Training Workshop on Understanding and Resolving Water Conflicts in the North East, India

23-26 January, 2012; Guwahati, Assam

Technical Report

Forum for Policy Dialogue on Water Conflicts in India
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The background of the Training Workshop and Acknowledgements

We are happy to bring out the proceedings of the third training workshop on

Understanding and Resolving Water Conflicts in the North East, India, organised by the Forum for Policy Dialogue on Water Conflicts in India (Forum to be brief) on 23-26 January 2012 at Guwahati, Assam and make it available to a wider water community for feedback, suggestions and free use.

Forum is a collaborative initiative of many institutions and individuals is an effort to bring together all those interested in working on issues related to water conflicts in India into a loose network for action and interaction. One of the important contributions of the Forum has been the book, Water Conflicts in India: A Million Revolts in the Making which has tried to document different types of water conflicts in India. Forum's work covers four broad areas, namely, conflict documentation, conflict resolution, conflict prevention, and networking and outreach. The details of Forum's work kindly log on to URL: http://conflicts.indiawaterportal.org

During the work of the Forum in understanding and documenting water conflicts in India over the last few years we realised that various stakeholders like researchers, activists, practitioners and policy makers who are interested in resolution of water conflicts, find it difficult to analyse the conflicts with the complexities and rapidly changing debates related to conflicts over resources, and to move towards its resolution in a scientific manner. To partially fill this gap the Forum decided to take up training and capacity building of various stakeholders as one of the important activities of the Forum. The first training workshop was organised on 5 – 9 April 2010 at Kochi, Kerala. The second training workshop was held at Satapada (Chilika Lake), Orissa on 18 – 22 July 2011. This training workshop was the third in the series. Responding to the feedback from the participants of the two training workshops that the section on conflict resolution needs strengthening, we tried to give more time to conflict resolution in the training workshop and got MetaCulture, with experience in conflict resolution methods, especially multi stakeholder processes and mediation, to take a couple of sessions.

Many individuals and organisations have contributed in organising the training workshop and bringing out the proceedings. We thankfully acknowledge all those individuals and organisations especially the participants, the resource persons, Aaranyak and Centre for the Environment, IIT– the local hosts – and the individuals who helped us organise a very fruitful field trip. We acknowledge the contribution of SCaN and Cap-Net and Arghyam for the financial support to the training workshop. We are thankful to Jayati of SaciWATERs for all her help in coordinating with SCaN and Cap-Net. We are also thankful to Dr. Partha J Das from Aaranyak and Dr. Chandan Mahanta from IIT, Guwahati for their collaboration in organizing this workshop. We thank Pratima, our colleague from SOPPECOM, and Madhumita Borthakur from Aaranyak for proving the administrative backup to the training workshop.

We appeal to all of you to get back to us with your comments and suggestions. Also, feel free to use the material in the proceedings. In case any body wants any specific presentations or papers included in the reader that we put together, feel free to approach us and we can send them to you. You could write to Shruti on waterconflictforum@gmail.com.

Pune — K. J. Joy, Suhas Paranjape and Shruti Vispute

10 March 2012 — Forum for Policy Dialogue on Water Conflicts in India

Rationale of the Workshop

Understanding conflicts and developing approaches and practical strategies to deal with conflicts is an important aspect of Integrated Water Resource Management (IWRM). One of the critical issues in IWRM is contending and competing water uses and users and many of the conflicts are also embedded in this. Of course there are also other types of conflicts like conflicts due to dams, submergence and displacement, pollution induced conflicts, conflicts due to privatization and so on. If IWRM has to move forward then we also need to develop capacities of various stakeholders in the water and allied sectors:

1) to understand water in an integrated manner (from an IWRM perspective in terms of crossing disciplinary boundaries of bio-physical sciences as well as various social science boundaries as well as sectoral and institutional boundaries,

2) understand the present institutional and legal set up and see the type of reforms to be initiated at this level, and

3) to bring together various, especially conflicting stakeholders, into a process of knowledge driven dialogue process within the deliberative democratic framework.

Though water conflicts are not necessarily bad or negative, with every conflict the society (and the ecosystems) pays a price. If water conflicts are unresolved there is a strong possibility that all our development efforts might get hampered and further the food security in the country could be seriously compromised. Also, the ecological issues related to the water conflicts are a major concern that needs immediate attention.

One of the pre-conditions for conflict resolution is the ability of the stakeholders to analyse the conflicts in all their complexities and come to a scientific understanding of the issues underpinning the conflicts. It also requires a good understanding of water as a resource and its legal, policy and institutional context. The different stakeholders also should have the necessary skills for a negotiated settlement. It is in this context the present training workshop is being organized.

Water Conflicts in Northeast India: The focus of this training workshop

The proposed training workshop focused more on the water conflicts in the North East. The Northeast, geo-ecologically a part of the eastern Himalayas is known for its richness in water resources, biodiversity and ethnic and cultural diversity as well. The region is drained by two large river systems of the World, mainly the Brahmaputra and the Barak (Meghna), both being trans-national rivers cutting across bordering countries. It is one of the rainiest regions of India. As a result the region is endowed with the highest water resources and hydropower potential in the country. With ownership of natural resources lying mainly with communities in most of the states in the region, state control over the resources has remained a source of disgruntlement for many communities. Moreover the dominant approach to developing and utilizing natural resources without much regard to participation of communities or traditional institutions in the decision making process has been a source of dissatisfaction of indigenous communities. The present development paradigm coupled with disregard of traditional institutions and community opinion has prepared the ground on which seeds of conflicts have germinated. The nature of water related conflicts in the region is typical of its socio-cultural complexity and political sensitivity. The hydropower potential of the region has attracted national and international attention with the result that more than

168 hydropower projects with large river dams are being planned for the region. A number of these projects are in different stages of execution by public and private sector companies. There is widespread concern over the observed and probable social and environmental impacts in the region. Protests against the detrimental downstream impacts of the large dams have assumed the proportions of a mass movement in Assam and Arunachal Pradesh.

Flood, river bank erosion and sand casting are three serious water induced hazards that have significantly affected people's lives, livelihoods and agriculture and economy of states like Assam. Floods are also disasters for Tripura and Manipur. The state's approach to flood management has left a lot to be desired. Right from adopting short- term measures like embankments as the main method of flood containment, to lack of proper and culturally acceptable R&R package to not doing enough for saving riparian areas from collapsing in to the rivers, it has been a story of poor governance and management of flood mitigation. People are not only unhappy with inadequate rehabilitation and relief, they have started protesting against inappropriate structural interventions and the financial corruption of vested interest groups in the Government.

Quality of drinking water is another area of growing concern where conflicts are building up slowly. In the face of increasing contamination of groundwater with fluoride and arsenic and resulting health hazards, Government actions has proved to be too ineffective. Transboundary issues like building of dams by China and alleged attempts of China to divert the Brahmaputra River within China are now topics of hot debate in the region. The upstream-downstream linkages within the region and the contiguous Himalayan areas are also contributing to conflict scenario. Landslide dams getting breached or diffused in Bhutan or Tibet have caused catastrophic floods in downstream areas in Arunachal and Assam. Unwarranted release of water to rivers from dams both in Bhutan and within the region has caused devastating flash floods in downstream plains. Lack of coordination between countries sharing the river basins is a major obstacle in resolving these problems.

The conflicts over water are not limited to the issues and examples cited above. These are rather indicative of many other observed or potential conflicts situations cantering around water. This training workshop was part of the 'North-East initiative' started by the Forum in 2010.

Objectives, modules, methods and team of resource persons

This training workshop aimed at introducing participants to the basic concepts, debates, theoretical and analytical approaches and emerging issues related to water, water conflicts and their resolution especially in the specific context of the North East.

The training workshop had modules on the following components:

- Understanding water
- Normative concerns around water
- Legal and institutional issues related to water
- Understanding water conflicts
- Conflict resolution: approaches, methods with special emphasis on negotiations, mediation and stakeholder dialogue

The main focus was on water conflicts in the North east and methodologies to resolve them. Hence in terms of time, about one-third of the available time was devoted to understanding

water in the context of IWRM, the normative concerns and legal and institutional issues related to water. The remaining two-third of the time was devoted to water conflicts and conflict resolution methodologies.

As the Forum itself is a network of various organizations and individuals, the training programme was also conceived as a network activity. The core group for designing the programme consists of K. J. Joy, Suhas Paranjape (both from SOPPECOM), Prof. Janakarajan (MIDS), Pranab Choudhury (Shristi, Baitarani initiative and Odisha Water Forum) and A. Latha (Chalakudi River Protection Committee) and Partha J Das (Aaranyak) and Chandan Mahanta (IIT, Guwahati) from North East had also taken the responsibility on behalf of the Forum to design and run the capacity building programme, which has been a felt need expressed by many of the partner organisations of the Forum. Thus the training programme is truly a network programme and not just one conceptualized and run only by SOPPECOM.

Objectives

To develop an understanding of water conflicts and process in the case of different types of water conflicts and also to build the capacities of researchers and activists of civil society organizations in conflict resolution methodologies especially in stakeholder dialogue

Specific objectives:

- To equip the participants – mostly middle level professionals drawn from government departments and NGOs working on water issues – to engage with water conflicts.
- To go beyond our partner organizations and reach out to other researchers and activists who want to work on these issues.
- To develop a full-fledged module on water conflicts and their resolution and run it on a pilot basis so as to learn from it and then finalize it on the basis of the feedback from the participants. SCAN can also help ideas and supplementary materials, including their own training manuals.
- Depending on the leanings from this pilot programme the Forum could also design targeted training programmes for other stakeholders, especially government water bureaucracy, media and judiciary

Expected outcomes

- A properly developed module on water conflicts in the North East India and process of resolution which can be used by other organizations also
- To create a small number of trained people around water conflicts and their resolution within the water sector, especially academia and civil society organizations.

Methodology

The workshop methodology consisted of following components:

Reader and case study format: The Forum sent out to all the participants, an illustrated Reader comprising several articles, reports and research papers on issues covering the legal, social, ecological, economic and political dimensions of water conflicts in India and some papers exclusively on the water conflicts in the North East india, two weeks before the workshop both in as a soft copy on a CD and a hard copy of the selected critical readings.

Class room lectures and discussions: The Training largely followed the classroom lecture and discussion format. Distinguished resource persons lectured the participants on specific topics. Following their presentation the floor was opened up for discussion, clarification of doubts if any, and exchange of comments among the participants. This allowed space for very fruitful and enriching engagement around the topic.

Recap: The workshop provided 15 minutes every morning for a Recap session which was facilitated by participants on a rotation basis. This was done in order to ensure the recapitulation of the previous day's proceedings.

Exposure visit to a live conflict site (Kulsi river site at Kukurmara): The workshop also included a field visit to Kulsi river site at Kukurmara and participants had discussions with the communities in the neighboring villages to better understand the conflicting issues in the region.

About the Organisers

About SOPPECOM

Society for Promoting Participative Ecosystem Management (SOPPECOM), the secretariat of the Forum, is a non-profit, non-governmental organisation working in the area of Natural Resource Management (NRM) primarily in the rural areas. It is committed to the principles of sustainable and rational use of natural resources, equity and social justice in the distribution of benefits especially to the disadvantaged sections like dalits, landless, women, democratic and decentralized governance of these resources. As an organization committed to these principles, SOPPECOM extends its support to grassroots groups working on NRM issues through training, resource literacy, and participatory planning, research and policy advocacy. (www.soppecom.org)

About Aaranyak

Aaranyak is a registered society working in the field of nature conservation in North East India since 1989. Its strength lies in applied research in biological, environmental and social field and its thrust area of work is the North Eastern India and Eastern Himalayas. From a small beginning in the year 1989, it has been slowly, but steadily growing as a premier research and advocacy organisation in North East India to cater to the complex needs of biodiversity conservation, natural resources management and livelihood improvement in this culturally diverse region of India. It is one of the most active NGO in the region and has influenced the policy making at national and state levels through its presence in the committees like 'Steering Committee for Formulation of New Assam Forest Policy', Rhino Task Force and State Wildlife Advisory Board' of the Government of Assam as well as National Board of Wildlife.

