Development Committees), of Nepalese officials including Chief District Officers, the viewpoint of the Indian side, discussions on inundation in the Standing Committee meetings, and some cases media statements from the Indian Embassy in Kathmandu. In each instance, the author has proposed solutions for easing the inundation problems. He also suggests increased public awareness, a strong voice by government to put its viewpoint to the Indian side, threats to cancel existing treaties, and the prospect of not entering into any new agreement or treaties unless the inundation problems are solved. He further proposes complaining to Security Council of the United Nations, mediation by a neutral third party, and raising the issue at the International Court of Justice.

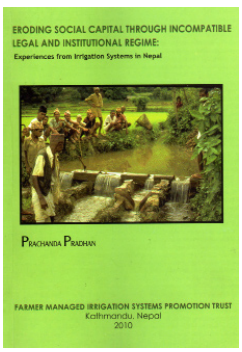
This is an exhaustive book on the subject of the suffering of Nepali people due to forceful construction of embankments and dams by India very near the international border and its detailed history.

"Eroding Social Capital through incompatible Legal and Institutional Regime: Experiences from Irrigation Systems in Nepal" by Dr. Prachanda Pradhan.

Reviewed by Ujjwal Pradhan

Farmer Managed Irrigation System Promotion Trust, Kathmandu, Nepal: 1st Edition 2010; 89 pp.; NRs 200

The book is about social capital: the shared knowledge, understanding, and pattern of interaction that a group of individuals brings to any productive activity and in this case irrigation and their organizations. The book deals with the various forms of social capital and collective action in farmer managed irrigation systems (FMIS) in Nepal, emphasizing them to be: trustworthiness, networks, and formal and informal rules and institutions. Bringing in the various perspectives on social capital by various scholars, Lin Ostrom included, Dr. Prachanda Pradhan explores how these concepts have played out in specific irrigation systems and the FMIS in general, and how the irrigation members and their organization have responded to external interventions and opportunities available. A specific case of Cherlung Irrigation system and the emergence of a community mill within is shown by Dr. Pradhan the dynamism and the internal social relations as well as their reproduction.



He presents the larger socio-politico and economic contexts within which the legal and institutional setups for natural resources management, including irrigation systems. He has taken a historical, contextual and political perspective in elucidating his emphasis on the social capital and the characteristics of FMIS, the nature of customary practices and norms and rules and at the same time how these have had to respond to the larger trends of government and external interventions. He provides a detailed analysis of the various policies and laws and their implications for irrigation management, the nature of external intervention especially through action research at the Indrawati Basin for irrigation system improvement, and the government agency intervention in the Second Sector Irrigation project. From his in-depth research he identifies the factors that have contributed to the erosion of social capital during the interventions: i) transparency of activities; ii) accountability; iii) irrigation investment approach; iv) corruption; v) political polarization; vi) change in demography and migration; and vii) inappropriate rules and regulations. Trust, confidence in one another, reciprocity, and flexibility within these organizations to face challenges through collective action and nurturing social capital: these are some of the take-home messages from this book.

Seldom do we find analysis that takes into account the changing contexts and the realpolitik, including corruption and local elitism, and a serious attempt not to romanticize community management but in ways that show the challenges and the opportunities they face, and understand what binds the members together and implications for equity in general.

With narratives and oral testimony from farmers themselves illustrating that" the irrigation channel up there {referring to irrigation system in Sindhupalchok} cannot stand in the fragile terrain only by iron rods and cement concrete, it is our organization which has kept the irrigation channel functioning," this book brings out the **sustainagility** aspects of these irrigation organizations: focusing on dynamism, the agility, and the process of creating and/or legitimating new types of livelihood and collective action systems to adapt and be resilient (without being static or reproducing the status quo) to a changing biophysical, social, economic, political environment without compromising the future. The photo on the cover speaks a lot, visually and symbolically, this dynamism and the rules within the socio-ecological setting.

This book should indeed be of interest to many stakeholders and scholars and researchers wanting to understand state-locality dynamics, role of the state, internal community social relations, the reasons for the tenacity and persistence of social capital and collective action, but also the fragility of social capital subjected to inappropriate legal and institutional eroding the very glue, the trust and relations that have bound people over certain meaningful activity. This book has relevance not only for irrigation and water management enthusiasts, but also for other forms of natural resources management, for those dealing with ideas and practices in the development, promoting enduring and responsive institutions, social change and empowerment.

Paper Presentation by Er. Gyanendra Lal Pradhan

Nepal has been declared Agriculture based country which is a mistake. No country has made rapid progress with agriculture. It makes just sustainable; but cannot make economically strong. Hydro sector is the one which can catapult the country into prosperity. Nepal needs to be called a country of Hydropower.

