How to cope with social embeddedness in water project implementation

Juho Haapala, DSc.
Field Specialist,
RVWRMP, Nepal

This article argues that water sector would benefit from more detailed analysis on the growing social embeddedness within project implementation processes as they operate to change the local realities. The research presents ways to understand and manage the social embeddedness in the intervention context. The findings are based on a review and synapsis of two international peer-reviewed journal articles on rural development interventions in the water sector of Nepal, and on the recently published thesis of these papers. This review article presents the lessons learnt about the characteristics of the social embeddedness, and provides solutions to tackle the related implementation problems by more deliberate facilitation of social settings.

Introduction to the context and research question

Regarding water sector development implementation in rural areas, the development agencies lean towards generally acknowledges approaches. In the rural development context, the trendy discourses involve community management, participation, and social inclusion (Chambers, 1994; de Haan, 2009), with an emphasis on sustainable rural livelihoods development (Chambers, 1994) or microfinancing and social funds (De Haan, 2009). The guidelines for the practices are provided by generally acknowledged approaches such as Integrated Water Resources Management (IWRM), which has been recognised by several UN processes, most recently by the Sustainable Development Goals. Furthermore, water project management should follow the accredited principles of good water governance (OECD, 2015).

The starting point for the project implementation is the need to be aligned with the policies and objectives of the government administration, and the possible donor stakeholders, and international contracts like the ones above. In addition to that, the implementation organisations work locally, within the surrounding socio-cultural environment. They should therefore simultaneously adapt to local conditions and cooperate with the local and national partner stakeholders (Rusca et al. 2015). The implementing actors encounter various socially embedded institutions at the grassroots level (Cleaver 2012; Rusca et al. 2015). The encounter produces a gap between designed institutions and the local reality (Cleaver 2012;). Figure 2 illustrates the position of project organization in the implementation process.