About Centre for the Environment

Since the Earth Summit in June 1992 in Rio de Janeiro, Brazil, a global consensus has been reached in addressing the pressing environmental problems facing us and preparing the world for the challenges waiting ahead. Great emphasis has been placed on the need for all sections of society to participate in working towards sustainable development - development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Therefore, every action at local level is equally vital for the

continued economical and social development of the world without detriment to the environment and natural resources. The Indian Institute of Technology Guwahati has visualized an active role for itself in dealing with new directions and concerns emerging from the mitigatory efforts of environmental problems of the day. In order to give a concrete shape to this visualization, IIT Guwahati established this full-fledged Centre for the Environment**,** in May 2004. The main objectives of the Centre for the Environment are to promote interdisciplinary research and development, to impart postgraduate education, to create public awareness, to provide consultancy in challenging area and to train manpower for mitigating emerging environmental problems.

About SCaN

SaciWATERs-CapNet Network (SCaN) provides a platform for working in partnership towards strengthening the human and institutional capacity in Integrated Water Resources Management (IWRM) across the South Asia region. It aims to integrate the available skills and knowledge, which are otherwise scattered throughout various institutions and disciplines.

Participants of the workshop with the chief guest and resource persons

Classroom Presentations and Discussions

Day One: 23 January 2012

Welcome, introduction to the training workshop and introduction of the participants

K J Joy, Senior Fellow, SOPPECOM, Pune and Chandan Mahanta, IIT Guwahati

K. J. Joy welcomed all the participants for the training workshop.

In his briefing, Joy shared the background of the Forum with the participants. He made the following key points:

The Forum started its activities in 2005- 06 as a collaborative initiative of 7-8 organizations supported by the WWF.

In the first phase, the Forum tried to understand different types of water conflicts that existed in India. This led to the publication of a case studies book by Routledge that documented 63 cases grouped under eight themes.

The present second phase of the Forum continues the documentation process but is also gearing up to go towards conflict resolution. There are more than 100 members of the Forum. There is a need to move from understanding conflicts to resolution and prevention of conflicts.

The overall objective of the Forum is reduced water conflicts in India as a result of better understanding, dialogue and policy intervention. In this regard, there are three broad areas or themes:

conflict documentation

conflict resolution

conflict prevention

Joy also touched upon the organizational aspects of the Forum and its national and state level structures and their areas of focus.

Joy also briefly talked about the Forum's other activities around the following events:

National Workshop on 'Water Entitlements and Allocations for Livelihoods and Ecosystem Needs and the Legal-institutional Framework for Conflict Resolution' (30-31 March 2009, Pune).

National Dialogue on 'Water Entitlements and Allocations for Livelihoods and Ecosystem Needs and the Legal-institutional Framework for Conflict Resolution', (25-26 February 2010, Pune).

Meeting to understand and explore common ground on the Mullaperiyar water conflict, (4 August, 2009, New Delhi).

Joy said that the objective of the training workshop is to introduce participants to the basic concepts, debates, theoretical and analytical approaches and emerging issues related to water conflicts and their resolution in India. There is a central gap of lack of necessary understanding, approaches and skills that makes the understanding and analysis of water conflicts and their resolution in a scientific manner more difficult. This training programme

is part of a process to fill this gap. This training programme is third in the series. The first training programme was held in Kerala from 5 to 9 April 2010; second training workshop was held at Satapada (Chilika Lake) in Orissa from 18 to 22 July 2011.

Dr. Chandan Mahanta while welcoming the participants said that there are enormous conflicts in the North East, this workshop is a good start to have an academic engagement to solve and understand water conflicts in the region.

Dr. Chandan Mahanta welcoming the participants and the Chief guest

Inauguration and Inaugural speech by Chief Guest

Dr. Indranee Dutta, Director, Omeo Kumar Das Institute of Social Change and Development, Guwahati

Dr. Indranee Dutta giving the inaugural speech

Dr. Indranee Dutta talked about the link between society and water and also said that this precious resource is becoming scarce – for example groundwater depletion and doom's day predictions of 2050 where it would be rather difficult to meet our needs. She said it is good that Forum has taken a comprehensive picture of water.

Conflicts over water have been taking place for centuries at different levels. CSOs have brought some of these conflicts and the issues around them to the forefront. There are issues like who owns? Who has ownership of the resource? Who should be held responsible for wastage of water? These are important issues to consider while talking about water conflicts.

Urbanisation and industrialisation are causing water quality problems. Floods, bank erosions and scarcity of drinking water especially in hilly areas are serious problems. Water contamination from fluoride is another major issue. Other major issues are: equity and access, dams and displacement. She said that it is good that the Forum is talking about resolution and new ways of managing water.

Water demand is going to increase with population increase. North East is considered to be one of the richest in terms of water resource, nature, biodiversity and so on. However there are many private bodies that have come in and what impacts they would have is a big question.

Some of the important issues she discussed are:

- Since the ownership of resource mostly lies with the community when the sate intervenes there are conflicts.
- The issue is also with the developmental paradigm that we are following. The interventions are not taking into account the local conditions.
- Youth from the NE is moving to other areas for low paying jobs. This is mainly because of low productivity and lack of livelihood opportunities in the NE.
- There are also transboundary issues coming up with China constructing upstream dams and diversions.
- For resolution dialogue is important. There could be many methods/techniques for resolution. Some psychological methods would be useful too.
- Finally the water conflict resolution has to be scientific, objective and also should take into account vulnerability.

Chairperson's address and Transboundary water conflicts (International and intra-national)

Prof D.C. Goswami, Former Head, Environmental Science Department, Guwahati University

Prof. Goswami chaired the inaugural session and discussed with participants on the transboundary water conflicts. He started by saying that we are all in for a major engagement with water conflicts and related issues during this workshop.

The seeds of conflicts were already there. Probably they are sprouting now. The NE region is prone to conflicts. The humanity has always learned to adapt to it. However, now the scale is different because resource use ahs gone up tremendously and technology has helped in this.

The geo-physical setting of the NE region is important in the study of water conflicts as the Himalays – one of the most dynamic and unstable systems form the major part of the region.

Water and life are intimately connected. Nobody even thought that the water flow in the streams would be denied to us. Life style is very important.

Water is common resource and it is mobile unlike other resources. Because of this governance of water is very difficult.

We know more about water today than ever before. Some of the knowledge has changed. Actually the knowledge emerges from the field, from the people and not from books. Knowledge base is important. Otherwise it would create fire, but no heat!

Conflicts are bound to be there. They are part of growth. What people thought that some of these like dams are blessings are turning out to be curses. The same is true with run of the river power generation projects in the NE.

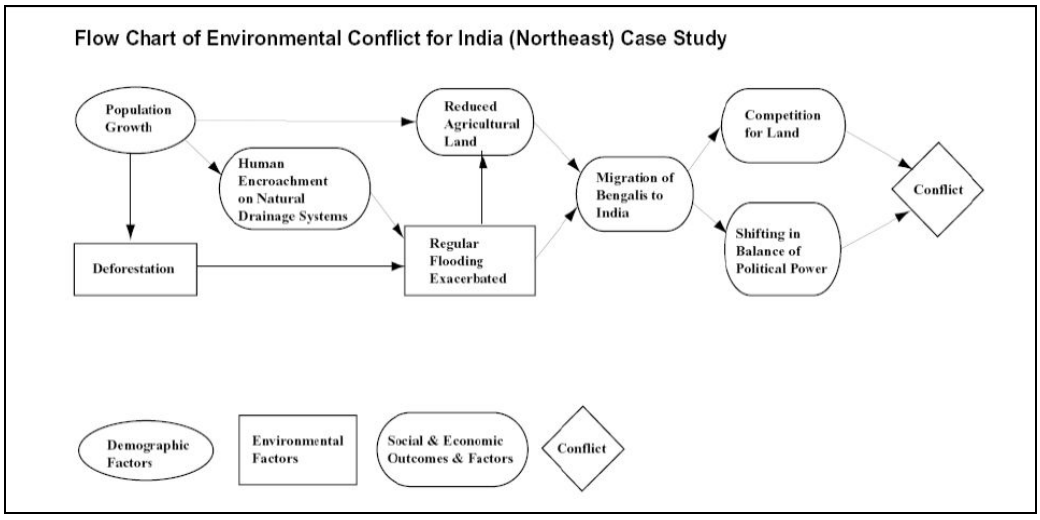
If the water resource structures are small then people can mange them. But when they are large like dams, the governments are involved and they do not deliver what hey promise.

Now the separation between activists and scientists/technologists is breaking down as the situation itself is demanding it. There is a need to scale down the interventions so that vulnerabilities are less. There is a need to safeguard vulnerable people. Vulnerabilities are locational, socio-economic, cultural and structural.

Overview of water and water conflicts in NE India and conflicts over policy and impacts of large hydro power development in NE India

Dr. Chandan Mahanta, IIT, Guwahati

Chandan started his presentation with the list of major areas of emerging conflicts in the North East, i.e. hydropower projects, drinking water, water quality and health, floods, bank erosion and sedimentation, drought, river pollution and groundwater.



Source: UNEP, 1999

Chandan took a review of the earth's water discussing that groundwater provides

22% of all freshwater withdrawals

37% of agricultural use (irrigation)

37% of the public water supply withdrawals

51% of all drinking water for total population

99% of drinking water for rural population

(USGS, 2004)

He further mentioned that water quantity + water quality + safe sanitation + effective hygiene = reduce diarrhoeal disease incidence by two-thirds.

He also discussed that the access to safe drinking water in India is 88% whereas in Assam it is 77.55% (only 37.88% household has drinking water sources within their premises) (Census 2001). 21% of communicable diseases in India are water related. In India, at least about 1.5 million children below the age of five years die every year due to various water borne diseases (World Bank).

He further discussed different areas of conflicts in the North East.

Water and Health

Drinking water: Water borne diseases massive burden on society and most diseases are preventable by consumption of safe water

Arsenicosis and Fluorosis: Assam is fifth arsenic endemic state. First case of fluorosis confirmed in May, 1999 in Karbi Anglong district. He also gave examples of cases, fluoride in drinking water, 8.02 mg/l was found in village Bagpani of Bagpani area, Karbi-Anglong district, Assam. Girl can not go to school because they have to look after their family as all other members are fluoride affected in the family. Cases of skeletal fluorosis, fluoride in drinking water, 14.36 mg/l are found in village Nopak-Killing of Bagpani areas, Karbi-Anglong district, Assam.

Multidimensional attributes of water governance:

Water, that is to say water supplies, irrigation and canals, drainage and embankments, water storage and water power….." is a state subject; as such an integrated approach can help mitigate the issues of water scarcity and water pollution!!!

He mentioned that for effective water governance we need participation, transparency, justice, accountability, consistency, integration, value system and stewardship.

Feared outcome of water conflicts is:

- Inequitable benefit
- Displacement of population
- Disruption of community networks
- Loss of cultural heritage
- Difficulty of transition to alternative livelihood
- Loss of unique biodiversity
- Submergence of land
- Loss of livelihood

Key recommendations of WCD to review on-going and planned hydroenergy projects, ensuring that the review:

- uses stakeholder analysis based on recognizing rights and assessing risks;
- enables vulnerable and disadvantaged stakeholder groups to participate in informed manner;
- includes distribution analysis to see who shares costs and benefits of project;
- develops agreed mitigation and resettlement measures to promote development opportunities and benefit sharing for adversely affected people;
- Avoids any severe and irreversible ecosystem impacts;
- provides for environmental flow requirement; mitigates or compensates unavoidable ecosystem impacts; designs and implements recourse and compliance mechanisms

Characteristics of HE Projects of NE:

- Incomes, savings, education levels, farming intensity, off-farm opportunities are not reflective of mainland India
- Affected people less wealthy, less educated than national average
- More dependent on farming and government subsidies for livelihoods
- Political and social marginality compounded as vast majority are often very small ethnic minority groups
- Lack reliable access to alternative development models and to decision processes through which large hydro-power projects are legitimized
- Used to surplus water – less used to its absence
- Equally important - the region is environmentally sensitive
- Biodiversity hot spot– most biologically diverse temperate region of the globe
- Places are fast losing pristine state – important repository of cultural diversity
- Tectonic as well as reservoir induced seismicity can be critical; one of the six most seismically active regions of world
- Fragile economy and diverse threatened cultures and species along ecologically sensitive trans-boundary rivers - EIA should be careful and comprehensive, but not so far
- India's policy prevents sharing hydrological data on trans-boundary rivers
- Publicly unavailable data/results fuel concerns and deny alternatives

Chandan also mentioned about the protest movements rising against hydropower dams in NE India.

