
Water Development Programs in India: Governance Processes and Effectiveness

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1	Introduction and Problem Statement	9
1.1	Research Question, Definitions and Research Approach	13
1.2	State of the Art	20
1.3	Outline of the Thesis	35
2	Development, Decision-Making and Foreign Aid in India	38
2.1	Decentralized Democracy: Decision-Making and Public Services	43
2.2	Water Policies, Institutions and Regulations in India	52
2.3	Foreign Aid: India as Recipient Country and its Donors	56
3	Theoretical Concepts and Analytical Framework	64
3.1	Understandings Actor Relationships	65
3.2	Governance Thinking: Understanding Social Coordination	70
3.3	Analytical Framework: Foreign Aid Governance Configurations	80
4	Research Design and Methodology	91
4.1	Comparative Case Study Design	92
4.2	Case Selection and Operationalization	97
4.3	Data Collection and Analysis	109
5	Water and Sanitation Aid Programs	116
5.1	Urban Sanitation Planning and Wastewater Treatment, GIZ	121
5.1.1	Achievements of wastewater treatment program in Cochin	122
5.1.2	Actor relationship in the implementation process	125
5.1.3	Alternative reasons for program results	129
5.1.4	Actor relationship and reputation drives high program results	130
5.2	Groundwater Recharge through Rainwater Harvesting, Arghyam	133
5.2.1	Weak project achievements in the rainwater harvesting program	134
5.2.2	Changing actor relationships over time in Thrissur	138
5.2.3	Fruitful environment supports the take-off of the project in Thrissur	143
5.2.4	Low program results and stagnant collaboration	147
5.3	Water and Sanitation for Informal Settlements in Bangalore, WSP	150
5.3.1	Providing water supply and sanitation for Bangalore's poor	153
5.3.2	Successful actor interplay, backed-up by the federal level	156
5.3.3	Charismatic leadership as foundation for actor interplay	161
5.3.4	Actor interplay and local legitimacy as key to success	163
5.4	Communal Toilets in Informal Settlements in Bangalore, WSUP	166
5.4.1	Unsustainable results in program implementation	169
5.4.2	Rejected relationship causes low project results	173
5.4.3	Negative repercussions from other existing programs for WSUP	177
5.4.4	Low project results due to rejected collaboration	178
5.5	Rural Rainwater Harvesting in Karnataka, BIRD-K	181
5.5.1	Medium project results in Sachetana program	183

5.5.2	Hierarchical actor relationship as key to long-term results	186
5.5.3	Alternative influences on project results	189
5.5.4	Medium project performance with positive perspectives.....	191
5.6	Community-based Water Kiosk in Andhra Pradesh, Naandi.....	193
5.6.1	Successful provision of community-based drinking water kiosks	194
5.6.2	Respectful and independent actor relationships as key to success	198
5.6.3	Alternative influences on project results	200
5.6.4	Business case to effectively provide a solution – but not for all	201
5.7	Water, Waste and Sanitation, New Delhi, WaterAid/DFID.....	203
5.7.1	Successful provision of water and sanitation facilities in Delhi.....	206
5.7.2	Hierarchical steering and reputation as key to success	208
5.7.3	Charismatic leadership and engagement as an alternative reason.....	211
5.7.4	Solid actor relationship leads to improvement in informal settlements	212
5.8	Case Comparison –Relationship and Program Effectiveness.....	214
5.8.1	Exploring patterns of social coordination and effectiveness.....	215
5.8.2	New or conventional donor: does it make a difference?	229
6	Conclusion and Implications.....	234
6.1	Concluding Theoretical Thoughts	238
6.2	Practical Implications and Policy Recommendations	243
6.3	Contribution and Pathways Ahead	248
	Bibliography	253
APPENDIX 1:	Sample Questionnaire.....	270
APPENDIX 2:	List of Interviews	272
APPENDIX 3:	Documents	275

List of Abbreviations

AAA	Accra Agenda for Action
ACI	Actor Centred Institutionalism
ADB	Asian Development Bank
AfD	Agence Française de Développement
ARWSP	Accelerated Rural Water Supply Programme, Karnataka
ASEM	Advisory Service for Environmental Management (GIZ)
AusAID	Australian Agency for International Development
BAIF	Bharatiya Agro Industries Foundation
BASIC	Brazil, South Africa, India and China (countries in transition)
BBMP	Bruhat Bengaluru Mahanagara Palike (Greater Bangalore Municipal Corporation)
BIRD-K	BAIF Institute for Rural Development, Karnataka
BDA	Bangalore Development Authority
BJP	Bharatiya Janata Party
BMDI	Federal Ministry of Transport and Digital Infrastructure (Germany)
BMP	Bangalore Mahanagara Palike (Bangalore City Corporation)
BMZ	Ministry for Economic Cooperation and Development (Germany)
BPL	Below Poverty Line
BWSSB	Bangalore Water Supply and Sewerage Board
CBO	Community Based Organization
CDD	Consortium for DEWATS Dissemination
CEO	Chief Executive Officer
CIDA	Canadian International Development Agency
CoC	Corporation of Cochin
CSP	City Sanitation Plan
CTF	City Task Force
DC	District Collector
DCB	Delhi Cantonment Board
DEWATS	Decentralized Wastewater Treatment System
DDA	Delhi Development Authority
DFID	Department for International Development
DJB	Delhi Jal Board
DMC	Delhi Metropolitan Council
DUISB	Delhi Urban Slum Improvement Board
GAA	German Agro Action (Deutsche Welthungerhilfe e.V.)
GAVI	Global Alliance for Vaccine and Immunisation
GDP	Gross Domestic Product
GIZ	Gesellschaft für Internationale Zusammenarbeit (formerly known as GTZ)
GoI	Government of India
GP	Gram Panchayats
GSDP	Gross State Domestic Product
GWP	Global Water Partnership
HDI	Human Development Index
IAS	Indian Administrative Service
ICLEI SA	International Council for Local Environmental Initiatives, South Asia
ICS	Indian Civil Service
ICRA	Investment and Credit Rating Agency of India
IDRC	International Development Research Centre
IFAD	International Fund for Agricultural Development
IMaCS	ICRA Management Consulting Services Ltd.
IMF	International Monetary Fund
INR	Indian Rupee
IPE	Infrastructural Professional Enterprise (New Delhi)
IRAP	Institute for Resource Analysis and Policy
IWP	International Water Partnership
IWRM	Integrated Water Resource Management
JICA	Japan International Cooperation Agency
JnNURM	Jawaharlal Nehru National Urban Renewal Mission
KFD	Karnataka Forest Department

KfW	Kreditanstalt für Wiederaufbau (German Development Bank)
KKV	King, G., Keohane, R.O., and Verba, S.
KRWSA	Kerala Rural Water Supply and Sanitation Agency
KSCB	Karnataka Slum Clearance Board
MCD	Municipal Corporation Delhi
MDGs	Millennium Development Goals
MLA	Member of the Legislative Assembly
MLD	Million Litres per Day
MMCU	Mazhapolima Monitoring and Coordination Unit
MoEF	Ministry of Environment and Forest (MoEF)
MoF	Ministry of Finance (India)
MoU	Memorandum of Understanding
MoUD	Ministry of Urban Development (India)
MRYDO	Model Rural Youth Development Organization
NCRPB	National Capital Region Planning Board (New Delhi)
NDMC	New Delhi Municipal Council
NGO	Non-Governmental Organisation
NOC	No Objection Certificate
NUSP	National Urban Sanitation Policy
NWP	National Water Policy
OD	Open defecation
OECD	Organisation for Economic Co-operation and Development
PPP	Public-Private-Partnership
RDPR	Department of Rural Development and Panchayat Raj, Karnataka
SC	Scheduled Casts
SDGs	Sustainable Development Goals
SDU	Social Development Unit (at BWSSB Bangalore)
SHG	Self-Help Groups
SSC	State-level Steering Committees
SNUSP	Support to National Urban Sanitation Policy
ST	Scheduled Tribes
TAC	Technical Advisory Committee
TMC	Thrissur Municipal Corporation
UK	United Kingdom
ULB	Urban Local Bodies
UN	United Nations
UNDP	United Nations Development Program
UNICEF	United Nations International Children's Emergency Fund
USAID	United States Agency for International Development
WB	World Bank
WfP	Water for People
WSP	Water and Sanitation Program (World Bank)
WSUP	Water and Sanitation for the Urban Poor

List of Tables and Figures

Table 1.1	Sub-Questions and Aims for the Analysis	17
Table 1.2	Selected Cases for Analysis	18
Figure 2.1	The IAS Organizational Structure at State Level	48
Figure 2.2	Institutions in India's Water Governance	53
Figure 2.3	Organization Chart of the Ministry of Finance	59
Table 3.1	Institutionalism: Contrasting Approaches	68
Table 3.2	Governance Configurations	81
Table 3.3	Alternative Explanations	86
Table 3.4	Assumption on typical and outlier governance arrangements	89
Figure 3.1	From Action Behavior to Project Results	90
Figure 4.1	Project Cycle	93
Table 4.1	Donors in Water and Sanitation Engagement in India	97
Table 4.2	Selected Cases for Analysis	99
Table 4.3	Operationalization Project Effectiveness	102
Table 4.4	Project Effectiveness Values	102
Table 4.5	Operationalization of Social Coordination	105
Table 4.6	Operationalization of Rival Explanations	107
Table 4.7	Set of Questions for Case Study Investigation	108
Table 4.8	Analysis of Empirical Data Material	114
Table 4.9	Quality Criteria of Research Design	115
Table 5.1	Seven Case Studies of Water and Sanitation Service Provision	117
Figure 5.1	Locations of Case Studies	118
Table 5.2	Macro-Economic and Social Parameters	119
Table 5.3	Effectiveness of GIZ Sanitation Project (I. Stage, 2010-2014)	124
Figure 5.2	Vector Graph of Actor Relationship in GIZ Program	127
Table 5.4	Results of GIZ Case Study	131
Table 5.5	Effectiveness of Arghyam Rainwater Harvesting Project	137
Figure 5.3	Actor Relationships in Arghyam's Rainwater Harvesting Program	142
Table 5.6	Results of Arghyam Case Study	148
Table 5.7	Effectiveness of WSP/WBA/JICA Water and Sanitation Project	155
Figure 5.4	Actor Relationships in Urban Water and Sanitation Program (WSP/WB)	159
Table 5.8	Results of WSP/WB/JICA Case Study	164
Table 5.8	Effectiveness of WSUP Urban Water and Sanitation	172
Figure 5.5	Actor Relationships in Water and Sanitation for the Poor (WSUP)	176
Table 5.9	Results of WSUP Case Study	180
Table 5.10	Effectiveness of BIRD-K Rainwater Harvesting Program	185
Figure 5.6	Sachetana: Actor Relationships in Rainwater Harvesting	187
Table 5.11	Results of BIRD-K Case Study	191
Table 5.12	Effectiveness of Naandi's Community-Based Kiosks Program	197
Figure 5.7	Actor Relationship in Naandi's Water Kiosk Program	199
Table 5.13	Results of Naandi Case Study	201
Table 5.14	Effectiveness of WaterAid Water and Sanitation Project	208
Figure 5.8	Actor relationships in WaterAids program	209
Table 5.15	Results of WaterAid Case Study	213
Table 5.16	Summary of Findings	216
Figure 5.9	Patterns of Actor Interplay and Project Effectiveness	217
Figure 5.10	Dynamics of Actor Interplay over Time	224
Figure 5.11	Findings on Variable Relationships and Combinations	228
Table 6.1	Policy Recommendations by Actor Type	246

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1 Introduction and Problem Statement

In the urban area of Bangalore, within a noisy and busy shopping district, lies a small and very dense settlement of about 200 little brick-walled, one-room houses packed with about 5000 inhabitants. The settlement struggles with having sufficient drinking water and has neither individual nor communal toilet facilities. The rocky soils do not allow for absorbing water, nor do they allow to access groundwater. The disastrous hygienic conditions in this densely populated area are visible in every corner of the informal settlement, including the small, bricked basement platforms that serve as community toilets.

The basement platforms are a relict and permanent reminder of an unsuccessful sanitation program in this settlement. After a long process of seeking permission to construct decentralized sanitation blocks for the inhabitants of an informal settlement¹, and receiving the official documents from local municipality officials, the United Kingdom-based development partnership, Water and Sanitation for the Urban Poor (WSUP), together with local partners constructed the basements for the public community toilet blocks. During the construction process, the forest department stopped work on the project, declaring the area to be a former lake area in which any infrastructure and settlement construction was strictly prohibited. The local municipality officer tried to settle the conflict between the forest department and the implementing agency, but was not successful and hence we still observe disastrous hygienic conditions in this particular informal settlement.

Just a few blocks away, at the Cauvery Bhavan building, is Salma Sadikha, the Head of the Social Development Unit (SDU) at Bangalore Water Supply and Sewerage Board (BWSSB), in her small and busy office. Files buzz, and documents are piled high in the four-by-four square meter room, which serves as her and her assistant's office in this

¹ Informal settlements (also sometimes referred to 'slums' or 'slum settlements' in literature or empirical material) describe in my thesis, residential areas, where inhabitants (in literature sometimes also referred to as 'slum dwellers') have no tenure security, houses are not planned and usually are very small and where an entire community settlement lack basic infrastructure and public services (UN HABITAT 2015). In India, one can distinguish between 'declared slums' and 'non-declared slums'. State governments in India have the responsibility to declare a slum under the "Framework of the slum areas improvement and clearance act, 1956" they can declare an informal settlement as formal and allow tenants to receive land titles or at least hold the legal right to stay and be allowed to build bricked houses and to profit from policy programs for infrastructure and public services (Nakamura 2016).

public administration building. Three mobile phones in the room ring almost constantly. Salma Sadikha is a small and lively woman who speaks of her work and her clients in a resolute and compassionate tone. In 2000, the SDU was established within the public water provider of Bangalore, in order to implement two large infrastructure programs on water and sanitation in Bangalore's informal settlements in cooperation with the Australian Aid Agency (AusAid) and the Water and Sanitation Program (WSP) of the World Bank. These programs were implemented in collaboration with four local NGOs, and the SDU team managed the immense achievement of sanitizing and providing tap water for almost half of Bangalore's informal settlement population during the following years.

Mandated within the World Bank program to provide Bangalore's urban poor with water and sanitation, the SDU team members rejected collaboration with WSUP's program targets to sanitize and provide water for about 31 informal settlements in Bangalore. Why did two actors who are engaged in the same policy field and share the same goals not collaborate in a city that is constantly growing and needs all available capacities to improve public services for the urban poor?

Looking at the contradicting statements of both sides, a mismatch in ambitions, approaches and goals seems to be the reason for the rejected relationship between WSUP as donor and the SDU as recipient for a financially and technically planned aid program. The SDU was established through, and has built long lasting relationships through implementing programs with the World Bank. WSUP's request for collaboration was denied due to the fact that they were perceived as a small-scale and only shorter-term partner, and due to formal constraints. WSUP, for its part, initiated round tables for policy dialogue, but never managed to engage any of the public officers for these forums. The responsible policy and administrative partners for their request simply were not interested in being mediated and influenced by a small international organization. WSUP faced the challenge of interdepartmental disputes as well as public actors' ignorance of their willingness to jointly set up water and sanitation programs. Hence, WSUP decided to work in areas where it could collaborate with local elites and implement its programs without the involvement of official city government partners.

The ideal case scenario, under the principles of the 2005 Paris Declaration (c.f. the Organization for Economic Co-operation and Development (OECD) Paris Declaration, 2005), strives for harmonization among international donors in local contexts, in order

to ease aid flows, prevent duplication of programs and streamline funds to those most in need of funds and public services. This anecdotal snippet of my research in South India vividly illustrates that we are still far away from such an ideal case implementation scenario, due to the multiple challenges at various levels within the dynamic process of foreign aid implementation. Various donors still compete for cooperation with local partners to implement their respective aid agendas on the ground.

The competing international and local donor agencies meet a situation in India, in which we find many formalized bureaucratic procedures and a hierarchical decision-making culture in political and administrative day-to-day work. There is almost no horizontal collaboration among institutions, with overlapping tasks and service groups across the various institutions. There are strong frictions within horizontal collaborations among state agencies responsible for policy sectors, such as the water service provider and the agricultural ministry, being responsible for irrigation, with both government agencies deciding on the same and competing water sources for their clients. Moreover, the bureaucratic and strict processes of formalized partnerships for donor and recipient relationships in aid programs have clear-cut standards regarding with whom to collaborate, for what and in which ways that hinder alignment and harmonization of aid implementers.²

The informal but tight corset of the government agencies as recipients of aid programs in India presents a challenge to potential donors regarding how to best collaborate and build relationships for program implementation. However, many donors actively implement projects in India, either in collaboration with the respective public counterparts or by ‘muddling through’ with the support of informal relationships with local elites, for example. These different kind of relationships between donors and recipients raise the question of what impacts the type of relationship have on project outcomes in aid programs, and what kind of relationships help to best explain respective program results.

² In 2005, the OECD conference on aid effectiveness in Paris initiated the so called “Paris declaration” that announced five principles to increase aid effectiveness: (1) ownership; (2) alignment with recipient programs; (3) harmonization of donors; (4) managing for results; and (5) mutual accountability of donors and recipients (OECD 2005). The ever changing donor landscape creates so many different governance arrangements that the outcomes of aid programs require more alignment to prevent duplication and to prevent fragmentation of actors and approaches, and to ideally achieve complementary agendas and effective results in a pluralist donor landscape.

This chapter of my dissertation establishes the research question and epistemic interest of my thesis by embedding my research approach into existing literature on actor relationships in foreign aid and its effectiveness. A final section in this chapter then gives a brief overview of the entire dissertation.

1.1 Research Question, Definitions and Research Approach

Complex partner networks and the relationships between donors and recipients are at the core of implementing aid programs. These diverse networks all share the common aim of improving the conditions for poor and marginalized people, and to induce socially just development. Depending on their relationships, we may be able to partially understand the effects of these relationship networks on the improvement of public service provision for the poor and marginalized. While some relationship networks may have effects in terms of organizational learning, capacity development and enhancement of knowledge, others may impact policy programs and induce institutional change at a larger scale than the respective program scope. These effects of an established donor-recipient relationship may vary from visible and big changes to indirect and small changes. Investing in relationships seems to hold the key for long-lasting and sustainable impact improvements in certain conditions of public goods and service provision for the poor and marginalized in developing countries (Eyben 2010; Eyben 2005; Eyben 2013a).

This thesis aims to understand different types of relationships between donors and recipients in the aid system, and to link these with program results. This relationship translates at an analytical level into understanding the variance in modes of social coordination between donor and recipient actors, and its effect on program results. Governance approaches provide a lens for structuring complex networks of actor interaction, and for understanding the modes of coordination among actors at different points of time (procedural governance) and at different decision-making levels (multi-level governance), as well as understanding networks consisting of actors from various backgrounds (multi-actor governance). These overarching categories in governance theory then serve to cluster these dimensions into respective governance configurations. Using such a governance lens, I aim to identify different types of governance configurations by looking at modes of coordination within donor-recipient relationships, and then to resolve their effects on respective project results.

The donor landscape of aid programs has immensely changed during past decades. Besides conventional donors from large bilateral and multilateral agencies from the global North, we nowadays also find donor agencies from the global South and an increasing number of local and international Non-Governmental Organizations (NGOs),

international development partnerships, regional foundations or philanthropist organizations and private sector donors that are engaged in aid program implementation. However, there has not yet been systematic research into whether there are systematic differences in building relationships with recipients among the various types of donors. In the complex donor landscape, one can differentiate two types of donor: The large bilateral and multilateral donors are considered as ‘conventional donors’ that usually work on the basis of bilateral agreements between the donor and the recipient governments or multilateral secretariats. ‘New’ donors have initiated their engagement in aid programs during the past decade with new, innovative and flexible approaches and a financial background that moves beyond ODA resources (such as international development partnerships, international NGOs, regional foundations or philanthropist organizations). Their engagement is based on voluntary, local agreement and contracts between public agencies in the recipient country and the respective donor organization (Bäckstrand 2006; Andonova and Levy 2003; Andonova 2010; Hale and Mauzerall 2004; Schäferhoff et al. 2009; Beisheim et al. 2007a; Liese and Beisheim 2011; Stewart and Gray 2006; Bethge et al. 2011) .

These various types of donors share the vision of alleviating poverty and providing public services and goods to the poor and marginalized, but differ strongly in their individual pathways of providing knowledge, capacities and programs towards development. The choices and quality of the donor-recipient relationship in foreign aid may provide an understanding of how this social coordination plays out for the program results over time. A systematic understanding of the link between actor relationships and program results, however, requires us to not assume a linear, cause-effect link, but rather to take a systematic perspective of different patterns of social coordination over time and link them with program results. In addition, it is desirable to identify what matters most in donor-recipient relationships in aid programs in terms of gaining traction and leading towards long-term impacts. My thesis addresses the following research question to find reasons for program effectiveness:

How does the donor-recipient relationship in aid delivery programs affect program results?

This research question requires the definition of three core concepts and what are understood to be the relevant actors in this relationship. Firstly, I will discuss and define the concept of ‘relationship’. Secondly, I discuss and define the terms ‘donor’ and

‘recipient actor’, and thirdly, I discuss and define my understanding of program results, to which the relationship of actors is linked.

To consider the relationship between two or more network actors means to understand the processes and context that relates two or more actors with each other. In aid programs, it is a common term to speak of the donor-recipient relationship as the cooperation between a donor organization and a recipient state. This relationship is typically characterized by a contractual basis of cooperation and a more or less shared agenda of compatible values and a mission for problem solution (Eyben 2010, 383; Ostrom 2005; Ostrom et al. 2002). Understanding this relationship is the core interest of my thesis, and for analytical purposes it is understood as a dynamic process among actors. The terms ‘relationship’ and ‘actor interplay’ in a network of two or more partners is used interchangeably. With a governance lens, this actor interplay can be differentiated into different modes of coordination: so called governance configurations that aim to provide for systematic analysis by identifying patterns of different modes over time (Risse 2012). Speaking of relationship or actor interplay in later parts of this thesis, I understand this as a dynamic concept of sequential modes of coordination among two or more actors within a network of previously defined programs, which share a degree of joint problem definition, values, mission and goals.

Actors, being responsible for implementing aid programs are typically differentiated into donor and recipient actors. The recipient actor in a nation state that receives technical, financial or capacity support can be labeled as a state or government actor. In the present context, state actor applies to recipients in the Indian nation state that engage in collaboration with a donor. The actual recipient actor has at a national level the role of internal and external sovereignty, which may be reduced by aid partnerships and transfer of tasks to external actors (Randeria 2007). The recipient actor is in the position to define contracts and agreements, planning of programs and implementation. In reality, implementation may be delegated to administrative units at a local level that implements programs. These programs are mandated by political ministries at a regional level that supervises collaboration to national level ministries and signs agreements between the recipient and donor states (Batley and Rose 2011; Nair 2011). Hence I use the term ‘recipient’ actor synonymously with the term ‘state actor’ (irrespective of the decision-making level), and will define it more closely where necessary.

Donors can vary from bilateral, to multilateral agencies, to NGOs, to private actors or hybrid actors, such as transnational Public-Private Partnerships (PPPs) (Bäckstrand 2006; Schäferhoff et al. 2009). However, in the context of aid programs, the donor agent is always external to the recipient agent and hence for analytical purposes can be defined as an external actor. External is defined in the sense of not being an entity of the recipient government, but being in charge of tasks that fulfill government functions (Risse 2012). The donor actor in aid relationships can also include state actors of donor governments (bilateral and multilateral aid). Since this thesis focuses on the Indian context in particular, the term state actor is exclusively used for members of the Indian government or administration. Hence I use the terms ‘recipient’ and ‘donor’ interchangeably with the terms ‘state actor’ and ‘external actor’.

Aid effectiveness in the management literature is defined as a systematic assessment of program results and regular monitoring of all parties throughout implementation. This definition ignores the challenges of unequal power relations, uncertainty and ambiguity in how improvement of a certain situation can be achieved (Eyben 2005; Chapman 2002; Rogers and Hall 2003; Sjöstedt 2013). In this thesis, I define the success of foreign aid programs in accordance with Easton (1965) and Young (1997), who denote program success as: (1) output; (2) outcome; and (3) impact (Easton 1965; Young 1997). Adopting Easton’s and Young’s effectiveness parameters, I understand the effectiveness of a programs to be the degree to which it was able to achieve its initially defined goals in terms of these three dimensions (Easton 1965; Young 1997).³ *Output* is defined as the activities of planning and initiating cooperation that a consortium of actors has produced in accordance with the initial project proposal. Changes of behavior and the short-term achievement of pre-defined goals of service provision are defined as *outcome*. In contrast, *impact* refers to the long-term achievements of sustainable improvements to a challenging situation (Beisheim and Liese 2014, 18). One can speak of sustainable impacts and project success if these achievements continue to be realized independently of external funding and result in substantial changes in institutions and processes (Gow and Morss 1988, 1414).

Given these definitions and my governance lens on actor interplay, my research aims to systematically understand the relationship between donor and recipients, and hence

³ Further definition, description and operationalization of the individual dimensions of effectiveness is given in detail in Chapter 4.

identifies patterns of modes of coordination within and across partners in aid programs. This includes asking how the quality and structure of the relationship is linked with project results. The second step of the analysis explores systematic differences in the achievements and modes of coordination between conventional and new donors. Cross-actor comparative insights into the successes and failures of the respective donor types have not yet been systematically analyzed. This second step of analysis will provide such insights by assessing how their respective approaches to coordination with state partners impact upon respective project results.

Table 1.1: Sub-Questions and Aims for the Analysis

Sub-Question	Aims for the Analysis
1) How does actor interplay over time affect program results?	Find combinations of interplay and effectiveness, and derive patterns for this relationship Create insights into the conditions that determine the interplay and project effectiveness
2) Do new and conventional donors differ systematically in their coordination approach and their respective project results?	Give insights into the differences in success of conventional and new donors Give insights into the differences in how conventional and new donors coordinate with state partners

Regarding the policy field and regional area, my research focuses on infrastructure service provision of water and sanitation programs in India. In order to provide for comparable cases in the highly complex and varying landscape of donors and approaches across the globe, limiting the study to one country, one policy sector and all relevant actors proved to provide a pathway for a reliable case-comparative research design. Additionally, infrastructure and service provision programs must include local state and bureaucratic actors at some point of the program and hence are selected for this research to guarantee a minimum degree of collaboration between recipient and donor actors.

Pursuing an in-depth case study, this analysis yields insights into the program implementation dynamics and aims to reveal actor relationships and patterns of coordination. Analysing the actor relationship will include assessing the role of power plays and (in)balances, modes and degree of delegation of tasks, intensity of interaction and decision-making and accountability mechanisms⁴.

⁴ Accountability in my thesis is understood as the willingness of an actor to be hold responsible for its action. This includes a relational element between two actors. Keohane (2003) differentiates between

Seven cases are selected in India’s water aid projects. These seven projects are individually analyzed as in-depth case studies, and are subsequently comparatively analyzed. This structured approach invokes the logic of the systematic case comparisons of John Stuart Mill (2002/1843), but does not strive for laboratory-like case comparison. These seven cases were purposely selected on the basis of their varying degrees of effectiveness.⁵ All seven cases are analyzed with a previously defined set of questions for the independent, alternative, and dependent variables. In a second step, these previously defined aspects of each case are compared, and explanations for respective degrees of effectiveness derived. The focus concerns systematic variances in patterns of actor interplay and program results between the two donor types.

Table 1.2: Selected Cases for Analysis

Actor type	Organization	Project Topic	Effectiveness
Conventional donors	WB/ WSP	Water and sanitation in urban informal settlements	Medium/High
	GIZ	Water and sanitation in urban informal settlements	High
	DFID/ Water Aid	Water and sanitation in urban informal settlements	Medium
New donors	Arghyam	Urban and rural rainwater harvesting	Medium/Low
	Bird-K	Rural rainwater harvesting	Medium
	Naandi	Rural water kiosk	High
	WSUP	Water and sanitation in urban informal settlements	Low

This approach leads to insights into the reasons for the dynamics of supportive actor relationships and program results. Alternative explanations, such as historical project background, non-transparent power-plays, local legitimacy⁶ and availability of resource

internal (“principal and agent are institutionally linked to each other”) and external accountability (“and in external accountability, those whose lives are impacted, and hence who would desire to hold to account, are not directly (or institutionally) linked to the one to be held to account.”) (Biermann and Gupta 2011; Keohane 2003).

⁵ This selection of the dependent variable (effectiveness) is based on the knowledge of an initial assessment of project portfolios of all (accessible) aid actors (in early 2000) in water implementation in India and the comparison of this portfolio with submitted final reports. See Chapter 4, case selection for further information.

⁶ Local legitimacy and legitimacy in general, is used in my thesis in accordance with Fritz Scharpfs understanding of input legitimacy as ‘government by the people’, meaning a political actor that has

controls are also considered in every case study. The objective of my thesis is to explain why some projects are more successful than others, and to what degree this success can be traced to actor relationships between donors and recipients.

Following this overview, the next section of my dissertation deals with the present state of the art. Firstly, I discuss the literature on actor relationships and interplay in development literature and the social sciences that is relevant to the conceptualization of my research question and approach. Secondly, the aid effectiveness literature is discussed, since the original idea for my thesis was inspired by the interesting insights of this literature and the omission there of detailed analysis of decades of aid programs and their results. Finally, I will provide insights into similar research projects that also assessed project effectiveness and inspired my work to look into different donor agencies' collaboration with Indian state actors.

gained legitimacy through democratic election processes and hence is responsive to the needs of the governed. Output legitimacy is also called “government for the people” and can be understood as political actors that gain legitimacy through effective solutions (Scharpf 1997; Scharpf 2004; Scharpf 1999). Output legitimacy in my context is closely related to the concept of local legitimacy, where state actors or functional equivalents gain legitimacy by providing public goods and services that are needed by beneficiaries (Beisheim and Liese 2014, 169; Krasner and Risse 2014; Beisheim et al. 2014b).

1.2 State of the Art

The system of a relationship between a foreign aid donor and a recipient was established after the Second World War, as donors put their focus of engagement on prior colonies. With the beginning of the Cold War, donor nations competed for allies in the developing world. After the Cold War, this system changed into a binary North-South aid system, with less political and ideological competition among donors. Foreign aid implementation has changed over the past several decades. The sixties were dominated by project-based aid programs, while the seventies and eighties were characterized by structural adjustment programs that focused on large-scale institutional and economic change. During the nineties, we again saw a turn from structural adjustment strategies of external actors towards more concentration on the recipient's ownership and inclusion of local civil society organizations, and financial support of existing institutional structures. The project-based foreign aid approach, in politically rather stable countries, was replaced by budget support⁷, capacity strengthening and increased local ownership through implementation of independently developed program approaches (Riddell 2007, 47).

Presently, the aid system is influenced by the global economic crisis as well as a multipolar world system, with transition countries as influential nations and with shared global visions and norms on development, such as the Millennium Development Goals (MDGs) and the Sustainable Development Goals (SDGs) (Beisheim 2016; Eyben 2013a; Fukuda-Parr and Hulme 2011; Fukuda-Parr 2004). The global governance architecture is perceived as changing in recent years, from legally binding towards a discourse of voluntary agreements to achieve mitigation of global climate change and sustainable development with active participation of local-level actors to empower marginalized groups and ultimately alleviate poverty. This change in the governance architecture is accompanied by a quest of identifying governance arrangements that

⁷ The advantages of budget support compared to project support are seen in the promotion of local development, consolidation of local institutions and increased ownership, with recipient nations planning, implementing and completing large-scale sectorial programs. However, budget support is prone to corruption and mismanagement and can only be applied in countries with a minimum standard of good governance and division of power. It is debated whether budget support fosters the development of local institutions and structures, or whether it only increases dependencies and supports non-transparent and autocratic structures (Koeberle et al. 2006; Cordella and Dell'Ariccia 2007; Jain 2007; Hayman 2011; Bader and Faust 2014).

provide for enabling conditions for development at a community level (Oldekop et al. 2016; Gulrajani 2015).

Moreover, the make-up of the donor community has changed over recent decades from mainly bilateral aid to a combination of multilateral and bilateral aid. Today, we find a high number of new types of donors, such as NGOs, international foundations, Public-Private-Partnerships (PPPs) and business actors. The effectiveness of international aid programs has always been the subject of critical review and highly controversial. International agendas for aid effectiveness (e.g. the OECD Paris Declaration 2005⁸) aim to provide standards to achieve optimal results with the allocated financial resources by reducing transaction costs at the recipient side, increasing harmonization among donors and eliminating the duplication of programs (OECD 2005).

Strategies for increased effectiveness over recent decades range from advancing state capacities and good governance, to innovation and flexible support of civil society, and to the creation of business models and market niches for private sector engagement. These strategies hold promises for increased capacities of the public sector, empowerment of civil society and strengthening of local market structures. This is targeted at strengthening the political system and the economy to alleviate poverty and foster peace. However, the creation of business models and market niches of new aid agents may weaken civil societies modes of functioning, and in fragile contexts may also place regulatory guidance in the hands of a non-transparent state actor. The transformative potential of the new donor landscape is hence put into question (Banks and Hulme 2014; Swyngedouw 2005). We have entered a decade of development in which we find substantial changes in the architecture of governance, but still aim for governance arrangements and actor relationships that provide the most enabling context arrangements for local development.

This quest for governance arrangements in combination with a growing donor community with a huge variety of agendas, norms and programs to empower local communities, provides the rationale of my thesis: to gain an understanding of these governance arrangements and their results at a local level. This section provides an overview of the different debates in the literature relating to foreign aid, governance

⁸ The twelve targets of the Paris Declaration of 2005 were discussed again and with a new composition of donor nations in 2008 in Accra, and resulted in the Accra Agenda for Action (AAA). They were also the subject of discussion in Busan, South Korea in 2011, which inaugurated the Global Partnership for Effective Development (Abdel-Malek 2012).

arrangements and aid effectiveness. Foreign aid effectiveness at a macro level is mainly discussed in economic sciences, while governance arrangements, management procedures and actor-centered approaches are analyzed in the social sciences and in public administration literature. The following overview of debates aims to make clear the current gap in research, and thus the scientific and societal relevancy of my thesis to identify and argue for the 'Erkenntnisinteresse' of my thesis.

The Institutionalisms - Actor Interplay

Following the institutional theorists who brought their perspective into social science mainstream discussions, institutions can be regarded as "systems of established and prevalent social rules that structure social interactions" (Hodgson 2006, 2). There is a debate within the school of thought of new institutional economics over whether institutions can be perceived as rules, norms or equilibria that structure social interaction (Hodgson 2006; Ostrom 2005; Ostrom 2010). This school of thought is based on the transaction cost theory of institutional change, from Douglas North and Oliver E. Williamson, which provides a framework for understanding institutional change from a rational choice perspective, with competition and incentives as drivers of institutional change (Williamson 1975; North 1990). In contrast, Actor Centered Institutionalism (ACI), developed by Mayntz and Scharpf (1995), posits assumptions about institutions, actor interplay and self-organization through interaction, and provides a heuristic for actor analysis. ACI has become part of the new institutionalism school of thought and explains how to close the gap between collective results and individual activities. ACI uses a very narrow definition of institutions as directives for action but does not link these directive actions to a particular outcome (Mayntz and Scharpf 1995).

New institutionalism focuses more on the structure and strategy of actor relationships, and empirically assesses the interplay between NGOs and state partners in local implementation (Greenwood and Hinings 1996; Booth 2011). Batley and Rose (2011) define actor interplay as the reciprocal relationship of partners, with a particular focus on influencing factors and the assessment of formal and informal relationship structures and respective organizational characteristics (Batley and Rose 2011, 231). The social relationships between two actors also contain norms, motives and interests, and hence, analysis of such relationships also requires consideration of power asymmetries (Greshoff et al. 2011; Eyben 2010).

The school of thought of institutionalist scholars hosts two adverse assumptions about determinants of the quality of actor interplay between state and external actors (Batley and Rose 2011, 233). On the one hand, authors from a neo-institutional perspective assume external actors in partnership constellations as external determining factors for the partnership, which adapt to their state-counterparts through regulative and institutional boundaries, set by state partners (Meyer and Rowan 1977; Powell and DiMaggio 1991; McLoughlin 2011). Authors from the co-evolutionary approach assume, by contrast, that non-state partners are not guided by institutional and regulative environments; rather, their positions for negotiations are determined by resource distribution, interests and norms. Hence, external actors are perceived as intrinsic and strategic action units (Rodrigues and Child 2008; Lewin and Volberda 1999). More recent research focuses on influence of international institutions and administrations at national level and their degree of autonomy (Conceição-Heldt et al. 2015; Busch 2015).

In short, we can see that research aims to understand the arrangements among actors, and differ in their definitions of institutions, but share the assumption that relationship-inherent as well as factors external to the relationship both matter for relationship arrangements. The next section links these approaches to development discourses in social sciences and development studies.

In the social sciences and public administration, two paradigms of development have predominated over recent decades. The first one considers development as a political process of social transformation through the empowerment of individuals. By contrast, the second paradigm considers development as a planned and measured process with the 'right' set of management tools (Elbers et al. 2014, 4).

Social science researchers have assessed trends in foreign aid approaches, focusing on policy coherence, actor interplay and modes of action. This research has identified four major determinants of high transaction costs and low effectiveness: (1) rigidity and tardiness of international bureaucracies; (2) high variance in donor approaches; (3) hierarchical implementation; and (4) conflicting interests of actors aside from the local bureaucrats in recipient countries (Nuscheler 2011).

Research that is focused on public administration aims to understand the project-inherent factors in play, such as institutional design and process management, as determinants of project effectiveness. Institutional design includes communication

strategies, availability of financial and human resources, capacities and expertise of personnel, and the adaptability and flexibility of actors. As keys to success for the implementation of aid programs at the local level, the relevance of champions, local adaptation and local legitimacy are cited, along with engagement in areas that are politically relative stable and that provide for a minimum degree of rule of law (Beisheim et al. 2014b; Ika et al. 2010; Ika et al. 2012; Khang and Moe 2008; Diallo and Thuillier 2004; Crawford and Bryce 2003; Gow and Morss 1988).

Low project outcomes or even failures are explained by imprecise process planning and rigid time frames that do not allow for the needed flexibility to adapt to challenges. Another reason for program failure is the challenge of intercultural communication and the integration of local power balances in project implementation. Thirdly, aid programs are prone to be overloaded with goals that are unattainable due to area challenges and administrative obstacles. The overload of goals and lag in achievements may also have negative repercussions for beneficiaries' expectations and may result in mistrust and loss of local ownership. This effect may be even stronger in programs that target the poorest members of society, who may be risk-averse in order to protect their very few belongings and living standard (Nuscheler 2011, 15; Muriithi and Crawford 2003, 318; Gow and Morss 1988, 1415). Nuscheler (2011) advocates research that analyzes the effectiveness of foreign aid projects and assess the complexity of causal chains from planning to implementation, with a focus on relationships and administrative processes. Effectiveness assessments should consider local conditions, needs, and demands, and should integrate local expertise and knowledge (Carvalho and White 1996, 9).

To explain the mechanisms for successful change of structures and processes, one needs to gain an understanding of project implementation dynamics and open the black box of actor engagement and modes of coordination. Bourguignon and Sundberg (2007) provide an analytical framework that links donor properties with project achievements. They find that recipient governments' attributes are the key to explaining a link between a program's approach and its achievements. Good and consolidated government systems are more likely to produce successful programs than weak government systems (Bourguignon and Sundberg 2007, 317). They conclude that weak and failed states or governments need different donor programs than consolidated and stable governments. However, their analysis remains on macro-level assumptions and findings. In contrast,

public policy and administration debates zoom in on project inherent and micro-level reasons for actor interplay.

Public Policy and Administration Discourses

If we consider managerial and public administrative perspectives, the objectives are the optimization of working procedures and the promotion of innovative, evidence based solutions to improve public sector service provision (Zhang 2013; Nightingale 2000). Managerial thinking focuses on institutional reforms, organizational learning and increasing competencies for action and problem solving. These approaches are guided by the normative quest for efficient and business-like bureaucracies, and they aim for best practices (Gulrajani 2011, 208). The public administration school of thought and new public management had the largest impact on priorities and practices when they were applied to development cooperation. This can be attributed to introducing results and evidence as performance standards to the implementation and evaluation of foreign aid programs (Eyben 2013b).

During the 1990s, the New Public Management (NPM) thinking was en vogue in research and in development practice. This approach led to the application of efficiency- and service-orientation criteria in public administrations, and to the tendency to outsource activities to private partners within complex contract agreements. This change in public policy practice sparked discussion of the privatization of public tasks and its legitimacy. The approach emphasizes increased effectiveness of the public sector through its reformation towards higher efficiency and greater service orientation (Naschold and Bogumil 2000; Budäus and Grüning 1998).

NPM is based on public choice theory, with a particular focus on market mechanisms and service provision to customers of the public sector. NPM draws on assumptions from business studies in order to address the range of management reforms, decision-making routines and leadership styles (Budäus and Grüning 1998, 8). The rationale behind the practice of outsourcing public services to private actors is to enhance the efficiency of public services. This has spurred extensive discussions on the role of legitimacy of external actors and fostered the debate of contract management to regulate public and private actor interaction.

It is crucial to bring this debate to the multi-level context realities of foreign aid, and to link the managerial nature of project management to local context realities. Some authors point out the difficulty of a lack of shared belief systems, which results in difficult cooperation (Brinkerhoff and Brinkerhoff 2011; Elbers et al. 2014; Elbers 2012; Brinkerhoff 2011) or a lack of pro-poor focused approaches (Bebbington 2005).

Critics of NPM argue that NPM-based reforms in public administration undercut the state's duty to provide common goods and services. Partial privatization of public services is accompanied by profit-maximizing, service-provision strategies and the dependence of these basic services on market mechanisms. A second criticism is that if we assume democratic principles to be the foundation for public services, then the partial privatization undermines the democratically functioning nature of the state's duties and responsibilities. This criticism addresses the NPM assumption that the private sector and public administration are almost identical in their interests and expertise in providing public services and goods (Kegelman 2007; Wilson 1987).

The political economy paradigm is dominated by static and actor-based approaches to intervention (Williams and Copestake 2011). This school of thought aims to gain a comprehensive understanding of the formal and informal processes and power dynamics that relate to administrative capacities, and of chains of accountability and reporting (Grindle 2011; Edelmann 2009; Gough and McGregor 2007; Copestake 2007; Moncrieffe and Luttrell 2005; Bebbington 2005). The authors argue that the complexity of foreign aid projects makes it impossible to assess the link between measures and achievements using large-scale quantitative research designs. Therefore, they advocate in-depth and comparative case studies with a small number of cases, in order to gain insights into decision-making processes, as well as local capacities and willingness to act (Williams and Copestake 2011, 28; Morrison 2010, 160).

The public administration literature takes up a functionalist perspective on institutions and how these functions limit the action options of engaged organizational actors. Moreover, this school of thought focuses on the dynamics of actor interplay and determinants of particular interplay patterns (Meyer and Rowan 1977; Powell and DiMaggio 1991; Scott 2000; Brinkerhoff and Brinkerhoff 2002; Teamy and McLoughlin 2009; Batley 2011; Heeks and Stanforth 2014). The lack of service provision by the public sector provides the empirical gap to aim for an understanding of service provision by alternative actors.

Public administration scholars assume that external actors have a comparative advantage in providing the services in a more innovative and flexible manner. Innovation and flexibility is directly linked with reform strategies and improvement of plugged-in bureaucratic structures. Cooperation with state actors reduces the risk of failure. In the case of failure, the blame is shared with state partners.

Critics of public administration argue that the public administration management perspective is in a methodological trap of trial-and-error-based experimental case studies. Moreover, they are criticized for their normative claim to increase public actors' efficiency in service provision, instead of aiming for sustainable and equal service provision to all citizens. They also claim that public administration scholars neglect local empirical realities, and that their concepts of effective bureaucracies do not match reality and hence are difficult to implement in challenging environments (Ramanath 2009, 67; Claeys and Jackson 2012, 603; Sansom 2011; Lipsky 2011). Public policy and administration literature reflects the adoption of managerial logic and market mechanisms for public entities and public service provision. New donors in foreign aid also mirror these concepts in their modes of operation and their self-description of being flexible, innovative, customer oriented and efficient.

Aid Effectiveness and Economic Development

For decades, the debate over aid effectiveness has been a dominant topic in the economic sciences and has resulted in two contrasting points of view (Gulrajani 2011; Mavrotas 2005; Mavrotas and McGillivray 2009). The dispute between proponents and opponents of international foreign aid are led by two leading US economists: Jeffrey D. Sachs (Harvard and Columbia University) and William Easterly (New York University). Sachs argues for a linear link between foreign aid and economic development at the national level, and considers economic reforms and managerial approaches as drivers for economic and, subsequently, social development (Sachs 2005). Easterly denies a link between foreign aid programs and economic growth, and considers aid as a vehicle for increased dependency structures instead of the driver for economic development; proponents of this view call for a halt to international financial investments and activities in developing countries (Easterly and Williamson 2011; Easterly 2005). This dispute has spawned a huge variety of macroeconomic studies, which aimed to

investigate the link between foreign aid implementation and economic growth (Easterly and Pfutze 2008; Sachs 2005; Mavrotas and Ouattara 2006; Mavrotas 2002; Agénor et al. 2008; Alesina and Dollar 2000; Asiedu and Nandwa 2007; Burnside and Dollar 1997).⁹

This controversial macroeconomic debate has also been supplemented by the microeconomic approach of Esther Duflo, Abhijit Banerjee and their team. These researchers attempted to assess the impact of foreign aid projects using random experiments. But although they are internationally well known for their studies and results, they face criticism because of the ethical dilemmas and methodological challenges and biases of experimental studies (Barrett and Carter 2010). Their experimental studies deal with equity issues of education and health service provision, and at the same time with societal dimensions, such as the impact of the caste system on marriage and equalization of men and women, and are mainly based on the Indian context. Their findings support the thesis of a positive relationship between foreign aid programs, local development and economic growth (Banerjee et al. 2010; Banerjee and Duflo 2007; Banerjee and Duflo 2003).

Since its origins after World War Two, foreign aid has been at least as controversial as it has been advocated. As already mentioned, economic scholars disagree about its impacts and hence about the sense of investing in foreign aid programs. Beyond the economic debate on the impact of aid programs, postcolonial theorists have also criticized aid programs for reasons of historical path dependency. Postcolonial scholars base their criticism on the damage done by the hegemony of the Global North during the era of colonialism, and emphasize the cultural gap between donor and recipient countries (Ziai 2011; Ziai 2009; Chakrabarty 2009). Modernization and dependence theorists, in contrast, argue from a more economic point of view that the industrialized world serves as a reference point for developing countries, and that foreign aid speeds up their industrialization with imbalanced power poles and large dependencies on the Global North. Dependence theorists focus on agrarian societies, and provide solutions for reforming the agrarian sector instead of promoting transformation towards industrialization (Rüland 1997; Rostow 1997).

⁹ Doucouliagos and Paldam (2009) provide a comprehensive overview of the nuances of these macroeconomic studies and their findings on the relationship between foreign aid and economic development (Doucouliagos and Paldam 2009).

However, postcolonial theorist critiques remain on a rather abstract level, and rarely provide solutions to the identified problems. They advocate the application of conventional aid programs in local cultural context settings, but remain elusive about actual program implementation in these settings (Draude and Neuweiler 2010; Winters 2014).

Postcolonial perspectives on foreign aid project implementation are considered at different parts of this thesis, since they assess actor interplay, bearing in mind the role of legitimacy and sources of this legitimacy for all actors. They also explicitly address the role of local legitimacy and of the interplay between foreign aid actors and local government and administrative actors. Empirical research in this area tends to focus on questions of rejection and acceptance of external actors in local context settings, as well as the techniques used by external actors to gain local legitimacy. This thesis and its empirical findings contribute to the discussion of external actor legitimacy in local context settings, the sources of legitimacy and approaches to achieve social equality.

The transformative potential of this new and extended donor landscape is put into question and hence my thesis aims to understand project inherent as well as project external reasons for social coordination among actors. Linking this understanding with program success by comparing different types of donors and their implementation approaches at micro-level has been identified as a research gap in the present literature on actor relationships and reasons for aid program success.

Localization of the Thesis and Epistemic Interest

The composition of actors in international and national foreign aid varies according to the interests of donors in particular areas and the size and need of recipient countries. The donor community in local context settings is highly fragmented, and a solid management of this diversity is not observable (Vollmer et al. 2014). As agreed under the principles of the OECD Paris Declaration of 2005, harmonization among bilateral and multilateral actors and new donors has yet to be achieved. Simplification of administrative processes in recipient countries is hardly observable, and nor are there any concrete strategies to implement the Paris Declaration principles (Sjöstedt 2013, 150; Knack et al. 2011, 1951). A clear advantage of harmonization would be a reduction in administrative procedures in recipient countries, which would reduce transaction

costs significantly and directly channel more resources towards poverty reduction. In 2000, the United Nations set the Millennium Development Goals (MDGs) as targets for comprehensive and substantial improvement of well-being in developing countries by 2015, but achieving them is still far out of sight. The partial failure of the MDGs has led to the Post-Rio process, and the integration of economic, ecological and social targets into the Sustainable Development Goals (SDGs), which are aimed at alleviating poverty and fostering sustainable development until 2030 (Chibba 2011, 76; Nuscheler 2011; Vandemoortele 2011; United Nations 2012; United Nations 2015; United Nations 2014). These international dialogues and policy processes, dealing with the transformation towards sustainable and socially just development, provide the backdrop for the societal relevance of understanding the interaction and program results of various donor programs with their respective recipient counter parts.

According to Lehnert et al. (2007), empirical research should be closely tied to societal relevancy, and is understood as “the promotion of understanding of social and political processes that can be traced back to a prior defined group of individuals and for which the change of processes provides normatively assessable difference to their prior position”¹⁰ (Lehnert et al. 2007, 47). Beyond the societal relevancy of scientific research, transdisciplinary thinking aims to establish a mode of co-production of knowledge between scientific research and political actors and processes, being driven by societal needs. Grounding scientific knowledge in societal needs in order to achieve transformation is the new paradigm, towards which scientific research should aim (Jones et al. 2013; Wilsdon et al. 2005; Wiesmann et al. 2008).

Foreign aid programs have various effects on local social, political and economic structures, and improvements in economic development in local contexts impacts on the economic development of a country over the long run. My thesis in contrast deals with the direct effects of various donors in local context settings, and will provide insights into the consolidation of these projects. Consolidated and self-sustaining projects are perceived as first step to long-term effects on development and economic transformation. It is the objective of this thesis to identify the individual elements within project implementation that contribute to project success, with a particular focus on the relationship between donors and recipient actors. Addressing the black box of multi-

¹⁰ Translation of the german citation: “[...] die unser Verständnis sozialer und politischer Prozesse [fördert], deren Auswirkung auf eine Gruppe potentiell Betroffener sich benennen lassen und für die Veränderungen auch einen normativ bewertbaren Unterschied machen“ (Lehnert et al. 2007, 47).

level and multi-actor context settings in foreign aid project consortiums, the empirical assessment of this thesis is based on theoretical assumptions from governance theory, as well as theories concerning the role of hierarchical and non-hierarchical steering in the relationships. The thesis has particular epistemic interest since it pursues a case-comparative methodological approach, and therefore enables a thorough investigation of the actor relationships for different types of donors and within the donor–recipient relationship. It is assumed that successful project programs are those that achieve their defined targets, are able to consolidate and be handed over to local beneficiaries or state partners, and contribute to the overall improvement of a pre-defined situation. Reduction of poverty, improvements in health, and education and water service provision all contribute to social welfare. Moreover, I assume that local successes, such as sanitation and water provision for the urban poor, provide a foundation for improvement and thus bridge the micro–macro divide in the quest to alleviate poverty.

As demonstrated in the literature review, many studies aim to identify the macroeconomic link between foreign aid and economic development at a national level. At the same time, we also find a multitude of studies that focus on project implementation and that identify physical, social, historical and demographic reasons for a project’s success. This thesis adheres rather to the latter approach, and provides a systematic and micro-level focused understanding of the keys to success. Considering project inherent factors and actor relationship attributes as relevant for program success by controlling at the same time for external reasons for program success. To draw a larger picture, I compare these findings from different types of donors, in order to provide insights into the multi-donor aid program landscape and derive insights into the transformative potential of different donor types.

The change in the landscape of donor actors in foreign aid has been the origin of many research initiatives over the past decades, which aim to understand various approaches. In particular, the inauguration of international Type II¹¹ development partnerships, at the Earth Summit in Johannesburg in 2002, inspired the research agenda and has resulted in at least two large research programs. One of these, is the Global Sustainability Database project at the University of Amsterdam, which was initiated by Philipp Pattberg and Frank Biermann. This deals with the genesis, influence and legitimacy of these new

¹¹ This thesis refers to these Type II Partnerships when speaking about international development partnerships or Public Private Partnerships (PPPs).

Type II partnerships with regards to providing public services, and with knowledge of the partnerships at a global level (Pattberg et al. 2012; Szulecki et al. 2010; Biermann and Pattberg 2008).

Another of the new large research programs is the D1-program of Marianne Beisheim and Andrea Liese at the Collaborative Research Centre 700 (Free University, Berlin). This project deals with the conditions for success of Type II development partnerships, and covers three stages of research over the period of 2005 to 2017. The initial results of this research project highlight the importance of a high degree of institutionalization, sound and adaptive process management and internal learning processes as determinants for long-term project success in areas of limited statehood (Liese et al. 2014; Beisheim et al. 2014a; Beisheim et al. 2014b; Beisheim and Liese 2014; Liese and Beisheim 2011; Beisheim et al. 2007a; Beisheim et al. 2007b).

The present thesis adheres to the D1 research program in terms of investigating the conditions for success, but places its emphasis on the role of actor interplay for success, and moves beyond Type II partnerships by including a variety of different donors in its analysis. The ultimate goal of this thesis is to create cross-case insights into different donor types and their relationship with recipient actors. This can allow policy recommendations to be derived for local collaboration as well as coordination among these various aid actors, based on the strengths and weaknesses of different aid programs.

The empirical case studies in my research are located in the Indian subcontinent. India lends itself to this thesis for two major reasons. Firstly, India is a country under transition, but still hosts a huge number of international donors and provides a variety of donor agents within the policy field of water and sanitation governance. Secondly, the insights from India are transferable to other context settings that have a comparative political environment, size of bureaucracy and level of development. Of course there is a limited extent to which one can generalize findings from case study evidence, but in my thesis I will identify the main characteristics that serve as entry points for other settings, in order to transfer the knowledge to different context settings, policy sectors and actor relationships.¹²

¹² See Chapter 6.1 for more information on the transfer of findings and generalization of my results.

The actor- and process-based analyses of my thesis aim to provide evidence for assumptions concerning the modes of coordination and dynamics of interplay of heterogenic actor constellations over time. From a policy perspective, this research can be justified by the ongoing processes and debates about fragmentation, pluralism and complementarity of foreign aid and its achievements in the past decades, which feed into developing strategies for implementation in the decades to come. In addition, the thesis will provide insights into different modes of action in the diversified donor landscape, and will give policy recommendations for managing this diversification in the long run. These recommendations can help to achieve sustainable development, as well as to complement administrative capacities instead of overstressing them. There are a variety of beneficiaries of the policy recommendations derived from my research, including recipient actors in local context settings, different types of international donors and indirectly also local beneficiaries.

My thesis differs from a managerial approach, since although it includes assumptions from this field as alternative explanations, it focuses mainly on the different points of interplay between external and recipient actors, and on deriving the potential of a relationship to resolve project achievements. My thesis also differs from conventional and mainly individual aid evaluations in that it focuses on cross-type comparisons and derives insights regarding conventional as well as new types of donors. Since aid evaluation practice is very advanced nowadays, the post-evaluation of World Bank programs and GIZ programs, for example, are far more detailed in their assessment than my case studies. However, my thesis adds value to conventional post-evaluation studies through its systematic comparison across different donor agencies and through taking into account these internal program evaluations for each case. Moreover, insights into the fragmented donor landscape help to identify pathways towards more harmonized and effective program implementation. Identification of the conditions for successful relationships may be of importance for the activities of different types of donors in India and elsewhere.

Theoretically, my thesis aims to contribute to governance approaches by addressing the combination of hierarchical and non-hierarchical steering, and by deriving different governance configurations. Applying these governance configurations to foreign aid implementation provides insights into actors' collaboration. Foreign aid implementation is embedded in a multi-level context of donor and recipient nations' politics and

bureaucracies. Recipients are held accountable by international stakeholder meetings on global aid effectiveness (e.g. Paris, Accra, Busan Dialogue), to advance their ownership and harmonization of donors in their country.

At the same time, foreign aid donors are characterized by multi-level and sometimes multi-actor context settings. Hence, I assume that governance approaches provide explanations for the mode of interplay within and across institutions. These governance configurations are based on the respective values of the mode of coordination, and hereafter they are linked with the respective degree of project effectiveness. While donors usually prefer horizontal and network steering, recipient actors pursue vertical steering. This thesis ultimately aims to understand the different combinations of these steering modes and their relevance for program achievements, which can give us a systematic understanding of actor relationships from a governance perspective.

1.3 Outline of the Thesis

The setting and epistemic interest of my thesis was explained above in **Chapter One**, which outlined the research question and embedded my research approach in the existing literature on foreign aid and actor relationship, and which justified the relevance of my research endeavor.

Building on this foundation, **Chapter Two** outlines the situation in India, setting out the necessary background knowledge for understanding the empirical case studies that follow. The chapter lays out the particularities and characteristics of India's decision-making and implementation of public goods and services. It is divided into three sections, the first of which covers the history and political system of India, with a focus on decision-making structures, the role of centralization and decentralization, and the engagement of civil society on the local, state and federal levels. This section also deals with Indian bureaucracy and its administrative units, procedures and chains of delegation, since bureaucracy is a prominent counterpart actor in international foreign aid implementation. The second section highlights water policy-making in India and introduces policy-making frameworks and regulations and highlights institutional responsibilities in water governance to illustrate the complexity and cross-sectoral character of governing water in a sustainable and responsible way for all. The third section covers recent developments in the landscape of international donors in India, with a particular focus on the engagement of the present donor community, including bilateral and multilateral donors, PPPs and local and transnational NGOs.

With this setting in place, **Chapter Three** provides a more detailed introduction of the theoretical concepts and assumptions concerning actor relationships, project effectiveness and relevant governance configurations. The section on actor interplay considers the different schools of thought on institutionalism, as well as introducing the concept of actor-centered institutionalism and providing arguments and assumptions from the administrative and management discourse on development aid. With a focus on the processes of actor interplay, this section derives central claims from governance theories. By assessing modes of coordination with combinations of hierarchical and non-hierarchical steering, this thesis derives four idealized governance configurations as the analytical framework: (1) competition or parallel governance; (2) governance by an external actor; (3) governance by a government; and (4) polycentric governance. These

four ideal types include changes over time (throughout the project cycle), such as the adaptation of international actors to local systems (mimicry and local legitimacy) and the gradual adjustment to local rules and institutions. This chapter concludes by considering alternative explanations for project results, such as clientelism, patronage and corruption.

Chapter Four then describes the research designs of the individual and comparative case studies, as well as explaining the process of data collection and the methodology of data analysis. The first section addresses the strategy used to select seven cases, and justifies their selection and relevance to the research questions stated above. The next section translates the theoretical assumptions on actor interplay and project effectiveness into empirically measurable concepts (operationalization), and complements this by putting alternative explanations for project results into operation. The third section provides background on data collection strategies, including the challenges faced and how to deal with missing data. This is followed by an explanation of the individual steps necessary for assessing the empirical material with the methodology of sequential data analysis. Finally, the quality of this research approach is discussed and its merits, and limitations are highlighted.

Following from this introduction to the case studies, **Chapter Five** presents in detail the analysis of the seven case studies and additionally compares the findings from these seven cases. The research question of my thesis is addressed empirically with reference to water governance aid programs in India. The Indian context suits the fact that state partners are perceived hierarchically, and are powerful and guiding in program collaboration consortiums, and hence provide for a particularly challenging actor–relationship situation. Empirical investigation of this context allows for insights into collaborations with unequal power balances, as well as into how external actors deal with this situation and how this impacts project results. Water governance projects have been selected to limit variables and focus on one particular policy field with comparable legal frameworks, institutions and decision-making procedures, and to derive insights for variance in terms of the success of conventional and new donor actors. The first section of the chapter introduces the seven case studies in northern and southern India. The cases vary due to type of donor, with analyzing programs from GIZ, WSP, DFID/WaterAid as conventional donors and looking into implementation of new donors, such as Arghyam and Naandi as local philanthropic foundations, BIRD-K as an

NGO and WSUP as international PPP. In the beginning I briefly give information and background on the program area, scale and duration and then introduce the respective program approaches and assessing the effectiveness of the programs, the actor interplays and resulting governance configurations. It evaluates the relevance of interplay for project effectiveness, and gives alternative explanations for the outcomes of the programs considered. The next section after the seven case studies provides comparative insights into the empirical findings of the case studies by assessing patterns of particular governance configurations and program effectiveness, in order to pave the way for assumptions regarding the key factors for success in international aid collaboration. It also deals with the variance of effectiveness among conventional and new donors, and aims to identify the different challenges these two actor types confront in local context settings.

Chapter Six concludes my thesis by linking the findings with the research question and theoretical assumptions to draw a larger picture on strengths and weaknesses of the new donor landscape with conventional and new donors aiming to fulfill comparative tasks. My analysis reveals that the actor interplay matters for program success and most important, putting the recipient actor in the driving seat is a major reason for program success. Moreover, new and conventional donors vary systematical in their reasons for program results and finally I identify certain context conditions that determine the quality of the actor interplay and ultimately lead to program success. Hereafter, I provide my thoughts on transfer and generalization of my findings to different thematic areas and context settings. My findings on the governance configurations are reflected in the light of present governance research and concludes that these configurations are a useful tool to systematically understand actor interaction. At the backdrop of my findings, I emphasize the importance of governance processes that include elements of social capital thinking when it comes to analyze foreign aid through a governance lens. Hereafter, practical implications for foreign aid implementation are derived and respective policy recommendations for the individual actor types are discussed. The chapter concludes by highlighting the contribution of my thesis and pathways ahead with emphasis on more harmonization and complementary aid programs to receive a meaningful donor landscape that serves the needs of the local beneficiaries and recipient countries and at the same time serves the purpose of providing solutions for global visions of responsible and sustainable development.

