are not enough if the rest of 'the system' necessary for the business is not in (sufficient) control of the 'poor' farmers or communities.

Résumé

This research was finalised in 2011. It was the International Year of Forests. It was also a Year of *Changes*. The world is changing in a political, social and environmental way – as was the case in other years. But here, we want to put emphasis on the term ‘change’ over ‘development’.

Allow me to make reference to the bigger picture of the subjects of foreign or international policy, to make it more understandable, what role forests after all this change can gain: In the Arab World, *political systems*, autocratic and stable for decades, so it was perceived, ‘suddenly’ turned around. Leaders are being challenged by the ‘grass roots’, inspired by the West – a sign of a *world system*? What actually constitutes such *nation states*, built on the money, economic or resource interest and the political tolerance of the West? It is hardly the development of independent capacities.

The *social niches*, the local populations of these countries act in, in their aspiration for change, remind us much of the *mechanisms of change*; locals are found to be drawn into by forest aid cooperation: There is Tunisia and Egypt, where collective resistance is likely to result in change (and maybe self-reliant, local social innovation?). There is Libya, where people find themselves in a battlefield, between resistance, adaptation, migration and anarchy. External actors try to get hold of the ‘negative externalisations’, their very own actions entailed, thereby repelling foreign policy once again to being ‘the continuation of home affairs, with other means’ (cp. Krippendorff 2000, cit. in: Chap. 1). The international community accepts the problem-solving measures, but does the International Court of Justice also solve the problem at its roots (accusing also Western political and economical allies)? There is Saudi Arabia, where administrative innovations (i.e. new incentives) still dominate and people seem to still react by forms of adaptation.

There is also Japan. The Fukushima accident. In one of the highest *developed nations*. Where are its *capacities*? Problem pressure – it alone – does not help much (remember Prittwitz 1990, cit. in: Chap. 1). Nonetheless, in Germany, the nuclear disaster caused a political tsunami. Some days ago, the Green Party celebrated. Is this another sign of a ‘world system’?

There is reason to doubt, as during the few years of this research, much more happened: the oil pest in the Gulf of Mexico, the Global Financial Crisis, another

civil war in Cote d'Ivoire (where earlier, the minister for environment, water and forests, counterpart to a German forest project, had to step down, after a corruption scandal on dumping nuclear and toxic waste) or the earthquakes in Haiti (critical in regard to deforestation), just to mention some. Is 'the world' *learning* from these issues? Often, it looks more like back to the status quo because of a lack in capacities – or from fear of not being able to sustain present power and serve interests in 'another world'.

The above shows *foreign policy as a huge system with plenty of interdependencies*; forest issues are not getting high on the agenda. There are though exceptions. Such windows of opportunity, like the UNCED conference in Rio de Janeiro (1992) or the ongoing climate change debate and the issue of reducing emissions from deforestation and forest degradation, can result in increased aid disbursements, until the career of the topic faces an end. Few (donor) countries, however, have *built up capacities and institutions* to an extent that allows them to engage in forest development activities on a regular basis. Others just hop on and hop off the train, as if by doing so provides them with a political advantage (i.e. Austria's Rain Forest Initiative, 1993–1995).

Besides the restrictions, even active forest aid donors face from *superior policy subsystems*; the *forest sector's interests* are also very diverse indeed. Forest aid flows to various countries, but only 39% is spent on those 30 countries who are 'responsible for' 73% of the global net *deforestation*. Locals may face a great 'variety' of *external interventions*, within only three decades: starting from the support of forest exploitation for their modernisation; when the trees are cut, support focuses on conservation; thereafter, 'development' takes advantage of the free labour of locals to reforest, in exchange of being granted a community forestry, carefully looked over by the government; and when the first trees just have barely grown up, the first donors are already at the doormat, offering the 'poor' a dollar or two if they will relinquish their trees in the name of combating climate change.

Apparently, the *locals do not have much of a say*, their own handed-down know-how gains no competency in *governmental and expert-dominated forestry cooperation*, self-reliant local innovation mechanisms are hardly facilitated, and the number of farmers driving a Mercedes is still easy to oversee (increase in forest-related income, if any, brings no economic miracles, for the majority). But where then can the 'ownership' be found, which is claimed so often? When do the locals actually have a break to implement what they want?

However, forests do constitute important sources for satisfying the basic needs and the subsistence economy of large parts of the world's population. The example of the *Water Towers of Kenya* shows to what extent further exploitation of these remaining hilltop forests could lead. A depletion of these forests could easily lead to a huge *migration* and to an increasing potential for conflicts in other parts of the region (Tanzania), where forest cover remained higher. As explained by an interviewee, this is where deforestation could turn from a forest to a foreign policy issue, namely, '*environmental security*'.