What is needed is …

- Presumptuous to suggest to restrict economic development aspirations, but efforts to maximize community benefit and minimize conflict mandatory
- Transparency and inclusiveness of decision making
- Environmental and social considerations
- Monitoring of impacts during construction and operation as agreed by stakeholders

Required action towards policy

- Targeted thrust on regional governance, local communities and stakeholders
- Regional cooperation in water/energy/food security
- Increased accountability by different actors
- Decentralization of decision making
- Mechanisms for equitably sharing benefits from water projects

- Focus not only on broad-based, long-term growth, but also on complementary activities that ensure livelihood security at community level
- Incentives and disincentives that encourage initiatives consistent with sound policy objectives; discourage initiatives that direct benefits to a small group while inflicting social and environmental costs to community at large

Chandan concluded his presentation with the following points.

The way ahead …

- Need to explore institutional change as a necessary first step
- Seek governance that focuses on equitable benefit sharing, spending of additional revenue on meaningful community development
- Transparency in decision making to increase accountability
- Support meeting challenges of protecting livelihood, cultural, and territorial identity of tribal communities and environment
- Promote long term inter-state or inter community cooperation in interest of mutually beneficial inter-dependencies and trade-offs
- Seek ways to equitably distribute losses and gains, arising from water projects


Participants during the session

Understanding water: the bio-physical and socio-cultural characteristics of water

K. J. Joy, Senior Fellow, SOPPECOM, Pune

In this presentation Joy highlighted the bio- physical and socio- cultural peculiarities of water as a natural resource in order to provide an understanding about the more complex issues related to its distribution, allocation and entitlement. The key highlights of his presentation were as follows:

- Water is an ecosystem resource, i.e., it is embedded within ecosystems; it is not a freely manipulable resource; nor is it a resource to be indiscriminately mined.
- Environmental flows- a minimum flow of water is required for the preservation of ecosystem services.

- Who is returning how much of water to the ecosystem and in what condition is an important issue related to quality of water.
- Water is a common pool resource, irrespective of what the property regime is.
- Water is divisible and therefore amenable to sharing- it has multiple, competing uses and users leading to the problem of excludability.
- Water is both a local and non- local resource- the way water is planned, used and managed causes externalities.
- The approach to water management nests different scales – from micro watershed upwards to basins and further up to states and countries.
- Every community has a proportional right to water as part of a collective right to assured livelihoods.
- Water use beyond fulfillment of livelihood needs, does not form part of this *right* and moreover cannot be at the cost of others' livelihoods.
- Assured and variable nature of water - assured water should be more equitably shared and tied to livelihood needs.
- Variable water could be utilized and managed in many different ways such as bulk biomass production or distribution to more enterprising farmers at economic costs.
- There is a socio-cultural aspect to water: drinking water use, domestic water use, water for livelihoods etc are often mediated, at least partially, through cultural traditions and values.
- Social hierarchies and inequalities such as caste system get intertwined with cultural traditions and values.
- Peculiarities of water as `private property': Water never was a commodity prior to the advent of modernity or capitalism.
- 'Ownership' of water is basically an entitlement to use water in a certain way at certain points and times; it does not imply entitlement in an absolute sense.

Joy concluded his presentation by stating that because of the peculiar nature of water both as an ecosystem and a common pool resource, it cannot be treated as private property in the classical sense. The instruments like classical market mechanisms cannot work efficiently because water lacks the reliability, the ready manipulability and the constancy that other private property has. All these characteristics have a bearing on water related institutions, policies and laws, movements and struggles around water and the normative concerns underpinning our approach and viewpoints about water.

Normative concerns around water: sustainability, equity and democratization

Suhas Paranjape

In this section, Suhas talked about the normative concerns around water issues. He said that currently there is a growing recognition of the fact that natural resources cannot exist independently; they are inter-connected and nested within the eco- system. Water is a prime example of this, it is one of the most complex resources – more connected and embedded than other resources. As a result, management of water resources should be based on a normative framework.

Following are the key highlights of his presentation:

Normative framework or concerns includes understanding of the notion of "development" and how this broad notion is to be translated in the specific context of different sectors; this translation may be based on additional assumptions about what is possible and also how these may be achieved. We could call this set of goals, specific objectives and assumptions the normative framework or concerns underpinning an analysis or approach

Suhas discussed four normative concerns: Livelihoods, Sustainability, Equity and Participation/democratization

Livelihood

There is a shift from basic needs/subsistence needs to livelihoods since the early 90s. This shift to livelihoods and sustainable livelihoods (DfID, CARE, Oxfam, UNDP, etc.) includes the following points:

- A livelihood comprises the capabilities, assets and activities required for a means of living
- A livelihood is sustainable when it can cope with and recover from shocks and maintain or enhance its capabilities and assets both now and in future while not undermining the natural resource base
- five types of capital: natural, social, physical, human and financial
- primarily based on Chambers and Conway's work on "sustainable livelihoods" in the early 90s

Defining livelihood needs: more than basic needs – includes needs that are imposed due to the nature of the livelihood activity itself. Composition of livelihoods is determined by livelihood pattern, it is not same as (cash) income. It is not limited to agriculture income; the role of non-farm incomes. It's objective is self reliance.

Fulfilment of needs has to be assessed at household and intra-household level

Suhas elaborated the linkages between biomass and livelihood while talking about biomass based approach to livelihoods:

Sustainability

- Sustainable development …that meets the needs of the present without compromising the ability of the future generations to meet their own needs (WCED, 1987)
- Sustain the underlying bio-physical processes, their environmental integrity and dependability as mediated by human intervention
- Conserve and/or enhance the primary productive and assimilative potential of the ecosystem
    - primary and secondary productivity
    - what is happening to the physical attributes of the system (dynamic steady state, reliability, resilience and adaptability) and how certain changes affect these attributes
- The concept of stocks and flows
- The rate of regeneration of the resource must be greater than or equal to the rate of harvest
- Use resources (like water, biomass, etc., within renewable limits:

- use annual flows
- stocks to be used only in bad years with the understanding that they would be replenished in good years
- minimise import of water or biomass, do it in a fair manner

Equity

- Two types of inequities:
  - Historically disadvantaged sections on the basis of class, caste, patriarchy, ethnicity, etc.
  - There is also spatial or locational disadvantages emanating from the bio-physical characteristics of resources (for example watershed)

Equity and right based discourse

- Right based discourse on development
- Right to resources and services needed to meet livelihoods
- The basic issue is "ensuring a social minimum to all"

Equity: in practice what could be done?

- Newly created or incremental resource created through developmental interventions to be shared equitably
- De-linking existing property rights and access to these resources and services and linking it to livelihood needs:
- Ensure these resources and services for livelihood needs to all on affordable terms
- Basic service and economic service
- Positive discrimination: Favour those bearing the brunt of the inequity due to class, caste, ethnicity, gender, location
- Equal opportunity or space for participation in decision making and management or governance functions (especially in the institutions)

Participation and democratisation

- Participation: a new buzzword in developmental policy, practice and research
- Also known by other terms like:
  - collective action, community based natural resource management, community driven development, bottom-up approach, decentralised self-governance, etc.
- 'Participation is often endorsed unambiguously on normative grounds even if the empirical basis is not clear' (Cohen & Uphoff, 1980)
- South Asian context: started with JFM and PIM through WUAs
- Need to go beyond efficiency to sustainability and equity
- Separation of allocation and regulation functions (governance functions) from service delivery or production-related functions
- Democracy: Primacy of local community in decision making, accountability
- The issue of democracy within the local communities

- Representation of women, landless & other resource poor sections
- Participation of the would-be project (intervention) affected persons in the decision making process
- Outsiders have a definite role in capability building of the local communities to make informed choices and also in raising issues related to equity and sustainability
- Accountability of larger structures and agents (supra local agencies) to the local community
- Pre-conditions for effective participation:
  - Legal mandate with clearly defined rights and responsibilities
  - Right to information and data
  - Performance and financial audits of projects and putting them in the public domain
  - Capability building of the local communities
  - Two-way traffic and learning for both "outsiders" and local communities

Overview of water conflicts in India

Suhas Paranjape

In this section, Suhas provided an overview of the various kinds of water conflicts. He then identified the various causes for water conflicts in India. Based on these, he then provided a typology of conflicts with examples in each category. Following are the key points of his presentation:

There are various kinds of contending water uses, which are as follows:

When the same unit of water is demanded for different kinds of uses we have a contestation and potential conflict: For example, in Chennai, Tamil Nadu conflicts in the peri-urban areas between those who would mine groundwater to supply to the city versus those who want to use it for irrigation, Ganga canal water for Delhi (urban needs versus rural livelihoods) etc.

Learnings: Structures built to improve the ecosystems may have unintended effects that harm people and ecosystems, improving water resources through rainwater harvesting at the micro level might improve water availability, but sharpen conflicts if equity is not addressed, and in the conflict between urban uses, the rural needs are steadily losing out.

Conflicts arising from Equity, Access and Allocations: Focuses mainly on equity issues between different users but within the same kind of use. This includes contestation over and between old and new water rights, old and new projects, tailenders and head-reachers, interbasin transfers, dalits and upper castes and so on. Examples include Mahad to Mangaon, where in a drought year, centuries of caste-based oppression and prejudice, deep rooted cultures and traditions, reared their head once again to deny water to the Dalits. Other examples are that of the Indira Gandhi Canal where diversions and reduction in water allocation causes unrest amongst farmers; Bhavani river where there exists competing water demands between old and new settlers and this was further aggravated by growing demands of industry etc.

Learnings: The absence of clear cut norms of equitable water allocation and distribution need a better concept of a right or an entitlement to water. A livelihood needs framework that sees assurance of minimum livelihood needs and the corresponding water requirement as an associated right need to share shortages and surpluses in a principled manner.

Conflicts around water quality: These conflicts arise around the issue of how and in what form users return water to the ecosystem. Polluted water returned by users causes problems to `downstream users,' and decreased freshwater availability; causes economic loss, social distress and ill health. Musi river in Andhra Pradesh for example, domestic sewerage and industrial effluents have reduced the river to a sewage drain. Similarly, in Chaliyar river, Kerala, the Gwalior Silk Mfg (Wvg.) Co.Ltd., also known as Grasim factory effluents released into the river resulted in severe water pollution, which affected the livelihood of a large section of people while the gaseous effluents became a source of air pollution.

Learnings: Some of the key questions that need to be addressed revolve around whether closure of the factories is the solution, whether industries can co-exist with agriculture and other water users and what is the long term solution to the problem. There is a need for a three-pronged approach to address the problem:

- a legal framework based on rapidly enforced criminal and civil penalties
- environmental mediation, a pragmatic direction to settle issues quickly and amicably
- encouraging voluntary compliance

Dams and displacements: Dams have often been called the temples of modern India. For the greater 'common good', there is an argument that some people, especially the resource poor sections like adivasis have to be displaced. This has led to situations where there are drought affected beneficiaries versus the displaced victims. Some examples include the Sardar Sarovar Project (SSP), Polavaram, Andhra Pradesh and Tawa, Madhya Pradesh.

Some of the key learnings from these kinds of conflicts have opened up the debate around large dams, polarization issues such as large vs. small and the need for integration, exploration of options with least cost: social and environmental and proper rehabilitation as part of an upstream area development programme.