2 Development, Decision-Making and Foreign Aid in India

The impulse driving my dissertation is the increasing fragmentation¹³ of donors and their program approaches in foreign aid over recent decades. The diversification of donors with varying program implementation is partly rooted in new modes of financial support, which combine public and private resources. The diversification of donors and their respective program approaches has resulted in higher transaction costs and unintended side-effects on the recipients' side. It remains unclear how and to what degree the two actor types of donors differ in establishing relationships with local partners on the recipient state, and how this affects the implementation of programs.

Empirically, India is proving itself to be a country with various actively engaged donors. Moreover, there are diverse modes of steering within the donor community, in contrast to the powerful and hierarchical implementation of India's large bureaucracy. India, the largest federal democracy in the world, is best characterized as a decentralized system with centralized state power. This manifests itself in strong state governments that are closely tied to federal-level politics (Sathyamurthy 1996). Its centralized decision-making power is accompanied by a strong hierarchical mode of decision-making and operation. This manifests as a strong sense of status, power and dominance of parts of the society, and an ever increasing diversity of actors, interests and positions that determine society and politics. The dominance of hierarchical steering prevents horizontal networks, as well as exchange and delegation of power across issue areas and across ministries and bureaucracies (Kumar 2007; Dwivedi et al. 1989).

Several studies also address this actor relationship in India, focusing in particular on the role of the transformation of the Indian state actors from developing to transition states, and on how local knowledge is needed to achieve transformation and alleviate poverty (Routray 2015). India is characterized by an adverse and sometimes even conflictive

¹³ Fragmentation versus pluralism in the international landscape of donor activities in foreign aid is based on a debate over whether various actors and agendas imply high transaction costs, efficiency losses or provide the ground for innovation, learning and selective competition. Pluralism conceptualizes the various approaches as complementary to each other, and can be understood at a sectoral, geographical or thematic level. Complementary aid governance may contain the complementary work of two agents in different themes or in different regions to utilize each other's competitive advantage (Molenaers et al. 2015, 328; Gulrajani 2014). Supporters of the fragmentation of the donor community argue for the need of greater harmonization of donor activities, a reduction of transaction costs for recipient states and the minimization of duplication of programs. For more information on the debate, see also the contributions in the "Fragmentation or Pluralism" conference at the German Development Institute, Bonn (10.-11. October 2013). The conference contributions deal with the diversification of approaches, actors and solutions in the global landscape of foreign aid.

relationship between government actors and external and civil society actors. Hence, the launch of state-related NGOs are quite common, to provide for service delivery of state tasks (Nair 2011).

Being a transition nation characterized by decentralized policy-making and powerful and technocratic bureaucracy, India and its implementation of foreign aid programs may be comparable to other transition states. In particular, we may find comparable context settings in other parts of the world concerning decentralization, technocracy of bureaucracies, economic transition and a degree of foreign aid engagement. It is assumed that India does not serve as an extreme case, but rather provides a context that can be applied to countries relevant to the categories mentioned above.

This chapter of my dissertation introduces the background of the political and administrative implementation of policies in the public sector. It illustrates this for the case of water and sanitation policies, which are most visible in the implementation of water and sanitation service provision on a local level. The chapter also relates this to regional and federal policies when it comes to distribution and regulation concerning water sources and water availability. To understand the seven case studies, this background chapter illustrates policy-making and administrative implementation in water and sanitation services, and provides a brief overview of the donor community and its most recent history in India. Having said this, India has announced a substantial change in its relations with international foreign aid donors, which has resulted in more fragmentation of aid program implementation.

In February 2003, the Indian Finance Minister declared the end to all aid collaborations in India, except the bilateral donors of the G8 member states and large multilateral donors.¹⁴ Officially, this turn in international coordination was justified by the Indian Government by reference to international standards of donor harmonization and to an internal decision to concentrate on a few large donors, rather than adapting to the purposes and interests of many donors.¹⁵ This change in the donor landscape initiated dual financial channels for foreign aid delivery. On the one hand, harmonization among

¹⁴ This was made clear by the BJP government when, in February 2003, India's Finance Minister announced in his annual Budget Speech: "A stage has come in our development where we should now, firstly, review our dependence on external donors. While being grateful to all our development partners of the past, I wish to announce that the Government of India would now prefer to provide relief to certain bilateral partners" (Government of India 2003, 22).

¹⁵ At the same time India was heavily criticized for its ongoing nuclear tests and hence the international press related this short-term and unpopular political signal to international criticism (Agrawal 2007, 12).

the largest donors on federal level was meant to be strengthened; and on the other hand, this decision was justified by the concentration of smaller donors at a local level without bilateral agreements with the federal level (De Groot et al. 2008, 17).

This turn in India's foreign policy relations was coupled with the initiation of an Indian development agency, the India Development Initiative (IDI), which serves regional Asian interests and focuses in its support strategies on India's neighboring countries (Chaturverdi 2013, 562). The turn also marks a departure from the era of India as a recipient nation. It is now also a donor nation and perceives itself rather as a donor than a recipient of foreign aid (Meier and Murthy 2011; Florini 2011; Chanana 2009; Agrawal 2007).

India's cooperation with this selected group of donors is received at the federal level and is heavily conditioned by the Indian government. All other donor agencies are allowed to provide a maximum of 25 million US Dollars per year, and are requested autonomously to establish contacts with local level counterparts. In accordance with this duality in channelling international money, foreign aid is classified by the Indian government into the two broad categories of 'government projects' at the federal level and 'non-government projects' at the state level, independent from federal agreements (Government of India 2013, 3). This strict duality in partnership options results in different relationships of donors with state counterparts, and hence results in different perspectives for the success of poverty alleviation programs in India.

Economically, India grew vastly in the beginning of the current century. The change from an agrarian society to becoming the IT-hub of the world marks the new era of an emerging transition in the economy, with a great impact on society. States such as Andhra Pradesh and Karnataka profited largely in their economic rise through the IT cities of Hyderabad and Bangalore. However, these positive trends also affected rural areas, with huge migration movements into the cities. India experienced a strong trend towards urbanization, high levels of urban poverty and losses of communal decision-making structures due to this migration of rural population to the cities. Even though the urban middle class grew extremely quickly through these transformations, the rural, agricultural spheres of India's society did not profit from these changes, and in some cases they even lost basic welfare services due to cutbacks of the government to reduce the federal fiscal deficit (Gupta 2012, 31).

Against this backdrop, India remains a country of sharp contrasts in various spheres of society, culture and policy. Rural and urban poverty remain as chronic as decades ago, and at the same time it has undergone the fastest economic transition of any country worldwide over the past two decades.

India experienced strong economic growth in combination with vast population growth. Inadequate attention to redistribution policy approaches has increased the level of poverty. Moreover, the prosperity gap between poor parts of the society and the ever-growing middle and upper class is widening. Comparing India with other transition countries provides evidence that India has to catch up in redistribution policies and particularly needs to strengthen its social welfare programs. In spite of its enormous economic growth over the past decade, India still ranks among the bottom third of the United Nations' Human Development Index (HDI 2016). HDI poverty criteria generally apply to more of the rural population than the urban population in transition countries; however, urban poverty is also increasing with increased migration to cities and trends towards increasingly urbanized societies in transition countries (Human Development Report 2012).

Rural poverty in India is immense, but urban poverty has increased over the past decade as well, by almost 40 percent compared to the decade before. About 17 percent of the population lives in informal urban settlements (Government of India 2014, 10). These numbers illustrate the huge challenge India faces in order to improve living conditions and overcome ongoing chronic poverty and food insecurity. When it comes to water, sanitation, health and hygiene, challenges are still prevalent in the modern but still developing state of India.

Access to water and sanitation has changed in recent years. In 2015, around 94 percent of India's population had access to improved water supply. About 97 percent of the urban population had access to safe drinking water, compared to only 92 percent of the rural population. More severe is the situation for provision of sanitation facilities: only 39 percent of the population had access to sanitation services in 2015, 62 percent had access in urban areas and 28 percent in rural areas (UNICEF and WHO 2011; UNICEF and WHO 2016). These figures demonstrate the need to focus on sanitation service provision while keeping up with the achievements in drinking water provision under ever changing climate conditions. What do water goals look like in the Indian context? And more importantly, what are the requirements for improving water resource

availability in the next decade? Presently, the balance of supply and demand of drinking water is quite stable, but it is predicted that by 2050 at the latest, India's demands will exceed the water supply. This is due to limited opportunities for storing water in semi-arid regions, seasonal rainfalls and ever increasing extreme weather events. Extra stress is put on water resource availability and environmental degradation by urbanization, industrialization and India's growing population (Briscoe and Malik 2007, 4).

Since my research focuses on water and sanitation governance programs in foreign aid, this chapter provides background information on legislation and decision-making in India's water and sanitation sector. To understand the complexity of the actor interplay between external donor agencies and government counterparts, I provide a brief historical overview of India's political and socio-economic development. I then outline the structures of decision-making, accountability relationships and policy implementation in public service provision, illustrated at the policy field of public water and sanitation service provision in India.

2.1 Decentralized Democracy: Decision-Making and Public Services

India is the largest and most diverse democracy in the world, and is challenged by deep social and economic inequalities with a fast growing population. After being under the rule of the British Empire for 27 years, India became independent in 1947 as a parliamentary democracy and a secular and federalist state. After the long and intensive struggle for independence, the political leaders were challenged to unify “the enormous diversity of India in terms of caste, language, religion and local patriotism, and to manage the groundswell of popular opposition to colonial rule [...]” (Harriss 2010, 56).

Since its independence, India has experienced enormous transformations, politically, economically and socially. The economic rise of India, including the liberalization of markets, was accompanied by a change from a single-party system to a multi-party system, which is even more evident at the state level. This results in huge variations in ideologies throughout state governments in India, and has repercussions for international donors on the respective willingness of state partners to collaborate. Scepticism about market liberalization and the vulnerability of India’s citizens is deeply rooted in the negative experiences under the rule of the British Empire, and hence is still predominant at the state level and also determines actor cooperation. Socially, India was dominated by a hierarchical agrarian society with authority concentrated in the hands of a minority of powerful landholders who oppressed a majority of people based on their caste. Since the 1950s, the Indian government has undertaken a large number of state interventions and national schemes for the poor. However, they failed to install a decent supply of basic goods and services, such as healthcare, education, clean water and sanitation facilities. There are still no public welfare systems or social safety nets for the Indian population (Harriss 2010; Corbridge et al. 2005; Wagner 2006).

Indian society remains heterogeneous, with vast problems in the provision of basic goods to the rural and urban poor, and it has among the highest inequalities in social and living conditions of any nation. Politically, India has sought to balance these inequalities with the institutionalized participation of all members of society, the Panchayati Raj (hereafter, panchayats) system of decision-making.¹⁶ This is based on the principle of

¹⁶ *Panchayati Raj* or *Panchayats* (“Assembly of five wise and respected elders”) were institutionalized in 1993 with the 73rd amendment to the constitution, in order to improve the living standards of the poor and to foster the provision of public goods through tailored development programs. *Gram Sabha*, the governing body on the village level is composed by one third of women and likewise a proportion of the

subsidiary as part of an inclusive process of policy decision-making in the largest democracy of the world.

India is a federal system of decentralized policy-making, with elected institutions at village, block, district and state level. In 1993, the Indian government passed an amendment to the constitution that empowered local panchayats, as elected village representatives, to become the foundation of the decentralized political system and help make decisions on development programs for the poor. The introduction of the panchayat system aimed at a higher share of representation of women, Scheduled Tribes (STs) and Scheduled Castes (SCs). It thus aimed for greater participation of minorities. At the same time, however, local power plays still remained in place and continue to hinder a fully democratic and participative process that represents all people. Moreover, corruption and low levels of rule enforcement seem to have been on the rise since the start of the new century (Mullen 2012, 124).

Distribution of responsibilities and fulfilment of democratic functions remain different from state to state, and sometimes these are not formalized and clearly evident even within states. Local level panchayats are entitled to perform certain tasks, but they lack independent budgeting power and therefore are prone to bribery and corruption (Johnson 2003, 20). There are three important system challenges that may cause ineffectiveness and inequality in local decision-making. Firstly, panchayats are meant to fulfil delegated tasks, but in many cases lack the adequate technical knowledge, capacity and financial autonomy to exercise these functions. Secondly, bureaucrats and elected members have such low salaries that they are prone to generate extra resources with informal service provision. Thirdly, this in turn results in large scale 'elite capture'¹⁷ behaviour, which seriously weakens the delegated function of the panchayats system (Johnson 2003, 2).

Even though the member composition and organizational behaviour of panchayats is controversial, they fulfil central tasks at the village level, such as water provision, healthcare services and institutionalizing cooperation for elementary public goods, including electricity access or access to the market for certain agricultural products.

seats need to be reserved for scheduled castes and scheduled tribes (equivalent to the share in the population) (Johnson 2003, 17).

¹⁷ Elite capture "is a phenomenon where resources transferred for the benefit of the masses are usurped by a few, usually politically and/or economically powerful groups, at the expense of the less economically and/or politically influential groups" (Dutta 2009, 3).

These elementary functions improve the lives of the rural population. However, reforms of the panchayats are greatly needed with respect to duties, accountability and financial viability, in order to guarantee their function and at the same time provide good governance frameworks for their activities (Springate-Baginski and Blaikie 2013).

There are no equivalent, institutionalized pendants in urban areas that fulfil the same tasks and duties as the panchayats. Urban poor who are not eligible to participate in political decision-making and elections, due to a lack of recognized land tenure, are highly dependent on civil society organizations for the provision of public goods and services. In urban informal settlements, civil society organisations in some regards fulfil a functional equivalent¹⁸ to the rural panchayat system. India has a vibrant and rich history of development in the civil society and engagement of NGOs in government programs. There are about 1.5 million Non-Governmental Organisations (NGOs) in India, most of which are engaged in religious matters and in the provision of social services. The very active and committed local NGO sector is an achievement of centuries with a long history of local community participation in decision-making and service provision. Decentralization and immense poverty led to the institutionalization of local NGO structures to support the poorest people, and to foster development as an extension, or so called functional equivalent, of the input-legitimate state actors. The NGO sector used to be characterized as a grassroots level movement in India. However, with the engagement of international donors in the 1990s, local NGOs grew larger and became the main implementers of international foreign aid assistance in local contexts (Asian Development Bank 2009, 2).

Today, decreasing international support has increased the financial dependency of NGOs on large-scale government programs. The reduced financial aid from external sources has resulted in a transformation of the civil society sector. Now, the larger and more well-known NGOs, operate in a more business-like mode, with the remaining international donors and government partners. At the same time, these changes have weakened the smaller NGOs over the last decade (Goswami and Tandon 2013, 656).

¹⁸ The concept of functional equivalents stresses the diversity of approaches, actors and networks that may fulfill tasks and service provision that are meant to be fulfilled by input legitimate state actors. For more information on the concept of functional equivalents, see (Draude and Neuweiler 2010; Börzel 2008 and Draude 2007).

Civil society in India is a heterogeneous conglomerate of actors. NGOs range from privately funded, to publicly funded and mixed funded institutionalized organisations, which are registered under a government act. In their membership and their Board appointment practices, NGOs differ from community-based organizations (CBOs), self-help groups (SHGs), and local cooperatives, and therefore cannot be perceived as performing full civil society functions. Rather, they can be considered as basic service providers in areas where state agencies and international donors lack the capacity to act (Kilby 2010, 5). The role of India's NGO sector has changed over the years towards more media visibility, campaigning, public protests and policy advocacy, as they have emphasized the empowerment of the vulnerable, communicating values of justice and promoting respect for human rights (Kilby 2010, 6). However, the provision of basic services to the poor and vulnerable is still mainly carried out by non-governmental initiatives that fulfil this public task and behave as equivalents of the state (Goswami and Tandon 2013, 657).

NGOs must be registered in India in order to receive tax benefits for collaborating with international actors. Relationships between NGOs and state partners vary from confrontation to collaboration, with a vast majority of NGOs refusing state collaboration, and establishing an intricate network of relationships to avoid direct collaborations (Asian Development Bank 2009, 4). In most cases, the NGO – state relationship takes place in a hostile climate. Local politicians, elites and bureaucrats oppose NGOs, because they are considered to illustrate the state's failure to provide public goods; there is mutual distrust in integrity and accountability (Sen 1999, 330). NGOs gain their legitimacy by providing valuable and reputable services. At the same time, they provide the state with legitimacy and can be regarded as performers of state functions in terms of service provision to the poor (Kilby 2010, 9). Even though they are considered as functional equivalents to community structures in rural areas, it remains unclear to whom many NGOs are accountable and how effectively they provide public goods and services.

Decision-making for public services such as water, sanitation, health and education are in the hands of federal and state ministries. The actual provision of these services is accomplished by the various bureaucratic departments of the Indian Administrative Service (IAS) or in some cases is sourced out to further agencies.

Political decisions are implemented by the well-institutionalized Indian administrative service, which is a legacy of the British rule in India. During colonial times, it was known as the Indian Civil Service (ICS) and is nowadays referred to as the Indian Administrative Service (IAS). India's society and public service is based largely on the value of a hierarchical structure, "respect for seniority" and "valuing tradition over change" as the most elementary principles that guide activities (Kumar 2007, 381). So long as the superior and inferior positions remain as they are, the inferior actors tend to look up to and be accountable to higher level positions (Panandiker and Kshirsagar 1978, 149). The hierarchical structure in India touches upon private as well as public spheres. The society is divided into four main and hierarchical ordered castes with a wide spectrum of sub-caste categories. Even in religion, the gods are put into hierarchies of importance (Kumar 2007, 380; Sinha 1995, 89). The combination of the colonial legacy of the administrative services and the strictly hierarchical society in India provide for a unique context of delegation and accountability in higher level decision-making.

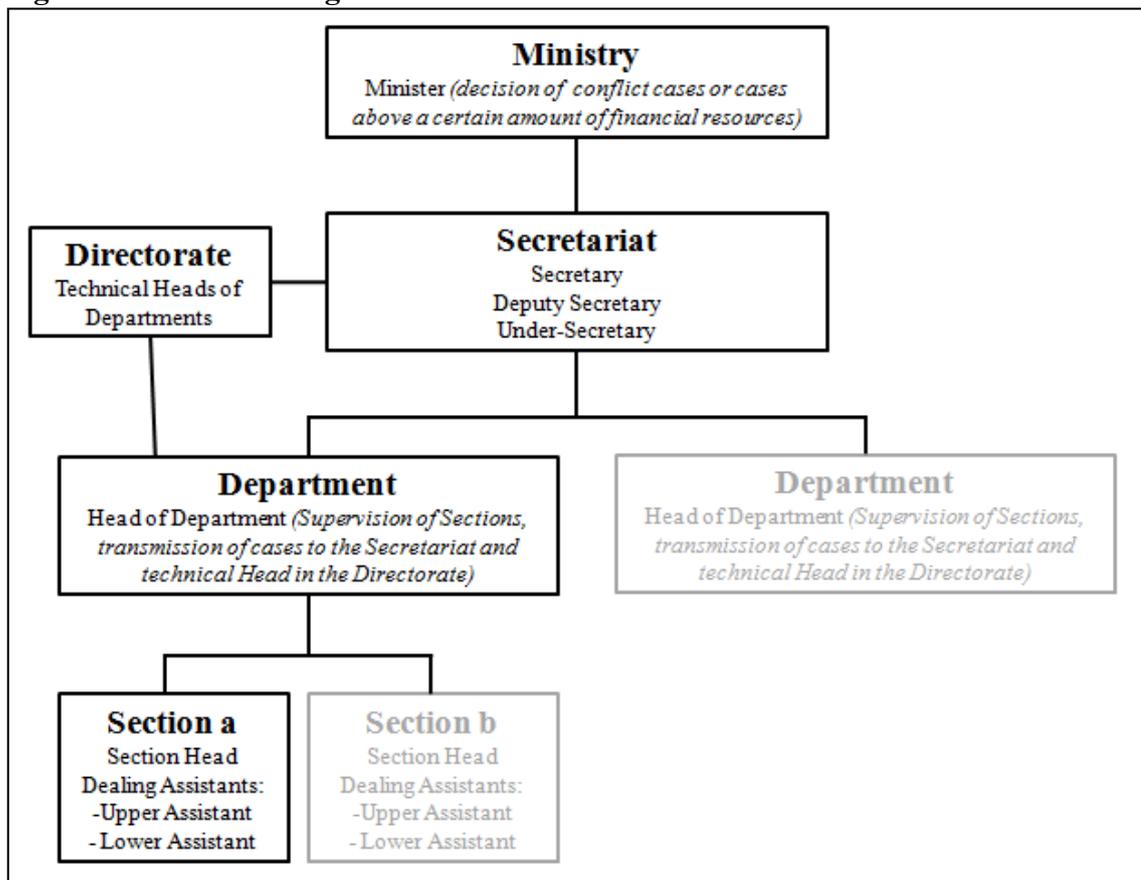
During the past decades, political and bureaucratic spheres have evolved as parallel systems with mutual dependencies of elected politicians and non-elected administrative officers. While the political actors in this conglomerate are accountable to the parliament, the administrative counterparts are accountable to respective political committees. During colonial times, the administrative system was originally established to exercise two functions: "collection of revenue and maintenance of law and order" (Jha 1999, 19). After independence, this model of operation shifted towards an operational orientation towards poverty reduction and the fostering of social and economic development. But even today, the Indian administration remains one of the largest employment systems in the world. An estimated 71.3 percent employment rate in India includes government and the public-sector employment together. This illustrates that India's employment rate is highly dependent on the public sector, and provides a picture of the size and scale of this sector (Das 1998, 15; Wagner 2006, 80).

Each level of the hierarchical administrative service operates autonomously, and officers conduct their duties and responsibilities without cross-level considerations (Gupta 2012, 29). In the national context, the IAS is active on the federal, state, district and village (rural) or block (urban) levels. These four levels operate almost independently from each other, but are upwardly accountable to each other. Tensions and mutual distrust

between political and administrative actors have their origin in a weak state, which needs to rely on the administration to perform core state functions, even though the administration lacks basic capacities itself (Panandiker and Kshirsagar 1978, 5).

The following figure, composed by the author, is based on the extensive ethnographical field study of Prasad (1974) and complemented by the observations and insights from the author's own field studies in several Indian states. It aims to illustrate the chain of delegation and potential command and control links by highlighting the departmental and section links among individual operational units.

Figure 2.1: The IAS Organisational Structure at State Level



Own illustration of Prasad (1974, 40-46)

Three levels of decision-making can be observed on the block (urban) and ward (rural) levels. These are the lower and upper assistants and the heads of sections, who are responsible for decisions on basic services and administrative processes and can be considered as being closest to citizens and actual problem situations. This actor triad provides the foundation for decision-making in the public administration. The head of each section is mandated to supervise the lower levels and to provide guidance and leadership to the team and sometimes assist with content in selected cases. The two

acting assistants are differentiated into upper and lower assistants, whose main tasks are to compile information and documents on each single case within a given period of time (usually four days) and suggest a decision for each case (Prasad 1974, 42). Final decisions are taken at the secretariat and directorate level, headed by the technical managers of the individual departments. In cases of conflict they are decided by the ministry itself. This vertical structure is meant to foster efficiency by clear coordination and delegation of tasks (Prasad 1974, 41; Gupta 2012). At the same time, this structure is prone to political corruption and clientelism¹⁹ because a high degree of decision-making authority at the lowest level is paired with inadequate and low salaries. Posting to different positions throughout lifelong service (in terms of topic and hierarchy) is common to improve capacities and prevent corruption and clientelism (Ferguson and Hasan 2013, 237).

The technocratic action orientation remains a big challenge, as this statement by a member of the Planning Commission illustrates: “when to address management problems we still think only in terms of instruments of command and control, not in terms of incentives that affect the behaviour of users, and the instruments – usufructuary rights, prices compensation – that affect this behaviour” (Briscoe and Malik 2006, 78). Kamath (1992) calls India the largest democratic country with the largest and most inefficient public sector. Gaining “permission to open a hotel involves 45 applications and over 25 different government agencies”. This fact illustrates the complexity of the entire structure of responsibilities, accountability and separation of tasks into individual institutions and decision-making entities (Kamath 1992, 1; Dwivedi et al. 1989).

Inefficiency of the administration is also caused by the excessive focus on writing in Indian bureaucratic offices and an immense lack of digitalisation of processes and working procedures. Writing is a daily practice and is considered as action in India’s administrative offices, even if it is a mere note that requires signatures from all levels within a unit or to fulfil a request. The writing-as-action practice provides a serious obstacle for poor people to reach officials, since most of India’s rural population is illiterate (Gupta 2012, 37). Besides the mere size and scale of the administration and the infinite procedures and uncertain application of rules and regulations, what else accounts for the inefficiency and timely procedures?

¹⁹ Clientelism “involves an implicit quid pro quo, an exchange of (recurring) favors for (recurring) political support” (Bardhan et al. 2011, 35).

In 2009, Transparency International labelled India as the 84th country out of 180 countries with problems of political and bureaucratic corruption. Prasad defines corruption as “any action or decision that violates or ignores or bypasses the fixed rules, procedures, instructions and executive orders is corruption so far as it amounts to use of authority beyond the institutionalised limit for private gain” (Prasad 1974, 65). It is important to understand the rules of the organisational structure in order to understand whether or not corruption may have occurred. The payment of bribes is an almost formalized procedure to overcome power structures or to avoid a fine in India. Several cases have revealed that corruption is so well institutionalized that it is even predictable and almost expected in certain sectors, services and interaction. Local citizens in most cases are well aware of the exact amounts of bribes they have to pay to the officers at different levels in the bureaucracy (Corbridge 2013, 223).

Tensions between the political and administrative spheres manifest in apparent patronage and clientelistic relationships with a high degree of corruption on all levels. This is partly rooted in the history from colonialism until independence, with an ongoing decline of political morality in India. Political mobilization and bureaucratic power marched hand in hand towards a widespread network in which politicians protected local administrative officers in their day-to-day corrupt practises; in opposition the local officer passed his profits up to his political patron (Gould 2011, 172). Patrimonial structures are present in political-administrative systems throughout the country. The turnover rate of top-level officers in the administration after a change of elected politicians provides an indication of the patrimonial structures at the top level of the administrative system. Lower levels of minor civil servants fulfil their duties on such a small salary, that petty corruption and inefficiency is the result in many administrations (Harriss 2010, 64).

The former judge of the High Court of India, S.P. Barucha admits: „About 20 percent of the judges in the courts are corrupt; corruption among public servants has reached monstrous dimensions in India. Its tentacles have started grappling even the institutions created for the protection of the public”.²⁰ Corruption is most transparent and visible at the local level in bureaucratic offices, but also reaches up the ladder to higher officials and even elected politicians, forming a fine grained network of corrupt practices (Gupta 1995, 384). The poor people of society, who are supposed to be the beneficiaries of

²⁰ Cited from Wagner (2006, 80) as a citation in the original of (Narayana 2006, 22).

welfare systems in India, are at the heart of this local-level corrupt system. The regular interaction of citizens with local administration officers results in an almost formal and institutionalized system of accepted prices for bribery (Gupta 2012, 34).

2.2 Water Policies, Institutions and Regulations in India

This section describes the historical and present situation of water governance policy in India. Water governance includes the regulatory and institutional frameworks that provide the rules decision-making for water and sanitation policy-making. Water governance can be defined as “[...] the range of political, social, economic and administrative systems in place to develop and manage water resources and the delivery of water services at different levels of society” (Connors 2005, 202).

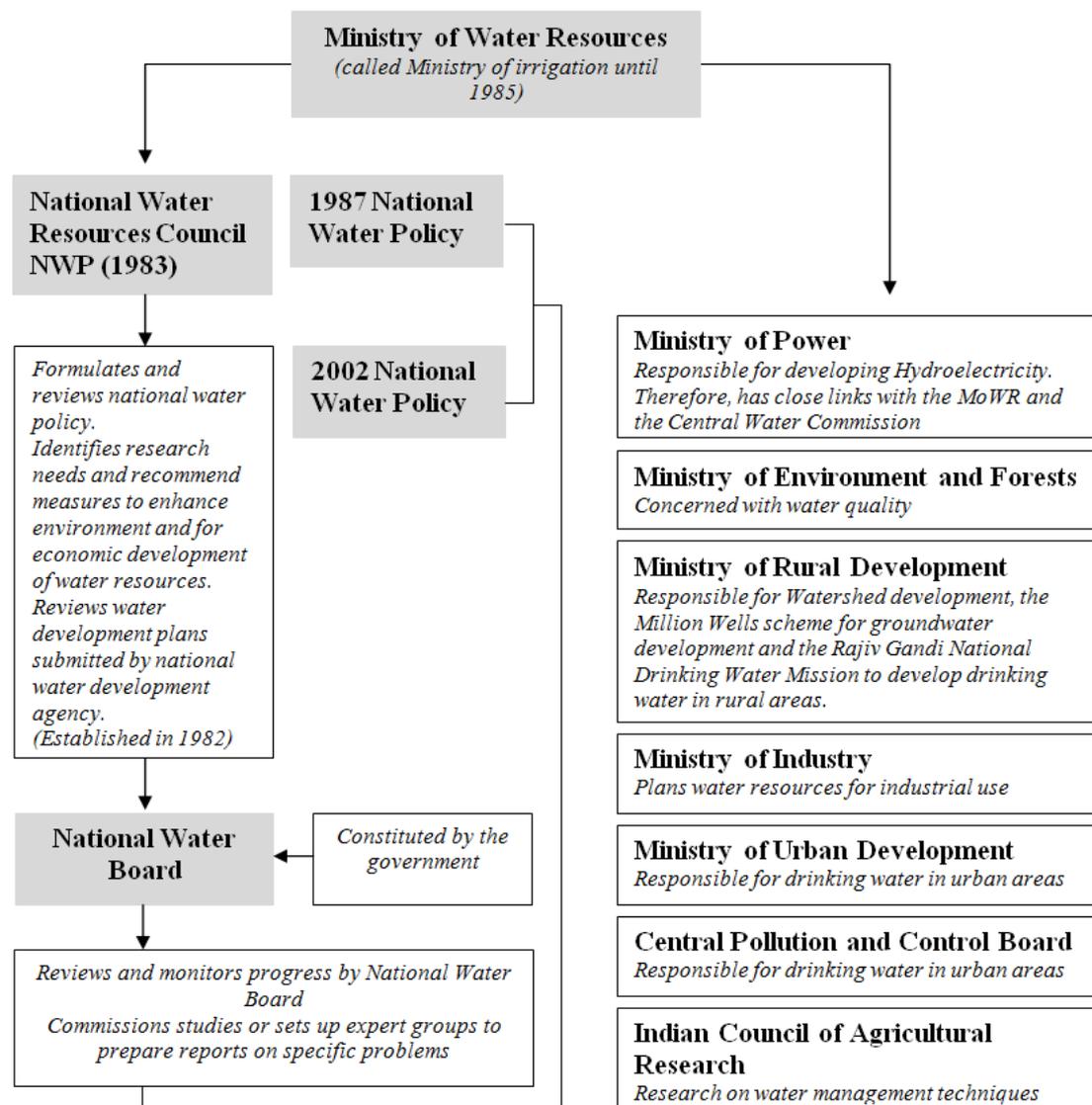
In 1935, the first Indian Government Act emphasized the powerful position of the local level in water provision for irrigation and domestic sector users. The first National Water Policy (NWP) was launched in 1987, with a focus on the conjunctive supply and use of surface and groundwater to provide a national assessment of existing water resources, and to provide ground for long-term planning of water availability and periods of scarcity in India.

In 2002, this national policy plan was re-launched with a stronger focus on water allocation priorities, due to increasing scarcity because of pollution and rising water demands of the increasing population. It also included private-sector cooperation in service delivery, in order to improve water services in the domestic sector. Positive experiences with independent water authorities in urban areas has led to an institution-building process, which has introduced independent water regulation authorities and provided state government with the mandate to decide on the distribution scheme and shares of water supply between rural and urban population. Moreover, institutionalization and financial support of water users’ associations in rural areas has strengthened users’ participation in domestic and agricultural rural water supply (Government of India 2002).

In India, land tenure confers rights to groundwater resources, and therefore, farmers are able to withdraw as much groundwater as they need from below their own fields. In rural areas in India, groundwater consumption accounts for a share of about 80 percent of all agricultural water use (Cullet 2006, 210). The combination of highly polluted surface water and strong tendencies towards subsidized electricity for farmers leads to excessive groundwater withdrawal and immense water inefficiency in the irrigation sector. To achieve greater efficiency in groundwater use, the re-launch of the NWP in 2012 highlighted the importance of managing water as a community resource and of decoupling land tenure from unlimited groundwater access (Government of India 2012).

The 2002 NWP adopted institutional mechanisms to preserve, monitor and plan water use going forward, and to mitigate periods of scarcity in the face of increasing demand and population growth. The government’s Ministry of Water Resources can provide only framework conditions and suggestions, and set incentives for transformation of water use. It pursues a strategy of introduction of participatory elements and private-sector inclusion in order to achieve substantial changes in water demand and water governance approaches (Government of India 2002, 4). The figure below illustrates the complexity of water governance and regulation in India. A multitude of institutions is responsible for regulation and policy-making in water related matters. The dilemma in water governance is not unique in India, but is rather a general condition for water governance, making it the reason why one cannot clearly speak of a “water sector”.

Figure 2.2: Institutions in India’s Water Governance



(Wilson et al. 2005, 80)

Attempts to transform institutional and regulatory frameworks are observable only at the federal level, by the Ministry of Water Resources under the advice of well-established water advisory institutions and bodies with international reputations. Among the many ministries involved in water resource management are the Energy Ministry, which impacts on surface water resources through its hydro energy production programs, and the Ministry of Rural Development, which provides support for rural substantive farming communities and guides the withdrawal of ground water resources. Additionally, in urban areas, we find the Pollution Control Board, which is mandated to observe pollution levels, and the Ministry of Urban Development, which is mandated to provide services to the poor and marginalized.

On the federal as well as state level, there is no horizontal integration of mandates and delegation of tasks among ministries, even though their responsibilities on water resource availability are strongly interlinked and confronted with trade-offs, both within urban boundaries and across the rural-urban divide. The problem of decoupled institutions and decision-making processes results in competing interests for a limited amount of water resources in the local catchment areas. Moreover, synergies in expertise among ministries could make up for lack of capacities within individual ministries and could mitigate the burden of over-extraction of water in rural and urban areas. Closing the gaps in mandates and providing cross-ministerial knowledge and expertise to overcome the ever increasing challenges of water resource scarcity should be of utmost importance as guiding principles for water resource management in India (Wilson et al. 2005, 79).

An internationally well known, widely endorsed and frequently applied approach to sustainably govern water resources is the concept of 'Integrated Water Resource Management' (IWRM). This approach aims to overcome silo mentality in governing water resources, and fosters integration across ministries and departments and within levels of delegation of departments. It aims comprehensively to transform water governance processes by including a holistic perspective of cross-sector policy linkages (Cullet 2009, 65). The IWRM agenda pursues six basic principles: (1) conservation of water, in light of forthcoming predictions on scarcity; (2) water as a basic need; being necessary for human survival; (3) water as an economic good to prevent wasteful and environmental damaging usage; (4) individual property rights, being delinked from water rights; (5) decentralization and user participation, with the transfer of authority from central to

local level; and finally (6) institutional reforms and privatization, since existing policies and regulations have failed to achieve desired outcomes (Cullet 2009, 68).

India has had a highly centralised approach to water policy formulation with a 'command and control' technique of decision-making. In the post-independence period, the federal administration reduced financial resources for the states and at the same time delegated more and more tasks and responsibilities to the state level. This shift from centralization to more delegation resulted in highly variable water resource management systems from state to state, and also creating an increasing dependency of state agencies on international foreign expertise and financial investments (Asthana 2008, 5).

Critics of India's water policy transformation decry the negative impacts and influence of international institutions such as the World Bank (WB) and the Asian Development Bank (ADB). Both institutions have invested heavily in the water sector and continue to dominate the transformation of the water sector in India (Cullet 2009, 63).

The transformation of the water sector in India is highly controversial and is argued by some to be purely driven by the concepts and conditions of the WB and ADB. Loans and grants from the WB go hand-in-hand with strict conditions for institutional and legal reforms, policy guidelines for tariffs and infrastructural requirements. Critics argue that the core principles of water reforms at the state level in India are heavily dominated by the WB water strategies, due to a public sector that is ill-equipped to create or carry out reforms on its own (Cullet 2009, 91; Kelley and D'Souza 2010).

Water governance remains challenged by the scarcity of the resource itself and by the difficulty of regulating and governing its equal distribution in order to manage it wisely and sustainably. Having shed some light on water policy-making in India, the next section provides detailed insights into the government institutions that are involved in India's foreign aid service delivery, and gives a brief overview of the international donors actively engaged in India.

2.3 Foreign Aid: India as Recipient Country and its Donors

Following its independence, India has been heavily dependent on international foreign aid, mainly provided by the large multilaterals and European and American bilateral organisations. India then experienced rapid economic growth with increasing urbanisation since the dawning of the new century, but it still remains food insecure and has high levels of poverty. Even though India remains a recipient nation of international foreign aid, it has also transformed towards becoming a donor nation, and provides financial and technical assistance to neighbouring countries as part of its foreign policy agenda (Agrawal 2007; Chanana 2009).

India has a GDP growth rate of five to six percent per year and ranks among the most flourishing nations worldwide. It is also characterized as a state in transition. However, disparities between different classes in society are so immense as to retard equitable social and economic development. To illustrate this gap, the country's rich and well-situated urban middle class can be compared to that of Latin America, whereas living standards in rural India can be compared to those of rural sub-Saharan Africa (Corbridge 2010, 306).

The state does not feel responsible for providing public goods to the poor, since there are already solutions in the private sector, which privatizes public tasks. Moreover, the lack of public goods for the poor strengthens the power and legitimacy of external actors, such as international donors and left wing activists, including the Naxalite movement. External actors challenge the sovereignty of the state, be it in a positive or negative way (Corbridge 2010, 316).

It remains unclear whether the state is not capable or not willing to implement basic service provision. Economically, India has performed well over the past ten years, and is among the leading countries in the IT industry. However, large parts of the country continue to live in absolute poverty and about 60 percent of Indians are illiterate.

At the beginning of this century, India had an economic growth rate of eight percent, but development of the economic sector remains closely linked to climatic conditions and the yearly monsoon season. Since independence, India has been characterized as a site for "trial and error" attempts by foreign aid delivery actors (Wagner 2006, 16). The challenges faced by Indian society, and hence foreign aid programs, can be considered as grouped into four major themes: (1) demographic development; (2) the social

position of women; (3) urbanisation and rural poverty; and (4) the caste system. These four dimensions pose challenges to India's political and social system that are difficult to overcome even today. While the Indian society is a comparatively young one, an immense growth in population and life expectancy has resulted from the country's improved hygienic and health conditions (Wagner 2006, 27).

The socioeconomic situation is still tenuous in rural areas of India. About 60 percent of the population lives on income generated by farming and agriculture. The absolute poverty in rural areas has led to massive migration waves into the suburbs of the cities, creating large informal settlements within cities and their suburbs (Wagner 2006, 29).

The society is based on the Hindu-originated caste system that differentiates among four main castes, each with many sub-castes. Beyond the caste groups there are two major groups of people considered to be below the lowest caste. These are namely the scheduled castes (SC), 'the untouchables', and the scheduled tribes (ST), the Adivasis, who are the Indian native population. These two groups are included in quotas in all public systems and have a special position when it comes to minority protection. Even though India is considered a modern state and a transition economy, and has officially abolished the caste system, that discriminatory system still remains alive in the day-to-day life of its citizens (Wagner 2006, 33).

India does not face severe problems of aid dependence, since it has always had centralized structures of cooperation with international donors at the national level, with the Department of Economic Affairs (Ministry of Finance) acting as a nodal agency for all external actors. In the past, multilateral project aid has accounted for the largest share of the aid sector in India and was characterized by smooth and fair relationships between multilaterals and the national government. In contrast, bilateral aid for a long time struggled with its conditionality of being tied-aid²¹ because the limits of choice in goods limited competition (Lipton and Teye 1990, 118). Since bilateral aid is the second-largest component of India's aid budget, this practice was ostracised by donors by the end of seventies, simply because the Indian government was self-confident enough to reject offers for projects that suggested over-priced products for project implementation (Lipton and Teye 1990, 119).

²¹ Source-tying aid refers to the situation when any imports or supplies for a foreign aid project need to be manufactured and procured in the donor country.

When it comes to foreign aid collaboration between the Indian government and international multilateral and bilateral donors, the government collaborates with large-scale external experts on the federal level in New Delhi and delegates smaller donors and organisations directly to local- and state-level cooperation. At the central level, the Ministry of Finance (MoF) directly interacts with the large multi- and bilateral donors, such as the World Bank (WB), the Asian Development Bank (ADB), the German Ministry for Economic Cooperation and Development (BMZ/GIZ), the British Department for International Development (DFID) and other bilateral agencies. Other foreign aid organisations, such as PPPs and NGOs, are advised to interact directly with local administrative units.

The Ministry of Finance (MoF) is the nodal agency for international donors at the federal level and is concerned with all central and state finances in India. Among its five departments, the Department of Economic Affairs is charged with formulating macroeconomic strategies and raising and monitoring external resources. This department is the partner for international aid actors in implementing foreign aid programs in India.

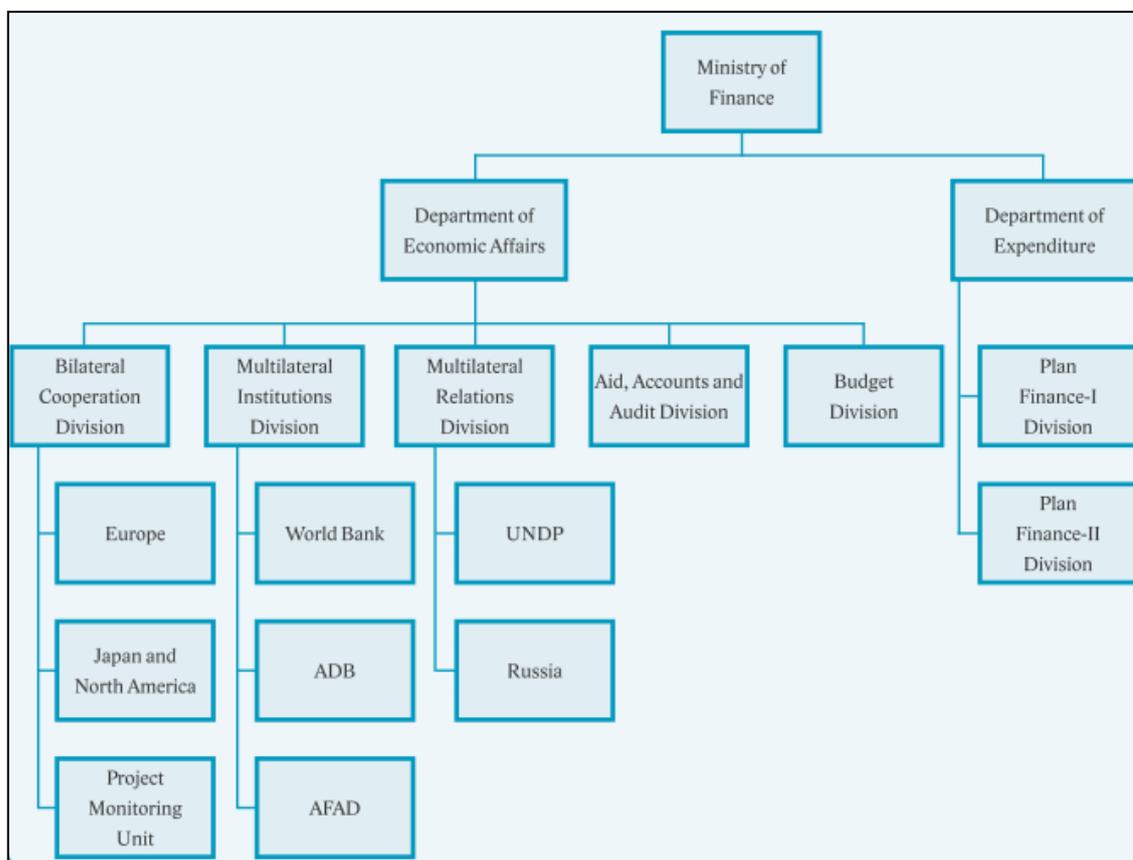
This major transformation and the selective cooperation approach was justified by the MoF by a limited need for external resources and by a desire for stricter administration of the remaining financial resources, through increasing harmonization of the foreign aid donors on the federal level (Government of India 2003). The MoF differentiates four different kinds of aid projects: (1) project finance, which deliver resources for a specific purpose; (2) sector programme finance, which supports policies and institutional reforms; (3) financial intermediary loans, which are provided to financial institutions at the federal level for specific purposes; and (4) technical cooperation, which includes the implementation of external assistance by the donor through consultancy or capacity development (Government of India 2013, 4). In my thesis, all empirical cases of conventional donors that collaborate at federal level can be categorized as technical cooperation and implementation of external assistance. New donors can be categorized in the same category but do not fall under the collaboration with MoF at federal level.

The centralisation of the large donors at the MoF has led to increased dependency of international agencies on the ministries departments. Analysing the project portfolio of the large donors illustrates that they are assigned to different policy niches, and that

India can be characterized as exercising soft power functions that are opposed to the international aid harmonization principles (Rogerson 2005, 533).

Critics of the system claim that international funds only substitute for existing resources of the Indian government, calling for more technical expertise and support in enhancing state partners' capacities in lieu of providing financial resources to India. The transfer of foreign aid from the federal to the state level is not additional to government funds, but rather replaces them. Hence, critics argue that this creates a conditioned dependency that could be prevented nowadays, in light of India's economic growth (Jha and Swaroop 1999).

Figure 2.3: Organization Chart of the Ministry of Finance



(Government of India 2013, 25)

The Department of Economic Affairs (today's MoF) is divided into three sub-divisions, one being responsible for bilateral cooperation and monitoring, another being charged to interact with multilateral institutions and a third in charge of establishing multilateral relations. The MoF has very strict regulations and binding procedures with bilateral cooperation partners in implementation of external programs. The government insists on formalized procedures with clear-cut program approaches, fixed time frames and

treaties with relevant nodal ministries at the national level. This entire process is organized and supervised by the individual units of the MoF (Government of India 2013, 26). This observation goes along with the change in India's foreign aid collaboration and a rather guiding state partner that assigns programs to donors, irrespective of their expertise and experience. The so called 'non-government projects' of smaller or rejected external funders are delegated to local-level administrations to compete with one another for the best and most adequate and innovate approach in local contexts.

Even though the procedures do not overlap with local standards, India has not struggled in the past with all the individual donor requirements for monitoring, reporting and project appraisal. However, the Indian bureaucracy would have welcomed some standardization of these procedures in the past, and acted to move things in this direction in 2002 (Lipton and Toye 1990, 120).

This situation leads us to ask whether it is a help or a hindrance when a large number of donors operate in a country. There are opposing arguments for and against a large number of donors. The argument against this perceives a 'small is beautiful' number of actors as an advantage to handling donations within the limited capacities of the administration. However, a larger number of donors fosters competition and might lead to more innovation through a higher number of choices (Cassen 1994, 178; Lipton and Toye 1990, 121). Today, we find a combination of these two approaches at different levels in India.

A further argument against a large number of donors concerns the decentralization that would likely accompany it, which holds the risk of fostering corrupt structures in local administrations. This suggests that large-scale programs at the federal level are the only effective ones with a high impact factor. Ideally, the strategy of channelling donor funds to different levels should therefore be complemented by a national bureau of monitoring and supervision of local projects, in order to coordinate aid projects, minimize duplication of activities, reduce corruption as well as complementary costs and save local administrative capacities (Cassen 1994, 176). In summary, what matters is the relative number of donors, compared to the administrative capacities who manage their input.

The largest multilateral donors in India are the World Bank, the United Nations and the European Commission. Bilaterally, the largest donors are the United States (USAID),

the United Kingdom (DFID), Germany (GIZ and BMZ), the Netherlands (Ministry of Development Cooperation), Japan (JICA) and Sweden (SIDA).

For decades, India pursued a policy dialogue for a multilateral approach, meaning that most of the bilateral and multilateral donors provided sectoral aid in the sectors of their expertise. In most cases, the World Bank used to be the mediator in the policy dialogue for the individual sector programs, while the other donors were in direct dialogue with their partners in their respective sectors. The benefits of the policy dialogue between the WB and the state were twofold, with India benefitting from a learning process as well as integrating many of its own experts in all levels of the WB (Cassen 1994, 74).

However, in the 1980s the influence of international donors decreased, due to the fact that the investment in foreign aid was less than 25 percent of public spending, combined with the relatively high strength of India's economy and India's reduced dependence on international loans. The controversial reforms of liberalization and other corrective market measures that took place in the 1990s were a response to economic crisis and not to the long-time insistence of the World Bank (Cassen 1994, 75).

The WB's engagement in India's water sector is discussed controversially among practitioners, scholars and civil society. On the one hand, the WB is considered as only a minor donor, since its investment costs are only six percent of the entire budget of the water sector; on the other hand, most of this investment is for variable costs and investment projects, with fixed costs taken by the federal and state governments. The WB remains the biggest player in all innovations and investments in India's water sector. Compared to other donors, the WB accounts for 72 percent of all donor-lending and grants in the water sector. The WB projects are well known for their high outputs and outcomes and their contribution to cross-cutting policy fields in India. However, their overly optimistic internal appraisals lead to low performance values from external evaluation units. Moreover, WB projects are criticized for their failure to tackle institutional change or to bolster institutional performance of India's water institutions (Briscoe and Malik 2006, 75).

Some consider the WB as an advocate of grassroots organizations and NGOs in terms of development activities to build partnerships with state actors that strengthen transparency and accountability and provide a voice for the poor people. At the same time, the WB is perceived as an actor that pushes its neo-liberal agenda, imposes

structural adjustment programs and reduces pluralism in India, and due to these factors it faces strong criticism (Sahoo 2013, 262).

The controversial role of the WB in India is best illustrated in the processes and publications of the “Independent People’s Tribunal on the World Bank in India”. This group of critical voices constituted itself in early 2005 in order to provide a forum for people who have been affected by the outcomes and impacts of WB-funded projects, who are particularly vulnerable to large-scale infrastructure projects (Kelley and D'Souza 2010, xiv). They conclude that the WB legitimizes its programs for the sake of poverty alleviation and development, but in most cases actually does not benefit the poor in India; it has even been characterized as a social crime (Kelley and D'Souza 2010, 447).

Other authors conclude that some WBs projects have averted the failure of some agricultural projects. They argue that institutional flexibility, gained by ‘learning by doing’ and by including small-scale instead of large-scale technologies, was particularly responsible for averting the failure of some agricultural projects, for which the small-scale technology was far more accepted and adequate for the local challenges than the internationally competitive, large-scale technology. However, it is too simplistic to praise ‘good local expertise and technology’ against the ‘bad and evil, large scale, high-tech solutions’. Both approaches may have pros and cons related to their scale, impact and local context setting. However, smaller agencies strive to integrate local expertise and equipment and this is valued higher by civil society actors and has induced higher ownership and hence success in the past (Lipton and Toye 1990, 168).

Besides the World Bank, the German GIZ and British DFID departments are actively engaged as conventional donors with a long history in India. While GIZ is mainly active in sustainable development and environmental policies, DFID has been assigned by the Indian government to be responsible for pro-poor strategies in social-sector development as well as private-sector engagement and business solutions for public services. The Japanese agency, JICA, is assigned to industry development with a focus on human capacities, strengthening of various industrial sectors and the manufacturing sector. The United States agency, USAID, has been assigned with support to the health sector, and collaborates with large foundations, such as the Bill and Melinda Gates Foundation and the GAVI Alliance, to provide large-scale immunisation programs, capacity strengthening of the health sector and hygiene programs in urban informal

settlements. USAID, one of seven bilateral donors that accounts for the economic rise of India, has cut its loans during the past years almost by half. However, one can argue that the reduced collaboration in foreign aid went along with increased collaboration in economic terms, particularly in nuclear energy plants for India's increasing energy demand (Berthélemy 2006, 192).

Besides multi- and bilateral donors, there has also been increased engagement of smaller international and regional donors. These donors are international development partnerships, international NGOs or regional foundations or philanthropist organisations. The respective donor activities and histories are provided in more detail in Chapter 5.

This chapter of my dissertation introduced the political and administrative implementation of water policies in the public policy decision-making in India. Moreover, a brief overview on external actors and the role of civil society was given. This background information serves as reference point for the case study analysis to understand the complex system of responsibilities, accountability and decision-making at the different levels of governance in India.

3 Theoretical Concepts and Analytical Framework

Understanding the complexity of relationships, interaction and communication in foreign aid implementation and asking for reasons of success and failure has always been important for those being engaged in foreign aid or academia with an external perspective on certain topics in foreign aid implementation.

During the 1950s and 1960s, discussion on foreign aid effectiveness centered on a linear development model, in which economic growth leads to more development (Solow 1956; Kaldor 1957; Burnside and Dollar 1997; Alesina and Dollar 2000). The 1970s were then dominated by structural adjustment programs that claimed to change traditional economies into industrialized societies, using neo-liberal agendas to foster economic and consequently also social development (Herbst 1990; Arora 1999; Easterly 2005). These structural adjustment programs were controversial, and impacts on economic growth and subsequent poverty alleviation were not observed after a decade of conditioned aid. The theoretical debate shifted hereafter towards dependence theory. This paved the way for the more critical and postmodern approaches to understanding the origin of underdevelopment and chronic poverty in the Global South (Hays 1964; Bernstein 1971; Dwivedi et al. 1989). The reasons for underdevelopment were sought, and the results of six decades of foreign aid were questioned, along with assumptions about economic growth, the participation of actors and the uncoupling of economic interests from social development.

In my thesis, I develop an understanding of actor relationships and project effectiveness in foreign aid partnerships. I will derive my own conceptual framework, and I will discuss how this guides my understanding of the actor relationship and its importance for project results. The first section (3.1) introduces the different debates on actor relationships and social coordination, and derives a working definition and conceptualization of actor interplay. The second section (3.2) introduces governance thinking, and derives the determinants of hierarchical and non-hierarchical coordination. The third section (3.3) provides my analytical framework and a discussion on theoretical governance configurations. The fourth section (3.4) discusses alternative explanations for project success, derived from the literature on foreign aid project effectiveness.

3.1 Understandings Actor Relationships

Actor interplay²² can be found in different research paradigms within different connotations, concepts and understandings. The concept of actor interplay implies some kind of relationship between an undefined number of actors. Analytically, a relationship can be captured as various modes of social coordination among actors. Different configurations of such social coordination shape the actor interplay over time. They may include dynamics of resource exchange, different levels and points of time in decision-making, and dynamics of reciprocal or unilateral influence, trust and interference.

Relating activities to one another and aiming to analyze modes of social coordination imply that something can be achieved by the interplay, which otherwise would not be achieved. This positive connotation of consequences of actor interplay is what makes it so attractive as a research objective in social sciences (Frances et al. 1991, 3). The great debates in international politics that deal with modes of social coordination, in the broader sense of institutions as systems of interacting parts, are the neo-institutionalism schools of thought.

In neo-institutional theory, the role of institutions for social and political outcomes is discussed in different strands of the debate. Four major schools of thought discuss actor and institutional interaction, which namely are: (1) rational choice institutionalism; (2) historical institutionalism; (3) sociological institutionalism; and (4) actor centered institutionalism. All four approaches are briefly discussed and compared to each other in terms of their contributions and limitations regarding the role of institutions for political outcomes.

(1) Rational Choice Institutionalism

Interaction can be defined as “Ex ante agreements about a structure of cooperation [that] economize on transaction costs, reduce opportunism and other forms of agency ‘slippage,’ and thereby enhance the prospects of gains through cooperation” (Shepsle 1986, 74). This understanding of social coordination is based on Oliver Williamson’s (1975) approach to hierarchy as a mode of coordination to reduce transaction costs and

²² The term ‘actor interplay’ and ‘actor interaction’ is preferred in conceptual and analytical contexts, whereas ‘actor relationship’ is preferred for empirical illustrations in the following parts of my thesis. The two concepts ‘relationship’ and ‘interplay’ are used interchangeably and have been introduced and defined in Chapter 1, page 15 of my thesis.

increase efficiency. Interplay among actors and in the form of institutions takes place due to the securing of property rights, rent-seeking behavior and transaction cost minimization (Williamson 1975, 13). William Ouchi moves one step beyond this by understanding organizations not only as systems of nested levels, but further as hierarchies in which “each party contributes labor to a corporate body which mediates the relationship by placing a value on each contribution and then compensating it fairly. The perception of equity in this case depends upon the social agreement that the bureaucratic hierarchy has the legitimate authority to provide this mediation” (Ouchi 1980, 130). Foreign aid actor constellations are comparable to formal bureaucracies, since they share planned and foreseeable sequences of actions. As a result of this hierarchy, as a mode of governance and decision-making, is ascribed to aid relationships.

Rational institutionalism postulates that individuals are cunning actors that are driven by strategic targets for themselves as well as others, and it aims to explain the impact of institutions on individual action and outcome (Hall and Taylor 1996; Krasner 1991; Hardin 1968). Within this approach, three ontological perspectives on organizational forms can be identified. First of all, the rational system of organizations defines them as highly formalized systems of collectivist action, in order to achieve collectively defined targets. Secondly, the natural system of organizations perceives organizations as social systems driven by conflict or consensus as their strategy to survive as organizations. Finally, the open system of organizations describes organizations as conglomerates of participants with varying interests, which are encapsulated in a larger environmental context (Scott and Davis 2007, 34). Open systems are also characterized as hierarchical systems in the sense of nested levels of organizational systems and subsystems, which leaves their differentiation of status and power to the modes of coordination (Scott and Davis 2007, 97; Andersson and Ostrom 2008, 73).

(2) Historical Institutionalism

In contrast to the above approach, historical institutionalism emphasizes structuralism over functionalism as the origin of institutions. Institutions are “the formal or informal procedures, routines, norms and conventions embedded in the organizational structure of the polity or political economy” (Hall and Taylor 1996, 938). Historical institutionalists have a broad understanding of institutions and individual behavior and emphasize the importance of power and asymmetries of power and power relations for

empirical analysis. Institutions are perceived as cognitive patterns that need to be interpreted due to action options.

The classic concept of how state actors exercise power was developed by Lukes (1974), who distinguishes three kinds of power: (1) through decision-making processes and political action; (2) non-decision making power, whereby actors influence the political agenda with their own preferences; and (3) ideological power, which embraces clear policy preferences and the influencing of individuals decision-making behavior with pre-developed belief systems (Lukes 1974, 15). The structural power of state authorities may be limited if states lack the capacities and resources to exercise it.²³ This imbalance might result in the delegation of authority to external actors as well as higher participation rates of local beneficiaries (Risse 2012, 12).

(3) Sociological Institutionalism

In addition to the perspectives of rational and historical institutionalism, we could also view organizations in terms of sociological institutionalism, which combines institutions and cultures. According to this perspective, organizations are formal mechanisms of legislative control by individuals who are serving their own interests. Authors like Moe (1987) argue for the importance of informal norms and standards that shape the political process, and emphasize the role of belief systems, culture, norms, procedures and cognitive scripts for institutions (Powell and DiMaggio 1991; Moe 1987). The modes of governance among actors are seen to be guided by formal, institutional rules that determine their codes of interplay, as well as by informal codes of behavior and shared belief systems. Although the formal modes of governance are more visible, the informal ones might actually have more influence on the relationship among actors. Institutions and belief systems are meant to construct social reality and impact basic preferences and individual identity. Hence, sociological institutionalism provides answer to legitimacy and social appropriateness in institutional interplays.

²³ The concept of structural power is based on Robert Dahl's definition of power: "A has power over B to the extent to which he can get B to do something that B would not otherwise do" (Dahl 1957, 202). He distinguishes the 'base of power', the 'means of power', the 'scope of power' and the 'amount of power' as four key dimensions to be taken into account when analysing power dynamics (Dahl 1957). Critics of Dahl argue that actor A might not only influence the action of actor B; he might also exercise his power by influencing the interests of actor B and make him embrace desires that are in the interest of actor A (socially constructed power) (Lukes 1974).

(4) Actor Centered Institutionalism

Actor centered institutionalism (ACI) posits that structures and agents need to be analyzed with reference to each other, because insights into actors' activities without insights into the institutional framework and structures in which they are embedded is as limited as the other way around (Scharpf 2006). ACI provides an analytical framework closely related to neo-institutionalism by integrating consequences of individual behavior into political processes and organizations. ACI is considered to give a research heuristic that leads to conclusions on legitimate and effective public policy choices by combining different assumptions from the structuralist as well as rational choice paradigms (Scharpf 1997). The approach focuses on the relation between state control and societal self-regulation. It could be argued, however, that this approach does not sufficiently address the relevance of power relations in actor interplays. Actor coalitions are assumed in the ACI approach, but their inter-dependence and level of collaboration are not further defined (Mayntz and Scharpf 1995).

Table 3.1 Institutionalism: Contrasting Approaches

	Rational Choice Institutionalism (Williamson, March and Olsen)	Historical Institutionalism (Evans, Collier and Lukes)	Sociological Institutionalism (DiMaggio and Powell)	Actor Centered Institutionalism (Mayntz and Scharpf)
Definition of Institution	Broad definition and application of institutions only as dependent variable	Broad definition of institutions	Broad definition of institutions as culture, symbols, norms and belief systems	Narrow definition of institutions and application as dependent and independent variable
Entities and Assumptions	Rational choice and actor centered (functionalist) paradigm	Structuralism emphasized over functionalism	Structuralism paradigm	Process orientation and identification of interdependencies of intermediate social phenomenon
Power and Knowledge	Power as material, political influence and competition of individual strategic action	Emphasizes role of power asymmetries and the power of one individual over another	Power is constituted through discourses, knowledge and expertise	Power is not explicitly included

Sociological institutionalists specify preferences, actions and norms that are taken as given in rational choice institutionalism. Rational choice institutionalism provides a solid but individually deterministic line of arguments on why institutions remain as they are, whereas sociological and historical institutionalism are more applicable in terms of

explaining the genesis and change of institutions over time. Both approaches share the assumption that institutions' genesis is embedded in an already existing institutional environment, and that institutional change is subsequently driven by cultural aspects and belief systems for sociological institutionalists, and by power imbalances for historical institutionalism.

