

WATERMILLS REVITALISATION: VOICES FROM THE COMMUNITY

Session theme:
Sustenance From
Himalayan Waters



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UPES

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Presentation plan

- ▶ Project background
- ▶ Data from the field: Our questions
- ▶ Water as a community resource
- ▶ Data from the field: Community run watermills and the question
- ▶ Watermill ownership/management and benefits today: Compulsions of the people and at the authorities
- ▶ India: common pool resources management cases
- ▶ Some Wales data: Some lessons

- ▶ Does the community have a voice? How?



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Background of the research project

- ▶ Funded by Global Challenge Research Fund (GCRF, UK)
 - ▶ UK government initiative supporting cutting edge research as part of the UK's Official Development Assistance (ODA) commitment through the following national academies
 - ▶ British Academy
 - ▶ The Royal Society
 - ▶ Royal Academy of Engineering
 - ▶ The Academy of Medical Sciences
- ▶ 12 month project grant
- ▶ Partner universities: Northumbria University, Newcastle, UK and University of Petroleum and Energy studies (UPES), India
- ▶ Collaborators: National Trust UK, UREDA, Energy & Environment Foundation, Independent consultant N Ravishankar - and the several villagers/communities
- ▶ Purpose: To study the networking of communities and agencies for development through watermills modernisation-cum- enhancement in Uttarakhand.
- ▶ Rationale: Established wisdom that water access, management and harnessing needs distributed and decentralised solutions of polycentric governance (Aggarwal,.....; Ostrom,;.....; colleagues in this room!)



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Water as a community resource

Water resources: Cases from the field - Uttarakhand, India

- ▶ 1. Farmer, Than Gaon, Uttarakhand, India
 - ▶ Grows crops in the valley irrigated by a channel fed by.... Mills grain in a traditional wooden watermill
 - ▶ Another watermill upgraded by state authorities a year ago capable of generating kW of electricity. This is lying idle over a year as it has a component (pulley) missing.
 - ▶ The farmer says he has asked the authorities a few times for the pulley. He has never talked to the village head; it has not been discussed at the *Panchayat* (village committee). Denied by supplier.
- ▶ 2. Watermill owner,, near Dehradun
 - ▶ Family owned watermill by stream running through their land, milling grain for clients and doing brisk business, charges flour as payment
 - ▶ Wants to expand, needs funds to build a store for grain and mill his own grain; not succeeded yet
 - ▶ Has no marketing plan/avenue; no contact with agencies/authorities to build the business.
- ▶ 3. Community hydro: Ramgaarh - a showcasing success
Lamabagarh: a dismal failure



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Water as a community resource

Two individuals and two village clusters: varying/ opposite results.

Successful cases are rare

Questions that arose for us:

- ▶ What are rights to water: of individuals and of the community
- ▶ What is the scope and environment for villager and village community engagement to harness available water



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Water as a community resource

The evolution of water rights and community engagement in India

- ▶ Water Law in India have been studied in two periods:
 - ▶ Ancient India: 2500 BCE (Indus Valley) to ~10 century CE: personal/communal and irrigation
 - ▶ Water laws:
 - ▶ The empowered were obligated to develop water works for others (Manu, c200-100BCE)
 - ▶ Water as royal property and taxed for use/extraction
 - ▶ Pre-existing customs allowed to continue. Some private ownership
 - ▶ Ownership rights of immovable assets lapsed if not in use
 - ▶ Good neighbourliness was a civic duty; causing others harm (diversion, overflow damage, obstruction) punishable/attracted compensation; joint waterworks treaties (Kautilya, 350 BCE-150 CE)



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Water as a community resource

- ▶ Medieval India: arrival of the muslims /Mughals (10th century CE onwards)
 - ▶ Islamic water laws (Siddiqui 1992)
 - ▶ Water as gift of god; no individual can own it
 - ▶ Right to thirst of humans and animals, right to quench from any source available
 - ▶ Applied to muslim population; Islamic rulers refrained from significant intervention of non-muslim population allowing existing systems to continue
 - ▶ Relatively high availability of water
 - precluded conflicts with Islamic norms
 - slowed down attention to water regulation



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Water as a community resource