Transboundary water conflicts: These conflicts are mainly of two kinds- conflicts between nations and conflicts between states (inter-state). Some examples of this kind of conflict are the Baghlihar dam issue with respect to India and Pakistan over Indus, Farraka barrage issue, India vs. Bangladesh over sharing the Ganga etc.

Learnings: One of the key learnings that can be derived from these issues is that there is a need to look beyond political expediency and look for long term durable understanding on the issues involved. While an Indo-Pak agreement over sharing waters has withstood hostile political relations and wars, similar agreements have led to bitter conflicts between Indian states. One also needs to think whether water can be taken out of state list and put under union or concurrent list. There is a real need for democratic and nested river basin organizations.

Privatisation: Since the past decade, a new set of conflicts are emerging in the context of the Liberalization, Privatization and Globalization (LPG) regime that include privatisation of sources and rights and privatisation of service delivery. Some examples of this conflict include, Sheonath river in Chhattisgarh, where a stretch of the river was given to Radial Company; the Plachimada issue in Kerala where there was a conflict of interest between Coca-Cola and the local communities and the panchayat.

Learnings: There is a need to make a distinction between source privatisation and privatisation of service delivery; water privatisation is highly polarised between two well entrenched positions of for and against and there seems to be very little attempt to explore the middle ground of seeing water as both a social and economic good. The real issue is

about the governance and regulatory framework to secure the rights and access of all to clean water. It is about the right to life. It is also about the rights to water for all.

Suhas also mentioned other types of conflicts arising due to floods, erosion, river course change, conflicts due to nuclear discharge and other environmental issues

There could be other ways of classifying conflicts. John Brisco and R. P. S. Malik have classified conflicts as follows:

- Conflicts at the international level
- Conflicts at the inter-state state level
- Conflicts between upstream and downstream riparians in intra-state river
- Conflicts between the state and the communities
- Conflicts between the farmers and the environment
- Conflicts within irrigation projects

Day Two: 24 January 2012

Presentation of the main learning from the day one by Group One

After self-introduction by the participants Prof. Chandan Mahanta presented the overview of the Workshop and highlighted the important issues related to water and water conflicts in North East India.

K.K. Joy took the initiative forward by emphasizing the bio-physical and socio-cultural features of NEI and focused that it is in this context that the present issues related to water conflicts should be analysed.

Prof. Indrani Dutta, Director, OKD Institute of Social Change and Development, Guwahati elaborated upon the conceptual issues such as the ownership of water, the issues related with its conservation, problems of displacement due to floods and erosion in NEI and urged upon the participants to deal with these issues in the workshop.

Prof. Dulal C. Goswami, the chairperson of the inaugural session stated that the geophysical realities of NE are such that conflicts are bound to arise. The Himalayan range, the dominant monsoon as well as the geographical incline of the region is such that it leads to wide variety in biodiversity which if not harnessed properly can lead to various contestations. Therefore proper governance of issues related to hydrology and its management is of utmost importance for the region.

Vote of thanks was given by Dr. Partha J Das.

The first academic session was addressed by Prof. Dulal Goswami who elaborated upon the various aspects related to the River Brahmaputra and the basin. The different names related with the river, the inflowing tributaries both from the Northern and the Southern regions of the basin, the fluvial regime as well as the seismic instability of the entire NE was highlighted by him. He focused upon the various geo-political and geo-environmental dimensions associated with the course of the Brahmaputra. He highlighted that there is absolutely no protocol amongst the countries of the region to exchange data regarding the flow pattern of the Brahmaputra, which he warned may lead to dangerous consequences in the future. According to him this is also a roadblock to research concerning the Brahmaputra river basin. Proper governance can play an important role in understanding; analysing and researching the issues related to river and river flows and thereby can act as an important step for conflict resolution in the sub-continent.

Chandan Mahanta: "Overview of water and water conflicts in NE"

The session was delivered by Prof. Mahanta. He began by highlighting the concept of 'irreversibility' in terms of dealing with environmental issues. He opines that if we do not act now things will be difficult to manage in the foreseeable future and we will cross all thresholds and the damage will be irreversible. Therefore the imperative is to move beyond the pale of ignorance about environmental problems and deal it in a holistic manner. It is in this context that he analyses the issues concerned with hydropower in NE. Prof. Mahanta stresses that the way hydropower is dealt with in NE is non-participatory in nature which leads to a conflict situation. This not only generates information asymmetries but also creates conditions which lead to deficit of trust and adequacy too. Water has multiple uses and therefore can be harnessed to fulfill multiple purposes. Utilising water to generate power is one important area but other aspects such as irrigation, navigation, drinking water, urban use etc. should also be considered. In this regards, he asserts for planning for water management in a holistic way. He goes on to deal with issues related to water that gives rise to conflict situation between the community and the government and highlights the probable measures which can be adopted for its possible resolution. Dialogue between various stakeholders therefore is the key for conflict resolution.

K.J. Joy: "Understanding water: The Bio-physical and socio-cultural characteristics of water"

Joy initiated his discussion by emphasising that water is an ecosystem resource which is embedded in the ecosystem itself and therefore there is a limit to its manipulation or in other words a limit to water mining. Water is a common pool resource. Although it has many characteristics of a public good yet neither is water a 'good' nor property by itself. He states that water is available in multiple scales and so there are trade-offs regarding its competing uses. Moreover, it is both a local and non-local resource and so there are limits to rights over water. Similarly, there are socio-cultural constructs related to water. The speaker emphasised that all these considerations should be considered while we deal with water conflicts resolution.

Suhas Paranjape: "Normative concerns around water: Sustainability, Equity and Democratization"

At the onset Suhas places an argument that in order to deal with ecosystems there should be a normative approach but not one 'norm' since what is true for a micro watershed need not be equally effective for the earth as a whole. Ecosystem management (water included) is therefore not scale neutral. He outlines four principle concerns associated with ecosystem management namely, livelihood, sustainability, equity and participation/democratisation. He went on to elaborate all these four principle concerns and their importance in conflict resolution.

Suhas Paranjape: "Overview of water conflicts in India: A Suggested Typology and Lessons"

Continuing with his deliberation in the earlier session Suhas goes on to present with a typology of water conflicts in India. He is of the opinion that since the same unit of water can be part of different use, it leads to contestation. Conflicts arise between old and new water rights, old and new projects, tail-enders and head-reachers as well as in inter basin transfers. Conflict resolution concerned with water needs to be looked beyond political expediency. It requires democratic and "nested" river basin approaches and organisation. Effective governance and proper regulatory framework are of equal importance in this regard. Rampant privatisation under contemporary globalisation is adding to the existing list of conflicts rather than leading to its resolution.

Climate change, ecological security and development: Drivers of water conflicts

Dr. Anamika Barua

Dr. Barua started her presentation with a discussion on the difference between the ecological economist and environmental economist. She first talked about what is ecological security and then moved to how climate change can be a challenge to the ecological security as well as development.

She asked participants if they knew where the word ecology came from.

It comes from a Greek work *oicos* which simply means house. Ecology is a study of a place where you are living – the environment where we live. Ecological security means how secure is the environment where we live. Ecology involved both living and non living entities.

She mentioned that we often say that we need to have sustainable development to avoid the conflicts in the future, but what we need is ecologically sustainable development.

We are focusing on the outcome of economic activities. We need to see the sea where we dump our waste (used resources) from the economic activities together to think about the ecological security. We need to see that if we utilise the source properly in a balanced way then the sink of the waste will not get exhausted.

In natural resource economics you focus on the source. When we focus on the sink we talk about the environmental economist who tries to find various market mechanisms to reduce pollution so that the sink is taken care off. Natural resource economists think about the rate at which you are using the resources and at what rate they are getting replenished? When the replenishment rate is not higher than the utilisation rate then there are conflicts around water, land and other resources.

Then she moved to the discussion on development by asking the difference between growth and development. She said these two terms are often used as synonyms because when we started thinking about development we focused on economic growth. But there is difference between the two.

An economist allocates scarce resources to a desirable end. While doing this there are three important questions that come to the mind:

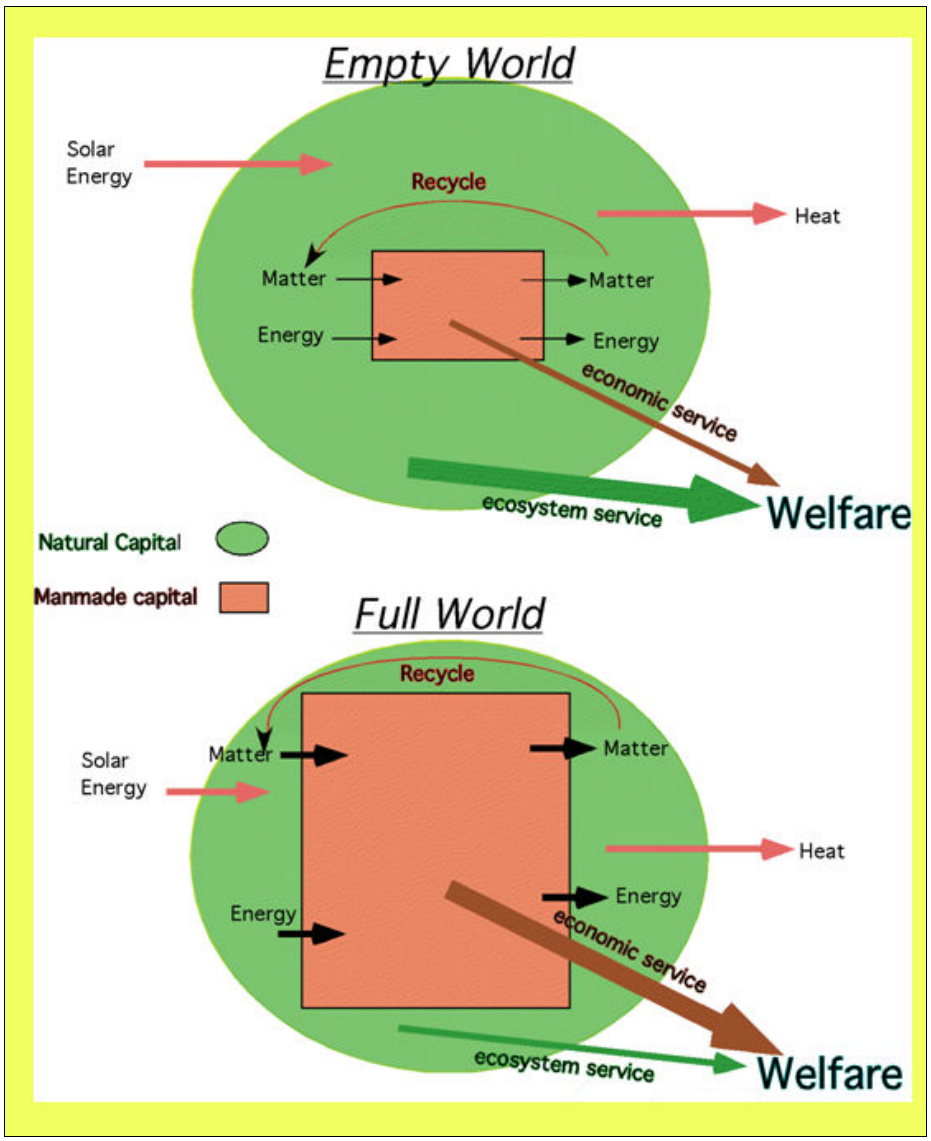
1. What is the desirable end?
2. What are those scarce resources and
3. How to allocate them?

Economic growth was seen as development but it was not for all. She gave an interesting example – if a horse is fed oats and the full stomach horse walks on the road and drops some oats then only very few cows can eat those oats.

This was the criticism for the growth oriented development that it will make rich people richer and poor poorer.

Technology, human capital is important for growth. So lot of investment was made in this. Neo-classical economists say that the environment is a subset of economy and they do not give importance to the environment. This led to the thought that there is no limit to the growth and this continued till 1970s. The thinking behind this was even if we exhaust the natural resources we can replenish them with man made resources and this let to the wider discussion on limits to growth.

