

Influence of different discourses on the outcomes of development policies and projects: Insights from water project implementation in Nepal

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Abstract

This study develops a systematic, participatory research method to study the impacts of different discourses on the outcomes of development policies and projects. The method visualizes relationships between key project discourses, enabling comparisons to be made between stated and actual discourses, and recognition of mutual synergies or inconsistencies among the discourses. Case study analysis of a rural water resources management project in Nepal demonstrates the ways in which individual responses from project specialists, combined together, lead to distinct hierarchical groups and clusters of discourses that reflect the day-to-day ways in which policies and projects are implemented. The paper discusses the ways in which project and organizational management could utilize the analysis in project planning, team formation, monitoring and supervision to meet external policy requirements, fit with local realities, and improve policy and project outcomes.

KEYWORDS

development cooperation, development intervention, Nepal, policy analysis, project management, rural development, water resources management

1 | INTRODUCTION

Politicians and decision-makers are interested in improving the ways in which their decisions are converted to social change. Finding appropriate approaches to effective policy implementation remains a major challenge to various development organizations and institutions (Crosby, 1996; DPF, 2015; Makinde, 2005; OECD, 2015; Rondinelli, 2013, pp. 5–6; United Nations Economic and Social Council, 2014; WWAP, 2015).

International development cooperation provides various instruments for policy implementation. Policy implementation and the approaches to development cooperation are thus fundamentally intertwined (Carothers & De Gramont, 2013; Duncan & Williams, 2012). The original, standard device for policy implementation in this context is a development project (De Haan, 2009; Rondinelli, 2013, p. 5). The conjecture is that project organization provides applicable, context-specific intervention tools, especially at operational levels (Rondinelli, 2013, p. 5; Sjöblom, Löfgren, & Godenhjelm, 2013).

Other instruments of development, such as sectoral, programmatic, and microcredit approaches, also become often “projectified” at the operational levels (Rondinelli, 2013, p. 6; Sjöblom et al., 2013, p. 3). From one perspective, development project organizations then function as simple implementation and innovation platforms for the policies. According to this view, external policies direct the ways in which development projects are allowed to operate (Ferguson, 1994; Rondinelli, 2013, pp. 5–6; Rossi, 2004). From a broader viewpoint, project organizations are not only mechanical devices of development, but their operation also depends on local, internal values and participation mechanisms (Cleaver, 2012; Haapala, Rautanen, White, Keskinen, & Varis, 2016; Tortajada, 2014). They promote embedded societal goals and reflect the characteristics of the surrounding society (Cleaver, 2012; Haapala et al., 2016; Tortajada, 2014).

Various tensions between directive policies, project implementation and local realities can be further characterized in the project context. Here we identify four types of such implementation tensions (Figure 1).

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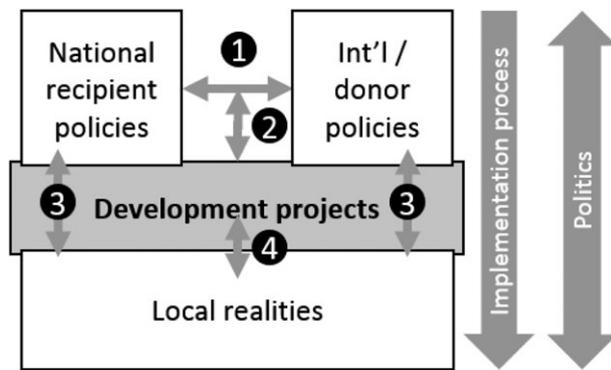


FIGURE 1 Possible tensions in the implementation of international development projects. Projects operate in fundamentally political surroundings, between external, directive policies and local realities. Four different types of tensions, described in the text, are marked with black circles. Source: the authors.

The first regards the fact that the policy discourses that direct development projects come top-down from variable national (originating either from recipient or donor governments) and international sources. Therefore, they may to a degree be discontinuous from each other (Rossi, 2004). The clearest example is the fuzzy interplay between the international, donor and national recipient policies and objectives regarding the discourses of development interventions (Hänninen, 2014).

Second, projects inevitably must make political, value-laden prioritizations in their every-day operations. However, project management is paradoxically mandated to negotiate and perform only as a politically neutral, implementing actor. Moreover, the directive policies do not necessarily reproduce effective, complementary ensembles at the operational level (Molenaers, Gagiano, & Renard, 2015). Some discourses, for instance, may become incompatible with each other in the context of a project, while others may become operationally marginalized under the pressure of more dominant discourses (Ferguson & Harman, 2015; Rossi, 2004).

Third, policies that work in one local context do not necessarily work in others (OECD, 2015, p. 3; Rondinelli, 2013, p. 16), making project management and application of directive policies always context specific. Aid delivery to the grassroots is a complex and delicate process (Rondinelli, 2013, p. i) that is embedded in local and global power-relations (Abdulai & Hulme, 2015; Cleaver, 2012). Top-down implementation across many cultural spaces and vertical administrative levels may pose inconsistencies between upper-level policies and local politics and realities. Development projects operate under pressure from both directions (Haapala et al., 2016; Haapala & White, 2015).

Fourth, an inevitable tension exists between project design, and local customs and realities (Cleaver, 2012; Haapala et al., 2016). Projects cannot therefore always produce the intended outcomes at the local level by following the project design (Haapala et al., 2016). Moreover, the ability of project management to control the local outset of a project is often limited (Rondinelli, 2013, pp. 17–18) as the local realities and the operational environment greatly influence project outcomes. These four aspects emphasize the central role of successful implementation conducted through project organizations.

Despite the challenges indicated above, little academic research has been conducted on the policy implementation process *within*

development project organizations. To our knowledge, it remains largely unstudied how project management absorbs and addresses the wide variety of development policies and practices, as well as accounts for local realities, within its *internal* project operation. Equally understudied are the ways in which these policies are transformed into politically informed development outcomes that make the policy have impact.