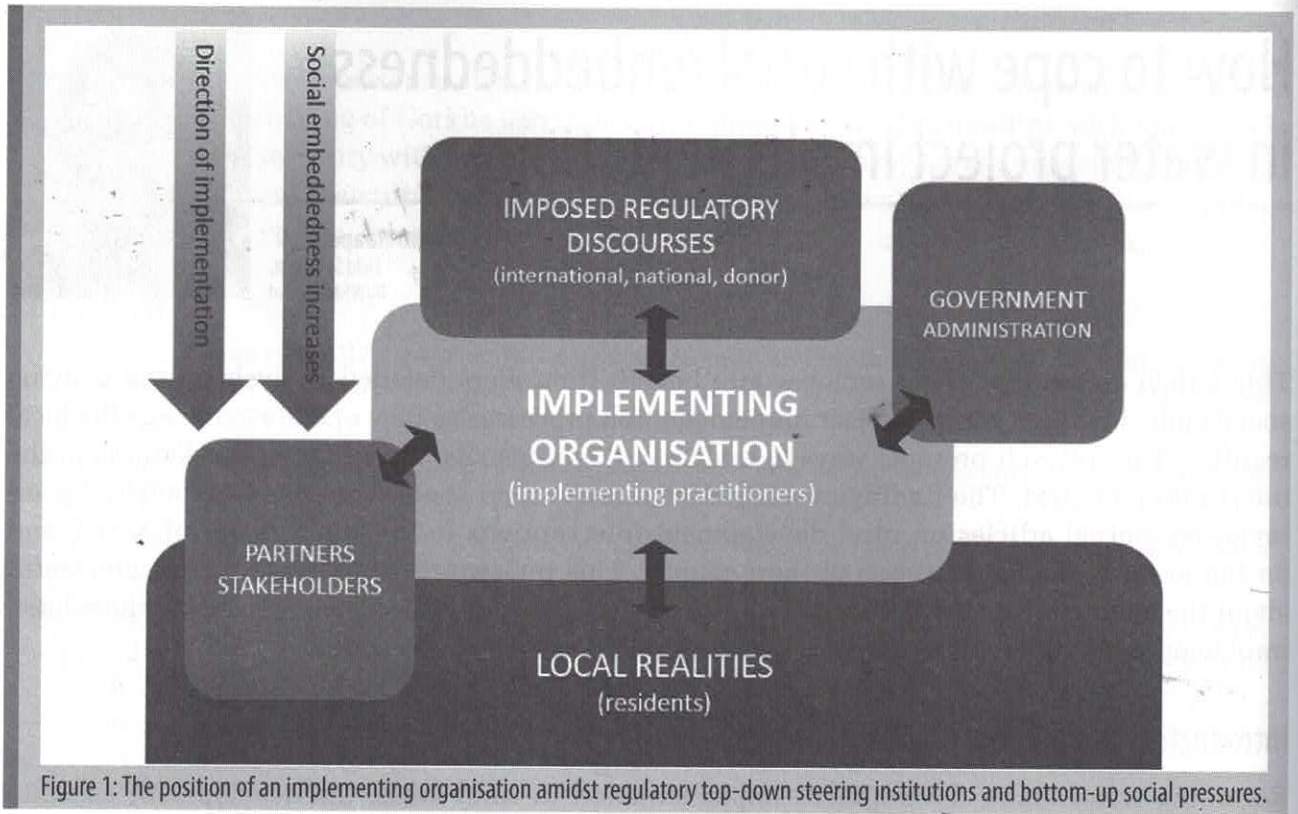

Figure 1: The position of an implementing organisation amidst regulatory top-down steering institutions and bottom-up social pressures.

The challenge is the increasing social embeddedness in the implementation process. Social embeddedness refers to the inclusion of various complex sociocultural factors that in practice complicate implementation processes. A gap remains between the theories of governing development at the grassroots, and the local realities. The critique argues that the governance approaches have too limited understanding about social dynamics (Cleaver, 2012; OECD, 2015:3). The evident challenges related to the governance of the implementation process make the water-based developments difficult to realise in practice.

A better understanding of these processes could help in furthering functional water services delivery in developing, remote, hilly rural areas. This study therefore addresses the following research question: Where are the pitfalls of governing the local-level social embeddedness in implementing rural water services development?

This study and especially the reference articles have examined two large-scale water and rural development interventions operating in Nepal by surveying selected communities under these projects. The first of them is Rural Village Water Resources Management Project (RVWRMP.org.np), which operates in Far West Nepal in the remotest and poorest rural localities of the country. The project's scope includes facilitating water supply, sanitation, agriculture and local farming, community cooperatives, livelihoods development, renewable energy, and irrigation. The project operates in 10 districts, with a beneficiary population of around 700,000 (2006-7/2018). The second intervention, the Rural Water Supply and Sanitation Project in West Nepal (RWSSPWN.org.np), focuses mainly on water supply, sanitation, and institutional capacity building. It has served hundreds of thousands of beneficiaries in 14 rural districts (2008-2018). For more about the projects, see the project websites, and the referred papers by the author.

Methods and theoretical themes

This article is based on the findings in the author's doctoral dissertation synthesis (Haapala, 2018). The research reviews and interprets in detail two of the author's peer-reviewed studies appended in the dissertation. These studies directly regard the introduced research context:

- Article 1: Haapala, J., & White, P. (2015). Why do some behaviours change more easily than others? Water-use behaviour interventions in rural Nepal. *Waterlines*, 34(4), 347-364.
- Article 2: Haapala, J., Rautanen, S. L., White, P., Keskinen, M., & Varis, O. (2016). Facilita2 ting bricolage through more organic institutional designs? The case of water users' associations in rural Nepal. *International Journal of the Commons*, 10(2).

The papers are hereafter referred to as Article 1 and Article 2. Furthermore, the findings rely indirectly on two other international peer-reviewed author's articles (Haapala & Keskinen, 2018; Haapala & White, 2018) that are more secondarily related to the research question of this article, also appended to the dissertation.