But there was something which was obstructing the growth in spite of the technology and human capital. It was the natural resources – natural capital which unlike other capitals has to be reused if needed and investment has to be made in it. Then they changed their thinking that actually economy is a subset of environment. There are limits to the extraction of the natural resources and beyond that you can go, you have to reuse the resources.
Why do we think about the conflicts around resources now? Why we did not think about them earlier?
Because we had more resources and we were in an empty world, just started the industrial revolution and other growth related productions. Whereas we started over utilising the resources and turned in a full world, welfare from ecosystem service is reduced.



Water has multiple uses multiple demands and it is going up due to changing lifestyles. Therefore it is becoming a scarce resource. Climate change is going to aggregate this situation.

Dr. Barua also discussed the gender aspect in case of water. She said women are often questioned if there is less or no water in the house. It is considered as their responsibility.

Due to the decreasing sources, the distance they have to walk is increased. This has increased the instances of sexual assaults. If a woman cannot get water and returns home empty handed she faces domestic violence and questions such where she has exactly been and why it takes so long to get water now compared to earlier days.

Dr. Barua ended her presentation with a point that scarcity of water will not only have an impact on livelihood and lead to water conflict but will also threaten the survival of the ecosystem and human being.

Conflicts over water induced hazards and their management: Perspectives from Assam

Dr. Partha J. Das

Partha started his presentation with an overview of the water induced hazards like floods, flash floods, river bank erosion, land degradation due to siltation/sand casting and dam induced flooding.

He made following points about flood hazards in Assam:

- Assam has the largest flood prone area in the country, 3.2 million ha, or 40% of the state's total geographical area
- 9.6% of the country's total flood prone area
- About 2000 villages inundated every year
- Average annual crop damage : Rs. 2500 million
- About 3 million people are annually affected

While discussing the flood devastation of River Gai he mentioned that since 1954:

Total area eroded: 4,25,900 Ha. (7%)

Rate of erosion: 8,500 Ha./Year

No. of villages eroded: 4521

population affected: 9,00,000

Affected Reaches Moderate to Severe: 130

Most Severe: 25

Oil Installations/Tea Gardens/ Important Towns and Cities/ Heritage Sites: 18

He gave few examples of the menace of sand casting, i.e. Dhemaji district, Sandscape of Samarajan, Dhemaji, Assam, Ranganadi Flash Flood in Lakhimpur etc.

Management of Water Induced Hazards (WIH)

- No specific dedicated policy
- Only guidelines from GoI projects and commissions
- Conventional structural approach
- Overall failure of prevailing management regime
- Colossal loss and damage to lives, livelihoods, infrastructure
- Flawed Flood Governance

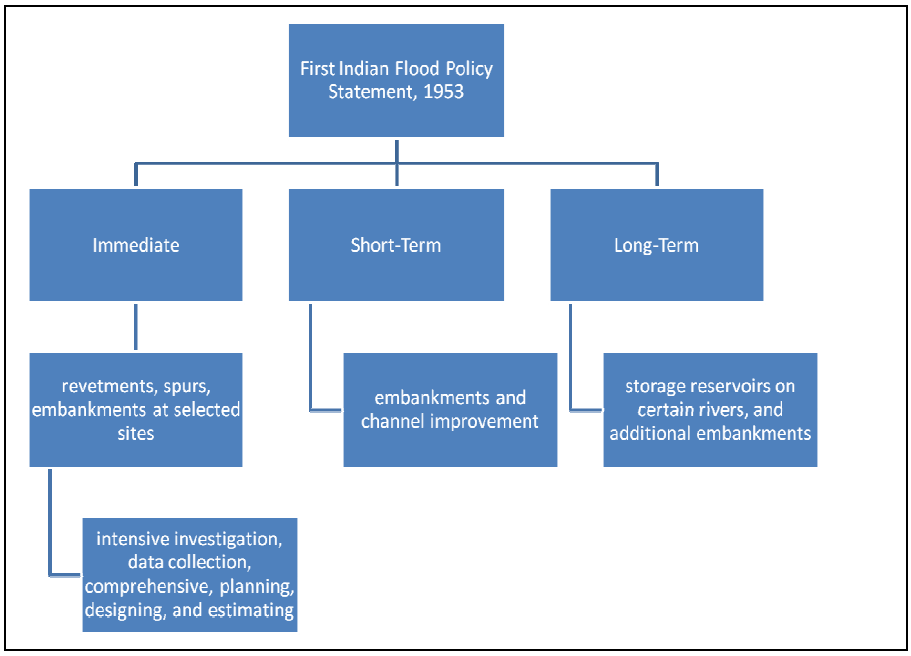
Dr. Partha J Das during his presentation.

Partha made a following typology of water conflicts:

Conflict Type/cause	Nature of manifestation	Stakeholder	Location
Debate over structural approach to flood management	Academic, policy, strategy	Technical experts(WR engineers, flood researchers), affected community, civil society	Country, Assam (confined to academicians)
Debate over desirability of embankments	Academic, policy, strategy	Technical experts(WR engineers, flood researchers), affected community, civil society	Country, Assam (confined to academicians)
Design, location of structures	Policy implementation, protest, movement	Community, GoA(WRD), civil society, PRI, DDC,	Jiadhal, Durpang, Brahmaputra

		movements	
Loss of land and assets due to bank erosion	Protest, movement, litigation	Community, GoA(Revenue, law), CS, movements	All over Assam(especially Dhemaji, Lakhimpur, Morigaon)
Inadequate and inequitable R&R	Protest, movement, litigation	Community, GOA(Revenue Dept), CS, NGOs, INGOs, Aid agencies	All over Assam(especially Dhemaji, Lakhimpur, Morigaon)
Degradation of soil/land due to sand casting	Protest, movement, litigation	Community, GoA(Revenue, agriculture, law), CS, movements	Dhemaji, Lakhimpur, Barpeta, Nagaon, Morigaon, Dhubri, Chars
Acquisition of land for embankment/bridges	Complaints, protests, litigation	Community, GoA(revenue, law), CS, movement	All over Assam
Conflict over land ownership of deposited landmass	Forceful possession, Non-payment of revenue, litigation	Community, GOA(revenue, law)	All over Brahmaputra and Barak valleys

Later he discussed about the flood related policy statements by the government. He said the first flood policy statement was made in September 3, 1954, when Mr. Gulzarilal Nanda was the Union Minister for Planning and Irrigation of India. The context was unprecedented flood devastation in 1953 and 1954 in many parts of India, mainly in Bihar and Assam. Three types of flood control means were suggested, i.e. Immediate, Short-term and Long-term.



Changing perception of flood management

- Mr. Gulzarilal Nanda's statement , July 27, 1956
- Absolute immunity from flood damage was not physically possible even in the distant future, because of the unpredictability of several natural forces which might cause unprecedented situation
- "We shall have to learn to live with floods to an extent"

National Flood Commission, 1976

- 'to evolve a coordinated, integrated and scientific approach to the flood control problems in the country and to draw out a national plan fixing priorities for implementation in the future'
- 204 recommendations
- Not a single recommendation implemented

NCIWRD Report, 1999

- 'there are no universal solutions which can provide complete protection against floods. It therefore recommends a shift in strategy from structural implements towards efficient management of flood plains, flood proofing, and disaster preparedness and response planning, flood forecasting and warning and other non structural measures such as disaster relief, flood fighting including public health measures and flood insurance
- performance review of selected embankments
- associating the beneficiaries in the upkeep and surveillance of embankments during the monsoon season for prevention of possible breaching.

Task Force on Flood Management/Erosion Control, 2004

- ensure flow of adequate financial resources to the states to implement flood management measures with Centrally Sponsored Scheme in the ratio of 90% Central and 10% State

- flood cess' of 1% to 2% that could be levied on new infrastructure like roads, buildings, power plants etc. in the flood prone states to mobilize resources for a revolving fund to be used for flood protection in the states

Short-term measures:

- plugging of breaches urgently on embankments
- raising and strengthening of embankments
- bank protection, anti-erosion works
- construction of high rise platforms,
- providing sluices in embankments,
- providing weak sections of embankments with fuse plugs
- construction of drainage development schemes as.

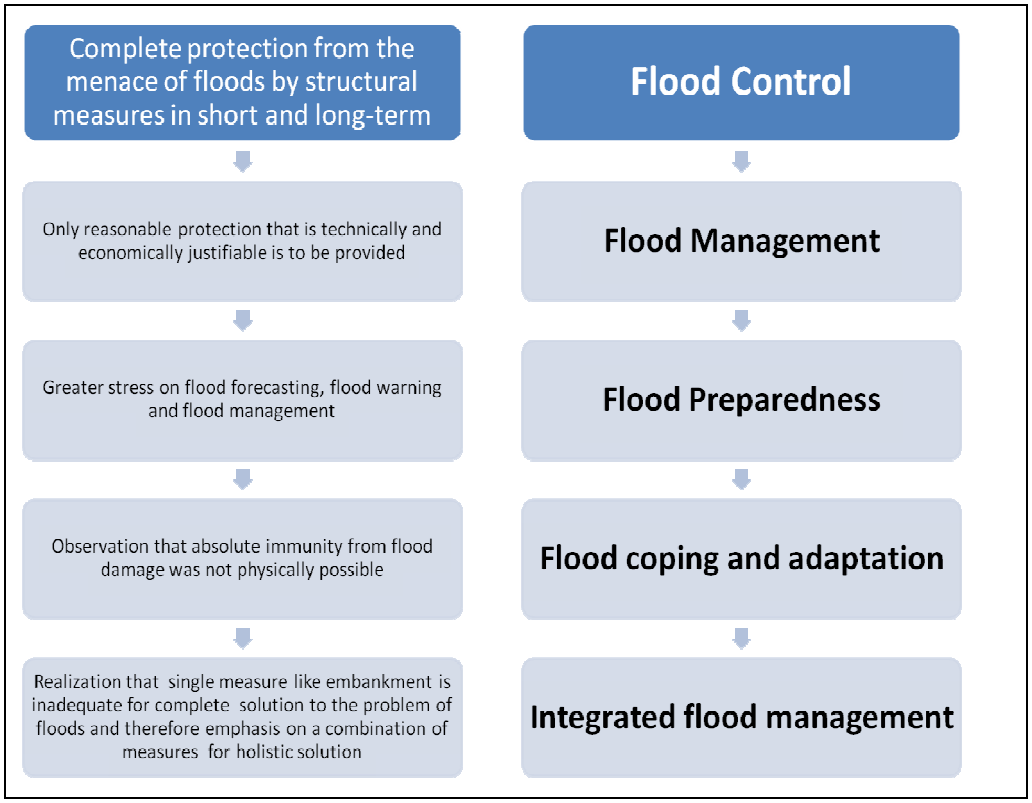
Long-term measure

Storage reservoir projects on upstream of flood causing rivers in Assam to find a 'permanent solution to the problem of floods and erosion'.

Non-structural measures:

- revival and maintenance of wetlands
- watershed management
- flood plain zoning
- extension and modernization of flood forecasting and warning systems etc.
- Community participation in maintenance of embankments.