This article presents a case study that deciphers the ways in which such an analysis can be conducted. The method developed for and applied in this study portrays the ways in which various policy discourses appear and interrelate within project operations. A rural water resources management project operating in Nepal is used as a demonstrative case study.

2 | CONTEXT AND METHODOLOGY

2.1 | Case study context

The case study water project operates in remote, rural Nepal. Four-fifths of the Nepalese population live in rural areas (Central Bureau of Statistics, 2012). Average income per capita (GNI PPP) is 2,500 US dollars (USD), ranking 189th out of 210 listed countries (World Bank, 2016a). In 2010, almost half of the population lived on less than 3.10 USD a day, and 15% less than 1.90 USD a day (World Bank, 2016b).

The least developed areas are located in the most remote and typically also water-scarce rural regions of the country. These localities are characterized by extreme remoteness, rugged and steep terrain, difficult access to villages and markets, and challenging climatic conditions, including severe droughts. Village water supply is often nonexistent, resulting in extensive water-fetching times for local women. Livelihoods rely largely on simple irrigated and rain-fed agriculture on steep mountain slopes. People suffer from malnourishment, inadequate hygiene, and lack of access to basic health care and any advanced education, among various other development challenges.

One important way to address these challenges is through sustainable water resources management and water infrastructure development. Such activities contribute to very basic prerequisites of a better life, such as access to safe drinking water, improved nourishment and livelihoods, enhanced personal health and hygiene, and access to electricity. Before the devastating earthquake in 2015, the government of Nepal targeted achieving universal coverage of basic water supply and sanitation services to its citizens by 2017. The estimated country-wide water supply coverage in Nepal was 84%, but only about one-quarter of the water supply schemes were fully functional (UNICEF, 2014, p. 20). Lack of long-term sustainability has long remained a prominent challenge for water sector stakeholders (Bhandari & Grant, 2007).

The above challenges are addressed by the development intervention under investigation. This Rural Village Water Resources Management Project (RVWRMP; <http://www.rvwrmp.org.np>) operates in the most remote, food-insecure and water-scarce districts and localities in the mid-hills and high Himalayas of Far and Mid-Western Nepal (Figure 2). The project builds on the history of bilateral water-sector development cooperation between Nepal and Finland, started at the beginning of the 1990s. Phase I of this project ran from 2006 to



FIGURE 2 RVWRMP II working Districts on a District map of Nepal. Source: the authors

2010, Phase II from 2010 to 2016, and Phase III since 2017. The study was conducted during the second phase. RVWRMP is currently the largest rural water-sector project in the country, serving hundreds of thousands of beneficiaries.

The scope of the project is in broad terms water resources development. In operation, it translates to construction of community water supply, micro hydropower and irrigation schemes, dry toilets, green houses and home gardens; and to establishment of community institutions, groups and cooperatives; training and education provided to community people, among many other activities. Human rights, gender equality and social inclusion values are central to all project practices in the field. The broader policy context of the project is described in section 3.1, and the key project activities and discourses are explained more in detail in Appendix 1, as parts of the analysis.

2.2 | Characteristics of project personnel and key informants

The project personnel consist of 250 trained individuals. They can be divided roughly into District personnel and the core team. The District personnel constitute most of the project staff, 220–230 individuals. They are often recruited from local communities, and approximately one-third of them are women. This team works at the community and District levels. They train local individuals for scheme operation and maintenance, educate the community, and plan, supervise, facilitate and monitor the project implementation activities conducted by community members.

This case study concentrates on the core project team, consisting of the most experienced project specialists (Nepalese and a few international) working in a Project Support Unit (PSU). The size of the team during the second phase was around 20 individuals. The PSU consist of senior specialists who lead and coordinate the project, educate and supervise the District personnel, communicate with upper-level donor and government tiers, and facilitate and support activities at local levels. Many of the PSU specialists have worked for several Finnish-funded projects, even back to the 1990s. Most of the PSU staff are

recruited from around all of Nepal (and a few internationally), and the Nepalese specialists tend to be men.

The interviewed PSU specialists represent most of the PSU, 16 out of 20 individuals. The case study analysis is conducted by interviewing 16 key informants working at the PSU, 13 Nepalese and three Finnish participants. The given PSU office names reflect the job descriptions of the anonymous key informants and the area of their particular expertise: technical office, planning office, institutional capacity building, information systems, monitoring and evaluation, management information systems, gender and social development, sustainable livelihoods, cooperative and micro finance development, institutional development and project coordination offices. Their perspective on water project management is illustrated in Figure 3.

This study focuses on the core team as they hold key positions in terms of shaping the project practices and recreating the project documents and procedures. They guide the operations of the project, and communicate with government and donor representatives, and other key stakeholders. The specialists have a long history of working together as a collective. They are fairly fluent in English, and relatively well aware of international discourses, national legislation and policies, donor and recipient government interests, the political environment, sectoral discourses and best practice. They therefore work at the focal point in which the external, directive policy discourses become organized into functional implementation practices within the project. We therefore postulate that the hypothesized gaps between the informant insights and actual operations remain negligible, and that the informants have a concrete link to the implementation reality and project discourses.

