

Selected Policy Issues and Discourses in Implementing the Melamchi Water Supply Project in Nepal

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Abstract

Water transfer from rural areas to urban areas is debated public policy and with a huge challenge in implementation the task, specially to full fill all the demands of the stakeholders concerned. In addition, intersectoral water allocation also requires huge capital expenditures, political commitment, capable implementing agencies, and related other public supports. In this context, this paper summarizes policy issues on water transfer and related institutional reform (city water supply privatization, compensation) associated with Melamchi Water Transfer Project in Nepal (in short, Melamchi Project). This Melamchi project was planned to be US\$470 million project earlier in 2000, after years of delays and controversies, which has been again redesigned and with reduced cost to about US\$317 million in early 2008. This project is to be funded from several donors and led by ADB/Manila. Here, we discuss on political economy related issues and stakeholders' concern over the project impacts upon them, privatization issues related to Kathmandu city water supply scheme, and so on. The analysis is based on key informant interviews, household survey, and field observations at selected places in both the water recipient city (Kathmandu) and water supplying basin (Melamchi basin) in Nepal. Privatization of the city water system appears to be one of the most debated and controversial policy issues and also politically very charged agendas attached with the project implementation plan earlier. This issue needs to be addressed/implemented with most care and being very pragmatic way considering the opposition from different interest groups. The sectoral institutional capacity of the implementing agency also needs to be assessed while designing such mega projects in developing country, and if requires institutional strengthening should be a key component of the project plan; which was lacking in the context of this project. The improved knowledge base and information generated out of this synthesis paper will be useful to the Melamchi project authority in Nepal and in planning such city water infrastructure project globally.

Key words: *Intersectoral water transfer, City water supply, Public water policy, Water privatization, Kathmandu, Nepal*

1. Introduction:

This paper illustrates some public policy bottlenecks and discourses in implementing a large-scale city water supply project in a developing country context. The is done taking an example from Melamchi Water Supply Project (hereafter Melamchi project), a multi-

million dollar drinking water project in Nepal that aims to divert water from Melamchi River of Sindhupalchok district to Kathmandu Valley through about a 26 km long tunnel. This has a significant policy importance because water transfer from rural areas to urban areas is a politically debated and economically challenging job. It demands a huge amount of money, political commitment, and public support. The improved knowledge base and information gained from this study is expected to be useful in planning city water infrastructures in other places. The paper aims to assess the key policy issues, discourses involved, and local perception in the implementation process of Melamchi project in Nepal.

In order to overcome the world's crisis in drinking water the World Water Commission declared its vision during Second World Water Forum held in the Netherlands in 2000. It declared: "Every human being should have access to safe water for drinking, appropriate sanitation, and enough food and energy at reasonable cost" (World Water Commission: in Mitchell, 2000). The demand of drinking water in urban areas is ever increasing because of population growth and corresponding increase of economic activities. The situation also applies to Kathmandu Valley, the capital of Nepal, which is having acute water shortage due to increased per capita water demand caused by high population density and related development activities. Most sources of water in the valley are already tapped and diverting water from Melamchi River was considered as one of the best alternatives for a longer term solution among 20 different sources surveyed in 80s-90s (MWDB, 2005). Hence, the Melamchi project was designed and being implemented in Nepal almost for a decade.

The project was started in 2001 with expected completion in 2006. Because of slow progress, the due date was extended to 2007 and recently, the project has set a new target of 2013. Among others, Asian Development Bank (ADB) is the main donor of Melamchi project. The project has three components with their sub-components: a) Physical Infrastructure Development (Melamchi diversion scheme, water treatment plant, bulk distribution system, and improvement and expansion of water distribution system); b) Social and Environment Program (Environment management plan, social upliftment program, and resettlement and compensation package); and c) Institutional Reforms (establishment of drinking water management board, drinking water service operator and drinking water rate commission instituted by the private operators). Although detail description of project components is not the scope of this paper some salient features of the project are presented in Table 1.