The methods employed by the articles are field observations, participatory observations, key informant interviews with the local beneficiaries and the project staff, group interviews with the community beneficiaries and project staff, and workshops and various exercises conducted with the project personnel. These activities have been conducted over a four-year period in 2014-2017, with around eight months presence in the projects and the field. The employed literature includes the project documents, manuals and guidelines, research articles, policy documents, and grey literature.

The research above has employed participatory, constructivist methodology for data collection and analysis. The research has been practical and pragmatism-oriented, with adaptive development of the argument in theory based on accumulating empirical evidence (see Layder, 1998). The research has applied the theories of adaptive governance and management (e.g., Pahl-Wostl, 2009), governing the commons (e.g., Ostrom, 1990), capabilities approach (Sen, 1999), and especially institutional bricolage (e.g., Cleaver, 2012).

The findings rely on the standpoint of institutional bricolage. It is a perspective that describes the ways that institutions emerge bottom-up as a combination of socially embedded practices and formal structures (Cleaver, 2012). People may act as bricoleurs to solve everyday problems in their socio-cultural institutional surroundings. The bricoleurs use whatever is at hand and recombining the available stuff together in new ways and for new purposes (ibid.). Cleaver describes the bricolage as 'a process in which people consciously and non-consciously draw on existing social formulae [...] to patch or piece together institutions in response to changing situations' (Cleaver, 2012:45). More information about the appended studies, theories, methods and data can be found from the compilation of the research papers that has been published as a thesis synthesis (Haapala, 2018).

Findings

Review of Article 1

Article 1 (Haapala & White, 2015; also in Haapala, 2018) explored the research question by investigating domestic water-use behaviour changes in many villages in Far West Nepal. The study analysed a rural water project that initiated reforms in water users' committees and behaviours in

the communities. The study started from the remark that some of the behaviour changes had been much easier to realise than some others. The article then analysed why.

The findings of the study emphasised the imposed behaviour changes were easy to realise only if they visibly and likely benefitted the individuals, and if they did not alter the existing cultural customs. The existing local ways of doing restricted some of the initiated changes in the studied case. This was especially the case if the behaviour change severely contradicted communal traditions or family customs (*chhaupadi*), or dealt with cultural taboos (e.g., the case of using urine as fertilizer).

The empirical evidence suggested that the local customs and traditions had a pronounced impact on the imposed development outcomes. Much of the working environment was informal and beyond the impact of regulatory efforts of the intervention. The local traditional ways of doing often overcame the imposed behaviour changes despite the significant efforts to change behaviours locally.

Review of Article 2

Article 2 (Haapala et al., 2016; also in Haapala, 2018) studied the research question by analyzing institutional realities of water users' committees at the village level. The observed committees did not very habitually follow the designed operation modes or the formal water users' rules and regulations. Instead, they often followed more applied, informal, and locally fit practices in the community management institutions.

The article conveyed that both formal and informally applied management practices were crucial for the functionality of the committees. The study found that the socially embedded, informal arrangements often provided the only potential way to maintain institutional operations in locally apt ways. This was the case especially in the remotest localities where the lack of resources, capabilities, and governance support compelled the local institutions to search for alternative solutions. However, the improvised local management modes also often included both 'bad ideas' and 'bad executions' that posed risks to the scheme maintenance or institutional functionality. The examples given in the article included different forms and degrees of elite capture, gender discrimination, and risky water scheme operation and maintenance practices.

The articles outlined ways in which the institutional bricolage processes could be better managed. The study suggested acknowledging the inevitably applied informal local operation modes in the project documents. The second suggestion was to consider conscious triggering of such emerged local operation modes that were desirable for project targets. The article suggested that this would happen in practice by consciously generating facilitated, locally legitimate, and inclusive spaces locally. One proposal was to start with the planned institutional design and then gradually allow and encourage local applications while the implementing project personnel are still present for facilitating them.

Outcomes: Analysis of the problem and proposals for potential solutions

The research literature review above indicates that social embeddedness makes interventionist implementation so challenging because the regulatory approach to governance cannot perfectly comprehend or control the diversity, complexity, and blurriness of the social spaces in which the

mplementation takes place. The social reality involves three unattainable characteristics for the governance approaches, i.e, complete fit, complete extension, and complete dominance (Figure 6).