2.3 | Analysis method

2.3.1 | Research approach

The analysis method depicts interactions and hierarchies between the identified key project discourses as perceived by the expert key informants. It relies heavily on their viewpoints, participation, knowledge and experience. The method is therefore characterized by participatory,

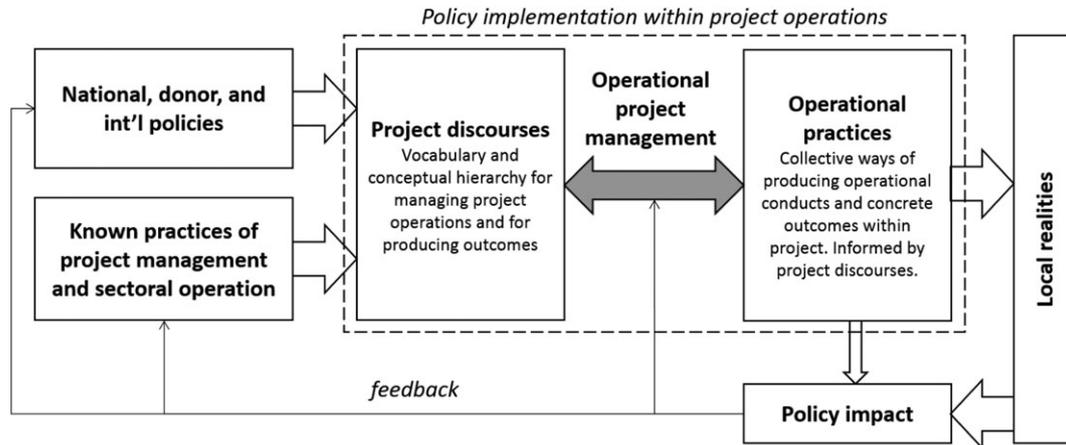


FIGURE 3 Project core team's perspective on project management: translating external policies and model practices into project discourses and operation. Source: the authors.

constructivist research. The study has a phenomenographic research orientation (e.g., Svensson, 1997). The orientation scrutinizes the ways in which examinees describe a certain phenomenon (Marton, 1981, 1988). It is generally applied for analyzing the differences and similarities in people's ways of understanding and experiencing the world.

Furthermore, the analysis is based on an understanding of the study context. It is founded on our field presence, observations and understanding of the specific context that allows constant triangulation with the insights of key informants through the analysis. This contextual knowledge provides an informed identification of project discourses for the analysis, and interpretations of the results. The research is founded on an extensive 5-month presence at the PSU and in the field, including observations, formal and informal interactions with the project personnel and the project's beneficiaries, and participation in several meetings and events. As a key event for this analysis, the first author arranged a project discourse workshop that introduced the main exercise for the personnel (see analysis phase 3), and a feedback session that reported the analysis results to the project personnel (phase 5). The triangulation also involves a literature review on both official, published project documents and internal, unpublished field reports.

2.3.2 | Phases of analysis

The analysis consists of five phases (Figure 4). The discourse identification phases (1 and 2) resemble the corresponding stages of the Q-method (e.g., Herrington & Coogan, 2011; Zabala, 2014), and the participatory phases (3 and 4) of the analysis resemble fuzzy cognitive mapping methodology (e.g., Gray et al., 2015; Groumpos, 2010; Kosko, 1986; Stach, Kurgan, & Pedrycz, 2010). The links between this analysis and the relative methods are discussed further in Section 4.2.

The first phase identifies the policy context of the project. The national, international and donor policies, and sectoral practices that steer the project are specified based on policy and project documents and observations in cooperation with project personnel. This analysis phase is based mainly on documentary evidence.

The second phase identifies the key internal project discourses. The identification is based on the lead author's observations on project management and field operation as well as on daily interactions with project personnel, participation in the day-to-day project operations

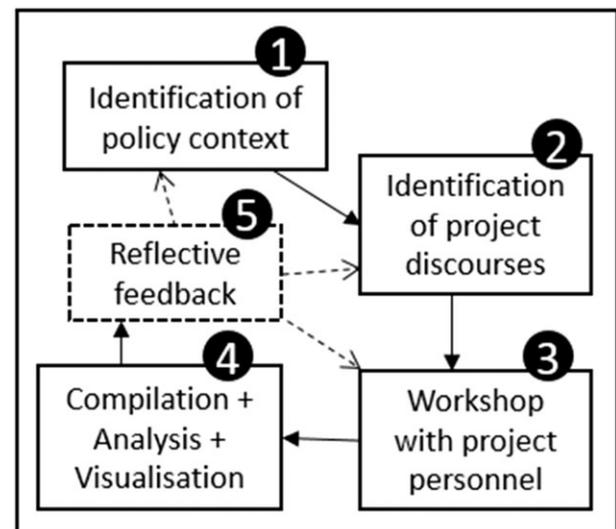


FIGURE 4 Five phases of analysis; see main text for detailed explanations. Source: the authors.

and meetings, and on a literature review of the project documents over the 5-month period. The criteria for identification of key discourses is the prevalence of the stated concepts in day-to-day activities, in communication between the personnel and beneficiaries, and in project materials.

The third phase consists of a project discourse workshop that documents the key informants' insights about the identified project discourses. Here the informants individually choose a few of the identified project discourses for further scrutiny as per their own interests and field of expertise. They indicate their views about the strongest unilateral and reciprocal influences between each chosen "focus discourse" and the other identified discourses. This is done by drawing arrows to the response sheet (illustrated in the upper part of Figure 5). While drawing, the informants simultaneously explain the rationale behind their views to the facilitating researcher, as a check. The exercise is blinded; the informants respond to the exercise individually, without knowledge of others' responses. The final outcome of the analysis is realized after compiling all the responses. This allowed us to minimize the researcher's influence on the exercise results. The