Even though Mr. Pradhan gets NRs. 15 million profit annually from the Khimti Hydropower Project. Mr. Pradhan is not happy with this project. The Govt. has done a wrong agreement with the Khimti Project. He is against it. Further, he stated that Chilime Hydropower (22 MW) is not a good model either. NEA is reluctant to increase NRs. 1 but is paying NRs.10.50 per unit for electricity imported from India. If the purchase rate is good, the local private developers will produce and the expensive import will not be required. Regarding loss of electricity, the industrialists steal electricity whereas the poor farmers are blamed for theft. If he is instructed, he can reduce the theft by 5% from Biratnagar corridor only.

Materials from Slides

Contribution of Agro sector in GDP

Nepal-35%, Bhutan-22%, India-18%, Thailand-12%, China-11%, Brazil-7%, Korea- 3%, Canada-2%, USA-1.20%

IPP's problems

- Increase Tariff, PPA; remove VAT
- Local fund mobilization & Power development fund
- Incentive for early completion before 2014

Possible Electricity Consuming areas

• Cooking		3500 MW
• Railways	(East-West)	200 MW
• Rope ways	100 Nos,	100 MW
• Cement Industries	50 Nos	1000 MW
• Processing Industries		?
• Fertilizer		(Uses gas not electricity)

"Electricity can be consumed maximum in cooking and transport."

Major Projects : FDI 5000~7500 MW

Project	Developer	Capacity
Upper Karnali	India	900
Arun III	India	900
Super Marsyangdi	India	660
Likhu + Balephi	India	120 + 50
Budhi Gandaki	France (Negotiation)	660
Tamakoshi III	SN Power, Norwey	880
Trisuli	China	102
West Seti	China ??	750
Lower Arun	Brazil	403

Relieve NEA from small plants < 5MW

- Private sector can optimize the capacity & operate
- NEA's cost of operation is high, Give at competitive prices

"Provide capital to NEA, increase efficiency "

- Start study of storage projects:
  - West Seti, Budhi Gandgaki, Seti Damauli

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Paper Presentation by Shree Ranjan Lacoul

The decade long insurgency had negatively affected the hydropower sector. After year 2063 (2006/7 AD), there has been good progress in electricity generation. The electricity loss in Nepal is very high. He did not agree that the Hydro Policy is unsuccessful. Mr. Lacoul presented year wise projects list that are in line for commissioning.

Materials from Slides

Year	2009/10	10/11	11/12	12/13
Capacity demand (MW)	893	980	1078	1185
Energy demand/day (dry) MWh	12400	13640	15004	16504

Projects completing in F.Y. 2067-68 (2010-11)

S.N	Project	District	kW	Developer	Status (Asoj, 2067)		
					PPA	Gen Lic.	Constr.
1	L Indrawati	Sindhupalchok	4,500	Sunkoshi HP	Yes	Yes	Delayed
2	Mai Khola	Ilam	4,500	Himal Dolkha HP	Yes	Yes	Completing
3	Hewa Khola	Sankhuwasabha	4,500	Barun HP	Yes	Yes	Completing
5	Lower Chaku Khola	Sindhupalchowk	1,765	Laughing Buddha	Yes	Yes	Ongoing
6	Belkhu	Dhading	518	Prime HP	Yes	Not Reqd	Completing
7	Bijayapur-1	Kaski	4,500	Bhagawati HP Dev	Yes	Yes	Completing
8	Middle Chaku	Sindhupalchowk	1,800	Laughing Buddha	Yes	applied	Ongoing
9	Ankhu Khola - 1	Dhading	8,550	Ankhu Jalbidhyut	Yes	Yes	Ongoing
10	Lower Piluwa	Sankhuwasabha	990	Baneshwor HP	Yes	Not Reqd	Completing
F.Y. 67-68 TOTAL			**31 MW**				

Projects completing in F.Y. 2068-69 (2011-12)

