# Hydro-Diplomacy and Hydro-Investments: Linkages, Problems and Prospects in Nepal\*

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## **Forensic Diplomacy**

It was a sad day for Nepali diplomacy in 1993/94. Under pressure from NGOs to clarify what China planned to withdraw from the Arun river in its territory for the Pengchoe irrigation scheme (a consumptive use that would reduce the dry season spring flow to the proposed Arun-3 project in Nepal and hence its electricity generation), Nepal government, instead of dealing directly with its great Northern neighbor on so fundamental a matter, delegated the responsibility to the World Bank. One may say this is to be expected in an aid-addicted country where donors are in the driving seat – and in the case of Arun-3, the Nepal government, instead of assuming leadership, had already designated the World Bank as the 'lead agency' – but that then begs the question on the role and responsibility of Nepali diplomats and the country's missions abroad.

Two years later, in 1996, the Mahakali Treaty was first sprung as a jack-in-the-box surprise to smother the Tanakpur past and later rammed through parliament with strange, restraining strictures that unilaterally re-defined it. India has not accepted them, hence they do not form part of the treaty; but then the Nepali political parties cannot run away from them because they have unanimously pledged themselves to the strictures in front of the Nepali people. Hence Mahakali becomes a conditionally ratified treaty, which really is no ratification, thus leaving the treaty in a moral limbo. However, today, when the fears of civil society and opposing political parties have proved valid and the ambitious provisions written into the treaty, primarily its study to be completed in six months and the over 300m high dam itself built in eight years, have lapsed into ignominy, Nepal's foreign ministry too has to shoulder the blame: it was after all signed, not by the minister of water resources but the country's foreign minister.

And, lest it be forgotten, the veto power in India on water issues concerning neighbours lies not with water agencies but its ministry of external affairs. But the constitutional provisions in India mean that water and electricity are state, not Union subjects; and newly created states such as Uttaranchal are not too happy with the idea of drowning their hill villages, as will happen with Pancheshwar, so that farms in the plains get free storage water. Nepali water diplomacy, therefore, has not only plenty of soul-searching to do as aspirations for enhanced economic diplomacy begins to be talked about, but must also engage in quiet diplomacy of a forensic nature that explores hidden agendas and conflict situations abroad so that decision-makers in Nepal could be forewarned of the lurking dangers that could derail the best of plans and agreements.

Diplomacy has been defined as the management of international relations by persuasion, unlike coercion which militaries engage in after diplomatic efforts have broken down. While subtle hints of possible coercive measures are within the diplomatic toolkits of

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strong powers, it is against the ethos of good diplomacy especially if it leaves in its wake a sense of resentment capable of bitter harvests years down the road in the most unexpected of ways. With water resources development, either national or collaborative international, being a very long term enterprise that, if initiated by one government or a parliament, will see fulfillment only a decade or two later after the country has seen many governments or even parliaments, unpleasant surprises are the norm rather than exceptions. Diplomacy also should not be confused with foreign policy, because the latter is something publicly stated after a broad domestic political consensus, while the former consists of activities conducted away from public glare. Diplomacy is the chief instrument through which foreign policy goals, its primary strategies and broad tactics are implemented. Water diplomacy therefore has to first understand the subtleties of policy in general, foreign policy in particular and water policy more specifically before practicing its professional art.

Policy, to use a definition attributed to Henry Kissinger, is "the formula for the use of power"; and with modernization and global trade, the nature of power has shifted the world over, away from sovereign lords closer towards the sovereign masses. Ever since Cardinal Richelieu set up the modern world's first foreign ministry in Paris in 1626, "national interests" have come to dominate that formula defining relations between countries which use various power resources to further their interests (Gyawali, 2007 and 2009). Power can be coercive (tamasik, as exercised by the army and the state through procedures), persuasive (rajasik, as exercised by the market through blandishments), but also moral (satwik, as exercised by civic movements through critique). Before a government can formulate and exercise its policy to protect its "national interests", it needs to be clear what kind of power exercised by which actor is it confronting and proceed to act accordingly. Without such a deconstruction, it would be wrong to think of the opposition to the Mahakali treaty as a Nepal versus India issue. Nepali and Indian hydrocrats are practically united in their agreement to build the Pancheshwar high dam and hope the proceduralism of MoUs and bilateral agreements would suffice. However, Indian and Nepali activist communities are united in their opposition to this mega-project for all the unaddressed inequities inherent therein.