The reality *is* governmental actors of donor and also recipient countries as well as consultancies gain the strongest influence in forest aid policy and cooperation

networks. In the light of what is discussed above, *what suggestions* can be made to these actors, which could lead to a form of change, coming closer to what is generally expected as ‘development cooperation’ *should* be for? Drawing on the results from this research, I would like to use this occasion to make the attempt³:

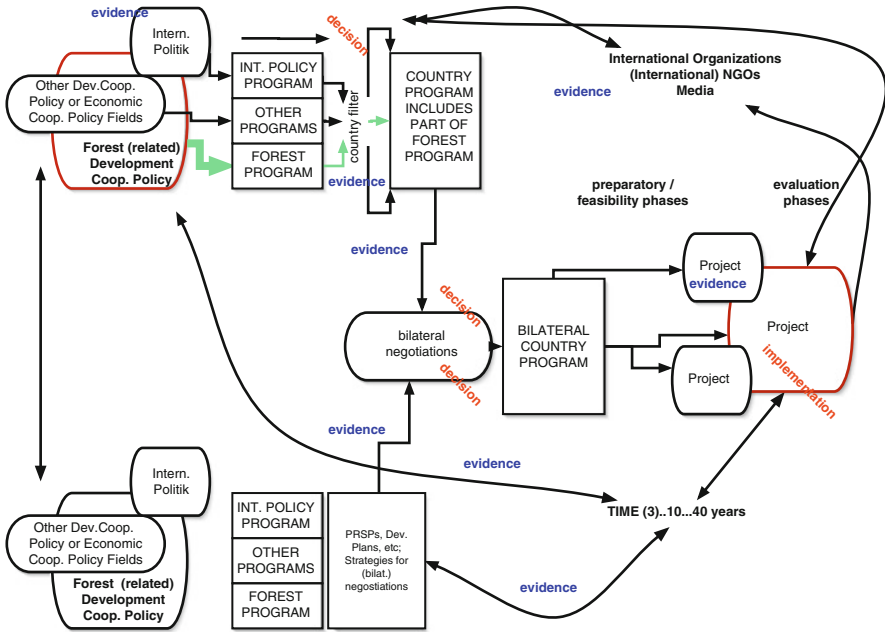
1. *Governments should carefully weigh if interventions are necessary and if so, if they are needed in the present time or in the future.*
2. *Given that both, the change of forests and societies, take its time, a secure environment for slow growth and change should be created* (cp. Bhutan).
3. *Given the unequal momentum that foreign trade and direct investment attain, compared to development cooperation (in both financial volume and speed of change), governments need to put more effort on applying policy coherence if development cooperation really ought to be enabled to make a difference. Without a change of international regulation and trade mechanisms, the creation of a secure environment for slow growth and change, based on the strengthening of independent capacities, can hardly be achieved.*
4. *Problems should be put first.* Sector desks should retain importance (budget control) and decide independently on the recipients to be addressed, to solve sector problems (i.e. deforestation or HIV), while overall coordination responsibility should remain with the country desks of donors’ ministries/agencies.
5. *A broad variety of instruments and implementation actors should be used.* Neither budget support nor project support alone is feasible. Small projects can have triggering effects. Provision of a policy mix of sector budget, integrated programme and concrete project support, at the same time, would be necessary. NGOs can more easily engage in ‘failed’ or corrupt states and in conflict areas. In Private–Public Partnerships, forest actors in research and business areas are provided with new opportunities by some donors. Communal partnerships’ cooperation should be strengthened too.
6. *Priority to self-sustained, local innovation processes should be given and the creation of an environment where locals are enabled to keep their traditions alive!* In this respect, it is key to address the lacks in the research of local know-how, the conditions of its creation and replication. Caution should be given to not misuse results (i.e. to interrupt replication). Research and education systems should include this knowledge and not marginalise traditional/local/indigenous institutions. Development cooperation interventions should *first* identify locally available or reintroduce-able know-how and practices, facilitate their utilisation and base their activities on such knowledge. Maybe, it should be obligatory to any proposal to elaborate in depth on what can be learned from ‘local knowledge systems’.
7. *If a donor decides to engage in cooperation, then the donor would also need to sustain its own expert capacities.* Donors should exclude administrative and operational costs, not reaching to the recipient country, from their ODA statistics

³ Being fully aware, some of these might phase considerable challenges to be implemented politically.

partly or fully or at least indicate their proportion in the total disbursement for an intervention.

8. *Transparency should be increased.* Development cooperation is not free of interests, and many external factors restrict environmental or forest cooperation. A clear speech is key to democratic debate, wherefrom interests gain (national) legitimacy. Instruments could be thought of, enabling for the *application of a more direct democracy in the decision-making* upon partner countries, sectors and interventions. This could help to overcome borders that politicians and bureaucrats have drawn, to secure their domain of influence. For instance, recipient's communes could be made eligible to submit project proposals. Donors should provide easy excess to information on ongoing and planned interventions (i.e. financing, institutions, responsible desk; risks of implementation; interests) on their public websites.