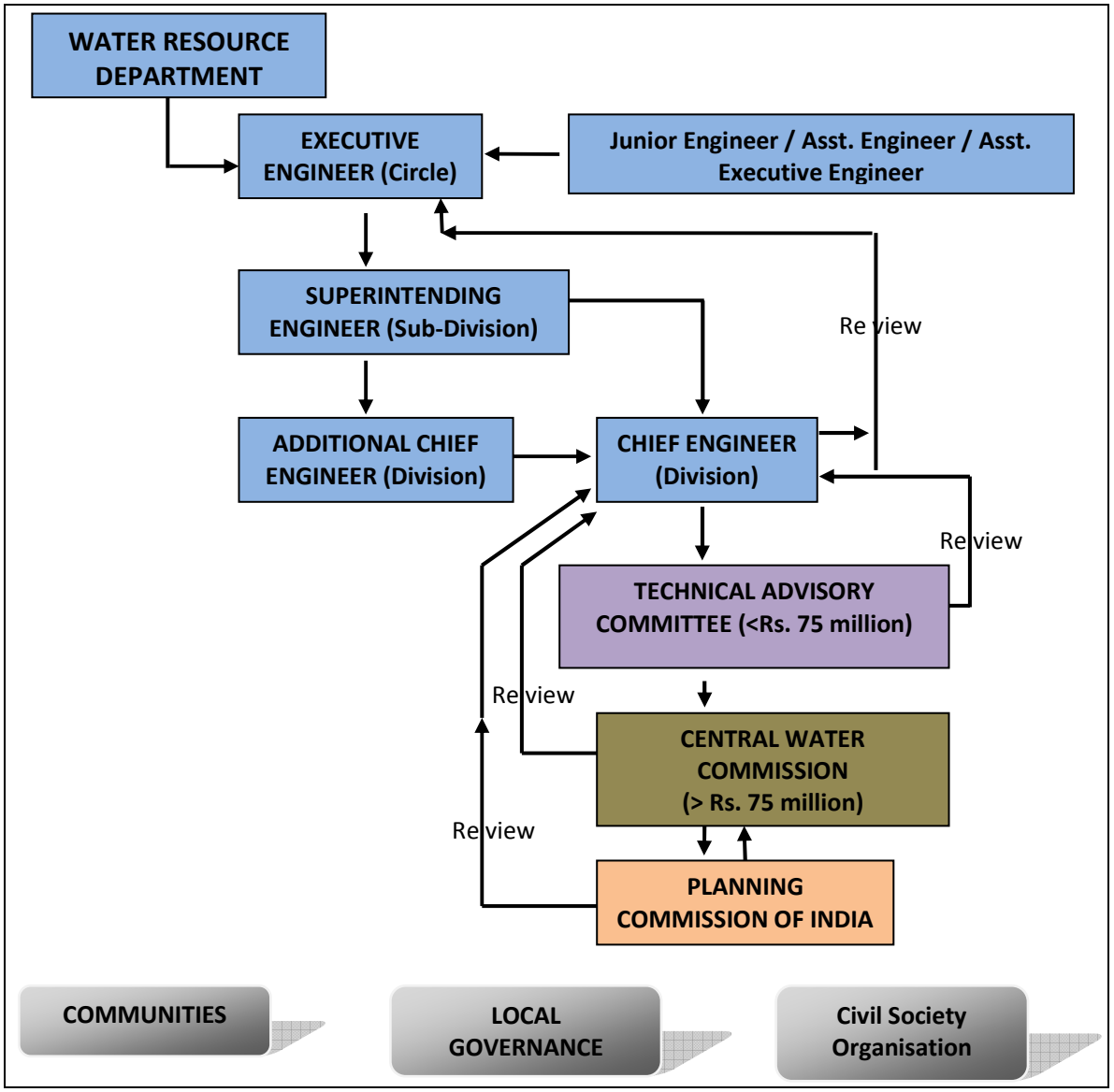
Evolution of flood management philosophy in India



Lacunae in flood management

- Design of river structures not based on up-to-date study of river hydrology and geomorphology
- Over-emphasis on structural measures(e.g. mainly embankments) for flood protection
- Inadequate maintenance of structures
- Non-existence of non-structural measures
- Lack of short term and real time reliable flood prediction/forecasting and warning in the Brahmaputra river mainstream
- Non-existence of flood forecasting and flood warning in tributaries of Brahmaputra
- Absence of trans-boundary cooperation for catchment treatment or river training in upstream areas in other states

Partha also discussed the Governance of flood mitigation infrastructure and the institutional mechanism of decision making with the following chart.



He further discussed the role of local governance agencies, district administration and Panchayats.

Major Institutional Shortcomings

- Lack of efficiency(Low ration of resource input to flood protection ensured)
- Lack of transparency
- Lack of accountability
- Lack of coordination(inter-departmental)
- Lack of scope for public participation in decision making, planning and implementation
- Flawed budgetary cycle
- Inadequately empowered PRI and DDC
- Financial irregularity in PRI and DDC
- Insufficient financial allocation
- No strong public activism against governance failure
- No attention to the problem of land degradation due to sand casting as well as land reclamation
- Flood and sand adapted agriculture is a neglected area

Partha ended his presentation with highlighting the policy gaps that need attention.

- Lack of an integrated flood and erosion management policy
- land acquisition policy for embankments(state and central) not pro-people
- No locally acceptable R&R policy
- No bilateral arrangement for exchange of information abut river status and hydrological data for monitoring and forecasting and warning of flash floods

Women and water conflicts

Jarjum Ete, Chairperson of Arunachal Pradesh Rajiv Gandhi Panchayati Raj Sangathan (APRGPRS), and women rights activist, Arunachal Pradesh

Jarjum Ete started her presentation with sharing a family incident where she first encountered with women and water conflicts. During her childhood her father used to be out stationed for work and her mother used to look after the children in family as well as work in the paddy fields. One day she found that the government authorities have diverted a water spring which used to supply water to her paddy fields to another village for their drinking water needs. She was angry because no government official consulted her about this and she in an anger destroyed the news constructed weir/ bund. Jarjum said it was for the first time she saw that women become part of the water conflicts because they are traditionally not part of the decision making processes - within the family, village or community in a tribal society.

In NE most of the village settlements are on the hill top whereas the water source is in the valley, women have to walk long distances to collect water; they have to share the water source not only for the domestic needs but also for the agriculture as they are the cultivators in the settled cultivated farm lands. This sharing of water resources also leads to conflicts. She also shared some examples from NE of such conflicts.

She further said that women empowerment process in Arunachal have been much better in whole of northeast. In terms of political empowerment, women of Arunachal are doing quite well. They may not be good leaders qualitatively, but quantitatively have taken over the space; and getting sufficient exposure and experiences. While concluding she expressed her concern that with the coming of 140 small and large dams in Arunachal Pradesh, the smaller communities around the project will be subsumed by outside population, and women are going to be taken over. Policy makers are not aware of linkages of women and their natural resources. They are not sensitive to ramifications of larger developmental interventions; women will be at the receiving end when collective resources will be taken over.

Jarjum Ete at the session

Methodologies for conflict resolution

K. J. Joy

What is a conflict?

- Conflict is present when two or more parties perceive that their interests are incompatible
  - These parties may be individuals, small or large groups, castes or communities, states or countries
  - Express hostile attitudes
  - Pursue their interests through actions that damage the other party/ies' interests
  - The issue of intensity (passive conflicts and aggressive or violent conflicts)
- Common denominator: "Contestation"

Conflicts: A source of change

- Conflicts need not be negative; it is a potential source for a change
- Interaction between conflicting parties may lead to changes, for better or worse
- Regardless of the direction, conflicts are almost always dynamic and have a time trajectory

Conflict resolution

> Increasing sensitivity about the need to integrate competitive demands and stakeholders' interests, in addition to the evolving need for political accommodation and the proactive stance in avoiding conflict, have all contributed to a shift from confrontation to cooperation, from monologue to dialogue and from dissent to consensus.
>
> (The 2006 UN World Water Development Report)

- Judicial processes are the main conflict resolution mechanism
  - In the case of water there are limits to it
- Alternative dispute resolution through dialogue or Track-2 diplomacy
  - a technique without entering into the formal judicial process in a given set of democratic governance
- Track-2 diplomacy is supposed to be pluralistic, inclusive, more democratic, cost effective and sustainable
- Conflict resolution needs interdisciplinary approach

The core of conflict resolution

An atmosphere where more than one stakeholder define their degree of stakes, entitlements, roles and responsibilities through negotiation or mediation and dialogue process

Do remember that…

- Consensus building
- Reconciliation
- Conflict resolution
- Cannot be isolated or divorced from the economic, social and political milieu in which one is operating

Theories of conflict resolution

1. Theory of impossibility & its application to conflict resolution in NRM

- There are often gains to be had by an organization or society by making a collective choice from a set of alternatives available to them, rather than having each individual act independently
  - The Collective choice could indeed reinforce the impossibility of co-existence
- Impossibility of co-existence

Examples:

- Husband and wife – if they cannot live together, its possible to seek divorce – the outcome at worst may affect individuals but not the society; but in the case of conflicts in NRM, such a possibility cannot exist as such drastic decisions may affect the society or even the future generation

- Lion and a lamb in a cage or in a confined territory – outcome - succumb to the pressure – impossible to coexist or challenge

2. Game theory

- Game theory is a branch of applied mathematics that is often used in the context of economics
  - It studies strategic interactions between agents
  - In strategic games, agents choose strategies which will maximize their return, given the strategies the other agents choose
  - Its relevance to social situations: Modeling games in social contexts supposed to help decision makers to interact with other agents

The example of "Prisoner's Dilemma"

- The Prisoner's Dilemma was one of the earliest "games" developed in game theory. By simulating the Prisoner's Dilemma we are given an excellent method of studying the issues of conflict vs. cooperation between individuals.
- Since the Prisoner's Dilemma is so basic, it can be used as a model for various schools of thought / disciplines / or even in military situations

- The Game:

Two people have been arrested separately for the same crime that they have supposedly committed, and are held in separate cells. They are not allowed to communicate with each other at all.

- Each prisoner is told the following:

We have arrested you and another person for committing this crime together

Options given to the prisoners

- If you both confess, we will reward your assistance to us, by sentencing you both lightly: 2 years in prison
- If you confess, and the other person does not, we will show our appreciation to you by letting you go. We will then use your testimony to put the other person in prison for 10 years
- If you both don't confess, we will not be able to convict you, but we will be able to hold you here and make you as uncomfortable as we can for 30 days
- If you don't confess, and the other person does, that person's testimony will be used to put you in prison for 10 years; your accomplice will go free in exchange for the testimony

- Lack of communication puts them in a dilemma

If you restore communication between the two, the cooperation is possible

3. Theory of rationality & CPR literature

- The tragedy of the commons – Hardin

  Drive for individual profit maximisation

    - If everybody wants to add one extra well in the case of ground water or an extra cow in the case of common pasture then this would end up in the tragedy of the commons
- CPR and collective action literature
    - The work of Elinor Ostrom and others
    - Importance of institutions

Methods of conflict resolution

1. Negotiation

- It involves two or more parties engaging in direct discussions with each other in a concerted effort of reaching an agreement
    - Direct talk among the affected individuals or the members of a community

2. Mediation

- It involves the use of a neutral third-party who assists the negotiation process among the affected parties in reaching an agreement
    - Typically, mediation takes place when direct negotiations fail
    - Example: In the context of Indus water treaty, the World Bank expert acting as the "neutral" third party

3. Arbitration

- This is a form of resolving conflict that is handled outside of court where both parties come before a neutral third-party
    - The neutral third-party is usually a lawyer who passes judgment on a winner and a loser in much the same way as that of a judge in a Court

4. Conciliation

- It means settling of disputes without litigation
    - Conciliation is the process by which discussion between parties is kept going through the participation of the conciliator
    - The main difference between arbitration and conciliation is that in arbitration proceedings the award is the decision of arbitral tribunal while in the case of conciliation the decision is that of the parties arrived at with the assistance of the conciliator

5. Collective bargaining

- Negotiation is something that you can do on one's own, while collective bargaining is something you can only do as a group
    - Pressure gorups, organisations of the project affected persons, trade unions, social movements, etc.

6. Multi stakeholder processes

- Stakeholder involvement/interaction being as very critical – stakeholder dialogue
- Some limited experience in the Indian context

Day Three: 25 January 2012: Field Visit to Kulsi river site at Kukurmara

The third day of the workshop was dedicated to the field visit to Kulsi river site at Kukurmara.

Main learnings and details about the field visit presented by Group Three are given below:

Tale of the 'Sihu's

- River Kulsi (one of the tributaries of river Bhramaputra) has the presence of approx 27-29 fresh river Dolphins or 'Sihu".
- Around the world only four species of fresh water Dolphins are found ,one of them being in India River Dolphin -Platanista Gagentica Gagentica have the status of National as well as state aquatic animal of Assam.
- 'Endangered Species'.
- Life expectancy : 35 years

The Gangetic Dolphin, an endangered species, is found in the Gangetic-Brahmaputra-Meghna river systems of India, Nepal and Bangladesh. The total population is estimated to be in the range of 2,500-3,000, of which 80 per cent is in the Indian Territory.