Thus what constitutes "national interests" has become the subject of lively debate that can, in this day and age, be resolved only through a vibrant democratic process wherein plural voices are not shut out but heard with sympathy. In Nepal's recent past, it was the Sadr Munshikhana which handled the regime's affairs with Mughlan to the south and Bhot to the north, but it was essentially concerned with protecting the interests of the Rana sovereigns. "National interest" was practically synonymous with the interests of the ruling family, which was not surprising given the virtually non-existent industry or weak commerce, and hence no social carriers of any weight for these interests. Symptomatic of this nadir was when, during the Rana shogunate, the Nepali consul general in Calcutta was referred to among the bhardars as "Buying Agency Ko Haakim", signifying the total subordination of the Munshikhana to the domestic needs of Rana palaces. Pharping (1911AD) and Sundarijal (1934AD) hydropower plants supplying electricity exclusively to the palaces of Rana rulers and homes of those in their service was the accepted norm.

In today's modern Nepal, there are other claimants defining what is the national interest, including the country's industrial and commercial sector as well as the electricity-less masses in the rural hinterlands whose interests are championed by the activist communities. And, with the freedom provided by globalized communications, these actors do not confine their concerns or contacts only within the state's international boundaries and hence they cannot be ignored. Successful modern international treaties, such as the Montreal Protocol limiting the use of ozone depleting substances, have been those that have taken these plural worldviews into account (Benedick, 1991). However, the legacy of loyalty and patronage (as opposed to efficiency and innovativeness) has continued within the state structure, even with the democratic changes of various hues since 1951, although small,

very small, improvements have been perceptible every once in a while. An example worth recalling is the then foreign secretary Jharendra Narayan Singh practically admonishing King Mahendra in 1966 for not appointing Nepali ambassadors for their skills but gifting the job as a reward for their loyalty (baksheesh, was the word used. See Gyawali, S.P. (2055BS)). Plus ca change plus c'est la meme chose!

Nepal suffers from a historical legacy of another kind that it has done little in recent decades to rectify. Despite the fact that Nepal has traditional water management structures - whether in irrigation or urban domestic water supply - that are centuries old, the official water management structures, i.e. various government departments, have been created as a reaction to riparian or development agency push for their brand of water development in only the last half century. Not only has the official water establishment been incapable of linking with traditional irrigation (i.e. the farmer-managed irrigation systems) or drinking water practices (e.g. the uniquely Nepall institutions of dhungey dharos) and thus building on past successes, but it has also been unable to address water management in its entire complexity, especially as they relate to current economic, social and environmental concerns (see Gyawali and Dixit, 1999). Given the context of their birth, these apex agencies suffer from an "implementation syndrome" dominated by construction engineering rather than strategic planning. The result has been that the economic, political, environmental and social aspects of water development as well as its sustainable management and international strategic aspects rarely figure in the process of defining the "national interest".

A recent example suffices to illustrate the point: when the Kosi and Gandak treaties were signed in the 1950s, Nepal did not have a firmly established water bureaucracy, as a result of which the idea of having a Nepali "liaison officer" was built into the treaties to facilitate Indian construction activities in Nepali territory. Almost a half century later, Nepal has well-staffed departments both for irrigation as well as flood-control. However, the ineffective (and thus ultimately detrimental to national interests) system of having politically appointed "liaison officers" continues (who incidentally have to receive their salaries from Patna, pay that has been withheld in the past when Nepali liaison officers did not meekly comply). If would have been better if this function was assigned to a first class officer of the Nepal government in the persona of the eastern or western regional directorate chief of irrigation or flood control.