Annex 1: A first ‘model’ of the bilateral foreign policy system



Source: Aurenhammer 2011

Annex 2: Case Studies Bhutan

Table A.2 Interests of powerful actors, created circumstances and local reactions in Bhutan

Interests of Powerful Stakeholders	Created Circumstances/Change Factors	Local Communities' Interests/Reactions	Local Socio-Economic Changes
economic utilization of forests (RGOB, Bhutanese entrepreneurs)	construction of feeder roads (✓✓)	getting the road close to the village (✓✓)	++ potatoes + out-migration; Δ temporary jobs; -- extraction of resources (Δ) subsistence-needs, pay royalties/subsidized prizes
'sell' technical know-how and/or equipment (donors' implementation organisations, experts)	wood extraction (✓X) timber auctions (✓ n.a.) regeneration and sanitation (X n.a.) (✓✓) (today: reflected in the Forest Management Code of Bhutan and road construction methods)	/ /	/ /
conflicting party-political and managerial interests (IFMP, donor's side)	(a) change of implementation body (✓) (b) conflicts due to ignorance of counter-parts interests (✓)	get some of it (✓ n.a.) /	Δ trainings (with little opportunity to make use of, till now)
creation of a national park, export ban on timber , while continued interest in above on remaining area (RGOB)	(c) non-implementation of 3rd phase of IFMP (✓) (d) reduced potential area of project expansion; (✓) (e) reduced economic utilization and future economic trade potential (✓)	forest technical training in Austria, some carpenters trained forests not regenerated, project not finished (X) extraction of resources by outsiders continues (X)	/
continuation of a research component (RGOB, donors' government and researches); CORET, FORED	national execution and coordinated implementation, esp. through RNR-RCs (✓)	(Δ)	(Δ)

community forestry for satisfying subsistence economical needs and restoring forest conditions (RGOB)

loss from royalties from allotted trees, but management responsibility now with the community, capacity building for the government to facilitate this process; reduce burden on non-community forestry land (✓ some communities) introduced and created community forestry institutions; provided technical assistance; (✓ some communities) structural base for economic development (X)

- (a) create circumstances that ease the *formal* procedure of getting needed trees (~)
- (b) subsistence needs prior to eventual access-selling
- (c) exclude outsiders (n.d.)
- (d) get some trainings, exchanges or some financial support for i.e. fire line construction (✓)

- Δ
- (a) potential saving of 0.21 Euros per household and year (prior to management expenses, opportunity costs)
- (b) annual allowable cut (27.7 trees/HH.y) only slightly above subsistence needs (little potential for selling)

✓ = implemented/achieved, ~ = partly implemented/achieved, X = not implemented/achieved, Δ minor interests/changes, + strong interest/changes, - negative interest/unwished changes

Source: Aurenhammer 2011

Annex 3: Case Studies Tanzania

Table A.3 Interests of powerful actors, created circumstances and local reactions in Tanzania

Interests of Powerful Stakeholders	Created Circumstances/Change Factors	Local Communities' Interests/Reactions	Local Socio-Economic Changes
economic utilization of forests, revenues, funds (Tanzanian Government, Sikh Sawmills)	wood extraction, limited economic returns (Sikh S.) (✓)	disagreement; also occasional work; produce maize, plant teak (✓)	Δ restricted to some local loggers and those with extended agriculture; some work in tea estates;
'sell' technical know-how and equipment (donors' agency, consultancy, industry)	(✓✓) exported machinery; still used today	/	/
conservation interests, pressure from scientific and NGO epistemic communities	(a) Tanzanian President to stop extractions, in contrast to the interests of forest authorities (✓)	forests not regenerated, project not finished (X)	/
international prestige of both Tanzanian and Finnish Governments (and future aid opportunities); Tanzanian President's intervention	(b) organised resistance internationally and in Finland (✓) (c) series of national logging bans (✓) (d) Norway funded IUCN counter-study revealing restrictions and limitations to Finnish consultants' prognosis (✓)	shift in local climate, humidity, fog affecting agriculture (i.e. spices' production), water, ... (X) conservation perceived as external exposure (on the wrong people), though nothing new (X)	
Conservation and Nature Reserve establishment (funds for the government, prestige, conservation, crop compensation for abandoned agricultural plots)	(a) establishment of Amani and Nilo Nature Reserves, 'difficulties' with Derema corridor (✓ Δ) (b) legal changes lead to explosion of compensation cost, not coverable by the donor with project closure in 2002 (Δ/X); (c) sudden money offer (for up to 50 percent of crop compensations) in the occasion of Presidential Elections in 2005 (Δ) (d) with reallocation of WB credits and other donations crop compensation finally paid 2010 (✓);	(Δ) some incentives: seedlings, exchange programs; need to abandon agricultural plots; only limited compensation for crops (Amani), conflicts, legal cases, ... delayed compensation for crops from Derema corridor unsatisfactory availability of mountain forest-lands for spice production	(Δ) some 'income generation activities'; compensation for production of three years with many obstacles; limited possibilities to continue valuable spice production in mountain forests; compensation of land/availability mainly in lowlands;
Tanzania: Presidential Elections (voting power, prestige)			
World Bank: reallocated credits for crop compensation			