Actor interplay is a process through which partners overcome the challenges posed by interdependency, by applying different modes of social coordination to influence one another's decision-making behaviors or strategies. Actor interplay is understood in my thesis as the combination of an organizational form of actor collaboration and specific rules of coordination (modes of action). The duality of structure and strategy (compatible with historical institutionalism) is also congruent with recent approaches in foreign aid implementation, and hence allows for differentiated insights into interaction dynamics (cf. Batley and Rose 2011; Brinkerhoff 2002; Batley 2006; Lowndes and Skelcher 1998). Combining this with governance thinking provides us with assumptions about actor collaborations and processes of interaction.

Following this explanation of theoretical approaches, the next section introduces the relevance of governance thinking, and links its basic assumptions with institutional theory in order to derive an analytical framework and theoretical assumptions for the approach taken in this thesis.

3.2 Governance Thinking: Understanding Social Coordination

Governance research has replaced classical research on government and state-led policy-making. It highlights the importance of social coordination among a multitude of actors, in a complex and multi-level contextual setting, and whose intentional activities are embedded in a dynamic and reflexive environment. This approach goes beyond pure state-led public policy-making.

Although there is a variety of work into governance thinking, research in this area can be seen to share at least five characteristics. These factors seek to provide a new mode of coordination that explains the complex and interconnected developments in the world, and can be summarized as: (1) a focus on actor arrangements, coordinated in non-hierarchical modes of action; (2) moving beyond the state-centered perception of public service provision; (3) an emphasis on the interdependencies of public and private actors in these coordination arrangements; (4) recognition that the change in coordination arrangements has immensely increased the complexity of policy-making; and (5) increased importance given to the cooperation and coordination of actors (Grande 2012; Emerson et al. 2011).

Governance thinking provides analytical concepts that can also serve as normative agendas for decision-making, when governance is a mode of coordination that includes marginalized and poor agents. The theory aims to move beyond a state centric perspective of governments, and to overcome the Weberian differentiation between processes of decision-making (politics) and processes of implementation (bureaucracy). It addresses public policy-making with actor constellations and decision-making procedures that go beyond top-down, state authority-led decision-making. It aims to overcome a singular, state-centered model of actors, who rationally and instrumentally provide policy processes in the ordered way of agenda-setting and decision-making. Moreover, it aims to move beyond linear perceptions of service provision by incorporating more dynamic and reflexive processes at different levels and norm setting with various actors and norm protection by e.g. civil society actors (cf. Leach et al. 2007, 3; Reiners and Liese 2015).

Governance thinking emphasizes the importance of including other actors, such as members of civil society, who bring different agendas and interests into the political decision-making process. Including a variety of interests, capacities and knowledge

agendas, this kind of governance leads to more negotiation and ownership in political decision-making (Anheier et al. 2002). The concept of social coordination in governance thinking differentiates three modes: market, hierarchy and network. The market mode describes an automatic coordination driven by independent self-interests and the desire for private gain, and thus is more competitive than collaborative in its nature. The hierarchy coordination mode is consciously organized with top-down decision-making power and ordination of superiority and inferiority. In the network mode, social coordination is neither autonomously driven nor hierarchically determined, but rather accomplished through a mixture of formal and informal mechanisms of relatively autonomous actors who are able to identify complementary interests (Williamson 1975; Thompson et al. 1991). Governance activities of public policy-making should steer policy-making and decision-making “outside government hierarchies and beyond market incentives” (Leach et al. 2007, 9), but may combine different elements of the above mentioned modes of social coordination. Multi-level governance thinking, combined with multiple actors raises questions about steering, accountability and modes of social coordination among the variety of interests in such consortiums.

There may be interplay between government and external actors in public policy-making, which could arise for a variety of reasons, such as environmentally sustainable development, or a lack of state capacity, resources or knowledge. Therefore, another theme of research focuses on the interplay between recipients and donors. The donor actors can share expertise, insights and linkages to provide a dynamic network with the recipient actors. My research focuses on policy realization through networks of actor engagement (Rhodes 1997a; Rhodes 1997b; Stoker 1998; Hajer and Wagenaar 2003; Hajer 2003; Rhodes 2007).

The shift of decision-making and power away from state actors is caused by a decline in the capacities of state actors. There is debate about new actors ‘hollowing-out’ the state functions and about the capacity of the state to coordinate these different actors. Empirical insights into these different developments of state functions therefore come from analysis of authority and accountability relationships (Rhodes 1997b; Stoker 1998; Jessop 2003). It is too simple to assume that state functions decline as a result of the rise of new and external actors. Decision-making and relationships among actors vary immensely, and reality is far more complex than a simple hollowing-out of state

functions and a delegation of state tasks and orchestration functions. Especially in areas with limited statehood²⁴, we find hybrid forms of formal and informal interplay. We therefore need to open the black box of governance arrangements that are performed in contexts where the state actor is not able or not willing to perform its public policy function.

The term ‘limited statehood’ can be used to describe areas in which state actors collaborate with external actors in order to overcome a certain degree of lack of state authority, by enforcing rules and regulations. In these fragile areas or areas of limited statehood, according to scholars of public administration, external actors support the provision of public policy-making in development collaborations, but they still aim to put the state actor in the driving seat of their approaches, or at least do not compete or become active without the government actors (Batley and Rose 2011; McLoughlin 2011; Teamy and McLoughlin 2009; Batley 2006; Brinkerhoff 2002; Winters 2010; Elsenhans 1991; Elsenhans 1984).

State actors in governance thinking are perceived as acting within a hierarchical authority structure. However, they are in danger of being challenged by external actors’ service provision, and of being ‘hollowed out’ and limited in their official functions by the delegation of authority to external actors (Rhodes 1997a, 34). At least they retain what Steven Krasner calls ‘domestic sovereignty’, the ability and legitimacy to plan, implement and enforce decisions and programs authoritatively: “the formal organization of political authority within the state and the ability of public authorities to exercise and effective control within the borders of their own polity” (Krasner 1999, 4). This definition allows for the empirical distinction between statehood as an institutional structure of authority, and the actual kind of governance that is exercised by a state (Risse 2012, 6). State actors are able to decide ‘top-down’, and steer by command and control mechanisms of policy-making (hierarchical steering).

Even though governance thinking explicitly focuses on non-hierarchical and mixed modes of coordination, it is applicable because a certain degree of hierarchy always exists in the coordination of actors, and a decent degree of hierarchy is always prevalent

²⁴ The SFB 700 Research Centre has developed a definition of areas of limited statehood and understands areas of limited statehood to cover “those areas of a country in which central authorities (governments) lack the ability to implement and enforce rules and decisions and/or in which the legitimate monopoly over the means of violence is lacking” (Krasner and Risse 2014, 5). For further concepts, definitions and empirical applications of areas of limited statehood, see also (Krasner and Risse 2014; Beisheim and Liese 2014; Risse 2012; Benecke et al. 2008).

in bureaucratic organizations (cf. Döhler 2007, 46). In foreign aid context settings, the state is limited in its abilities and capacities to provide for public policy-making. Hence, we find varying modes of interplay, of delegation of authority to external actors, and types of accountability relationships.

Owing to the empirical proposition of foreign aid collaboration as a multi-level and multi-actor constellation of decision-making, governance thinking is an attractive approach, due to its focus on identifying relationships and their implications in such complex actor settings. At the same time, it is commonly assumed that the interplay of actors with high participation and hence low degree of hierarchical steering is considered to be more likely to be effective, due to ownership of the participating actors in the constellation. However, what type of actor constellations and actor relationships provide for effective decision-making processes, and how they relate to project effectiveness, remains an empirical question.

Governance thinking focuses on the role of actor participation, procedures of decision-making and the ownership of partners in these processes. While the procedural dimension of governance thinking concentrates on social coordination and provision of services, the structural dimension relates to institutions and actor constellations (Börzel and Risse 2010, 114). Governance thinking allows for a focus on the inclusion of external actors, the negotiation processes of policy-making, and combinations of hierarchical and non-hierarchical steering towards service provision. Moreover, governance literature links these political steering concepts with questions on legitimacy, accountability and effectiveness (Liese and Beisheim 2011; Schäferhoff et al. 2009; Börzel and Risse 2005).

Governance thinking differentiates between the structural and process dimensions of different types of interplay. Structural dimensions would include considerations of hierarchy, coordination and competition, whereas process dimensions include considering traditional, hierarchical steering and authority, as compared to new modes of soft-steering governance, such as bargaining, deliberation, incentives and sanction mechanisms (Mayntz 2004; Benz 2006; Schuppert and Zürn 2008). Governance can thus be defined as “various institutionalized modes of coordination to produce and implement collectively binding rules, or to provide collective goods” (Risse 2012, 7).

Risse (2012) invokes four analytical dimensions, which can be used to provide a typology of seven such types of interplay or “governance configurations”: (1) the type

of actors: state and external actors; (2) the modes of governance: hierarchical and non-hierarchical modes of social interplay; (3) the institutional embeddedness: formal versus informal; and (4) the resources: material and ideational resources, and their consequences for power asymmetries (Risse 2012, 5).

My thesis approaches various governance configurations in development aid by focusing on two particular dimensions from Risse's grouping. These concern the actors (state and external actors) and the processes of decision-making (hierarchical and non-hierarchical steering). The next section elaborates further on these two dimensions and their characteristics, in order to create a systematic understanding of four different types of governance configurations.

When we speak of actor interplay, we need to consider which actors are actually meant by recipient government (state) actors and external (donor) actors.²⁵ The state actors are public-sector entities at the local administrative level, who are responsible for providing public services. The landscape of external donor actors has changed immensely during the past decade. The conventional and well institutionalized structure of bilateral and multilateral donors has been complemented by new actors, such as local and international NGOs, transnational Public-Private-Partnerships, local and global philanthropic foundations and private-sector actors.

In studying the state, one must differentiate between the executive (administrative), judicial and legislative branches of actors. These three entities of the 'state apparatus' differ in their functions because different mechanisms put them into office. The executive branch is dependent on public elections, and is therefore responsible for their actions with respect to the public. The judicial branch is designed to be independent and to serve for longer periods. Members of the administrative branch are appointed after a transparent review of their expertise and knowledge. The principle of hierarchy and democracy claims that due to the chain of input-legitimacy in democracies, state actors are able to coordinate hierarchically, and are mandated to enforce the majority decision of votes (cf. Döhler 2007, 48).

A fair amount of work on the role of state actors in developing countries has been done by Hartmut Elsenhans (Elsenhans 2001; Elsenhans 1991; Elsenhans 1984). He defines

²⁵ The term 'external actors' is used in this thesis for all aid actors, be they international or national, new or conventional donors. The differentiation emphasizes an external service provider, in comparison to the input-legitimate state actor. For definition of the different actor types in my thesis, see Chapter 1, page 15 and 16. For a detailed, empirical description of the two actor types in the Indian context, see Chapter 2.

the state as the bureaucracy, and refers “to this class as the “state class” because it uses its control over the state apparatus to appropriate the mass of the surplus product and decides in which form it will be employed within the framework of political conflict” (Elsenhans 1991, 78). He differentiates his notion of bureaucracy-as-state from other definitions by describing it as a singular apparatus with collective interests, resources and actions, instead of defining it as a fractional class of capitalists, as is suggested by the terms state-bourgeoisie and administrative-bourgeoisie (Elsenhans 1984, 24).²⁶

The state bureaucracy balances between the two motivations of ‘self-privilege’ and ‘legitimacy-restraints’, which are compatible if they are pursued only in part by the bureaucratic actors. Pure self-privilege limits legitimacy, and pure legitimacy requires abstaining from self-privilege (Elsenhans 1984, 145). However, Elsenhans argues that state bureaucracies tend towards self-privilege in order to maintain a strong and powerful position within a changing society and international actor environment (Elsenhans 1984, 156).

The administrative bureaucracy apparatus is said to follow a hierarchical mode of action and to have strong clientelistic structures of decision-making. Members of these state cliques try to maximize their power and income and act according to their own principles and enhancement of privileges, since control by other classes and groups is relatively low (Elsenhans 1984, 25). However, this perspective is challenged by more recent foreign aid literature, which finds that participatory elements in foreign aid implementation hold state actors accountable to citizens and civil society. This literature also argues against strong, hierarchical steering modes of state actors in foreign aid consortiums (Winters 2010, 228; Cornwall and Brock 2005). In addition, Fuhr (2000) claims that decentralizing state power and state resources may match local demands, and hence creates more responsive and accountable state actors, which stimulate local economic development through demand orientation and participation (Fuhr 2000).

As discussed earlier, the landscape of external foreign aid actors has changed significantly, and falls into two broad categories of conventional and new donors. While conventional bilateral and multilateral donors operate at all political and administrative

²⁶ The classical theorists on bureaucracy (with no explicit link to developing countries) are Karl Marx and Max Weber. While Marx’s focus was on class conflicts, his interest in bureaucracies’ role was limited to the power struggles between society and bureaucracy. Weber, by contrast, looked at bureaucracy as an administrative institution that carries out public tasks effectively and predictably (Weber 1921/1980; Panandiker and Kshirsagar 1978).

levels with their state counterparts, including on regional and local levels, new donors by contrast cannot rely on intra-state agreements, nation state back-up and historically developed relationships. The framework conditions, rules and regulations for new actors' interplay are set by the state actors, and they profit from at least a minimum degree of 'shadow of hierarchy'²⁷ from state actors. Conventional aid actors' success in interplay and program implementation is attributed to this shadow of hierarchy. A minimal shadow of hierarchy serves as an incentive for cooperation by external actors because it invokes the possibility that their project outcomes will be transferred to and maintained by state actors in the long run (cf. Börzel 2008, 126).

Local legitimacy is gained from project outputs²⁸, and empirical legitimacy is gained through the engagement of domestic actors (Krasner and Risse 2014, 3; Beisheim et al. 2014b). Conventional aid actors' interplay relies on nation state agreements, and new aid actors are dependent on the willingness of local administrative units to collaborate with them. Their mechanism for establishing projects and successful inter-agency partnerships is to gain local legitimacy by providing successful and innovative public-sector solutions for visible and accepted problems.

Due to differences in institutional embeddedness, as well as the shadow of hierarchy and local legitimacy of these two groups of external actors, it is assumed that we can find patterns of different modes of social interaction of the two types of external actors over time.

In addition to considering different types of actors, governance thinking has also focused on changes in the modes of social coordination. This includes moving from classical hierarchical steering to non-hierarchical modes of coordination and hybrid modes of interaction, which I will present in this section.

²⁷ The concept of 'shadow of hierarchy' was developed by classical steering theorists, and suggests that a state actor in cooperative arrangements acts cooperatively and non-authoritatively, but theoretically is able to change this steering mode of action at any time towards authoritative and hierarchical decision-making (Mayntz and Scharpf 1995; Töller 2008, 283; Scharpf 2006). This 'shadow of hierarchy' in authoritative decision-making is assumed to be extremely short in areas of limited statehood, and therefore requires non-hierarchical steering as a not only complimentary but rather necessary substitute mode of action (Börzel 2008).

²⁸ This concept refers to F. Scharpf's distinction (1997, 1999) of input and output legitimacy. Input legitimacy implies the legitimacy of participative and democratic structures in which public agents can be held accountable by elections in the political system (criterion of fairness). Output legitimacy refers to the level of proficiency that is needed to achieve service provision (criterion of competence). The two dimensions conflict because each can only be reached at the expense of the other (Scharpf 1999; Scharpf 1997).

The classical, hierarchical, vertical steering mode of coordination allows the enforcement of rules by command and control, and requires obedience to these commands by subordinate actors (Risse 2012, 9). This mode of coordination claims input legitimacy through election, and its actors can apply coercion as top-down leaders in order to enforce commands. This perception of hierarchical steering is taken from Max Weber's sociology of power and 'Herrschaft'. Weber considers the power of a person to be the ability to express commands to others and expect obedience to these commands. 'Herrschaft' is considered as an institutionalized form of power (Weber 1921/1980, 28).²⁹

Hierarchical steering by state actors is justified by their sovereignty to govern and can be labeled 'governance by government'. Hierarchical steering by external foreign aid actors lacks input legitimacy and sovereignty, and hence has to rely on output legitimacy or local legitimacy. Hierarchical steering by external actors is discussed either in the context of foreign intervention or local warlords, who coercively usurp power in ruling and enforcement of rules (Risse 2012, 15). In foreign aid cooperation, hierarchical steering by external actors may occur where the input-legitimate state actor is unable or unwilling to exercise its functions, and either delegates it to external actors (accepted external rule) or at least tolerates the external action for a finite period of time. The design of this type of governance configuration needs to be analyzed empirically and is related to the literature on weak states, patronage and clientelism.³⁰

As is argued by Lowndes and Skelcher, "The imposition of an authoritative integrating and supervisory structure enables bureaucratic routines to be established [...] The cost, however, is a reduction in flexibility and innovation because of a tendency to formalization and routinization" (Lowndes and Skelcher 1998, 318). There are always limits to a concept like hierarchical steering. The New Public Management approach emphasizes the limits of flexible cooperation with external partners, and highlights the importance of contract management and transparent decision-making for providing public services in an effective manner (Naschold and Bogumil 2000; Budäus and

²⁹ Compare as well Bourdieu's concept of power, 'Herrschaft' as a result of social inequality of classes (Bourdieu 1987) and Foucault's concept of a knowledge-power-complex, which relates power and 'Herrschaft' to knowledge (Foucault 1987).

³⁰ The weak state literature concentrates on a failure to perform basic state functions, due to a lack of state capacities, and on institutions that are compromised by corruption, clientelistic and patronage structures (Migdal 1988; Hopkins 2000; Brinkerhoff and Goldsmith 2002; Chesterman et al. 2005; Erdmann and Engel 2007).

Grüning 1998). However, as Wiesenthal (2000) nicely illustrates in his theory of social coordination, all kinds of steering mechanisms are prone to coordination problems and inefficiencies, due to a low diversity of rules and regulations (Wiesenthal 2000). Coordination problems among actors are also closely linked to the complexity of providing a service or a task.³¹ Providing a service or a public good with a high complexity of task requires effective expertise and decision-making at different points of time in implementation and hence may need an overall guidance in a hierarchical steering style but at the same time requires more cooperation, participation and flexibility in implementation.

Non-hierarchical steering can be differentiated into two types of steering. The first of these is steering by creating incentives and manipulation (logic of instrumental coordination), which leads to artificial learning processes and to incentives or sanctions to put cost-benefit calculations into practice and thus achieve desired behavior and outcomes from the cooperation partner. The second type of non-hierarchical steering is non-manipulative steering (logic of communicative coordination), which includes approaches of bilateral arguing and persuasion. Moreover, learning takes place under the banner of challenging fixed preferences, and aims to change the socialization of the rules and procedures of social coordination (Risse 2012, 9). These new modes of governance with non-hierarchical steering mechanisms are characterized as network structures of state and external actors ('governance with government'), as well as by political decision-making and self-regulation by external actors ('governance without government') (Benz 2006; Zürn 1998; Rosenau and Czempiel 1992).

The differentiation between hierarchical and non-hierarchical modes of action as analytical categories helps to identify combinations of these two modes of coordination as a type of governance configuration. Invoking the concept of social coordination focuses on actor-centered perspectives of interplay. This combination of the governance concept and steering mechanism allows for a systematic account of actor interests and resources in governance structures that are well known for having a blind spot in everything related to power and interplay (Risse 2012, 10).

Understanding new modes of governance, and the resulting configurations of governance by networks of state and external actors, overcomes the problem of an

³¹ The complexity of a task is defined as the number of interventions needed for task fulfillment, and the number of participating actors to be coordinated and administrated (Krasner and Risse 2014, 14).

actor-versus-structure perspective, and brings a power perspective into the governance debate. Governance thinking includes soft-steering mechanisms as modes of social coordination; however, we must also keep in mind that non-hierarchical modes of social coordination also include implicit messages and attempts to influence the moral and political belief systems and behavior of recipients. Soft-steering goes beyond pure network forms of deliberation and bargaining, and can be considered a form of political signaling and incentives to activate citizens resources (Offe 2008, 74).

Understanding the relationship of actors in foreign aid implementation will be based on assumptions of the given theories in this section. The governance lens allows to include the complexity of multiple actors and points of time of interaction across various levels. The multitude of dimensions makes the analysis of interaction in foreign aid very interesting, since the relationship of donors and recipients is traditionally perceived as a recipient that requires external support to fulfil a certain task and a donor that acts according to the needs of the recipient. This precondition should allow for relationships of willing collaborating actors that jointly implement tasks. As outlined in this chapter, these collaborations are also guided by incentives and further factors that determine the actor relationship. The development of a framework in the next section accounts exactly for this by assuming that we receive different types of modes of coordination that also vary due to their success in delivering program results.

3.3 Analytical Framework: Foreign Aid Governance Configurations

Building on the analytical components of the previous section, where actors and modes of social coordination were introduced as guiding dimensions in governance configurations, this section develops four ideal-type governance configurations within a two-by-two matrix, based on different modes of social coordination. These four ideal type configurations are linked to the governance configurations, developed by Thomas Risse's (2012) and reflect some of his assumptions but develop different type of configurations. These four ideal-type governance configurations may also provide for variance in relationship over time.

Foreign aid cooperation is determined by a complex interplay of donor interests and ideas, as well as recipient needs and interests. These dynamics generate political attitudes and configurations that can be characterized as complex consortiums of self-interests, needs and public interests on all sides of the partnership (Schlichte 2005, 213). Foreign aid outcomes are dependent on project-inherent and project-external determinants. While the political structures of the recipient country play an important role, at the same time, foreign aid donors have to follow international obligations concerning their degree of institutionalization as well as their responsibilities and duties in protecting beneficiary citizens from human rights abuses (Riddell 2007, 7). These challenges provide the basis for applying governance thinking to the interplay of foreign aid donors, assuming that they share the context of multi-actor and multi-level service provision under the premise of collaborating with counterparts at the recipient side.

Two types of hierarchical and two types of non-hierarchical steering are assumed to best describe the individual mode of action of respective actor type in these constellations. Donors and recipients may differ or share similar features in their internal modes of coordination. Combining these modes with each other allows to understand the type of relationship that exists within actor partnerships. Understanding how these different combinations of coordination affect the project results remains an empirical question. If a relationship is well established and the modes of coordination harmonize with each other or whether they don't set off any kind of interplay at all and how this has repercussions for the effectiveness is the key interest of my thesis.

Against this background, I develop an analytical framework that invokes variance in modes of action (cf. Risse 2012) leading to different types of governance

configurations. These governance configurations are analyzed over time and for systematic patterns of actor interplay and project success. Conventionally, well-established actor interplay, being caused by harmonized modes of coordination among partners is assumed to result in successful programs. However, this link might not be linear and therefore needs to be systematically analyzed in order to identify which interplay processes lead to successful project results.

The following table 3.2 provides the two actor types (donor and recipient) and the two assumed modes of coordination (hierarchical and non-hierarchical). This illustrates four ideal type governance configurations, which serve as the analytical framework for the empirical part of my thesis and which will be linked with the project’s results.

My approach takes influence from Risse’s (2012) argumentation for four conceptual governance dimensions and resulting seven types of governance arrangements. Risse developed his typology for different actor types in areas of limited statehood, while in my thesis the focus is put on service provision programs of development aid and hence reduces this down to two, yielding a two-by-two matrix with state and external actors and two different steering mechanisms (hierarchical and non-hierarchical).

Table 3.2 Governance Configurations

External Actor (Foreign Aid Donors)	State Actor (Recipient Government)	
	Hierarchical	Non-Hierarchical
	Hierarchical	(1) Competition or parallel governance
Non-Hierarchical	(3) Governance by government	(4) Polycentric governance

The matrix depicts four ideal governance configurations, the first of which is competition or parallel governance of state, and external actors with hierarchical governance. In the second governance configuration we see governance by external actors, in which the external actor hierarchically enforces their development program, and the state actor obeys the rules and regulations of the external actor. Thirdly, in governance by government, the state actor exercises their function as an input-legitimate actor, providing public goods with the support of a non-hierarchically operating, external aid actor. Finally, polycentric governance is characterized by non-hierarchical mechanisms of decision-making by all involved actors in foreign aid implementation.

Besides these ideal types, there might also be hybrid forms of governance configurations, and configurations may vary also over time.

My analytical framework of governance configurations is developed for foreign aid governance constellations, and its conceptualization invokes the institutional rules and regulations of bilateral agreements, multilateral aid consortiums and international aid agendas, such as the Paris Declaration 2005 on aid effectiveness. This framework does not apply to governance regimes, such as ‘governance by external actors’ in warlord regimes (cf. Risse 2012, 15). Due to the above mentioned institutions and rules of foreign aid collaboration, a minimum degree of local legitimacy and acceptance of recipient actors is needed for the governance arrangements that are the object this thesis’ analysis to come into existence. My framework differentiates four governance arrangements, which are: (1) competition or parallel governance; (2) governance by an external actor; (3) governance by government; and (4) polycentric governance. The next section introduces these four governance configurations and derives assumptions for the empirical analysis in my thesis.

(1) Competition and parallel governance describes a mode of social coordination in which the state and external actors both share the same mode of internal coordination and aim to dominate the interplay with their individual goals and interests, using hierarchical decision-making modes of action, without compromises, negotiation or collaboration. This dual hierarchical mode of social coordination of state and external actors is assumed to result in no cooperation, or only a limited degree of cooperation, due to conflictive interests and competition for guidance and dominance in decision making. This configuration can be characterized as adversary, rival competition or parallel governance structures.

(2) Governance by an external actor is characterized by the dominance in decision-making of public policy-formulation by the external aid actor. ‘Governance by external actor’ occurs when the donor actor hierarchically enforces its program approach and the state actor is obedient to the rules and regulations of the external actor. This interplay is best described analytically as coordination with the strategically strong influence of the external actor, who holds hegemony, guides and dominates decision-making and implementation without inclusion of local expertise and experiences. A hegemonic position enables external actors to enforce their agenda more effectively without consensus among all participating actors (cf. Schimank 2007, 39). This configuration is

regarded as a temporary solution to public-service provision, and in foreign aid practice is most likely to be seen in humanitarian aid, short-term disaster relief operations and area context settings where the recipient actor has no capacities to provide services and is in need of external support. This configuration can be successful in project implementation if the state actor delegates authority independently and is willing to take over the results of the program on a long-term basis when the state has regained strength and institutional capacity. This configuration is also based on the recipients' expectation to first neglect local ownership in the short term and hereafter expects its merits in the long run.

(3) Governance by government combines the hierarchical decision-making mode of state partners with obedient and non-hierarchical collaboration of external actors. In this configuration, the state actor exercises the state function as a legitimate actor for giving input into and providing public policy-making with the support of external aid actors. Due to the international agreements on best practice in foreign aid provision, this configuration is regarded as the optimal, most desirable, most prevalent and most effective actor arrangement in foreign aid, since it puts the domestic actor in the driver's seat. Hierarchical decision-making about programs and plans is exercised by the input-legitimate state actor: a decisive and guiding decision-making position that enables hierarchical steering and the coordination of all participating partners. Meanwhile, the external foreign aid partner contributes soft-steering influence mechanisms, such as incentive-setting, capacity building, reflecting activities or bargaining for new and innovative solutions.

(4) Polycentric governance is characterized by non-hierarchical mechanisms of decision-making of all involved actors in foreign aid implementation. Risse (2012) further subdivides this category into four types: (1) negotiation systems: bargaining and arguing and deliberation; (2) non-hierarchical influence; (3) soft-mutual competition; and (4) parallel governance (Risse 2012, 27). If there is no delegated authority in foreign aid by state actors, there is either cooperation or conflict. Foreign aid collaboration has to fulfill minimum standards of collaboration and, hence, parallel governance is not in accordance with international propositions on local legitimacy and actor harmonization (cf. Paris Declaration 2005). Therefore, parallel governance configuration does not exist in foreign aid contexts under the category of polycentric governance. Polycentric governance as a theoretical construct is a type of actor

arrangement in which partners are open to innovation and have a flexible approach in which they are willing to learn and to adapt their actions to one another (Andersson and Ostrom 2008, 77; Ostrom 2005). However, polycentric governance is criticized for dealing with all of the individual particularities and interests of all participants and therefore having an inefficient method of decision-making (cf. Schimank 2007, 41).

This analytical framework, outlining four ideal type governance configurations, serves two major purposes. Firstly, the patterns and types of governance configurations and their project successes are analyzed with the aim of identifying a pattern between certain modes of social coordination among actors and project results. Secondly, it explores whether the governance configurations vary systematically between conventional aid donors and new aid donors.

Regarding the relationship between modes of coordination and project effectiveness, I aim in my thesis to understand the underlying assumption that programs that account for the input-legitimate function of state actors and put them in the driving seat have greater success in achieving their project goals. This assumption is based on the powerful and guiding role of ownership of the local state partners who are mandated to provide the needed services, and who simply lack the capacities and knowledge to do in an adequate manner.

***Assumption 1:** The more the recipient actor is put in the 'driving seat' and is actively engaged in decision-making and implementation, the more successful are project results.*

The second assumption hypothesized here is that, according to the differences in engagement with state actors and the varying modes of coordination and approaches of implementation, external actors will differ systematically in their steering mode and hence in their governance configuration with state actors. Although conventional, bilateral and multilateral actors tend to operate in a hierarchical steering mode, they also need to conform to international aid conventions and rely on delegated authority. We can therefore expect them to be engaged in either (1) competitive governance, or (2) governance by external actors. Since conventional aid actors rely on binding bilateral agreements and can be described as bureaucratic organizations, it may also be the case that they suppress their hierarchical steering mode and engage in (3) governance by government action, but with limited project success since they are not able to fully deploy their expertise and knowledge.

In contrast, new foreign aid actors are characterized by non-hierarchical steering and influence in decision-making and pursue rather flexible and innovative program approaches. Due to their lack of a reputation in local context settings, they are flexible in putting the state actor in the driving seat. Hence it is expected that they will most likely engage in (3) governance by government configurations, or (4) polycentric governance. In cases where they try to exercise hierarchical steering modes, their influence is assumed to be low, since they lack both the output legitimacy and the resource power to exercise such a function and hence will fail in their project approach and instead use exit strategies in the actor arrangement.

Conventional donors are assumed to be most likely to achieve a successful outcome in projects in which they provide the public service as external actors under the delegated authority of the state (shadow of hierarchy). This is because they are able to implement their programs relatively independently and with only soft-steering influence of state partners due to long term trust and reputation. However, they may also be successful in configurations in which the state actor is strong and guiding, due to the output legitimacy of their previous projects and long term cooperation. It is expected that they are most likely to fail in polycentric governance arrangements, since they already contain a multitude of national interests, and at the same time encounter the additional interests of local and state counterparts. This high number in interests may result in long debates over details instead of ad hoc and efficient decision-making.

***Assumption 2:** Conventional and new donors differ in their modes of coordination. New donors are more flexible, innovative and adaptive to recipient actors' demands, and hence are more successful than conventional donors.*

New foreign aid actors are attributed with soft-steering mechanisms as their mode of governance, and therefore are most likely to be successful in arrangements in which the government takes the driving seat and they provide advocacy. They are expected to fall short of their goals and achievements in governance configurations that require hierarchical-steering from them, since they are in most cases not as powerful as state actors, and also lack the capacities and resources to compete or provide parallel governance structures. They are thus most likely to opt for the exit strategy in these actor constellations.

Theoretically, it has been argued that conventional donors are assumed to act in hierarchical steering and due to their long term acceptance and reputation meet a state

actor counterpart with no hierarchical steering. This allows the assumption that *governance by external actor* is assumed to be most likely the case for conventional donors. In contrast, due to bilateral and multilateral agreements, *competition or parallel governance* is considered to be an outlier case for conventional donor cooperation. In contrast, new donors are assumed to be more flexible and adaptive actors and hence will most likely act in non-hierarchical mode of coordination and due to their inexperience in aid implementation are assumed to meet dominant and guiding state counterparts. Hence the typical governance configuration for new donors is *governance by government* and *competition and parallel governance* as outlier cases. Table 3.4 summarizes the respective assumptions for conventional and new donors with green, indicating the typical case and red, indicating the outlier case.

Table 3.4 Assumption on typical and outlier governance arrangements

	Recipient Government Actor		
		Hierarchical	Non-Hierarchical
Conventional Donors	Hierarchical	(1) Competition or parallel governance	(2) Governance by external actor
	Non-Hierarchical	(3) Governance by government	4) Polycentric governance
New Donors	Hierarchical	(1) Competition or parallel governance	(2) Governance by external actor
	Non-Hierarchical	(3) Governance by government	(4) Polycentric governance

There is as yet no coherent theory to explain project success in challenging and complex environments of foreign aid projects. The theoretical debate behind this, however, dealing with social coordination, is based on governance thinking. In order to broaden our perspective on this subject, the following section discusses alternative explanations for project success from various strands of administrative and management literature on foreign aid projects (Diallo and Thuillier 2004; Crawford 1997; Gow and Morss 1988). In this strand of literature we find four main alternative explanations for project results: (1) project history and inheritance of institutions and structures; (2) gaining local legitimacy, institutional and structural change; (3) local legitimacy, the quality of the

interplay, frequency and intensity of cooperation; and (4) resource availability. This section considers each of these categories in more detail.

(1) Historical project context. Actor interplay processes are characterized by formal and informal negotiations and dynamic interplay arrangements, which are determined by the respective visions, strategies and goals towards problem solving. This process of co-evolution is assumed to take place in the vision and planning phase of a project, when the actors strive to develop a project proposal and establish the formalities of interplay and coordination. This beginning phase is influenced by factors from previous projects in the respective area. The subsequent historical context of the previous development projects has the potential to set the framework conditions for existing local governance structures, personnel constraints, legislation and institutional setup. As Gow and Morss have summarized: “historical factors - including ethnic origins, patterns of collective action, and previous experience with development efforts - may influence reactions to new development ideas” (Gow and Morss 1988, 1400). The argument for the relevance of a project’s historical context is based on the assumption that interaction partners may profit from or be compromised by ‘issue linkages’ to previous project arrangements. These ‘issue linkages’ create personal or power bonds across time and space, and hold opportunities for personal profits as well as the potential to disadvantage subsequent project arrangements (cf. McGinnis 1986; Gow and Morss 1988).

(2) Non-transparent power plays. The patron–client theory focuses on the mutual–but-unequal dependency structures of privately anchored patron and client relationships (Kaufman 1974, 285). Patron–client relationships may sometimes also have middlemen as connecting elements between two individuals who are geographically separated or socially distanced because of their different policy levels (Kettering 1988, 425). Clientelism, perceived as an alleviated characteristic of corruption can be described as “the relationship [that] occurs between actors of unequal power and status; it is based on the principle of reciprocity; that is, it is a self-regulating form of interpersonal exchange, the maintenance of which depends on the return that each actor expects to obtain by rendering goods and services to the other and which ceases once the expected rewards fail to materialize; the relationship is particularistic and private, anchored only loosely in public law or community norms” (Kaufman 1974, 285). Bonds between patrons and clients are based on mutual benefits, while the power is distributed disproportionately

between the two parties. Patrons are usually embedded in a wider network of relations (multi-level) and middlemen are the contact persons between clients and patrons. The system flourishes in societies with high inequality and insecure political and economic systems and hardly any welfare system (Brinkerhoff and Goldsmith 2002, 2).

(3) Local legitimacy. A third factor to consider in the explanation of project success is the extent to which project partners are able to gain local legitimacy and foster project realization, which ultimately gives project effectiveness. In the literature, it is assumed that a lack of local legitimacy of external actors blocks the initial process of co-evolution of actor arrangements and hence results in project failure. Therefore external actors build on this local legitimacy by adapting their operational activities to the preferences and strategies of the local partners and provide a participative, viable, innovative and manageable project approach in order to get their project on the ground (cf. Beisheim et al. 2014b; Krasner and Risse 2014).

(4) Resource availability. Material as well as immaterial resources shape the interplay and can be considered as an important part of specific governance configurations. Resources allow actors to fulfill certain tasks, constitute order and control and expect obedience of the rules and regulations they set for others. In order to exercise “informed decision-making, organizational capacities for implementation and legitimacy” (Risse 2012, 11), governance actors need a variety of different material and immaterial resources. Material resources are the physical resources that are inserted by the participating actors. Physical capital is needed to make happen what would otherwise not have occurred. In fact, since physical resources are such strong factors in the interplay, they may also produce power imbalances and conflicts among partners (Brondizio et al. 2009, 260). Besides physical resources, human capital and immaterial resources, such as knowledge and technical expertise are two examples that may determine the project’s performance. Human capital includes staff size in the actor arrangement, and actors’ capabilities and knowledge is considered as immaterial resources that contribute to the planning, vision and implementation phase. Moreover, immaterial resources may also include the abilities of an individual or organization, which contribute to mutual cooperation, respect and trust in a relationship and which also give the actors a sense of obligation and commitment to one another.

Table 3.3 summarizes the alternative explanations that may also give a reason or provide for an explanation of program success.

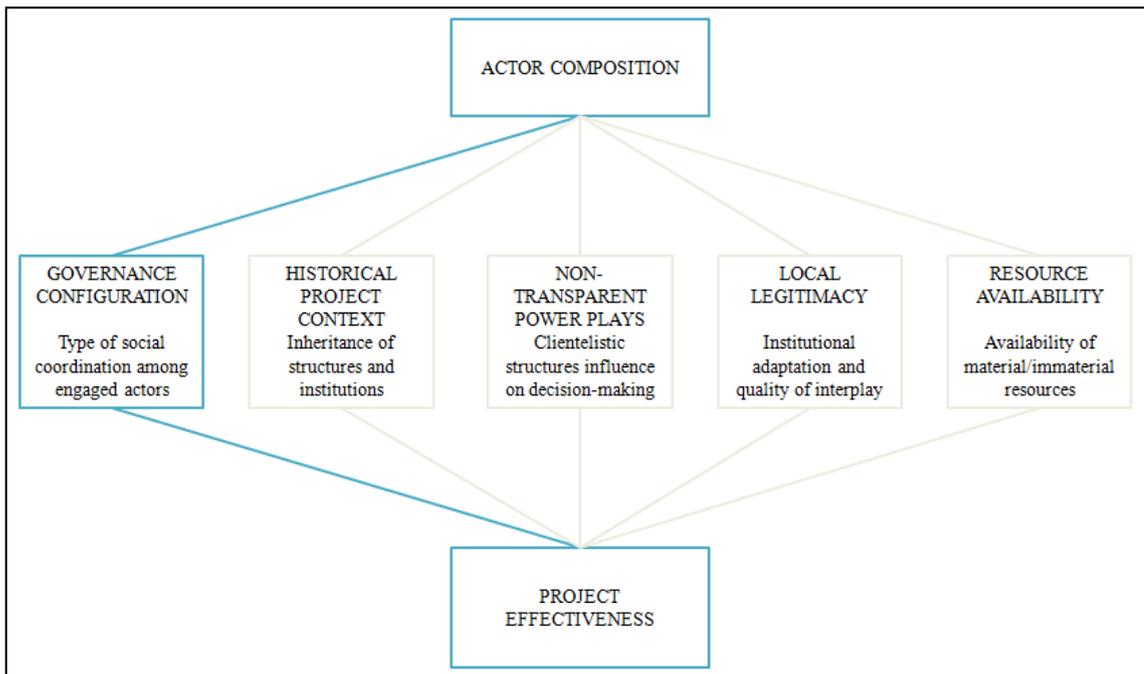
Table 3.3 Alternative Explanations

Alternative Explanations	Assumption for Effectiveness
Historical Project Context	Issue linkages: Inheritance of project relevant structures or human resources that impact project onset and success
Non-Transparent Power Plays	Clientelistic relationships prevent transparent decision-making and provide an obstacle for project effectiveness
Local Legitimacy	Adaptation of institutional structures to local counterparts increases the quality of the interplay and fosters project success
Resource Availability	The more material and immaterial resources are available the more likely is project success.

In my thesis the actor composition is the starting point when considering different reasons for project effectiveness. We find two types of actor compositions, new donors that collaborate with local recipients and conventional donors that engage with recipient counterparts. Figure 3.1 illustrates the theoretical assumption that there are different reasons that may provide an understanding of project effectiveness. In the empirical investigation they are treated as equally important. It is assumed that the empirical case studies reveal their degree of contribution to project results and hence provide a picture on what matters most for effectiveness. Moreover, it is of interest to identify whether new or conventional actor compositions differ systematically in what matters most for project success. Even though these reasons are treated as equally important, it is assumed that actor interplay plays a key role for project success and that the rival explanations may be important as well but don't provide for a necessary condition for project success. To sum this up, it is assumed that actor interplay is a necessary condition for project success, while the other factors may provide as supportive to success in terms of providing a catalyst function that positively influences the actor interplay.

Actor interplay being a necessary condition for the project's realization, has so far not been tested for its direct links to overall project success. By analyzing the patterns of social coordination within various actor consortiums and relating it to project success, this thesis aims to shed some light on systematic differences of foreign donors in actor interplay and their implications for project success.

Figure 3.1 From Action Behavior to Project Results



The reasons for a lack of water and sanitation services for the rural and urban poor in India are manifold. They range from a lack of public service capacities, to a lack of resources to plan and implement these public services for the poorer members of society, to even the unwillingness to act or the lack of knowledge of how best to provide the services and to break through the cycle of illegal water vendor structures. The challenges that state actors face in service provision are the entry point for external actors, who aim to provide an agenda to compensate for state weaknesses and overcome the obstacles towards adequate service provision. Institutional and structural change is considered a means of overcoming inadequate local administrative or financial capacities.

4 Research Design and Methodology

Analysing the activities and results of foreign aid programs requires having an understanding of the processes inherent to program implementation, as well as of participating actors and the program's context setting. To this end, the field research for my thesis was preceded by desktop research of relevant documents and evaluations for the respective programs. Field research is understood as a sequential process including several cycles of desktop research, interviews and participating observations over a duration of several years. The received qualitative data allows for detailed insights into complex project dynamics over time from various perspectives.

Qualitative research has been criticized for its subjectivity, lack in transparency and traceability, as well as weaknesses in causal inference, selection bias and codification of each individual step of research (King et al. 1994). This has resulted in a paradigm shift whereby qualitative methodologies were adapted to quantitative research logics. This paradigm shift, named after its main proponents King, Keohane and Verba as 'KKV', has in turn been overshadowed in recent years by a new strand of literature, which softened the quasi experimental logic of qualitative research designs (Mahoney 2010; Gerring 2004; Collier 2011; Beach and Pedersen 2013; Flick 2002). The new qualitative research paradigm claims more complex and appropriate methodological approaches for researching social phenomena. For example, it accounts for multi-level contexts and case complexity, and emphasizes the strength of qualitative research contributions to scientific debates as partial compensation for the deficits of quantitative approaches (Mahoney 2010, 122).

This chapter describes the research design of this thesis, and therefore links the research question with the empirical analysis of the thesis. It also clarifies the operationalization of variables, discusses the data collection process, and provides information on the method used to analyze empirical material. The chapter is divided into three main sections, encompassing comparative case study design, case selection and operationalization, and finally data collection and analysis.

4.1 Comparative Case Study Design

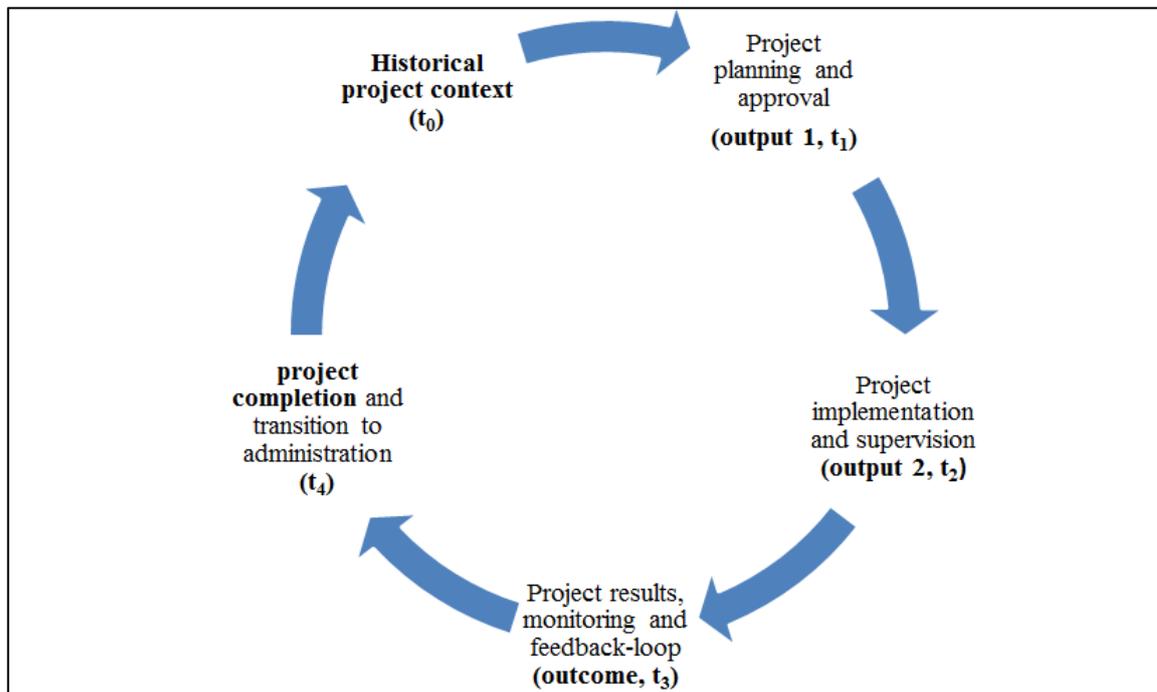
Case study research designs are applicable in situations where many variables determine an outcome and exceed the number of data points for analysis. Moreover, accessibility of information about a phenomenon requires multiple sources of information, such as interviews, field visits, document research and newspaper articles. The boundaries of the empirical phenomenon are not clearly evident and cannot be separated from the context of the social phenomenon under investigation (Yin 2009, 18). In foreign aid projects, the empirical phenomenon boundaries are blurred. We find various formal and informal actor constellations. These actors are embedded in complex political and institutional environments, and the social coordination varies due to the stage of implementation of a program. This leaves us with the question: what is understood to be a case in the present research, and what is defined as the unit of analysis?

The unit of analysis in my thesis is the implemented project itself, perceived as an entity from planning to implementation and completion within a given context setting. Project implementation is defined as the sequence of interplay activities spanning from project planning and approval to project completion, and includes decision-making by the recipient and donor actors. A project takes place in given social, temporal and spatial boundaries, and is embedded in a temporal and social context setting. When projects are implemented they also inherit personal and institutional legacies of prior activities in a given area, and their results may be influenced by the impact of these legacies. Even though we cannot clearly mark the project cycle as a bounded entity in terms of its duration and the involvement of actors, we do need to define what has to be understood theoretically as a 'project' in foreign aid. In accordance with Johnson (1984), a suitable definition for foreign aid development projects is: "a planned complex of actions and investments, at a selected location, that are designed to meet output, capacity or transformation goals, in a given period of time, using specified techniques" (Johnson 1984, 112).

In addition, another useful consideration when defining projects is the steps that make up a project cycle. Rondinelli (1977) developed a project cycle with twelve steps that mark the crucial decision points in development projects: "(1) Project identification and definition, (2) project formulation, preparation and feasibility analysis, (3) project design, (4) project appraisal, (5) project selection, negotiation and approval, (6) project

activation and organization, (7) project implementation and operation, (8) project supervision, monitoring and control, (9) project completion or termination, (10) output diffusion and transition to normal administration, (11) project evaluation and (12) follow-up analysis and action” (Rondinelli 1977, 5). This detailed description of individual steps of foreign aid implementation helps to understand the sequences of action in foreign aid collaborations. However, to make these steps operational for the comparative case analysis, I will distil them down into five key steps. These are as follows: history prior to the envisaged project (t_0); project planning and approval at international donor level (output 1, t_1); project implementation and supervision at local level (output 2, t_2); project results, monitoring and feedback-loop at a local level (outcome, t_3); and project completion, evaluation and transition to normal administration and maybe consideration of replication elsewhere (t_4). These five key steps are illustrated in the figure below.

Figure 4.1 Project Cycle



The first step, the historical project context (t_0), includes prior development projects and existing local governance structures, legislation, regulation and the institutional setup, all of which together provide the context situation for setting-up a new aid program (Heeks and Stanforth 2014, 19).

The second step of the project cycle, output 1, is the international and regional project planning and vision phase (t_1). This phase includes the vision and strategy of a certain

project proposal, as well as the design, negotiation and planning of the envisaged program. The third step, output 2, is the implementation and supervision phase (t_2), and contains the capacity building programs and strengthening of the project beneficiaries and the implementation of the project plan under supervision. At this stage, operational activities of the aid programs take place. The fourth step, outcome (t_3), describes the phase of program results that can be used by beneficiaries and that have improved a prior situation. This sequence is characterized by monitoring, control and, where needed, feedback loops to adjust and improve the implementation. The final stage is the project completion and transition to normal administration (t_4), which includes evaluation and follow-up analysis that aims towards the replication and scaling-up of a program approach. This sequence illustrates the ideal case scenario of program implementation. In reality, the sequence will not be that straight forward, include repercussions and feedback-loops that make it a rather iterative process of moving towards program implementation. However, the four developed steps of program implementation are important for analytical reasons of assessing the different stages within foreign aid program implementation.

Development project collaborations are known to combine different forms of social coordination over time. As Lowndes and Skelcher have summarized it: “Strategies to develop effective partnerships thus involve combining different modes of governance in an environment where the power relations between various partners will be shifting and the resulting dynamics will at one point stimulate co-operation and at another competition” (Lowndes and Skelcher 1998, 314). Typical characteristics of the individual interplay modes vary due to their sequential appearance in the project cycle. While rather informal and flexible decision-making is visible in the initiation and planning phase of a development project, a rather static, consolidated and hierarchical mode of action comes to the fore during the operational phase, during which processes and operations are formalized and consolidated (cf. Ranade and Hudson 2003, 37). To understand the dynamics of interplay in actor arrangements, the modes of social coordination at each individual stage of the project cycle must be analyzed in order to generate the cross-case comparison of my thesis.

Case comparison and inference-making from cross-case analysis are two strategies that are commonly used in social science research. Case studies have often been criticized for having too many explanatory variables and too few avenues to explore

them. Therefore, single case and multiple-case studies do not aim to generalize their results to an entire population; rather, they serve as a method for developing hypotheses and testing theoretical assumptions, and serve as a foundation for further, research (Lijphart 1971, 685). This thesis aims to apply a typology of social coordination across levels, actors and time to the action of aid implementation. To address the weakness of case studies, this thesis applies replication logic and derives its comparative insights from the cross-comparison of seven cases, which have been selected on the basis of theoretical sampling and identify empirical patterns that prove theoretical assumptions.

The most prominent technique of comparing cases in social sciences remains the approach of John Stuart Mill (1843/ 2002). Within this approach, two key aspects of controlled comparison are comparison as a method of ‘agreement’, the so called “least similar cases method” and as a method of ‘difference’, the so called “most similar cases method” (Mill 2002/1843). Both methods share strict conditions for case selection and the logic of laboratory experiments. Przeworski and Teune (1970) have criticized this method because of the difficulty in singling out experimental variables that would make empirical reality a controlled comparison; they suggest their own more easily applied version of a most-similar and most-different system of comparison (Przeworski and Teune 1970; Gerring 2007).

The comparative case study design of my thesis is based on Mills’ propositions on variances in case comparison. However, empirical investigation in foreign aid contexts does not allow for the application of a very rigid research design. This is because we do not find comparative cases that are that constant in certain factors and that vary in others. These case studies do not lend themselves to a laboratory type of experiment. However, being aware of these principles, and trying to adjust the comparative design as closely as possible to them, accounts for a comparative research design. I apply a comparative case study approach that combines the method of systematic difference, investigating the dependent variable of project effectiveness, with approaches of structured focused comparison and empirically grounded patterns of case comparison (cf. George and Bennett 2005). The approach of applying replication logic to seven cases aims to identify patterns of governance configurations over time. The detection of patterns is an alternative methodological technique for case comparison, which is based

on abductive inference-making³² from theoretical assumptions and empirical material. Generalization from case to case is possible only with the method of structured-focused comparison, which Geddes has described as “measuring the same causal factors and outcomes in the same way in each case; and the use of the cases other than those from which hypotheses have been induced to test arguments” (Geddes 2006, 172).

The application of structured, focused comparison requires two elementary steps: (1) develop a set of questions derived from this theoretical framework to be applied to each single case study, and (2) deal only with prior formulated and selected aspects of each case, in order to prevent non-structured and detailed case studies. After having applied these two steps to all selected cases, one can identify patterns of the relationship of social coordination and project effectiveness.

³² One can distinguish between inductive, deductive and abductive inference-making. A deductive approach applies established theoretical assumptions and hypotheses to explain certain social phenomenon. Inductive research explores the knowledge of social phenomena; it makes inferences for a particular case, but is not able to generalize findings from case to case. Abductive inference-making allows the detection of a new phenomenon based on existing theoretical assumptions (Kelle and Kluge 1999, 22).

4.2 Case Selection and Operationalization

In addressing the question of effectiveness in foreign aid project delivery, one can turn to an almost limitless number of cases. A focus on projects and service provision in water infrastructure programs in a transition country such as India reduces the number by a certain degree, but development projects have been implemented in India for decades and by a multitude of international foreign aid actors. Thus the universe of cases remains almost innumerable. To reduce the variance of political and institutional context settings, I limited my inquiry to projects related to water and sanitation infrastructure and service provision. I therefore identified all conventional and new actors that provide for completed water and sanitation aid programs in India in a given time period of approx. 12 years from 2000-2012.³³

Table 4.1 Donors in Water and Sanitation Engagement in India

Conventional Donors	New Donors
Multilateral and Bilateral Donors	Transnational Partnerships, Non-Profit Organizations and Philanthropic Foundations
AFD (France)	Arghyam
Asian Development Bank (ADB)	BIRD-K
CIDA (Canada)	CARE
DFID/Water Aid (United Kingdom)	Global Water Partnership (GWP)
EuropeAID (Europe)	India Water Partnership (IWP)
GIZ (Germany)	Naandi
Int. Fund for Agricultural Development (IFAD)	Oxfam
International Monetary Fund (IMF)	Saci WATERS
JICA (Japan)	Safe water network
UNDP	Water for People (WfP)
UNICEF	Water.org
USAID (US)	WSUP
World Bank/ Water and Sanitation Program (WB/WSP)	

³³ My sources of information for engaged actors in water and sanitation in India was the water portal: indiawaterportal.org and the partner and participation lists of the recent Stockholm's World Water Week as well as information by the Indian government.

Hereafter, I contacted all the donors, being active in India and aimed to access their project portfolio. Not all of these listed donors were accessible for my research project and rejected collaboration with me. Moreover, some donors programs did not meet the criteria of infrastructure service provision and a comparable degree of complexity. E.g. the new donor Saci WATERS was very collaborative with the author, and had implemented very successful knowledge projects in water and sanitation, but in the end could not be included in the present case comparison, due to lack of the basic criterion of infrastructure or public service provision.

After having established contacts with the seven organizations, listed in Table 4.1, their entire pool of cases was assessed and reviewed briefly by the author regarding the variance of project effectiveness and for an equal degree of task complexity³⁴. Cases were then identified with a variance in project effectiveness and a medium task complexity, which were then selected for closer analysis. Hence, effectiveness of the programs was assessed twice by the author. A first, rough assessment, based on project proposals of selected donors and the actual realization of programs served for case selection. In a second, in-depth assessment, I analysed the projects regarding the four categories of effectiveness, given later in this chapter.

This table lists all of the conventional and new donor actors under consideration in India that implement water and sanitation service projects. Those donors, marked in bold were selected for the empirical investigation. I selected three conventional agencies and four new donors on the basis of (1) the variance in project effectiveness, (2) a comparative degree of task complexity, and (3) their degree of collaboration with local state partners. This selection process limited the number of new donors to the four selected agencies: Arghyam, BIRD-K, Naandi and WSUP, all of which aimed to provide water and/or sanitation services to rural or urban poor as pilot programs for subsequent public service provision. All conventional donors collaborate with state partners, and in this case I selected DFID/Water Aid, GIZ and WB/WSP. Overall, these seven agencies implemented about 70 water and sanitation projects between the years 2000 and 2010. In an initial step, the effectiveness of all projects in this time period were accessed by desktop research into internal and external evaluations of these programs.

³⁴ The complexity of a task is defined as the number of interventions needed for task fulfillment, and the number of participating actors to be coordinated and administrated (Krasner and Risse 2014, 14).

Since my research aims to understand the relationship between social coordination and project effectiveness, the selection of the cases above was based on variance in the dependent variable: effectiveness. I aimed to analyze data-rich cases and to identify cases with varying degrees of project effectiveness in order to empirically test the theoretically predicted link between the mode of social coordination and effectiveness.

Table 4.2 Selected Cases for Analysis

Actor Type	Organization	Project Topic	Effectiveness
Conventional Donors	WB/ WSP	Water and sanitation in urban informal settlements	Medium/High
	GIZ	Water and sanitation in urban informal settlements	High
	DFID/ Water Aid	Water and sanitation in urban informal settlements	Medium
New Donors	Arghyam	Urban and rural rainwater harvesting	Medium/Low
	Bird-K	Rural rainwater harvesting	Medium
	Naandi	Rural water kiosk	High
	WSUP	Water and sanitation in urban informal settlements	Low

The ability to put concepts into operation is usually only applicable in quantitative, large-n studies, which enable large and abstract concepts to be made measurable with observable indicators. Since my thesis argues that sufficient reasons for a project's success are particular modes of social coordination (hierarchical-steering and non-hierarchical-steering) among involved partners, it is necessary to shed some light on modes of social coordination and how they are empirically measured and accessed. Large-n studies usually refer to observable indicators in interval (equally ranked sequences) or ordinal level (ranked) measurement. Case studies, in contrast, aim to reduce the complexity of categories and rather refer to nominal (unranked) scales of observable indicators (Geddes 2006, 145).

The research question this thesis poses is how actor interplay relates to project results and what conditions affect this link. In order to make this empirically observable, I now describe the measurement of the dependent variable (project effectiveness), and the measurement methodology for the independent and alternative explanation variables. The observable indicators of these variables are then described, and a set of questions is

generated for analysis in each case study. Finally, I explain the process of data collection and the rationale behind the use of different sources (data triangulation) as well as the technical steps of analysing and interpreting the data.

Project effectiveness in particular, and performance measurements in general, have always been controversial, and the scale of reference as well as the gradation among individual steps on that scale require particular attention. My thesis describes project performance in terms of *effectiveness* and conceptualizes this in accordance with David Easton's three-layer distinction of *output*, *outcome* and *impact* (cf. Easton 1965; Young 1999). This distinction can be further elaborated with reference to the definition of project effectiveness given by Beisheim and Liese (2009), which is precisely adapted for empirical and qualitative assessment of project effectiveness in complex and multi-layered governance projects. Beisheim and Liese distinguish *output 1* as referring to program results of international actors, *output 2* as being project results of local implementation partners, *outcome* as the uptake of the project by local target groups, and finally *impact* as the long-term change and effective problem solution (Beisheim and Liese 2009, 9). The reference point for the four dimensions of effectiveness is the achievement of the prior set goals (Fuhr and Lederer 2009; Beisheim and Liese 2009).

Output 1 refers to the appraisal and planning phase of a project, and assesses the extent to which participating actors provide a manageable project proposal plan, select team members and organizations for implementation and pave the way for legal and bureaucratic acceptance of the construction of infrastructure measures. Output 1 might contain such concrete actions such as holding information about the situation of land titles for their service in a given area as well as having gained knowledge of the particular needs of inhabitants of informal communities (e.g. providing for a sewage system in an informal settlement requires enough space in the individual homes to install an individual toilet) and having integrated these elements in the overall project plan.

Output 2 captures the implementation phase of development projects and assesses the technical implementation process as well as the inclusion of social and economic dimensions to make the project viable and accepted by the defined target group. Output 2 can be regarded as high, if the implementation is smooth, within time and according to plans and includes elements such as construction of public toilet blocks, public water

taps, individual household toilets or water kiosks. Output 2 is considered to be the pure technical implementation of the project proposal.

The outcome of the project refers to the provision of efficiently operating services and the up-take of the provided service by the group of project beneficiaries. This means for example, that a communal toilet block is actually used by the beneficiaries and that problems of open defecation are not observable any more. Also the establishment and active engagement of self-help groups (SHGs) as empowerment of inhabitants of informal settlements is considered as outcome.

The empirical accessibility of the long-term impact of projects is controversial and much discussed in literature. It is, however, included in the present approach, since all selected cases are analyzed retrospectively and had been terminated by the time this empirical investigation began. In order to keep the cases comparable, and to draw solid conclusions concerning their success, it was important that the projects had all passed comparable stages of planning, implementation and termination.

A project's impact refers to a substantial change in a given problem that existed prior to the project program. Has the problem been solved by the given approach in an adequate and locally adapted manner? Most important for judging impact is the self-sustaining status of the project. Has it been designed, implemented and handed over such that financial and technical inputs from foreign aid donor actors are no longer needed for it to remain viable and accepted in the target group?

E.g. the existence of a communal toilet block, being closed down due to lack of operation and maintenance does not account for successful impact of a program. In contrast, obvious increased welfare of inhabitants and provision of constant services that are self-sustaining or have established formalized interaction between public utilities and inhabitants of informal settlements is considered as a high impact of a program. Impact in my research focuses especially on the improvement of a given problem after program completion and withdrawal of the donor.