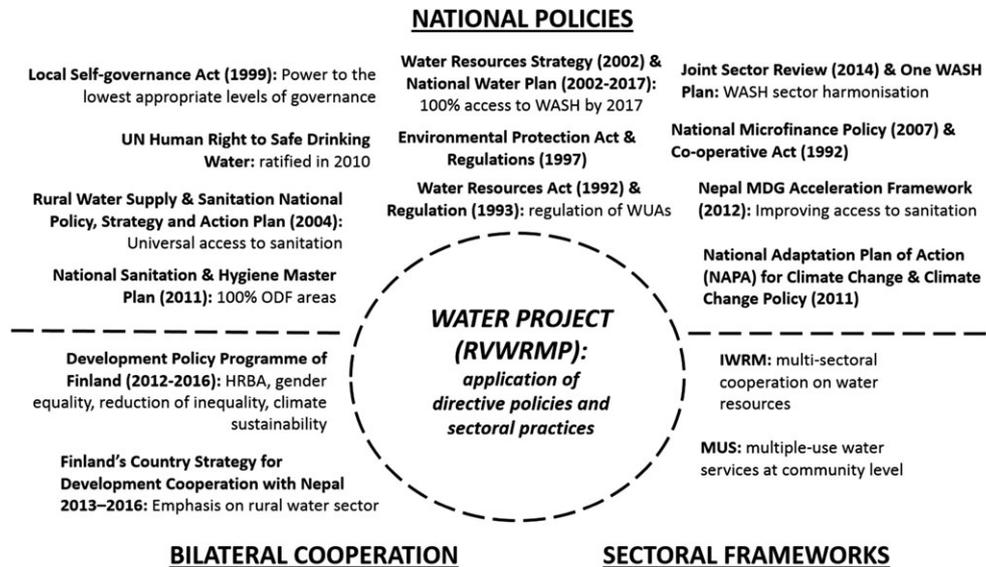


FIGURE 5 The main policies, mutual agreements and sectoral practices that direct the internal project discourses. Source: the authors.

analysis results can thus be seen as the individual informants' "collective mind-set" of the discursive interrelations of the project.

The fourth phase visualizes the analysis results according to the responses compiled. It reveals the interrelations between the identified project discourses, emerging hierarchies between them, and possible clusters of interconnected discourses. The results emerge directly from the exercise compiled responses, without further interpretation by the researcher. "Influence ratio" has a crucial role in phase 4. It deciphers the ability of a discourse to influence other discourses (or being influenced by them), forming a relative hierarchy between each one. Visually, the ratio describes the proportion of departing to arriving influence for each project discourse in the visualization of the results.

In the fifth phase, the study results are again reflected with the PSU specialists in a common meeting. Triangulated with field observations and a review of project modality documents, it increases the reliability and validity of the method and results. The feedback ensures that the researcher's interpretation of the specific case study context is valid and the conduct of the method and analysis is acceptable for the key informants.

3 | ANALYSIS

3.1 | Identification of policy context (Phase 1)

The operations of the water project were influenced directly by the national water sectoral policies, strategies and campaigns. These included The National Water Plan (2002-17) that set the target for providing access to water supply and sanitation for all of the Nepalese population by 2017. The Rural Water Supply and Sanitation Sector Policy (20Master Plan04) stipulated that all water projects must aim to provide access to universal sanitation. The National Sanitation and Hygiene Master Plan (2011) guided water, sanitation and hygiene ("WASH") projects on appropriate means to introduce 100% sanitation coverage via the Open Defecation Free campaign. The Joint Sector Review of 2014 proposed a harmonized approach by all sector

stakeholders for a One WASH plan. In addition, the United Nations (UN) resolution on the human right to safe drinking water and sanitation (and various subsequent resolutions) was ratified by Nepal in 2010 (Ministry of Urban Development, 2014; RVWRMP, 2015). In practice, the project workers and operations clearly accounted for these policies, and aimed at fulfilling their requirements.

Besides directive policies and agreements, the official project documents mentioned some sectoral practices in their operation. Such practices included Multiple Use Water Services (see van Koppen et al., 2009, 2014; for Nepal see Basnet & van Koppen, 2011; Mikhail, 2010; Mikhail & Yoder, 2008)) as well as Integrated Water Resources Management (IWRM; see for example, Agarwal et al., 2000; Keskinen, 2010; Varis, Enckell, & Keskinen, 2014) that is recognized by several UN processes such as Sustainable Development Goals (SDG-REFE). Both were used in cooperation with the lowest governmental tier (Village Development Committee) on Water Use Master Plan, which is the main tool of water supply planning and development prioritization (RVWRMP, 2011b). Furthermore, IWRM was mentioned in the step-by-step modality of the project (see RVWRMP, 2012b). However, in reality both concepts were implemented only through other project discourses, such as participation, gender equality and institutional capacity building, and the project personnel scarcely used these concepts in their everyday work.

Furthermore, the discourses that directed the water project at the time of scrutiny stemmed from Nepalese donor cooperation in the water sector (analyzed extensively by Hänninen, 2014), from the mutual strategic agreements between the two countries (MFAF, 2014), as well as from the guidelines of the Finnish Development Policy Programme 2012-2016 (MFAF, 2012). The program emphasized a Human Rights Based Approach (HRBA) as its main departure point. Gender equality, reduction of inequality and climate sustainability were considered as the cross-cutting themes of development cooperation (MFAF, 2012). In practice, the project personnel aimed to implement these principles in the communities in their everyday work. Figure 5 summarizes the policies and other practices that directed the project.

3.2 | Identification of key project discourses (Phase 2)

We concluded that the project's operations and related discourses could be summarized by a selection of nine key discourses, presented in random order in Table 1. Appendix 1 describes how the identified key project discourses link with the observed procedures, field activities and project documents. These key discourses remained at the core of the operational works, were often used in the day-to-day communication within the project, and were also evident in the project documents and materials. Many of the identified discourses were combinations of multiple concepts to better meet with the broader working areas of the project, to capture their observed interrelatedness in practice and to increase the simplicity of the analysis.

The water resources management discourses used by the project, namely IWRM and Multiple Use Water Services, were implemented through rural development-related discourses during day-to-day operations. They were hardly ever mentioned by the personnel in their day-to-day communication, nor in project implementation practices (see section above). Therefore, the analysis considered IWRM and Multiple Use Water Services as implicit discourses rather than independent, explicit key discourses that were chosen to provide closer scrutiny.