Essentially, the argument being made here from these examples is that the foreign policy of a country is only as strong as the domestic support it enjoys through internal political consensus as well as in-house institutional muscle. A Nepali diplomat cannot conduct economic diplomacy more effectively than the national institutions (s)he represents can deliver on national interests or international commitments. To illustrate this with another Nepali example, there is a vibrant debate within Nepal among contending views regarding water resources development: will the export of hydropower make the country rich (and is thus in its "national interest" to follow an export-oriented path), or is hydropower an input to national production which will make national commerce and industry more competitive, (thus developing cheap hydropower not for export but for domestic use)? Laos followed the first path, but is now having second thoughts (Gyawali, 2006): Norway followed the second path and used water resources development for what she termed "nation building", as did the United States in the immediate years following the Great Depression for a similar national imperative.

No consensus has as yet evolved in the Nepali political sphere regarding the virtues and pitfalls of these two divergent paths, and the debate is quite fierce among the protagonists, primarily the business-led party politicians for the export-led paradigm and the social and environmental activist community for the domestic growth paradigm. What this means is that Nepali diplomacy cannot take a strong position either way in its international encounters on the subject until the domestic debate comes to a natural closure

and leads to a forging of common foreign policy on this issue. In that sense, water diplomacy is something that will have to follow domestic political consensus: it cannot precede it, nor can it contribute to the domestic consensus building, except perhaps as a means of information flow regarding international experiences into Nepal and from here to the outer world of potential international investors as honest exposition of Nepali legal as well as socio-political status. And, it will be argued below, Article 126 (of the 1990 constitution)/156 (of the current interim constitution), if properly followed, is one of the best institutional means available to generate the national consensus alluded to above, as is the practically moribund arrangement of the Water and Energy Commission which has representations from almost half the concerned ministries of Nepal, including foreign ministry.

## Beyond Hydrodollars

One of the problems with water is that, unlike the fixed territoriality of land, it flows without respecting man-made boundaries, including academic disciplinary boundaries, making it difficult to administer not just internationally but also domestically. As a river crosses a boundary, it divides the land it flows over into an upper and a lower riparian. Much of water diplomacy has been focused on devising appropriate international regimes between sovereign nation states. Unfortunately, while the state is one important actor, it is hardly the only relevant political site in the world today for the development of norms of water governance. Markets and civic movements have emerged as co-equals with their own values and definitions of what the problems are and what the solutions should be. Diplomacy that is not sufficiently sensitive to these emerging realities is bound to fail in its mission.

Conca (2006) argues that international regime formation, which takes the nation state as the only socio-institutional unit of concern, is only one institutional vehicle currently on the global scene, and even then not the most successful one, where the future of water governance is being forged. The others vehicles are transnational water marketization initiatives led by multinational companies and supported by multilateral aid agencies; the very effective transnational egalitarian protests against large dams, globalization, Third World debt etc; and finally international networks of water professionals with a presence in all these sites but coming together on their own to develop a consensus about good water management through such programs as IWRM (integrated water resources management).

While the presence of the Nepali state agencies in the regime formation site (e.g. the United Nation's Convention on the Law of the Non-Navigable Uses of International Water Courses, 1997) has been weak, it is almost non-existent in the other three non-conventional ones described above, where many of the non-state actors play an increasingly assertive role. In the case of Nepal and her water resources development, these actors are the investors and financiers of water technology as well as the international brotherhood of protestors and critics. The international bankers control the capital and hence the technology linked to it: without their willing cooperation, the larger grandiose water schemes that are constantly dreamed of cannot be contemplated based only on accumulated Nepali or Indian capital. The critics cannot be ignored either because no international banker will lend money for a dam project, already an endangered enterprise, if there are ground to believe that it is plagued with social and environmental problems. In the past, activists have successfully led effectively painful boycott of products as well as disinvestments from companies and banks engaged in un-green or anti-social business; and, despite the talks of bravado by Third World hydrocrats, corporate boardrooms in the financial capitals around the world are extremely sensitive to this new form of moral pressure.