Nevertheless, one has to keep in mind, that impact is such a long-term dimension that its empirical measurement is amongst the most difficult and insecure assessments compared to the previous three dimensions of effectiveness and will in the end not weigh as much for the overall estimation of effectiveness as the other three dimensions of the concept.

Table 4.3 Operationalization of Project Effectiveness

Category	Definition	Values
<i>Output 1</i>	Realization of a project appraisal and provision of a project implementation plan and an existing network with prospective partners to set up the service provision	High/medium/low
<i>Output 2</i>	Provision of an effective operating infrastructure and acceptance of the service by the target beneficiary group for the respective project area	High/medium/low
<i>Outcome</i>	Substantial change of the previous lack of service provision, and up-take of the service by the beneficiaries group	High/medium/low
<i>Impact</i>	Substantial change of a problematic situation and accurate and self-sustaining solution of the previously existing problem in the respective service area	High/medium/low

The measurement of project effectiveness is related to this four-layered conceptualization of project performance of infrastructure-related water and sanitation projects in the Indian context. For this measurement, each individual dimension can be ranked as high, medium or low. The overall effectiveness of the project is evaluated in the analytical part of the thesis, where values for the individual dimensions as well as a mean value of all four dimensions are derived.

Table 4.4 Project Effectiveness Values

Category	Definition
<i>High</i>	Effectively operating service planning and provision with substantial change in the up-take of the provided service by the beneficiaries group and self-sustaining solution of the previous problem in the long run.
<i>Medium</i>	Partial success in service provision and acceptance of the public good by the beneficiaries group with limitations in planning, implementation and self-sustainability of the project approach
<i>Low</i>	No change in previous lack in service provision or no acceptance of project implementation plans for solution of a well-known problem or challenge in service provision

The methodological challenge in measuring effectiveness is to identify the point of reference that determines whether a result can be ranked high, medium or low. In the present approach, this point of reference is the project goal(s) and target(s), mostly as they are formulated in the mission statement of the organization (for the overall and long-term impact of a program) and in the project proposal plan of each respective

project. Another crucial part of assessing the overall effectiveness, is as mentioned above, the difficulty to define the degree of effectiveness in cases, where assessment varies between the different categories. Hence, the above given categories present in somehow ideal case scenarios, in empirical reality it is not always clear cut how to define a finding and integrate it according to the given rankings.

Critics of this methodology of internal points of reference would include the dimensions of the economic rate of return and the actual impact on poverty reduction and income distribution in the defined project area for the evaluation of project success (Lipton and Toye 1990, 148). However, the measure of economic rate of return is not applicable in my cases because most water and sanitation projects are not designed to become viable business models at the end; rather, they aim to provide the public service as a cooperative service or something comparable. Moreover, poverty reduction and income distribution in most cases are only accessible on a macro level and hence cannot be tracked back to the impact of a certain project in a given project area. But on the micro level of my research approach it proved to be helpful to include insights and expertise from actors external to the program consortium to validate the given information and triangulate impressions from field visits with insights from program members and insights from non-program members with documents and public media coverage, where applicable.

Actor interplay and social coordination are understood as different modes of social coordination with a combination of hierarchical and non-hierarchical steering in decision-making processes. For analytical purposes, I invoke four categories of hierarchical and non-hierarchical steering that are derived from governance thinking (Risse 2012; Offe 2008; Schimank 2007; Döhler 2007; Greshoff et al. 2011). Hierarchical steering is a mode of coordination in which rule enforcement is achieved by command and control on one side and obedience on the other; this mode of social coordination is rather inflexible, non-adaptive and very formalized in its procedures and rules of decision-making (Döhler 2007). To capture hierarchical steering in the empirical analysis of aid programs, two variances of hierarchical steering are differentiated.

The first form of hierarchical steering is authoritative coordination, which includes the strongest forms of vertical decision-making and authoritative and even coercive implementation of action, which in cases of delegation relies not only on contracts but

rather on immediate instances of control and command (on-site monitoring). This mode of coordination e.g. manifests empirical at situations where one actor claims a dominant position in decision-making, without any willingness for negotiation or inclusion of knowledge from another actor. Moreover, authoritative decision-making means also to have the power to make decisions and not being willing to accept any other dominance or input from an actor, being part of a consortium.

The second form is delegative coordination, which includes command and control decision-making in a context-embedded sense, with control of delegated implementation of decision-making. Delegative social coordination still pursues a vertical decision-making style, but it allows for more influences and ownership of lower level positions in the vertical actor chain. Delegative coordination manifests itself in a control-and-command decision-making style, combined with softer steering styles such as inclusion of inputs and suggestions from local civil society partners or at least awareness for increased ownership by pursuing a rather inclusive and participatory style of implementation.

Non-hierarchical steering is characterized by negotiation, bargaining and communication as modes of decision-making (Schimank 2007), and here again I distinguish two versions. The first types of non-hierarchical steering is instrumental coordination, which includes steering by setting incentives, manipulating the interests of the opposition towards one's own interests, and creating artificial learning processes and sanctions. As a mode of action, it is not transparent and inclusive for all involved actors (Benz 2007). This type of interaction can be best illustrated by agents that conduct stakeholder-workshops to transfer selected sets of knowledge and information. This asymmetry in knowledge exchange is based on experience to pursue a hidden- as well as a formal agenda of knowledge sharing. Communication channels follow official procedures as well as informal channels of interaction to achieve desired negotiation results.

The second mode, communicative coordination, is best characterized as a transparent and inclusive vertical communication process of arguing, persuasion and negotiation about goals and processes among actors at all levels. Non-hierarchical steering modes are best characterized as network modes because they aim to include all participating actors into the decision-making process (Schimank 2007; Wald and Jansen 2007). Empirically, communication mode of coordination may manifest itself in institutional

changes of a local donor consortium that mimics public sector structure in order to achieve communication on a regular basis, increase knowledge about internal information of utilities and also increase visibility over time to be included in negotiation processes. In a complex actor environment on recipient as well as donor side in India, gaining visibility is a key to constant communication and negotiation with respective partners.

The combination of coordination modes of involved actors describes the relationship between project partners, and I also refer to this as governance configuration in this thesis.

Table 4.5 Operationalization of Social Coordination

Categories	Values	Definition
Hierarchical Steering	(1) Authoritative Coordination	Vertical decision-making and coercive implementation with no influence of lower-level actors. Strict and formalized accountability mechanisms, monitoring and reporting schemes are observable
	(2) Delegative Coordination	Vertical decision-making with delegation and influence of lower-level actors, but no participation of beneficiaries and hence a lack in local ownership. Non-transparent application of monitoring mechanisms, but hierarchical accountability and reporting procedures are observable
Non-Hierarchical Steering	(3) Instrumental Coordination	Horizontal decision-making with manipulation and non-inclusive incentive setting and non-transparent decision-making rules towards self-interest goals with non-transparent participation mechanisms of local beneficiaries. Non-transparent application of monitoring and accountability mechanisms
	(4) Communicative Coordination	Horizontal decision-making with inclusion of all actors and transparent communication and decision-making rules, balanced distribution of resources and monitoring and transparent and equal (checks-and balances) accountability and supervision strategies are observable

This ranked scale of the four types of social coordination, from very hierarchical to soft-hierarchical to non-hierarchical steering and finally, to almost horizontal coordination, is applied in order to capture the nuances of the relationships among engaged actors in foreign aid projects. This ordinal scale does not allow for mathematic transformations, but it does allow for a fine grain analysis of social action modes among engaged actors and it sheds light on social coordination over time. These four modes of social coordination are applied to all selected cases to identify the relationships among

partners over time during project implementation. The quality of the interplay is derived from the combination of the modes of coordination and the resulting governance configurations, which thus addresses the central empirical research question of this thesis. Beyond the actor interplay, additional factors are also considered to be relevant for project success. These are the subject of the next section.

Linking foreign aid project effectiveness to different governance configurations as the key determinants of success is subject to criticism, since rival explanations and variables could also impact upon project performance. In the theoretical part of my thesis, I identified four variables as potential rival explanations, which are discussed as key factors in foreign aid literature: (1) path dependencies from previous aid projects in a given study area; (2) the influence of non-transparent power plays; (3) local legitimacy of external actors; and (4) resource availability. The next section elaborates on the conceptual dimensions of these variables, and translates them into measurable constructs for empirical analysis.

Foreign aid projects do not operate in a vacuum, and hence the historical context of a project is relevant to control for path dependencies of relevant context situations. Previous foreign aid programs may have already introduced new management structures and institutional changes that can be inherited and accelerate the project progress.

The second dimension, clientelistic relationships are a special form of corruption and non-transparent decision-making and unequal dependencies among actors. Non-transparent and sensitive issues are difficult to observe empirically. However, illegitimate ties between people and asymmetrical power influence of individuals in the project context are observable through a multitude of data sources and through direct observation in the field. In some cases, this is more than clear when speaking about personalities in the project context and gathering information on biographies and personal links among stakeholders in the respective area.

The third dimension, local legitimacy is the ability of an external actor to adjust its institutional design to local partners to influence the relationship in a positive way and ultimately achieve higher project results. This dimension is measured as the differences in organizational set up from the initial project planning and implementation through later stages of the project implementation. The quality of interplay is operationalized as the frequency and acceptance of communication among project partners and the relevance of this communication for project progress.

The fourth dimension, resource availability, refers to the availability and distribution of material and immaterial resources among actors and whether they are sufficient for project completion. An immaterial resource may be expert knowledge of particular technologies or patents that may provide the key for the needed service provision.

Table 4.6 Operationalization of Rival Explanations

Variable	Operationalization
Historical Project Context	Assessment of previous development projects in the area: what was the thematic focus, which actors were engaged, when did it terminate and what did it aim for? Empirical check for overlaps of actors and themes with the investigated project in the respective area
Non-Transparent Power Plays	Assessment and comparison of biographies of stakeholders for overlaps and unclear decision-making procedures. Assessment of personal challenges and obstacles in the stakeholder consortium
Local Legitimacy	Assessment of institutional design and comparison of this set up throughout the project cycle stages. Changes in the set-up are evaluated and interpreted for their impact on the relationship perceived as quality and frequency of communication
Resource Availability	Assessment of availability and individual possession and fundraising of financial resources (material resources). Assessment of outstanding persons (biography and status) or outstanding technological expert knowledge, compared to other central members of the project consortium (immaterial resources)

Table 4.6 summarizes the four alternative variables and gives examples of how they are measured in my empirical investigation. Data analysis and identification of certain types of social coordination is based on descriptions of the social reality. The empirical material is structured according to theoretical categories, and reduced to necessary and sufficient groups and types of social coordination.

This method aims to illustrate the complexity of horizontal and vertical linkages of social coordination and accountability mechanisms and at the same time to extract shared phenomena and divergent facts of the individual cases by setting them in relation to one another (cf. Kelle and Kluge 1999). However, one has to admit that the four modes of social coordination provide for ideal type modes of behaviour. Behaviour can change over time and so can the modes of interaction. Hence, they serve as foundation to identify “typical” cases that might still vary over time. Aiming to categorize the mode of coordination in such strict categories supports the research design of comparative case studies of my thesis and allows in the end to identify patterns of certain types of relationships among actors with respective program results.

The following table 4.7 provides a set of questions that is applied to all case studies with respect to the independent and dependent variables and rival explanations for outcomes. This set of questions serves as framework for analyzing the cases and is not identical with the interview guideline.

Table 4.7 Set of Questions for Case Study Investigation

Variable	Question
<i>Independent Variable</i>	<ul style="list-style-type: none"> - What types of actors are engaged in the project (actor composition)? - Which mode of social coordination is exercised by each actor? <ul style="list-style-type: none"> - Which actor is guiding decision-making processes? - What approach for M&E is applied? - Which leadership style is applied? - Which local actors are included and how effective is the communication with them? - Which governance configuration is observable? - Does the mode of social coordination and the governance configuration change over time?
<i>Dependent Variable</i>	<ul style="list-style-type: none"> - What is the overall project goal? - What is the overall agenda of the organization in the respective area? - What has been achieved from project vision and planning? - What has been achieved from project implementation and actor inclusion? - What has been achieved from project termination and self-sustainability?
<i>Alternative Explanation</i>	<ul style="list-style-type: none"> - Are there structures and features inherited by previous foreign aid projects? (historical context and path dependencies) - Which obstacles and challenges were met in the local context settings due to personnel interdependencies? Which actors were engaged and included in implementations that were not part of the project team? Why were they included? (clientelistic structures) - What institutional design and structural change is observable over time? (local legitimacy) How frequent do actors interact and what intensity and importance do these interplays have? (quality of the interplay) - Which material and immaterial resources were relevant for project success? Did the project ever face resource shortages? How did expert knowledge influence the relationship? (resource availability)

4.3 Data Collection and Analysis

My thesis draws mainly from qualitative data sources and this section therefore explains the data collection process and the methodology used to analyze my empirical material. My thesis distinguishes between three main sources of empirical evidence: (1) semi-structured and expert interviews; (2) direct project observation; and (3) external evaluation and different types of project documentation. Information in my research is drawn from all three sources of information, but the balance between the sources varies from case to case and depends on the availability of interview partners, internal and external documents and accessibility of project sites for repetitive field visits.

Selection bias in data collection is a common problem in qualitative research and is addressed in the present study by integrating different individual sources of data that are independent from each other. If the analysis of data sources by various scholars results in the same findings, qualitative research is considered as reliable. And if multiple measurements of the same phenomenon yield the same results, qualitative research is considered as valid. Data triangulation, the integration of independent and different data sources, helps to move beyond descriptive story-telling and allows us to make substantial inferences.

In my empirical research, I applied a stepwise approach of desktop research in rotation with three major field research phases in India.³⁵ Journeys to respective project sites and project relevant interview partners were organized independently and on short notice for the respective partner. After visiting a project site and speaking with people, interviews were documented with memory protocols (and in most cases also recorded) while field observations were documented in field notes with pictures, impressions and contextual information on the project site, such as historical events, cultural background of inhabitants or job market situation in a particular area. Documents were assessed beforehand, either online from the internet or provided by interview partners in the course of the conversation or in some cases were assessed online afterwards. In my

³⁵ My research visits to India were part of my project work for the D1 project of the Collaborative Research Centre 700 of the Freie Universität Berlin, and I am very grateful for the funding by the German research foundation (DFG) for travels to India and Bangladesh within the D1 project. Field research was organized by me and took place in 2010 (interviews with the secretariats), twice to India and once to Bangladesh in 2011 and once more to India and Bangladesh in 2012.

stepwise approach, each project was visited more than once and interview partners in most cases were available for follow-up questions later on.

Documentation means all forms of paper and electronic documentation that are available for a project, be they internal project reports, internal evaluations, minutes of meetings, email correspondence, organizational records (such as budget and personnel records), job announcements, memoranda, or external documents such as research studies, external expert evaluations, newspaper coverage or any other electronic report or article.³⁶

Newspaper sources for example provide important background and contextualisation. Documents are usually helpful in understanding narratives and verifying evidence from other sources. Internal and external evaluation reports of foreign aid programs are primary data as well and provide for critical and holistic insights into program implementation. To provide for valid and reliable measurements, it is important to categorize documents by source and to triangulate the information they contain with data from other sources such as interviews and personal observation. I carried out systematic searches for different primary and secondary sources, with extensive online research to clarify contradicting information before field research in India.

Interviews are another main source of data for case studies, and elicit empirical information from multiple perspectives. There are, however, various types of interview. While structured queries are used because of their association with surveys and quantitative research evidence, I would argue that guided conversations are far more fruitful, since they allow the researcher to access new information in a way that keeps the information comparative from case to case. Two types of interviews are used in this thesis. The in-depth interview is held over a longer period of time, lasting from at least one hour to a maximum of almost a day and being combined with a field trip. This interview form, based on a conversation guideline, allows for information gathering as well as sharing of opinions, discussion of events, and suggestions for further interview partners and source evidence.³⁷ The second type, the focused interview, is shorter in nature and serves as a conversation that confirms already existing empirical evidence or that clarifies contradictions; it draws on a selected set of questions from the entire

³⁶ See Appendix 1 for a detailed list of primary documentation sources (internal project documents) with authorship, date of publication, category of publication and accessibility; and see Appendix 2 for secondary data documentation sources (media article, online article, research studies).

³⁷ See Appendix 3 for the questionnaire used to guide conversation on primary data collection.

questionnaire (Yin 2009, 107). The interviews for my thesis are further distinguished as either primary interviews, held with stakeholders of a project, or secondary interviews, which were held with experts external to the project that possess information that reflects the activities, context situations or conflicts within the project from an external perspective.³⁸

A general conversation guideline and methodology for the interview research in this thesis was developed from literature on how to design, conduct and analyze interview-based social science research (Meuser and Nagel 2009; Kvale 2008; Nohl 2006; Helfferich 2005). The resulting interview guidelines for my interviews were tested in an exploratory manner before and at the actual field research.³⁹

In accordance with Beach and Pedersen (2013) validity of interviews was achieved in my research by (1) varying interview partners, (2) paraphrasing and contextualising interview content and (3) evaluation of accuracy by contextualizing the role of the interviewee (Beach and Pedersen 2013, 134). Interviews are reflexive in the sense that the interviewee provides the information that the interviewer aims to attain (bias of social desirability). I always asked for examples if an answer did not seem plausible. Additionally, the accuracy of interviewers' observation was evaluated by searching for patterns of information given by different interview partners. Another weakness of interviews is the period of time between the interview and the actual event discussed, and differences among interviewees in their memory of events, chronologies and details (Tansey 2007). Triangulation of the interview information with other primary and secondary data sources and interviewees was achieved in most cases, since the robustness of the empirical evidence can be guaranteed by this triangulation of data sources.

Direct observation is a third source of data, which includes contextual observation of project sites (field visits to gain technical details, geographical characteristics, physical artefacts and location information) as well real-time event observations of workshops and meetings of an organization (cf. Yin 2009, 102). My field visits are also treated as

³⁸ See Appendix 1 for a detailed list of primary data sources (interviews) with date and location of interview, organization and position of the interviewee; and see Appendix 2 for secondary sources (expert interviews).

³⁹ See Appendix 3 for more information on the interview guideline.

primary data⁴⁰ and consist of my impressions during visits to project sites. Impressions were documented with memory protocols of the conversations, pictures of the technical features or the situation in the project area, as well as geographical size and local context setting around a project area. Most project site visits took place with support of a project member because independent project visits may have been too dangerous or may have caused expectations among beneficiaries that I could not fulfil. Many project visits were made with a project member, other than the partner previously interviewed. Hence data from visits are in most cases independent of interviews about a project. One can claim that conversations with beneficiaries are biased because of the presence of a project team member. Yet beneficiaries seemed willing to speak openly in the presence of a project member. In cases of obvious lack of information (such as the failure cases of WSUP) I visited the project sites again with an independent expert in the field and spoke with beneficiaries again. Moreover, discussions with beneficiaries served to confirm the social context characteristics of their living situation before and after the program. This was not perceived as sensitive information and hence was shared easily with me in most cases. Observation of project technologies and in-depth discussions and focus groups with project beneficiaries helped to clarify the goals of the project, as well as actual achievements in the area and the adoption of the devices by the target group. Detailed insights about the technical condition and questions about operation and maintenance were clarified with field visits, which in many cases varied from two to four visits for each case site (in 2011 and 2012).

Even though my search for data was driven by a desire for finely grained empirical evidence, there remains a risk of bias in the perception of the cases due to non-balanced information and misinterpretation of sources by the author. The next section briefly introduces the different methods for qualitative data analysis and elaborates on sequential analysis, which is the applied method in my thesis.

Sequential data analysis includes different types of content analysis, such as building classes, quantifying wording, semantic and structure analysis and grounded theory, all of which are commonly used in social science research to analyze interview and documentation material.

⁴⁰ See Appendix 1 for a detailed list of primary interview and field observation sources with date and location of field trip.

Suggestions for a content analysis of documents invoke four major steps. Of these, the first is ‘soaking and poking’ or reading as many documents as possible related to a particular case in order to gain insights into the entire case narrative. Second comes the ‘prioritization and explication’ of the material, which aims to identify previously defined criteria and variables. Third is ‘categorization and coding’ of sequences within the text according to previously operationalized variables. The fourth step is ‘causal imputation and contextualization’, which includes the formulation of plausible, causal relationships in accordance with theoretical assumptions and propositions (cf. Hermann 2008; Nohl 2006, 34; George and Bennett 2005, 90; Reh 1995; Kuckartz 2009; Wohlrab-Sahr and Przyborski 2008; Mayring 2007).

This type of content data analysis approaches the material from predefined categories of content, and identifies codes that are thereafter identified in the empirical material. Collection of the identified codes under individual categories results in the findings of the content analysis, provides for themes that are important due to their frequency mentioned (intensity) in the material, and illustrates contextual connections beyond individual categories and aims to arrive at narratives in the end.

Since gathering data from interviews already introduces a recursive element in the form of follow-up inquiries on certain topics, it is important to counterbalance this recursive interview bias with adequate data analysis methods in order to receive insights into the entire narration of a case study.

My thesis is concerned with the analysis of social coordination mechanisms in the interplay of state and external actors, and hence seeks procedural insights into agents’ actions and habitual behaviors. The documentary method combines several elements that serve to reveal these social coordination mechanisms empirically and to detect comparable patterns of coordination. The empirical data collected for this thesis is analyzed by this method of narrative, sequential analysis, which emphasizes categories of text elements as important, but also accounts for sequences in general and aims to contextualize their content within the overall environment (Nohl 2006).

The method is based on the assumption that behavior is based on tacit knowledge that is not overtly expressed in an interview situation, but that can be reconstructed through the analysis of a sequence of empirical stories within a conversation. This assumes that responses in an interview are not stand-alone information; rather, their meaningful relation to one another needs to be teased out to express the tacit knowledge underlying

agents' actions. The reconstruction of sequences identifies the tacit knowledge and the behavioral context of each agent. Comparing different cases allows us to identify types of sequences, and goes beyond descriptive, empirical story telling towards the abstraction of intentional, objective and documented meaning of expressions (Nohl 2006, 8).

The empirical material of my thesis is analyzed in the style of the documentary, sequential method of analysis, but it also contain elements of the classic content analysis approach. Each data source was transferred into a written document and analyzed in the following scheme of implementation.

Table 4.8 Analysis of Empirical Data Material

Steps of Analysis	Practical Implementation
(1) Classification and Categories	Classification of the text material by its intentional and objective meaning. Identification of categories that have been derived from theoretical debates. Identification of categories that have not been identified beforehand (awareness of alternative explanations, unknown to the researcher)
(2) Paraphrasing	Structured description of the processes within each category. Identification of sequences of social coordination and their interrelationships
(3) Internal Contextualization	Comparison of the structured descriptions of different sources (other interview partners, documents, field visits, etc.)
(4) Cross-Case Contextualization	Comparison of the structured descriptions among cases (and data material) and identification of behavioral contexts of agents due to sequences of social coordination over time in the case study
(5) Analytical Abstraction	Analytical abstraction of the sequences and detected frames of agents' operation. Identification of ideal types, hybrid types and search for systematic patterns across cases due to theoretical assumptions and propositions

In a first step, the raw material of texts was reviewed for major categories that are in accordance with the identified variables and their operationalisation. This primary step of reviewing the data sources was also open to the inclusion of new categories that have not been derived from literature but that might have occurred systematically in the data material. Paraphrasing of the categories and case internal contextualization was the second step of the analysis. As a final step, cross-case comparison was applied in order to generate analytical abstraction from the single case insights, and to provide for comparative results on the relationship between actor interplay and project success.

I aimed in my qualitative research to develop a solid research design with a high methodological standard to remain credible in making conclusions and in yielding

results that may be replicable. It is difficult to judge whether a selected method is adequate for answering a given research question. However, there are certain criteria from quantitative sciences that can be applied to evaluate the quality of qualitative research designs: (1) construct validity; (2) internal validity; (3) external validity; and (4) reliability. These four categories address questions of the theoretical fit of the research design with the assumptions and propositions of theory. They also give research precision and enable standardization with similar (and accumulating) research on the same topic. Finally, they enable adequate emphasis on accuracy, transparency and representativeness of the chosen cases (cf. Gerring 2011, 627; Yin 2009, 41).

Table 4.9 Quality Criteria of Research Design

Criterion	Definition	Application
Construct Validity	<i>“Identifying correct operational measures for the concepts being studied”</i>	<ul style="list-style-type: none"> – Use multiple sources of evidence – Review case study reports by key informants
Internal Validity	<i>“Seeking to establish a causal relationship, whereby certain conditions are believed to lead to other conditions, as distinguished from spurious relationships”</i>	<ul style="list-style-type: none"> – Develop causal logic explanations – Address rival explanations – Do theory building
External Validity	<i>“Defining the domain to which a study’s findings can be generalized”</i>	<ul style="list-style-type: none"> – Apply replication logic in multiple-case studies – Apply theory-guidance in single-case studies
Reliability	<i>“Demonstrating that the operations of a study – such as the data collection procedures – can be repeated, with the same results”</i>	<ul style="list-style-type: none"> – Use data protocol – Make data collection and analyzed evidence transparent

Own adaptation of Yin (2003, 40) and Gerring (2011)

Comparative case study research designs follow replication logic in order to draw inferences from a few cases. However, statistical generalization, in the sense of making inferences from the given results for the entire population, is not possible based on case studies. Analytical generalization in cross-case study designs strives in particular to contribute to theoretical assumptions and claims with new empirical findings and with replication of the findings in comparable context situations (cf. Yin 2009, 38; Flyvjeberg and Bent 2006).

5 Water and Sanitation Aid Programs

Foreign aid implementation in India has seen major changes and different trends of implementation throughout the past decades. From a small-scale, detailed and mainly infrastructure-based project delivery mode, foreign aid has evolved towards channelling resources to individual policy sectors (such as health and education) in the form of ‘budget support’ or at least complementary project approaches with focus on local partners’ ownership (Riddell 2007, 47).

This chapter provides empirical insights from field research conducted over several months in Europe and in India in 2010, 2011 and 2012 and is divided into eight sections. This introductory part of the chapter briefly introduces the seven selected cases and their localization in the Indian subcontinent. Thereafter, sections one to seven provide detailed empirical analysis of the seven case studies, giving information on their effectiveness, the actor interplay and respective governance configurations, and investigating how these and other factors have impacted the project performance. This part of the chapter summarizes the empirical research material and provides insights into the project cycles and results of each of the case studies. The final section of this chapter then provides a comparative analysis of the seven cases, and elucidates empirical patterns of actor interplay and effectiveness. Thus, it provides an answer to the question of whether a relationship exists between actor interplay and project effectiveness and whether new or conventional donors differ systematically in their actor interplays and project results.

The next section provides comparative insights into the different areas in which the case studies are located, and highlights their similarities and differences in social, economic and political respects.

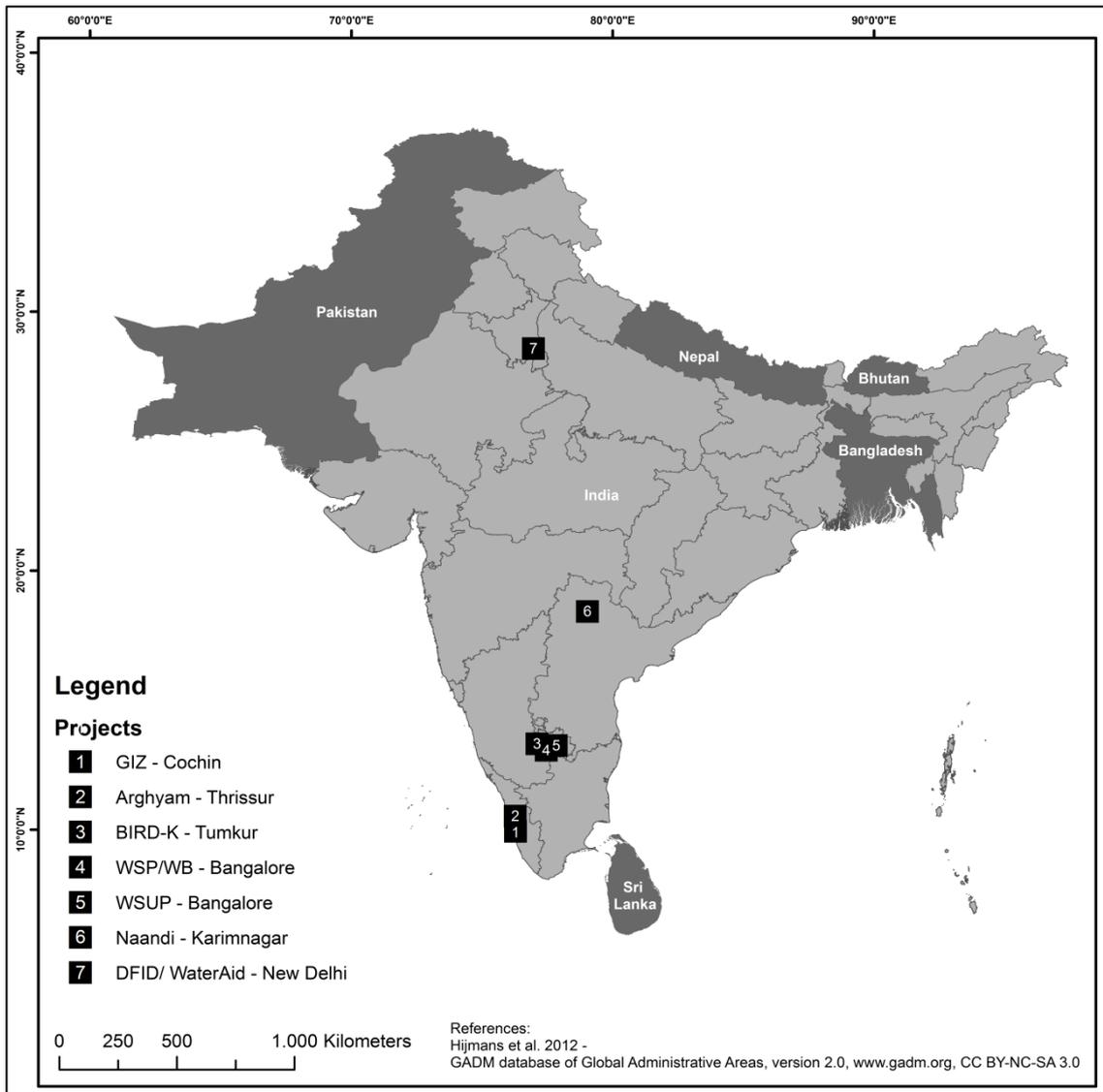
The seven cases of my thesis are scattered geographically across all of India. Even though India is one country, its individual states are as different as nation states can be. Regional disparities are found in the macro-economic situation of states, social welfare systems and public service provision, as well as in political decision-making, administrative implementation and party politics. India’s 29 states and seven union territories also vary in their religions, traditions, language and degrees of poverty.

Table 5.1 Seven Water and Sanitation Programs

Donor	Type of Donor	Rural rainwater harvesting versus urban, public water and sanitation
GIZ	Conventional	Urban (Cochin, Kerala)
Arghyam	New	Rural (Kerala)
WSP/WB/JICA	Conventional	Urban (Bangalore, Karnataka)
WSUP	New	Urban (Bangalore, Karnataka)
BIRD-K	New	Rural (Karnataka)
Naandi	New	Rural (Andhra Pradesh)
WaterAid/ DFID	Conventional	Urban (New Delhi)

The seven projects are located in different Indian states and areas within states. While the GIZ and Arghyam programs are located in two cities of the southern state, Kerala, the projects of WSUP, WSP/WB and BIRD-K are located in another southern state, Karnataka. BIRD-K is the only one not providing services to the urban poor of Bangalore, instead operating in rural areas north and south of Bangalore city. The Naandi projects are located in rural areas of Karnataka's neighboring state, Andhra Pradesh, where the area characteristics are comparable to those of BIRD-K. The only case in northern India is the program of DFID/Water Aid, which operates in urban informal settlements of the New Delhi Union Territory, whose area characteristics are comparable to the informal settlement projects in Bangalore city.

Figure 5.1 Geographical Location of the Seven Cases



Kerala is among the most densely populated of India's states, with a total of about 33 million inhabitants and about 819 people per square kilometer. Andhra Pradesh⁴¹ has a population of 49 million people and is not as densely populated as Kerala, with 308 people living per square kilometer. Karnataka has 61 million inhabitants and 319 people living per square kilometer. New Delhi Metropolitan Area has currently about 21 million people, with 11,297 per square kilometer. Kerala and New Delhi are densely populated and well developed⁴². Karnataka and Andhra Pradesh are characterized by domination of the agricultural sector in rural areas and by IT sectors in their IT hubs, Hyderabad (AP) and Bangalore (Karnataka).

⁴¹ Andhra Pradesh (AP) used to cover the state area of AP and Telangana. In 2014 Telangana was officially formed as an additional state of India. Since project implementation and field visits took place before separation of the state, this thesis speaks of the former state AP that included the Telangana state.

⁴² All numbers are based on the Government of India's (2011) census of India

Politically, these states differ significantly based on the dominance of the ruling parties. Kerala has seen decades of rule of the socialist party and has the most institutionalized system of decentralized decision-making, the panchayats. Karnataka and AP, in contrast, are dominated by the rule of the congress party with strong left-wing districts in Telanagana parts of AP.

The macroeconomic environments of the projects are captured by the Gross State Domestic Product (GSDP) and main industrial sectors as driving forces of the states and the average growth rate of GSDP. The social and development parameters of literacy rate, population density and average life expectancy in years serve as indicators of the development and demographic characterization of states and allow comparisons between India's states. The political context of each of the three states and the Union Territory is given below, where each of the case studies are elaborated.

Table 5.2 Macro-Economic and Social Parameters

Parameter	Source	Kerala	Karnataka	Andhra Pradesh	New Delhi
GSDP (%) of all States	Planning Commission 2012-13	4.2	5.6	7.8	3.9
Average GSDP Growth Rate (%)	Centre for Monitoring Indian Economy (CMIE)	12.3	15.5	16	17.5
Literacy Rate (%)	State economic surveys	90.92	75.6	67.7	86.3
Average Life Expectancy (years)	State economic survey	73.9	65.35	64.2	72.9
Population Density (persons per sq km)	State economic surveys	819	319	308	11,297

As we can see from the table 5.2, GSDP is highest in Andhra Pradesh, which also has the second-highest growth rate, driven by the agricultural sector. This state has a vast and growing knowledge-based industry based on sectors such as IT, biotechnology and pharmaceuticals (IBEF-Andhra Pradesh, 2013, 5). The states of Karnataka, Kerala and New Delhi share comparatively similar economic and social parameters. While New Delhi has the weakest GSDP among the four states, it still ranks in the first quartile of all Indian states, and holds the highest potential for the future with a yearly growth rate of 17.5 percent. New Delhi is the political centre of India, and is characterized by a growing IT industry and large financial and service sectors (IBEF-New Delhi, 2013, 4).

Karnataka is predominantly characterized by a large and still growing IT sector, with the service hub of Bangalore City. Ranking second highest in GSDP among the four states, Karnataka is also well known for being a knowledge and education hub for young academics. Kerala, the southern state, is predominantly characterized by a well-developed tourist sector; it also offers IT knowledge as well as spices and herbs in the agricultural sector (IBEF-Kerala, 2010, 7).

Taking a look at the social indicators, India overall has an average life expectancy of 65 years, which is below the global average. It has an average of 74 percent literacy rate. Kerala is the Indian state with the highest life expectancy rate, closely followed by New Delhi, and both are above the global average; the other three states are close to the global average in life expectancy. We can also observe differences in rural and urban areas due to variance in food supply and hygienic conditions and availability of health services (Kounteya 2010).

Building on this sketch of the different areas, in the following sections, I provide an in-depth empirical analysis of the cases in rural and urban areas. Four cases represent new donor consortiums and three represent conventional donors. This imbalance of cases is due to the higher accessibility of conventional donors and their programs in the field. For each case I apply a comparable scheme of analysis and the same set of questions. Firstly, the area context and program information is given, and I assess the dependent variable, degree of project effectiveness. Secondly, I discuss the mode of coordination (the independent variable) throughout the project cycle, along with alternative explanations for the degree of project success. Finally, the findings of the cases and factors that determined project success are summarized.

5.1 Urban Sanitation Planning and Wastewater Treatment, GIZ

Cochin is a city on the coastline of southern India, with about 2.1 million citizens; its surrounding areas are tropical with many fresh water lakes and salt water basins. The mixed freshwater and saltwater environments are extremely vulnerable to external influences such as increases in water levels, extreme weather events (heavy monsoon rains) and wastewater discharge of the local industrial and domestic sectors. A public sewage treatment system covers only small areas of the city, and the public water bodies and canals are therefore heavily polluted by untreated wastewater disposal and dumping of solid waste (Corporation of Cochin 2012, 1).⁴³ The informal, almost ‘parastatal’ structures of wastewater and waste disposal in public spaces are the largest challenge to environmentally sustainable development as well as service provision by public actors in the area (Nivedita 2010, 6). In 2006, the GIZ-led Advisory Services in Environmental Management Program (ASEM), in collaboration with the Indian national government, initiated a technology, capacity-building and transformation-focused program. This program aimed to upgrade the environmental status of five cities in India, with Cochin⁴⁴ among them. The main implementing actors on the national level are the GIZ-ASEM project team and the Ministry of Urban Development (MoUD).

Info Box: Urban Sanitation Planning and Wastewater Treatment, Cochin (GIZ)

Components: Enhancing knowledge and planning procedures and achieving urban sanitation and waste treatment by drafting a city sanitation plan, conducting technical and administrative trainings to improve the system of water supply and wastewater treatment, and establishing capacity-building measures through digital working units and electronic administrative processes.

Scale: Citywide improvement of water and sanitation (177,000 households) with a focus on the urban poor and improvement of the environmental situation for Cochin region.

Duration: 2010-2014 (Stage 1)

Partners: GIZ, Ministry of Urban Development (MoUD), Technical Advisory Group (TAC), State Level Steering-Committee (SSC) Kerala, City Task Force (CTF) at the Municipal Corporation, Cochin

Parallel to this initiative, the Indian government launched the National Urban Sanitation Policy (NUSP) in 2008, which provides a vision of community-based sanitation in all states of India, and is linked to the Indian financial support scheme, JnNURM

⁴³ All documents given in this case study section are considered as primary data sources (for more information on primary data, see Chapter 4) and are separately listed in Appendix 3: List of Documents.

⁴⁴ The other four cities in the program are Tirupathi (Andhra Pradesh), Nashik (Maharashtra), Raipur (Chattisgarh) and Shimla (Himachal Pradesh).

(Jawaharlal Nehru National Urban Renewal Mission) for urban modernization (SNUSP 2013a, 2). The combination of these policy changes prove the willingness of state actors to act, and includes the availability of external expertise and capacities on sustainable development, such as GIZ. It also aims towards solving the problem of environmental degradation of public and private water bodies, including the touristic attraction of the Kerala Backwaters⁴⁵, and of public land through inadequate waste and sewerage disposal (SNUSP 2013c, 14 and 17). This window of opportunity⁴⁶ represents a catalyst for program success. The multi-level approach includes policy recommendations on the national level (harmonization of institutions and advice for sanitation plans) and the federal level (conceptualization of sanitation plans), and a cross-cutting task of vertical knowledge management (GIZ-ASEM 2011, 5).

The next section analyzes the effectiveness of the GIZ-MoUD program for Cochin City, and gives insights into the details of project implementation. The entire program on total urban sanitation is embedded in a long and complex time frame and has been implemented in three stages over eight years.

5.1.1 Achievements of wastewater treatment program in Cochin

The overall ambition of the program is the improvement of service provision in the sanitation sector as such, with particular focus on sanitation improvements for poorer citizens: “Total Sanitation Plans focuses more on spatial coverage whereas Inclusive Sanitation Plans focuses more on covering various groups of people in the cities i.e. low income settlements, regular floating population, or in specific period, specific professions like construction workers, informal employment and so on” (GTZ-ASEM, 2010). Besides these demand side-oriented objectives, an additional and major service supply side-oriented component is to transform local decision-making structures into multi-level and cross-sector interaction modes of governance with innovations in electronic and digital management of the administrative units and procedures (Corporation of Cochin, 2011, 129).

The findings of this case relate only to the first program stage (2010-2014). The overarching program goals are supplemented by a set of four procedural objectives that

⁴⁵ The Kerala backwaters are a system of lakes, canals and lagoons, with a unique ecosystem of flora and fauna, based on a mix of fresh and sea, flowing parallel to the Arabian Sea in South India's state Kerala. It is a center of local tourist activity such as houseboat cruises.

⁴⁶ Windows of opportunity are considered as tipping points at which significant changes in existing policies and regulations are possible. Windows of opportunity are considered as opening up when “problems, solutions, and politics come together at a critical time” (Olsson et al. 2006, 25).

sequentially follow the logic of the project cycle. The project consortium provided the overall vision and goals of the program that can be categorized into the more nuanced dimensions of output 1, output 2, outcome and impact. *Output 1* includes the provision of a project vision and plan, as well as viable working units and steering committees that produce concise sanitation plans for respective city areas in accordance with the National Urban Sanitation Policy (NUSP): “In order to enable a coordinated and orchestrated action by the multiple actors [...]” (Director, IPE, Bangalore, cited from: GTZ-ASEM, 2010, 7). *Output 2* is considered to include the design of a CSP itself and manageable working units for further processes, realistic time frames and focus on improvement of the urban poor. *Outcome* is the result of training and workshops for state and city staff members to make them aware of and knowledgeable about the individual components and steps of procedure towards a CSP. The long-term *impact* at this stage of the project is the institutional consolidation of new working units and substantial change in coordination mechanisms towards more orchestration and less hierarchical decision-making in order to pursue a cross-sectoral solution (GTZ-ASEM 2010, 8; GIZ 2012; SNUSP 2013a, 3).

Regarding *output 1*, the project consortium adequately developed a joint project plan and vision at round tables at the highest political level of project implementation in five pilot towns and translated these visions into internal work plans for state-level implementation (Senior Advisor, GIZ, New Delhi: 08/03/2011). With an eye to *output 2*, the national project team of GIZ and MoUD succeeded in providing tools and services to generate a baseline study of the sanitation situation in the city and to establish knowledge management platforms for all participating actors. The infrastructure for implementation of new knowledge, training of staff members and adaptation of proposed service provision processes aimed to be able to adapt culturally and technically to local circumstances (Senior Advisor, GIZ, New Delhi: 08/03/2011)⁴⁷. Moreover, a training workshop provided project representatives with the knowledge needed to adequately plan and implement a City Sanitation Plan (CSP), with financial control by and viability of the local stakeholders assured (GIZ, 2012, 2 and GTZ-ASEM, 2010).

⁴⁷ All interview sources given in this case study section are listed according to organization and in alphabetical order in Appendix 2: List of Interviews. Interview partners' names are anonymized; they are separable by their job title, organization and location.

Following this stage, the Cochin city task force team, in collaboration with the municipal agents, drafted a CSP highlighting their organization’s capacity, financial sustainability, most-needed areas and populations as well as the technical feasibility of the suggested solutions. The CSP of Cochin is based on a comprehensive baseline study that identified institutional structures, sludge management practices and a feasible working plan for implementation, with a particular focus on the urban poor. GIZ staff members evaluated this *outcome* of the Cochin program in order to guarantee feasibility and inclusiveness of all relevant dimensions, namely geographical and socio-economic circumstances, the legal framework and the technical and financial environment (SNUSP 2013a, 15, The Indian Express 2013).

Table 5.3 Effectiveness of GIZ Sanitation Project (Stage 1, 2010-2014)

Category	Project Goals: GIZ/ Cochin	Achievements	Value
<i>Output 1</i>	Provide for project vision, plan and steering committees that coordinates implementation	Round tables at a national level and establishment of vision and work plans	High
<i>Output 2</i>	Provide for knowledge and information at state and city level through training and workshops	State level workshops for state and city staff members to provide knowledge and expertise	High
<i>Outcome</i>	Provide an adequate CSP with feasible work packages and time frames with a strong focus on improvement of the urban poor	Provision of a holistic and solid CSP for Cochin with a focus on the most-needed areas and informal settlement areas, based on a baseline study	High
<i>Impact</i>	Institutional consolidation of the steering committees and substantial change in coordination modes	Establishment of institutions at a national, state and city level, which operate effectively, and establishment of TAC on a national level	High

Regarding the *impact*, the three core task groups at the national level (environmental cell in MoUD), state level (SSC) and city level (CTF) were consolidated as nodal agencies that participate in workshops, implement surveys, work on implementation of the CSP and hence adequately carry out their designated functions in the consortium. These institutions are meant to achieve network coordination in local settings and have had high success rates. Moreover, on the national level, the GIZ team established an international technical advisory team (TAC) with regular meetings to identify core challenges and develop up-to-date policy recommendations for water and sanitation service delivery in the Indian context. At regular meetings of the technical advisory

team, which included partners from all levels, the three most important success factors were identified: (1) including local governments as key stakeholders and putting them in the driving seat; (2) building capacity tools and interactive training units for local ULBs; and (3) assuring participation for ownership and operation and maintenance (SNUSP 2013b, 22).

The effectiveness of the GIZ sanitation program and implementation of its first stage in Cochin can be ranked as high due to its achievement and due to incremental change in the modus operandi of public utilities towards participatory approaches. Even though, this finding does not yet address the overall goal of ‘total and inclusive sanitation’ one can argue that the present achievements serve as a solid ground for further implementation. Even though this first stage took more time in implementation than originally planned, the set-up and results of the program are remarkable. This success story is based on various factors. The next sections provide insights into the horizontal and vertical actor relationships, and consider alternative explanations for the success of this program.

5.1.2 Actor relationship in the implementation process

This project is characterized by multiple interplay points of participating actors on national, federal and city decision-making levels. GIZ-ASEM is perceived and acts as an external expert with knowledge contributions in the project consortium. GIZ’s work in this program includes the advisory role and critical feedback of an international Technical Advisory Committee (TAC). On the state level, the initiator and political counterpart of GIZ is the MoUD, with an established “environmental cell”, an institutionalized layer of bureaucracy whose authority is delegated by the state government (GTZ-ASEM 2010, 6). As is inherent to bilateral aid, GIZ is mandated by different ministries of the German government to fulfil the function of a collaborating partner of the Indian government and to provide the needed expertise. On the state level, GIZ interacts with state counterparts in accordance with the bilateral MoU and with determined and formalized catalogue decision-making procedures. Beyond this, all activities of external actors in India are “heavily controlled, steered and conducted” by the Indian government, a power relationship described as the most “centralized development aid system”. The Indian government coordinates the activities of bi- and multilateral agencies and purposely prevents harmonization among them (Senior Advisor, GIZ, New Delhi: 08/03/2011). The MoUD steers the joint program in a

hierarchical mode of coordination and action, manifested in the strict control of all stakeholders: “The agenda of programs and action of bilateral and multilateral agents is determined by the bureaucrats of the MoUD” (International Development Aid Consultant, New Delhi: 24/02/2011).

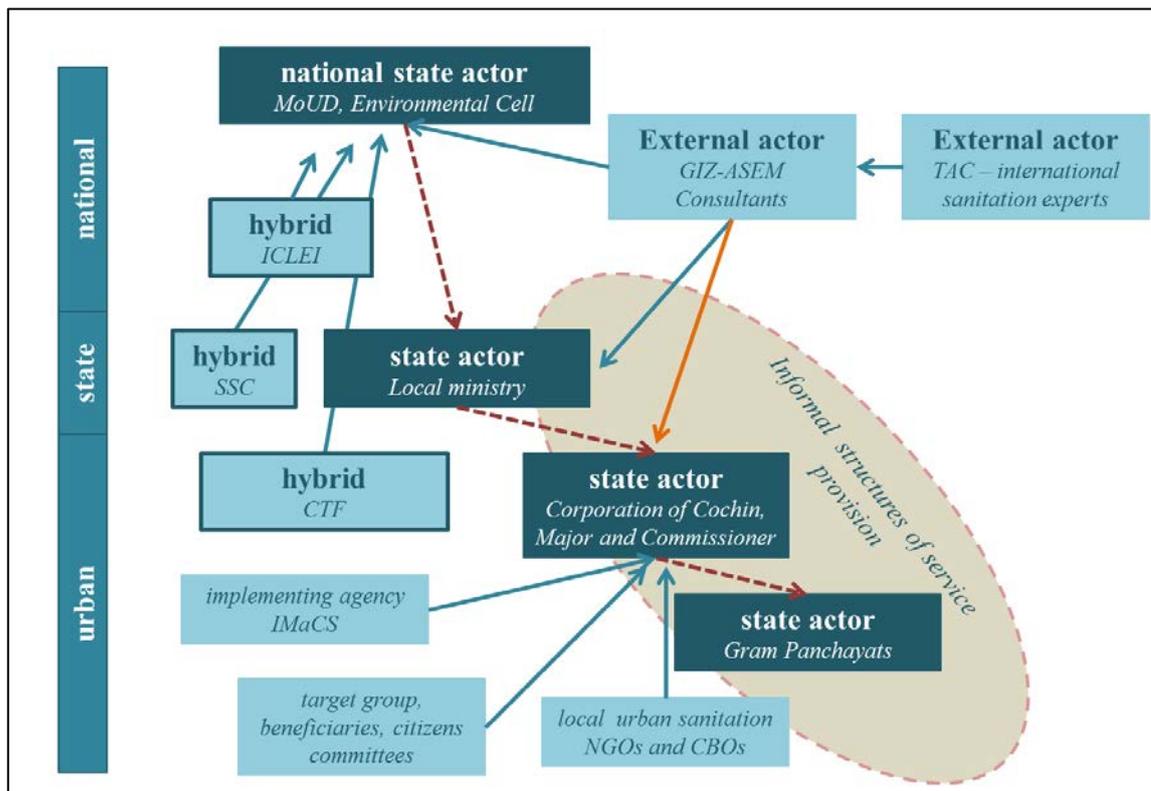
The MoUD has established its own technical advisory board and neglects the GIZ-initiated international advisory expert team (TAC). Being a nation that was suppressed by external actors for centuries, India’s demand for command and control is visible in all procedures and decision-making processes, and can clearly be attributed to its colonial history. Even though these hierarchical decision-making structures work in most cases very efficiently, they are mostly not transparent and not comprehensible to external actors (Senior Advisor, GIZ, New Delhi: 08/03/2011). There is only very limited influence exerted by lower-level state partners on national, state decision-making processes (GTZ-ASEM 2010).

Planning, development, decision-making and approval of project elements are coordinated and catalyzed by internal government units; hence, the mode of social coordination of state actors with external actors is identified as *hierarchical steering*. The ministry outsources essential tasks and decision-making power to the environmental cell as a ‘sparring partner’ for the external actors. Inclusion of actors beyond the ministry itself in decision-making and essential contributions shows the hierarchical steering to be a mode of *delegative coordination* with lower-level, inclusive decision-making elements.

The GIZ-ASEM consultant team, as the international aid partner in this arrangement, has a long history of engagement in India, and in the past was well known as a partner for technical cooperation with a very decentralized and participative style of project planning and implementation. The new agenda of the Indian government for foreign aid partners forced GIZ’s mode of operation towards a more macro- and meso-level advisory function at the national policy level. Visible GIZ activities are focused on the national level; they are sporadically visible at the state level, at which they perform workshop and training venues for local state partners. The constant observation (strict and dense reporting obligations) on GIZ activities by their state counterparts requires high effectiveness rates and a strong output orientation of the GIZ staff members (Senior Advisor, GIZ, New Delhi: 08/03/2011). Even though the state actor formally determines the programmatic agenda of the external actor, the implementation by GIZ

has also influenced a nuanced, so-called “hidden international donor agenda”. This emphasizes the increased institutional harmonization of Indian state ministries and increased levels of horizontal decision-making. The influences and agendas of the international donors are not always transparent to the state partners, and include activities such as the implementation of small-scale projects as pilot demonstrations for potential broader applications (Senior Advisor, GIZ, New Delhi: 08/03/2011).

Figure 5.2 Vector Graph of Actor Relationships in GIZ Sanitation Program



Source: own compilation. Blue arrow: direction of reporting and accountability. Red arrow: direction of decision-making and exercising of formal mandate. Orange arrow: direction of accepted advice and knowledge input.

This vector graph illustration reveals the relationships between the various partners in this GIZ program in Cochin. While the GIZ exercises much influence at the state and urban level, it is obliged to report to a national level. Hence, local level capacity-building and training measures are accepted and implemented successfully, because the GIZ program is backed-up by federal-level decision-making. Informal networks of actors that provide sanitation and water services are not directly included in the program implementation, but are being dealt with by the local state partners, who integrate these informal service provider networks in their citywide sanitation planning and training

workshops. The technical advisory group gives a counter-balance of additional external expertise to the MoUD, and enhances the overall knowledge basis.

An organizational chart, provided by a senior advisor of GIZ, reveals the line of decision-making and involvement in the project actor arrangement. While the GIZ is second to the MoUD and its environmental cell, the city councils and city task forces are directly linked to GIZ, the external actor. This first part of the chart shows clear, hierarchical and top-down delegation and decision-making chains. However, at the city level, implementation and negotiation between all stakeholders is horizontal and polycentric in character, in order to guarantee local participation and ownership, and is overseen by a nodal agency⁴⁸ that moderates between the state and federal decision-making levels (Walther 2010, 4 and Subramanian 2010, 9).

The GIZ-ASEM Technical Advisory Committee (TAC) team, which is horizontal in the line of decision-making and advice, is institutionalized with regular workshops and provision of policy recommendations on the project cases of GIZ. Their advice is included in the implementation by GIZ, but they are officially not accepted as an influencing body by the national counterpart, MoUD (SNUSP 2013a and b). The list of requests for improvement that are expressed by TAC members illustrates the subordinate level of influence of GIZ experts on MoUD strategies, knowledge generation and project planning. Even though it is clear that the GIZ focus and engagement on the NUSP has become more intensive and professional over recent years, their inclusion in national- and state-level, actor round tables still lags far behind expectations, and they are subordinate to processes and coordination of the MoUD state partners.

The GIZ mode of decision-making and provision of external expertise can best be characterized as *non-hierarchical steering* that is influenced by its hidden agenda (on more horizontal activities at the federal level). It can be called *instrumental coordination*, due to the obedience to the rules and decision-making dominance of the state actor. In essence, GIZ tries to introduce incentives and institutional stimuli to achieve structural change that it considers important for program success without making such strategies transparent to their state counterpart.

⁴⁸ The ICLEI SA network (International Council for Local Environmental Initiatives South Asia) has been announced by Cochin's CTF as the nodal actor between the environmental cell of MoUD at the national level and all engaged actors at the local level, in order to facilitate interaction between the two levels (Corporation of Cochin 2010, 4).

Thus, we find *governance by government* configuration in this actor arrangement, which is characterized by rather close modes of hierarchical and non-hierarchical steering. This combination makes it a more equal partnership in steering than other arrangements are. Both modes of coordination are characterized by non-transparent modes of decision-making and, to different degrees, favor inclusion of lower-level actors. Hence, there are parallels in their mode of coordination but they significantly differ in the balance of influence on decision-making and agenda-setting, due to dominance of the state actor over the external actor. This unbalanced cooperation is characterized by long-term and effective collaboration as well as mutual respect and understanding. However, suppression of the external actor is seen in the mode of selection of partner actors as well as throughout project implementation.

5.1.3 Alternative reasons for program results

In addition to the dynamics of the actor interplay between project partners and across time, we can also consider the impacts of project legacies, local power plays and legitimacy and resource availability as a potential set of explanations for the positive project outcome of this program and rival explanations.

Even though GIZ has been active in India for decades and has a very good reputation, due to many implemented technical advisory projects, the inheritance of project structures and personal ties as catalyst functions for subsequent projects takes place only at the federal level of decision-making. Hence, the well-institutionalized relationship between state and external actors essentially relies on this developed relationship, but does not directly impact on local-level capacities and knowledge for implementation.

Most important for the success of this program was the structural change that institutionalized the horizontal and vertical interplay by establishing three nodal agencies for coordination. Firstly, within the federal MoUD, the *environmental cell* was established to coordinate state and external partners at the federal level. This administrative unit aggregates all capacities, expertise and data at the national level in order to organize and plan a unified strategy, and to monitor and evaluate project implementation (Senior Advisor, GIZ, New Delhi: 08/03/2011). At the local level, the State Level Steering Committee (SSC) is the nodal administrative unit to coordinate CSPs of all cities in the respective state area. At the urban level, the institutionalization of the City Task Force (CTF) coordinates local political entities, and their interests, as

well as the citizen committees that express needs and provide a voice to households. The CTF's main goal is to guarantee ownership of the program as well as coordination among local participants in order to coordinate the multiple activities that aim for a common and holistic project plan with shared ideas on the solution. This structural change provided institutionalized links for vertical decision-making and horizontal inclusion and increased communication among all stakeholders.

However, structural change works as a catalyst only in combination with key personalities in these administrative network units. The diversification of public, private and non-governmental agents in the stakeholder forum requires charismatic leader personalities able to include input-legitimate administrative units as well as external service providers, and to enhance needed capacities at public utilities and service providers (Senior Advisor, GIZ, New Delhi: 08/03/2011). The financial deficits of public utilities are addressed in the project plan but are not relevant impact factors at the first stage of the program (SNUSP 2013c, 17). Material and non-material resources at the federal level at this stage of the program are sufficient for successful project implementation.

5.1.4 Actor relationship and reputation drives high program results

The initial implementation phase of the GIZ program has successfully achieved its goals. Which components in the program implementation led to this success? The GIZ, having been actively engaged in India for many decades and having a very good reputation in program implementation with state agencies, still operates according to the rules, regulations and advices of the national MoUD. In this program consortium, the donor-recipient relationship can be best described as a *governance by government* configuration, with the MoUD in the driver's seat of decision-making and implementation. But how is the external actor able to implement its agenda when its ideas and concepts are not fully integrated and with essential decision-making power centered in the MoUD?

Even though imbalanced, the relationship between GIZ and MoUD at the federal level provided a solid ground for implementation at the local level. The fine-grained interaction whereby GIZ respected state rules and regulations for interaction with the national ministry allows for mutual respect and ultimately the fine reputation of GIZ as an external actor. While the MoUD remains in the superior position of determining the planning and decision-making process and leading the implementation of the program,

the GIZ was able to introduce its ideas and visions through their state workshops, and to leverage their approach of institutional connection and network modes of operation as key to program success. Hence, one can say that the combination of respecting the guiding and hierarchical position of state actors and limiting hierarchical structures within the external agency resulted in mutual trust and reputation-building, and thus allowed for effective infiltration of GIZ's conceptual agenda at the federal level.

Table 5.4 Results of GIZ Case Study

Variable	Findings	Interpretation
Independent Variable	State actor (MoUD): hierarchical steering (delegative coordination)	This actor arrangement can be characterized as <i>governance by government</i> , and the domination of the state actor is accepted by the external actor, which provides for a better reputation of the external actor at lower policy levels, and hence allows for smooth implementation of its program ideas
	External actor (GIZ): non-hierarchical steering (instrumental coordination)	
Alternative Explanations	Historical project context	Not relevant
	Non-transparent power plays	Not relevant within project consortium
	Local legitimacy	Structural change of nodal agencies on three levels has successfully taken place, and its consolidation serves as solid basis for project performance
	Resource availability	Financial resources were available from JnNURM, and funding by the external actor was not relevant for implementation; human capacities and outstanding expertise of the external actor at the national level were observable and relevant
Dependent Variable	High project effectiveness	Institutional consolidation of local implementation strategies and implementation bodies without extensive inclusion of the external actor (GIZ remains with advisory function)

The reputation and well-established actor interplay at the federal level has shown ideal repercussions for successful actor relationship at the state and city levels. This *federal-level-backup* in the present case means that the external actor was able to capitalize on advantages of the hierarchical-order-and-obedience system in order to succeed in local-level implementation, even though the official mandate of GIZ for federal-level collaboration essentially limits their depth of action. The well-set-up interplay at the federal level allowed for local legitimacy in terms of structural change of local partners and extensive knowledge exchange among state and external partners in workshops and

trainings. Institutionalizing nodal agencies supported horizontal collaboration, and hence allowed for balancing the very hierarchical mode of implementation at the lower administrative levels. These processes, in combination with knowledge transfer at the state level and activation of local-level activities, guaranteed sustainable and effective structural change and program implementation at the local level. The backup function of national-level state actors is complemented by the advisory function of international donors at that level. As Senior Advisor, Dr. Regina Dube, of GIZ-ASEM project consortium states: “We can only be successful and achieve visible change in a joint effort. This is the reason why CSP needs political and administrative backing right from day one” (GTZ-ASEM, 2010, 4). Alternative explanations did not play a major role in understanding the successful implementation of this program. They were either not observed to be relevant or, in cases of local legitimacy, were not a key driver for success. Hence, the success of this program is considered to be based on strict vertical decision-making and mandating structure as well as the bottom-up reporting obligations.

Successful project implementation at the local level is based on viable actor relationships at the federal level as a back-up system for decentralized decision-making on the local level. As long as the external actor gains a reputation for adhering to hierarchical decision-making, the mode of *governance by government* seems to be the sufficient condition for successful program implementation, as long as the external actor complements the expertise and capacities of the state actor. The second most important factor for project success seems to be the well-established actor interplay in the beginning, which allowed for further structural adaptation and establishment of nodal agencies at all implementation levels. GIZ has been collaborating with the Indian government ministries for decades now, and hence can rely on a high reputation and level of trust. This long-lasting relationship pays out in the implementation of large programs, such as the water and sanitation program in Cochin. This strong reputational back-up of GIZ activities in regional and local context settings by the national level is the backbone of success of the GIZ programs.

5.2 Groundwater Recharge through Rainwater Harvesting, Arghyam

In Thrissur district, in the heart of southern India's state, Kerala, people face severe drinking water problems in the summer months March, May and June, due to declining groundwater tables and the drying out of individual household wells.⁴⁹ During these months, citizens rely on mobile water tanker systems for water, which are cost inefficient, unreliable in their operation and highly criticized for being in the hands of local political elite systems. In response to this situation, Arghyam⁵⁰ has partnered with the local government actors, the District Collector (DC)⁵¹ and Gram Panchayats (GPs).⁵² Together, they have supported a water-harvesting program, called *Mazhapolima*⁵³, and implemented a participative and integrative household-based rainwater harvesting program between 2009 and 2012.