S.N	Project	District	kW	Developer	Status (Asoj, 2067)		
					PPA	Gen Lic.	Constr.
1	Lower Modi I	Parbat	10,000	United Modi HP	Yes	Yes	Ongoing
2	Sipring Khola	Dolkha	10,000	Synergy P Dev	Yes	Yes	Ongoing
3	Upper Puwa Khola-1	Ilam	3,000	Joshi HP Dev	Yes	Not applied	Not started
4	Ladku Khola	Kavrepalanchowk	700	Universal Power	Yes	Not Reqd	Ongoing
5	Seti Khola	Chitwan	465	Shreeup HP	Yes	Not Reqd	Ongoing
6	Jyadi Khola	Sindhupalchowk	998	Electro-com	Yes	applied	Not started
7	Upper Hugdi Khola	Gulmi	5,000	Ruru HP	Yes	applied	Not started
8	Bhairabkunda	Sindhupalchowk	3,600	Nikhil Jalshakti	Yes	Yes	Ongoing
9	Andhikhola	Syangja	9,400	Butwal Power co	Yes	Yes	Ongoing
10	Tinau Khola	Palpa	990	Nama Buddha HP	Yes	Not Reqd	Not started
11	Chake Khola	Ramechhap	990	Garjang Upatyaka HP	Yes	Not Reqd	Not started
12	Golmagad	Doti	580	Mansarowar Powers	Yes	Not Reqd	Ongoing
13	Handi Khola	Sindhupalchowk	2,500	Handi Jalbidyut	??	applied	Not started
14	Charnawati Khola	Dolakha	3,520	Nepal Hydro Dev	Yes	Yes	Ongoing
F.Y. 068-69TOTAL			**48.52 MW**				

Projects completing in F.Y. 2069-70 (2012-13)

S.N	Project	District	kW	Developer	Status		
					PPA	Gen Lic.	Constr.
1	Pikhuwa Khola	Bhojpur	2,475	Eastern HP	Yes	applied	Not started
2	Radhi Khola	Lamjung	4,400	Radhi Bidyut	Yes	applied	Not started
3	Jumdi Khola	Gulmi	2,200	Jumdi HP	Yes	applied	Not started
4	Dorkhu Khola	Nuwalkot	990	Eklekunda HP	Yes	Not Reqd	Not started
5	Rahughat	Myagdi	32,000	N E A (for GoN)	Yes	??	Not started
6	Upper Trishuli 3A	Rasuwa	61,000	N E A	Yes	applied	Ongoing
7	Bhim		7,200	BPC	Yes	Not applied	Not started
8	Namarjun Madi	Kaski	12,000	Himalayan HP	Yes	applied	Not started
9	Upper Piluwa 1	Sankhuwasabha	3,000	Barun HP dev	Yes	NO	Not started
10	Madakyu	Kaski	10,000	Sikles HP	Yes	NO	Not started
11	Madi		5,000		Yes	Not applied	Not started
12	Budhiganga		7,200		Yes	Not applied	Not started
13	Singati	Dolakha	10,000	Singati hydroenergy	Yes	NO	Not started
14	Lower Balephi	Sindhupalchok	20,000	Welcome group	Yes	applied	Not started
15	Phawa Khola	Taplejung	4,950	Shivani HP	Yes	Yes	Ongoing
16	Kulekhani III	Makawanpur	14,000	N E A	Yes	Yes	Ongoing
17	Tadi Khola	Nuwakot	3,500	Aadishakti P Dev	Yes	Not applied	Not started
18	Jiri Khola	Dolkha	2,200	Bojini Company	Yes	Not applied	Not started
19	Theule Khola	Baglung	1,500	Barahi HP	Yes	Not applied	Not started
20	Dapcha-Roshi	Kavrepalanchowk	5,000	L. K. Power	Yes	applied	Not started
21	Lower Piluwa	Sankhuwasabha	990	Baneshor HP	Yes	Not Reqd	Not started
22	Chamelia	Darchula	30,000	N E A	Yes	Yes	Ongoing
23	Middle Gaddigqd	Doti	2,970	Triyog Energy	Yes	Not applied	Not started
24	Upper Mai Khola	Ilam	9,980	Mai valley HP	Yes ??	Yes	Started
25	Madi-1 Khola	Kaski	20,000	Annapurna Group	Yes	Yes	Not started
26	Siuri Khola	Lamjung	5,000	Nyadi Group	Yes	Yes	Not started
27	Mailung Khola	Rasuwa	5,000	Mailung Khola HP	Yes	Yes	Not started
F.Y. 069-70 TOTAL			**276.48 MW**				

...Remaining in Page 13

...Continued from page 74

Hydropower for Prosperity of Nepal

Commentators:

Mr. Lila Nath Bhattarai, Director NEA commenting on the two papers, said that Hydropower sector has not been discouraging; NEA needs improvement in its management. The political parties have created conducive environment in Middle Bhotekoshi which should be exploited.

Mr. Guru P. Neupane is of the opinion that instead of electricity export, electricity consuming industries need to be established in Nepal. The first priority should be strengthening the transmission line system. Since last 13 years, electricity produced from Khimti, Bhotekoshi, Middle Marsyandhi etc. could not be brought to Kathmandu due to non improvement in transmission line. Hence, this sector needs urgent improvement. The hydro sector needs to be tax free, electricity from storage project should be given good price and open up the Eastern sector. The private sector cannot produce electricity by paying 15% per annum interest to the Banks. Due to lack of Policy and Regulation, foreign investment is not coming in Nepal.