The first wake-up call regarding these new global governance modalities for the Nepali establishment was during the campaign against Arun-3, the 201 MW project on the eponymous river that was slated for construction at an initial estimate of \$5300 per kW. That price, together with the conditionalities associated with it, was considered outrageously unfair by activists who cobbled up an international coalition of protest. They were successful enough to force the World Bank and its bevy of bi- and multilateral donors to back out of it in August 1995. Today they have been vindicated by the fact that Nepali private entrepreneurs have succeeded in building the Piluwa Khola hydel project in the same Arun valley, still with no road, at only \$1400/kW; and overall the Nepali system has subsequently gained a slew of alternative projects that are providing the national grid a third more electricity than Arun-3 would have, and at half the cost and half the time (Gyawali, 2003)!

The second wake-up call was the Tanakpur/Mahakali episode that tied up the supreme court, the press and the parliament for the first half of the 1990s (details in Gyawali and Dixit 2000). The Tanakpur fiasco was subsumed under a much bigger Mahakali Treaty whose ambitions included building at Pancheswar possibly the highest dam of its type in this part of the world to generate over 6000 MW of power. The detailed engineering design was to have been completed in six months, financing arranged in two years, and the project itself completed in eight years. The treaty was ratified by over two-thirds of the parliament in September 1996 despite fierce opposition by activists and nationalist politicians: today, eleven years further on, far from seeing the completion of Pancheswar, we are yet to see even the completion of the first step, the detailed project report. The primary reason lies with the myopia on the side of the Nepali establishment that, in its bedazzlement with earning hydrodollars from electricity export, failed to address crucial concerns of water rights, common border, socio-environmental issues or that of electricity pricing. Voices were caution on these issues were drowned out by developmental hype; but they are coming back to haunt this treaty, which now needs to be re-negotiated as its tenyear mandate has run out.

These wake-up calls have not been heeded by the state's hydrocracies or the politicians entrusted to provide them guidance. The institutional mistakes of Arun-3, which lay in the FIDC-type contracts (as opposed to fixed-price contracts) which forces the client (Nepal government) to surrender all powers to the consultants and accord them privileged position allowing for open-ended contract variations, were repeated in the ADB-led 144 MW Kali Gandaki as well as in the German-led 69 MW Middle Marsyangdi. The errors made in the agreements regarding electricity pricing, fairness in international contracts, equity over water rights and valuation of regulated water have been repeated in the case of the 750 MW West Seti. They have returned to haunt the water establishment some sixteen years after the initial decision was made in 1994 to develop West Setl as an exclusively hydroelectricity export project: social and environmental activists have moved the Supreme Court seeking redresses on these issues (see Raajdhani, 2007); and despite the court's illogical decision that electricity is not a resource (thus not requiring parliamentary ratification), the appeal against this technically unsound decision continues. Indeed, when Nepal is paying Khimti and Bhote Kosi more than six cents per unit for run-or-river electricity; when the cost of undelivered power to Nepali industries (i.e. load-shedding) is sixteen cents; shops are running generators at over nineteen cents; and India itself proposes selling electricity to Nepal during its hour of load-shedding need at six cents, it does seem unfair that Nepal should be asked to develop storage energy for export at half that amount!

What those who are swept away by the hydrodollar hype have failed to appreciate is that all major hydel projects contemplated along the Nepal Himalaya are of a storage type that have regulated water (i.e. monsoon waters that have been stored for release in the dry season) as a major product, at par or even more valuable than electricity. In the semi-arid but very fertile Ganga plains (semi-arid because it suffers from four months of floods and eight months of drought in the monsoon-dominated precipitation regime), electricity can be

had from a variety of sources even though they might be more expensive than cheaply developed hydro; but crops cannot be irrigated in bone-dry months of March to May with anything other than water. And this water for irrigation in Uttar Pradesh or Bihar can only come either from replenished groundwater (which needs electricity for pumping) or monsoon runoff that has been stored behind dams in the Nepali hills (what is called 'regulated flow').