<p>Village Land Forest Reserves (VLFR) as a means of sustaining donor funds and decreasing pressure on Nature Reserves (sustain donor funds for Tanzanian governmental actor, NGO, a.o.)</p>	<p>reduced revenues from utilization in non-reserved forests; but management responsibility now with the village, capacity building for the government to facilitate this process; reduce burden on Nature Reserves and Forest Reserves (✓ some communities) capacity building and support for VLFR creation; provided technical assistance; (✓ some communities) structural base for economic development (Δ)</p>	<p>(a) get some trainings, exchanges or some material support (✓) (b) still large dependency on District Officials (c) yet in only view villages, not all villages have value-able stock (timber); small areas; (d) those having, may sell all, according to management plan (e) non-timber forest products development (<i>Allanblackia</i> spp.)</p>	<p>Δ view have real income opportunities from timber/firewood, Δ some income from butterfly farming, <i>Allanblackia</i> spp.; growing importance of tea versus trees; little retaining of valuable spice production (i.e. cardamom, black pepper) restricted benefits from entry and research fees of Amani Nature Reserve</p>
<p>Village Land Forest Reserves (VLFR), individual farmer activities, conservation research, as a mean to transfer know-how and to increase income generation (donors' agencies, NGOs)</p>			

✓ = implemented/achieved, ~ = partly implemented/achieved, Δ minor interests/changes, + strong interest/changes, - negative interest/unwished changes
 Source: Aurenhammer 2011

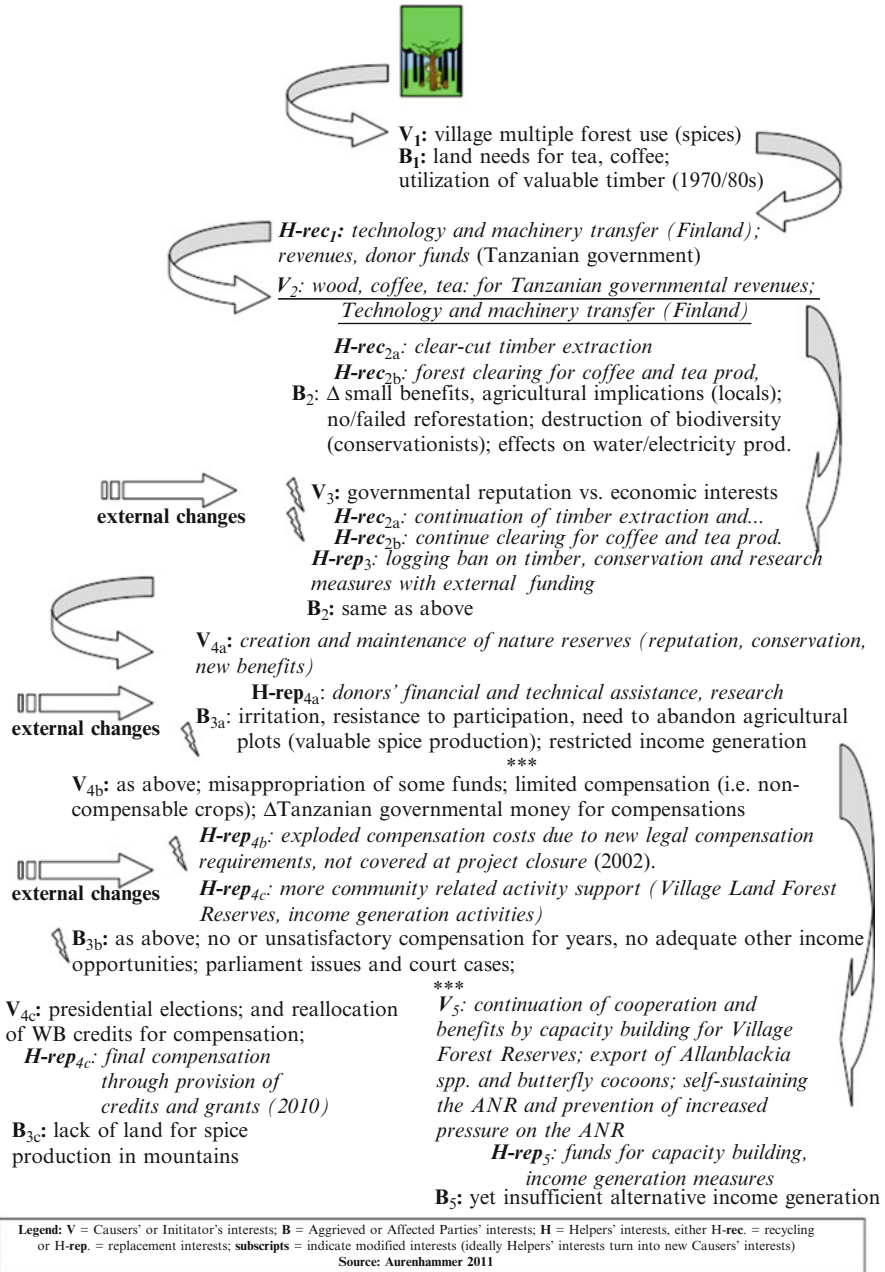
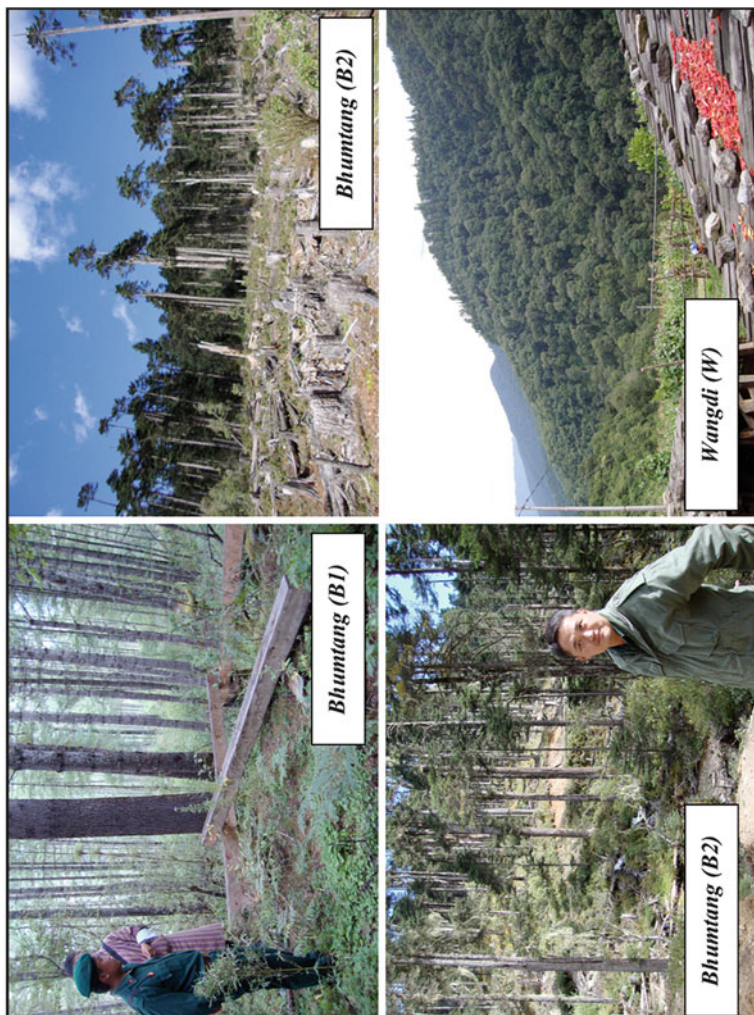


