Partners for Resilience : Strategic Partnership

Understanding IRM

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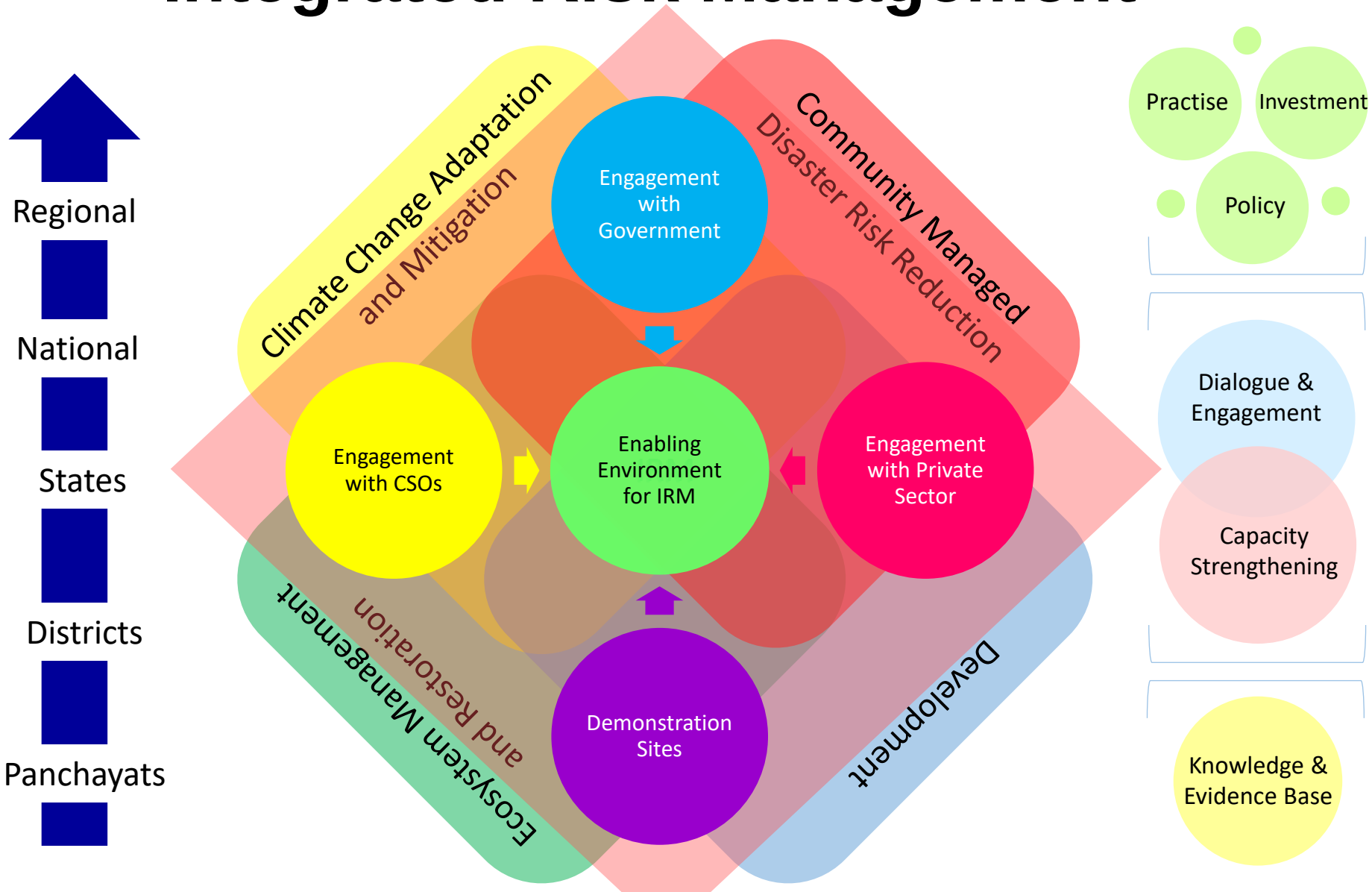
Integrated Risk Management