Arghyam is a Bangalore-based philanthropic foundation, founded in 2006 by Rohini Nilekani, who used a private endowment to begin implementing projects funded by interest rates in the rural water and sanitation sector. The organization supports grassroots NGOs and aims to bring their concepts and approaches to a certain, minimum scale to make them visible. The organization perceives itself as an action research entity, and aims to take lessons learned from each project to future projects. They incorporate trial and error methods in their working spirit, as well as innovation and flexibility, and perceive failure as necessary for successes in the future (Project Assistant, Arghyam, Bangalore: 15/03/2011 and Project Manager, Arghyam, Bangalore: 15/03/2012). From 2006 to 2012, Arghyam implemented a total of about 80 projects, most of them in India's southern states.

Since its establishment, Arghyam has implemented projects in the water sector with the goal of providing equal and sustainable access to water resources, and sanitation solutions for all households (Arghyam, 2010, 7). It emphasizes participative approaches and the inclusion of local communities to increase ownership and achieve sustainable

⁴⁹ Water wells or dug wells are drilled boreholes in the private backyards of Kerala's households that provide access to groundwater in underground aquifers. About 72 percent of households in Kerala rely on open wells for private water supply. Usually these wells dry out in the months of March to June, and are then refilled as soon as the monsoon rain begins (Arghyam 2008, 4).

⁵⁰ *Arghyam*, means offering in Sanskrit.

⁵¹ The District Collector (DC) is the chief administration officer in a district and is appointed by the State Government. His duties and responsibilities overlap with those of the elected political bodies of city majors and rural Gram Panchayats. Conflicts and power quarrels among these actors are a daily routine.

⁵² See Chapter 2 for more information on Gram Panchayats.

⁵³ *Mazhapolima* means bounty of rain in the local language Malayam.

program implementation: “It doesn’t matter if the national or state government sets goals, understands the problem and sends out decrees, if there is no capacity locally to both understanding the problem and to understand how to approach solving it. The most successful efforts around solving water and sanitation problems (and I believe this applies to education, healthcare and other areas as well), are when you manage to engage the local community to the point where the local community not only understands the problem, but owns the solution” (CEO Arghyam, 2010 cited from Bjelkeman 2010).

Info Box: Groundwater Recharge through Rainwater Harvesting (Arghyam in Thrissur, Kerala)

Components: Capacity-building measures at district level and a participatory, household-based rainwater harvesting program, and a mobile phone-based surveillance system for groundwater table monitoring.

Scale: 45,000 target households

Duration: 2009 - 2012

Partners: Arghyam (Mazhapolima Monitoring and Co-ordination Unit, MMCU), District Collectorate, Thrissur

The rainwater harvesting program, *Mazhapolima*, initiated by the DC, is complemented by Arghyam with an individual research and monitoring element. The goal is to strengthen the knowledge and data generation component of the program with a mobile text message-based surveillance information system, which provides daily data on groundwater tables. Arghyam installed and financed the *Mazhapolima Monitoring and Co-ordination Unit* (MMCU), the administrative entity for the project. Based in Thrissur District, it reports to the district collector and collaborates with Arghyam in research and monitoring (Arghyam 2010, 13 and 2011a, 26).

5.2.1 Weak project achievements in the rainwater harvesting program

The project hoped to install about 45,000 rainwater harvesting devices, but managed to install just 7,000 devices over the 2009 to 2011 funding period. Besides the soft components of knowledge sharing workshops and on-site monitoring of groundwater levels, technically, the installation of rainwater harvesting devices, include the PVC gutter along the roof and the PVC pipe system, connecting the gutter with the dug well. Some devices include filters, depending on the cleanliness of the roof. Extra expenditures may be made for such particularities as polyethylene sheets for thatched

roofs, rain pits and surface run-off catches (MMCU 2008, 17). Material and work costs for the installation of the devices can vary from 500 to 4,000 Indian Rupee (INR),⁵⁴ depending on the condition and size of the roof, the condition of the dug well and various geographical preconditions of the site (MMCU 2009).

Besides activating funds at government level, the program pursues a demand-driven and participatory approach. It also formulates awareness campaigns on public media and through prestige projects at local schools, police buildings and the archbishop seat in Thrissur (field visit by the author, Thrissur: 15/03/2014). However, the government is not obliged to use the state funds for this particular program. After the first, very supportive DC resigned, the MMCU first lobbied at the state level for the release of the funds, and then tried to convince the GP members to make the funds available for this particular program (Project Manager, Arghyam, Bangalore: 15/03/2012).

In addition to its goal of constructing 45,000 wells and rainwater harvesting devices in Thrissur district (Project Manager, Arghyam, Bangalore: 09/03/2012), the consortium's overall goal was: "to contribute to enhanced health and welfare of the community through improved access to drinking water." The specific objectives of the Mazhapolima initiative, in their words, were to: "(1) recharge ground water and (2) improved drinking water availability and service level across the year, (3) significantly reduce the impact of drought and consequent public spending on supply of drinking water in tankers to the water stressed regions in the district and (4) improved agricultural production and productivity" (MMCU, 2008, 1).

In terms of the four dimensions of effectiveness measurement, the following internal project objectives can be differentiated. *Output 1* is the set-up of the project plan and financing, and the establishment of actor networks and operational working units to implement the working plan. Additionally, public media campaigns and awareness raising modules need to be in place in order to create the bottom-up demand for the program's proposed objectives. *Output 2* refers to close cooperation with GPs as the main actors in this project and the provision of 45,000 wells and rainwater harvesting devices, including explicitly also households that are below the poverty line (BPL). Moreover, they target high usage rates and awareness of the necessary operation and

⁵⁴ In 2009, when this program was initiated, 100 INR was equivalent to 1.43 EUR. The installation costs varied from approximately 7 EUR to 60 EUR of the total cost. Households are required to pay for only 30 percent of the cost of the device. Total costs for the demand side are about 2 EUR to 18 EUR, with the additional amount being paid by government subsidies schemes.

maintenance works throughout the year. In this project, *outcome* implies the recharge of groundwater and improved independent and affordable access to drinking water all year round. *Impact* refers to enhanced welfare and improved agricultural production by improved water availability (MMCU 2008; MMCU 2009; Arghyam 2011b, 6).

Achievements regarding *output 1* are the MMCU jointly established by Arghyams and DC, as an operational working unit to implement the shared project plan. The DC and MMCU established actor networks with GPs in the first year, and launched the program in one of the largest GPs in Thrissur district. The release of the funds through GPs requires collaboration with them on the one hand, and bottom-up demand creation on the other. From its initiation in 2008 to mid-2009, the project published a handbook on rainwater harvesting for all households in the district. A media campaign was launched in this initial phase, with local awareness peaking at the world water day, when school children were taught about water conservation information. State-level awareness peaked in 2001, when the program was awarded the water digest award in New Delhi and received significant media attention throughout India (MMCU 2009, 14-15; Team Leader, MMCU, Thrissur: 15/03/2012). The initial project phase of vision and planning and establishment of the core elements for operation were implemented very successfully in the first year of the project.

Regarding *output 2*, in 2009-2011, the MMCU established only 7,000 instead of 45,000 targeted rainwater harvesting devices, which is about 15 percent of the targeted number of facilities. In 2012, a project-extension year, another 60 units were constructed, but the total number still remained far below the objective of the program (Project Manager, Arghyam, Bangalore: 09/03/2012; MMCU 2011, 5). Moreover, although the program was initiated with a particular GP-centric approach, no GP members ever visited one of the planned workshops that aimed to illustrate the objectives of the program and provide background information on the groundwater situation in their respective wards (MMCU 2009, 7; Team Leader, MMCU, Thrissur: 15/03/2012). However, the action research component was implemented successfully, and the monitoring by mobile phone text message-based information of the targeted 285 open wells was achieved. The water levels were reported regularly to the MMCU unit by mobile text messages of the local community, and the MMCU team was able to record ground water levels for this area over a period of two years (Arghyam 2011a, 26).

Regarding the *outcome*, only a low level of project results could be achieved due to the low number of installed rainwater harvesting devices. There was no significant change in groundwater levels, and nor was there any significant change in water availability for all citizens of Thrissur district. The project did not manage to break up the informal water vendor structures of water tankers, and the project was not applicable to households with lower building standards, meaning small sheds without a water well. Even though the project plan included polyester canvas for loose roof tops, the project did not include a social component for poorer households. The local project staff at MMCU rated the knowledge about technical sound systems higher than serving the poor directly and having socially just access to the program: “It does not differ for groundwater level who charges it and we actually prefer better-off households because they maintain the devices properly and they understand why it makes sense to invest. Poorer people do not have the understanding of what equity and sustainability mean for them and the people around them” (Team Leader, MMCU: 15/03/2012; Field visit of the author, Thrissur: 16/03/2011). On the one hand this illustrates the macro-level and long-term goal of the program of achieving increased groundwater tables that provide a solution for all but on the other hand does not account for alternative solutions and does not immediately serve those who are in most need of affordable water supply.

Table 5.5 Effectiveness of Arghyam Rainwater Harvesting Project

Category	Project Goals: Arghyam/ Thrissur	Achievements	Value
<i>Output 1</i>	Project proposal, financial planning and establishment of actor networks and awareness raising campaigns	Establishment of the MMCU and launch of the program at GP level with awareness campaigns with high impact and success	High
<i>Output 2</i>	Construction of 45,000 wells and roof harvesting devices, and establishment of action research component	Construction of 7,000 wells and low cooperation of GPs; solid data from the mobile text message based monitoring component	Medium
<i>Outcome</i>	Independent, affordable and year round water supply for all households and substantial groundwater level all year round	No substantial changes in water supply structures as well as for groundwater levels; hardly any implementation of equity components in the program	Low
<i>Impact</i>	Improved welfare and agricultural production through water availability	No substantial impact observable due to low output and outcome	Low

The result of the entire program in regard to its initial ambitions has remained far behind expectations. Thus the overall *impact* of sufficient groundwater tables is not only

absent, but even out of reach, due to the low number of installed rainwater harvesting devices. Moreover, improved welfare on the basis of water supply for all domestic and agricultural purposes remains an unrealized vision and awareness on the need to support poor and marginalized with basic services such as year round water provision is non-existent.

The overall effectiveness of the program is medium to rather low; a major impact could not be achieved even though the program started off well. How can we explain the disappointing outcome of a program that launched with well-institutionalized structures and successful awareness raising campaigns?

5.2.2 Changing actor relationships over time in Thrissur

The actors involved in the project included state, district and block-level actors. The program was initiated in 2009 by the District Collector (DC), and the collaboration with Arghyam, the external partner, was set up on this intermediary level of administration as it is responsible for water and sanitation service provision. The DC initiated the program as a small-scale follow up to a larger World Bank (WB) project that was completed in 2009. Arghyam stepped in with the research component to gain more experience in interaction with state actors in project implementation (Project Manager, Arghyam, Bangalore: 15/03/2012). Therefore, the line of reporting was rather horizontal from MMCU to DC, including giving notice to Arghyam in Bangalore.

To analyze the mode of social coordination of engaged state actors in this program, one has to differentiate between the duties, tasks and modes of action of actors at the state-level (planning commission), district-level (District Collector) and block-level (Gram Panchayats). Additionally, the different stages of implementation over time are highly relevant in the present case.

In the first year, this particular DC pursued a clear, transparent and open dialogue and engaged face-to-face with MMCU team leaders. The steering approach of the DC was straightforward and hierarchical, as we can see in his statement about how to best implement such programs: “it is necessary that someone takes the action and moves on. Development and progress requires strong leadership, however, it requires at the same time the skill, not being visible as such to the beneficiaries group. The people need to have the impression of the importance of their action and commitment, however, on government side, a strong leadership approach is needed in order to get things going and

achieve something in this slow bureaucracy. Additionally, Gram Panchayats are powerful, well institutionalized and possess more power than in other States in India. This in return means that they are very self-confident about their action. Influencing their decisions on fund release for particular project proposals requires a huge amount of time for lobbying. They won't act as long as they don't see the necessity to do so, therefore, the program was predominantly successful in areas where the demand for water was high and the problem of contaminated groundwater was severe" (Former District Collector, Thrissur: 15/03/2012). This statement highlights the complexity of the challenges and various ways to address solutions. GPs, as local decision-making institutions, can only be brought on board to such a program when there is a relevant window of opportunity⁵⁵ that creates a need for their action. Moreover, it illustrates the double role of the state actor, pushing the program for implementation but in doing so behind the scenes and allowing beneficiaries own the actual successes of a program to make it self-sustaining in the long run.

Drawing a comparative line between the responsibilities of the individual emphasizes two aspects of the situation. Firstly, this particular DC, due to his previous position as World Bank Expert, did not perceive himself as part of "this bureaucratic and political environment". His exposed position as an external actor put him in a superior position, which prevented transparent and formal interactions with the input legitimate state actors at district level. Secondly, the sharp degradation of the public administration by him, combined with a failure to allow for strong GP-driven power relations, resulted in a non-transparent, superior and hence hierarchical mode of social coordination on the part of the DC as the initiating state actor of the entire project proposal.

While the project nonetheless launched under this DC, its implementation slowed down remarkably under successive DCs, who did not have the will to lobby for the program at the GP level. The MMCU team changed their communication strategy and aimed to approach the GPs as nodal agents, instead of the DC. They provided workshops and awareness raising campaigns to establish collaboration and enhance knowledge at local, political level about the program in several districts. However, their ambitions remained unanswered and did not result in any cooperation at all: "All workshops with GP

⁵⁵ Window of opportunity is understood as the combination of need and demand for a particular service and the willingness of all participating actors to take action.

members to explain the project and plan release of funds ended with no GP ever showing up” (Team Leader, MMCU, Thrissur: 15/03/2012).

While the program was initiated at the district level, the most powerful actors are the GPs at the block level. There is a conflict in the power constellation between the district level’s responsibility for service provision and the block level’s (GPs’) responsibility to decide on how to allocate the provided funds. While the DC is an administrative entity, the GPs are elected, and mandated to provide water resource services to citizens (MMCU 2009, 7). This powerful position of the GPs was muted by the strong and guiding DC in the initial phase of the project; and their power returned in regard to this particular project when the person of the DC changed and the project slowed down in implementation.

We find a change in the modes of social coordination over time. In the initial phase, with the strong DC in place, we find a rather *hierarchical* mode of decision-making and enforcement of project plans at lower levels. This can be characterized as *delegative coordination* with the influence of lower decision-making levels (GPs), but non-transparent decision-making and imbalanced resources and capacities (expertise and knowledge from international foreign aid system of the DC). These modes of decision-making change over time as different personalities occupy the position of DC. Successive DCs were not interested in project implementation and hence, no mode of social coordination relevant for the Mazhapolima project was observable under them. Therefore, this program illustrates the importance of the state actor, being in the driving seat as determinant of project success.

Arghyam and MMCU, the external actor in this program, did not gain much experience with state-actor collaboration. Although it was open to more such experience, local GPs and their interplay with state organs amount to black boxes for Arghyam. Arghyam does not perceive itself as a supplement to government actors, but rather as activating them for service provision and providing them with the needed expertise and tacit knowledge to overcome hierarchies and slow bureaucratic structures. In return, Arghyam received insights into best practice cases and was allowed to pursue action research throughout the project’s implementation. Arghyam’s organizational uniqueness is their approach of trial and error, which allows for a maximum freedom of innovation and flexibility; the foundation is even open to risking project failure for the sake of learning (Manager of Water Portal and Senior Advisor, Arghyam, Bangalore: 01/03/2012).

Arghyam's presence in the Mazhapolima project is assured by the "Special purpose vehicle for Mazhapolima that has been set up with experienced professional team members and works under the leadership of the District Collector" (MMCU, 2009, 13). The MMCU is responsible for the operational and technical aspects of service provision, mobile monitoring of the water levels, and development of strategies for demand creation. The selection of participating households in the program is the responsibility of the respective GPs (Team Leader, MMCU, Thrissur: 15/03/2012).

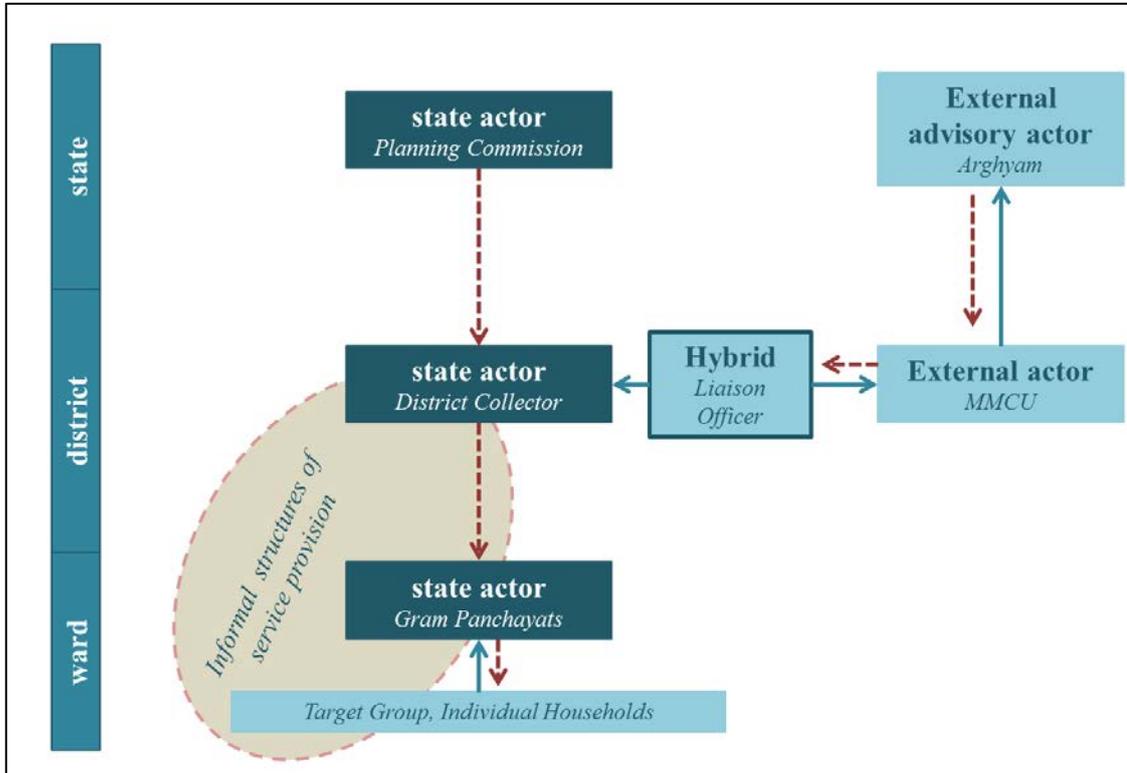
The MMCU team includes two elements that provide them a minimum degree of power in this actor arrangement. The first is their expertise in groundwater recharge and local and decentralized monitoring at the household level (providing a research and knowledge function). The second element is their attachment to the DC, which helps to overcome the negative image of grassroots NGOs in Kerala, and provides them more local legitimacy as a purported state actor. Besides their operational options for achieving their goals, such as demand creation, networking and awareness campaigns, their only sanction mechanism is blaming, shaming and pushing activities (Project Manager, Arghyam, Bangalore: 15/03/2012).

Even though the MMCU managed to increase its local legitimacy with structural adjustments, such as establishing a liaison officer at the local DC that serves as cross-cutting function to the MMCU. Their work still remained fully dependent on GPs willingness to release funds for rainwater harvesting. The non-responsive attitude across several GPs in the area resulted in a strategic change at MMCU from aiming to align with the supply side towards creating demand for their program within society. Hence, the MMCU sought to increase the pressure on GPs by lobbying at the household level, and request households by personal visits, flyers, workshops and through TV commercials to increase the demand for the program from the bottom-up.

In the case of Arghyam in general, and the MMCU in particular, we find in the beginning a mode of coordination that is non-hierarchical, and that seeks to include all political and administrative levels as well as target groups. Hence, it can be characterized as *communicative coordination*. Moreover, monitoring is pursued by Arghyam in a transparent manner with mechanisms for regular reporting to the local political level (DC) and to Arghyam itself. Established communication channels via workshops and the liaison officer provided a basis for negotiation and knowledge exchange between donor and recipient of this program. However, though out later

stages of the program, the collaboration slowed down and ultimately came to an end and resulted in rather competition governance of water provision to households.

Figure 5.3 Actor Relationships in Arghyam’s Rainwater Harvesting Program



Source: own compilation. Blue arrow: direction of reporting and accountability. Red arrow: direction of decision-making and exercising of formal mandate. Orange arrow: direction of accepted advice and knowledge input.

This vector graph illustration with the hybrid liaison officer position reveals the strategic approach of ‘embedded’ activities and quasi-state actor status to achieve the aspired targets of the program. Key to success in the beginning of program implementation was the relationship between the external actor and state actors to achieve their support and willingness to contribute. In the initial phase of the program, a solid and supportive relationship allowed for a smooth start of the program, but then slowed down over time. The informal water service provision structures are closely linked with GPs and hence, without the authority of the DC, the program was not even considered for implementation by local GPs and the respective target households. This case illustrates the need of the external actor to provide for a solid relationship as basis for success and that their change in strategy towards lobbying at the household level (gaining local legitimacy) did not provide for further successes of the program.

Regarding actor interplay, the combination of *communicative coordination* by the external actor and *delegative coordination* by the state actor in the initial phase of the project led to a *governance by government* configuration with high outputs and results in the beginning of the program. Throughout its implementation, the program's progress slowed. This was due to a change of the actor relationship and to a disinterest from state actors for the entire program, which changed the governance style in the end towards one of *competition governance*. The actor relationship in this project consortium illustrates (1) that putting the state actor in the driving seat allowed for high program results and (2) that the dynamics of interplay can change over time and how different relationships at different stages of the project cycle affect project outcomes.

5.2.3 Fruitful environment supports the take-off of the project in Thrissur

From 2000 to 2006, the World Bank implemented the *Jalanidhi*⁵⁶ program in 92 selected GPs distributed among four districts in Kerala (Thrissur being among them), and collaborated with the state department's Kerala Rural Water Supply and Sanitation Agency (KRWSA) in Trivandrum. The program aimed to improve water and sanitation for rural households in the respective GPs with a particular focus on below poverty line (BPL) households. Implementation involved provision of latrines, rainwater harvesting structures and drainage and water supply schemes. The infrastructural results of the program were for the most part successful, with water supply improving up to 57 percent compared to coverage before the program's initiation. Moreover, the selected GPs were re-elected in their wards and continued to support program implementation. However, a large share of the increased coverage rate was to households above the poverty line, and the program failed to achieve improvements for BPL households (Kerala State and Planning Board 2009, 5).

Arghyam's Mazhapolima project profited from the inherited awareness of this previous rainwater harvesting program and its contribution to ground water management, as well as awareness of state subsidy schemes that were communicated to a wider public. Institutionally unique were the inheritance of existing actor networks for implementation and the expertise and engagement of the District Collector, who served as leading consultant for the WB project: "The district being one of the major project area of Jalanidhi, could harness the experience to a great extent" (MMCUC, 2008, 12).

⁵⁶ *Jalanidhi* means water wealth in the Hindi language.

Mazhapolima's extraordinarily successful initial project phase was due to the support of the local DC, who was the leading consultant under the previously implemented Jalanidhi program of the World Bank. The combination of the inheritance of institutional structures, awareness and an individual who exercised strong and effective leadership in his political DC position drove high success rates of program and may have led to an overestimation of its potential overall successes.

Water supply in India is perceived as a governance area that is difficult to improve because it is deeply politicized and prone to corruption and clientelistic relationships among actors. As the founder of Argham summarizes the challenges that are still existing in India's water governance service provision: "India has reasonably bountiful water supplies—a lot of the problem is a governance deficit. The government has the money and the mandate, but it's not really happening. It's about access, empowerment, having a voice; water is a deeply political issue in many parts of the county" (Rohini Nilekani, Chairperson and Founder of Arghyam, cited from Jenkins, Cordelia 2011). Taking a look at the water supply structure in Thrissur district, only a small share of people are linked to the system of piped public water service provided by the Thrissur Municipal Corporation (TMC). Most citizens rely on privately dug wells and groundwater supply, but during the summer months, groundwater levels are so low that people need to rely on water tankers from private water owners. This tanker system is highly politicized and is far more expensive than any other water supply service, as this quote clearly shows: "The water sector is the worst in corruption. This country is full of corruption, every sector has its mafia structures, and however, water sector is the worst. Therefore you know, water vendors and illegal structures lobby in the government or even belong to the government and prevent any efficient and sustainable measures to be undertaken to assure sustainable and secure water supply" (Former District Collector, Thrissur: 15/03/2012).

The Mazhapolima project consortium is aware of these powerful and illegal water supply structures, but does not account for them in their project proposal. Powerful mafia structures are still in place, and are closely linked with political elites at the block level. They have an interest in preventing full coverage of rainwater harvesting devices in order to maintain their vendor structures. Since these illegal structures are known but were not included in the project proposal, their intervention to slow further installation of rainwater harvesting structures was highly likely. Moreover, they collaborate closely

with GPs, who, in turn, were not accessible to the project team at all. Even though Arghyam, in its initial project supplements, suggested mobile text message-based tracking of water tankers, the DC rejected this proposal without justification (Project Manager, Arghyam, Bangalore: 09/03/2012). These illegal structures were not challenged and their impact on the slowing down of the program over time can only be assumed; hence, they may have contributed to the low outcomes of this project in the end.

By taking up the approach of installing a special-purpose vehicle with the MMCU, in the beginning, Arghyam decided to “fully play the state actor card” and move away from any linkages with the NGO sector in Kerala (Team Leader, MMCU, Thrissur: 15/03/2012). Officially they did not become part of the district bureaucracy; however, this institutional setting allowed them to operate under the cloak of a state agency, and increase their visibility as well as power by pretending to be linked to higher levels of political and administrative hierarchy.

This institutional set-up at the time of the project’s launch was slightly adjusted after the first DC resigned, resulting in the slowdown of the project. The team decided to hire a liaison officer, whose position was purely operational. As an IAS officer, he had personal links with the DC staff members. The position was created as an interface function between the DC and MMCU for identifying desirable dissemination strategies, mobilization of funds and information about local government funds. The DC itself follows the strict and hierarchical IAS system, with particular communication requirements (letters) that need to be met in order to speed up communication and the implementation of the project (Team Leader, MMCU, Thrissur: 17/03/2012).

The MMCU’s mimicry of bureaucratic structures, decision-making and knowledge is illustrated in their strategy of employing a liaison officer as a cross-cutting element between the MMCU and the DC. This strategy aimed for two goals: (1) to increase internal knowledge and accessibility of the release of program funds for the rainwater harvesting project; and (2) to increase credibility and visibility of local GPs by simulating bureaucratic structures, agents and knowledge. This mimicry strategy, however, did not produce the desired effect, and the MMCU shifted their activities towards the target group and applied demand creation measures to overcome the barrier of non-cooperation of GPs in the district by stimulating bottom-up requests for the rainwater harvesting program.

The financial resources for the program were released at the state level from the Planning Commission. The funds were channeled to the DC, which distributed the money among the GPs. The GPs decide which programs they want to finance, and their spending decisions are closely linked to the elections and most likely aim to achieve improvements in addressing the most urgent demands of their voters. An external actor such as the MMCU is able to stimulate demand only through awareness-raising in order to gain funding for their agendas. Financial support for the MMCU itself has been provided from Arghyam (Team Leader, MMCU, Thrissur: 17/03/2012).

Throughout the project's implementation, the operational unit MMCU was financed by Arghyam funds. However, availability of resources for project implementation varied immensely and was dependent on the political will of the GPs in Thrissur district. Hence, the project was not available to households once awareness dropped after a year of project implementation. Even though the external actor was perceived to have generated enough financial resources, if their availability is decided by a state partner who does not collaborate with the external actor, and if there is no mechanism in place to release the funds, then they are practically not available. The shortage of financial resources was a result of the slowing down relationship between state actor and external actor in this program.

Analysis of the personnel changes of this project over time reveals the importance of an outstanding personality with the expertise and willingness to achieve a certain project outcome as catalyst factor for project realization. As one team leader from the MMCU saw it: "The program was initiated in May 2008 by the former District Collector in Thrissur. Before becoming the DC of Thrissur, Dr Baby was the leading WB Consultant of the Jananidhi program in Thrissur district. Throughout his DC position he acted as the chairmen of Mazhapolima and appointed a project coordinator who was also part of the World Bank project. They inherited the office spaces and furniture from the WB project" (Team Leader, MMCU, Thrissur: 15/03/2012).

By the end of the program in 2012, the MMCU had collaborated with the sixth DC after the first DC, all of whose successors were less interested and collaborative in the implementation of the project than the first DC and initiator of the program had been. He had the willingness and vision to achieve substantial change in decentralized water supply solutions and groundwater levels adequate for the district to serve as a role model for other areas in India.

5.2.4 Low program results and stagnant collaboration

The project started well under the strong leadership of the DC of Thrissur and with the inheritance of project structures from a former World Bank program. However, over time, the project slowed considerably and at completion in 2012 had achieved only about 15 percent of the planned-for technical rainwater harvesting installations. What were the reasons for the low project results after four years of active engagement of the leading MMCU team members?

First of all, the project managed to gather momentum in its initiation phase with an extremely motivated individual with high expertise and a local and national reputation. This combination of strong leadership and reputation allowed him to neutralize the existing powerful status of GPs and coordinate activities towards building awareness of proclaiming the program and selecting households in which to implement the rainwater harvesting devices. After that DC resigned from his position, however, the successive DCs lacked the reputation and willingness to lobby at the GP's for further funding of this program. Thus, the project stalled; aside from some large awareness campaigns, only a few more technical devices were installed and no substantial change in groundwater levels or public water supply was achieved.

On the one hand, this case illustrates the importance of good actor interplay and a strong state actor who takes responsibility, owns reputation and is willing to motivate local state actors towards change in service provision structures. The initially high outputs of the program were due to well-established actor networks and operation units in combination with the hierarchical mode of steering by the state actor, as well as the heritage of the WB project structures, reputation, and the resultant awareness of the entire issue area of rainwater harvesting.

Other explanations such as release of financial funds and non-transparent power plays were relevant to set-off the program in the beginning but they were less relevant through later stages of program implementation. Hence one can assume that solid actor interplay between donor and recipient allows for negotiation about strategies to overcome financial or clientelistic challenges, but did only serve the purpose of strengthening the actor relationship in the beginning of the program implementation. Without a solid relationship, these factors influence the program implementation. Moreover, this case does prove that inheritance of a historical project context allows for smooth start of a

new program but does not guarantee for the aspired success of substantially changing groundwater levels in this region.

Table 5.6 Results of Arghyam Case Study

Variable	Findings	Interpretation
Independent Variable	State actor (District Commissioner): Hierarchical steering (delegative coordination)	The <i>governance by government</i> actor constellation changed over time towards rather <i>competition governance</i> and the project faded out with hardly any cooperation at the end; this was due to a decrease in hierarchical leadership of DC and a lack of cooperation with the input-legitimate actors for water supply, the GPs
	External actor (Arghyam/MMCU): Non-hierarchical steering (Communicative coordination)	
Alternative Explanations	Historical project context	Relevant for project initiation but was not utilized for long term success of the program
	Non-transparent power plays	Relevant in the present case but was not addressed by the project team; informal (GP linked) water vendor structures were not challenged and this was a major reason for low project results
	Local legitimacy	Relevant in the project initiation but with minor impact on the overall project performance
	Resource availability	Crucial impact factor for initial success and low performance through later stages: strong initial leadership was able to neutralize existing GP power structures; when leadership faded, the project did as well and financial resources became difficult to access
Dependent Variable	Medium to low project effectiveness	No substantial change in rainwater harvesting behavior and recharge of groundwater, due to lack of access to local power structures and hence financial resources to implement the project in a sustainable manner; continuing governance by government arrangement was not achieved and therefore, the project faded out after one year of successful outputs

Moreover, this case also illustrates that activating the demand side as a driver of such a program works only in cases where the need for the new service is immensely high and affordable to those who need it. But those who most need affordable and year-round water supply were not explicitly included in the program and hence not taken into account when the MMCU changed their strategy towards mobilization from the bottom up. Those areas who were wealthy enough to pay for the informal and expensive water tankers had no need to support bottom-up demand creation: “Wards with water

shortages immediately implemented the program and wards with no problems at the moment allocated the money for different community structures than sustainable water supply” (Project Manager, Arghyam, Bangalore: 09/03/2012).

Even though this program was comparatively simple with respect to tasks, the team did not address or manage to harness local GP power structures to compete with their other funding priorities. This in the end the governance by government constellation had high successes and throughout implementation turned towards competition governance that resulted in overall low project results of the Mazhapolima program.

Given the local power constellation of GPs, programs for such a significant and large-scale-impact issue as groundwater recharge require action from higher-level political entities. Without hierarchical coordination, the lower levels were too decentralized and were unwilling to be motivated by an external actor such as Arghyam. This case illustrates nicely that without any trickle down of federal-level backup, motivation of local levels to collaborate with the external actor was non-existent. This assumption is backed by the observation that the initial phase of the program was accompanied by high media attention and receiving an award at federal level. An experienced state actor and such federal level back-up through public awareness increased willingness of local state actors for collaboration.

This case nicely illustrated that the alternative reasons such as profiting from structures of previous programs, charismatic leadership and gaining local legitimacy served as strong motor to set-off program implementation in the beginning of the project and can be regarded as catalyst for a solid actor relationship. However, these advantages were not utilized throughout the entire program implementation and resulted in slowing down of actor relationship and change from *governance by government* towards *competitive governance* and low project results in the end of the program.

5.3 Water and Sanitation for Informal Settlements in Bangalore, WSP

Bangalore city, an emerging megacity with a rapidly growing IT and industry sector, officially has about 550 informal settlements whose residents mainly serve as industry employees. The core area of Bangalore has about 362 informal settlement areas, located within well-developed areas on public or private land between industrial and domestic housing tracts. Most of these areas have been supplied for years with public water taps and illegal water pipes. There is a direct run-off of sewage into the storm-water drainage canals of local neighborhoods (BWSSB 2014).

Since 1964, water and sewerage service provision has been in the hands of the Bangalore Water Supply and Sewerage Board (BWSSB), which has no formal obligation to provide water and sanitation solutions to informal urban settlements. Informal settlements are served by the Urban Development Department and KSCB. The chairman of the BWSSB is appointed by the Karnataka state government, an elected body, and has to report to that government. He therefore struggles with top-down interference in his operational decision-making (e.g. tariff setting), depending on the political party and ministers in power of the state government (Connors 2005, 205; Connors and Brocklehurst 2006, 5). This institutional setting, in which the BWSSB is an ‘operational unit’ of a political state actor, with decision-making power but at the same time has a mandate to report to political state actors, opens the door to friction in the system. This friction can prevent substantial changes in operation modes, but also catalyze changes in the formal rules of service provision.

A multitude of state-level institutions are responsible for different elements of infrastructure set-up in Bangalore city. While the Karnataka Slum Clearance Board (KSCB) is the key unit for improvement of informal settlements, this institution is equipped with engineers and technical experts rather than with social development expertise. The KSCB is responsible for technical equipment, registration and the upgrading of informal settlement areas. It delegates responsibility for technical infrastructure, its long-term maintenance and public service provision to Bangalore’s City Corporation (BMP) (Connors 2005, 204).

From 2000 to 2002, an AusAID-funded pilot project in three of Bangalore’s informal settlements created the momentum for major changes in service provision to informal settlements. The legacy of these pilot projects was the knowledge that urban poor are

willing to pay for individual and legal household connections, but they lack land title documents to comply with the conditions for infrastructural service provision by the public utility (Connors 2005, 209).

Moreover, this project profited greatly from strong collaboration with three NGOs that provided community sensitization and mobilization in order to guarantee residents' willingness to pay, and to provide the needed knowledge for public water service application and accounting (Connors 2005, 214).

This pilot projects initiated by AusAID not only created the momentum for policy changes in Bangalore's urban service provision; they also set the stage for scaling up to 96 informal settlements in the first phase of the program. This was accomplished with the support of the international donor community, namely the Japan International Cooperation Agency (JICA), the World Bank (WB) and the World Bank's Water and Sanitation Program (WSP) (Sadikha 2006, 68; BWSSB 2014).

Info Box: Water Supply and Sanitation for Bangalore's Informal Settlements

Components: Capacity building to establish institutional structures that provide water and sanitation services to the urban poor. Knowledge component on tariffs and pricing policies and technical support to extend the water and sewerage network to informal settlements.

Scale: Sanitize and provide water supply for 45 informal settlements

Duration: 2002 - 2005

Partners: World Bank, JICA, WSP, MoUD, Social Development Unit (SDU) at BWSSB, AusAID, Bangalore Municipal Corporation (BMP), Bangalore Development Authority and Karnataka Slum Clearance Board (KSCB)

Three external policy stimuli can be identified for the internal and substantial change of BWSSBs operation policy for urban informal settlements. The first of these was the evidence of success illustrated by the pilot projects on individual household water connections in urban informal settlements. The second stimulus was that BMP decided to cut funds for public water taps, which resulted in a substantial decrease of public water availability. Thirdly, there was an enormous release of funds for city-wide water network extension (Connors 2005, 208). With support from all levels of the BWSSB, the extension of its network was linked to the extension of the pilot programs for all informal settlements in the city to provide individual household connections and make them new customers to BWSSB. This created a new perception of service provision for the poor (Connors and Brocklehurst 2006, 8; World Bank 2003).

In general, public utilities are not designed to build awareness among customers in need of services, nor to mobilize communities or provide training in filling-in application forms and adhering to the formalities of the public tariff billing system. Therefore, the BWSSB established a core operation cell for informal settlements, the so called Social Development Unit (SDU). While the SDU, in collaboration with four local NGOs, was responsible for soft interventions (such as the provision of information and awareness building), the international donors and the engineering department of BWSSB took responsibility for the hard interventions (e.g. extension of the public pipeline system). In the beginning, the SDU collaborated with locally prominent leaders from the communities, NGOs and the community based organizations (CBOs), independently from BWSSB customer services (Social Development Specialist, Bangalore: 20/04/2012).

After the assessment of existing infrastructure in the informal settlement, the local NGOs together with the SDU and external engineers (a team of about eight people) collaborated with the informal settlement to provide the social mobilization component as a basis for the individual household connection service. After the water network was established and household meters were installed, members of the households were trained in filling in application forms. After being contracted for a period of three years, they were tutored about utility bill collection and accounting (Social Development Specialist, Bangalore: 20/04/2012; Connors and Brocklehurst, 2006, 10).

The sewerage network for the wards was provided in collaboration with JICA and the World Bank, and one goal was to provide individual households with toilets. The cost of the toilet was shared on a 50-50 basis between the household and public loans. The households were required to invest the first 50 percent of the costs; thereafter the utility stepped in to pay the remainder (Social Development Specialist, Bangalore: 20/04/2012).

Besides the World Bank's financial and administrative support, WSP's dissemination of information about the program led to replication in major cities such as New Delhi and Dhaka in Bangladesh. WSP has a close partnership at national level with the Ministry of Urban Development of India (MoUD) and the Ministry of Rural Development of India (MoRD). WSP's main objective is to communicate with the two leading ministries in water governance and to develop policies and regulations for secure and portable water. State actors at the national level are very selective in their communication and

cooperation channels with international donors (Independent World Bank Consultant, Bangalore: 07/03/2012).

The overall target of the program was to connect the 362 informal settlements in the core area of Bangalore to the water and sewerage network envisioned in Bangalore's 2025 master plan⁵⁷, with a long-term goal of extending this service to the greater Bangalore area and its additional 550 informal settlements. The first project phase, carried out between 2002 and 2005, achieved the connection of approximately 45 informal settlements.⁵⁸

Regarding the effectiveness of individual project steps, *output 1* is the establishment of institutional structures and policy regulations for individual water and sewerage connection in informal settlements. This required awareness within the community and a mobilization program with the target group to prevent administrative and legal (land title documents) obstacles to service provision to informal settlements. The extension of existing public water and sewerage networks and the construction of individual household solutions for the targeted number of 45 informal settlements are considered as *output 2* of this program. *Outcome* is the provision of water and sanitation solutions on a household basis for Bangalore's informal settlements with affordable tariffs. Achieving hygienic conditions for residents and at the same time preventing informal and costly water vending structures is considered a major project outcome. As a result, the living conditions and welfare of inhabitants are improved as the project's long term *impact*. Welfare measures in these informal settlements include increased work force and health conditions for the inhabitants.

5.3.1 Providing water supply and sanitation for Bangalore's poor

Looking at the program's actual achievements, how successful was the engaged actor consortium in program implementation? Regarding *output 1*, the project consortium successfully established horizontal and vertical links between relevant institutions in Bangalore to provide for joint management of informal settlement connection processes. Moreover, the establishment of the SDU was the key to providing an operational unit,

⁵⁷ This master plan until 2025 has already been extended towards a new master plan that runs until 2031, both plans can be accessed at Karnataka's state government's website.

⁵⁸ If the aim is to connect 362 informal settlements over the 23 years from 2002 until 2025, then on average 15 informal settlements should be connected each year to reach the target of city-wide water and sanitation coverage. This allows for approximately 45 informal settlement connections in three years (first program stage from 2002 until 2005 under WSP/ WB and JICA guidance).

which has decision-making and sanctioning power for the program in the respective informal settlements, and which is well linked with the key NGO partners that provide social mobilization in the informal settlement areas. As an operational unit, the SDU coordinates the NGOs, engineers and CBOs towards program implementation, but it still lacks a coherent and official policy agenda through which it can link their activities. Moreover, the SDU still struggles with relationships to other departments within BWSSB and with other institutions in the city that are in charge of service provision (such as BDA, BMP and KSCB⁵⁹). Most important, the SDU, in joint effort with BMP and other BWSSB departments, created a procedure whereby inhabitants without land titles are eligible to apply for public water connections on an individual household basis. The results of the initial phase of the program are remarkable, and hence *output 1* can be defined as highly effective and successful in its goal achievement.

Following the AusAID's pilot projects in the three targeted informal settlements, the SDU, in collaboration with BMP, WSP, WB and JICA, managed to initiate water and sanitation works in a total of 46 informal settlements between 2002 and 2005 (Connors and Brocklehurst, 2006, 12). Initiation means that all 46 informal settlements have been connected with one of the local NGOs, have established CBOs, and received mobilization measures towards service provision. However, only about 26 informal settlements had received water services and even fewer had received sewerage connections and sanitation facilities by the end of 2005 (Connors 2005, 214). The reasons for the low outcome of sanitation solutions include the prevalent social norms of sanitation and defecation as issues that are not addressed in society. There is a need to change perceptions of sanitation and then change behavior, even though it might be more inconvenient for some (Research Analyst, WSP, New Delhi: 23/02/2011).

Progress to date is not on track for achieving the targeted connections of 45 informal settlements in three years, in order to achieve the 2025 master plan objectives of Bangalore city. The slow progress towards this goal is caused by area-specific challenges of different geographical situations that require tailored infrastructure solutions. Additionally, settlements required tailored administrative procedures and relationships between CBOs and BWSSB departments. Due to increased experience in

⁵⁹ Bangalore Development Authority (BDA), Bangalore Mahanagara Palike (Bangalore City Corporation) (BMP) and Karnataka Slum Clearance Board (KSCB) being responsible for public service provision in water, sanitation, waste and health and KSCB holding the mandate to clear or up-grade informal settlements, depending on the land title situation.

implementation and raised awareness in the communities about the program, one can expect that the process of connecting informal settlements to the water network will speed up in the future and hence *output 2* of the project is considered as a medium level success.

The *outcome* of the project is also ranked as a medium level of success, since not all targeted informal settlements for this stage of project implementation have yet profited from receiving individual household connections. However, the program has achieved substantial closing down illegal water connections, abolishing informal water vendor structures and providing service to a decent number of informal settlement inhabitants at a fair and affordable price with a regular basis of service provision. Private connections in the respective informal settlements have improved hygienic conditions and the welfare of the citizens, who now have more dignity and increased time to work.

Table 5.7 Effectiveness of WSP/WB/JICA Water and Sanitation Project

Category	Project Goals: WSP/WB, Bangalore	Achievements	Value
<i>Output 1</i>	Establishment of institutional structures and policy regulations for water and sanitation connections on a household basis	Establishment of the SDU as a key operational unit and solid establishment of network of key actors for service provision	High
<i>Output 2</i>	Extension of public water and sewerage network and construction of water and sanitation connections for approx. 45 informal settlements (2002-2005)	Initiation of informal settlement connection in 46 informal settlements and completed connection of 26 informal settlements by the end of 2005	Medium
<i>Outcome</i>	Individual water connection and private sanitation solutions with fair tariff systems, and improvement of hygienic conditions and prevention of illegal water vendor structures.	Abolishment of informal water vending systems, provision of affordable and individual water to all inhabitants of the respective informal settlements; only a few sewage lines and sanitation solutions to date	Medium
<i>Impact</i>	Improved living conditions through better health conditions and more welfare through individual water access	Achievement of long term change in service provision to the poor in the city of Bangalore and replication of the institutional set-up of the project in other megacities in South Asia	High

The program has had a significant impact on the understanding of operator–client relationships in serving the poor in Bangalore city. Moreover, the program gained so much media coverage and attention in its set-up phase, that it has been replicated in

other cities, such as New Delhi and Dhaka in Bangladesh. This reputation and ongoing efforts to achieve the master plan 2025 for Bangalore city are regarded as a significant achievement with regard to the long-term *impact* of the program for the city of Bangalore and the inhabitants of informal settlements.

AS summarized in table 5.7 the effectiveness of this program in Bangalore is ranked in total as very successful (medium to high success) since it came close to achieving all its goals in the planned time span for the first stage of the program. Even though it did not manage to connect all informal settlements with water and sewerage lines, its high degree of success is due to its reputation and replication in other cities in South Asia. The SDU team members were still heavily engaged in providing services to remaining informal settlements in the city and had managed to double the number of connected informal settlements between 2005 and 2012.

5.3.2 Successful actor interplay, backed-up by the federal level

This section assesses the modes of social coordination of the participating state and external actors in this actor consortium, beginning with the state actors in Bangalore. It then analyzes the modes of interaction of the external actors of the consortium and concludes with insights on the mode of governance of the actor interplay in implementing this program.

BWSSB was put under pressure by citizens' and local NGOs' complaints, which requested extension of public service provision to informal settlements. This protest from civil society resulted in daily media attention to the topic of equal and justice service provision by public agencies. BWSSB reacted to this media coverage and began to perceive inhabitants of informal settlements as new customers that needed to be included in the service: "It remains, of course, a state-owned public utility, full of the bureaucratic hurdles residents routinely decry; but its progress towards being an organization open to complaints, suggestions and information-sharing is both significant and substantive" (Connors, 2005, 213), is stated by Connors (2005) who accompanied the process of institutional change within BWSSB for several years and served as an external evaluator of the entire program.

It can be regarded as a major step towards recognition of informal settlements to provide permanent public service infrastructures, even though inhabitants do not hold land titles and tenure rights. Without this loophole, this process might have caused a

larger debate at the State Legislative Assembly. The fast program results profited heavily from preventing this formal political decision, as Connors and Brocklehurst (2006) show through this statement: “the tacit support of the state Urban Development Department was crucial; the Secretary of the Department was a member of the Board of Directors that adopted the initial resolution and did not object to later practice” (Connors and Brocklehurst, 2006, 7).

In 2002, the implementation of the so called ‘package program’ created momentum for the extension of the entire program. The package program was completed in 2005 and included the construction of basic water infrastructure for all wards in downtown Bangalore by BMP and international donors (Connors and Brocklehurst, 2006, 9). Cooperation of international donors with local State Government partners is determined by the agenda-setting of the government actor and can best be characterized as a bidding process for the most efficient solution to identified problems.

Decision-making in state entities is never done by individuals; rather, decisions are agreed upon by a round of people. This leads to the consideration of collaboration and targets of collaboration with international donors (Regional Team Leader, WSP, New Delhi: 23/02/2011). Moreover, line of reporting is very strict from bottom-up from SDU to city and state government units. This does not allow for too much flexibility of lower-level decision making at SDU that goes beyond daily challenges in the program. The mode of social coordination of state actors is top-down and very rigid but at the same time includes participatory and round table elements of communication and inclusion in decision-making. Hence the mode of social coordination can be characterized as hierarchical steering and *delegative coordination* with only limited involvement of lower-level decision-making. As one World Bank consultant phrased it: “The government has taken up a central role in decision-making and agenda shaping of development and development projects. Especially by introducing schemes such as JnNURM they set the framework to channel all the activities and determine who is doing what, with whom and why” (Independent WB Consultant, Bangalore: 13/03/2011). Implementing the program partly under the federal JnNURM framework allows the external actor WSP to be guaranteed federal-level backup in its local level actor relationship.

Cooperation of state actors with external actors takes place at different political levels. While the WSP collaborates closely with ministries at the national level (the Ministry of

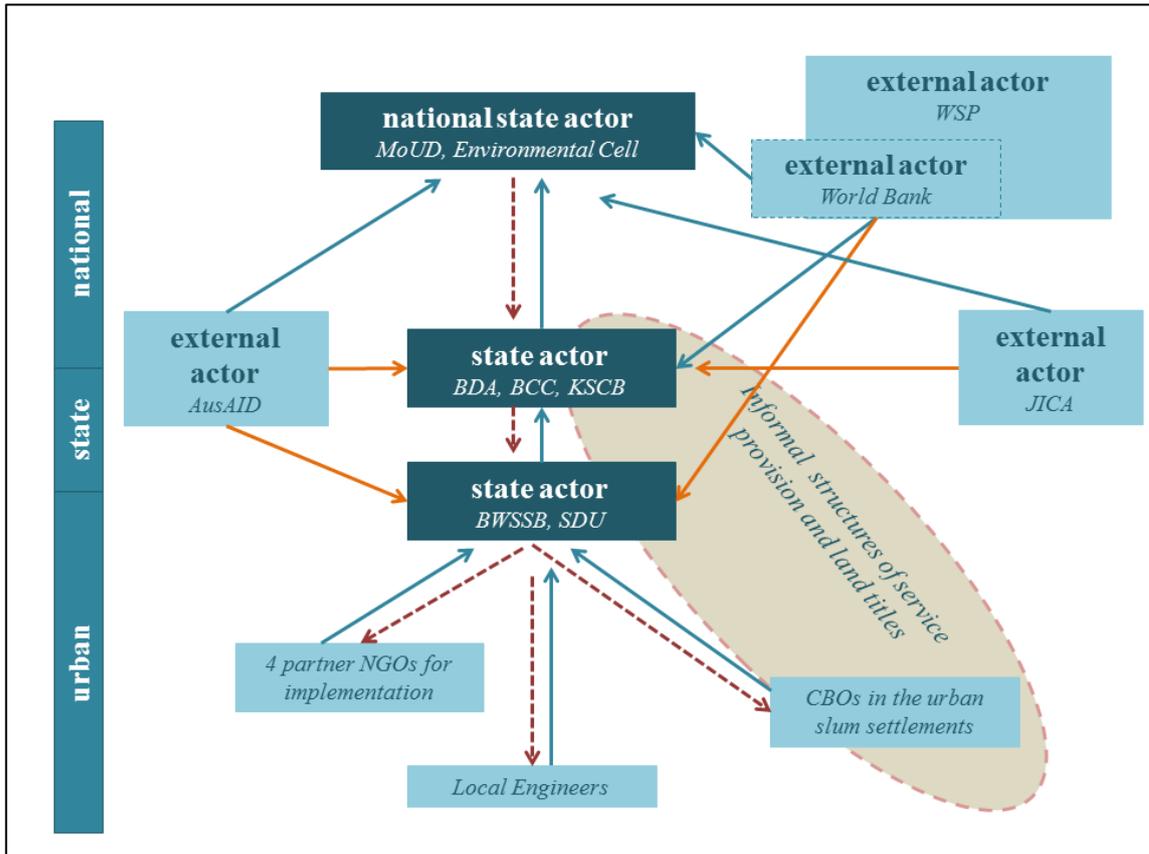
Urban Development of India and the Ministry of Rural Development of India), its impact on state-level implementation is limited to several workshops on knowledge exchange and learning and on accompanying the local level implementation to disseminate project results and provide for lessons learned. Therefore, collaboration between the WSP and state partners in this project context had decision-making relevant at national level but was limited to debates, knowledge exchange and advice on state-level implementation without substantial impact on actual decision-making at the state level.

The WSP pursued a rather strategic approach when collaborating with state actors in order to address pressing issues and achieve substantial change. As one of their team leaders put it, they emphasized that “most important to projects in India is the ownership of the government. They only take up approaches which they feel to be their own approaches and ideas. Therefore, it’s about clever marketing of project approaches to the government, provide them time and space to work on such an approach and make them feel the proposal has been done by them. This assures sustainable development and further up taking in questions of operation and maintenance by the government.” (Regional Team Leader, WSP, New Delhi: 23/02/2011). Therefore, the WSP’s strategy of dissemination and communication of local-level achievements is one way of scaling-up smaller initiatives and replicating successful project approaches (WSP, 2001, 3). Another are local level learning workshops that foster knowledge exchange among implementing actors within a program consortium as well as across initiatives from different areas that share the same vision of sanitizing and providing water to informal settlements.

Besides the WSP, the Japan International Cooperation Agency (JICA) was also engaged in this program under the infrastructure component of providing water pipelines to wards in the city that are dominated by informal settlements. Under its large-scale Cauvery Water Supply Project⁶⁰, the JICA included informal settlement development as an additional component in its program plans to provide for infrastructure to all parts of the city (BWSSB, 2014). Figure 5.4 illustrates the multiple links among the involved actors from national to state and to city level.

⁶⁰ The Cauvery Water Supply Project is a large scale program to meet the increasing demand of urban Bangalore for water by pumping the water uphill from the nearby Cauvery River in three stages into the city.

Figure 5.4 Actor Relationships in Urban Water and Sanitation Program (WSP/WB)



Source: own compilation. Blue arrow: direction of reporting and accountability. Red arrow: direction of decision-making and exercising of formal mandate. Orange arrow: direction of accepted advice and knowledge input.

This vector graph about direction of reporting, accountability and decision-making reveals that the large external actors did not collaborate with each other. However, their close relationship and reporting obligations to national level ministries assured a sound composition of their activities at the local level. Decision-making and implementation were top-down and driven by well-recognized knowledge input from external actors. The combination of recognized input of the external actors at all state levels with a strong willingness to act at the state and urban level resulted in successful institutional change towards service provision for informal settlements and, ultimately, in a change of governance procedures towards systematically establishing institutional structures that provide the urban poor with public services.

Comparing the collaboration of state actors with different international donors, WSP is one of the central donors with a high reputation among state actors. From the

perspective of the WSP's regional team leader, though, the ministerial side of actors at the national level "pursue a very hierarchical and strict communication policy and are very selective about to whom they speak and to whom not and who they influence via other actors. [...] though they take their resources, they build up a power relation, demonstrating the Bank staff that they determine the agenda and that they dominate the actors and control who speaks to whom" (Regional Team Leader, WSP, New Delhi: 23/02/2011). Many international donors who lack reputation also lack a transparent and collaborative interaction with state actors. WSP and JICA are two agencies that have gained trust over the years in their expertise and program implementation; this has given them good reputations and allowed for smooth and interactive cooperation with state partners at the national level as a back-up for local-level implementation.

With WSP providing for knowledge and learning workshops at different levels of decision-making as well as throughout program implementation, their mode of engagement in the relationship with the respective state counterparts remains to be knowledge based communication and negotiation about program implementation and adjustment of program plans. The horizontal mode of decision-making with local NGOs and within the WSP team itself, allows to perceive the mode of social coordination on the external actor side as a *communicative mode of coordination*. Hence, the collaboration between state and external actors in this project is backed up by ties between actors at the national level and these national level credits in combination with reputation of WSP as providing successfully for public services, allows this national effect of close relationships to trickle down to local level and provide for a position on local level that is respected and consulted for its expertise. The combination of the two modes of social coordination in this relationship between WSP and BWSSB/ SDU can be characterized as *governance by government*. The interaction is characterized by the advisory function of the external actor to the local government actor, with a minor implementation support from the external actor to large-scale infrastructures. However, major changes in the institutional set-up and policy regulations have been implemented by the state actors exercising their input, legitimate service provision function, without any friction with external actors.

However, over time, the state actors changed their mode of social coordination, moving towards *instrumental coordination* with local NGOs and CBOs in the project implementation plan. Realizing their increasing experience and knowledge with

inhabitants of informal settlements provided them with a position to be included in official round tables at state level and to participate in adjustments of the design of the entire program. This signals a change from hierarchical towards more vertical coordination between actors and higher degrees of participation. This change can be characterized as a slight breeze towards instrumental coordination at state partner side what can be interpreted as slight tendency at the end of program implementation towards *polycentric governance* in a governance arrangement with a conventional donor consortium such as WSP and JICA. Besides this very interesting change over time, which factors have also had an impact on successful project implementation?

5.3.3 Charismatic leadership as foundation for actor interplay

The WSP/JICA project profited from prior and largely funded AusAID project, which was implemented between 2000 and 2002 and included pilot studies to serve urban informal settlements with water supply services. The most important achievement of the project was a large willingness-to-pay study, which revealed the eagerness of informal settlement inhabitants for permanent and sustainable water supply and their willingness to pay for this water as every customer does in the city. A second achievement of the program was the recognition that the service system has to accommodate inhabitants who cannot provide land title documentation or property tax receipts in order to be eligible for service provision (Connors 2005, 209).

Both of these aspects were raised by the international donor, AusAID, and the awareness of these crucial factors for success created the momentum for institutional and regulatory change towards sustainable service provision for the poor. In terms of infrastructure, this pilot program was successful in connecting almost 1,000 households and 6,000 people (73 percent of the inhabitants of the settlements) to individual water connections. It also refurbished two existing public toilet blocks and opened drains in three informal settlements in Bangalore city (Connors and Brocklehurst 2006, 7). The awareness-raising on land title issues and people's willingness to pay for regular services, in combination with the overwhelming success of connecting these three communities, created a momentum at different levels in the ministries. In addition, it created momentum in the engineering department of BWSSB in terms of recognizing informal settlements as regular customer areas (Connors and Brocklehurst 2006, 15). One social development specialist recalled: "We delinked the provision of water supply from the land tenure, any informal settlement household could apply for a water supply

connection by just providing a proof of residence, that could be some identity card, an ID card that is issued by the City Corporation or by the Slum Clearance Development Authority or even by the electricity department, even an electricity bill will do saying this particular person has been residing in this informal settlement for so long” (Social Development Specialist, Bangalore: 20/04/2012).

In Bangalore, informal water vendor structures had to be considered in order to change the political regulations for service provision to the urban poor. Private water tankers with overpriced water had been common throughout the summer months, when water supply to the entire city is limited to few hours a day. Approximately 6,000 bore wells and 15,000 public taps were installed, maintained and put into use by BWSSB. Informal water vendor structures are often politically motivated in their service provision on a temporary basis, usually in the run-up to an election (Connors and Brocklehurst 2006, 4). However, the major obstacles for service provision to informal settlements were land tenure issues and the social work in the community itself that was needed to mobilize residents and provide them with the knowledge necessary to become a customer of BWSSB.

As a legacy of the pilot project, BWSSB decided to establish a so-called Social Development Unit (SDU) with a social worker as a division to oversee the field engineers that connect the informal settlements. Previously, BWSSB had never employed a social worker. This change in strategy, and the acceptance of new pathways to provide for mature and knowing communities, allowed for greater engagement of NGOs. This in turn provided knowledge to the inhabitants and created CBOs that implemented the service supply plans of the respective informal settlements. This institutional adjustment provided enhanced capacities for providing services to the urban poor, and it also established new dialogues with potential customers, changed the perceptions of poor people and catalyzed their willingness to pay in part for proper service provision.

Within the BWSSB, this adjustment was the tipping point for a substantial change in Bangalore’s service provision to the urban poor. The strict hierarchical communication channels within BWSSB initially created institutional friction with the SDU. The SDU was requested to report to BWSSB’s corporate planning division and not to the maintenance division, which is actually in charge of providing for field-level engineers and hence technical support for the required infrastructure for individual household

connections (Connors and Brocklehurst 2006, 11). This illustrates that adaptation to local conditions is of utmost importance; however, besides institutional change, a change in policies and regulations needs to take place in order to provide for a project environment that allows for successful target achievements.

Besides the structural adjustment, the personal leadership qualities of the SDU head officer were of significant importance for the project's success. She was appointed from her previous position in the Women and Children Development Department in Karnataka. As a well-known social development expert, she had the expertise to set up a close network with four core NGOs for community mobilization, and to motivate BWSSBs engineers to consider informal settlement inhabitants as new and solid customers. However, her office of three team members was severely understaffed for tackling the huge challenge of providing support to all informal settlements in the city of Bangalore (Connors 2005, 213; Connors and Brocklehurst 2006, 9).

In summary, one can argue that the combination of structural change and a committed, charismatic and well-known leader, as well as bring solidly networked with international donor agencies provided the basis for this program's ultimate success.

5.3.4 Actor interplay and local legitimacy as key to success

Even though the program did not achieve all its targets, it successfully changed old institutional structures and continued to operate several weeks after the institutional adjustment. This seems likely to lead to an ongoing procedure of more custom orientation for poor people. The main drivers of success of this program were the fruitful interplay between state and external actors regarding large scale infrastructure measures, as well as structural change within the water provider through the establishment of the SDU, in combination with a charismatic leader.

It could be argued, firstly, that the immediate infrastructure investments were necessary for the program to reach its present scale, and, secondly, that the structural change in the planning and vision phase allowed for a change in social coordination that had a slight polycentric character in the end by including local NGOs and engineers. Knowledge transfer and successful mobilization of the communities relied purely on the approach of collaborating closely with NGOs and engineers. This inclusive implementation approach was successful because of the committed and skilled leadership of the SDU head officer, who was able to expand the capacities of the service provider to meeting

the needs of the urban poor by changing prevalent policy regulations, such as the land tenure issue, and by promoting the successes in a way that stimulated further success stories.