Fig. A.3 Tanzania's case in a nutshell – an interest spiral, after Prittwitz (1990)

Annex 4: Selected Pictures from Case Studies (2009 & 2010)

Bhutan (2009)



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Nepal (2009)



Udayapur (UI)



Siraha (non-CF, forest loss through erosion)



Siraha (SI)

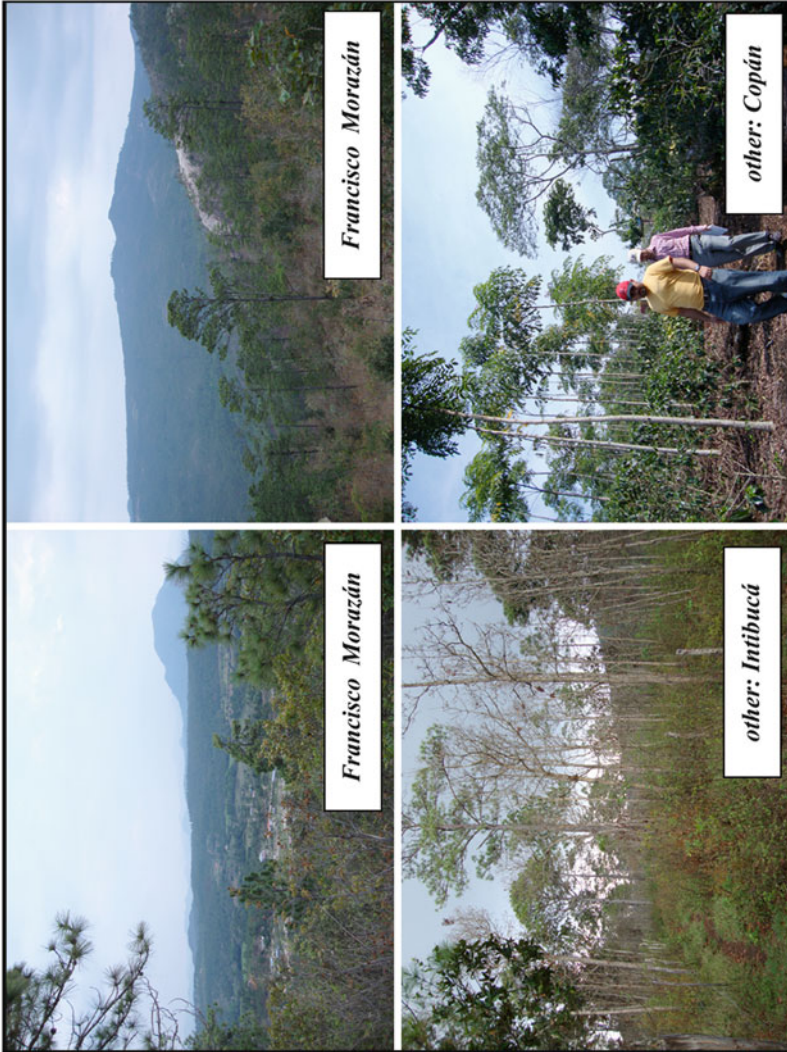


Makwanpur (H3)