A storage dam's regulated flow, i.e. controlled current that gives rivers below the dam much more water in the dry season than it would have and much less peak flow in the monsoon season, brings about several other major benefits besides irrigation. The first is flood control that saves billions downstream in terms of flood damage and insurance, and the others are improved navigation and fisheries, since the increase in flow would significantly increase river depth. Navigation, compared to irrigation, also has an important environmental benefit: unlike irrigation that draws away most of the water from the river course and uses it consumptively, navigation demands that there be flow in the river, which in turn is also conducive to supporting aquatic life. What is important to remember is that, if a dam is thought of as a factory, the one major investment in it gives at least five major output products: electricity, improved downstream environmental flow as well as regulated water for irrigation, flood control and navigation. The beneficiaries of all these outputs must pay their share of the investments and cannot be expected to become free-riders.

Even though Nepal's primary interest is in hydroelectricity, it is in her interest to make sure that the cost of a dam is also paid for by the other sector beneficiaries, especially irrigation where the gains from increased dry season flow are enormous. As an example, it must be borne in mind that the Sacramento Delta near the San Francisco Bay has provided more wealth from agriculture by orders of magnitude than all the gold found in California since the Gold Rush of 1849. By ensuring that part of the cost of the dam is paid by agriculture as well as flood-proofed transport infrastructure and municipalities, the production cost of electricity can be brought down considerably. The difference then between what the market is willing to pay for electricity and the cost it takes to produce it would be much larger, and so would Nepal's overall income from selling electricity. Allowing downstream irrigation and flood protection free-rider benefits would be tantamount to making them so by Nepal importing their floods, and permanently drowning out Nepali villages, just so that the downstream towns and villages can have these benefits. It would also reduce the benefits Nepal could get from selling electricity to the market, if all the costs of production are loaded on electricity.

On this count, the following important historical quote would be of interest to future Nepali hydro-diplomats. While much has changed in the sixty-five years that this statement was made, the essence of the water resource development ethos it enshrines remains as valid today as it was then; and the question of a proper assessment of downstream benefits remains even more vexing technically and diplomatically.

I found the short note prepared in the External Affairs Dept. on Nepal and Post-War Development very interesting. The destinies of Nepal and India are very closely linked and we should do everything possible to foster good relations between the two countries, especially as we owe her a big debt on account of the Gurkha battalions. Existing differences in opinion on Customs and Excise matters should not be allowed to hold up help to Nepal to advance herself.

The suggestion that this help should take the form of a storage dam and hydro-electric power station is, I think, an admirable one. This would not only give Nepal a basis on which she could build local industries but would also materially benefit the Eastern districts of the United Provinces and Bihar,

which could draw on Nepal for power. It would also focus attention in Nepal to water development and storage and this might eventually lead to the possibility of flood control in the lower Ganges Valley. Without some check on such Nepalese rivers as the Gogra, Rapti and Gandak, flooding in East UP and Bihar cannot be kept under control. Ibbotson, one of my Advisors, who has an intimate knowledge of the Himalayas and its rivers, was so struck by this suggestion, that he considered Nepal should be given a free gift of a storage dam and power house. He was of the opinion that though ostensibly this might be given as a reward for war work, in effect it would ultimately prove to be of material benefit to the Provinces in the center of North India. 1

Another myth regarding electricity that has dominated the public mind in Nepal is that water agreements have to be done in hot haste otherwise Bhutan will capture the Indian power market, or that India will develop nuclear power and will have no need for Nepali hydropower. It must be realized that Bhutan has no Tarai to irrigate, nor is the adjacent riparian territory in India (water-rich Assam's right bank of the Brahmaputra) particularly thirsty for water. Nepal by contrast sits upstream of large swathes of UP and Bihar that are not only water scarce but happens to be the electoral constituencies of most of independent India's prime ministers and almost half of the Indian parliament (see Gyawali and Dixit 2000 as well as Gyawali 2001). India will need storage dams in Nepal for water alone, even if there were no electricity involved, and Nepali hydroelectricity can only be a very valuable by-product. How valuable is it, is what the vigorous debate currently happens to be concentrated on between state agencies and the socio-environmental activists. Electricity from Nepali storage dams is more valuable than normal electricity because it is what is called "peak power", i.e. power that is needed at the time of maximum demand for grid stabilization. The more thermal and nuclear power in the north Indian grid, the bigger the need for flexible peaking hydropower to balance the system and prevent its blackout. Furthermore, as the climate change debate heats up globally, there is going to be a high premium on Nepali hydropower as a clean source of energy that can offset CO2 emissions. Hence Nepal's negotiating position need not be determined by any imperative of haste.