3.3 | Compilation of exercise results and their visualization (phases 3–4)

Phases 3 and 4 considered the ways in which the identified project discourses appeared and interrelated within the project according to the

TABLE 1 The nine key project discourses identified. Appendix 1 provides detailed discourse descriptions.

No	Name of project discourse
1	Institutional Capacity Building
2	Livelihoods Development
3	Gender Equality and Social Inclusion and Human Rights Based Approach (GESI & HRBA)
4	Sustainable Scheme Operation and Maintenance (O&M)
5	Poverty Reduction
6	Environmental Protection and Climate Change Adaptation
7	Health and Hygiene
8	Food Security and Basic Nutrition
9	Participation and Community Management

project's personnel. At this stage, the identified project discourses were placed in a hierarchy as per the compiled responses of key informants. The specialist informants, working together to address common operative problems, evidently had a quite codirectional collective mindset and well-informed understanding of the project discourses. Compilation of the responses indicated that the nine project discourses formed three distinct groups, based on their relative ability to influence other discourses. This hierarchy was formed by determining the influence ratio for each project discourse (Table 2):

From the rightmost column of Table 2 we see that the “foundational discourses” (Group 1) had the greatest influence. This relatively large number implied that these discourses greatly influenced the other discourses but were not greatly influenced by them. The PSU specialists' explanations during the workshop, and their feedback on the results (see the fifth phase), indicated that these discourses evidently set the stage for the operational project activities by providing the project personnel with underlying, procedural frames and collective values for project operations and practices. These interactions thus provided foundations for the other discourses.

The operational discourse group (Group 2) comprised five discourses. The corresponding influence ratios were balanced around a value 1 (Table 2). This implied that these discourses were both influenced by some discourses (here mainly the foundational discourses), and that they correspondingly influenced some others (especially “Poverty Reduction”). Again, the specialists' explanations and feedback indicated that these discourses actually represented the standard operational practices of the project, providing the practical means to achieve the desired project outcomes (especially that of poverty reduction).

“Poverty Reduction” made up the third discourse group. It differed from the other project discourses as it was heavily influenced by them but had no significant influence on the others. Correspondingly, the key informants perceived “Poverty Reduction” as the eventual objective of the project operations to be achieved by operating through subordinate project discourses. This matched the stated purpose of RVWRMP II, namely “to achieve improved well-being and reduced poverty through sustainable management of their water resources” (RVWRMP, 2011a). The idea of the distinct nature of “Poverty Reduction” versus the other project discourses came up in many discussions with project informants, as well as in the feedback session (phase 5).

To visualize the relationship between project discourses and to take the analysis a step further, the set of diagrams in Figure 6 were

TABLE 2 Discourses grouped according to their relative capacity to influence other discourses

Discourse group	Project discourse name	Influence ratio*
“Foundational discourses” (these mainly influence the other discourses but are not greatly influenced by them)	Participation and Community Management	2.79
	Institutional Capacity Building	2.13
	GESI and HRBA	1.67
“Operational discourses” (these mainly influence the discourses in the third group and are influenced by the discourses from the first group)	Health and Hygiene	1.19
	Livelihoods Development	0.96
	Sustainable Scheme Operation and Maintenance	0.94
	Environmental Protection and Climate Change Adaptation	0.85
	Food Security and Nutrition	0.82
“Objective discourses” (these were influenced by all other discourses while not significantly influencing them)	Poverty Reduction	0.15