Nicaragua (2010)



Honduras (2010)



Uganda (2010)



Kenya (2010)



Tanzania (East-Usambara, Tanga Region, 2010)



**)source: Ply and Panel (T) Ltd. (picture of the picture, Aurenhammer, 2010)
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Curriculum Vitae

PETER K. AURENHAMMER



Born in 1979, citizen of Austria

Married, 2 children

Education

Ph.D., Forest Sciences, Georg-August-University of Göttingen, Göttingen, Germany (2008–2011)

Non-degree, Forestry, enrolled Ph.D. student, University of Natural Resources and Life Sciences, Vienna, Austria (2005–2007, incl. leaves of absence for work)

Dipl. Ing., Forestry and Wood Technology, University of Natural Resources and Life Sciences, Vienna, Austria (1999–2004)

Non-degree, Erasmus year and research on master thesis, University of Joensuu, Finland (2001–2002, 2004)

Certificate, Socrates Intensive Programme “Agriculture: Source of raw material for industry”, Ghent University, Ghent, Belgium (2002)

Non-degree, Finnish Language Courses, University of Vienna, Institute of Finno-Ugristic, Vienna, Austria (2002–2005)

Diploma, Forestry, Forestry High-School ‘HBLA f. Forstwirtschaft’, Gainfarn, Austria (1994–1998)

Languages

German, Finnish, English

Specialty

Forest policy analyses, foreign policy analyses, development cooperation policy and projects, analytical policy research, network analyses, sustainable forest management, silviculture and nature protection, certification of sustainable forest management, evaluation & development of national forest programs, policies and legislation, quality management, bioenergy

Recent Work Experience

Dr. Aurenhammer joined Pöyry Energy GmbH in 2011. As part of the Management Consulting Group he works in the field of forestry, forest industry and bioenergy, focusing on the bioenergy and industry sectors in CEE/SEE and Central Asian Countries, including analysis of legal and political frameworks, forest program/policy evaluation and development as well as the development of national and project level strategies. Before joining Pöyry he worked with research institutes, governmental organizations and companies in the forest and related sectors.

2011 - ...

Pöyry Energy GmbH, Vienna, Austria

(from 03/2012: Pöyry Management Consulting Austria GmbH)

Selected projects at Pöyry:

2012

Global Pulp and Paper Producer: Analysis of wood availability in nine CEE/SEE countries, for industrial and energy use, including new forms of biomass production. (Project manager)

2012

Global Forest Industry Company: Valuation of forests in Europe and Latin America.

2011–2012

European Development Bank: Assessing the market for commercial use of biomass for heat and power generation in Bulgaria, Romania, Ukraine, Belarus and Turkey, including analysis of legal and political frameworks.

2011–2012

Global Development Bank: Scoping of biomass potential and opportunities in Europe and Central Asia (Russia, Ukraine, Turkey, Egypt, Balkans, Bulgaria, Romania, Jordan, Pakistan), including analysis of legal and political frameworks.

2011

Global Board Producer: Analysis of legislation and policies relevant to new forms of biomass production, for European countries.

Previous Work Experience

2011

Georg-August-University of Göttingen, Göttingen, Germany

Project Manager/Head of Community Forestry Research Group (on Nepal, Indonesia, Cameroon, Namibia, Thailand, Peru, Albania, Germany)

- 2008–2011 **Georg-August-University of Göttingen, Göttingen, Germany**
Lecturer/forest policy, international policy (forestry, environment), development policy, methods of empirical social research, network analyses, policy field analyses
- 2008–2010 **Georg-August-University of Göttingen, Göttingen, Germany**
Project Manager/management and implementation of a research project on forest development cooperation and policies (in Nepal, Bhutan, Nicaragua, Honduras, Tanzania, Kenya, Uganda; Austria, Finland, Germany and Sweden)
- 2007–2009 **pro-SILVA Austria – Consulting, Vienna, Austria and Göttingen, Germany**
Director and Project Manager/independent consultancy national and international services, related to forests and natural resource management, in the fields of research, policies, economics, silviculture, logistics and nature-tourism
Selected projects at pro-Silva Austria:
- 2007–2009 A European Ministry: Project Manager/independent consultancy for a European Ministry for the European Research Area – Network on Agricultural Research for Development (ERA-ARD)
- 2007–2008 A European Ministry: Management and Implementation of a research project on forest related development policies, in co-operation with two universities
- 2006–2007 **Federal Ministry of Agriculture, Forestry, Environment and Water Management, Division IV/2 – Forestry Education and Research, Vienna, Austria**
Employee/international forest consulting, international forest development and policies, national forest program/Austrian forest dialogue
- 2005 **A European Wood-Harvesting and Trade Company**
Forest Manager for Austria, Germany, Slovenia/Felling, procurement and timber trade (including independent consultancy services)
- 2004 **Faculty of Forestry, University of Joensuu, Joensuu, Finland**
Guest Scientist/Certification of sustainable forest management in Finland
- 2000 **Metsäliitto, Savonlinna, Finland**
Employee/forestry (certification, standard development), bioenergy and quality management
European Forest Institute, Joensuu, Finland
Research trainee/forestry and urban greenspace