- ▶ Colonial laws/policies on water (Guha, 1992; Cullet, 2009)
 - ▶ Government ownership, government control of surface water introduced
 - ▶ 2 main strands of British colonial water law
 - ▶ Emphasised rights of landowners to water access (Common law governance): reasonable portion of surface water flow and unlimited ground water (Dellapenna, 2011)
 - ▶ Laws entrusting appointed Controller for implementing, e.g., to acquire land for embankments and protection/maintenance of embankments (Bengal embankment Act 1855)
- ▶ Three major changes
 - ▶ Resource gathering/ food production economy to a commodity economy; progressive strengthening of state control and weakening people's customary rights
 - ▶ Long standing local relations became less important and social cohesion declined
 - ▶ Commercial production became more important than subsistence generally; exploitation more important than conservation ; the individual more important than community



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Water as a community resource

- ▶ Water legislation in independent India (Cullet and Gupta, 2000)
 - ▶ Water is a state subject
 - ▶ States have the exclusive power to regulate water supplies, irrigation and canals, drainage and embankments, water storage, water power and fisheries (Gol, 1947, 1950)
 - ▶ Interstate rivers restrictions and dispute adjudication powers with the Union govt
 - ▶ Despite much legislation (on water ownership control/disputes, use, pollution), the colonial rationale in water rights/management (a) of linking water access to land ownership and (b) of governmental control was continued in essence.
 - ▶ Central govt has no jurisdiction over ground water. Led to over-extraction for irrigation and ground water depletion over the last 70 years.
- ▶ Water is a fundamental right (ie, access to clean and sufficient water): The supreme Court and several High court judgements on this over decades.



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Water as a community resource

- ▶ There is an ambivalence about water rights in India as an individual right or a 'right without remedies' does have a bearing on our second question
- ▶ Q: What is the scope and environment for villager and village community engagement to harness available water
 - ▶ Conditions prevailing where community has engaged
 - ▶ What is the players (stakeholders) network that enables the engagement.



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Watermill ownership and benefits today

- ▶ Watermill ownership /management and benefits today
 - ▶ Compulsions of the people
 - ▶ Water availability
 - ▶ Income generation
 - ▶ Age related responses e.g., from villages....
 - ▶ Evolving thinking on the ground: two distinct strands
 - ▶ Compulsions of the authorities
 - ▶ Political compulsions (beyond most 'payscales')*
 - ▶ KPA's
 - ▶ Evolving thinking on the ground: the new breed
 - ▶ Rent seeking: (strangely) evolving
- ▶ This is beyond watermills small or big and beyond water (fisheries, irrigation systems, grazing grounds, forest): Common Pool Resource (CPR) management



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India/South Asia: common pool resources management cases

- ▶ CPR is resource that have low excludability and high subtractability (Ostrom 2005: 24)

		Subtractability	
Excludability		Low	High
	Difficult	Public goods	Common-pool resources
	Easy	Toll goods	Private goods

Source: Ostrom *et al* (1994)

- ▶ Agrawal (1993): six villages in Almora, Uttarakhand studied over time (1977-89) on community management of forest commons
- ▶ Ostrom (1990, 1993, 2012): studied various CPR mgt of communities in India, Canada, Nepal)
- ▶ Lam (1998): studied the FMS vs AMS
- ▶ Agrawal (1998): studies village communities and caste relations



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CPR management today: some Wales data (& some lessons?)

Field work from Wales to Cumbria

- ▶ Background - Wales: very proud, mostly rural, lowest per capita GVA in the UK), lower employment rate, Characteristically, closed mines, banks, declined infrastructure inv., emigration.
- ▶ Abergavenny: nestled in the hills, poorest among Welsh communities

Our field interaction:

- ▶ Council officer meeting with villager committee and NGO chief
- ▶ Discussion on fund raising for a regeneration of the region
 - ▶ Communities in Newtown Poys, Taff Bargoed, Tagarth, Bangor, Abergwyngregyn, Bethesda and Llanberis in Wales and Cumbria in North England.
- ▶ Local community and authority engagement/ consultations - [WLGA](#) Rural Forum
- ▶ In Wales emigration yes, but also - the return of the deserted PLUS others with life saving



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CPR management today: some lessons from Wales data

Our take home

- ▶ Local community and authority engagement
 - ▶ The praja, ie, the communities' Can do - together - approach of community (does it come easy?)
 - ▶ The raja, ie, Local Authorities performance assessment (known?)
- ▶ NGO's play a mighty role
 - ▶ How do they? Not praja, not raja: what are they?

More on this in the next presentation and in the afternoon's panel discussion



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Questions please



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