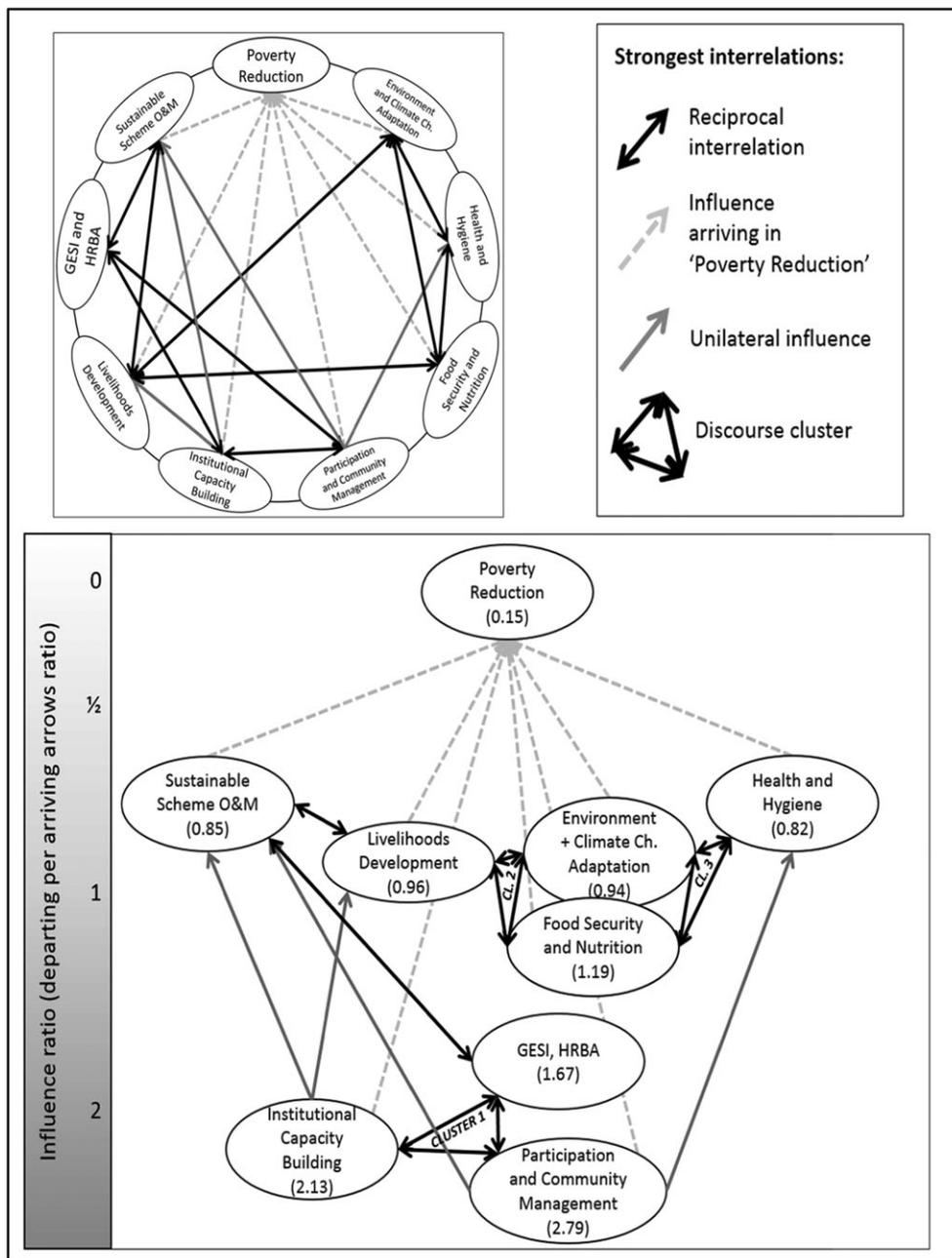


FIGURE 6 Top: compiled key informant responses on the response sheet. Bottom: emerging discourse hierarchy as per the responses. Source: the authors.

created. The upper part of the figure depicts the response sheet fulfilled by the strongest recognized interrelations between the project discourses according to the compiled responses. This presentation, however, leaves the discourse hierarchies and the three distinct discourse groups imperceptible. The discourses are therefore illustrated in the lower part of Figure 6 as per their relative ability to influence the other discourses, based on the influence ratio.

The arrows departing from “Participation and Community Management” and “Institutional Capacity Building” (both from the foundational discourse group) indicate that these discourses had the strongest unilateral influences on the others. In particular, they affected three other discourses (that were part of the operational group), namely “Health and Hygiene,” “Livelihoods Development” and “Sustainable Scheme O&M.” The also had an influence on “Poverty Reduction.” This

supported the informants’ view that the foundational discourses set the stage for the operational project activities by providing the project personnel with the underlying, collective procedural frames and values.

Figure 6 also exposes an additional layer of interaction between the project discourses. “Discourse clusters,” shown as triangles of reciprocal interactions in Figure 6, demonstrate that some discourses were explicitly strongly interconnected with each other. One discourse cluster is formed around the foundational group (“Participation and Community Management,” “Institutional Capacity Building,” and “GESI and HRBA”), while two partially overlapping clusters are found around the functional discourses (“Environmental Protection and Climate Change Adaptation,” “Food Security and Nutrition,” “Health and Hygiene,” and “Livelihoods Development”). Such interconnected clusters of discourses were formed *within* the identified discourse groups,

whereas the most remarkable unilateral influences remained mainly intermediate to the three groups. This further highlighted the different perceived roles of the discourse groups and the clusters within project management and operations. These ideas are further interpreted from an organization management viewpoint in Section 4.1.

3.4 | Reflective feedback (phase 5)

The lead author arranged a workshop for the PSU specialists so as to present the method of analysis, process and results. The feedback ensured that the specialists considered the research design to be acceptable and the method sound.

The specialists considered the results to be rational and reliable, reflecting their own understanding of the project's operations: the foundational discourses were seen as reflecting the broader project values and ways of doing, as suggested by the analysis results. Similarly, the five operational discourses were found to reflect the actual operational activities of the project in the field, thus corresponding to their position in the analysis. The feedback also confirmed that the specialists considered the position of poverty reduction as the project objective. The perceived role of the "Poverty Reduction" discourse corresponded to the stated purposes of the project (see RVWRMP, 2011a), emphasizing that the actual project practices were well in line with the stated project objectives and related policies.

The specialists considered the composition of the nine project discourses to generally represent the project operations comprehensively. However, they mentioned that the role of transparency as one of the foundational principles of the project did not arise explicitly from the analysis results. Having a limited number of project discourses simplified the analysis, but according to the received feedback it may have overlooked one key aspect that would have become evident in a more complex analysis. The absence of a separately identified discourse for transparency, a possible mistake that became evident in phase 5, exemplifies this. By contrast, transparency could have been seen as a part of the "Participation and Community Management" discourse. The feedback generally demonstrated that the design of the method functioned well with the chosen assembly.

4 | DISCUSSION

4.1 | Reflections on case study analysis

The Introduction describes various tensions that project management encounter and must consider between the policies, internal discourse and realities at grass roots level. The developed method can help organizations to address these tensions within the project operations. Organization management can then purposefully utilize awareness about the evident discourse hierarchy and clusters during project planning, team formation, monitoring and supervising the operations, and in finding operational synergies between the discourses and corresponding field activities. Project management is able to direct the operations by harmonizing and recreating the internal discourse hierarchies to better meet external policy requirements and local realities, or to improve the internal operability and efficiency of the organization.

Our analysis has several implications for project management. The first advantage of the developed method is the identification of discourse hierarchies: it can examine whether the actual project discourse hierarchy differs from the stated project aims and objectives. In the case analyzed, for instance, it is important to note that the project personnel conceived three distinctly different types of project discourses. This translates into the project discourses having distinct roles, and that they reflect well the stated project objectives (Section 3.4 in particular). This awareness could be used in project design, planning and monitoring of operations.