- 1997 **UPM-Kymmene Metsä, Savonlinna, Finland**
Enso-Gutzeit, Savonlinna, Finland
Metsäliitto, Savonlinna, Finland
Etelä-Savon Metsäkeskus, Savonlinna, Finland
 Trainee/Forestry and Wood Technology
- 1996 **Forestry enterprise ‘Bundeslehr- und –versuchsforst Merkenstein
 – Gainfarn’, Gainfarn, Austria**
 Trainee/Forestry

Memberships and Other, Recent Activities

Member of the Austrian Alpine Society (Section Austria); Vienna Country Hunting Association; Finnish-Austrian Economic Forum; EVA Economic and Political Forum Finland; BOKU Alumni, Forstalumni, Alumni of Georg-August-University of Göttingen (University Alumni Associations)

Recent participation at a.o.: ETFAG, Forests for Europe (MCPFE, INC LBA), UNECE/FAO, IUFRO and Forest Policy Scientist’s meetings

Reviewer for Forest Policy and Economics

Publications and Other Literature

Douglas Clark, Peter Aurenhammer, Olin Bartlomé and Morwenna Spear (in print, 2012): “Innovative wood-based products, 2011–2012” in: UNECE/FAO Forest Products Annual Market Review, 2011–2012.

Tapani Pahkasalo, Christopher Gaston and Peter Aurenhammer (in print, 2012): “Value-added wood products markets, 2011–2012” in: UNECE/FAO Forest Products Annual Market Review, 2011–2012.

Peter K. Aurenhammer, (2012): “Development Cooperation Policy in Forestry from an analytical perspective”, Springer, Dordrecht/Netherlands.

Peter K. Aurenhammer, (2011, unpublished): “European States’ bilateral foreign aid policy in forestry, Actors and processes under special consideration of competences in forestry know-how”, Dissertation at the Georg-August-University Göttingen, Germany in collaboration with the Austrian Institute for International Affairs.

Peter K. Aurenhammer, (submitted, unpublished): “Capacity construction, capacity destruction – Whose capacities development cooperation builds upon?”, Development and Change.

Peter K. Aurenhammer, (accepted after minor revisions, to date unpublished): “Climate Aid will not serve forests nor the poor”, Journal of Sustainable Forestry, Yale University.

Peter K. Aurenhammer, 2010: “Climate Aid will not serve forests nor the poor”, poster presented at the Forest Policy Scientists Meeting, Reichenau a.d. Rax, Austria, 24. – 26.03.2010.

Peter K. Aurenhammer, 2010: Analyse der forstlichen Entwicklungspolitik und Ableitung von möglichen Handlungsfeldern für Österreich, Endbericht. 44 S., BMLFUW, Wien. (Analyses of forest related development cooperation policy and suggestions for innovative solutions for future policies, final scientific report, including qualitative results, to the Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management – BMLFUW. German, executive summary in English)*

Peter K. Aurenhammer, 2009: “Analysis of forest-related development cooperation and potential future fields of activities”, poster presented at the First International Community Forestry Conference, Pokhara, Nepal, 15 – 18.09.2009.

Peter K. Aurenhammer, 2009: Analyse der forstlichen Entwicklungspolitik und Ableitung von möglichen Handlungsfeldern für Österreich (Arbeitstitel), TEIL B: Ergebnisse aus den quantitativen Netzwerkanalysen, 59 S., BMLFUW, Wien (Analyses of forest related development cooperation policy and suggestions for innovative solutions for future policies, Part B: Results from quantitative network analyses, scientific report to the BMLFUW. German, executive summary in English)*

Peter K. Aurenhammer, 2008: Analyse der forstlichen Entwicklungspolitik und Ableitung von möglichen Handlungsfeldern für Österreich (Arbeitstitel), TEIL A: Ergebnisse aus der Analyse von Sekundärdaten, 108 S., BMLFUW, Wien (Analyses of forest related development cooperation policy and suggestions for innovative solutions for future policies, Part A: Results from the analyses of secondary data, scientific report to the BMLFUW. German, executive summary in English)*