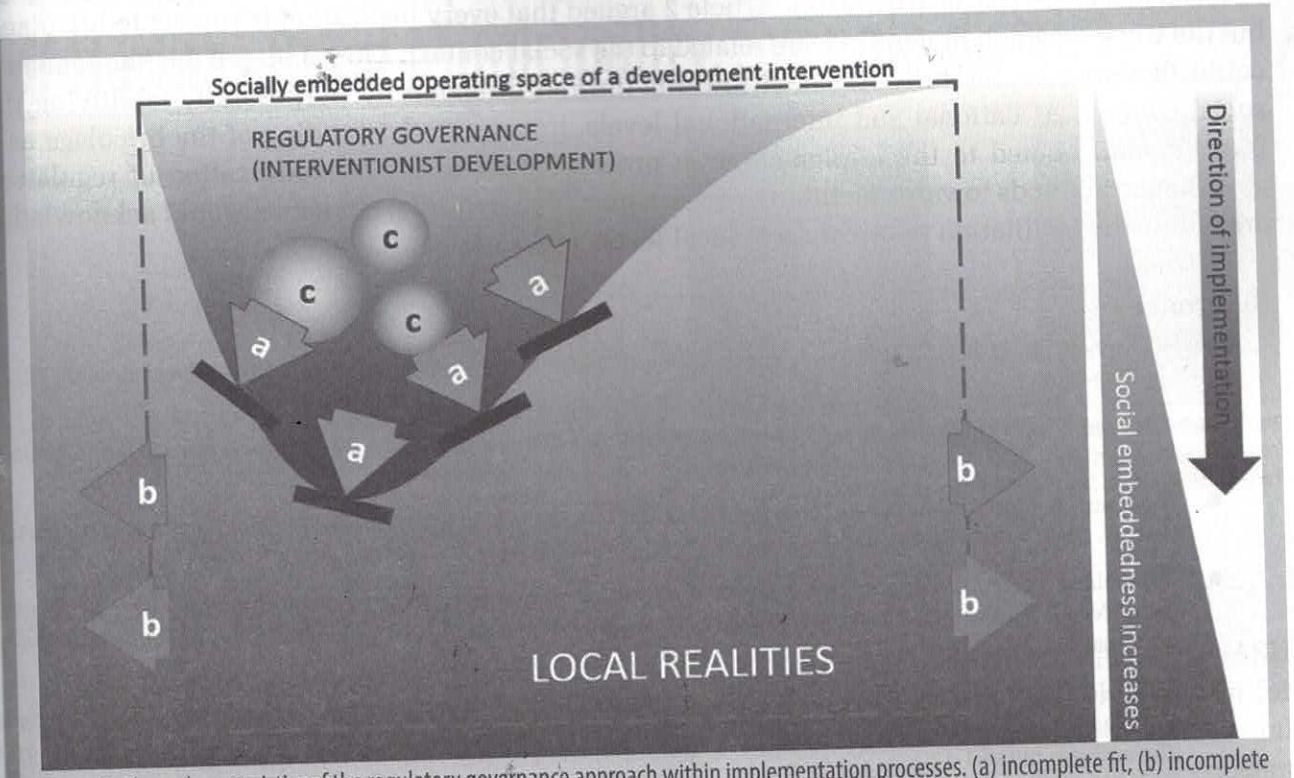

Figure 2: Three characteristics of the regulatory governance approach within implementation processes. (a) incomplete fit, (b) incomplete extension, and (c) incomplete dominance.

a) Incomplete fit: Context-specific social complexity and diversity inevitably extends deeper than the capacity and influence of regulatory governance interventions;
b) Incomplete extension: Social space inevitably spreads beyond the capacity and influence of regulatory governance interventions;
c) Incomplete dominance: the regulatory capacity and resources are inevitably to a degree insufficient for coping seamlessly with socially embedded environs.