The Dolphins are poached for its oil and meat, which is used as bait for catching fish in Bihar and Assam for catching fish and also for its medicinal values

Sand mining at Kukurmara

- Has created lowered the river bed unsuitable for dolphin habitat
- Dolphins has adopted the changed situation to some extent
- During summer, they get scattered but in winter they concentrate in one place
- Going on for last 20-25 years which was started first by the government officials
- Sands are considered best for construction because of its good quality
- It has created earning source for many youths
- Flood was perennial but due to the diversion of river flood occurrence stooped since last five years

Sand mining in the area

Views of the Fishermen (village: Amtola 3)

- Fishermen: Elders emotional about the dolphins and don't support sand mining. Youngsters dependent on the sand mining for income generation

- Fishermen community increased over the period of time and lack of education, lack of employment opportunities but would like to absorb in other employments if provided
- Dolphins leads to fishermen's catch
- Villagers believe that if embankments are removed fish population may increase which will help the community to sustain on fishing

Discussions with the local fishermen

Amtola village

- 500 houses of about 1000 families and about 15000 persons
- Primary source of livelihood fishing
- Changing pattern of livelihood is noticed when the fish population decreased at the river Kulshi
- Embankments, accumulation of sands and closure of free flow of river water caused decrease of fish population, believe peoples of this village
- Villagers conducted awareness on the conservation of dolphins
- Dolphin poachers are now converted to conservationists.
- First public hearing by village elders were held 20 years back
- Social boycott of these villagers is noticed during the filed trip which may have further narrowed down their choice of employment.

Observations

Things harmful for Dolphin population at Kukurmara

- Water pollution
- Food scarcity
- Dam constructions
- Fishing net trappings

The participants also visited Deepor Beel, located south-west of Guwahati city which is a freshwater lake, and is also a Ramsar site. The lake was listed a Ramsar site in November 2002, in order to enable conservation measures on the basis of its biological and environmental importance.

Group three of the participants presented the views of different stakeholders from the area. The important points presented by the group are given below:

Deepor Beel

- As the legend goes, the wet land came after an earth quake
- From Stakeholder's perspective we see four groups here
    1) Government
    2) Local People
    3) Conservationist
    4) Local Political Leadership

Government

- First time - Intervened in the wetland ecology first time with the construction of Railway
- Protest and appeals were not adhered –

  Elephant corridor blocked led to death of the largest mammal over ground

  Bird habitat disturbed
- Declared the area reserve forest without a map clarifying boundaries
- Secondly in the form of a road construction – a VIP road to serve the political elites

Local people

- Twenty Two villages in the area
- Karbis and Kaibartas (the fishermen community)
- Declaring the Deepor beel as a reserve forest has mainly hit the fishermen communities – mainly in the form of loss of livelihood
- People of the area want the road but there demand was for a all weather connecting road
- People didn't get any compensation from the government.
- Existing structural inequalities

Conservationist

- Importance of preserving the natural habitat is in contrast to demands for development.
- Conservationist brought the change in the original plan of railway line cutting through the wetland

- Now the dilemma is in the case of the VIP road

Local political leadership

- Wrongly guiding the people of the area for electoral gains
    - Telling them not to attend the meetings oragnized by government
    - Antagonizing them against conservation agencies

Current issues

- Government has issued 144 on fishing and land cutting but
    - "Commercial fishing" versus "community fishing" both of them illegal but local police allows "community fishing"
    - Rampant commercial fishing in the core area itself
- Encroachment from all sides

Day Four: 26 January 2012

Main learning from day two

By Group Two

The 2nd Day started with the presentation by the Group 1 on the reflection on Day1 activities.

The first session of Day 2 began with the expert presentation on the Ecological Economics by Dr. Anamika Barua. In her presentation she gave a lucid explanation on the concepts and dimensions of environmental economics and ecological security. Her presentation activated an interesting interaction with the participants centering the following topics:

Sustainable development

Concept of Growth and Development

Consideration of natural resources as natural capital

Economy as a subset of environment

Dr. Anamika Barua in her later part of presentation focused on the "Water security" issues. She elaborated on the reasons behind water being the pivot of many conflicts around the world. She explains that shortage of water ("water is a scarce product") has led to serious economic impact on the society and this leads to downfall of development process. She goes on to explain how "Water" as an economic good has tremendous impact on the "Social capital". Citing the example from her own research, she narrates how water conflict issues erupting at local level in Sikkim have resulted in breakdown of social capital in the state which has further taken the shape of domestic violence.

The 2nd session was taken over by Dr. Partha Jyoti Das who elaborately presented on the topic "Conflicts over water induced hazards and their management: perspectives from Assam". He gave a pictorial description alongwith his field experiences to the participants regarding the various water induced hazards in Assam. During his presentation he discussed on the following:

Types of water induced hazards(WIH)

Flood, Erosion, Sand casting, dam induced flooding in Assam

Management of WIH

Government Policies and initiatives on Flood management

Structural and Non-Structural measures

Lacunae in Flood management

In the 3rd session Prof. Chandan Mahanta was the resource person and he delivered a lecture on "Overview of Water and Water Conflict in North East India". He started with by identifying the major emerging areas of conflicts in NE India and these are: Hydropower projects, drinking water, water quality and health, Floods, Bank erosion, river pollution and groundwater. He goes on to explain the various outcomes of all the water conflict issues in general. Towards the end of his presentation he stressed on the requirement of strong government policies and their effective implementation for solving conflict issues. Categorically he spoke on the following issues related to water conflicts:

Regional governance and cooperation

Increased accountability

Decentralization of decision making

Mechanism for equitable water sharing benefits

Long term growth models

Incentives and disincentives that encourages initiatives with sound policy

In the 4rth session Ms. Jarjum Ete enlightened the participants with a lively talk on the topic "Women and Water Conflict". She elaborated mainly her personal encounter and experiences twisting around the water conflicts in Arunachal Pradesh. Ete said traditionally in a tribal society, women are never a part of the decision making processes – whether it is within the family, village or the community. But in recent times because of varied water conflict situations in the north east, women are coming into the forefront. She proclaimed that now women can no longer be kept outside the decision making process. In a tribal society, women are looked over as pillar of community; as they till the land, manage resources and largely take the role of guardians of the community resources. Yet, the policy makers are not aware of or don't pay heed to such linkages of women with its natural resources. As the policy makers are not sensitive to ramifications of larger developmental interventions, women will be at the receiving end when collective resources will be taken over. Thus with the coming of large dams in Arunachal, the smaller communities around the project will be subsumed by outside population, and women are going to be taken over. Her talk ended with a very good and informative interaction with the participants.

Day 2 ended with the presentation from K. J. Joy on "Methodologies for Conflict Resolution". He started the session with an interrogative sentence that was one of the core themes of this workshop, 'what is conflict?' He explained conflict as *'a situation when two or more parties perceive their interests are incompatible'*. Then he explained the process for conflict resolution. Here he explained the importance of judicial process, alternative dispute resolution through dialogue (or Track-2 diplomacy) and inter-disciplinary approach for conflict resolution. It was really enlightening to learn through this lecture that 'consensus building, reconciliation and conflict resolution' cannot be isolated from economic, social and political milieu in which one is operating. Thereafter, the session witnessed different theories of conflict resolution from the speaker. He explained various theories of conflict resolution with much humorous touch to them with the help of wonderful examples. The theories that were explained are, a) theory of impossibility (it's applicability to conflict resolution in natural resource management), b) game theory, and, c) theory of rationality. Then he explained different processes like negotiation, mediation, arbitration, conciliation, collective bargaining and multi-stakeholder processes with different examples, and their importance in conflict resolution. The session ended with a lot of interaction among the participants focusing on conflict resolutions taking Narmada project, Lower Subansiri Hydropower project and others as case studies.

Our team would like to express that we found the day very useful and interesting; having said that we also came across a bit of over lapping, a slight hurry of some of the expert presentations and little less availability of time for participatory and interactive work. We look forward towards improvement in streamlining the topic themes. We also would like to put forward the suggestion to focusing on the workshop topic and inclusion of the relevant cases and issues from other parts of NE namely Manipur, Mizoram, Meghalaya and Nagaland as well.

Conflict resolution: Common challenges and some approaches to creating sustainable solutions

Beth Fascitelli

Beth conducted the session in an interactive manner and tried to involve participants in the discussions with small games.

She started with a quote, Telling people to EMBRACE CONFLICT (because in it lies OPPORTUNITIES) is like… ...telling them "Love your enemy!" or "Celebrate your neighbor's lottery winnings!"

Competition vs. Collaboration

A Successful Negotiation?

Competitive	**Collaborative**
You did not make ANY concessions You forced *them* to give in to *your* demands You got "more" than they did	You and your counterpart see a more complex problem and tackle it *together* Agreements are sustainable, not repeatedly challenged Solutions are creative You and your counterpart want to work together again

And if you're still not convinced...

Collaboration...

- Surfaces multiple perspectives, instead of just one
- Results in creative and comprehensive solutions through joint idea-generation and problem-solving
- Develops inspiring models of democratic engagement
- Builds stronger communities and societies

Solutions vs. Process

"For every complex problem there is an answer that is clear, simple, and **WRONG.**" (**H.L. Mencken,** Journalist and Social Critic)

Solution-driven Negotiation	**Process-driven Negotiation**
Focuses on Advocacy	Focuses on Dialogue

Pre-determined solutions	No predetermined solution
Minimum/exclusive stakeholder involvement	Maximum/inclusive stakeholder involvement
Narrow understanding of conflict issues and interests	Appreciation of complexity and diversity of issues, interests, and emotions
Tendency to deride the other's solutions	Creates joint ownership of solution

Positions vs. Interests

Positions	**Interests**
Articulated demands	Awareness of the needs and values behind the 'want'
Rigid inflexible stances	Appreciation of complexity – complex needs and emotions
Limited awareness of real needs	Openness to negotiation and flexibility
Changes with discovery of interests	

Thin vs. Thick Multi-stakeholder Initiatives

Thin MSIs	**Thick MSIs**
Groups that broadly agree with each other	*All* key stakeholders, irrespective of perspective
Strategies based on pre-determined goals	Open-ended strategies, evolving goals
Coalitions against stakeholders *not* at the table	Collaborate to meet all party's interests

Case Study 1: Water Round Table in a U.S. City

The Problem

- Water shortage

- Complicated water supply system affecting multiple stakeholder interests
- Long history of conflict and litigation
- Planned large dam and storage lake with potential adverse environmental impacts
- Prospects of a new, prolonged litigation at high cost for the City

The Process

- Professional mediators hired
- Mediators conducted a Conflict Assessment
- Roundtable convened involving ALL stakeholders
- Stakeholders built agreement on process, ground rules, and scope
- Monthly Roundtable meetings held
- Work Groups established

The Process – A Closer Look

Mediators guided stakeholders in:

- Creating a list of key interests to address
- Restating the problem
- Developing alternatives and designing models
- Addressing the legal, institutional, and financial implications of discussions
- Creating a joint report
- Reaching consensus on a holistic course of action

Stakeholders	**Initial Positions**	**Revealed Interests**
Business groups	Project will go ahead in its present shape Will not bow to litigation or protests Will not negotiate	Healthy profits for org. growth Succeed in executing large projects Protect relations with subcontractors Maintain reputation and credibility Prevent delays and lost opportunities
Environmental groups	Project will not go ahead Conflict to continue Will litigate and protest Will not negotiate	Protect the environment Maintain credibility as a protector of the environment Play a bigger role in state and local policymaking

Success Factors

- *All* stakeholders involved
- Restatement of problem: *dam vs. reliable water supply*
- Positions *transformed* into interests
- Equitable division of tasks in group
- Joint fact-finding = collective acceptance of data
- Joint problem solving = collective ownership of solutions
- Agreements on *process* and *principles*, instead of a particular solution