Peter K. Aurenhammer, 2004: Werte und Interessen politischer Akteure zum Thema “Zertifizierung nachhaltiger Waldbewirtschaftung in Finnland” - eine empirische Analyse, Diplomarbeit am Department für Wirtschafts- und Sozialwissenschaften, Universität f. Bodenkultur Wien, in Zusammenarbeit mit der Universität Joensuu, Finnland, 173 S. (Analysis of beliefs and interests of political actors in the topic ‘certification of sustainable forest management’ in Finland/Eri poliittisten tahojen arvoja ja intressejä aiheesta ‘kestävän metsätalouden sertifiointi’ Suomessa; Master Thesis at the Department for Economic and Social Sciences, University of Agriculture, Vienna, in cooperation with the University of Joensuu, Finland. German, summaries in English and Finnish language)

Peter K. Aurenhammer, 2003: “Russlands Forstwirtschaft - eine sozialistische Insel im Ozean des Marktes”, WALD UND HOLZ 04/03, S 44–48. (Russian Forestry – a socialist island in the ocean of the market; German. Edited reprint.)

Peter K. Aurenhammer, 2002: “Sozialistische Forstinsel im Ozean des Marktes”, ÖSTERREICHISCHE FORSTZEITUNG 03/02, S 28–30. (Socialist forest island in the ocean of the market; German.)

Peter K. Aurenhammer, 2002: “Russische Forstwirtschaft (Teil2) - Naturschutz und Forstindustrie”, ÖSTERREICHISCHE FORSTZEITUNG 04/02, S 28–31. (Russian Forestry (Part 2) – Nature Protection and Forest Industry; German.)

P. K. Aurenhammer, 2002: Tatra national park-an environment defined by elevation zones, National Parks and Botanical Gardens in Finland, the Baltic States and Poland, study report, ed. by T. Aniszewski, Department of Biology, University of Joensuu, 2002, 71 p., p. 21 – 37.

P. K. Aurenhammer, 2002: Multiple values of the national parks in the Baltic countries and Poland, National Parks and Botanical Gardens in Finland, the Baltic States and Poland, study report, ed. by T. Aniszewski, Department of Biology, University of Joensuu, 2002, 71 p., p. 40 – 48.

P. K. Aurenhammer, 2002: National Parks of the Baltic countries and Poland and their international significance, National Parks and Botanical Gardens in Finland, the Baltic States and Poland, study report, ed. by T. Aniszewski, Department of Biology, University of Joensuu, 2002, 71 p., p. 52 – 56.

Peter Aurenhammer, 2002: Lapinkurssi 2002, Vegetation in the Alps and in Lapland (Kasvillisuus Alpeilla ja Lapissa), p. 39 – 42. Pohjois-Suomen kurssi 25.–31.08.2002. Study reports. University of Joensuu, 2002, 79 p.

Peter Aurenhammer, 2001: Evaluation of the precision and accuracy of a modern hypsometer compared with traditional ones, under practical field conditions, 29 p.; in cooperation with a.o. Metsäliitto, BOKU University, University of Joensuu (unpublished)

P. K. Aurenhammer, A. Ottitsch and K. Raffler, 2001: COST-E12: Pilot studies Open green space and tree cover. (Paper) European Forest Institute. Joensuu. (see i.e.: cit. in: G. Janse, 2002: Policy instruments and other influences on Non Wood Forest Products and Services (NWFPS))

Peter K. Aurenhammer, 2001: “Umweltprüfung auf Schlagflächen – finnisches Modell”, ÖSTERREICHISCHE FORSTZEITUNG 02/01, S 36–38. (Environmental Audits on Harvested Areas – a Finnish Model; German)

Peter K. Aurenhammer, 2001: “Ein undurchschaubares Netz großer Forstkonzerne”, ÖSTERREICHISCHE FORSTZEITUNG 11/01, S 36–37. (An inscrutable network of giant forest companies; German)

Peter K. Aurenhammer, 1999: “In Österreich ist der Förster Waldhüter, in Finnland Waldpfleger”, AKTUELL 6/99 - Mitteilungen des Hauptverbandes der Land- und Forstwirtschaftsbetriebe Österreichs, S 31. (In Austria foresters are keepers of forests, in Finland caretakers of forests; German)

Peter K. Aurenhammer, 1999: “Finnen schätzen Waldpflege, Österreicher den Waldschutz”, ÖSTERREICHISCHE FORSTZEITUNG 11/99, S 26–27. (Finns honor forest management, Austrians forest protection; German)

Peter K. Aurenhammer, 1999: “Einstellung zu Jagd eher positiv, aber Prinzipientreue gefragt”, ÖSTERREICHISCHE FORSTZEITUNG 12/99, S 17. (Attitude on hunting rather positive, but hunters expected to be principled; German)

Peter K. Aurenhammer, 1999: Wir und der Wald. Verschiedene Anschauungen über ein Ökosystem und seine Bedeutung. 57 S. (Eigenverlag) (Us and the Woods. Varying perceptions on an ecosystem and its relevancy. German, self-published research results from Austria and Finland)

Peter K. Aurenhammer, Karo Hämäläinen, 1997: “Suomi on Itävalta 800 metrissä”, LÄNSI-SAVO 11.07.1997; Interview. (‘Finland is like Austria at 800 meters high’; Finnish)

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