The first characteristic is incomplete fit (a): The regulatory discourses remain inevitably to a degree too generic and nonspecific for directing con-text-specific implementation processes without further interpretation. Much of implementation occurs in variable local, less institutionalised social environs (Articles 1-2) which largely remain unregulated by external governance (Article 2). They are thus largely beyond the discursive instructions or formal institutional influence.

The second characteristic is incomplete extension (b): The social space inevitably extends beyond the means of regulatory governance interventions. The numerous institutional bricolage management modes of the local water users' institutions demonstrated this argument (Article 2).

The third characteristic is incomplete dominance (c): Imposing effective regulation in practice would require massive resources to overcome the existing institutions governing the local social trajectories (Article 1). The empirical evidence from the articles implies that the originators of the interventionist development could not provide enough of such resources (Article 2). The implementation therefore remains strongly influenced by local formal and informal social currents, such as local customs (Article 1) and groups of elites (articles 1 and 2).

The findings propose potential solutions for enabling water services. The first proposed solution is to comprehend the importance of the existing unregulated social spaces and the need to find ways to influence these spaces (Article 2). Article 2 argued that every institution is subject to bricolage, but the ways in which it manifests are related to the social context. The quality of the phenomenon could therefore be carefully triggered towards desired direction by purposefully modifying the social context. At national and international levels, broader understanding of the bricolage as a phenomenon related to the implementation process could result in modification of regulatory governance methods towards facilitative governance. This type of governance would acknowledge and allow the facilitation of bricolage at local levels by local practitioners.

References

- Chambers, R. (1994). The origins and practice of participatory rural appraisal. *World development*, 22(7), pp.953-969.
- Cleaver, F. (2012). *Development through bricolage: rethinking institutions for natural resource management.* Routledge.
- De Haan, A. (2009). *How the Aid Industry Works. An Introduction to International Development.* USA: Kumarian Press.
- Haapala, J. (2018). *Governing water for local development-Solutions to implementation challenges in remote, rural Nepal.* [Academic Dissertation]. Aalto University Department of Built Environment. Aalto University publication series: Doctoral Disserations, 129/2018. https://bit.ly/2LLnEB0.
- Haapala, J., and Keskinen, M. (2018). The Influence of Different Discourses on the Outcomes of Development Policies and Projects: Insights from Water Project Implementation in Nepal. *Environmental Policy and Governance.* 2018:1-12.
- Haapala, J., Rautanen, S. L., White, P., Keskinen, M., & Varis, O. (2016). Facilitating bricolage through more organic institutional designs? The case of water users' associations in rural Nepal. *International Journal of the Commons*, 10(2).
- Haapala, J., & White, P. (2015). Why do some behaviours change more easily than others? Water-use behaviour interventions in rural Nepal. *Waterlines*, 34(4), 347-364.
- Haapala, J., and White, P. (2018). Development through Bricoleurs: Portraying Local Personnel's Role in Implementation of Water Resources Development in Rural Nepal. Water Alternatives [Accepted, not published].
- Layder, D. (1998). *Towards adaptive theory. Sociological Practice.* London; Sage Publications 132-173.
- OECD. (2015). *OECD Principles on Water Governance: Welcomed by Ministers at the OECD Ministerial Council Meeting on 4 June 2015.* OECD Publishing.
- Ostrom, E. (1990). *Governing the Commons: The Evolution of Institutions for Collective Action.* Cambridge University Press.
- Pahl-Wostl, C. (2009). A conceptual framework for analysing adaptive capacity and multi-level learning processes in resource governance regimes. *Global Environmental Change*, 19(3), 354-365.
- Rusca, M., Schwartz, K., Hadzovic, L., & Ahlers, R. (2015). Adapting Generic Models through Bricolage: Elite Capture of Water Users Associations in Peri-urban Lilongwe. *European Journal of Development Research Advance* 27:777–792.
- Sen, A. (1999). *Development as Freedom.* Oxford University Press.