This case reveals how some key drivers of program success are the large scale of a program and relying on a charismatic leader who drives the implementation process. Institutional change at the state level was only possible due to a political momentum and window of opportunity. However, utilizing this change in the long run remains in the hands of a charismatic leader. This case reveals that program success needs to rely on a successful relationship of donor and recipient, but that the ultimate success of the relationships and the mode of coordination may vary due to outstanding champion persons that guide a process of implementation.

Table 5.8 Results of WSP/WB Case Study

Variable	Findings	Interpretation
Independent Variable	State actor (BMWSSB): hierarchical steering (delegative coordination)	The social coordination mechanisms in this actor constellation were clearly determined by a <i>governance by government</i> arrangement with a strong and dedicated state actor, which changed over time from delegative to instrumental coordination and hence provided for a rather <i>polycentric governance</i> arrangement over time
	External actor (WSP/ WB): non-hierarchical steering (Communicative coordination)	
Alternative Explanations	Historical project context	The legacy of the AusAID pilot program paved the way for change in behavior, attitudes towards the poor and finally structural adjustment of the local service provider
	Non-transparent power plays	Local power structures were considered in project implementation and hence did play a minor role for project results
	Local legitimacy	Structural adjustment and change in reporting structures were crucial factors for successful project implementation
	Resource availability	Charismatic and committed leader with high impact on the outcome of the program
Dependent Variable	Project effectiveness	Medium to high effectiveness due to the achievement of project aims and establishment of respective actor networks

The success of this program was determined mainly by local legitimacy in combination with human resource capacities and the willingness to act. The combination of modes of coordination resulted into governance by government relationship that in the end developed towards a relationship with a rather polycentric governance configuration,

which in the end paved the way for success. This case reveals that governance by government is needed to install a program and roll it out successfully in the end. Compared to other programs, where programs ended with *competition governance* due to a lack of coordination among donors and recipients, this program proves the opposite. Successful program implementation increased trust and knowledge among state partners and provided for a slight tendency towards non-hierarchical steering by including lower levels of decision-making into adjustments of the program.

This tendency of a *polycentric governance* relationship itself is not the key to success, but if it goes along with local legitimacy and charismatic leadership, then we find an ideal combination of factors that sets incentives to engage all included partners from engineers to political decision-makers and prevent slowing down of a program. This change at the end reveals a pathway that allows for project success in the long run and self-sustaining service provision for informal settlements.

5.4 Communal Toilets in Informal Settlements in Bangalore, WSUP

As mentioned earlier in the WSP/WB case, Bangalore city officially has about 550 informal settlements, with about 362 located in its core area and about 188 in its greater municipal area. The city itself is so densely populated that one does not notice the difference between the core and the greater municipal area. However, the greater municipal area is more dominated by large industrial areas, and informal settlements in these areas differ in terms of the job activities of their inhabitants. In inner city informal settlement areas, settlers mainly work as rickshaw drivers or private servants. However, in outer city areas, male settlers are predominantly employed as support service in large industrial and IT companies, while a high share of female inhabitants practice prostitution and these women are exposed to violence, lack of health service provision and lack of basic water and sanitation services.

Regarding service provision and the infrastructure of water and sanitation facilities, the area of greater Bangalore is under the mandate of the Greater Bangalore Municipal Corporation, the Bruhat Bengaluru Mahanagara Palike (BBMP). The BBMP collaborates with Bangalore's Development Authority (BDA) for the implementation of water and sanitation service provision. However, service provision and infrastructures in the extended Bangalore areas do not come under the mandate of Bangalore Water Supply and Sewerage Board (BWSSB).

Water and Sanitation for the Urban Poor (WSUP), a London-based transnational development partnership,⁶¹ implements water and sanitation projects in South Asia and various countries in sub-Saharan Africa. The partnership's head office is in London, but projects are implemented by local staff and supported by regular visits from the UK-based project managers. WSUP's vision is to strengthen local service providers as well as local communities and to enhance water and sanitation facilities for the urban poor (Bevan and Franceys 2009).

In South Asia, WSUP mainly works in large informal settlement areas to provide inhabitants with independent and small-scale sanitation solutions and drill boreholes for public water taps. In 2003, WSUP initiated a project in the informal settlements of

⁶¹ Transnational development partnerships are relatively new. In the aftermath of the World Summit on Sustainable Development in Johannesburg, 2002, the so-called Type II Partnerships were inaugurated to provide new solutions to international development and sustainability as tools to integrate private, public and science partners in their program proposals and implementation (Andonova and Levy 2003).

Bangalore city, in South India. Bangalore city area has about 4.3 million inhabitants, of which some 345,200 live in different forms of informal settlements, spread all over the city.

WSUP started its engagement in Bangalore with the target of providing 44 informal settlements with clean and affordable drinking water and sustainable sanitation concepts. The goal was to directly provide water and sanitation services to about 200,000 people and to scale up these pilot projects in additional informal settlement communities. The vision was to integrate these pilot areas with public utilities to guarantee long-lasting relationships between customers and public water utilities.

Info Box: Water and Sanitation Facilities for Bangalore's Informal Settlements

Components: Capacity-building and knowledge transfer to urban service provider, and technical support to construct public water and sanitation solutions for informal settlements. Workshops and knowledge transfer with respective informal settlement communities.

Scale: Sanitize and provide water supply for 44 informal settlements and 200,000 people

Duration: 2006 - 2011

Partners: Water and Sanitation for the Urban Poor (WSUP), CDD, TTI, District Collector

A 2006 collaboration contract between WSUP and Thames Water⁶² initiated WSUP's engagement in Bangalore. Thames Water already had an assignment with the Bangalore Water Supply and Sewerage Board (BWSSB) to address problems in informal settlement areas and to provide service delivery for these communities. In the early stages of the project, Thames Water was the implementing actor and WSUP concentrated on its monitoring role. Collaboratively, the consortium identified critical issue areas in Bangalore with a baseline survey and they designed a plan for 44 informal settlements with a target population of 200,000 people. This provided an early implementation plan for WSUP activities in Bangalore. It selected four pilot areas (Laxmanmurthy Nagar, Rajiv Gandhi Nagar, Swatandhra Nagar and Kaveri Nagar) in which to implement their plans (Technical Coordinator, WSUP, Bangalore: 19/01/2011).

Since the privatization of water is a sensitive topic in India, Thames Water faced widespread protest against its activities in informal settlement communities from local and national NGOs and activist networks. WSUP then decided to end its Thames Water collaboration in India. It took WSUP almost a year to pursue campaigns in Bangalore on

⁶² Thames Water is a British private utility company, responsible for water provision and waste treatment in the United Kingdom (UK).

the ground by using local networks and high ranking contacts in order to establish WSUP as an individual brand, not being engaged or perceived as a private sector water company. Finally, they planned and implemented a Decentralized Wastewater Treatment Solution (DEWATS) in Swatandhra Nagar, a rather well-off informal settlement in the eastern outskirts of the megacity, Bangalore. The settlement of about 200 households and 1,000 people consists mainly of better-income groups and about 50 percent of people have their own toilets. WSUP, in collaboration with the Consortium for DEWATS Dissemination (CDD), installed a drainage system for the entire area and provided connections to every single household. However, only a small percentage of households have yet managed to connect to the system or build an in-house latrine (Technical Coordinator, WSUP, Bangalore: 19/01/2011; Field visit of the author, Bangalore: 18/01/2011; CDD, 2009; CDD, 2010).

In Laxmanmurthy and Gandhi Nagar, WSUP started the planning and construction of latrine blocks but the work was interrupted by the Karnataka Slum Clearance Board, the Forest Department and the Lake Authority. The authorities claimed that the location of the informal settlement on a former lake area made it a sensitive area under nature protection. After several failed attempts to receive a No Objection Certificate (NOC)⁶³ from the land-owning authority, WSUP stopped all preparations for construction of latrine blocks in these two informal settlements (Project Director, WSUP, Bangalore: 10/11/2010).

In Kaveri Nagar, an informal settlement with about 4,000 households, WSUP refurbished two existing latrine blocks and planned the construction of two new blocks in collaboration with a local consultancy (TTI Engineers). While one toilet block with a local and decentralized treatment facility was implemented, the second toilet block remained bare brickwork, because the informal settlement inhabitants decided to rededicate the building as a temple.⁶⁴ Therefore, in Kaveri Nagar, three latrine blocks are operating sporadically. They are supervised by CDD staff members, since WSUP completed its operations in India in 2011 (TTI Consulting Engineers, 2010; TTI

⁶³ No Objection Certificate (NOC) is the legal approval by government agencies to construct e.g. infrastructural facilities.

⁶⁴ Temple buildings in an informal settlement provide for security from eviction because a temple area cannot be desecrated by eviction and demolition. The settlement did not have such a temple and was more in need of a temple than of another sanitation block in order to decrease the likeliness of eviction. This knowledge of cultural habits, local security issues and local needs was obviously not included when the service provision program was designed, which indicates a lack of adaption of the WSUP approach to local conditions (cf. Beisheim and Liese 2014).

Consulting Engineers, 2009; WSUP, 2011). Even though WSUP announced the extension of the Bangalore program to other cities in South India in 2009 (WSUP, 2009, 20), an internal decision was made to complete WSUP India programs in 2011 and to finalize all WSUP activities in 2012. This was due to the non-collaboration of public utilities and the difficulties in interaction with state partners at the national level in New Delhi (Technical Coordinator, WSUP, Bangalore: 14/03/2012).

5.4.1 Unsustainable results in program implementation

As stated earlier, the overall goal of WSUP was the provision of water and sanitation facilities in 44 informal settlements in Bangalore. In assessing the effectiveness of this program, *output 1* is the establishment of an adequately staffed, operational working unit of WSUP in Bangalore, and the establishment of relationships with local water providers and informal settlement rehabilitation institutions. The provision of a project plan and the establishment of bidding processes and contracts with local companies for implementation are regarded as *output 2*. *Outcome* is the successful installation of water and sanitation facilities for the 44 informal settlement areas as well as active usage of these facilities from the community (acceptance) and reduced open defecation. *Impact* is perceived as improved welfare and lifestyles, due to more time and better hygienic conditions in the informal settlement area as well as long-term operation and maintenance structures of the water and sanitation facilities by transferring responsibilities to the public service provider, BWSSB. The overall WSUP objective was not achieved: providing water and sanitation for 44 informal settlements and reaching about 200,000 people. However, two pilot projects were implemented and within these project contexts, good technical solutions to sanitation issues were achieved. The next section looks more closely at the implementation and challenges WSUP faced in the Bangalore project.

Output 1 was partially achieved through the establishment of WSUP Bangalore, a small but well-known working unit that provided support to the project implementation with a team of about 5-15 people over several years. The team is composed of social workers and technical engineers, as well as administration and finance staff members. Collaborations for implementation were established with two local agencies, namely the CDD for a decentralized sewerage system and TTI for sanitation blocks in Kaveri Nagar informal settlement. However, attempts to network with the local water provider, BWSSB and BMP, were not successful and hence the targeted implementation of 44

informal settlements was not achieved; only two informal settlements were given better sanitation by WSUP. The results of *output 1* are therefore labeled as medium, since while the overall targets were not reached; a minimum of local institutionalization was achieved, in combination with two small and quite successful pilot projects.

Output 2 of the program is the water and sanitation upgrade of 44 informal settlement areas, as envisioned by WSUP London and WSUP Bangalore. Initially, the partnership aimed at implementing plans in four pilot areas and then replicating these pilot cases in 40 other informal settlements throughout the city. They selected four areas: Kaveri Nagar, Swatandhra Nagar, Rajivgandhi Nagar and Laxmanmurthy Nagar. The project team established project planning in all four areas and developed a bidding process for implementation in these areas. The concept of TTI Consultants won in two project areas; the other two projects were assigned to CDD. Both agencies started construction of sanitation facilities, but both were interrupted by the Karnataka Forest Department (KFD), which claimed that the areas were environmentally sensitive former lake areas and hence were banned from receiving any permanent infrastructure (Project Director, WSUP, Swindon: 10/11/2010). Even though WSUP had contracted with two local agencies for project implementation, two of their pilot projects failed completely during the initial implementing phase, and plans for the other two pilot areas were changed due to lack of cooperation from local service providers (Technical Coordinator, WSUP, Bangalore: 09/03/2012). WSUP underestimated the relevance of considering and adapting to the legal and institutional environments of the selected geographic areas and hence did not achieve self-sustaining public water and sewerage service provision. Since the pilot programs themselves only partially succeeded, and since, more importantly, the overarching goal of providing service to 44 informal settlement communities was not achieved, the *output 2* results are categorized as low.

The program's *outcome* after six years is sanitation and sewerage facilities in two informal settlements (Kaveri and Swatandhra Nagar). In Swatandhra Nagar, a small and rather better-off informal settlement, WSUP collaborated with CDD to install a DEWATS system that provides a decentralized sewerage network for all households and provides the opportunity to link individual household toilets to the network. However, only about 30 percent of the households in this informal settlement were able to construct an individual household toilet by the end of the program in 2011, due to a lack of financial capacities. The number of individual household connections is not very

high, due to a lack of program proponents to empower and support individual households to get connected to the provided decentralized network. Even though the character of a decentralized sewerage system is quite remarkable, to make it a success, the ability of households to adequately respond to such infrastructure provision needs to be considered more carefully in advance of such a program approach.

In the other informal settlement, Kaveri Nagar, a rather large and problematic informal settlement area, WSUP refurbished two existing public sanitation blocks and constructed two new blocks. However, by the end of the project in 2011 only two blocks were in operation. These two blocks were technically operating very well but lacked users due to high prices and inconvenient opening hours. The provision of public sanitation blocks needs also to consider inhabitants' willingness to pay for such a public service, and the hours of demand. Due to security problems, the sanitation block shuts down in the evenings and female inhabitants have no other choice than to use outside areas with plastic bags as alternative toilets. Additionally, the social and cultural acceptance of such facilities needs to be evaluated beforehand. This particular informal settlement faces problems with drug trafficking and prostitution, and the sanitation facilities quite quickly became well-known places for these activities and were avoided by other inhabitants of the informal settlement. This resulted in limited opening hours at peak-times (morning and evening) due to decreased demand and security problems.

The other two blocks were shut down because of lack of operation and maintenance, and the conversion of one newly constructed block into a local Hindu temple (Field visits of the author, Bangalore: 18/01/2011 and 25/01/2011). Service provision in only two settlements that reach only a limited number of inhabitants due to structural challenges, has to be ranked a low result.

The *impact* of the project is hardly visible. There is no significant improvement in the targeted inhabitants' living conditions and welfare. Even though the technical success of two small pilot projects is remarkable, open defecation is still prevalent in informal settlement areas (Field visits of the author, Bangalore: 14/03/2012). Conditions have improved for only approximately 300 households, or about 1,500 people in two informal settlements. They represent less than 1 percent of the 200,000 people targeted by WSUP in the beginning of 2006.

Table 5.8 Effectiveness of WSUP Urban Water and Sanitation

Category	Project Goals: WSUP	Achievements	Value
<i>Output 1</i>	Establishment of local WSUP branch and agreement with public water and sanitation service provider for service provision to 44 informal settlements	Establishment of an operational working unit in Bangalore and partnership with two implementing agencies, but not with public sector water and sanitation service provider	Medium
<i>Output 2</i>	Project planning and bidding process and establishment of relationship with implementing agencies for 44 informal settlements	Project planning of four pilot projects; failure of two projects in the initial implementing phase and partial success of two pilots out of 44 planned projects	Low
<i>Outcome</i>	Facilitation of water and sanitation solutions for all informal settlement inhabitants	Implementation of technically efficient DEWATS systems in two informal settlements, but low usage rates in these two informal settlements due to lack of resources	Low
<i>Impact</i>	Improved welfare and hygienic living conditions and reduction of poverty	Improved welfare for only about 1percent of the originally targeted population.	Low

Regarding the water provision component of their programs, WSUP realized during the implementation phase that public water provision in the outskirts of Bangalore is difficult to achieve, due to the geographical and institutional challenges. Therefore, they provided a few public water points that eased the situation, but do not provide for a long-term and sustainable water supply (Managing Director, TTI Consultants, Bangalore: 11/03/2011). In sum, the impact of the project compared to the initial goals of WSUP in Bangalore has to be ranked as low.

In considering all results of the four dimensions of effectiveness, the overall effectiveness of the WSUP program in Bangalore is low. Even though the partnership managed to establish two technically viable projects in the outskirts of Bangalore, which might provide models for further project approaches, presently they have improved living conditions for only a few hundred informal settlement inhabitants compared to the overall goal to provide public services for 200,000 citizens. WSUP itself has realized that it overestimated its potential impact in India's megacities and concluded that their approach might have produced more viable outcomes in smaller cities in Bangalore (Project Director, WSUP, Swindon: 10/11/2010), where the demand

for collaboration with external actors is higher than in large megacities with actively engaged large scale donors.

The partnership was not able to a solid footing in India because local conditions and needs were not adequately considered or addressed by the partnership in advance. Nor was it able to connect with the public sector for joint programs of service provision. Why WSUP was unable to develop strong ties with the public sector and to what extent was this failure responsible for the disappointing results of this technically promising program approach? The next section discusses the reasons for the rejected relationship and how this is interlinked to the low project results.

5.4.2 Rejected relationship causes low project results

The social coordination between the external actor, WSUP, and the local state agencies (BWSSB, BDA, BBMP and BMP) for shared provision of water and sanitation infrastructure was doomed to fail from the beginning. Why did collaboration and social coordination fail to develop in this case?

BWSSB rejected any cooperation with WSUP right from the start, for two main reasons. Firstly, WSUP's approach of providing water and sanitation services and strengthening the capacities of the local water utilities (BWSSB in this case) did not complement the existing project portfolios of BWSSB with international, large-scale donors, such as WB, WSP or JICA. Therefore, their program was perceived as too small to make a meaningful contribution to the already existing programs. In the view of a social development specialist from BWSSB: "We did not cooperate with WSUP because we do not collaborate with such small entities and prefer large scale providers" (Social Development Specialist, BWSSSB, Bangalore: 20/04/2012). The rejection of collaboration was a combination of the scale and size of the proposed WSUP program and the already existing structures and actor constellations for water and sanitation services in informal settlements.

The second reason for the BWSSB rejecting the collaboration is that BWSSB rejects smaller and new donors from an ideological point of view. The same specialist continued: "We [BWSSB] are not partnering with local NGOs or international donors such as Arghyam or WSUP because they aim at policy advocacy and they have a different mindset and modus of operation than we have" (Social Development Specialist, BWSSSB, Bangalore: 20/04/2012). The state partner perceives discrepancies

in the operational mode of the new donors and in goal-setting and implementation strategies. Moreover, there is also a certain degree of mistrust, due to lack of reputation and due to the obvious approach of WSUP to enhance capacity and provide training for the local municipalities. This combination of no reputation in the respective local context and the ambition to contribute to major structural and institutional changes at within the urban utilities is perceived as over-ambitious by BWSSB and results in mistrust and rejection of collaboration. These differences in decision-making and perception of how to achieve change for improvement of water and sanitation governance are reason enough for state partners to reject collaboration with WSUP as a new donor.

The state actor in Bangalore confirmed its superior position by interrupting the on-going project constructions of WSUP and through the rejection of any kind of coordination. The dominant and strong protest against WSUP as a small international donor is a case in which the state actor claims its government functions without any interference from small projects. This powerful and hierarchical decision-making of the state actor resulted in three years of ‘muddling through’ with WSUP’s partnership, as it continued project implementation under the sanction of a local district collector in the greater Bangalore area and established competition governance structures to provide decentralized services for two informal settlements in Bangalore.

In the beginning of WSUPs engagement in Bangalore, the partnership planned its programs in the head office in London. After selecting suitable informal settlement areas in Bangalore, it aimed to immediately implement the projects with the support of the local administrative authorities. The establishment of a local WSUP team in Bangalore served to engage in the delicate process of strengthening the community based organizations (CBOs). However, financial and operational management and decision-making was under the mandate of the UK-based program directors. Hence, the projects were to be implemented as London-designed proposals with only limited participation of local informal settlement inhabitants. In addition, WSUP aimed to strengthen the capacities and knowledge of urban water providers and acted with a strong and guiding sense of mission to do so (Project Director, WSUP, Swindon: 10/11/2010; Field visit of the author, Bangalore: 25/01/2011).

In this Indian case, WSUP did not succeed in collaborating and coordinating with the public utility, BWSSB. WSUP acted with a strong sense of mission about what was

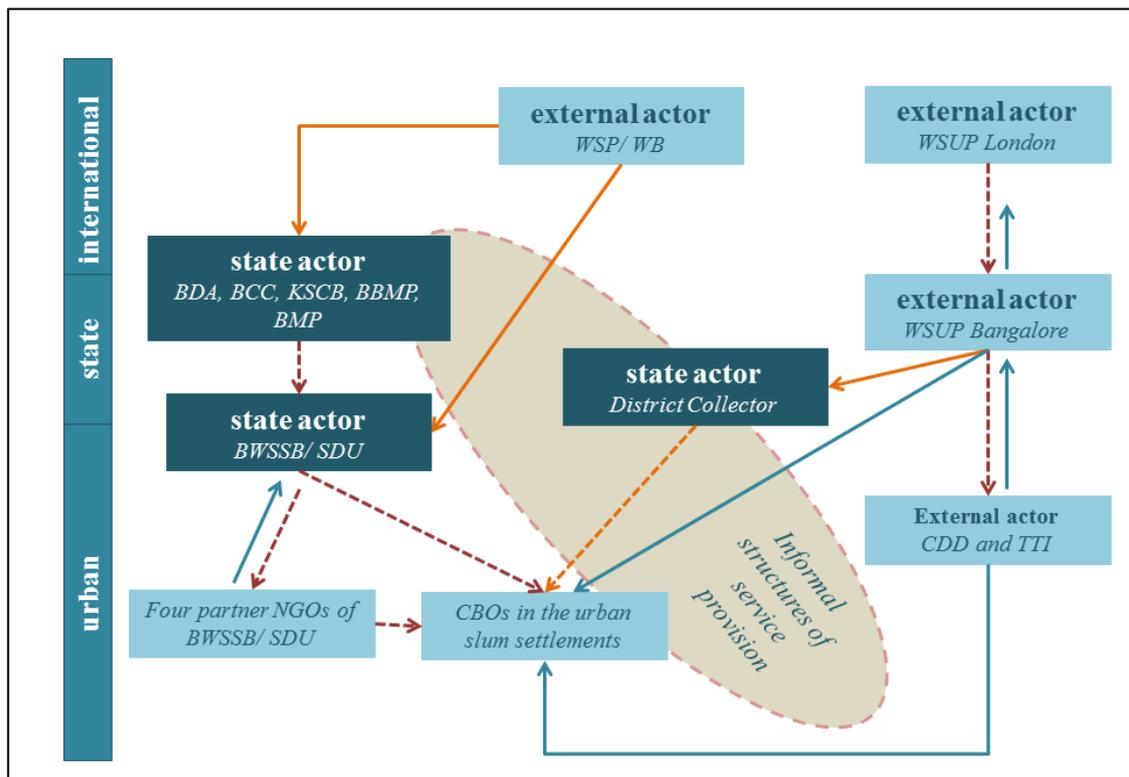
needed and how to tackle the existing problems, which resulted in a clash of perceptions between WSUP and BWSSB about each other's activities and modes of operation. According to the CEO of WSUP: "[The public utility, BWSSB] is deeply political, without clear commitment to reach the poor in the informal settlements" (CEO, WSUP, London: 11/11/2010). This strong sense of fulfilling an internationally mandated mission in the local context resulted in a lack of cooperation from the local service provider. From the point of view of BWSSB: "Their mandate is completely different; they are not looking at infrastructure projects but at policy issues. [...] they might coordinate on certain issues only then will they come in" (Social Development Specialist, BWSSB, Bangalore: 20/04/2012). This case reveals that both ends of the interplay vary in the perception of why the cooperation did not come into action. While the activities and achievements of BWSSB in urban informal settlements in Bangalore prove their successful approach and willingness to collaborate with larger donors, WSUP obviously overestimated their impact and the willingness of BWSSB to be guided by WSUP as a small and relatively new entity in Bangalore's water sector. It proves that without federal level-backup and a lack of reputation from prior programs it is difficult for a new donor to establish trustworthy relationship with local counterparts.

To successfully provide sanitation services on a large scale to urban poor, even small-scale donors such as WSUP need to establish cooperation with state agencies that are the legitimate actors for service provision. Even though WSUP has a very hierarchical mode of social coordination, it is highly dependent on the willingness of local state agencies to cooperate: "[donors] can express their ideas, and public utilities are willing to listen, but the government has a set of rules that need to be followed. WSUP cannot implement projects by themselves – they are requested to support the government" (Coordinator R&D and M&E, CDD, Bangalore: 25/01/2011). In a country like India, where state agents operate in very hierarchical modes of decision-making, establishing collaboration is difficult, especially when it has been already rejected by higher level decision-makers (CEO, WSUP, London: 11/11/2010). Instead of targeting alternative solutions with other donors, being active in the region, WSUP opted for an exit strategy and collaborated at the fringe of the city and with local state actors, outside of the BWSSB geographical area of responsibility.

In this actor arrangement we find the mode of hierarchical steering at state actor side as well as at the external actor side what resulted into entering into a *competition*

governance arrangement due to the lack of trust and lack of willingness to collaborate at the two actor sides. The state government is fulfilling a blockade function and the external actor opts for an exit option and implements a program far below its originally planned scale and beyond their targeted urban areas. This lack of willingness to collaborate lead towards a program that cannot be self-sustainable due to lack of long-term support in maintenance and operation from public utilities.

Figure 5.5 Actor Relationships in Water and Sanitation for the Poor (WSUP)



Source: own compilation. Blue arrow: direction of reporting and accountability. Red arrow: direction of decision-making and exercising of formal mandate. Orange arrow: direction of accepted advice and knowledge input.

This vector graph summarizes the actor relationships by providing information on reporting obligations and decision-making. As said earlier, this figure depicts that there does not exist any direct link between BWSSB and WSUP as external actor. Advice and input to BWSSB was not accepted by WSUP, due to the already established relationship and positive activities of the WSP/WB program and the existing network with for local NGOs to implement water and sanitation infrastructure programs in Bangalore’s urban informal settlements. Decision-making (red arrows) is done completely independent from each other, WSUP mandates reaches from London headquarter to WSUPs local office and their local counterpart CDD but is not linked to the public utility at all.

Overall, WSUPs program reveals that WSUP, as an external actor, had no interface with the legitimate state actor that provides public water and sanitation services to urban poor. The implementation of their pilot areas relied on local district collectors in the outskirts of Bangalore. Therefore, the pilots remained in the show-case status and any plans of up-scaling and replication were impossible due to a missing relationship with the respective counterparts in Bangalore's administration.

WSUP went for the exit option, abandoning the collaboration with the legitimate state actors, and instead collaborating with a local politician (district collector of the ward) in greater Bangalore, an area not under BWSSB mandate. This exit strategy was selected to at least implement the pilot programs, which illustrate the technical solutions for decentralized sewerage system and provide at least partial success. However, the entire collaboration was doomed to failure, since the established facilities are dependent for protection on a local politician who may not be re-elected. Due to unclear tenure rights and land titles, the informal settlement inhabitants of Kaveri Nagar and Laxmanmurthy Nagar remain vulnerable to eviction from their homes by the Slum Clearance Board. This dependence of WSUP's program in Bangalore on external support makes even these pilot projects liable to fail in the near future and provides no perspective for long-term sustainability of the service provision.

5.4.3 Negative repercussions from other existing programs for WSUP

The inheritance of pre-existing actor collaborations of the WSP/WB/JICA program in Bangalore had a negative effect on WSUP's engagement, since BWSSB, the state actor, was already supported with expertise, technical knowledge and financial resources. A comprehensive structural change within the utility and strong ties with local implementing agencies were already established when WSUP planned its entry into program implementation. Moreover, the public service provider emphasized its limited capacities in collaborating with a multitude of actors and hence did not allow for project proposals from smaller donors. Being the successor to such a large-scale and successful program prefigured a lack of collaboration in this project.

Non-transparent power plays are prevalent in Bangalore's water supply system, since the public provider falls short in providing all parts of the city with a sufficient amount of water. Therefore, a large and informal network of highly profitable water tanker system businesses exists; private boreholes are the other option for water provision. Since the entire topic of water provision in a water-scarce area is highly politicized,

WSUP avoided the existing, non-transparent power plays by opting for sanitation solutions instead of water provision. Hence, while these powerful and existing informal water vendors' networks do exist, they had hardly any impact on the performance of this project.

Regarding local legitimacy, this case nicely illustrates that low usage rates of the existing toilet blocks were due to a failure to address local needs and adjust the program to these needs and to informal settlements inhabitants' willingness to pay for use. However, since the entire program approach of reaching out to 44 informal settlement areas failed, the low degree of WSUP's local legitimacy is not perceived as having influenced the project's results.

Financial and human resources did not play a role for WSUP, because funding of the program was properly planned ahead in London and sanctioned by WSUP's international board long before the implementation phase began.

5.4.4 Low project results due to rejected collaboration

WSUP was not able to scale these pilot projects up to the targeted 44 informal settlements in Bangalore, because they experienced difficulties in collaborating with local water authorities. Retrospectively, they underestimated the institutional challenges in India's megacities and had to realize that their approach might have had more potential to fit local needs in a smaller city in India. This is supported by the fact that the responsible person, the head of the Social Development Unit (SDU) at Bangalore's Water Supply and Sewerage Board (BWSSB) was well informed and aware of WSUP's initiative in Bangalore. However, as explained above, BWSSB rejected the collaboration because BWSSB only collaborates with large donors to plan and implement projects on a minimum scale of size and financial volume, and because it perceives collaboration with smaller international donors as a clash of principles and ideological interference with their respective mode of operation and social coordination.

In the end, the institutional establishment of WSUP and the implementation of its program can be characterized as *competition governance*, since both involved agents continued to achieve their goals without collaboration. WSUP circumvented the public actors in charge, BWSSB and BMP, for the price of establishing their project in unpopular areas in the outskirts of Bangalore. The implementation was sanctioned by the local political and elected body (District Collector), who can guarantee security of

the technical devices only within his election period. This competition governance strategy does not provide for long-term and sustainable solutions, because the project implementation has avoided the formal procedures of informal settlement improvement in India's administrative system.

Even though WSUP experienced rejection in collaboration in the local context, they maintained their authoritative mode of coordination with vertical decision-making and almost no inclusion of lower-level expertise in adjusting their program and approach in Bangalore city. At the same time, BWSSB processes can be perceived as *authoritative coordination*, since the decision-making power and operational and strategic planning of informal settlement upgrades were in the hands of a small unit, the SDU. The SDU, in return, delegates tasks of program implementation to local NGOs. Hence, one can assume that there might have been room for a partnership with WSUP, if its approach had been complementary to the state's existing ones, and if it had been willing to accept a position of a non-hierarchical steering mode of coordination with a superior and guiding state actor. The conflicting agendas and ideas about program implementation, and the conflicting modes of coordination resulted in competition governance structures that in the end did not allow WSUP to entirely implement its program.

In summary, I argue that in this case *competition governance* as a form of non-interaction between state and external partners led to project failure of external actors approach. Even though the implemented pilot projects are operating with medium to high results, their impacts are minor compared to the overall objectives of WSUP for its Bangalore program. Moreover, it seems that collaboration between the two actors was not out of reach but it was prevented due to lack of sensitivity from WSUP as external actor for existing activities and a lack of adjustment of their program to the local conditions and ongoing programs and already existing institutional structures to tackle the challenge of water and sanitation service provision for urban informal settlement areas.

Table 5.9 Results of WSUP Case Study

Variable	Findings	Interpretation
Independent Variable	State actor (BWSSB and BMP): hierarchical steering (authoritative coordination)	The actor arrangement is characterized as <i>competition governance</i> with the state government fulfilling a blockade function and the external partner implementing its internationally delegated task in an area in collaboration with local political partners (election period as time frame); hardly any opportunity of long term success and self-sustainability of the project.
	External actor (WSUP): hierarchical steering (delegative coordination)	
Alternative Explanations	Historical project context	Relevant in that other actors are active in Bangalore, and since WSUP did not complement these services, they were rejected by the local administration; negative impact from legacies on the present project
	Non-transparent power plays	Relevant on an administrative level in the bureaucracy as well as on local, political level and informal water vendor structures, but circumvented by concentrating on sanitation rather than water provision
	Local legitimacy	Adjustments to local administrative structures are observable (change in seniority of staff members), but did not impact project results
	Resource availability	Not relevant
Dependent Variable	Low project effectiveness	Provision of services to only two informal settlements instead of 44, and no substantial change and no sustainable strategy of the existing two informal settlement projects

This case illustrates that cooperative interplay between donor and recipient is of utmost importance for implementing the projects at the planned scales. The friction in interaction did not allow for WSUP’s longer strategy of implementation in Bangalore, because the public-service provider claimed its monopolistic position and was not willing to coordinate approaches of different international donors. Moreover, it was a problem of different perception of the local challenges and what was needed. While WSUP aimed to achieve institutional change with capacity building at BWSSB side, they were not aware of the already existing change and ongoing program to implement water and sanitation programs. The mismatch in ambitions and goals ultimately resulted in mistrust and led towards failure of any form of collaboration between the external actor and the local utilities.

5.5 Rural Rainwater Harvesting in Karnataka, BIRD-K

Gadag, Kolar and Tumkur districts are all located in the outskirts of Bangalore city. Aside from some minor agricultural production, they serve as road transit areas from Bangalore to Hyderabad city. The districts are located in the southern parts of the Deccan plateau, where the climate can be characterized as semi-arid with insecure rainfall patterns. The groundwater is heavily fluorinated. Due to lack of rainfall and polluted groundwater, the area has severe soil degradation and very poor agricultural production capacity (Arghyam 2010). Therefore, the people in this district are in need of secure and sustainable water provision solution for domestic as well as agricultural use.

The BAIF Institute for Rural Development, Karnataka (BIRD-K) is a regionally registered voluntary organization (NGO) with a mission to provide employment, empowerment and sustainable livelihoods in rural areas of Karnataka. With a combination of knowledge-based decision-making and enhancement of local capacities, the organization strives for improvements in agricultural productivity and rural livelihoods to alleviate poverty and hunger. BIRD-K itself is the partner organization of The Bhartiya Agro Industries Foundation (BAIF), Gujarat, which operates in rural areas to create self-employment schemes and to upgrade rural livelihoods, mostly under the mandate of German Agro Action (GAA).⁶⁵

Info Box: Sachetana - Rural Rainwater Harvesting in Karnataka (BIRD-K)

Components: Construction of rainwater harvesting and household-based water storage facilities in combination with participatory community approaches (SHGs) and awareness-raising on fluoride polluted groundwater. Recharge of communal groundwater tanks to reduce fluoride pollution.

Scale: 60 villages and approx. 5,000 households in Gadag, Kolar and Tumkur

Duration: 2006 - 2012

Partners: BIRD-K, Arghyam, The Bhartiya Agro Industries Foundation (BAIF), German Agro Action (GAA), Rural Development and Panchayath Raj Department, (DRDPR), District Collectors at Gadag, Kolar and Tumkur

Even though BIRD-K is registered as a local NGO, its modes of operation and project portfolio are influenced by international donors that aim to implement their programs in local context settings without the back-up of federal and state government agencies. This link between international funding agencies and local implementation provides for

⁶⁵ Deutsche Welthungerhilfe e.V.

the perspective of BIRD-K as an external actor addressing the local challenge of fluoride polluted groundwater.

BIRD-K initiated a program on rainwater harvesting in three districts, which ran between 2006 and 2011, with an extension to 2012 and an extended third phase that has just recently started and will run for another five years. The goal was to provide year-round and self-sustainable drinking water to the rural population. The entire area almost always experiences water scarcity, receiving fair amounts of rain only in the summer monsoon months. Therefore, a project that aims to provide year-round drinking water through rainwater harvesting on a household basis needs to provide the technical facilities to harvest the rainwater during monsoon months, as well as the capacity to store the water in a safe and pollution-free area. *Sachetana*⁶⁶ is a program initiated by BIRD-K in collaboration with the district government agency, Department of Rural Development and Panchayat Raj (RDPR) and with minor financial support of Arghyam. The program combines the technical facilities for rainwater harvesting and storage at household level with participative community approaches to discharging rainwater into the polluted groundwater in order to dilute pollution levels. It aims to achieve long-term and self-sustainable operation and maintenance of the program, and to overcome the impacts on rural livelihoods and health dangers caused by fluoride-polluted groundwater sources in the three districts (BIRD-K, 2014).

Fluoride consumption is needed for the development of human teeth and bones. However, drinking water should contain a minimum of 0.6 mg/l to a maximum of 1.5 mg/l fluoride in order not to harm the human body (WHO 2006). In this case study area, groundwater contains between 3 mg/l to 6 mg/l fluoride: levels that have serious health impacts on the human body and that can be toxic. Therefore, the combination of raising awareness about contaminated water sources and the provision of services to avoid polluted drinking water are of utmost importance to strengthen livelihoods that are already prone to poverty due to soil degradation and poor agricultural production. BIRD-K, in collaboration with RDPR developed within the federal and state-sponsored program scheme, the Accelerated Rural Water Supply Program (ARWSP).⁶⁷ ARWSP is a program that provided rural households in fluoride-affected areas with alternative sources of drinking water, storage facilities and watershed-based systems to discharge

⁶⁶ The Hindi word *Sachetana* means emotions.

⁶⁷ ARWSP is a program that provides federal government funds to the state governments to implement large-scale drinking water-supply schemes in rural areas.

the water into polluted groundwater. The *Sachetana* program operates under the rural water supply program of RDPR of Karnataka, which funds rainwater harvesting facilities and filter chambers to store the water in 5,000 liter tanks below the ground. In addition, superfluous water is discharged into local aquifers to dilute fluoride levels in polluted groundwater. This program provides year-round drinking water to individual households by catching rainwater and filtering the water to remove fluorides. The main costs of installing the technical facilities are covered by the government program on rural water supply; only the initial investment of 10 percent has to be made by beneficiaries. However, chronic poverty is so prevalent in these areas, due to lack of employment and poor agricultural production, that people cannot even afford this 10 percent investment. Through the creation of village-based self-help groups (SHGs), the program consortium installed a social component that allows for loans to BPL households that cannot afford the initial investment (Biswas 2012, 50). BIRD-K set up a mechanism with Arghyam to advance the 10 percent amount and receive the loan back within a year. BIRD-K is the implementing partner and directly collaborates with the Rural Development Department. Arghyam directly collaborated with BIRD-K throughout the implementation, and linked with state agencies only when it came to the dissemination and communication of the program (Acharya, 2008 and Project Manager, Arghyam, Bangalore: 07/03/2012).

5.5.1 Medium project results in Sachetana program

The next section offers insights into the effectiveness of the Sachetana program, with respect to *output 1*, *output 2*, *outcome* and *impact* of the program. While the overall target of the program was the improvement of human health and livelihoods in the respective areas, the program also strived to reduce fluoride pollution in groundwater. Through watershed and soil rehabilitation programs, it aimed to provide higher agricultural production and self-employment of the villagers in the three districts of Gadag, Kolar and Tumkur. Within the ARWSP Program, BIRD-K aimed to construct about 5,000 water-harvesting facilities, 2,000 farm ponds, 17 bore-well-recharge systems and 12 aquifer-recharge structures (Arghyam 2010). Implementation was targeted to 60 villages within the three districts (Acharya 2008, 20).

The set-up of a project implementation plan and the establishment of relevant state partner networks in the area of these three districts are regarded as *output 1*. The technical provision of the above mentioned facilities and recharge structures in

combination with awareness rising, and the establishment of SHGs and communication procedures with state partners is seen as *output 2*. The *outcome* of the Sachetana program is the improvement of drinking water supply during the entire year for all villages in these three districts, leaving the villagers with more work time due to easier access to water. Finally, the *impact* is improvement of public health, welfare, livelihoods and agricultural production in these districts.

Regarding *output 1*, BIRD-K was very successful in establishing the joint program on rainwater harvesting and watershed management structures with the local government agency, RDPR. This can be attributed to the empirical experience of a pilot study that proved its approach to be successful. The partnership was established through the formation of a MoU with clear tasks and responsibilities. Contributions and responsibilities were discussed bilaterally. Moreover, the project plan for the program was elaborated, and contained a social component for households that are below the poverty line, addressing how to support those unable to afford the 10 percent share of investment (Project Manager, BIRD-K, Tumkur: 13/03/2012; Mithri, Bennadi 2012).

Regarding *output 2*, BIRD-K successfully established community-based communication platforms and SHGs in the respective villages. However, implementation of the technical devices and provision of watershed management measures still lagged behind the time schedule due to delays in funding. Specifically, this resulted from the strictly hierarchical chain of fund-delivery from the State Department to the District Collector at ward level, and finally to the Gram Panchayats at the *tulak* (village) level: a process that took far more time than initially estimated by the project consortium. Moreover, the program was not able to reach out to all 60 villages, and instead only reached 25 villages in the three districts, covering a total of 105 household units instead of 500. Thus, the project reached only 42 percent of the targeted villages and only 21 percent of the targeted number of households. In addition, the program did not achieve the implementation of the program for all villagers within one SHG unit in a village (BIRD-K 2014). Substantial improvement of the drinking water supply situation for the villages is not observable, and therefore the success of *output 2* has to be ranked as medium.

The *outcome* of the program is characterized as medium to low, since while there have been improvements in welfare of individual families in the respective villages, the overall picture of the villages' water supply and health situation is still quite devastating (Field Visit with Project Manager, BIRD-K, Sitra/ Tumkur: 13/03/2012). Public water

taps were observed that pump polluted ground water up to the village, and only a small percentage of households have established the rainwater harvesting devices. The tanks beneath houses have limited capacity; those with them are not able to share the water with other households. The overall approach, however, is promising, as the efforts of both partners are visible and this program *outcome* can be ranked as a medium success.

The long term *impacts* of the program are only partially visible at this point in time. Some of the villagers were able to substantially improve their welfare and health situation through these individual household solutions. However, improvement of the welfare and health situation of entire villages (which is targeted in watershed management approaches) is not yet visible. Resource degradation and chronic poverty are still problems. Many rooftops are covered by palm leaves, which do not allow for technical installations. Hence, the environmental and social impact of the program has to be ranked as low. Establishment of the solid partnership between state and external partners and the continuation of the Sachetana program into its third phase are considered as success, and thus the overall rank for *impact* is given as medium.

Table 5.10 Effectiveness of BIRD-K Rainwater Harvesting Program

Category	Project Goals BIRD-K	Achievements	Value
<i>Output 1</i>	Provide a comprehensive and feasible project proposal and establish a solid network among state and external partners	Successful establishment of collaboration between state and external partner with a clear and innovative proposal that goes beyond typical technologically-oriented solutions to the problem	High
<i>Output 2</i>	Provide the technical facilities of rainwater harvesting devices to the three districts, communication procedures and influential and empowered SHGs	Successful establishment of SHGs but not complete establishment of the targeted technical devices for the 60 villages in the given time frame, reaching only 42% of the targeted number of villages and only 21% of the targeted households	Medium
<i>Outcome</i>	Improved drinking water supply for the villages and improved employment scheme and higher agricultural production due to decreased fluoride concentration in groundwater	No substantial improvement of sustainable water supply; decreased fluoride concentration and increased employment for some village members	Medium - low
<i>Impact</i>	Improvements in the villagers' health situation, welfare and livelihoods due to increased living standards and income, generated by agricultural productivity	No substantial improvement of health situation and welfare of the villages and the region, but establishment of a solid partnership between state and external actors	Medium

Aggregating together the four different factors to measure success, we can summarize the overall effectiveness of the Sachetana program as medium. This medium success of a very promising program approach owes on several factors, which are discussed below.

5.5.2 Hierarchical actor relationship as key to long-term results

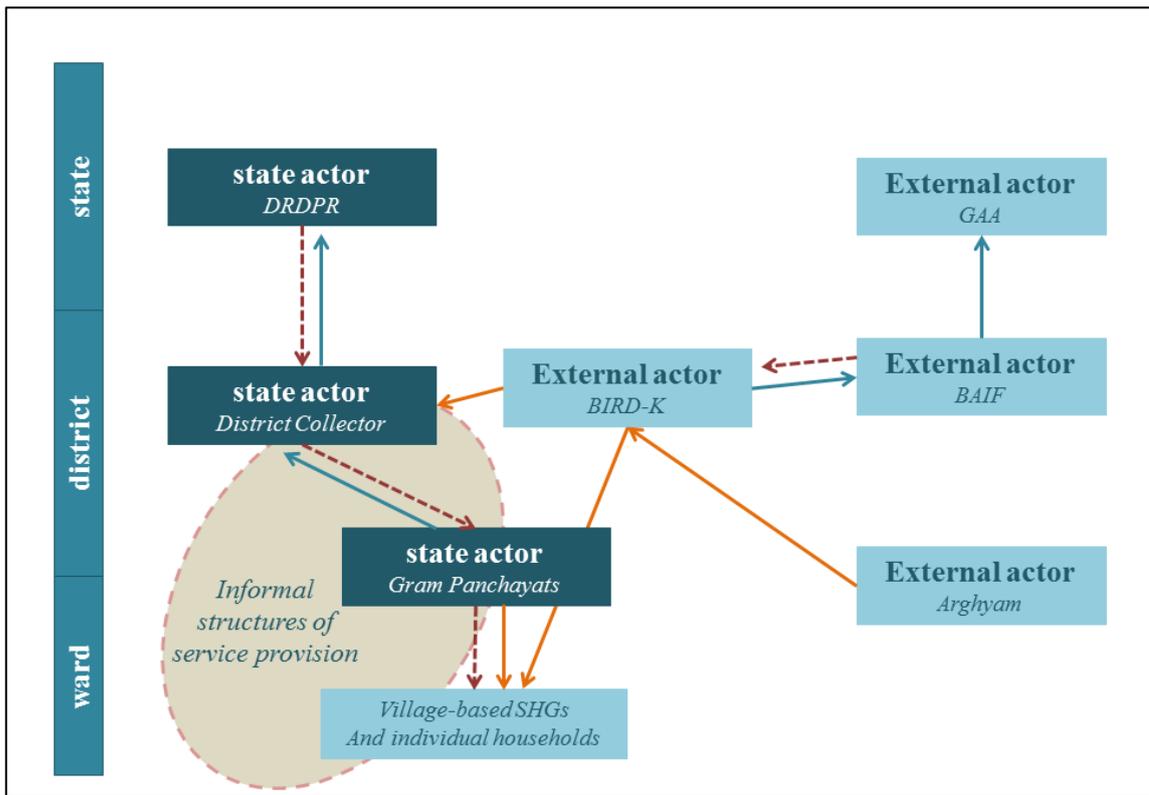
The provision of drinking water facilities is the responsibility of state governments. Even though the ARWSP program was launched at the federal government level, the various urban and rural state departments were responsible for executing the program and implementing adequate measures and facilities to ensure drinking water supplies (Acharya 2008, 9).

Neither state governments nor NGOs are used to collaborating under public funding arrangements and large-scale programs for service provision. Therefore, at first the state government was reluctant to collaborate with a local NGO that had international funding and expertise (GAA, Arghyam, and the International Development Research Centre (IDRC), a Canadian Research Institution). This resulted in the collaboration being highly formalized in order to provide for an institutional framework and clear division of responsibilities and tasks during implementation (Acharya 2008, 11).

State governments from state department over district collector to local Gram Panchayats were involved in implementing the program. While the state level is responsible to sanction financial funds for the program for the individual communities, the implementation itself is based on the decision of Gram Panchayats at community level. Households who are eligible to participate in the program can apply at the Gram Panchayats level and hereafter, can implement the program when it is sanctioned by all political levels (Interview with Project Manager, BIRD-K, Sitra/Tumkur: 13/03/2012).

As depicted in figure 5.17, at external actors' side we find a mode of non-hierarchical steering that includes external donor institutions and additional funders, such as Arghyam in round tables to adjust program components. At state actor side, we observe a very hierarchical mode of decision-making that reaches from state do district and to community level of Self-help groups and individual households that applied for being part of the program.

Figure 5.17 Sachetana: Actor Relationships in Rainwater Harvesting



Source: own compilation. Blue arrow: direction of reporting and accountability. Red arrow: direction of decision-making and exercising of formal mandate. Orange arrow: direction of accepted advice and knowledge input.

Task and responsibility distribution was clearly divided between partners. While the state partner, RDPR, was responsible for the technical knowledge and implementation of applications and facilities at the household as well as community levels, the BIRD-K staffs were responsible for providing soft skills and providing knowledge management. Establishment of SHGs, awareness-raising at the community level and the establishment of communication platforms are just a few soft skill measures to mention. The contributions of each created a fruitful cooperation for program implementation and ongoing operation and maintenance (Acharya 2008, 11; Interview with Project Manager, BIRD-K, Sitra/Tumkur: 13/03/2012).

A huge challenge in implementation was the hierarchical manner of fund release. The state government had to release funds first to districts, and then to villages and finally households. This procedure took too much time and delayed the entire program. Therefore, one can assume that strict hierarchical decision-making and sanctioning of programs is not adequate for on-time delivery of ambitiously sized projects (Acharya 2008, 41). Moreover, it took some time to overcome the bureaucratic tradition of

providing technological solutions to the problem. This was a learning experience for state partners from empirical evidence of alternative, non-technology based solutions (fluoride filters versus rainwater harvesting communities). However, the state government also emphasized the proactive engagement of village communities supporting the program and providing their share of investment for a lifelong, clean water supply and increased welfare (Government of Karnataka, 2007 and Arghyam 2010, 13). Moreover, reporting obligations were bottom-up from community level to district and state level. All in all, the role of state partners is not one of simply steering in a guiding and hierarchical way, but also of allowing for lower-level influences in deciding upon adjustments of the program and deciding on which communities to integrate, why and how; hence, the mode of social coordination is characterized as *delegative coordination*.

BIRD-K is a small NGO that uses innovative and flexible program approaches. With this small pilot program, they raised awareness of solutions to fluoride pollution other than the existing state practice of providing defluoridization technologies at the village level. These technologies require permanent operation and maintenance work and costs, and are not self-sustaining in terms of technical equipment and affordability of the filtered water to the village communities. Even though BIRD-K internally pursued a rather flexible, non-hierarchical mode of decision-making and delegation, they were able to substantially influence the decision-making of the state government regarding the overall policy strategy for overcoming the fluoride pollution problem.

BIRD-K proved to be reliable in their engagement at community level. Mobilizing communities and empower SHGs were accompanied by timely feedback loops from BIRD-K staff with the district collector. These regular feedback rounds and the immense knowledge transfer at community level increased BIRD-Ks reputation within a very short period of time and allowed for more flexibility from state actor side to sanction additional funds for further communities. BIRD-Ks knowledge influence is remarkable in that the discourse between the two partners on the best solution to tackle the problem. The agenda and knowledge solution of BIRD-K was not debated openly; rather, it was a non-transparent process, with BIRD-K simply providing empirical evidence of success that convinced the state government (Archarya 2008, 35; Interview and Field Visit with Project Manager, BIRD-K, Sitra/Tumkur: 13/03/2012).

The state partner in this interplay situation pursued a *delegative* mode of social coordination. It did this by executing a hierarchical mode of decision-making (from state to ward and to village level), while remaining open to external influences in its decision-making and agenda-setting, and providing the opportunity for innovative and sustainable solutions to the problem to play out. BIRD-K, the external partner in this collaboration, pursued a non-hierarchical mode of coordination with its other external partners (Arghyam and BAIF). Besides horizontal decision-making procedures, it also aimed to set incentives (provide successful and affordable pilot project evidence) and influence the state partners' decision-making in a non-transparent way. Therefore, the mode of social coordination of BIRD-K is understood to be *instrumental coordination*. The combination of delegative and instrumental coordination results in a *governance by government* type of interaction. The relationship can thus be characterized by a strong state partner that is substantially influenced by the external actor and both partners can rely on each other and have established a relationship that is characterized by trust and mutual respect.

5.5.3 Alternative influences on project results

The Sachetana program is based on a pilot project that was implemented from 1998 to early 2000. In collaboration with the Canadian Research Institute IDRC, BIRD-K initiated a rainwater harvesting program to mitigate fluoride pollution of drinking water in Tumkur district. The program was a household-based initiative to provide individual rainwater harvesting facilities, and at the same time strived to empower entire villages, establish SHGs, implement watershed-management programs⁶⁸ and provide afforestation to stop soil erosion and to improve the health and livelihoods of villagers. With a small grant and support for the project proposal from IDRC, BIRD-K was able to implement this pilot project successfully (Acharya 2008, 19).

⁶⁸ Watershed management processes are integrated measures at the village or aquifer scale for providing sustainable strategies for soil rehabilitation and water availability and livestock management. The programs are based on community empowerment, knowledge-raising and establishment of dialogues and SHGs at the village level. On a landscape level, technical measures such as small mud walls and mud trenches serve to slow down rainwater erosion and discharge rainwater into groundwater to prevent soil degradation, increase water tables and reduce the pollution of groundwater. The combination of physical, technical measures with soft skill measures improves the local livelihoods and empowers villages and communities with self-sustaining employment, improved health and more sustainable local ecosystem services.

This pilot project served as a baseline study and provided empirical evidence to convince the state government to join forces with BIRD-K and implement a sustainable rural rainwater harvesting program. Before this program, the state government favored defluoridization technologies at the village level to overcome the challenge. However, this technology needs maintenance efforts and technical expertise and support in the long run. Since the state government was not able to provide this for every village, the program slowed down as soon as the technology broke down, leaving villagers with the problem of fluoridated water (Project Manager, Arghyam, Bangalore: 07/03/2012).

This pilot project provided a historical context for the Sachetana program as it fostered collaboration between state and external partners and even resulted in a change in attitudes and appropriate measures to tackle the fluoride challenge in rural areas. Without the evidence of the pilot project, government partners admitted they would not have been willing to engage in the collaboration with BIRD-K or to change their program approach to fluoride-polluted drinking water. Hence, the pilot project can be regarded as the necessary pre-condition for collaboration and fruitful actor interplay throughout continued implementation of Sachetana program.

The project was communicated from various sources to be free of corruption; or at least corruption was not relevant to program implementation (Archarya 2008, 38; Field Visit with Project Manager, BIRD-K, Sitra/Tumkur: 13/03/2012). However, the delays in disbursement of funds caused a real challenge to implementing the project on time, and hence had a major influence on overall success of the program. Disbursement problems may have been linked to corruption, but this has not been proven by the empirical investigation and, hence, is considered irrelevant to the performance of Sachetana program.

Local legitimacy of BIRD-K at the community level was achieved by intensive community work, awareness-raising and the successful establishment of SGHs groups. This soft skill contribution of BIRD-K, however, did not significantly influence the performance of the program to date; rather, it is likely to have a major impact on the ongoing program as it enters its third five-year stage.

5.5.4 Medium project performance with positive perspectives

The Sachetana program served as a baseline project for BIRD-K to collaborate with the state government, and for the partners jointly to provide public services under the umbrella of Federal State Rural Water Supply Scheme. The interplay between actors in this consortium was smooth, due to BIRD-K's subservience to the state partner and acceptance of their dominance in overall planning and decision-making. Moreover, BIRD-K adapted its approach and working processes to be almost identical to the state bureaucracy and therefore, is perceived almost as a state actor. This resulted in a homogenous actor consortium, which achieved solid and long-lasting collaboration.

Table 5.11 Results of BIRD-K Case Study

Variable	Findings	Interpretation
Independent Variable	State actor (RDPR): hierarchical steering (delegative coordination)	In this constellation there is a <i>governance by government</i> actor interplay that is characterized by influential and hierarchically guiding state partners, but with a degree of lower-level influence and openness to innovative, soft-steering approaches of the external partner
	External actor (BIRD-K): non-hierarchical steering (instrumental coordination)	
Alternative Explanations	Historical project context	A pilot project was implemented prior to the Sachetana program and served as giving empirical evidence to convince the state partner to enter into the collaboration; therefore, it is regarded as a necessary condition for establishment of the interplay
	Non-transparent power plays	These were not relevant
	Local legitimacy	Local legitimacy was achieved by intensive community work (establishment of SGH groups) and by convincing soft-skill illustrations of BIRD-K to RDPR, but did not significantly influence the results
	Resource availability	Resources were available, but plagued by delays from the state partner's side, thus influencing the low achievements within the given time frame
Dependent Variable	Medium project effectiveness	Medium project effectiveness was achieved due to time-intensive bureaucratic procedures for releasing the funds, but the historical project context (evidence of successful pilot project) was a necessary condition for this collaboration to actually come into existence

The *governance by government* mode of this actor consortium is a typical case in which the legitimate state actors decide on the size and scale of the program by releasing the funds, while the external actor contributes and influences with soft-steering measures,

which empower communities and ensure the partial success of the program. The major achievement of this program is BIRD-K's success in changing RDPR's policy agenda away from favoring technological solutions that are intensive in operation and maintenance, and towards the implementation of soft steering and less intervention-intensive solutions to a severe problem.

The overall performance of the Sachetana program is assessed to be of medium effectiveness, but it illustrates a remarkable collaboration between state and external actors. BIRD-K, a relatively small and local NGO backed up by larger international funds and expertise, managed to gain the attention of the state government and to establish a partnership that has now lasted for about eight years without any friction. The BIRD-K team is small (four or five permanent staff members), but with the support of Arghyam, it has had a huge impact on the policy agenda in rural drinking water supply in the state of Karnataka. With soft steering and an instrumental mode of coordination, the NGO achieved a change towards more sustainable, participative and holistic approaches to drinking water supply and improved welfare.

The high interest of both participating parties in the project was due to BIRD-K's ability to illustrate the effect and success of this kind of solution to the fluoride pollution challenge in the entire region. The interplay itself profited heavily from the innovation and flexibility of partners, their similarities, their willingness to adapt their modes of coordination, and the external actor's acceptance of the supremacy of the state partner.

The third project phase was recently launched as a replication of the first two phases. However, this time the program has further increased the engagement of the state government by assigning it more responsibility and responsiveness throughout implementation. This new project phase will facilitate community mobilization as well as rainwater-harvesting devices by government actors, with minor support of BIRD-K as the external actor. This development paves the way for a self-sustaining and locally independent solution for a significant problem in this region.

5.6 Community-based Water Kiosk in Andhra Pradesh, Naandi

Andhra Pradesh is a state in the heart of India on the Deccan Plateau and the Eastern Coastal Plains of the country. While the capital, Hyderabad is well known as an IT-hub in India, the surrounding area is characterized by irrigation-based agricultural production in a dry and semi-arid region with hardly any rainfall during the winter months. The summer months see some monsoon rain from May to August. The Godavari and Krishna rivers are the major surface water sources for the state, but surface water in Andhra Pradesh is rare, due to its location as a down-stream state, dependent on the left-over water resources from up-stream states such as Maharashtra.

Groundwater quality and quantity is among the most severe issue in Andhra Pradesh. While farmers in rural areas are provided with free electricity, there is no environmentally conscious behavior for irrigation. Farmers pump up more groundwater than they need, irrespective of the already depleted groundwater resources. Additionally, many districts in Andhra Pradesh face problems of fluoride-polluted groundwater. The foundation Naandi⁶⁹, in collaboration with private donors and state partners, implements a water kiosk system to provide community-based water supply services.

Info Box: Community-based Water Kiosk in Andhra Pradesh (Naandi)

Components: Providing water purification technology on a community level (water kiosks) and capacity-building to establish operation and maintenance structures of the water kiosk, as well as knowledge transfer and awareness raising for pollution of groundwater and the need for purification at the community level.

Scale: All rural households in Andhra Pradesh

Duration: 2007-2011

Partners: Naandi, TATA Industries Ltd., District Collector, State Government AP, Gram Panchayats

Naandi was founded in 1998 in Hyderabad by Dr. K. Anji Reddy, the chairman of Dr. Reddy's Laboratories (Pharmaceutical Corporation) and the son of a rural farmer in Andhra Pradesh. The foundation draws from an endowment of the Reddy Laboratories in India and perceives itself as a combination of a funding and implementing agency. It is a for-profit foundation but with a social component and a human face (Chief Water Program Officer, Mumbai: 13/04/2011). Naandi is actively engaged in large-scale

⁶⁹ Naandi means 'dawn' or 'new beginning' in Sanskrit.

children's meals and youth education programs, and it also addresses issues such as community water supply and local farmers' support. The program's approaches are focused on creating business models in the form of public-private-partnerships (PPPs) and making social services economically viable and affordable to the urban and rural poor.

The community-based water kiosk program was initiated by Naandi in 2003 in collaboration with TATA Sons Ltd., which provided the technology and engineering knowledge, while Naandi supplied the relevant state partner networks.

A water kiosk is a small, brick house in the center of a village or small town, operated by locals and based on a local bore well to pump up groundwater to communities. It is equipped with filter facilities to provide clean drinking water. During its working hours community members can purchase jerry cans and buy purified drinking water for about 10–20 Paisa⁷⁰ per liter (Chief Water Program Officer, Mumbai: 13/04/2011). To date, Naandi has established more than 400 community-based water purification kiosks in five states of India (Punjab, Haryana, Rajasthan, Andhra Pradesh and Karnataka). The business models Naandi created with the community water kiosks resulted in the establishment of the social enterprise, the *Naandi Community Water Services Ltd.*, which began in 2010 to provide water kiosks under the slogan "I Pure" (Naandi 2011).

The program's selection of project sites rests on three basic criteria: (1) heavily polluted groundwater; (2) willingness of the local GPs to engage in the program; and (3) willingness of state government agencies to engage in the program. Naandi's business partner (mainly TATA) then assays the groundwater and adjusts the respective filters to the local water pollution level. The initial investment costs of the kiosks are covered by the business partner; their subsequent operation and maintenance is covered by community usage fees. Members of Naandi's large staff check the quality of the water every month and also provide feedback on kiosk user rates in order to make adjustments in cases of low usage (Chief Water Program Officer, Mumbai: 13/04/2011).