Table 1: Salient features of Melamchi Water Supply Project

SN	Features	Unit	Description
1	Project name		Melamchi Water Transfer Project
2	Executing agency		Government of Nepal, Ministry of Physical Planning and Works, Melamchi Water Supply Development Board (MWDB)
3	Project duration	Years	Originally 6 (July 2001 to July 2006), now extended to 2013
4	Estimated cost	US\$	464 millions (original plan) but adjusted to 320 millions in 2008
5	IRR	%	13.5
6	Donors	No. 9	Asian Development Bank, US\$ 120 millions (adjusted to US\$ 137 millions)

			World Bank, US\$ 80 millions Other bilateral donors, US\$120 millions Government of Nepal, US\$ 118 millions (adjusted to US\$ 90.6 millions)
7	Source of water	No. 3	Stage I: Melamchi River (perennial) in <i>Helambu</i> VDC of Sindhupalchok district located at about 40 km northeast of Kathmandu Stage II and III: Yangri and Larke (tributaries of Indrawati River)
8	Major components	No. 3	a. Physical Infrastructure Development: Melamchi Diversion Scheme (MDS) includes access road and tunnel adit, a diversion weir dam 5–7 m high, control system and sediment exclusion and 26.5 km long tunnel running from Ribarma to Mahankal, Sundarijal VDC in Kathmandu. Water Treatment Plant (WTP): Conventional gravity water treatment plant will treat the water for WHO drinking water standard through the process of chemical flocculation, sedimentation, filtration and chlorination. The plant will be located at Sundarijal VDC, on the outskirts of the Kathmandu city. Bulk Distribution System (BDS): Treated water will be conveyed by a network of peripheral distribution system of ductile iron pipes each with a diameter of 300–1,400 mm to the reservoirs built at high locations. Distribution Network Improvement (DNI): Distribution to the consumers by rehabilitated and extended network ensuring quality and equitable distribution, and reduction of leakage and wastage b. Social and Environment Program: This includes the mitigation measures for the potential negative impacts on social and environmental sectors in Melamchi area. The sub-components under this include Environmental Management Plan, Social Upliftment Program, and Resettlement and Compensation Package. c. Institutional Reforms: This is the major policy component of the project comprising mainly the privatization of drinking water sector in Kathmandu. This includes establishment of Drinking Water Management Board, Drinking Water Service Operator, and Drinking Water Rate Commission instituted by the private operators.
9.	Changes made in early 2008		The project has been restructured with agreement between the government and the ADB and extended the loan till 2013. Under the restructuring, the project is divided into two sub-projects; 1) Melamchi Valley Drinking Water Sub-Project, and 2) Kathmandu Valley Drinking Water Sub-Project. Out of the total of US\$ 317 million cost estimate, US\$ 249M was allocated for the first project and US\$ 68M dollar for second project, with ADB providing 43 percent of the project cost as loan. Among other partners, JEBICO, OPEC and Nordic Development Fund will respectively provide 15 percent, 4.4 percent and 3.3 percent of the total cost as loans. JICA will provide 5.7 per cent of the project cost as grant. Nepal government will bear 28.6 percent of the project cost.

Sources: Bhattarai et al. 2002; MWDB, 2002; *The Rising Nepal*, 2008a; 2008b; *Spotlight*, 2008

The institutional reform and undergoing project activities (including changes over time) are highlighted in the paper with sufficient attention to the underlying causes of hindering

project implementation. This is particularly important because of their relevance for discussion in policy, discourses and local perception. Ensuring access of drinking water to poor may not only be the matter of getting enough water but also how the intervention, regulation and costing mechanisms would address in line with the agency, accessibility and affordability of stakeholders involved in drinking water supply sector, which are the key public policy and governance issues in intersectoral water transfer decisions (Mitchell, 2000).

As per the current status of Melamchi project, the total estimated cost has recently been revised and reduced to about US\$ 320 million, which is about 144 million reduction from its original estimation of US\$ 464 million made in 2000. The ADB, the key donor of the project, is providing a loan of \$137 million for the project (The Rising Nepal, 2008a). In early 2008, the project was restructured with agreement between the government and the ADB and extended the loan till 2013. Under the restructuring, the project is divided into two subprojects in the respective areas; 1) Melamchi Valley Drinking Water Subproject (in donor area), and 2) Kathmandu Valley Drinking Water Subproject (recipient area).