In all the negotiations of the past fifty years, India has not been keen to admit willingness to share the downstream economic benefits of irrigation and flood control from storage dam-building in the Nepal Himalaya, nor does it want to price hydropower at peaking rates. The fault for this, however, lies on the Nepali side for not putting these positions across in a convincing manner. It is, therefore to my mind, the main challenge before Nepali diplomacy to convince their Indian counterparts that it is in our mutual interests for India to recognize these substantive benefits and to propose sharing them equitably. For this to happen, strengthening diplomatic capacity in Nepal vis-à-vis water is the first prerequisite.

### Challenges Ahead

In a widely quoted remark, the UN Secretary-General Boutros Boutros-Ghali said that the next war would be fought over water. It is difficult to imagine that the UN head was being as facetious as the American humorist (Mark Twain who said, after a visit to the Wild West, "whisky is for drinking: water is for fighting over"), but we do know that many water experts discount water wars as a possibility. If wars will be fought, they will not be over water; but bad water relations may contribute to chronic bad blood between countries that

Demi-official letter from H.E. Sir Maurice Hallett, GCIE, KCSI, Governor, United Provinces, to Sir Olaf Caroe, KCIE, CSI, Secretary to the Government of India, E. A. Dept. dated 18 February 1945.

will then exacerbate other more vexing grievances, which in turn may trigger martial responses. There is something about water – and the need to ensure its sustainable harvest over many years and generations rather than any one-time mining – that requires for its harnessing a strong degree of mutual cooperation within and between countries over an extended period of time. It cannot be done in the same manner of surrounding a diamond mine or an oil well with a security cordon and extracting the resource.

This deep-seated difference between petroleum and water leads us to a few broad conclusions: water does bring bounty if properly harnessed but assuring hydrodollars from its exploitation is fundamentally a different enterprise from earning petrodollars; around water are plenty of disputed issues but they cannot be resolved by military means; and diplomacy is the proper manner in which water problems can be resolved but it requires indepth and interdisciplinary understanding of water issues. One major institutional resource Nepal currently enjoys is the provision in its constitution of Article 126 (1990)/156 (current interim) which requires a democratic debate on resource sharing issues of a "pervasive, serious and long-term" nature. One set of political players temporarily dominating the government apparatus or one discipline (civil engineering construction) alone would not be able to force the nation onto a long-term project with multiple consequences. The issues would have to be debated and analysed for its ramifications in a transparent and democratic manner.

Fortunately, for diplomatic capacity building in the area of water diplomacy, Nepal does not have to start from scratch. The rudimentary institutional framework exists and only needs re-vitalizing. It is there in form of the Water and Energy Commission, established with Canadian help in the early 1980s and strengthened in 1991 by making its executive member-secretary a full and independent government special class secretary. Its governing board, chaired by the minister of water resources, includes the permanent secretaries of all relevant ministries besides water resources, such as those of foreign affairs, finance, forests, supplies, law, etc., which deal with some aspect or the other of water and energy. It is the place where myriad concerns could find technical, political and administrative closure.

Unfortunately, it has rarely been used. Its opinion on major policy issues were rarely sought, and when sought, and the advice was contrary to the political bias of the day, it was ignored. In the late 1980s, when it cautioned against putting all electricity development eggs into one Arun-3 basket, it was ignored. In the mid-1990s its opinion was never formally sought on the Tanakpur-Mahakali debate, so much so that independent members who served two terms (four years) on its board retired without having been called to attend any meeting! Since then, official postings to WECS, its secretariat were seen by senior civil servants as punishments designed to put careers out on a shunting yard. Despite this sad history, especially of the last decade or so, there is little option but to revive it. Indeed, in order to address the many policy issues related to water and energy in this country, a body such as this commission, if it did not exist, would have to be created afresh.