Conflict Resolution Modalities

- **Facilitation** – Neutral management of the Dialogue process
- **Dialogue** – Facilitated and structured conversations amongst polarized groups to increase understanding and trust
- **Consensus Building** –Systematic and collaborative fact finding, problem solving, negotiation, and joint decision making
- **Mediation** – Facilitation by a neutral third party to help parties rebuild communication with each other and thereby resolve disputes

Case Study 2: Garment Sector Roundtable

The Problem

- Threats to industry sustainability and profitability
- Industry riddled with business and labour issues
- Reactive and adversarial stakeholder engagement over many years
- Misperceptions, misunderstandings, and distrust
- Stakeholders fail to address root causes
- Existing forums ineffective; lack of relevant stakeholders

"...there is a need for these stakeholders to come together, not to restate and reinforce their already entrenched positions, but rather to listen to and build an understanding of each other's needs, interests, challenges, and values." (Meta-Culture Garment Sector Scoping Report, December 2009)

Garment Sector Roundtable: Purpose

To create a multi-stakeholder group capable of:

- Improving relationships and establishing trust
- Discussing differences
- Identifying common interests
- Taking collaborative action to initiate systemic changes within the industry

GSR – A Brief History

- *Sept 2009:* NGO approaches Meta-Culture with an idea of convening a multi-stakeholder forum in the garment sector
- *Dec 2009:* Meta-Culture submits scoping report

- *Apr-May 2010:* Stakeholder discussions
- *May-Jul 2010:* Outreach meetings with potential participants
- *Aug 19, 2010:* GSR Informational Meeting for potential participants
- *Sep-Nov 2010:* Nailing down commitments and contributions
- *Jan 11, 2011:* GSR Inaugural Meeting (20 participants from 8 stakeholder groups)

Resolution through Transformation

- Facilitation by a 'neutral' third party
- Effective and transparent process
- Presence of ALL key stakeholders
- Moving parties from:
  - Debate to ***Dialogue***
  - Distrust to ***Trust***
  - Competition to ***Collaboration***
  - Positions to ***Interests***
  - Simple to Complex solutions

Neutrality/Omnipartiality

Choosing the Right Facilitator

Content Expert	**Process Expert**
Extensive knowledge of field	Limited knowledge of field
Aware of sectoral politics	Deep experience of facilitation and process management
Deep investment in the sector and clear stake in outcome	No stake, except in good process
History with other stakeholders and part of sub-groups	Limited history with stakeholders
Clarity/ideas about 'right' solutions	No pre-determined solutions or answers
Feels there's much to lose by being neutral	Loses nothing by being neutral

Multi Stakeholder Dialogue as a Possible Way of Conflict Resolution

K J Joy

This session did not take place as earlier session on conflict resolution took more time than scheduled. The power point presentation of this session was circulated to all the participants for their reading.

Water Resource Conflicts: a theoretical perspective

Rushabh Hemani, UNICEF

Water Resource Conflicts

- Water conflict is a term describing a conflict between countries, states, or groups over an access to water resources.
- The United Nations recognizes that water disputes result from opposing interests of water users, public or private.
- Competing demands on the same resources by different people result in protracted conflicts, sometimes violent

Factors Leading to Evolution of Water Conflicts

- Physical & Technological
  - rainfall, soil texture, nature & extent of g/w aquifers and overall hydrological cycle
  - technological factors either constrain or facilitate the use of resources
- Attributes of community
  - Individual/community actions to meet need/ interests
- Institutional factors
  - interaction with physical and socio-cultural world

Competition and Conflicts in Different Water Users

Different forms of localized surface water conflicts

- Upstream v/s Downstream
- Agriculture v/s Domestic
- Urban v/s Rural allocations
- Industrial pollution v/s community

Behind the water crisis likes a very apparent human hand!

- Mis-management of water resources is leading to increasing inter-state/region conflicts over water resources
- Scenario of water crisis leading to water conflict results from factors that operate for a long time with various actors involved including Government

Conflict Analysis: Mapping

Strengths	Limitations
Temporal Mapping •Provides accurate record of who did what-when	•Often based on recall data and subject to errors •Does not cover spatial dimension of conflict
Spatial Mapping •May provide some clues about the impact of events on different stakeholders on account of spatial dimensions – eg. Proximity of resources, etc.	• Spatial dimension also changes over time which can't be captured in a single diagram
Historical Mapping •Overcomes the limitation of both the above methods •Can have series of maps at different points in the time showing spatial changes.	• Conflicts often escalate at higher levels and are fought in arenas far removed from the original battlegrounds
Mapping of Levels and Arenas Provides information about changes in positions, strategies and key actors as conflict moves to higher levels and into different arenas.	• Such map fail to provide information of spatial dimension. • Should be used in conjugation with Spatial or Historical mapping

Source: Pastakia, A. R. (ed.), Locked Horns; Conflicts and Their resolution in community based Natural Resouce Management (2003)

Alternate Approaches to Conflict Analysis

Strengths	Limitations
Stakeholder Analysis •Focus on different groups and their interests can lead to negotiated solutions	•Not very effective when conflicts escalates to higher levels when new actors get involved in different arenas where rules of games are different
Actor-Oriented Analysis •Focus on mapping of events across roles of different actors •Useful for generating understanding of process at different levels and arenas	• Usually good for understanding of conflict but not very helpful in conflict resolution
Root Cause Analysis •Focus on proper diagonosis of problem likely to yield effective results	• Root cause may be perceived differently by different stakeholder groups
Policy Instrument Analysis •Focus on policy flaws and implementation problems leading to conflicts.	• Not relevant for non-policy induced conflicts.

Source: Pastakia, A. R., Conflict Analysis: A review of tools and methods (1999)

Conflict Management

- Conflicts do not take place in isolation. It has context, partisan interest and positions.
- Strong relationship between: culture, communication – verbal/ non verbal and conflict!
- Conflict resolution – proactive process – arbitration requires – careful planning and preparation

Conflict Management in Water Resources:

- It would require application of different methodical approaches to the development process
- Water conflict usually arises due to lack of micro planning and subsequent linkage with macro planning

Traditional/customary/local ways of conflict resolution in NE India

Prof. A.C. Bhagawati

Prof. Bhagabati discussed that there are many communities in the NE with their distinct language, social formation, religious and livelihood patterns and culture. In 1991 an exercise has been done to list such communities with number of indicators. The number of such communities was presented as 357. He elaborated that some of them are not indigenous but they are settled here since many years. He mentioned that in the post British era, the methods of conflict resolution amongst the communities changed as the direct intervention of the British authorities was no more in existent. There were changes in the administration. He believed that these communities in NE have enough resources and capacity to resolve conflicting issues but unfortunately it is not given important and we keep going to the legislation and laws without looking at the community capacity and resources to resolve conflicts. We need to take in to account the strength of the traditional institution in conflict resolution.

Prof. Bhagavati at the session

Panel Discussion: Water Conflicts in the North East India

Prof. A.C. Bhagawati, Samudragupta Kashyap, Dr. Nanigopal Mahanta, Dr. Gorky Chakroborty, Dr. Nirmal Bhagabati

The Panel including Dr. Gorky Chakraborty, Prof. A.C. Bhagawati, Samudragupta Kashyap, Dr. Nanigopal Mahanta and Dr. Nirmal Bhagabati

H. N. Das, Retired IAS officer, chaired the panel discussion.

Dr. Gorky Chakraborty, Samudragupta Kashyap, Dr. Nanigopal Mahanta and Dr. Nirmal Bhagabati spoke at the panel. The panel highlighted the current issues related to water conflicts in the NE region.

Valedictory Session

In the last valedictory session participants were given the certificates for participation by Prof. A.C. Bahagawati and H. N. Das.

K J Joy, Partha J Das and Chandan Mahanta thanked all the participants and resource persons and concluded the workshop.

Schedule of the Training Workshop

Time	Topic	Resource Person
Day One: 23 January 2012		
09:00 to 10.30		
09:00 to 09:45	Welcome, introduction to the training programme and introduction of the participants	Dr. Chandan Mahanta Dr. Partha J. Das K. J. Joy
09.45 to 10.15	Inauguration and Inaugural Speech by Chief Guest	Dr. Indranee Dutta Director, Omeo Kumar Das Institute of Social Change and Development, Guwahati
10.15 to10.30	Chairperson's address	Prof D.C. Goswami Former Head , Environmental Science Department, Gauhati University)
10:30 to 11:00	*High Tea/Coffee*	
11:00 to 12.00	Transboundary water conflicts (International and intra-national)	Prof. D. C. Goswami
12:00 to 13:00	Overview of water and water conflicts in NE India	Dr. Chandan Mahanta
13:00 to 14:00	*Lunch*	
14:00 to 15:00	Understanding water: the bio-physical and socio-cultural characteristics of water	K. J. Joy
15.00-15.15	*Tea/Coffee*	
15:15 to 16:15	Normative concerns around water: sustainability, equity and democratization	Suhas Paranjape
16.15-17.15	Overview of water conflicts water conflicts in India	Suhas Paranjape
20.00	*Dinner*	

Day Two: 24 January 2012		
09:00- 09:15	Main learning from the day one	Group-I
09:15-10:15	Let us look at Economics	Dr. Anamika Barua
10:15-11:15	Water hazard and conflicts	Dr. Partha J Das
11:15 to 11:30	*Tea/Coffee*	
11:30 to 12:30	Resource, Development, Hydropower and conflicts: Scenario in NE India	Prof. Chandan Mahanta
12:30-13:30	Resource, Development, Hydropower and conflicts: Scenario in NE India	Prof. Chandan Mahanta
13.30-14:30	*Lunch*	
14:30-15:30	Women and water conflicts	Jarjum Ete
15:30 to 15:45	*Tea/Coffee*	
15:45 to 16:45	Experience sharing by participants	Coordinated by Partha J Das
16:45-17:45	Methodologies for conflict resolution	K. J. Joy
20:00	*Dinner*	
Day Three: 25 January 2012: Field Visit to Kulsi river site at Kukurmara		
Day Four: 26 January 2012		
09:00 to 09:15	Main learning from day two	Group-II
09:15 to 09:30	Main learning from day three	Group-III
09:30 to 10:30	Conflict resolution: Common challenges and some approaches to creating sustainable solutions	Beth Fascitelli
10:30 to 10:45	*Tea/Coffee*	
10:45 to 11:45	Conflict resolution: Common challenges and some approaches to creating sustainable solutions	Beth Fascitelli
11:45 to 12:45	Conflict resolution: Common challenges and some approaches to creating sustainable solutions	Beth Fascitelli
12:45 to 13:45	Water Resource Conflicts: a theoretical perspective	Rushabh Hemani

13:45 to 14:45	*Lunch*	
14:45 to 15:45	Traditional/customary/local ways of conflict resolution in NE India	Prof. A.C. Bhagabati
15:45 to 16:45	Panel Discussion: Water Conflicts in the North East India	Prof. A.C. Bhagawati, H.N. Das, Samudragupta Kashyap, Dr. Gorky Chakroborty, Nirmal Bhagabati
	Valedictory Session	
16:45 to 18:30	Distribution of certificates	A.C. Bahagawati & H. N. Das
	High Tea	
	Way Forward	KJ Joy, Partha J Das & Chandan Mahanta

List of participants

No.	Name	Email	Organisation/Designation	Gender
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3	Arindam Kashyap	arindamkashyap52@gmail.com	General Member, AARANYAK	Male
4	Bidyut Bikash Sharma	bidyut.bikash.sarma@gmail.com	Research Scholar, Department of Environmental Science, Gauhati University	Male
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12	Raju Mimi	rajumimi@gmail.com	News Correspondent, Arunachal Times	Male
13	Ranjita Bania	ranjitabania@gmail.com	Fisheries Research Centre, Assam Agricultural University, Jorhat	Female

14	Suranjoy Singh Logjam	prda@rediffmail.com	Chief functionary, Peoples Resource Development Association, PRDA, Bishnupur	Male
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List of resource persons

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