5.6.1 Successful provision of community-based drinking water kiosks

Since this program aims to create multiple businesses models and is not a limited or timed effort to provide a certain service for a defined target group, this assessment analysis will focus on one particular case of setting up a community-based water kiosk

⁷⁰ 1 Paisa equals 1/100 Indian Rupee (INR), with 1 INR ~ 0,013 EUR.

in rural Andhra Pradesh. Findings from this particular case are related to the development of the overall program of Naandi to provide purified water to rural and needy communities in Andhra Pradesh.

Output 1 of an individual water kiosk is the assessment of community needs for a purified water supply, as well as the engagement of the local GP to support implementation and supervise long-term operation and maintenance of the kiosk. Additionally, a network and agreement with state government partners must be established to ensure the release of government funds and sanctioning of the community-based groundwater pump, and to contract out the electricity provision for the kiosk. *Output 2* of the program is the construction of the kiosk itself, and its smooth and long-term technological operation including the availability of jerry cans and reliable, service-oriented opening hours for the community. The *outcome* of the program is a year-round, reliable and high-quality water supply for the entire community, and the transfer of the kiosk to local self-sustaining control in an economically viable business model. Substantial improvements in community health and welfare, higher employment and increased agricultural production constitute the long-term *impact* of the program.

Regarding *output 1*, during the initiation phase of the kiosk, Naandi relied on data from state governments about the pollution level of groundwater in respective areas and selected the neediest communities in terms of water quality. Thereafter, the community and the local GP were approached to assess the demand for purified drinking water, and to assure their commitment and engagement in order to set up a demand-based and ownership-based program (Chief Water Program Officer, Mumbai: 13/04/2011). In Karimnagar, employment is mainly based on agricultural production, livestock in combination with milk production, and large-scale dye works in open spaces, close to the local river. Individual groundwater pumps are under severe stress due to the high demands of the local population and the dye works, and existing surface water sources are heavily polluted (Field Visit of the Author, Karimnagar: 08/03/2009). *Output 1* of the program is ranked as high, since demand was clearly visible, and Naandi successfully established formalized contracts and MoUs with private-sector and public agencies, and mobilized community commitment to use, operate and maintain the kiosk. The kiosk in Karimnagar is located in the center of this small town and provides fluoride-free drinking water to the local community. The establishment of the kiosk was partially financed by a local Member of the Legislative Assembly (MLA) who ran in the

upcoming election (Field Visit of the Author, Karimnagar: 08/03/2009). The kiosk was technically installed with TATA equipment and technology, and on its inauguration day the entire community profited from free and purified water. Thereafter, the water was sold for 15 Paisa per liter to community members between 7 AM and 6 PM, with a service break in the afternoon. *Output 2* of the service provision is also considered high, since the service started within the planned time schedule and has been operating reliably ever since. Several community members committed themselves to servicing the kiosk and organizing the sale of jerry cans and a renting system for the community, as well as providing the water and regularly reporting to Naandi staff members about operation of the technical devices as well as usage rates throughout the weeks (Chief Water Executive Officer, Hyderabad: 03/02/2011; Field Visit of the Author, Karimnagar: 08/03/2009).

Outcome of this program is regarded as medium to high, since the kiosk provides an economically viable business model for this community and serves as a pilot for replication in other districts of the state. Service is reliable and continuous. However, service provision is still challenged by the already depleted groundwater and compromises the service, and at the same time the service depletes the groundwater tables even further. This affects the entire region's irrigation system as well as the water kiosks. Hence, in the long run, the successful outcome of the program is dependent on sustainable groundwater management over the entire region.

A substantial change in user behavior is observable in the area; however, substantial changes in community health and welfare will not be apparent for some years (Chief Water Executive Officer, Hyderabad: 03/02/2011; Field Visit of the Author, Karimnagar: 08/03/2009). The *impact* is considered as medium because there is no social component to provide access to water for people that cannot afford it. There are community members who live on well under a dollar a day and can neither afford the jerry can nor the water it would hold. The poorest of the poor are excluded as they cannot participate in this business model. Instead, they continue to fetch water from the nearby, heavily polluted river.

Table 5.12 Effectiveness of Naandi’s Community-based Kiosks Program

Category	Naandi’s Project Goals	Achievements	value
<i>Output 1</i>	Needs assessment at community level and establishment of networks at local and state political level	Karimnagar is an area of high demand due to poor water quality in the area and strong economic sector that requires healthy work forces; state partners on the state and district level were willing to cooperate and actively engaged in planning of the kiosk	High
<i>Output 2</i>	Construction of the water supply service through a kiosk, and technically and economically reliable service provision	Regular service provision is provided by the new water kiosk, and usage rates are as high as expected, due to the urgent demand of the local population	High
<i>Outcome</i>	Substantial change in user behavior and reliable and high quality water supply at any time throughout the year, and establishment of an economically viable business case	Services are provided and users have accepted the new service provision in a positive manner and with high usage rates; but although the business case is well established, water provision still relies on the ever decreasing water tables	High - medium
<i>Impact</i>	Substantial change in health situation and welfare of the communities due to sustainable water supply	The health situation is only partially improved to date and the poorest of the community are not integrated in the project; the dependence on water resource availability as external factor poses severe limitations on the long-term self-sustaining success of the program	Medium

The program itself is highly successful as a community-based water supply model and an economically viable business model (Mandri-Perrott 2008). However, the long-term success of this business model is highly dependent on groundwater availability. Since groundwater is extremely scarce in this area and scarcity is even increasing due to a lack of political regulation and overexploitation of groundwater (Lal 2014), the kiosks are prone to long-term failure due to lack of water resources for purification. Even though this program provides for an economically viable business model, its dependence on resource availability limits its sustainability over the long run.

The section below assesses the actor interplay between Naandi and its respective state and local partners, and the relevance of these partnership networks for the high success of this program.

5.6.2 Respectful and independent actor relationships as key to success

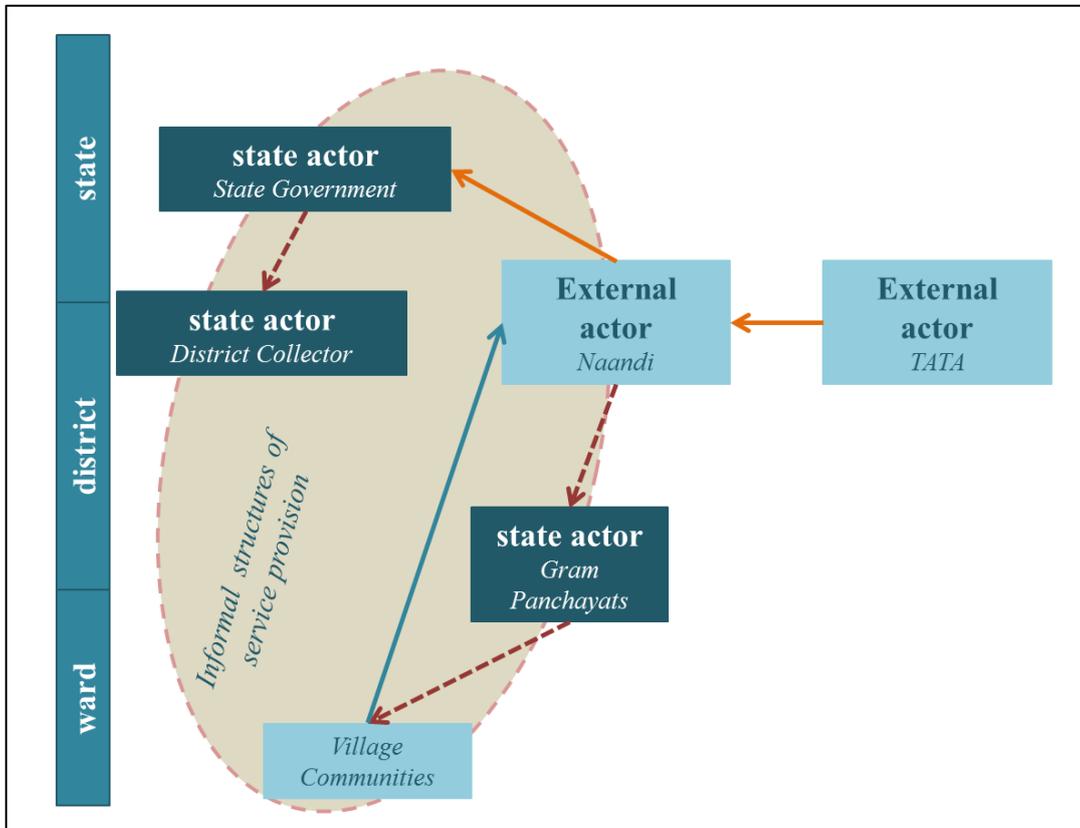
Naandi collaborated in program implementation with different levels of state partners. While the entire program was set up in a top-down manner, Naandi primarily established contacts with respective state governments. Naandi approached the local Gram Panchayats and requested their commitment and engagement in program implementation. Both partners were of utmost importance in paving the way for their ownership of and commitment to the program, as well as in sorting out the land-tenure rights and the herewith connected access to groundwater, needed for the set-up of the kiosk (Chief Water Program Officer, Mumbai: 13/04/2011).

The program implementation was highly dependent on decision-making at individual levels in the state government. They did not need to contribute financially to the program or even take it over as a public-service provision later on. Their engagement was comparatively low, but the decision for implementation was highly dependent on their willingness sanction Nandi's plans. Naandi's program manager maintained close relationship with highest level government agents, but the decision-making role of the state government remains non-transparent in this program. State partners evaluate the program positively for the rural communities and as a key to solve rural drinking-water crisis, but were not critical about the inability for the poorest to afford this water. Sanctioning the program remained with different levels of government, but approval of the program was never refused by any of these decision-making levels (Chief Water Program Officer, Mumbai: 13/04/2011).

The vertical decision-making from top-down and the ultimate power to sanction the programs is regarded as hierarchical steering. However, providing for participation of community Gram Panchayats in the decision-making process as well as interacting regularly with the external actor and include its perspective into the decision-making allows considering the mode of coordination as being *delegative*. Moreover, one has to claim that Naandi establishes a business case that seems to be a win-win situation for both partners. Local state partner is released from its task to provide water as a public good and Naandi implements its program successfully and self-sustaining. However, this categorization does not account for state actor to not fulfil its task of providing water as a public good and affordable price. This program may leave the poorest behind who cannot afford water prices at certain points of time. This relationship between the

state government and Naandi serves the purpose to source the service out but immediately raises normative questions of this outsourced service provision.

Figure 5.7 Actor Relationship in Naandi’s Water Kiosk Program



Source: own compilation. Blue arrow: direction of reporting and accountability. Red arrow: direction of decision-making and exercising of formal mandate. Orange arrow: direction of accepted advice and knowledge input.

Naandi, as the external actor in this constellation, is itself structured in a very hierarchical manner. While the community water kiosk team consists of about 600 staff members, the team is clearly split into management, operation and monitoring working units, which are all subordinate to the chief program officers in Nandi's headquarter in Hyderabad (Chief Water Program Officer, Mumbai: 13/04/2011). The success of Naandi's business model relates significantly to the chief management's ability to create close networks with senior state government officials. The importance of this network is emphasized as the key to success; however, how it was established and which 'resources' made it viable is unknown. The influence of Naandi on the state government can only be guessed at by the author, as it seems to have profited from informal resource and knowledge exchange with mutual benefits.

Naandi purposely approached only the state government as its partner in this program, but did not rely on its programs or schemes, since they considered the conditions under which state programs are delivered too complex (Chief Water Executive Officer (Successor), Hyderabad: 02/04/2012). Constraints to cooperation with state partners are perceived by Naandi to limit the flexibility and potential success of program implementation. Government programs request strict tender processes for partner institutions and state government program approaches are usually outdated and not based on up-to-date technology (Chief Water Executive Officer, Hyderabad: 03/02/2011).

Naandi itself pursues a hierarchical mode of steering. By including target communities and GPs in the decision-making process it can be best characterized as pursuing a *delegative* mode of coordination. The combination of the donor–recipient relationship with delegative modes of coordination results in a governance configuration of *competition*, *adversary* or *parallel governance* by two actors. Since Naandi consults the state partners but does not rely on their material or immaterial inputs for the project, and since the state partners themselves pursue large-scale rural drinking water projects for communities, this governance configuration can be considered as *parallel governance* with mutual respect and acceptance without competitive elements in the actor interplay.

5.6.3 Alternative influences on project results

Regarding alternative explanations for project results, one major impact on this program's success seemed to be Naandi performing its own non-transparent power plays. Being perceived as a social actor while pursuing business models may cause difficulties in some areas in India, but obviously this was not the case where they have been engaged to date. Their relationships with state governments remain nebulous and due to their non-transparency need to be regarded as highly questionable. A second driver of success was the availability of financial resources, since Naandi and its partners created business models illustrating how economically viable is their provision of the public service of water as a private good. Both alternative reasons have an impact on the relationship of the two partners and do not individually account for the success of the program.

5.6.4 Business case to effectively provide a solution – but not for all

The community-based water kiosk project of Naandi was in some respects exceptional, because the problem of water pollution and the lack of public-service provision was tackled by a private external actor, with the support and commitment of the legitimate state actor. The program replicated itself within different districts and states in India, and provides a successful illustration of how to quickly and effectively tackle a huge challenge in rural areas. As a business model, the kiosk is handed over to the communities and with their engagement and maintenance it provides for long-term operational program, even after the external actor that initiated the program leaves the area.

Table 5.13 Results of Naandi Case Study

Variable	Findings	Interpretation
Independent Variable	State actor: hierarchical steering (delegative coordination)	In this constellation there is <i>parallel governance</i> actor interplay, which is characterized by mutual respect and commitment, but with separated service provision from both parties and no dependency relationship between them
	External actor (Naandi): hierarchical steering (delegative coordination)	
Alternative Explanations	Historical project context	Not relevant
	Non-transparent power plays	This was not relevant for program implementation but seems to play a role in terms of success of this business case program
	Local legitimacy	The program is adjusted to local needs in terms of pollution levels, which resulted in a high quality program but does not determine the performance of the entire program
	Resource availability	Resources available from the business model provide the ground for viable replication of the entire program to other districts
Dependent Variable	High project effectiveness	High project success was achieved due to a tailored and well-designed program with mutual respect, commitment and understanding of collaborating partners

There are two major shortcomings of the program that illustrate that even though a business case takes-off well and provides for a success it comes at societal costs when it comes to provision of drinking-water. First, to make it an inclusive and sustainable program, this business model requires a social component to make the water available

to BPL household members. As it is now, the poor members of the community are left behind when prices due to external reasons rise and drinking-water becomes unaffordable for them. Second, the water kiosk system owns the land and hence extracts groundwater for the community in an unlimited manner. In areas, where groundwater is depleted and drinking-water requirements compete with agricultural water needs, the water kiosk does not provide for long-term sustainable solutions, since the resource is limited in dry and remote areas. To solve this challenge, it also requires governments knowledge management on water tables and sufficient regulations that protect diminishing groundwater resources. Hence it remains the need for a policy agenda that protects groundwater resources in order to provide a sustainable and inclusive approach to water provision in the rural areas in Andhra Pradesh.

The actor consortium in this program was quite committed to supporting one another's activities without mutual dependence on each other. The state actor willingly accepted the privatization of a public service without having an active stake in implementation, and the external actor successfully implemented a service provision program as an economically viable business model without interference from the legitimate state actor. In sum, we find a successful program implementation approach that remains prone to external influences such as depleting groundwater (natural resource availability dependence) and rising water prices (market mode of service provision). Such programs are also dependent on acceptance by user groups and are always prone to competing market concepts. Even though the program itself was implemented successfully, its long-term impact has to be put into question due to these limitations that may arise in the near future.

5.7 Water, Waste and Sanitation, New Delhi, WaterAid/DFID

Delhi is the national capital territory area (encompassing New Delhi, Old Delhi and greater Delhi metropolitan area) and is inhabited by about 17 million people, according to the 2011 census of India. Delhi, the largest city in the North of India, is bordered by Haryana and Uttar Pradesh states and is located on the Indo-Gangetic Plain along the banks of the Yamuna river. The subtropical climate of New Delhi brings dry and cold winters and very hot and humid summers with intensive monsoon showers from June to September. The water supply to the city is managed by Delhi Jal Board (DJB) and is provided by distant surface waters (reservoirs and water carriers) or by the ever-depleting groundwater resources. Large amounts of the city's sewage and waste is dumped unfiltered and untreated into the Yamuna river, which therefore does not provide any fresh water to the residents. Groundwater resources are depleted in southern parts of the cities to below 30 meters of the surface; and in northern parts of the city we find highly polluted groundwater that is not suitable for human consumption, due to high levels of fluoride, nitrates and other chemicals (Government of India 2005).

Delhi is known for its high number of informal settlements. It is claimed that about 50 percent of its citizens live below the poverty line, most in informal settlements with unclear tenure rights. With about 1,000 people migrating into the area each day, these informal settlements are growing and contributing the density of the outskirts of the Delhi metropolitan area. These settlements are always vulnerable to eviction and demolition. They consist of small huts with no land tenure rights and no public service infrastructure such as water, sanitation, and health or education provision. In Moti Nagar, in the western outskirts of New Delhi, WaterAid, in collaboration with the local NGO, Model Rural Youth Development Organization (MRYDO), operates a water and sanitation program in five informal settlements.

In 1981, WaterAid established itself as a charitable trust in the United Kingdom (UK) with the goal of providing knowledge, expertise and technical capacities for water, sanitation and hygiene campaigns in order to alleviate extreme poverty and improve health and welfare. WaterAid is UK based but operates from local offices in their most work-intensive countries. WaterAid has been active from its beginnings in India; however, it has had no fully registered local branch in India. This will change in 2015, when WaterAid is to be officially registered with the public fiscal control authorities as

an independent organization in India (Director Policy and Partnerships, WaterAid, New Delhi: 25/02/2011). Globally and locally, the UK Department for International Development (DFID) is the largest institutional partner of WaterAid, with a total funding for WaterAid of about nine million EUR (which is equivalent to about seven million GBP) a year. DFID and WaterAid have a partnership agreement that highlights the rights and duties of WaterAid. DFID funding is contingent on WaterAid's performance, and hence there is a strict monitoring and evaluation mechanism between the two organizations (DFID 2011). The overall financial resources of WaterAid include private donations (share of ~60 percent), restricted government (DFID) funds (share of ~25 percent), and other sources such as unrestricted funds, legacies and event fundraising (share of ~15 percent) (WaterAid: 2011b). Because of India's colonial legacy, DFID has a particular position in the donor landscape in India, and therefore does not directly implement programs for the Indian government. WaterAid can be regarded as its outreach organization for water, sanitation and health programs in India. While DFID does not directly manage the operational implementation of projects, it definitely influences WaterAid's project portfolio and policy agenda through their funding decisions. Hence, WaterAid is categorized and treated as a conventional donor in this thesis, even though it perceives itself as an international charity trust.

As stated above, WaterAid's local partner in program implementation is MRYDO, a locally established NGO in New Delhi established in the early 1990s. MRYDO is actively engaged in social development, empowerment of women and children, and justice in public service provision to informal settlements. With a large portfolio of programs, it is well experienced in collaborating with local political actors and surmounting bureaucratic obstacles at the local level. Owing to its explicit human rights and justice approach and intensive experience with empowerment of women, MRYDO even has experience in court filings and enforcement of the Right to Information Act and human rights articles (MRYDO 2010).

In 2008, WaterAid and MRYDO jointly initiated the *Swasth*⁷¹ program, which, in cooperation with four local NGOs, sought to empower informal communities and provide them with public water and sanitation services. This program was implemented in various low-income settlements in the outskirts of New Delhi. Technically, the

⁷¹ The full program title is *Swachch Dilli Swasth Dilli*, meaning 'clean Delhi, healthy Delhi' in the Hindi language.

program provided water connection points and refurbished wastewater canals and existing public sanitation blocks for the respective informal settlement communities. It also strongly focused on social mobilization and empowerment of settlers to claim their rights to information and public service provision.

The program launched with the mobilization of the community by establishing female SHGs and sensitizing them on personal hygiene and the cleaning of the community area, and on their rights to access government support for public water provision, sewage disposal management and public waste collection. MRYDO established local SHGs and empowered them to link with the local ward collectorate in order to make the intervention and achievements of the program self-sustaining.

Info Box: *Swasth* - Water, Waste and Sanitation in Delhi's Informal Settlements (WaterAid)

Components: Capacity-building in informal settlement communities to establish SHGs and strengthen service provision of public providers to informal settlements. Technological support to refurbish existing water and sanitation facilities.

Scale: Four informal settlements and approximately 2,000 households

Duration: 2008 - 2010

Partners: WaterAid, DFID, MRYDO, District Collector, the National Capital Region Planning Board (NCRPB), the Delhi Metropolitan Council (DMC), the Delhi Urban Slum Improvement Board (DUSIB), and the Delhi Development Authority (DDA)

WaterAid provided the interface function with the city authorities and communicated findings, successes and baseline data to the respective city councils and utilities. Moreover, the program was financially based on WaterAid's funds as well as on a public funding program (the Metro-works scheme), which was inaugurated to provide funds for infrastructure provision to informal settlements, close to the metro-line and irrespective of their land tenure situation. Applying for these public funds requires in-depth understanding of the government implementation and application procedures. WaterAid addresses these knowledge gaps and provides its partners with knowledge on how to utilize public funding for NGO programs to make them sustainable in the long run.

Delhi is a mess with respect to the definition of responsibilities and accountability of public authorities. The federal government level is mixed with city level authorities and local level political entities. The mix of actors with shared interests and stakes in

policies and decision-making in Delhi creates unclear lines of accountability and overlaps in responsibilities and decision-making.

In terms of overall planning for urban development and city management, four institutions compete: the National Capital Region Planning Board (NCRPB); the Delhi Metropolitan Council (DMC); the Delhi Urban Slum Improvement Board (DUSIB); and the Delhi Development Authority (DDA). Another four institutions are involved in water and sanitation service provision to respective customers: the Municipal Corporation Delhi (MCD); the New Delhi Municipal Council (NDMC); the Delhi Cantonment Board (DCB); and the Delhi Jal Board (DJB). However, requests for service are always addressed to the locally elected ward or district body, which thereafter transfers the request to the respective bureaucratic institutions (WaterAid 2011a, 6).

5.7.1 Successful provision of water and sanitation facilities in Delhi

Regarding the effectiveness of the first stage of the *Swasth* program, we can again distinguish the four dimensions of the program's results. In this case, *outcome 1* is the provision of a feasible project proposal and establishment of the network with planning and implementing actors, as well as the empowerment of the target communities in terms of established SHGs. The refurbishment of existing infrastructure and the provision of public service delivery, such as waste collection through public agencies are considered as *output 2* of the program's implementation. The *outcome* of the program is a substantial change in user behavior in terms of the provision and acceptance of public water taps, the acceptance of refurbished public sanitation blocks, the reduction of open defecation and, finally, the improvement of the hygienic situation due to increased cleanliness and improved awareness of personal hygiene. The *impact* of the program is the improved health and welfare of the inhabitants due to better service provision and additional time for employment.

With respect to *output 1*, WaterAid and MRYDO successfully established a partnership and merged their local expertise on public funding programs and local authorities to draft a project plan that was feasible for implementation in five informal settlements in southwestern parts of the greater New Delhi area. Moreover, MRYDO established contacts with DDA and local ward collectors and GPs for public drainage systems and waste collection in the informal settlement areas. Furthermore, WaterAid collaborated with DJB and NCRPB for the release of funds from the metro works program (Project

Director, MRYDO, New Delhi: 09/03/2011; Manager Human Resources, WaterAid, New Delhi: 25/02/2011). The *output 1* achievements are therefore ranked as high.

Thereafter, MRYDO successfully established local SHGs in the informal settlements and informed them about public funds and access to public services for informal settlements under the metro funding program. In addition, unemployed women were provided with sewing machines that within a year doubled the income of their individual households. The combination of empowerment and increased income resulted in better schooling options for their children and area-specific training in operation and maintenance of the refurbished drainage system and sanitation block (Field visit to Moti Nagar informal settlement of the author with project director MRYDO, New Delhi: 09/03/2011). The success of *output 2* is ranked as high to medium, based on the outstanding achievements in hygiene and employment of female inhabitants, but also on the inadequacy of sanitation facilities for the high number of informal settlement inhabitants.

The *outcome* of the program is ranked as medium, because while we find a substantial change in hygienic conditions and cleanliness of the informal settlement, the number of refurbished sanitation blocks and public water taps is not sufficient for the number of inhabitants in the informal settlement. The informal settlements are located close to railway lines, and it was obvious that open defecation was still practiced widely by the settlers in the area of the railway lines (Field visit to Moti Nagar informal settlement of the author with project director MRYDO, New Delhi: 09/03/2011).

The substantial improvements in welfare due to the creation of employment opportunities and health in the informal settlement was remarkable over such a short time. This included cleanliness and changes in washing behavior, such that different water sources were used for washing of individuals, clothes and textiles, and vehicles such as motorcycles and Rikshaws. Additionally, the programs have been selected to be funded for replication to other informal settlements under a second funding period. Therefore, the *impact* of the program is ranked as high.

Table 5.14 Effectiveness of WaterAid Water and Sanitation Project

Category	Project Goals: WaterAid	Achievements	Value
<i>Output 1</i>	Provision of project proposal and establishment of network with partners and target communities	Development of a project plan that includes empowerment and employment of female settlers, establishment of actor collaboration between WaterAid and MRYDO and establishment of state partners collaboration at the local (MRYDO) and city levels (WaterAid)	High
<i>Output 2</i>	Establishment of SHGs, empowerment of communities and refurbishment of existing infrastructure	Empowerment of women in the settlements, establishment of SHGs, creation of female employment opportunities and refurbishment of existing infrastructure (but number of facilities is not sufficient for inhabitants)	High-medium
<i>Outcome</i>	Substantial change in user behavior regarding open defecation and health and hygiene conditions in the informal settlement	Hygiene condition and cleanliness has improved substantially, but number of facilities is not sufficient for the entire community, and hence open defecation is still practiced widely and queues for water taps are long during peak hours	Medium
<i>Impact</i>	Substantial change in health and welfare; acceptance as customers to public service provision	Substantial improvement in health and welfare in the entire community, and replication and up-scaling within a second stage of the program.	High

The overall effectiveness of the program is rated as high to medium, since the actor consortium managed to implement the initially proposed program agenda with only minor changes and delays in implementation. Moreover, the long-term impact of the program is rated as high, since the program has succeeded in getting funds for a second phase of the program, which replicates and scales up the achieved successes.

5.7.2 Hierarchical steering and reputation as key to success

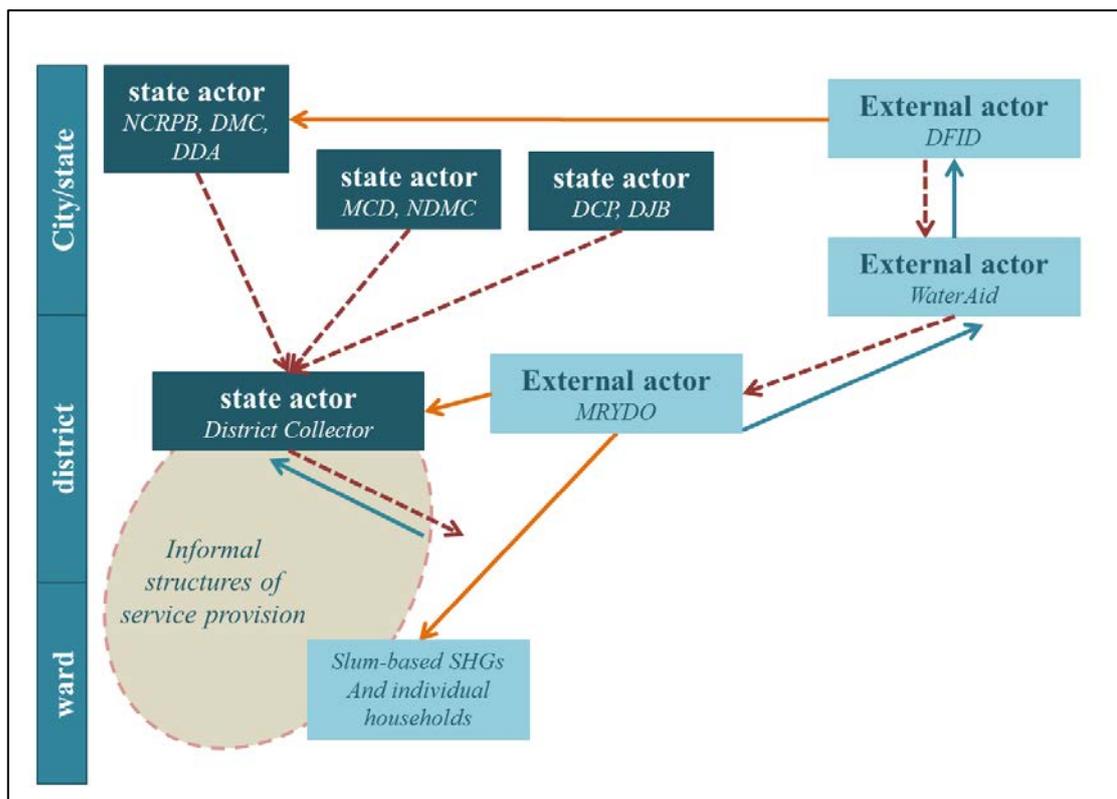
This section assesses the individual modes of coordination between WaterAid head office in New Delhi and MRYDO as external partners and government ministries and New Delhi's municipality as state counterpart in decision-making.

The relationship between WaterAid and local state partners lasts for several decades and is characterized by regular consultations and agenda-setting meetings. Even though, WaterAid has gained a lot of trust and reputation from the Indian government, they still do obey to the government and perceive the government agencies as agents to set legal

frameworks, regulations and make a rights-based policy decision in water governance. WaterAid as external actor aims to only provide knowledge and capacity building measures in terms of joint learning through their pilot programs. Moreover, WaterAid fosters to strengthen cross-departmental collaboration at government level to reduce trade-offs in water provision and enhance sustainable water management in India (Director Policy and Partnerships, WaterAid, New Delhi: 25/02/2011).

On the state actor side, we can observe a rather weaker, but still hierarchical steering mode of *delegative coordination*, where higher level officials in State Governments make the major program decisions and lower level operational decision-making has to report regularly and relatively inflexibly to higher levels. As earlier mentioned, we find a multitude of state actors responsible for service provision and support to informal settlement communities. There is also a rather chaotic mixture of institutions competing for authority and influence in a system of parallel governance (Human Resource Manager, WaterAid, New Delhi: 25/02/2011).

Figure 5.8 Actor relationships in WaterAids program



Source: own compilation. Blue arrow: direction of reporting and accountability. Red arrow: direction of decision-making and exercising of formal mandate. Orange arrow: direction of accepted advice and knowledge input.

This system can be capitalized on by local NGOs and communities seeking access to service provision by one of the many state government utilities. Hence, we find rather non-hierarchical, instrumental coordination at the state actor level (WaterAid 2011a). But since the success of local implementation is dependent on the local mode of program implementation, it is relevant in this context to highlight the successful strategy of communicative coordination among the WaterAid New Delhi office, MRYDO, the local NGO and the SHGs in the respective target communities. WaterAid and MRYDO are collaborating already for a long time and with high success in their programs. Their relationship is based on regular meetings where they exchange challenges, ongoing processes and planned adjustment of the ongoing programs. These regular meetings and interaction serves as foundation for WaterAids trust in MRYDOs successful work. Additionally, MRYDO provides written feedback and reporting on the project on a regular and reliable basis, that increased the transparent decision-making situation between both partners during the past years. Moreover, MRYDO successfully transfers this communicative knowledge exchange into the communities by holding regular community meetings and having established solid SHGs that actually drive the positive changes in the community at a high and regular level (Project Director, MRYDO, New Delhi: 09/03/2011; Field visit to Moti Nagar informal settlement of the author with project director MRYDO, New Delhi: 09/03/2011).

Moreover in this program, the empowerment of women and the solid establishment of SHGs that tackle social and infrastructural challenges in the informal settlement by regularly addressing authorities and reporting back to them about progress in their informal settlement. This regular and formal exchange provides for transparent communication structures among MRYDO the implementing agency, the SHGs and the respective city utilities (Manager Human Resources, WaterAid, New Delhi: 25/02/2011). WaterAid had established an additional knowledge component by providing program data to the city utility for water provision and urban development to facilitate data-based planning (Director Policy and Partnerships, WaterAid, New Delhi: 25/02/2011). This service provision of WaterAid targets improvements in digital planning components but at the same time it fosters regular consultations and increases communication across departments and between WaterAid and their government partners.

On the external actor side at WaterAid and MRYDO, we can observe *communicative coordination* at the local implementation level in New Delhi, in contrast to the very hierarchical chain of decision-making and reporting from local level of WaterAid to the global level of WaterAid and DFID. The actor interplay is best characterized as an established relationship between MRYDO and WaterAid as implementers of programs and their respective relationships with federal government agencies and city utilities. The donor side in this arrangement is aware of the hierarchical mode of decision-making and incorporates this into its activities by enhancing shared knowledge components to increase knowledge exchange among both parties and provide for mutual trust and reliability in program implementation.

The combination of the two steering modes, hierarchical steering on the state-actor side and non-hierarchical steering on the external actor side, gives a setting of *governance by government configuration*. A well experienced and external actor with considerable expertise was able to capitalize on the rather chaotic institutional duties and responsibilities on the state actor side. Focusing on extensive knowledge exchange across all levels and throughout the entire implementation process increased the existing reputation of WaterAid and MRYDO as reliable and communicative counterparts to state actors. The high level of obligation and commitment and knowledge exchange by the donor side is rewarded in this actor relationship with positive cooperation from recipient side what ultimately allowed successful program implementation.

5.7.3 Charismatic leadership and engagement as an alternative reason

Besides these dynamics of actor interplay throughout the project's implementation, what else might have had an impact on the project outcomes? The inheritance of previously implemented aid program structures or processes is not relevant in this case. Informal power structures and dependencies were discussed with participants to be present but not influential on the program implementation. Local legitimacy was observed within the empowerment approach of MRYDO to establish SHGs in the informal settlements and to create topic-related working groups (waste, drainage, water supply, sanitation block operation, maintenance, etc.), in order to increase ownership of the inhabitants. This supported to make the program self-sustaining by linking formally established structures of these SHGs with the respective departments at city level and allow the inhabitants an empowerment to address their needs directly to the respective

departments at city level. Structural adjustment of the organizations' designs and mode of operation did not take place, and was at the same time not needed, since the combination of an internationally experienced organization that holds the knowledge for adopting their programs to regulations of India's financial support systems (WaterAid), in collaboration with a locally recognized NGO (MRYDO) provided for all broker knowledge and expertise that was needed to address the different state actor levels adequately and with sufficient expertise and at the same time empower the community to help themselves on the long-run.

Regarding the availability and relevancy of material and immaterial resources, the program did not face any material resource shortages and hence can be considered to have been properly planned and financially viable. Additionally, the success of the program profited highly from the high expertise of engaged actors at WaterAid and MRYSO. WaterAid's staff members have the expertise and international backup of DFID, which enables them to address state government officials in a technically adequate way that is appropriate to operationally. MRYSO's director, in turn, was also a major driver of the success of this program. With eight years of background experience in working for UNICEF in India, he is well aware of the international aid system and its requirements for successful program implementation. At the same time, being director of MRYSO for about 20 years equipped him with extensive knowledge of local problems and challenges, and provided the relevant links and networks with local informal settlement communities, local NGOs, as well as local politicians and bureaucrats for joint action (Project Director, MRYSO, New Delhi: 09/03/2011; Manager Human Resources, WaterAid, New Delhi: 25/02/2011).

5.7.4 Solid actor relationship leads to improvement in informal settlements

WaterAid/DFID and MRYSO's program on local empowerment and informal settlement upgrade achieved quite remarkable results with a medium to high performance evaluation of their overall achievements and impacts.

This high performance was mainly influenced by a very good, solid interplay between state and external actors, in which the external actors accepted the dominance and hierarchical mode of decision-making of public bureaucracies and politicians. But at the same time, external actors were skilled enough to capitalize on chaotic competition

among authorities for reputation and implementation of their own partnerships; external partners also knew how to negotiate and utilize the complex requirements of public government funding programs.

Table 5.15 Results of WaterAid Case Study

Variable	Findings	Interpretation
Independent Variable	State actor (MoUD): hierarchical steering (delegative coordination)	<i>Governance by government</i> configuration with intense, successful collaboration in terms of knowledge-based decision-making (city level) and provision of water and waste collection services to the informal settlement communities (ward and GPs level); but informally, one can even consider a polycentric configuration arrangement, since state actors compete internally for power and prestige and provide a rather chaotic and horizontal decision-making counterpart to the traditional, hierarchical steered mode of action
	External actor (WaterAid/MRYDO): non-hierarchical steering (communicative coordination)	
Alternative Explanations	Historical project context	Not relevant
	Non-transparent power plays	Not relevant
	Local legitimacy	Not relevant
	Resource availability	Charismatic, experienced leadership was relevant at WaterAid and MRYDO, and strongly contributed to the success of the program
Dependent Variable	High-medium project effectiveness	Overall achievements of the program are remarkable and serve as a baseline for replication to other settlements, but facilities are not sufficient in number to provide for solutions for all settlers in the informal settlement area

The success of this program reflects the combination of fine-grained actor interplay with experienced and charismatic leadership at various policy and administration levels. The empowerment of local SHGs to claim their rights and request admission as customers to public water and waste disposal services of public utilities successfully resulted in substantial improvements of their situation. This local-level success was also due to the long experience of the Project Director of MRYDO in empowering communities and connecting them with local service providers. Moreover, the experience and knowledge of the local WaterAid team enabled the accessibility of public funds and led to evidence-based decision-making in the urban planning authority. Key to program success was the accomplishments of skilled and willing external actors who brokered fruitful actor collaboration.

5.8 Case Comparison –Relationship and Program Effectiveness

Complex systems of operational interaction, decision-making and communication provide the basis for relationship dynamics in implementation of foreign aid programs. The complex system of aid implementation comprises a range of actors, ranging from external actors' mandates to donors, their local counterparts on federal, state and communal levels and civil society partners, as well as further agents at the fringe of the implementation of aid programs. The previous section explored the reasons for the respective degrees of effectiveness in seven selected aid programs. These seven programs mainly aimed at the provision of two kinds of public services: The provision of water and sanitation services for urban informal settlements was implemented by GIZ in Cochin, by WSP and WSUP in Bangalore, and by WaterAid in New Delhi. The remaining three organizations, Arghyam in Kerala, BIRD-K in Karnataka and Naandi in Andhra Pradesh, implemented rainwater harvesting or filtering programs to supply rural and remote areas with a reliable drinking water supply and, if needed, recharge groundwater levels.

This section identifies similarities and particularities across cases, and identifies reasons and pathways that illustrate the variance of effectiveness in implementation of the seven programs. There will be a comparison of the relevance of respective governance constellations with their modes of social coordination, respective alternative explanations and the type of donor that mandated the project, in order to single out reasons for the varying program performance.

This case comparison is divided into two sections, the first of which (5.3.1) highlights the comparative findings regarding actor interplay as the reason for program performance, also considering alternative reasons that may fulfill a catalyst function for a positive actor interplay. This section discusses the findings concerning the four types of actor interplay across all seven cases. In addition, I compare the dynamics of interplay over time, in order to identify pathways of governance processes over time that have an influence on program performance. The second section (5.3.2) compares the findings of patterns of effectiveness and governance configurations regarding conventional and new donors, and finally summarizes all empirical findings from the case comparison and elaborates on the reasons behind as well as nuances in explanations.

5.8.1 Exploring patterns of social coordination and effectiveness

In my theoretical discussion of governance to provide public services, I argued that there are four types of social coordination: (1) competition or parallel governance; (2) governance by external actors; (3) governance by government; and (4) polycentric governance. I assume that the more balanced and mutually accepted the mode of coordination among partners in interplay is, the more likely the project is to succeed due to a solid relationship. Parallel and competition governance are two configurations assumed to provide low project results, due to their lack of mutually accepted modes of coordination. Likewise, governance by external actors is assumed to hinder fruitful interplay, because it requires a strong willingness from the recipient actor to take delegation. Governance by government seems to be the most promising configuration, with the legitimate state actor in the driving seat, implementing a program and assuring its program survival in the long-run without external actors' support or supervision. Finally, the polycentric governance configuration is assumed to be linked to positive outcomes; however, due to multiple interests and actors, it can also result in lower outcomes and is contested over longer periods of time due to time consumption for decision-making.

A comparative overview of all independent, dependent and alternative variables of the seven cases reveals three main findings. Firstly, the coordination mode *governance by government* is the dominant configuration across almost all cases, and actor interplay matters for project success in most of the cases. Even over time, we can identify that solid and mutual relationships provide the ground for successful program implementation.

The second main finding is that the new and conventional donors vary systematically in their degrees of effectiveness, with conventional donors being better in the overall achievement of program targets than new donors.⁷² New donors have either a governance configuration that is prone to failure in the relationship between donor and recipient, or, in cases where they provide for assumed successful *governance by government*, there is an alternative variable that explains the link between unstable relationships and low project performance.

⁷² Even though the cases were selected due to variance in effectiveness, there were no low or medium cases identified in the overall sample of cases from conventional donors (see Chapter 4, Research Design for further information on case selection).

The third observation is that many cases prove that alternative explanations are a precondition for the quality of the actor interplay, and hence provide an important catalyst function towards program success.

The following table summarizes the findings across all cases, giving the findings on program performance, respective mode of social coordination, alternative reasons and a brief description of what determined program results.

Table 5.16 Summary of Findings

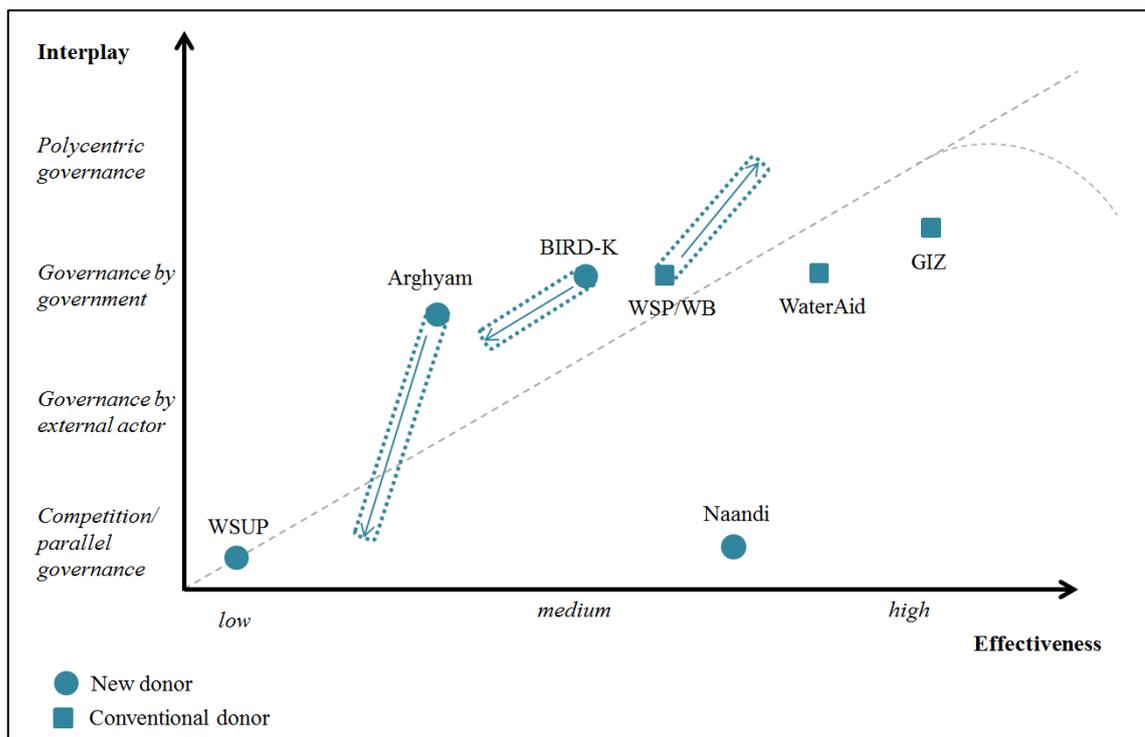
Actor	Effectiveness	Interplay	Alt. Explanation	Interpretation
Conventional Donors				
GIZ	High	Governance by government	– Not relevant	Federal state backup
WSP/WB	Medium-high	Governance by government	– History – Champion	Federal state backup
WaterAid/DFID	High-medium	Governance by government	– Not relevant	Federal state backup
New Donors				
Arghyam	Medium-low	Governance by government	– History – Power plays – Champion	Historical project context
WSUP	Low	Competition governance	– History	Historical project context
BIRD-K	Medium	Governance by government	– History – Financial re-sources	Pilot project context
Naandi	High-medium	Parallel governance	– History – Power plays	Business case generation

Looking at this table, we can see that the findings across all cases illustrate that *governance by government* is the dominant configuration, which best characterizes the donor–recipient relationship in India’s water aid governance. Hierarchical steering by state actors, in combination with non-hierarchical modes of coordination with external partners, is the most promising strategy of actor interplay in program implementation. This illustrates the guidance of the state actor in India’s aid implementation, and is mostly valid for conventional donors and linked with program success in these cases. This mode of social coordination is also valid for new donors, but not necessarily linked

with successful program implementation. None of the cases feature a non-hierarchical mode of coordination on the part of the state partner; hence we find no pure configurations of *polycentric governance* or *governance by external actors*. This said some donors did move towards polycentric governance through later stages of project implementation, a trend that I will discuss later on when I assess reasons for governance processes over time.

Building from this first step in comparative analysis, the following graph illustrates the theoretical assumption of a linear link between the respective governance configurations and the degree of project effectiveness.⁷³ The results from the empirical case studies are collected in a case-comparative overview, with the round dots symbolizing new donors and the squares symbolizing the conventional donors. The changes over time ($t_0 - t_4$)⁷⁴ in the governance configuration and its impact on the results of the respective projects is captured in the following figure 5.9 for the two cases of Arghyam and WSP/WB that change between two governance configurations and also change in their effectiveness.

Figure 5.9 Patterns of Actor Interplay and Project Effectiveness



⁷³ In attempting to visualize the assumptions and findings via this graph, the independent variable, actor interplay, cannot be regarded as an ordinal scale variable. However, as argued earlier, the configurations are almost in an ordinal ranking, and hence this visualization of assumptions and findings is given for a better understanding of the links and patterns of links.

⁷⁴ For information on the project cycle and sequence of the implementation phases see Chapter 4.1.

At first glance, the findings in figure 5.9 do not mirror the assumption of a linear link of the governance configurations and program effectiveness. However, the most effective cases of the sample are all implemented within a *governance-by-government* actor constellation. Additionally, the ineffective results of WSUP also support the assumed linear link between *competition governance* and low project results, while parallel governance, as in the case of Naandi, and provide for being more successful. BIRD-K and Arghyam are the special cases, given the assumptions in chapter 3 and will be discussed later in this section.

In what follows, I assess patterns between the different governance configurations and project effectiveness. Such systematic patterns of these two variables provide insights into a potential causal relationship between actor interplay and project effectiveness. This analysis begins with a discussion of the findings according to the four types of governance arrangements and by discussing the respective outlier cases.

Governance by government emphasizes the willingness of India's state actors to fulfill their legitimate functions as public service providers. State actor dominance may occur due to a lack of competing classes and actors in the local society (Elsenhans 1984, 165). This dominance of bureaucracy over society and external actors may have adverse impacts on the actor arrangement, depending on the tolerance, power resources and acceptance of the external actor to be in a passive position in decision-making and implementation of aid programs.

It is assumed not to be conflictive in cases where the donor acts as an advisor to the state actor, or where they enhance missing capacities of the state actor and are regarded as a complementary element in the actor arrangement. The donor is accountable to the recipient counterpart, and in return receives legitimacy through obedience and qualitative service provision. The dominance of recipient institutions' belief system and action can only be substantially influenced if the donor pursues the implementation of its own agenda in a non-transparent and passive manner (cf. Schimank 2007, 38).

Across all cases with this mode of coordination, the external actors perform only advisory functions and report back to their mandated mother organizations, but in none of the cases do they provide policy-level decision-making. Conventional donors show a tendency towards *governance by government* as a mode of social coordination and towards the provision of successful program implementation.

The empirical insights reveal that increased ownership and project teams that put the state partner in the driving seat are more likely to succeed in their project program. This is the case for all conventional donors. However, the new donors provide a slightly different picture when it comes to this mode of coordination. BIRD-K also put the state actor in the driving seat, but the project's success was only medium, due to slow financial, bureaucratic procedures and a relatively tough time scale. Obstacles at the recipient side of the constellation could not repeat the success of a prior pilot project that had actually triggered the collaboration due to its overwhelming success. Since this case is characterized by *governance by government* mode of coordination it is assumed to have an actor interplay that favors positive program results. Mutual trust among program partners was established through an initial pilot project but slowed down over time and resulted low responsiveness of the recipient actor and the release of prior agreed funds. However, being a new donor, this case illustrates how collaboration with state partners without *federal-level backup* turns out to be a difficult task.

Additionally, Arghyam's Mazhapolima program in Kerala changed in its performance and interplay over time, from medium to low performance, for a similar reason. In the beginning, the results were remarkable, due to a strong and willing government actor (and charismatic leader) that triggered strong relationships through trust and acceptance of local power plays and hence achieved willingness for collaboration and program implementation. In later stages of the project, without this engaged government partner, the relationship was perceived as rather chaotic and competitive. Hence, one can characterize the actor interplay in this constellation as transforming from a *governance-by-government* interplay towards *competition governance*, and in the end not being very successful, due to the lack of *federal-level backup* that encouraged the initial successes of the program over time.

The first assumption of the theoretical section, that one reason for effectiveness is the increased ownership of state partners, seems to be confirmed. However, as insights reveal, this is only the case under the condition of similar modes of coordination. Project consortiums that had comparable understandings of cooperating with each other, but accepted the input-legitimate function of the state actor and the reputation of the external actor seemed to be most successful at dynamic actor interplay and ultimately in project success. Moreover, the history prior to a program and the presence of

charismatic leaders seem to serve as a blockade or catalyst function for the quality of the relationship between donors and recipients.

Governance by an external actor in foreign aid is best characterized by a delegation of authority by the recipient to the donor actor due to a lack in recipients' strength and capacity to undertake and complete a project. Delegation of authority means that the external actor has enough support to implement and exercise the function of providing a public good with an almost absent or only soft-steering state counterpart in the recipient country. This can be regarded as a typical principal–agent relationship, but with the particularity that the recipient actor delegates and the external actor implements (Risse 2012, 17). This configuration of delegated authority also implies a delegation of input-legitimacy to the external actor, and hence provides a solid background for the implementation and long-term sustainability of a program through the transfer to state partners at later stages of a service. Moreover, accountability mechanisms are established by the delegating state partners, providing or at least a minimum standard of command and control by the state partner.

This configuration may be established in cases when the local state partners lack the ability and capacity to provide for public policy-making, leading them to agree on a temporary takeover of these tasks by external actors. This governance configuration is extremely rare and requires asymmetric distribution of material and immaterial resources in order to be accepted and effective (Risse 2012, 13). One can assume that the configuration of governance by an external actor may be found to be effective in the short-term and in ad-hoc humanitarian aid relief projects. Since the cases selected focused only on permanent aid programs, my research did not show reveal any evidence of *governance by external actor* constellation and it remains empirically open whether humanitarian aid under *governance by external actor* constellations can succeed.

Parallel and competition governance implies an initial failure in cooperation between potential partners, resulting in their decision to implement the program in parallel to or competitively independent from each other. This is labeled as an 'exit option' or the exit of an actor in a partnership, which impacts the activities of the exit actor but not those of the remaining partners. Exit strategies may result in project failure and may be difficult to perform for the exit actor (cf. Schimank 2007, 35). Parallel governance implies minimal or almost no cooperation, and can best be characterized as tolerance for the counterpart's activities in parallel governance situations. The external actor lacks the

acceptance of the input-legitimate actor, and the external actor in most cases will not be able to implement plans of a program that requires sanctioning by bureaucracies in the recipient country.

In the case of Naandi, we have an outlier case that achieved relatively high project results with what is best characterized as parallel governance, a configuration that is assumed to be doomed to fail. Naandi did not fail because a business model for implementation was established that did not rely on an active interplay with public state partners, but that amounted to the privatization of public services. It is remarkable that the state actor supported this privatization policy as a solution for urban areas. Naandi's reputation for providing public services on a private basis paved the way for its mutual agreement with state actors to provide the needed services on that basis. However, generating a business model and following the logic of market mode of coordination provides for an outlier case in comparison with the other cases, which all strive for self-sustainability through public service provision in the long-run.

In the case of Arghyam, the change from hierarchical to non-hierarchical steering at state actor side was caused by the withdrawal of the local champion (DC), which led to chaotic and confused decision-making structures on the state actor's side in the implementation of this rainwater harvesting program and ultimately resulted in *parallel governance* situation, with lack of acceptance at state partners side.

State actors in this governance configuration differ in their degree of legitimacy compared to external actors. Being the input-legitimate actor provides them with the power to provide public-policy making and to veto the actions of external actors. External actors are able to provide public services only with support from local communities and beneficiaries, thus gaining local 'output' legitimacy. However, without the cooperation of input-legitimate state partners, programs will always lack the institutional backup for long-term, self-sustainable service provision by state partners. Infrastructure programs on a large scale are impossible; only local and small-scale initiatives are feasible, and then only with the support of the local groups of beneficiaries, high competences in service delivery and the attainment of local and output legitimacy (cf. Krasner and Risse 2014; Beisheim et al. 2014b).

WSUP proves this governance constellation to not be effective in program implementation. The relationship between input-legitimate counterparts and WSUP was either non-existent or conflictive due to rival actors that were already successful in

program implementation on a larger scale. Hence, the actor relationship in WSUPs program may best be described as the sequential and adding up to each other's acting and reacting of partners with conflicting interests.

This interplay can achieve high collective results, but only on the basis of reaction in a non-transparent process of interplay and adaptation to norms, strategies and goals of the counterpart, comparable to the prisoners' dilemma (cf. Schimank 2007, 37). Recipient actors need to have the political will to collaborate; otherwise they pose a blockade and act as veto players in international projects (Beisheim and Fuhr 2008, 18).

Additionally, foreign aid programs aim to provide services that are sustainable, and can thus be handed over to the respective public-sector agent, in order to assure the long-term operation and maintenance and maybe scaling-up of the program. This opportunity is blocked in parallel and competition governance, because an initial attempt for cooperation failed and the long term effectiveness in terms of self-sustaining provision as public good or service seems to be excluded in this governance configuration by the rejection of local state partners.

Moreover, *parallel and competition governance* do substantially differ in their arrangement. While *parallel governance* is connoted with at least acceptance of recipient actor and may only lack an official delegation of task, it is relatively comparative with *governance by external actor*. This configuration, however, lacks the long-term perspective that a certain service is provided by the public sector as a public good or service. This characteristic feature is in contrast shared with the *competition governance* constellation but, in contrast, this one is a relationship that has a negative connotation and is not accepted by recipient actors as being legitimate to implement a program on their behalf. Summarizing these three types, they do share the feature of lack of cooperation with local state partners but differ in the degree of being accepted or rejected as implementing agent in local context settings.

Polycentric governance is a networked mode of governance, which is characterized by the symmetrical distribution of resources and power and a smaller extent of formal interactions. Decision-making, friendship and interdependence become part of the interplay mode and may lead to the utilization of all existing expertise in a consortium in a shared and trusted relationship (Ostrom 2010; Ranade and Hudson 2003, 36). This configuration may best be described as a mutual negotiation system with conscious communication and transparent adaptation to each other's norms and interests on

different levels of decision-making. Polycentric governance is assumed to foster participation, which results in higher ownership of partners in implementing a joint program and hence is linked with positive program results.

Critics may also argue that non-hierarchical decision-making leads to unclear duties and responsibilities, and hence results in chaos in the planning and implementation of development projects. It might rather be the case that horizontal interplay among state-actors and horizontal cooperation with external actors leads towards blurred regulations and decision-making processes, as well as longer processes of implementation.

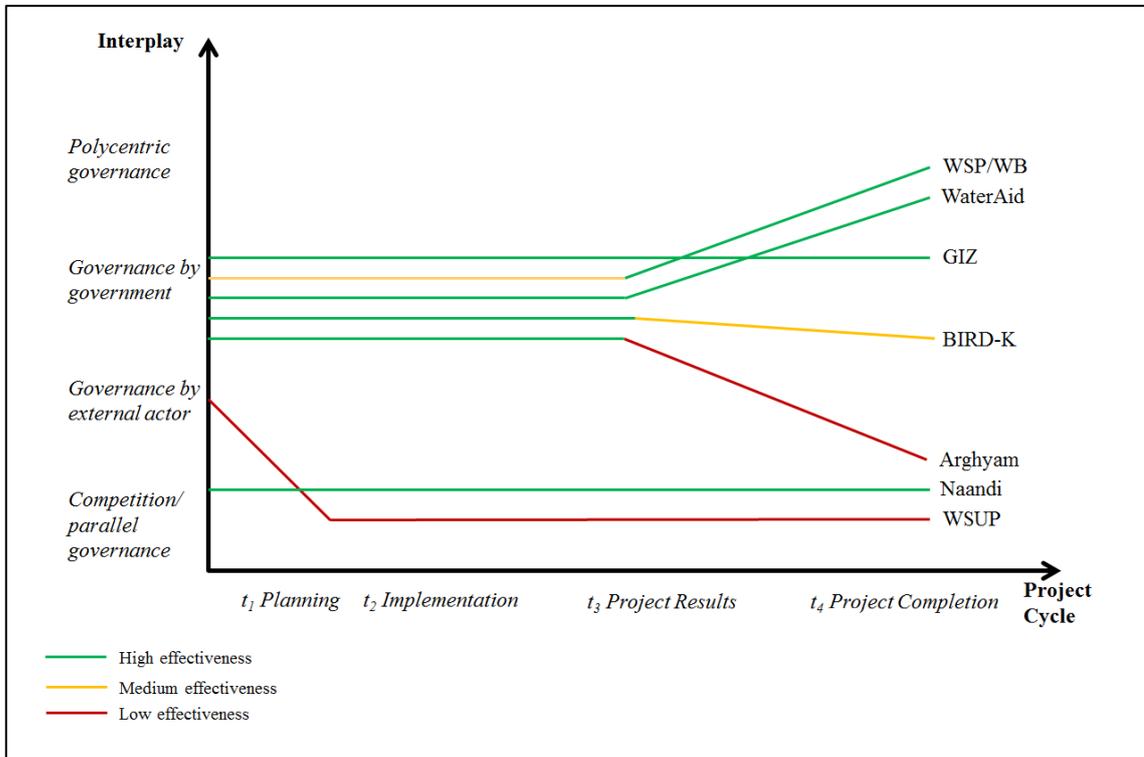
Why do we not find cases of polycentric governance and governance by external actors in the initial stages of program implementation? There is some tendency towards these modes of governance in cases such as WaterAid and WSP/WB, where the responsibilities are rather flexible and unclear throughout later stages of program implementation and when a minimum degree of trust and confidence in each other's work has been established. This change from *governance by government* towards *polycentric governance* is a rather unintended and natural process and was only partially visible in the case of WaterAid. The external actor capitalized on this situation by playing out these flexible structures and turning them to their own advantage.

In the case of WSP/WB, the charismatic leader provided as a catalyst towards polycentric tendencies of the program towards the end of implementation. The high outcomes and successful program implementation proved in this case that polycentric governance can be successful in service provision, under the condition of established relationships and mutual respect. Hence these cases prove that polycentric governance is successful and may provide a *modus operandi* throughout later stages of implementation in stable and trustworthy actor relationships.

Following on from this discussion of the various governance configurations and given the fact that we do find dynamics of relationships over time, figure 5.10 illustrates these slight changes of governance configurations over time. It also highlights the dynamic nature of actor relationships throughout project implementation and links it with project success. The colors provide the information about the degree of effectiveness of the programs over time. While no project started with polycentric and open coordination *modus*, two of them gained mutual trust in each other's capacities and abilities at least towards the end, changing towards polycentric governance. Most programs set off with *governance by government* relationship constellation and showed a medium-to-high

performance. Hence, as illustrated in this graph, *governance by government* is the dominant and most successful configuration when it comes to linking it with project success. And only few relationships tend to move towards polycentric governance throughout later stages of their programs.

Figure 5.10 Dynamics of Actor Interplay over Time



With this illustration I aim to capture the dynamics of the actor relationship over time, and I aim to shed a light on why there is a need to discuss governance configurations as a tool to understand relationships in a systemic way but also understand them as governance processes over time as well. The dynamics of the actor interplay reveal that most of the programs tend to move towards polycentric governance in the end, and still retain a medium-to-high effectiveness. Even though governance comprises the assumption of a multitude of actors that coordinate across different levels, we also need to consider processes as a third dimension of these two governance dimensions.

If we take a closer look at the cases of governance by government of GIZ, WSP, WaterAid, Arghyam and BIRD-K, the conventional donors GIZ, WSP and WaterAid are all effective and set off well, due to federal state backup of their activities across all levels. These relationships are thus based on reputation and experience, and increase reciprocal trust with each other. Trust and reputation increase the confidence in each

other's abilities, and slightly change the mode of coordination towards polycentric governance over time with not too much of loss in success of the program.

The two new donors, Arghyam and BIRD-K can be considered as external actors that know the rules of the game and aim to establish this reciprocal trust and collaboration by mimicry of public sector structures and the establishment of state-alike structures. In the short term, this strategy pays off well for the establishment of the program, but in the long run they lose trust, and social coordination slows down and gets interrupted, ultimately reducing the effectiveness of the programs. Both cases prove that a reliable and trustworthy relationship supports program effectiveness, and that the loss of trust also goes along with the weakening of program results.