Second, the analysis depicted specific discourse clusters. The clusters imply that some project discourses have partially overlapping roles and mutual synergies. The clusters were in our case formed within the discourse groups, rather than between them. This indicates the distinct role of each discourse group, and reflects the existing synergies and interlinkages among the discourses in the same cluster. This could mean that the field activities related to the discourses in the same cluster may benefit from each other. This awareness could be used in the formation of field teams and planning of activities.

The study revealed possibilities for further research. First, it suggests that project workers' understandings of the interrelations of project discourses have great influence on actual operations. The role and influence of project personnel therefore deserve further elaboration and analysis. Second, the developed analysis could be repeated in other contexts to show actual functioning logics of projects or other organizations, as well as to enable comparison. Further analyses are expected to reveal different types of hierarchical patterns in different contexts. The developed research method could be potentially tested and applied more broadly in the fields of development studies, natural resources management, political ecology or organization management.

4.2 | Comparisons with related methods

The method developed here partially resembles Q-methodology (Herrington & Coogan, 2011; Zabala, 2014) and the idea of fuzzy cognitive mapping (e.g., Gray et al., 2015; Groumpos, 2010; Kosko, 1986; Stach et al., 2010). These methods share the same phenomenographic starting point, and the first two analysis phases resemble the statement identification phases of the Q-method. However, unlike the Q-method, the described method does not aim to grasp the variety of viewpoints that exist, nor to sum them in a synthesis. Rather it aims to understand the ways in which the discourses interact within a certain setting. The methodology described in this paper does not use distinct statistical analysis, but relies on the construed expert knowledge of key informants.

The introduced method and the fuzzy cognitive mapping methodology are similar in that they both look at the interconnectivity of certain concepts and encourage the use of expert knowledge and participation (cf. Gray et al., 2015; Stach et al., 2010). In the developed methodology, the fuzziness comes from the different aspects and opinions within the collective mindset of the core project personnel about project functions. However, it not aim to produce a functional causal system or a model about the discourse system functions. We consider the qualitative content of the identified influences as being far too complex and multidimensional to be evaluated or modeled

reliably and specifically as a whole. Another difference is the developed method's strong emphasis on contextual understanding and field observations. We believe that this makes it more suitable to analyses in expert organization and project management contexts, allowing continuous triangulation with operational reality. However, the third and fourth analysis phases, in particular, could be described as a participatory application of fuzzy cognitive mapping methodology principles.

5 | CONCLUSIONS

The aim of this study was the development and description of a participatory research method for unfolding the ways in which policy discourses interrelate within project organizations. Our internal discourse analysis helps decision-makers and project managers to understand the ways in which the various steering policies mould and interact within the implementing organization. This is important to provide more effective policy impact and improved contextual understanding of implementation processes.

The conducted case study analysis demonstrated the ways in which development project personnel transformed the externally imposed policy discourses into an internal, operative project discourse hierarchy. The method visualized the ways in which the key project discourses interacted with each other within project operations, leading to distinct hierarchical groups and clusters of discourses. The clusters indicated partially overlapping roles and strong mutual synergies. The internal discourse hierarchy steered the observed project practice.

The method has several concrete contributions to improving internal project management: the analysis enables visualizations of positions and interrelations of the key discourses within organizations in a transparent way. It enables comparisons between the discourses, and between stated objectives versus the observed discourse hierarchy, and also helps to recognize mutual synergies or inconsistencies among the discourses within organization practice.

Finally, the participatory analysis methods, including workshops and interviews, help the project personnel to reflect the different roles and relations that different discourses have in their own work, and how they correspond to other staff members and project documents. At the same time, the possible differences in interpretations between project personnel highlight the potential ambiguity related to the project's stated objectives and actual practices.

This paper discusses the ways in which organizations could utilize the analysis in planning, team formation, monitoring and supervision. This will allow implementing managers to meet with external policy requirements, fit with local realities, and improve policy and project outcomes.

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APPENDIX A

Descriptions of the nine project discourses:

1. "Institutional Capacity Building," referred in the study context to enhancing the capacities, and cooperation among stakeholder institutions at community, district, development regional and central levels. Related project activities included the establishment of Water Users' Associations, Cooperatives and other community institutions, cooperation with all administrative levels of the government, various types of arranged training to maintain and operate the established institutions, and knowledge sharing campaigns for the communities (RVWRMP, 2012a). The project document recognized capacity building in the overall project objective (RVWRMP, 2011a, p. 27) as well as in two of the three expected result categories of the project (RVWRMP, 2011a, p. 29). The personnel used this concept repeatedly in internal project communication.
2. "Livelihoods Development" discourse referred to overall rural livelihoods, enabled in many cases by the improved community water supply, microhydropower construction, irrigation and related capacity-building activities. Livelihoods development activities of the project included support to cooperative business, home gardens, construction of green houses, instituting leader farmer trainings, nurseries, expanded irrigation, fertilizer businesses, and development of local information technology services, and microentrepreneurships such as carpentering, spice grinding, paper-making and garment production. The project objective explicitly emphasized "increased opportunities in rural livelihoods" (RVWRMP, 2011a, p. 27). The expected project results recognized livelihood development: "Result 2: Improved and sustainable nutrition, food security and sustainable income at community level through natural resources based livelihoods development" (RVWRMP, 2011a, p. 29).
3. Gender Equality and Social Inclusion, and Human Rights Based Approach (GESI & HRBA). GESI referred to the Gender Equality and Social Inclusion Strategy and Action Plan (RVWRMP, 2011a, pp. 38–39, 2015) with emphasis on HRBA (RVWRMP, 2015). It was based on the recognition that "inclusive targeting" is required for disadvantaged groups, such as women, the poor and people with disabilities to gain equitable access to resources and opportunities (RVWRMP, 2015), and to achieve the "improved quality of life" project target (RVWRMP, 2011a). Related project activities included empowering disadvantaged groups to involve and to take lead roles in project activities; giving preference to the disadvantaged in all training opportunities, awareness-raising campaigns, rallies, door-to-door visits, community meetings and interactions, and collaboration with local administration. HRBA referred to "the norms, principles, standards and goals of the international human rights system into development plans and processes" (RVWRMP, 2015, p. 5). It was closely linked to national and international policy context, discussed in Section 3.1, especially with the Finnish guidelines to development cooperation (MFAF, 2012). GESI and HRBA were mainly used among project specialists, but less so in the field.
4. "Sustainable Scheme Operation and Maintenance (O&M)" referred to the overall goal of the whole life cycle of the water schemes, from initial planning to postconstruction and rehabilitation. Water Users Associations were established to be the executive institutions of scheme O&M. They were run autonomously by the community. Related project activities included improved mechanisms of financing, regular maintenance and rehabilitation, developing technical back-up systems, and implementation practices and standards used in water supply, sanitation and irrigation development. The operational tools included postconstruction guidelines (RVWRMP, 2012a), training, phases of construction, and other activities specified in the Step-by-step Manual (RVWRMP, 2012b), Water Use Master Plans (see RVWRMP, 2011b) and Water Safety Plans. Most of the actual project work was related to the sustainable functioning of the water schemes. This concept was repeatedly used in the field with community stakeholders. This matched the stated purpose of RVWRMP II, "to achieve improved well-being and reduced poverty through *sustainable management of their water resources*" (emphasis added; RVWRMP, 2011a).
5. "Poverty Reduction" discourse referred to the promotion of better quality of life and standards of living, especially for the poorest, involving improved nutrition, health and livelihoods of community members. The project document stated that the purpose of Phase II is "to achieve improved well-being and reduced poverty" (RVWRMP, 2011a, p. 28). It was further stated in the second phase document versus the first phase that "this new formulation emphasises the impacts of the Project, instead of means of the previous formulation" (RVWRMP, 2011a, p. 28). The latter stressed the role of poverty reduction as the desired final project outcome. Poverty Reduction was also referred to in the project document by alternative terms as "enhanced quality of life" (p. 27), stressing poverty as a comprehensive condition of life.
6. "Environmental Protection and Climate Change Adaptation." The first part of the concept referred to the recognition that sustainable human wellbeing is founded on the natural environment. Activities related to environmental protection involved microlevel watershed management, including various types of source protection activities, low-impact infrastructure and technology, construction of water preservation infrastructure, and soil management and erosion control pilots. Enhancing environmental conditions was also explicitly emphasized in the overall project objective (RVWRMP, 2011a, p. 27). The "Climate Change Adaptation" part of the discourse referred to activities that can be considered to contribute to adaptation to climate change by reducing vulnerability and increase resilience to disasters and adverse impacts to climate change. The project goals included empowering people to manage their own water supply. Related activities involved the application of IWRM, promoting efficient use of water, prioritizing multiuse systems, environmental and soil protection activities, and low-input agriculture. Operational tools included the Step-by-step Manual (RVWRMP, 2012b) and Water Safety Plans.



7. "Health and Hygiene." Health referred to the direct project activities regarding overall physical, mental and social human wellbeing. It was manifested in the water project context most closely through food security, nutrition, and hygiene and sanitation issues. Hygiene, in turn, referred to sanitation- and hygiene-related behavior, infrastructure developments and thematic community groups. Related operational practices involved various training at multiple levels, Open Defecation Free and total sanitation campaigns, Water Use Master Plans (RVWRMP, 2011b), water safety planning and implementation, other institutional capacity-building activities such as establishment of community groups, and construction of dry toilets for every household in project localities. The main guiding document in the project context was the Nepal National Sanitation and Hygiene Master Plan (GoN, 2011). The project document referred to health in the project objective as "enhanced quality of life" and in the project purpose as improved "well-being" (RVWRMP, 2011a, p. 27). Health issues were also among the expected results of the project (RVWRMP, 2011a, p. 29). In practice, health and hygiene improvements were the most often discussed themes in the field, considered an approachable theme by both project personnel and the beneficiaries.
8. "Food Security and Nutrition" referred to the project activities directed towards the availability of, access to and use of nutritious food for healthy life. In the project context, food insecurity and malnutrition were clear problems in multiple areas. These problems originated particularly from an inadequate variety of cultivated plants, remoteness and challenging environmental and climatic conditions, plus gender-related discrimination and various food taboos (see Haapala & White, 2015). These led to problems such as insufficient calorie intake and suboptimal feeding patterns. Related project activities included awareness campaigns, GESI activities, promotion of home gardening, dietary demonstration from locally available foods, IWRM, activities related to health, sanitation and hygiene, Open Defecation Free campaigns, training of farmers and irrigation infrastructure. The project objectives (RVWRMP, 2011a) indirectly referred to food security and nutrition, and the document stated "improved and sustainable nutrition, food security" (p. 29) as an expected result.
9. "Community Management and Participation" discourse referred to the management of water by a community through collective, participatory action of volunteers and stakeholders. In the project context, this approach emphasized self-led, democratic, transparent, uncorrupted, equitable and equal participation, empowerment, and decision-making processes in the community regarding the management of water resources. These actions crosscut all project activities. Related activities included local institutional capacity building and training events, rules of O&M (gender balance in representative positions, giving preference to disadvantaged community groups), and the fact that the communities themselves constructed their own water infrastructure, and operated the established water-related community institutions. Transparency and anti-corruption was stressed by various means and customs during all phases of action from planning to postconstruction. Related concepts such as ownership, self-initiative and accountability were broadly used in the everyday communication in the field by both the project personnel and community members.