The subproject 1 is categorized into three specific programs. The first program of infrastructure development (US\$ 195 million) is divided into the construction of tunnel and headwork (US\$ 96 million), construction of access road (US\$ 38 million) and US\$ 61 million is allocated for the development of water purification centre. The second program, namely social and environmental impact mitigation (US\$ 6.02 million) is meant to spend for the project-affected people in 14 VDCs of Sindhupalchowk district for their social improvement. Finally, the third program will have a budget of US\$ 45.7 million for the project implementation support. Likewise, under the subproject 2, US\$ 48.5 million will be spent on infrastructure development, US\$ 1.75 million on social and environmental support and US\$ 6.35 million on project implementation. Three institutions have been formed to improve the distribution system in the Kathmandu Valley such as Kathmandu Valley Drinking Water Management Board (for managing drinking water in the valley); Kathmandu Valley Drinking Water Limited (KUKL) and a commission for determining the water tariff (The Rising Nepal, 2008b).

This paper is structured into five sections. After this introduction and background information the next section is allocated for the objectives and scope of this paper. In the third section, we provide the methodology we followed to come up with this paper and fourth section provides the findings of our study. Finally, in conclusion and implications as section five, we summarize our work and describe some policy implications of our findings and discussions we have made in previous sections.

2. Objectives and Scope:

The main purpose of the study is to review and summarize some of the selected policy issues in relation to Melamchi water transfer project, and to assess the interplay between policy discourses and local perceptions. The specific objectives are:

- a. to summarize the local stakeholder perceptions on changing water uses and institutional arrangements that affects on their behavior;

- b. to describe and assess the key policy discourses involved in institutional reform in water supply system and analyze the consumers' preferences;
- c. to analyze the inter-actor dynamics and interfaces between and among different stakeholders involved in the process of project formulation and implementation; and
- d. to provide policy feedbacks to the project implementation process, in general.

The scope of this paper is mainly to review and synthesize the selected public policy issues on the management of city drinking water supply in Nepal. The assessment and analytical aspect of the paper is to review in most instances the media publications in relation to Melamchi project as it has remained as a 'hot-cake' in the political arena of Nepal for so many years. Taking Melamchi project as an example, the paper is expected to contribute to improved knowledgebase on public policy and institutional issues concerned to intersectoral water reallocation in developing country situation where such policies are under discussion.

3. Methodology:

The study team extensively reviewed different published and unpublished reports of Melamchi Water supply Development Board (MWDB), documents of Melamchi project, media publications (newspapers as well as websites), and public notices and circulars. The review was supplemented with consultation meetings with project related people, staffs of Nepal Water Supply Corporation (NWSC), and representatives from different pressure groups such as Water and Energy Users' Federation – Nepal (WAFED), Melamchi Local Concern Group, to name a few. In addition, a survey was conducted with 247 households covering five municipalities in Kathmandu valley in order to get the consumers' perception. Four enumerators interviewed randomly selected households from the selected wards and municipalities with the help of interview schedule.

4. Results and Discussion:

As per the project funding condition, the government has to privatize city water supply system (already in the process), which is the most contended and debated issue in the political arena of Nepal. We present the views and discourses of four groups of actors in general: the consumers, the pressure groups, the donors, and the government with fully aware of the fact that these groups do not have homogenous characteristics. In other words, within the same group of actors the divergence in perspective is ostensible. This is particularly relevant in the case of consumers who showed an ambivalent view on the privatization of drinking water services in Kathmandu valley. Following few sections describe the perceptions of different actors involved in the process towards privatization. In doing this, we will show how the government has to tackle with in a situation of the multiplicity of interests.

a. 'No privatization': pressure groups-consumers' coalition

Slightly over half of sample households are either not in favor of privatization or they can not make a judgment. Those who oppose privatization think that water is one of the basic services supposed to be provided by the government. In their perception, drinking water can not be a tradable good and if it is privatized the priority of private sector would be profit maximization rather than to provide services to the consumers. It is therefore, government should be responsible to provide such basic services to its citizen. This construct coincides with the perspective of those pressure groups who are fighting against privatization. Particularly the poor who can not afford a higher price seem to be on the target of such pressure groups and they easily get support of those poor consumers to improvise their voice more strongly.