Polycentric governance towards the end of program implementation may exist due to increased trust and reputation. Hence, when speaking of governance pathways over time we can distinguish pathways with *federal-level backup*, which provide more flexibility for external actors throughout implementation than those pathways in which the external actor constantly struggles to gain or remain in a trustworthy relationship to successfully implement its program. Discussing different aspects of governance for program success thus needs to consider the actors, the levels of engagement and the processes of interaction over time, which are related to trust and reputation, and more flexible and adaptable governance pathways in the end.

Building on these comparative findings, the next section brings them into conversation with the assumptions made for alternative explanations, such as historical project context, non-transparent power plays, local legitimacy and resource availability. Do we find any systematic patterns of variation in these variables among the seven cases, and what function do they perform for the overall program results?

The impact of **historical project context** on project performance, through the inheritance of institutions and knowledge from prior programs, was found to be relevant for the effectiveness in five cases: Arghyam, BIRD-K, Naandi, WSP and WSUP. Arghyam and WSUP both could have profited from existing decision-making structures and issue area awareness associated with the previous, large-scale World Bank projects. Yet, ultimately, neither of them profited from these prior structures and already existing features. In fact, WSUP's actor interplay was negatively affected by the already existing program structures. In the case of Arghyam and BIRD-K, the project profited immensely from the previous program capacities, knowledge and structures, but only in

its initial stages, and after this their impacts were lost over the time of project implementation. In contrast, WSP and Naandi utilized prior pilot projects as trial cases to set off far larger programs that succeeded in the long run. Hence, one needs to acknowledge the effects of small, best practice pilot cases, which provide insights into opportunities and pitfalls and already pave the way for actor relationships that facilitate the implementation of larger programs of the same kind. In general one can conclude that historical project context does only matter in the initial phase of program implementation and has a catalyst function towards positively impacting actor relationships. Utilizing this initial advantage towards successful relationships seems to be a key but does not directly impact overall project performance.

Non-transparent power plays were only relevant for program success, in combination with actor relationships, in the case of Arghyam. The control of these local level power plays by the local political elites provided efficient decision-making situations in the initial stages of the program. But when the hierarchical mode of action changed towards a non-hierarchical mode, the local power plays gained strength and impacted the program success in a negative way hindering further collaborations on the program. The change in interaction over time from mutual and cooperative interplay in the beginning, with high project outputs, to chaotic and non-hierarchical coordination through later stages, resulted in a low performance of the entire program. This case illustrates how non-transparent power plays can deactivate a solid interplay between state and external actors, and significantly impact the outcome and impact of a well-designed and implemented program.

Adjusting to local conditions to increase **local legitimacy** is important for new donors that approach state counterparts at local level. New donors lack the *federal back-up* and reputation, and hence it is of utmost importance for them to gain local legitimacy to establish strong relationships and enable successful programs. Structural adjustment of modes of operation and processes to gain local legitimacy were observed in the Arghyam and BIRD-K cases, but losing them in the end also resulted in low performance of the programs. Local legitimacy is regarded as a pre-requisite for successful relationships but not for ultimate project success.

Regarding **resources**, we find relevance of human resources in terms of key champions that drive project success on the state actors' side. Five out of seven cases show coordination modes in which the input-legitimate state actor demonstrated a hierarchical

mode of coordination and determined the policy-agenda and decision-making processes throughout implementation. Two of these cases were successful due to a champion or charismatic leader who created momentum for solid relationships between donor and recipient and to allow projects to set off successfully. Taking a more detailed look at these cases, we can see that in the first case of WSP, a charismatic leader at the public utility established fruitful, solid relationships with external actors. Even though the absence of a champion cannot directly be assessed as having an impact on the project result, it can be assumed that charismatic leaders provide a catalyst for engaging actor relationships.

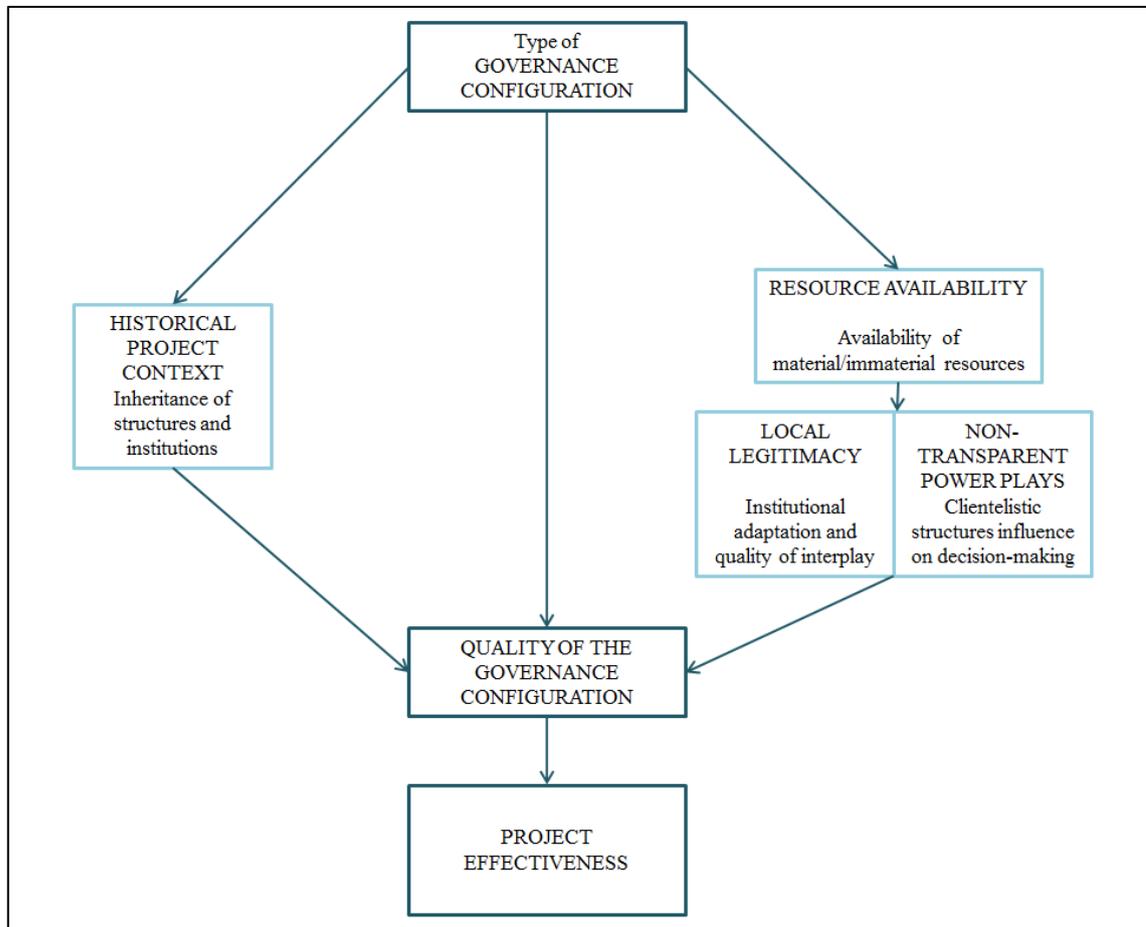
Additionally, in the case of Arghyam, we find again that a charismatic leader on the state side heavily impacted the program proposal and the first stage of implementation. Through later stages, this particular champion resigned and the entire program slowed down and achieved only a medium degree of effectiveness. Champions serve as catalyst that can significantly affect the quality of the relationship. The combination of a willing and able champion on the state actor side increases the likeliness of project success because it provides an opportunity to overcome obstacles in slow and unresponsive bureaucracies.

It can be concluded that the most relevant alternative explanations are historical project context (and prior developed pilot projects) and the driving force of champions (resources). While the historical legacies of large-scale donor programs can hinder new donors from implementing comparable programs, at the same time pilot programs can also pave the way for overcoming challenges for larger scale programs. Charismatic leaders provide local knowledge and have proved to counterbalance local power plays and establish solid relationships that serve as drivers for program success. Local legitimacy is relevant for new donors that lack reputation and expertise; they must gain credibility and reputation by adapting their structures and processes to local, state and beneficiary structures in order to generate a trustworthy relationship with local level state partners. In general, one can conclude that these alternative explanations are important but can be considered as having a catalyst function for establishment of trustworthy and solid actor relationships.

Insights on the alternative explanations revealed that they do not have the same level of importance to project success as the governance configuration. Alternative explanations rather impact the quality of the actor relationship. Without a reliable relationship,

projects do not take off at all (compare the WSUP case). The following figure 5.11 provides an overview of the three different pathways of how the analyzed variables in my thesis roughly matter for project success.

Figure 5.11 Findings on Variable Relationships and Combinations



In general, alternative reasons have an impact on the quality of the actor relationship and hence do not serve as giving direct reasons to project success. Additionally, the relevance of alternative explanations for actor interplay has been found to apply mainly to new donor types. Either the historic project context matters for the establishment of a solid actor relationship and leads to program success (pathway to the left), or the combination of a charismatic leader overcomes non-transparent power plays and creates local legitimacy for the external actor and establishes solid relationships for program success (pathway to the right).

In a third pathway, alternative explanations provide no prerequisite for solid actor interplay. This pathway plays mainly a role for conventional donors. The two conventional donors WaterAid and GIZ, confirm the assumption of a direct link between the governance by government configuration (as confirmative action and

putting the government in the driver's seat) as a key to program success (pathway in the middle).

Conventional donors all pursue *governance by government* configurations, and have comparatively high results in project outcomes. New donors vary more in their governance configuration, and provide a mixed picture of project success. Hence, we find more variance with new donors and need to take a closer look at the reasons for this variance, and at the same time identify the similarities among conventional donors regarding their pathways towards project success. The next section deals with this variance and carves out the similarities and differences to find an answer to the question, whether it makes a difference who mandates foreign aid implementation, or not.

5.8.2 New or conventional donor: does it make a difference?

Comparing the two different donor types and their implementation approaches reveals interesting insights. As stated earlier in my thesis, I am interested in understanding whether there is a systematic difference in program success of new and conventional donors. Based on present literature on new donors, I assume that new donors are more flexible and innovative, and hence find it easier to adapt to recipient actors. This capacity for flexibility and adaption is considered to provide more room for maneuver than conventional donors have, and may enable more successful programs. It is assumed that conventional donors lack this flexibility and hence cannot be as responsive to local needs as new donors.⁷⁵

Regarding this assumption, my research reveals, firstly, that the two types of donor do seem to differ systematically, with conventional donors being more successful than new donors. Secondly, the research shows that even though new donors proved to be more adaptable and flexible, they are not more successful because they observe more obstacles in implementing local level programs due to a lack of backup from federal level governments.

Conventional donors can be all characterized as showing *governance by government* arrangement, with an actor relationship that has reputation and long-term engagement as key factors for mutual and long-term trust across all governance levels and across all

⁷⁵ Compare discussion in my analytical framework in chapter 3.

actors in the relationship. These relationships are long-lasting, and all showed a medium to high success rate, with hardly any relevance of rival explanations.

The three conventional donors, WSP, WaterAid, and GIZ, had a medium to high level of effectiveness, and all three pursued strategies that put their respective state counterparts in the driver's seat. Putting the input-legitimate state actor in the driver's seat, and having a donor in a rather obedient, consultative position in the relationship, fosters trust and establishes trustworthy relationships in the long-run. As the research in India illustrates, stable and trustworthy relationships across all levels of program implementation serve as a foundation for program success

Due to India's political decision to collaborate with large donors at the federal state level, with a trickle down to local level, WSP, WaterAid and GIZ share the background of an established actor relationship on the federal level, which backs up local level program implementation. This *federal-level-backup* means that conventional donors are able to capitalize on the advantages of the *hierarchical-order-and-obedience system* within India's government and bureaucratic agencies from federal to state to community level. This mode of social coordination explicitly puts the recipient actor in the driver's seat of the relationship, and allows for more responsibility and hence more stewardship for the recipient in the entire program. Responsibility and stewardship go along with more sustainable program results and long-term effects, as well as less conflict of interests and bad planning of local implementation.

Moreover, conventional donors' role as an obedient actor that provided expertise and knowledge to the local counterparts was accepted by all counterparts across governance levels, due to the federal level mandate of the program. Finally, these three programs were all backed-up by federal government policy-making powers, and were allowed to include all levels, from the federal to state to urban level in their planning and implementation phases. This inclusive process of a ladder of decision-makers is perceived as being a key to successfully mobilizing lower-level activities through delegation chains from higher levels and through deliberative and participative processes across all levels. Successful collaboration at the local level is a phenomenon that can be labeled as *federal-level-backup*, a process of higher-level command and control, which strengthens local-level engagement and accountability in a context that is showing centralized policy-decision making.

In contrast, new donors pursue approaches in which they propose particular programs to local actors. Participation in the design of the program of the recipient actor is limited to a more narrow group of actors than in programs of the conventional donors, and hence requires the recipient actor at the local level to be convinced of the need for the proposed program. The findings on new donors reveal that their success is more dependent on external and internal project conditions, such as historical project background and charismatic leaders. Additionally, new donors tend to establish individual operational units, which guide implementation and do not pursue an approach that puts the respective state counterpart in the driving seat.

My research has illustrated that long-term and self-sustaining project effectiveness requires more than only support from recipients in the long-run. It also requires local ownership of the population and beneficiaries to guarantee that resources for maintenance and operation are mobilized locally, and that capacities to continue the project are available beyond the activities of the donor (cf. Gow and Morss 1988, 1413).

To achieve local ownership, beneficiaries must be included throughout different stages of the project as well as empowered and motivated to continue the tasks and duties of a program when aid input ends. Therefore, the actor interplay should strive to strengthen existing incentives, and to create citizen demand for the public service newly provided. Another strategy to strengthen political responsiveness and local ownership is coalition-building between parties in order to reduce administrative and capacity obstacles that might block collaboration between unequal actors (cf. Hughes and Hutchison 2011, 21).

The main difference between new and conventional donors is that conventional donors are able to cross-fertilize the intensive and rigid cooperation at federal to local level implementation. New donors are asked to directly address local-level policy-making, and need pilot programs and charismatic leaders in order to succeed in establishing a solid cooperation with local state actors. Gaining local legitimacy remains important throughout implementation in order to achieve successful program outcomes over time.

Putting the findings in a more concrete context, conventional donors share the competitive advantage of a reputation from prior projects and more participative processes across all levels of decision-making, which help them to establish successful relationships and provide effective program implementation. New donors aim at implementing pre-designed programs and do not have such a strong focus on advice and participatory processes of local actors. Moreover, in India they lack the support of

higher-level decision-making and need to allow for additional time and resources to gain local legitimacy and convince local-level decision-makers of their program's approach. Getting state counterparts on the side of their program is a key driver of program success. These structural differences between the two donor types lead to differences in their relationship with recipient actors, and ultimately lead to variance in the effectiveness of their programs.

Moreover, the assumed typical and outlier cases of new and conventional donors, as stated in table 3.4 (page 68 of my thesis) are not mirrored in my empirical analysis of water governance implementation in India. Conventional donors were assumed to implement programs on a basis of providing public goods as external actor. This may have been true in past decades or in context settings with lack of capacity of state actors. However, in the case of India, conventional donors implement their programs in *governance by government* arrangements. Competition and parallel governance as outlier cases can be confirmed and is based on the fact that conventional donors act on the basis of bilateral and multilateral agreements with states and hence will not establish governance arrangements with features as shared in these two configurations.

New donors in contrast were assumed due to implement programs locally with *governance by government* arrangements. Even though we observe this arrangement in the cases of BIRD-K and Naandi, other donors implement their programs in *competition and parallel governance* modes, which were assumed to be outlier cases. This again illustrates the complexity of the picture when it comes to new donors and their respective individual strategies to implement programs in local contexts. The two cases (Naandi and WSUP) where we observe these assumed outlier cases, do either fail, as in the case of WSUP or provide for a business case that does not account for the normative standards of service provision programs (self-sustaining and inclusive service provision for all).

These findings do not support the second assumption of my thesis, that new donors are more flexible and innovative and hence are more successful than conventional donors. Even though their degree of flexibility and innovation has been proved, this is not necessarily linked with more success. However, we can still identify systematic differences in the kind of relationships between new and conventional donors, with conventional donors being more successful overall. To draw a more nuanced picture, I can conclude that the reputation of conventional donors leads to more trust between

participating partners in aid implementation, and hence the establishment of solid actor relationships can be observed as the foundation for sustainable aid programs in all three cases observed in India.

New donors, by contrast, have proven to be innovative in their program approaches, and aim at complementary programs to existing approaches. However, their innovation and flexibility are not sufficient to guarantee for the success of their programs. Success for new donors needs more 'ingredients', such as charismatic leaders and the creation of business cases to set off a successful aid program. They also face huge difficulties in implementation in the end, due to competing situations and lack of reputation and expertise on local structures and processes.

6 Conclusion and Implications

Nowadays, foreign aid program implementation is an object of both internal and external evaluation processes, in order to guarantee the effectiveness and long-term impact of these programs. These evaluations are tied to the respective donors and their program, which means that insights across programs and across various donors are still very rare. In my thesis I aim to understand the implementation processes of seven different donors, and systematically to assess and compare these seven water governance programs. By comparing the aid implementation from three conventional donors and four new donors, my thesis aims to identify the reasons for project effectiveness, with a particular focus on actor relationships of these two different donor types and systematic differences in their success. My findings are thus aligned with the discussion of program effectiveness and governance, and the impact of an ever-increasingly fragmented donor community of aid implementing agencies in India.

Through the governance lens, I gained insights with my research into the various actors engaged in aid implementation and the various levels, from federal to state to local level, that are relevant for program implementation in seven water and sanitation aid programs. With a systematic understanding of different modes of coordination through a governance lens, my research was guided by the following research question of **how does the donor-recipient relationship in aid delivery programs affect program results?**

With this question, I attempt to understand the donor–recipient relationship and how it relates to program results as well as gaining insights into systematic differences between conventional and new donors. Integrating aid evaluations in the respective case analysis of my empirical research, I aim in my thesis to move beyond individual case analysis and rather provide insights into pathways to success across different types of donors, by focusing on the actor interplay and its relevance for program success. Some programs target water and sanitation provision in slum areas (GIZ, WSP/WB, WSUP, WaterAid/DFID) whereas others aim to provide drinking water through rainwater harvesting or local water kiosk stations (Arghyam, BIRD-K and Naandi).

The overall findings of my thesis reveal, firstly, that these kinds of governance arrangements that put the recipient actor in the driving seat are linked with high

program results. This suggests that actor relationships that guarantee ownership and empower the recipient state actor are very promising. This finding might not be too surprising, given the background of bilateral and multilateral aid that explicitly aims for empowerment of the recipient side in its collaborations. The interesting part of this finding, however, is the trickling down of this effect to the local level implementation and the so called *federal state level back-up* model, when comparing the success of conventional donors with the failures of new donors.

The second finding was that conventional and new donors vary systematically in their program results and reasons for success. While conventional donors achieve successful results and self-sustaining programs through solid relationships between actors across all policy levels, new donors provide a rather mixed picture. They call for a more nuanced understanding of the pathways that led them towards their mixed program results. Thirdly, my research showed that there are alternative reasons that matter for program success, and that these reasons drive the actor relationship. For example, historical project background and local legitimacy, in combination with a solid actor interplay, have an impact on program results in mainly new donor arrangements. Overall, the role and position of the recipient state actor in implementing aid programs is of utmost importance. To successfully provide for water and sanitation services, aid donors need to either gain local legitimacy and trust, or to rely on a trickling down effect from federal level state power in order to foster the implementation and enforcement of agreements at the local level of implementation.

The broad and politically contested topic of effective service delivery by different aid actors is narrowed down in my thesis to the particular country context in India and the particular policy field of water governance, in order to reduce variance in explanations. From a methodological point of view, this narrowing down of the research perspective has implications for the potential generalization of my findings. Generalization refers to the abstraction from empirical reality to theoretical assumptions that provide the basis for further empirical application and transferability, for example in different context settings, policy sectors and actor relationships (Kelle et al. 1993).

The systematic comparison across the cases of my thesis can already be regarded as an initial step of generalization from the insights of the single case studies. Beyond my comparative findings, the present concepts and ideas may also be applicable in comparable country context settings that share particular conditions, such as being a

decentralized democracy and being an economy in transition, as well as possessing a large bureaucracy for the provision of public services. Moreover, my findings may also be applicable in international aid programs in different policy sectors that share the same features of being oriented towards the provision of basic infrastructure and public services, for example health care provision in slums, electrification in rural areas and the provision of nutrients and food for marginalized people.

Moreover, my findings are transferable to contexts with comparable actor relationships that aim to provide public goods where state actors are not providing it or have mandated the service to a third party. Such contexts may vary from the outsourcing of provision of public services in fragile states, to local counterparts and to the collaboration of vulnerable people in areas of limited statehood, or even to contexts where the state is temporarily not able to provide a service such as in the case of natural disasters or other humanitarian emergency situations.

In addition to these possibilities of generalization, the knowledge gained in my research could be expanded through further research, in particular research that would stress more the question of the competitive advantages of private sector aid actors compared to new and conventional donors. The aim of this would be to deepen the picture of the opportunities and pitfalls of different approaches to supporting the poor and marginalized. Furthermore, the four governance arrangements in my thesis should also be further tested for humanitarian aid. Humanitarian aid takes place in different context settings and relies on actor interplay between donors and recipients, but does not have the time or capacity to establish solid relationships. It will be of interest to find whether the delegation of tasks that is observable in humanitarian aid programs does provide effective relief and support for the affected target group. Research should also provide more knowledge on the governance processes that entitle a multitude of actors in different context settings over time. The global visions to fight climate change and foster sustainable development for all resulted in the Paris agreement against climate change and the 2030 Agenda for Sustainable Development. These agreements illustrate the need to focus more on how to generate societal relevant knowledge of how to implement these voluntary agreements at global, state and local levels.

From a methodological perspective, further research based on my approach and my findings could address two challenges. Firstly, further research should aim to transfer the present approach to different context settings and different policy fields in order to

strengthen the finding that actor relationships are relevant for program success in different settings. Secondly, we should advance mixed method designs and provide methodological solutions to understanding dynamic approaches over time, which should then be combined with various explaining factors. Gaining insights into such complex research objectives as multi-level, multi-actor aid implementation requires standardized, comparative methodological frameworks on the one hand, and, on the other, methods that allow for the combination of different factors at different points of time to create a holistic picture of the pathways towards program outcomes. Combining single case analysis with cross case analysis, and including data from interviews and direct observation over time with existing evaluation frameworks and public printed material, are the first steps to gaining a holistic picture.

However, future research in this area should be prepared to focus on the strengths of social science methods in combination with anthropological research methods. Hence, further research should move beyond both straight-forward, large-scale cause and effect studies or small case studies that are thick and dense with analysis. Developing middle ground methodologies to grasp complex research objectives seems necessary for the advancement of how to best grasp themes that aim for a nuanced understanding of complex phenomenon or sensitive issue areas. The present approach has aimed to provide such a middle ground by applying a comparative case analysis without reducing the complexity of each case story. Secondly, the contextualization of the present findings in the particular conditions of policy-making and implementation in India points to the need for testing these findings in other, comparable context settings.

The next section of this chapter brings my findings into conversation with my theoretical framework on governance approaches and actor interplay, and thus reveals their contribution to the governance debate as well as additional arguments that may be cross-fertilized for the current governance debate. It focuses particularly on the role of the recipient state actors in governance theory, and reflects upon the importance of considering governance as a process, as well as linking it with elements of social capital thinking. Following this, I critically discuss lessons learned from the seven case studies, integrate them into present discussions on aid delivery at the global level, and use these to derive policy recommendations for recipients and donors. The third section of this chapter then concludes by highlighting the contributions of my thesis to the discourse on aid effectiveness and by identifying pathways ahead for the practical policy realm.

6.1 Concluding Theoretical Thoughts

How to best implement foreign aid programs has always been a contested area of research, largely because of the need for a fine balance in the collaboration between donors and recipient actors. In a globalized world, we find donor consortiums that comprise different actor types and state recipients, which integrate civil society and local business actors in program implementation. We therefore find quite complex actor constellations for program implementation. Governance theory, with its assumptions on how social coordination influences decision-making and political outcomes beyond state-centric and hierarchical government systems, is the theoretical foundation of this thesis to understand the complex interactions of partners in foreign aid over time and across different decision-making levels.

The theoretical framework of this thesis has comprised four types of governance constellations: (1) *competition or parallel governance*; (2) *governance by external actor*; (3) *governance by government*; and (4) *polycentric governance*. As discussed in the previous section, my empirical analysis reveals that the *governance-by-government* constellation is both the most common among conventional donors and, at the same time, the most successful in implementation. Moreover, it provides a mode of social coordination that serves with *federal-level backup* as a catalyst for local level implementation. The trickling-down of a superiority and inferiority system of decision-making seems to be a main driver for program implementation on a community level.

What can be learned from this finding for the approach of governance configurations, as well as for governance thinking in general? Even though we have complex problem settings and hybrid modes of coordination, it seems that the conventional steering type of hierarchical delegation by state actors is relevant for the success of governance service provision in the field of foreign aid.⁷⁶ Putting the state actor in the driving seat to determine agenda setting, program planning and supervising implementation, remains important for achieving a targeted program outcome. And putting decision-making and implementation in the hands of recipient state actors, paired with non-hierarchical but

⁷⁶ This may be different for partnerships that provide knowledge-related services or setting standards instead of service provision. For more information on this differentiation, see (Beisheim and Liese 2014)

still instrumentally influential external actors, is revealed to be the most successful combination.

Competition and parallel governance were observed in two cases. Both cases again illustrated the importance of the state actor. While the competition case turned out to fail in program implementation due to insufficient cooperation with the input-legitimate state actors, the parallel case of Naandi, succeeded due to its establishment of business models that relieved the state actor of the challenging task of providing drinking water in rural areas. Two configurations play only a minor role in foreign aid: *governance by external actor* and pure *polycentric governance*. The *governance by external actor* configuration requires further assessment in context settings where the state partner lacks the capacity and willingness to provide public services (in least developing countries and in aid-dependent context settings) and hence is willing to entirely delegate this task to international external actors. Secondly, the *polycentric governance* arrangement seems unlikely to provide a mode of coordination that supports the off-set of programs, implementation and long-term impacts. Tendencies towards polycentric governance can only be observed in relationships where the external actor has accepted and fully lives up to the superior position in decision-making of the recipient state actor.

Comparing these findings with the overall concept of the four types of governance configurations in foreign aid, the findings illustrate that social coordination among actors in development aid does matter, but that there is a strong tendency towards hierarchical decision-making of state actors for effectively providing public goods. Moreover, these configurations help us systematically to understand the mode of coordination among different actors, and to match it with the result of the cooperation. In conclusion, the findings illustrate that modes of coordination vary over time, and hence provide only a limited and static part of the puzzle of actor relationships and how they matter for program results. To understand the role of actor relationships for program success, one needs to move beyond the static typology of four governance configurations, and to draw a more comprehensive picture by including two additional components. The first of these would be to move beyond a typology and develop a procedural understanding of governance dynamics over time. A second important component would be to integrate thoughts of social capital as an element for trust and reputation to provide for a driver of this dynamic governance understanding.

In considering these possible developments, we must first ask what it would mean to move beyond a static governance configuration typology and arrive at a rather procedural understanding of network relationships and governance. Explicitly focusing on dynamic governance concepts takes into account the lines of decision-making and accountability, as well as their importance for program success in terms of balancing competing interests over time, with a non-linear perception of steering and outcomes (Leach et al. 2007; Rhodes 2007; Rhodes 1997a). To balance competing interests in governance networks explicitly integrates the importance of different interest groups and asymmetric power relations. Governance theory has been criticized for neglecting power and inequality (Risse 2012, 10). Including hierarchical modes of coordination in governance theory calls attention to the institutionalized power structures of order and obedience (Dahl 1957). As illustrated in my case studies, even non-hierarchical structures consist of power relations and imbalances, because actors aim to set incentives, or use positive and negative sanctions.

Power influences the cost-benefit calculations of other actors in a given governance consortium. There are two major sources of power in governance configurations. Firstly, state actors utilize their input-legitimate function as service providers and dominate external actors. Secondly, external actors receive power through local legitimacy (Krasner and Risse 2014; Beisheim et al. 2014b). While conventional donors possess reputation based on long experience, new donors are able to gain local legitimacy through pilot demonstration projects. These two sources of legitimacy are the sources of power prevalent in aid implementation and are subject to change over time. Hence, questions of legitimacy, accountability and decision-making should be integrated as equally important in a procedural governance approach.

Taking the Weberian differentiation of decision-making processes being in the hands of politics and implementation processes being in the hands of bureaucrats, this differentiation meets quite well the system of hierarchical policy-making in India. Randeria (2007) has described an application of this differentiation, with labelling India as a 'cunning state'. Cunning states are tactical and manipulative; they portray themselves as weak and unable to provide public services. Hence, they collaborate with external actors; but their inability to act is dependent on their domestic interests (Randeria 2007). She argues that the external project law of international donors is acting to increase this characteristic of India being a cunning state. This is based on the

assumption of a state that is temporarily not willing to provide a service instead of not able to provide a service.

Secondly, taking up a social capital lens emphasizes the importance of generating trust and reducing opportunistic behavior among partners throughout collaboration. Social capital promotes cooperation and is considered as a cultural component of actor interplay. Social capital is difficult to generate, but repeated interaction in social networks may produce social capital as a byproduct of interaction (Fukuyama 2001; Woolcock and Narayan 2000; Boix and Posner 1998). Repeated linkages among project partners are inherent in implementation over time, and may provide a missing piece of the interaction puzzle. To achieve high quality in actor relationships, trust and reciprocity builds up slowly to finally deliver effective outcomes. Iterative interaction is considered as an adaptive process with feedback loops between partners, which foster high quality relationships with mutual trust and reputation (Brondizio et al. 2009; Bebbington 2008). However, there are limitations to social capital, since it cannot be regarded as a solution for all collective action problems and cannot intentionally be created by project partners (Serra 2011; Cleaver 2005).

Considering these theoretical considerations and findings together with the research question of how the donor–recipient relationship affects aid delivery, we can conclude that the governance configuration typology alone does not provide a sufficient answer. Beyond these static configurations, there is a need to develop a procedural governance understanding that takes into account the social capital of the relationship of actor networks as well as questions of legitimacy and accountability.

These findings can be linked with the work of modernization theory scholars, which also points to the necessity of a ‘strong’ state in order to achieve the change from traditional to modern societies. It is argued that this transformation process entails social challenges that may result in local unrest. These tensions are manageable only by a powerful and guiding state bureaucratic apparatus (Elsenhans 1984; Myrdal 1970; Pye 1966; Hagen 1964). Myrdal (1970) has influenced this discussion with his contrary notion of the ‘soft’ state, which describes “[...] all the various types of social indiscipline which manifest themselves by deficiencies in legislation and, in particular, law observance and enforcement, a widespread disobedience by public officials and, often, their collusion with powerful persons and groups [...] whose conduct they should regulate. Within the concept of the soft states belongs also corruption“ (Myrdal 1970,

208). Here we can distinguish between least developed countries, which are dependent on external support to overcome the internal lack of coordination, and transition states, which are economically viable, active in global policy-making but lacking in capacities to provide domestic policy solutions on their own. Seeking advice from international agencies seems to be the appropriate strategy for such strong states to overcome the lack of a wealth redistribution policy.

The increasing importance of non-hierarchical actor coordination, in a complex actor environment, acts to increase interdependencies and creates various decision-making situations that put additional stress on coordinating program partners throughout implementation. The present findings support the assumption that the governance services of conventional donors do not substitute for, but rather complement and support existing state provision services (Grande 2012, 567). New donors, in contrast, seem to aim to perform ‘functional equivalents’⁷⁷ of state service provision, but fail to do so successfully in the Indian context.

Summarizing the theoretical implications from the findings of this thesis, I would argue that governance thinking has to move beyond multi-level and multi-actor decision-making networks, and provide more dynamic notions of governance. The present findings suggest that we should include power-dynamics and sources of legitimacy in this procedural thinking. Moreover, they suggest that we should overcome sequential decision-making and implementation thinking in governance networks, and move rather towards processes that take steps forward towards implementation and allow for repercussions and stepping back again to move forward in another sequence of action. This iterative and non-linear process of interaction increases social capital among partners in governance networks, and this cultural component does contribute to the quality of actor interplay and ultimately to program success. Governance typologies are helpful for identifying different types of actor interaction, but do not provide the entire picture of how actor interplay affects program results. The entire puzzle is given by the combination of the above mentioned elements.

⁷⁷ For more information on functional equivalents, see (Draude and Neuweiler 2010; Börzel 2008; Draude 2007)

6.2 Practical Implications and Policy Recommendations

In the past, the global donor landscape was dominated by bilateral and multilateral donors only. Over the last decade this duality has been expanded with local and global NGOs, philanthropic foundations, private sector engagement and international PPPs. India pursued a foreign aid policy that reduced the number of bilateral and multilateral donors down to the G8 members and a countable set of multilateral donors, with the goal of reducing administration costs. All other donors in the diverse landscape of the aid community are asked to implement their aid programs autonomously with local government partners. This duality in foreign aid implementation channels one set of activities through the federal government level and another set through the local government level (Government of India 2013, 3).

How has this policy of dual aid channels impacted aid implementation activities in India? First of all, the federal government has successfully reduced international donor activities in the country, and thus its administrative efforts and costs. However, harmonization of large donors was not achieved as the federal government directed donors into individual niches and made them experts in their individual topics. It is beyond the scope of this empirical analysis to address this subject fully. However, it seems that the federal government neglects the fact that large donors combine several fields of expertise. A sectoral aid program approach, in which donors can feed in their advice and expertise, might be more adequate and sustainable than assigning those pre-defined, thematic niches.

A second effect of the dual aid channels is suggested by the limited number of success cases among new donors in India. This points to the failure of the policy strategy of channeling new donors directly to local level government partners. In two cases, new donors were not able to establish or keep up the relationship with the local state counterparts because their lack of reputation (legitimacy) made state partners unwilling to collaborate. In one case (BIRD-K), an effective interplay was established and maintained throughout project implementation, but slow government and bureaucracy procedures undermined project success in the end. One new donor (Naandi) engaged in a business model that was independent from government cooperation and achieved successful program outcomes. While this project succeeded, one can argue that the

potential of impacts from new donors with innovative and flexible program approaches are not yet realized in the field of water and sanitation provision.

Since the multi- and bilateral donors all succeeded with the *backup of the federal* government actors, the Indian government would be best advised to stimulate incentives for local government actors to collaborate with new donors or to support harmonization of conventional and new donors in complementary approaches (Koch 2009, 38). The flexibility and innovation of new donors might be integrated into conventional donor strategies as a preliminary benchmark of programs or pilot projects that lead the way to larger scale, innovative and solidly planned programs. Most new donors initially aim to implement a large-scale and innovative program but lack the experience, reputation and trust of local beneficiaries and government actors, and therefore end up as small-scale, so-called best practice cases. Such pilot studies may provide a way out of failure, but they need federal-level incentives and back up in order to increase their range of coverage.

The present situation of diversified actor consortiums and a fragmented landscape of actors and approaches has resulted in a mixed picture of project achievements. The fragmented landscape of donors results in higher transaction costs for donors and local beneficiaries. As in the case of WSUP, it leads to conflicts over the existing demands and needs of beneficiaries, instead of improving the situation for them. Moreover, the present practice of the Indian government fosters fragmentation of action in policy sectors as well as areas. This strategy creates a competitive market for new donors in local context settings and does not consider local needs. The transaction costs of failures of new donors are high for the donors themselves, as well as for the local beneficiaries in need of provision of basic services.

As declared at the High Level Forum Meeting in Busan 2011, there is a need to manage the fragmented landscape of donors and the willingness of India as a recipient country to steer this diversity (Vollmer et al. 2014; Pietschmann 2014) towards a sectorally, spatially and socially balanced implementation strategy for foreign aid (Beisheim and Liese 2014). This requires the willingness and capacity of the Indian federal government to take a leading role in coordinating these diversified actors. Existing knowledge of local needs and demands (from NGOs and local governments) needs to be utilized in such a national strategy, in order to guarantee a holistic and integrative approach of coordination and at the same time increase local ownership for

implementation. The empirical insights of this study illustrate the immense knowledge that exists among local-level NGOs and government actors concerning the needs and demands in different areas and sectors of basic service provision, such as health, water, sanitation and education. An integrated approach, which includes local expertise within an open working group, may result in participative and equal coordination of Indian actors and increase effectiveness, social, sectoral and spatial equality of program implementation, based on increased ownership and participation of a multitude of actors.

Besides these policy implications for India's aid strategy, what else can be learned from the present empirical evidence for donors that are currently active in India or in a comparative context setting? Since conventional donors profit heavily from the reputation provided to them by the federal government backup in implementation, new donors are best advised to gain reputation in other ways. This thesis proposes two strategies to gain reputation. One strategy is to gain local legitimacy by creating pilot projects and already existing achievements as, in the BIRD-K case. Another strategy, as seen in the case of Naandi, is to create a business case and source a public service out to private-sector service provision. The former case of BIRD-K is remarkable, because its pilot project achieved a paradigm-like policy shift. The local government actor changed its strategy of problem solution from technological based solutions to social mobilization work in combination with technical rainwater-harvesting facilities. This illustration project provided the donors with empirical evidence and reputation for the further scale-up and replication of the program in the entire state area affected by the fluoride problem. In order to gain this reputation, new donors are best advised to assess local needs and demands and address these through small illustrative projects, which serve as a baseline of evidence for larger programs, instead of aiming at large-scale change from the outset, as illustrated with the failure case of WSUP's program in Bangalore.

The relevance of prior projects for new donors points to the importance for new donors of adapting their activities to existing local context settings. Establishing actor networks with the local state as well as external actors, and avoiding competitive market situations, can set the stage for the most successful achievements. Thus, new actors are advised to capitalize on their advantages, namely innovation and flexibility (due to the small sizes of these organizations), and to feed their programs and approaches into the

agendas of existing larger program consortiums or to target areas where conventional aid is not present. Since this strategy poses the risk that new donors will lose visibility, their integration into existing consortiums needs to be made transparent and visible within the program implementation cycle.

The success of conventional donors may reflect the willingness of the federal actors to collaborate with them in accordance with pre-defined conditions, as well as the reputation of their work over decades. Since this reputation cannot be denied, conventional donors are in the position to move beyond the grassroots versus large-scale program differentiation, and to utilize the synergy effects from both in showcase programs under their umbrella in areas that are hard to reach or sensitive in implementation.

Table 6.1 Policy Recommendations by Actor Type

Policy recommendations	
Federal government	<ul style="list-style-type: none"> – Prevent fragmentation⁷⁸ and coordinate diversity – Provide bottom-up participation in an open working group for coordination of aid activities
State government	<ul style="list-style-type: none"> – Engage in national coordination strategy on coordination of diversity – Provide knowledge on needs and demands of areas and policy sectors
New donors	<ul style="list-style-type: none"> – Provide illustration cases for gaining local legitimacy – Integrate projects thoughtfully in existing local context settings – Play out their competitive advantage of innovation and flexibility and integrate their activities with conventional donors
Conventional donors	<ul style="list-style-type: none"> – Push for harmonization – Integrate new donors and utilize synergy effects for ‘hard to implement’ areas and sectors

Even though various actors perform quite comparable components of project implementation to meet comparable challenges, they still differ in their structures and processes for achieving their goals. Therefore, more harmonization and an institutional change, towards sectoral program implementation instead of actor-focused program implementation, could utilize existing expertise and foster synergies instead of doubling activities within the diversified actor landscape.

Hence, the Indian state government, as a recipient actor of foreign aid, should take the leading role in navigating donors beyond allocating them to respective federal and state levels. Instead, navigation could mean strategic activities that foster collaboration

⁷⁸ See page 37 for definition and further information on actor fragmentation.

between new and conventional donors by setting incentives for more collaboration. This strategy would keep administrative and transaction costs at a low level on the recipient actor's side, and at the same time prevent exercises in trial and error programs of new and inexperienced aid actors. Strengthening the collaboration of the two donor types would increase the international requirements of more harmonization and alignment, and at the same time strengthen the position of beneficiaries and those in need of support, in terms of not exposing them to programs with a minimum of experience and reputation.

6.3 Contribution and Pathways Ahead

“The world is not “running out of water” but it is not always available when and where people need it. Climate, normal seasonal variations, droughts and floods can all contribute to local extreme conditions.”

(World Business Council for Sustainable Development 2005, 1)

The supply of drinking water and sanitation facilities remain inadequate for the Indian population in general, and for the poor and marginalized in particular. Even though the access to drinking water has increased to 92 percent, access to sanitation remains still very low in India, at 35 percent. Furthermore, extreme weather events and changing climate conditions put additional stress on the already diminishing water aquifers in India, and urban areas receive water only few hours a day. Another challenge is the increasing amount of contaminated water from domestic and industrial pollution as well as unsustainable agricultural practices (WHO/ UNICEF Joint Monitoring Programme (JMP) for Water Supply and Sanitation 2011). The availability of water resources is high on the political agenda and as a cross-cutting theme also touches important topics such as the empowerment of women, health and hygiene, food and nutrition and energy provision. This cross-cutting dimension emphasizes how much attention we need to have when speaking of shortages of drinking-water, the most severe challenge out of many water challenges. To overcome these challenges in the long run, initiatives to provide poor and marginalized people with sufficient drinking water require efficient service provision on the local level, planning program implementation in advance at the state level, and, most importantly, responsible water governance architectures at the federal level.

My research has investigated reasons for the effectiveness of water governance programs, with a particular focus on complex actor relationships and their dynamics over time, and how these have an effect on the results of program implementation. Since my research has revealed that conventional donors are more successful, due to a trickling down effect of their reputation and mutual trust in local implementation, my findings provide interesting insights, which may be linked to the global debate of aid effectiveness. They may also be linked to the global dialogue on Sustainable Development Goals

(SDGs), including the 2030 Agenda that combines the paradigms of poverty alleviation and environmental sustainable development.

The global dialogue on poverty alleviation was guided until 2015 by the achievements of the Millennium Development Goals (MDGs). With the Rio+20 conference in 2012, the MDG agenda was transformed into the post Rio-Dialogue, and led to the introduction of the Sustainable Development Goals (SDGs) and a process for implementing these goals, which is called the 2030 Agenda. The 2030 Agenda integrates economic, ecological and social targets, and aims for sustainable and equal development for the Global North and the Global South. To implement the 2030 Agenda, we need to take up a perspective across policy sectors to identify trade-offs and synergies for implementation. This process may provide governance actors with priorities of action within countries and priorities of action beyond national boundaries (Müller et al. 2015; Bhaduri et al. 2015). This governance endeavor requires the establishment of solid actor relationships across a multitude of partners, from government agencies to scientific partners and civil society actors. These partnerships will establish processes to coordinate existing and new initiatives, and are best advised to learn from existing experience and to align activities to each other instead of aiming for individual results. A tailored and sound establishment of governance processes may foster the coordination of relevant actors' activities, and navigate their initiatives through the complex environment towards achieving positive results with the 2030 Agenda for Sustainable Development at global, regional and national level (Beisheim 2016; Beisheim 2015).

My findings relate to the discussion of the ongoing international agendas of actor alignment and aid harmonization, in which the United Nations (2012): “[...] underscore the continued need for an enabling environment at the national and international levels, as well as continued and strengthened international cooperation [...]. We recognize the diversification of actors and stakeholders engaged in the pursuit of sustainable development” (United Nations 2012, 5). Diametric to the inauguration of new donor types at the Earth Summit in Johannesburg in South Africa (2002), the process of achieving more harmonization among foreign aid donors in local context settings is a crucial development at a time when the number and variety of donor approaches has increased significantly (The World Bank 2013).

A global strategy to achieve aid effectiveness and to activate fresh financial resources for aid implementation was developed with the High Level Forums in Paris (2005), Accra (2008) and Busan (2011). These stakeholder forums provide strategies that focus mainly on harmonization of donors and sectoral approaches of aid implementation. However, these strategies are difficult to implement, due to a lack in transparency of individual activities and results in harmonized sectoral implementation programs. What should be done when such challenges exist in a country that pursues a strategy that prevents harmonization of large donor programs and rejects managing the ever increasing diversity of new donor consortiums?

In India, reduction in administrative costs was achieved by reducing the number of collaboration partners, but harmonization among actors is actively prevented by the Indian government by assigning certain niches to each individual donor. New donors in India cannot rely on any federal support and are fully dependent on the willingness of local state actors to collaborate and provide their local preferences. The adaption of aid programs to local preferences and needs results in lower transaction costs and increases incentives for local economic development. Decentralization of state power is seen to even increase responsiveness and to stimulate local level development (Fuhr 2000, 28). A thorough assessment by the Indian government is needed to assess which actors provide a service for the local level, which prefers decentralized implementation over the alignment of initiatives. The aid effectiveness agenda seems to be a promising path for overcoming high transaction costs and giving substantial change in the provision of public services for all. However, a diversified donor landscape does not automatically lead to improved and increased service provision and alignment of activities. This fragmentation of approaches has to be navigated coherently by local recipient actors.

My findings suggest that donor diversification only partially fulfils the criteria of a (competitive) market place, and can be characterized as a large landscape of aid programs that differentiate strongly in their respective successes. The fact that new donors struggle with the same problems that conventional donors did decades ago, calls for a more thorough look at this diversification and an elaborated strategy for coordinating the diversity towards more sustainable and effective pathways. Marginalized and vulnerable people live on a minimal income and should not be at risk of losing this due to experimental program implementation. For ethical reasons, aid

implementation should not be implemented in a trial and error mode. Aid resources are limited and should be invested responsibly and sustainably.

New public-private-partnership donors have been the object of research for several years, and one key to success has been identified as their institutional design. Their innovation and flexibility allows them to adapt their institutional design in such a way that it contributes to effectiveness throughout implementation processes. Hence, as new agents of aid implementation, PPPs are suitable tools for tasks and areas in which their competitive advantage of flexibility pays off well and may not be suitable in other areas and for tasks that require different attributes (Beisheim and Liese 2014, 215). My research moves beyond new donors and compares the program implementation of conventional and new donors. It reveals that new donors' adaptive institutional design reaches limits when the recipient counterparts are not willing to collaborate at all, as illustrated at the case of WSUP. We need to pin down the strength of each of these donor types and integrate their approaches with one another to fully utilize their competitive advantages for program success. While new donors are notably strong in their innovative and flexible approaches, they may lend themselves towards being show case and pilot program actors in larger donor consortiums. In contrast, conventional donors' strength pays off in terms of stronger mutual trust, based on long-term reputational relationships and knowledge of informal structures and power-plays. This strength provides them with an expert and knowledge-input function for the recipient side of the relationship.

If projects are coordinated in a way that utilizes the respective strengths of the two donor types, we could achieve results that provide an added value to local beneficiaries, instead of duplicated, parallel and failed systems of service provision. Throughout the project cycle of program implementation, new donors can play a pivotal role in piloting a program and integrating civil society actors throughout program implementation and follow-up. Conventional donors' strength is the long-term expertise that they can provide, as well as the trust and reputation that allows for solid relationships with recipient actors. Their strengths become a crucial factor in the establishment of stakeholder forums, the implementation of programs, evaluation and lessons learned, as well as in the scale-up of successful achievements. Integrating both donor types within the same program seems to be a promising pathway to move towards overall success for all donors, and to utilize the competitive advantages of the two donor types.

Both donors provide important pieces in the puzzle of global sustainable development, but they need to be coordinated locally in a way that meets the needs of the poor and vulnerable, and that uses out the added value of each donor type. In general, such coordinated programs should be designed in a complementary fashion, to compensate for the lack of local service provision, but also to empower local service providers to provide services in a self-sustaining way in the long run. Sustainable and equitable development that leaves no one behind can only be achieved with coordinated, sound and human rights based approaches.

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APPENDIX 1: Sample Questionnaire

Introductory remarks before the interview takes place:

- General greetings and appreciation for meeting and valuable time
- Introduction of my background and interest in this research topic
- Introduction of my research approach and provision of a flyer with content and contact details
- In case of no objective, I would like to record the interview. This should allow us to proceed swiftly and the interview should take no longer than 50-60 minutes.
- Brief outline of the interview structure
- Do you have any further questions before we start?

Set 1: Introduction and personal background (ice-breaker question)

Question:

“Could you briefly tell me what your personal background is and for how long you are with the organization and what your assignments are?”

Concrete enquiry:

- Since when are you with the organization?
- What are and what have been your assignments?

Set 2: Sequential steps from project planning to implementation

Question:

“Could you please describe the individual steps from project development to project implementation?”

Concrete enquiry:

- Project vision and time frame
- Human and financial resources, cost estimation
- Approach and implementation strategy
- Implementation activities and communication
- Number of interventions (complexity of task)
- Challenges, obstacles and crucial parts of project implementation
- Monitoring and evaluation
- Project summary

Set 3: Involvement and engagement of partners

Question:

“Could you please provide me an understanding of all involved partners in the project consortium?”

Concrete enquiry:

- Number of partners
- From which political/administrative level were these partners
- Depth of action of the individual partners
- Any actors explicitly excluded? (Why?)
- Formal/informal relationship among partners
- Roles, duties and stakes of partners
- In comparison of all partners who engaged most capacities in the project?
- Any frictions and conflicts among partners? Why?
- External and internal expertise, influence of the individual partners on decision-making
- Role and inclusion of target group/beneficiaries

Set 4: Modes, processes and obstacles in daily interaction and stakeholder participation

<p>Question:</p> <p>“Could you please describe the routines of communication and decision-making in the project consortium.”</p>	<p>Concrete enquiry:</p> <ul style="list-style-type: none">– Reporting structures and duties– Who oversees/ mandates whom in the consortium– Frequency of communication and meetings– Who has decision-making power (financial/ strategically/ operational)?– Engagement of the different levels (national/ state/ ward/ block level) in the different decision-making situations
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Set 5: Project environment and its impact on implementation and actor consortium

<p>Question:</p> <p>“Were there any local conditions (geographical, institutional, personnel, historical) that had an impact on your project vision and implementation?”</p>	<p>Concrete enquiry:</p> <ul style="list-style-type: none">– Geographical challenges– Demographic challenges– Land titles and land ownership– Competing projects, actors service supply structures in area– Personnel ties– Inheritance of structures/ processes/awareness from previous aid projects– Particularities in political context setting?– Any other particularities?– Did you adjust/ customize the project plan to local conditions over time?
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Set 6: Project objectives, project results, achievements and failures

<p>Question:</p> <p>“Could you please elaborate on the objectives of the program, what have been the greatest achievements and what was not in reach of implementation?”</p>	<p>Concrete enquiry:</p> <ul style="list-style-type: none">– Objectives of the initiating partner in the consortium– Overall project goals and was there any change of these over time (why?)– What are the long term impacts that were planned to be achieved– What actually could not be achieved of these plans and visions? (Why?)
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Set 7: Concluding remarks and remaining issues

<p>Question:</p> <p>”Broadly speaking: Which factor is most important for project realization and long term success?”</p> <p>“Is there anything important that we have left out of our conversation and that you would like to mention specifically?”</p>	<p>Concrete enquiry:</p> <ul style="list-style-type: none">– Personal suggestion of key factor for success– Personal suggestion of biggest obstacle– Provide room for omitted information and relevant impact factors
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Concluding remarks after the interview:

- Thank you very much for your kind support and this valuable information on your work’ we would like to continue this cooperation and will keep you updated about further proceedings, results and information concerning our research.
- Would you provide me the opportunity to approach you again by mail or phone for further questions and come back to you during another visit at the same time next year? Do you have any reports/ surveys/ feasibility studies you can provide me?
- Clarify anonymity of the interview and further procedure of the authorisation of interview transcripts

APPENDIX 2: List of Interviews

WSUP, Bangalore (Karnataka)

No	Information
1	Interview with Project Director, WSUP, Swindon/UK (10/11/2010)
2	Interview with CEO, WSUP, London/UK (11/11/2010).
3	Interview with Technical Coordinator , WSUP, Bangalore/India, (19/01/11), Interviewer: H. Janetschek
4	Interview with Engineer, CDD, Bangalore/India, (25/01/11), Interviewer: H. Janetschek
5	Interview with Social Worker, CDD, Bangalore/India, (25/01/11), Interviewer: H. Janetschek
6	Interview with Coordinator R&D and M&E, CDD, Bangalore/India, (25/01/11), Interviewer: H. Janetschek
7	Interview with Managing Director, TTI Consultant, Bangalore/India, (11/03/11), Interviewer: H. Janetschek
8	Interview with, Project Manager, TTI Consultant, Bangalore/India, (11/03/11), Interviewer: H. Janetschek
9	Interview with Technical Coordinator , WSUP, Bangalore/India, (09/03/12), Interviewer: H. Janetschek
10	Interview with Social Development Specialist, BWSSB/SDU, Bangalore/India, (20/04/12), Interviewer: H. Janetschek
11	Field visit with Social Worker at Swathandra Nagar, WSUP, Bangalore/India, (18/01/11), Researcher: H. Janetschek
12	Field visit with Technical Coordinator and Social Worker at Kaveri Nagar, WSUP, Bangalore/India, (25/01/11), Researcher: H. Janetschek
13	Field visit with Technical Coordinator at Bangalore, WSUP, Bangalore/India, (14/03/12), Researcher: H.

Naandi, Hyderabad (Andhra Pradesh)

No	Information
14	Interview with Chief Water Executive Officer, Naandi, Hyderabad/India, (03/02/11), Interviewer: H. Janetschek
15	Phone-interview with Chief Water Program Officer, Naandi, Mumbai/India, (13/04/11), Interviewer: H. Janetschek
16	Interview with Chief Water Executive Officer (Successor), Naandi, Hyderabad/India, (02/04/12), Interviewer: H. Janetschek
17	Field visit to water kiosk opening of the Author, Karimnager/India, (08/03/2009) , Researcher: H. Janetschek

Arghyam, Thrissur (Kerala) and Bangalore (Karnataka)

No	Information
18	Interview with Project Assistant, Arghyam, Bangalore/India, (15/03/11), Interviewer: H. Janetschek
19	Interview with Manager of the Water Portal and Senior Advisor, Arghyam, Bangalore/India, (01/03/12), Interviewer: H. Janetschek
20	Interview with Project Officer, Arghyam, Bangalore/India, (01/03/12), Interviewer: H. Janetschek
21	Interview with Project Manager, Arghyam, Bangalore/India, (07/03/12), Interviewer: H. Janetschek
22	Interview with Project Officer, Arghyam, Bangalore/India, (09/03/12), Interviewer: H. Janetschek
23	Interview with Team Leader, MMCU, Thrissur/ India, (15/03/12), Interviewer: H. Janetschek
24	Interview with former District Collector, Thrissur/ India (15/03/12), Interviewer: H. Janetschek
25	Field Visit by the author, Thrissur/ India, (16/03/12), Conducted by: H. Janetschek
26	Interview with Team Leader, MMCU, Thrissur/ India, (17/03/12), Interviewer: H. Janetschek

BIRD-K, Bangalore/ Tumkur (Karnataka)

No	Information
27	Interview with Project Manager , Arghyam, Bangalore/India, (07/03/12), Interviewer: H. Janetschek
28	Interview with Project Manager, BIRD-K, Tumkur /India, (13/03/12), Interviewer: H. Janetschek
29	Field visit with Project Manager at Sitra, BIRD-K, Sitra/India, (13/03/12), Researcher: H. Janetschek

GIZ, New Delhi (and other places)

No	Information
30	Interview with Senior Advisor, Sustainable Urban Habitat, GIZ, Delhi/India, (08/03/11), Interviewer: H. Janetschek
31	Interview with International Development Cooperation Consultant to Bi- and Multilateral Aid Agencies, Water and Sanitation Specialist, Delhi/India (24/02/11)Interviewer: H. Janetschek
32	E.P. Nivedita, Director, Ministry of Urban Development, Government of India, Bangalore: 15/04/2010, published in GTZ-ASEM 2010

World Bank/ WSP New Delhi and Bangalore (Karnataka)

No	Information
33	Interview with Senior Water and Sanitation Specialist, WSP, New Delhi/India, (23/02/11), Interviewer: H. Janetschek
34	Interview with Regional Communication Specialist, WSP, New Delhi/India, (23/02/11), Interviewer: H. Janetschek
35	Interview with Regional Team leader, WSP, New Delhi/India, (23/02/11), Interviewer: H. Janetschek
36	Interview with Research Analyst, WSP, New Delhi/India, (23/02/11), Interviewer: H. Janetschek
37	Interview with Water and Sanitation Specialist, WSP, New Delhi/India, (23/02/11), Interviewer: H. Janetschek
38	Interview with Urban Water Specialist, World Bank, New Delhi/India, (27/2/11), Interviewer: H. Janetschek
39	Interview with Social Development Specialist, BWSSB/SDU, Bangalore/India, (20/04/12), Interviewer: H. Janetschek

Water Aid/DFID, New Delhi

No	Information
40	Interview with Director Policy and Partnerships, WaterAid, Delhi/India, (25/02/11), Interviewer: H. Janetschek
41	Interview with Manager Human Resources, WaterAid, Delhi/India, (25/02/11), Interviewer: H. Janetschek
42	Interview with Director Program Operations, WaterAid, Delhi/India, (25/02/11), Interviewer: H. Janetschek
43	Interview with Project Director, MRYDO, Delhi/India, (09/03/11), Interviewer: H. Janetschek
44	Field Visit with Project Director, MRYDO, Moti Nagar/Delhi/India (09/03/11), Researcher: H. Janetschek
45	Interview with Senior Water Researcher, TERI, Delhi/India, (17/02/11), Interviewer: H. Janetschek

Expert Interviews

No	Information
46	Interview with Senior Urban Management, ADB, Delhi/India, (22/02/11), Interviewer: H. Janetschek
47	Interview with Independent World Bank Consultant, Bangalore/India, (13/03/11), Interviewer: H. Janetschek
48	Interview with Independent, Bangalore/India, (07/03/12), Interviewer: H. Janetschek
49	Interview with Senior Water Policy Analyst, IRAP, Hyderabad/India, (29/03/12), Interviewer: H. Janetschek

APPENDIX 3: Documents

GIZ, New Delhi

No	Information
1	ASEM (2008) Support to JNNURM. Accessed: http://www.asemindia.com (10/03/2011)
2	Corporation of Cochin (2010) Report of the Orientation Workshop on Service Level Bench Marking – Kochi in July 2010. Cochin. Accessed: http://www.urbansanitation.org/e31169/e58117/ (10/03/2011)
3	Corporation of Cochin (2011) Draft City Sanitation Plan. Volume I. Cochin. Accessed: http://www.urbansanitation.org/e31169/e58117/ (10/03/2011)
4	Corporation of Cochin (2012) City Sanitation Plan. Cochin. Accessed: http://www.urbansanitation.org/e31169/e49811/ (28/07/14)
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6	GIZ (2011) Fact Sheet, City Sanitation Plans. Indo-German Environmental Programme ASEM. New Delhi. Accessed: http://www.urbansanitation.org/e31169/e49811/ (28/07/14)
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9	Government of India (2010) National Urban Sanitation Policy (NUSP). Accessed: http://www.urbanindia.nic.in/programme/uwss/NUSP.pdf (03/03/2011)
10	Government of India (2012) Memorandum of Understanding: Joint Declaration of the Republic of India and the Federal Republic of Germany in the Field of Sustainable Urban Development.
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14	Jha, Gangadhar (2010) City level consultation workshop: Institutional Issues in City Sanitation Plans. Accessed: www.urbanindia.nic.in/programme/uwss/CSP/Bangalore_Wshop/Presentations/inst_issues_city_sanitation_plans.pdf (24.07.2014)
15	Nivedita, E.P. (2010) National Urban Sanitation Policy: Towards City Wide Sanitation. New Delhi (16 th April 2010).
16	SNUSP (2013a) 1 st TAC Meeting Report on Indian Water and Sanitation Utilities. Access: http://www.urbansanitation.org/live/hrdpmp/hrdpmaster/hrdp-asem/content/e30293/e31169/e49839/e57625/TAC_Report.pdf (28/07/2014)
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34	Connors, Genevieve (2005) When Utilities Muddle Through: Pro-Poor Governance in Bangalore's Public Water Sector. <i>Environment and Urbanization</i> 17(1): 201-218.
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37	WSP (2001) Water and Sanitation Program, Council Charter. Washington D.C.
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No	Information
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55	Mandri-Perrott (2008) Output-Based Aid in India: Community Water Project in Andhra Pradesh (The Global Partnership on Output Based-Aid). Note Number 21

Water Aid/DFID/MRYDO, New Delhi

No	Information
56	DFID (2011) Intervention Summary: Programme Partnership Arrangement with WaterAid. Accessed: www.wateraid.org/~/_media/Publications/dfid-ppa-business-case-summary-wateraid.pdf (13/11/2014)
57	Government of India (2005) Economic Survey of Delhi. Chapter 13: Water Supply and Sewerage. Accessed: http://delhiplanning.nic.in/Economic%20Survey/ES%202005-06/Chpt/13.pdf (13.11.2014)
58	MRYDO (2010) Annual Report 2008/2009. Internal Document, with the author
59	Water Aid (2011a) Clean Delhi, Healthy Delhi Phase 2 Programme Proposal. Internal document, with the author.
60	WaterAid (20011b) WaterAid Annual Report 2009/10. London, UK.

Eidesstattliche Erklärung

Ich versichere an Eides statt, dass meine hinsichtlich der früheren Teilnahme an Promotionsverfahren gemachten Angaben richtig sind und, dass die eingereichte Arbeit oder wesentliche Teile derselben in keinem anderen Verfahren zur Erlangung eines akademischen Grades vorgelegt worden sind.

Ich versichere darüber hinaus, dass bei der Anfertigung der Dissertation die Grundsätze zur Sicherung guter wissenschaftlicher Praxis der DFG eingehalten wurden, die Dissertation selbständig und ohne fremde Hilfe verfasst wurde, andere als die von mir angegebenen Quellen und Hilfsmittel nicht benutzt worden sind und die den benutzten Werken wörtlich oder sinngemäß entnommenen Stellen als solche kenntlich gemacht wurden. Einer Überprüfung der eingereichten Dissertation bzw. die an dieser Stelle eingereichten Schriften mittels einer Plagiatssoftware stimme ich zu.

Berlin, den 20.12.2016

Hannah Janetschek