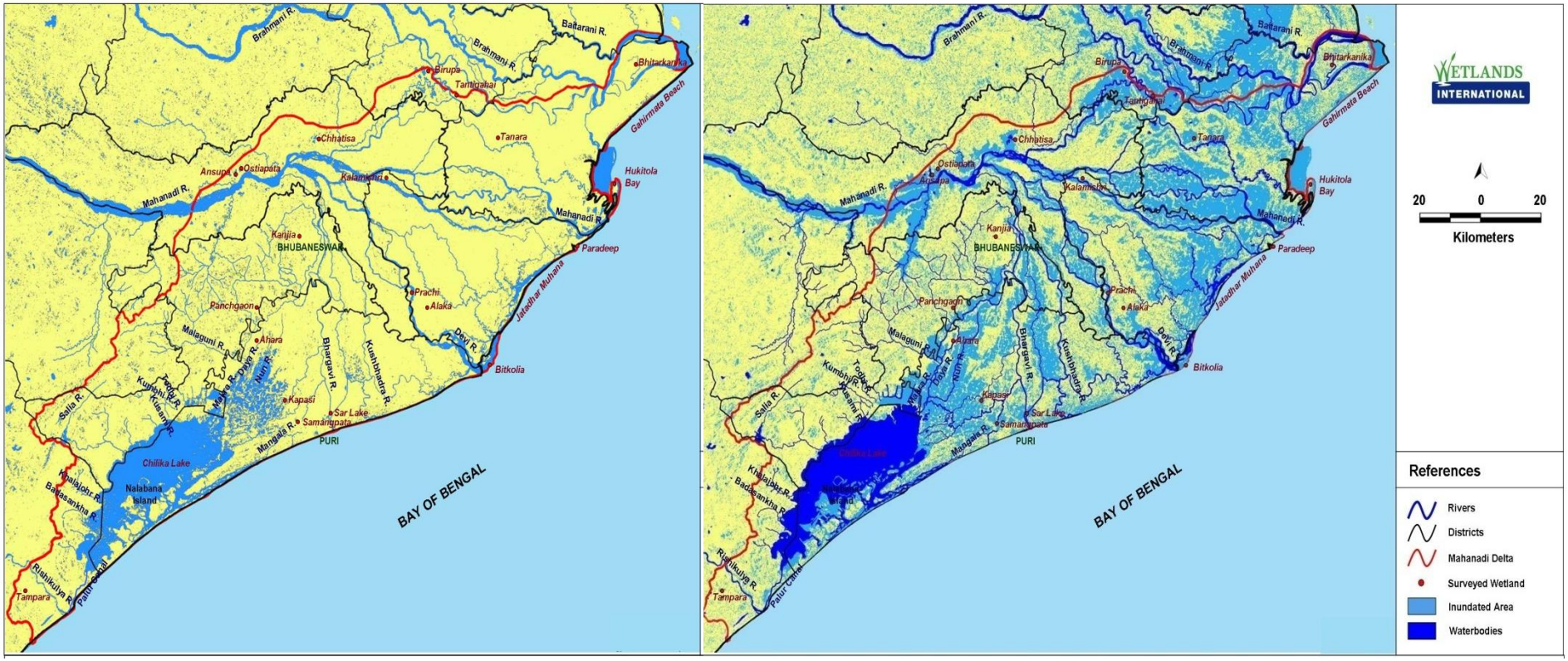


Landscape approach

- Recognize the broader landscape scales on which the drivers of risk express themselves
- By regarding risk in a wider landscape, the places where it originates and where it manifests itself become clear – places which can be geographically remote
- Disasters need to be considered beyond administrative boundaries