In reforming and re-vitalizing WECS for the purposes of water diplomacy, several steps need to be taken. The first is to make sure that the chairmanship is not fixed in the persona of one minister (such as that of water or energy) but is rotated among the ministers of the different ministries whose secretaries are permanent members of the WEC board. It could be two-year terms that would allow the particular ministry to inject new ideas from its perspectives. A supplies ministry chairmanship might introduce policy ideas about replacing fossil fuel, while a forest ministry tenure could coincide with work on sustainable fuelwood harvesting. When it came turn for the foreign ministry, it might see significant improvement in Nepal's water diplomacy.

A precondition for such policy innovations to succeed is to ensure that senior officials from different ministries are deputed to WECS to work on various policy issues for fixed terms and with fixed responsibilities. As something that grew out of the ministry of water

resources, WECS is too engineering-heavy, although some engineers within it have developed some skills in non-technical analysis. The active presence of non-engineering experts from other ministries would allow WECS to more effectively address the social, environmental, economic as well as political issues associated with water and energy development. For the foreign ministry, it might be necessary to add one more requirement: any senior diplomatic posting to riparian countries should require at least a six to twelve month stint at WECS with a relevant water and energy policy study conducted there by that official. In the past, it has been sad that foreign ministry officials have sat in on water talks without an idea of what Nepall river basins are like and what issues are being discussed!

Successful water diplomacy requires understanding the subtle aspects that bedevil the other side. Since the mid-1970s, Nepal's water development has been aid-led rather than domestic enterprise led. This state of affairs has seen the slow ceding of the driver's seat to experts from aid agencies, with Nepali officials playing a mere liaison role. The fallout from this passivity has been that Nepal's officialdom had made little effort to understand what the Indian water debate is all about or what kind of institutions mediate in these debates and conflicts. The Age of Aid, which began with the end of the Second World War, has ended with the collapse of the Berlin Wall. While the past institutional momentum will mean that its activities will run for a while on inertia much as the Roman Empire's slow decline, its élan vital is spent. Water resources development in the coming years will see the rise of markets trying to meet domestic demands, heightened activism of socioenvironmentalists, as well as the concerns of neighbours with capital (China) and needs (India). The Bhutani model of India-tutelaged construction will not work for Nepal (Gyawali, 2001), primarily because she is about 50 times larger, and the core issue is not electricity but water for irrigation and flood control. Climate change and the capping of carbon emissions will put new pressures on the development of renewable.

These changing ground realities will require a serious re-thinking of Nepal's position in the world around us, as well as the country's own internal capacity to meet the emerging challenges. For example, while the need for foreign investments will grow, the need to exploit to the hilt national capital will be more pronounced. A recent study showed that nudging just 10% of the remittance inflow into the country away from unproductive conspicuous consumption in jewelry and urban land speculation to renewable energy such as hydropower, biogas and solar would be sufficient to move Nepal into a fully renewable future (see NCVST, 2009).

Such fundamental strategic re-thinking should be done pro-actively by Nepal's institutional leadership or else the country will become a victim of chance. A re-vitalized Sadr Munshikhana is one very important part of the re-thinking. For a start, the arrangement of a re-vitalized WECS spelled out above could be one effective manner of training our future diplomats to understand the hopes, aspirations and constraints of water and energy facing not only our neighbours but also ourselves. It will also help them explain to the neighbours the subtleties of water politics in Nepal, of what can be plausibly expected to be delivered and what might just remain pious dreams. In the end, by creating a cadre of diplomats fully aware of the concerns of both sides, it may be reasonable to hope that we will be led away from the impasse of the past to more practical, do-able joint efforts in harnessing our water and power in the 21st Century.

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