WAFED, an actively working pressure group in Kathmandu, issued a press-release in 8 February 2008 saying, “WAFED strongly opposes the most recent instance of the Asian Development Bank's (ADB) duplicity in the continuing saga of forcing Nepal into its trap of privatizing Kathmandu Valley water supply and its management, an objective it has been pursuing single-mindedly for the last many years [...] WAFED calls on all Nepali campaign groups, both active in Melamchi and Kathmandu valleys, as well as international friends and networks to continue with their struggle against the privatization of Kathmandu Valley water supply and put pressure on the ADB to respect the alternative proposals from the government of Nepal instead of adhering dogmatically to their anti-public lending conditionalities, particularly those pertaining to private sector management” (WAFED, 2008). This kind of lobbying and advocacy are not only in Nepal but is a global discourse of activists who take the issue of human rights and lobby for basic services, environment issues, and the like.

Other countries also have similar kinds of movement (BBC News, 2003; Shiva, 2005; Branch, 1994; Olivera and Olivera, 2006; Amenga-Etego, 2006; Mitchell, 2000). In Bolivia, for example, the activists formed a coalition comprised of peasants, environmental groups, professionals and urban workers such as manufacturing laborers and teachers to fight against, in their own words, a giant robbery – privatization of water, with the backing of the World Bank (Olivera and Olivera, 2006). Branch (1994) argues that in Britain, the privatization of water has turned into a consumers’ nightmare. In the past five years since Margaret Thatcher privatized British Water, the cost to consumers has increased by almost 50 percent and previous year went up 12 percent, more than three times than the rate of inflation. Shiva (2005) articulates that the current push to privatize water is a recipe for destroying the scarce water resources and for excluding the poor from their water share.

In other words, the pressure groups are continuously raising ‘red flags’ against privatization particularly to the introduction of multinationals and a consequent price hike. They have been lobbying against privatization. As a result, the decision on management contract with a UK based company Severn Trent Water International (STWI) had to turn down, in 2007, because of local pressure. In a way, the local pressure encouraged government to have a strong stake in decision-making. Hence, the then Minister for Housing and Physical Planning changed the previous decision made by the (previous) government, to recruit STWI for management contract because STWI was the single

bidder, which was against the norm of competitive bidding. The negotiation and interaction among donors, project officials, the government and the pressure groups is continue and the Melamchi issue is becoming a contended issue in the Nepalese political sphere.

b. 'In any case we are paying': why not privatization?

In another front, nearly half of survey respondents in Kathmandu Valley supported privatization (Figure 1). Because of acute shortage of drinking water supplied by NWSC, the consumers have to meet their water demand through other sources such as water jar, private vendors (water tankers), tube-wells (heavy electricity consumption also makes it expensive), and stone-spouts etc. The traditional public stone-spouts are being dried out day-by-day so they can not become reliable sources anymore. It is not an easy task to arrange water from these alternative sources. It means even though NWSC bill is less (because of less quantity of supply) the consumers have been investing a huge amount of time, money and labor in order to manage drinking water.

In other words, if regular, enough and reliable supply of water is guaranteed the consumers are not against privatization of water supply management and consequent increase in water bills because they are already paying high cost for water in their current arrangement (Khatri-Chhetri et al, 2007). Casey et al. (2006) demonstrate a higher willingness to pay if the current water bills are higher, in Brazil. The result also agrees with a study carried out by Whittington et al (2002) in Kathmandu, which showed a higher support of consumers to privatization if the water problem in the valley would be solved. They illustrate, “there is strong support among both poor and non-poor households for a plan that would result in improved water services and higher water tariffs. We estimate that approximately 70 percent of the population would be willing to pay a fivefold increase in the current average water bill for improved water services provided by a private operator (Whittington et al, 2002: 532).

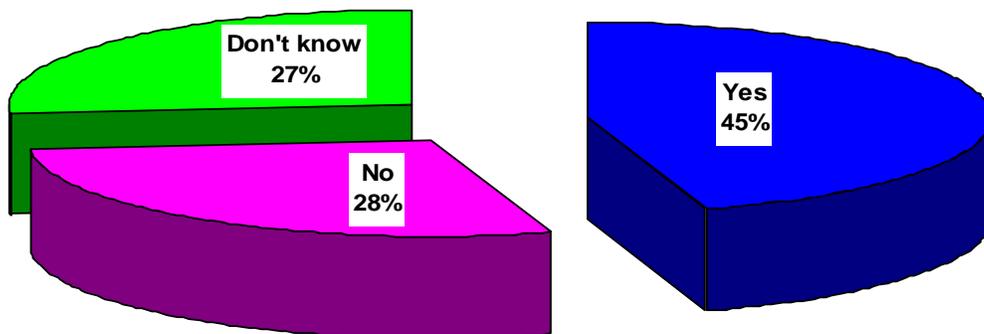


Figure 1: Number of households in favor of privatization.

c. Privatization: a precondition for funding

Donor's discourse in funding projects is driven by both sustainability of schemes and a secured investment. Therefore they talk about cost recovery, sustainable and efficient management, and high internal rate of return. Being ADB the main donor of Melamchi project, its policy plays a crucial role in privatization. In January 2001, ADB approved a new water policy that views water as a socially vital economic good. The major focus of the water policy are on water sector reforms: foster integrated water resources management (IWRM); improve and delivery of water services through autonomous and accountable services providers, private sector provider etc.; and promote regional cooperation for the mutually beneficial use of shared users (ADB, 2001). The policy promotes full cost recovery and tradable water rights and covers water utilities, other water infrastructure (e.g. irrigation) and river basin management. In order to avail water sector loans, governments must adopt and implement a national water action agenda, including changes in legislation and policies that subscribes to the Bank's water policy.

Hence, it is obligatory for the government to privatize water sector management in Kathmandu Valley in order to meet the criteria of ADB to get funding for Melamchi project. It has also been clear from the statement made by the Nepal Resident Mission of ADB, "As a reliable and trusted development partner of Nepal, ADB has remained steadfast in its commitment to the MWSP, which would have brought significant development benefits to the people while providing a long-term solution to the water scarcity problems in Kathmandu Valley" (The Rising Nepal, 2007). The statement further insists, "ADB has also made strenuous efforts and shown maximum flexibility to sustain the Project at several critical times when it has been at risk over the past six years. However, the inability of the Government to authorize the signing of the duly negotiated management contract at this very late stage creates considerable uncertainty on the way forward" (ibid). It shows the donor's influence in decision-making while government has to follow in one way or another in order to continue the project funding.

d. The government's position: bottleneck on implementation

In this game, especially the governments of the poor countries like Nepal, where political situation is also not stable, have very little stake in decision-making. It seems to be a big dilemma to the government to settle the issue and design such an institutional mechanism that would be acceptable to as many actors as possible, even if not all. On one hand, government has to depend on external funding for such mega projects; means, it has to follow the donors policies. On the other hand, the government has to be accountable to its citizens. The citizens are not only the consumers but also the activists who have a bigger voice to protest against government. It means the government decision on privatization is influenced not only by donors but also the local actors such as consumers, pressure groups, with variety of interests.

In this case, the donors put condition of privatization to fund the project according to their policy. In a statement made by the Nepal Resident Mission to ADB, it said the bank was hoping that the government "remains serious about finding a long-term and susta-

inable solution to Kathmandu's water supply problems” (The Rising Nepal, 2007). This is a straight pressure for government to the privatization. On contrary, local actors (especially the pressure groups) also exert pressure not to privatize this basic service. These both donor and pressure groups are heterogeneous and they may have different vested interests (nobody knows), so their forms of pressure or influence in decision-making are also different. As we saw above that the donor hits with its policies and conditions while the local actors exert pressure through advocacy, lobbying, and protests.

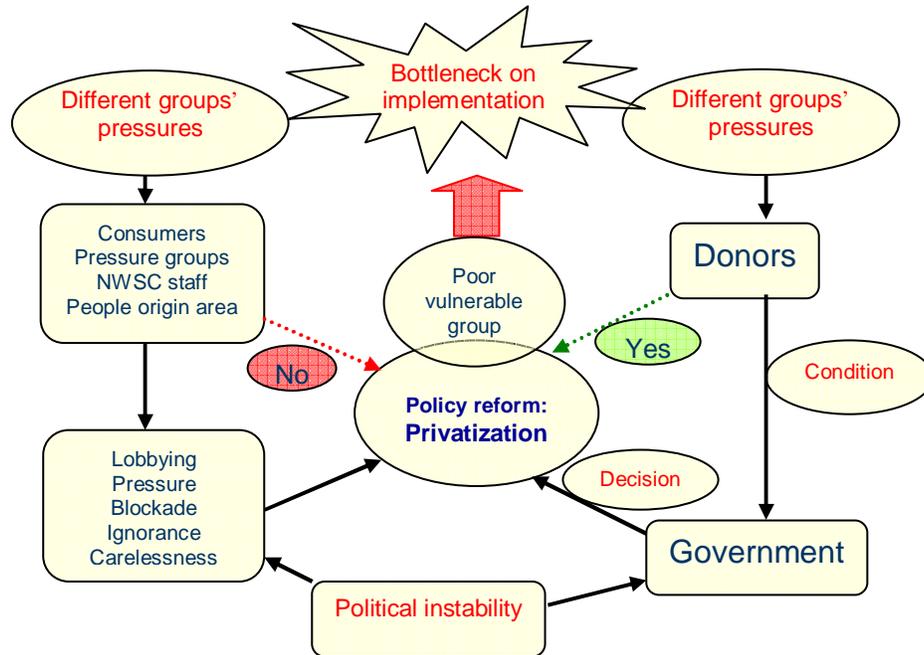


Figure 2: Key issues, actors and processes involved in project implementation.

However, the government has to make decision in anyway, which is a big challenge to devise such an inclusive policy that addresses not only the interests of donors and the pressure groups but also the poor and vulnerable groups who may not have a bigger voice. There is, therefore, always some sort of bottleneck prevailed in the course of project implementation. Figure 2 summarizes the government challenge and possible interfaces in the decision-making process on privatization.

In the course of implementation, the project activities have been interrupted so many times. For instance, in 2006-2007, the project activities got almost stopped delay largely due to weak government institutional set up in handling the international contract and needed to renegotiate with the donors and other project activities to be resumed again. In deed, there was a big coverage of news about Melamchi project regarding the debate between government and the donors particularly the ADB (for example: Nepali times, 2007a; 2007b; The Rising Nepal, 2007; 2008a; 2008b). Finally, they came to agree on renegotiation with revision of project budget and reorganization of project activities that are already mentioned above (Spotlight, 2008).

5. Conclusion and Implications:

It is obvious that the key public policy issue of Melamchi project is privatization. This has been remained to be the most contended issues especially between the donors and the local pressure groups, which is putting government under pressure on how to handle the situation ingeniously. The government can neither avoid the donors' policy nor can it be unaccountable to its citizens. In other words, the government needs both donors' commitment as well as public support. Public support needs to be strengthened by increasing transparency in management and wide stakeholder participations. This critical issue needs to be addressed in more pragmatic way especially to protect from the vulnerability of poor people in Kathmandu valley. The potential price hike and possible exclusion of slum dwellers and other urban poor from basic human rights needs special arrangement for them.

Recently, the project has been redesigned and repackaged and also the project cost has been sliced down by over 32 percent than originally planned as US\$464 million in 2000. The sectoral institutional capacity to implement such scale of project also needs to be assessed while designing such large-scale project, which is another shortcoming in this case of large-scale water transfer project now. Hence, the findings are expected to contribute to global debates on the implementation and management of intersectoral water transfer for improved and long-term city water supply especially in the developing country situation where sectoral government apparatuses are not strong enough to handle such mega-projects.

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