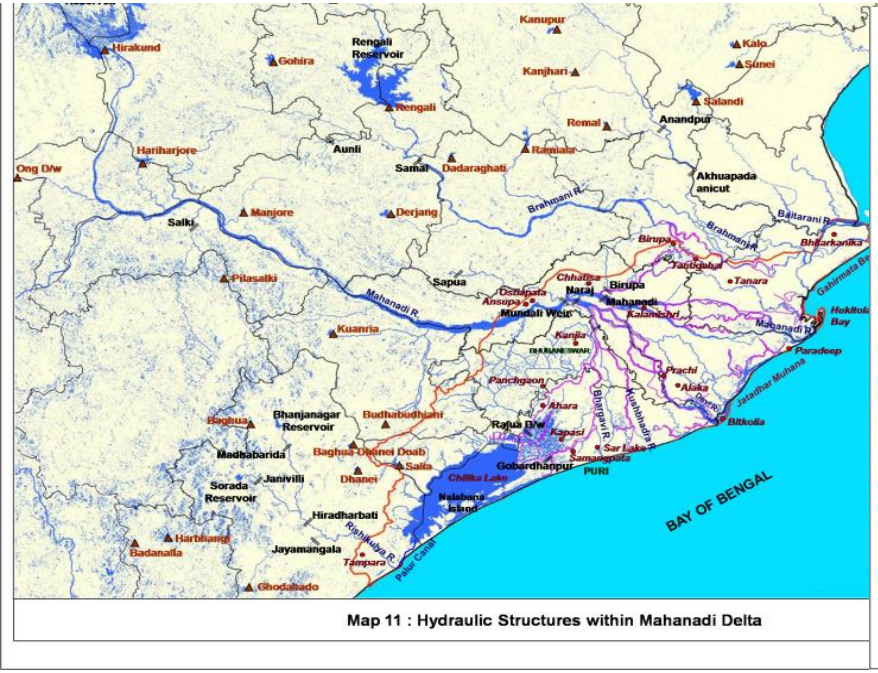
Mahanadi Delta

Deltas are hydro-geologically dynamic

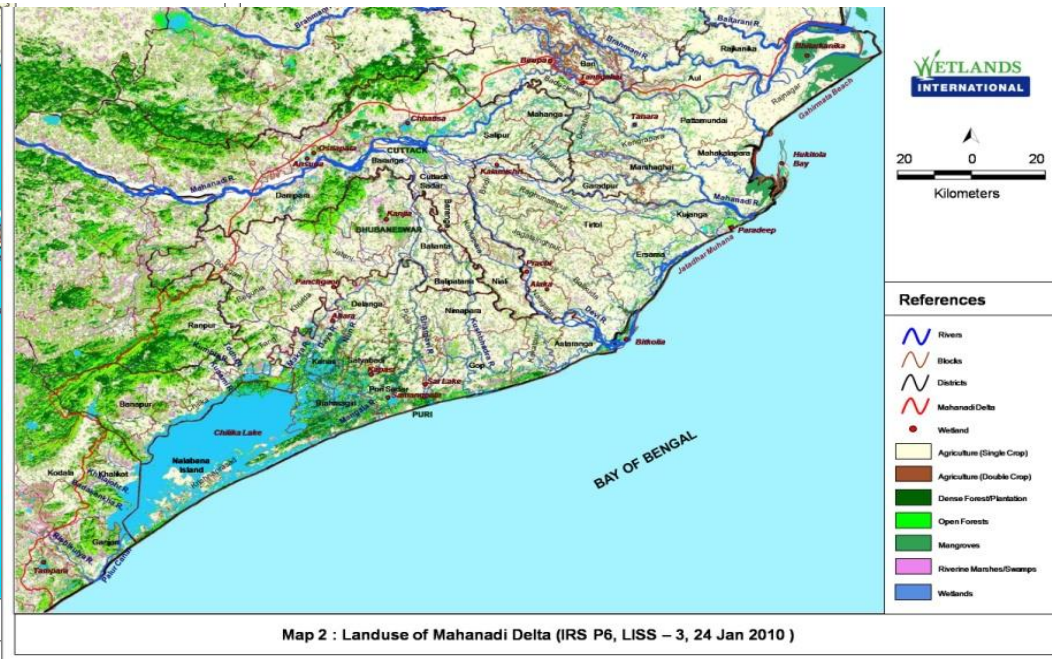


Mahanadi Delta

From flood dependent to flood vulnerable



Map 11 : Hydraulic Structures within Mahanadi Delta



Map 2 : Landuse of Mahanadi Delta (IRS P6, LISS – 3, 24 Jan 2010)

1. Participatory assessment

- Find common concerns
- Understand drivers of risk
- Drivers of risk
  - Unplanned development – the gateway to poverty and deprivation
  - Vulnerable livelihoods – a catalyst for poverty and disaster risk in rural areas
  - Ecosystem degradation – harsh realities are already apparent

2. In depth risk analysis using HVCA tool

- Stakeholders analysis (understanding the most vulnerable and most resilient)
- Hazard vulnerability and capacity assessments
- Identify problems and strengthen capacities

3. Building partnerships and stimulating processes

- Building on existing community initiatives (PRIs are a entry point)
- Coming to an agreement on the core issues and problems
- Strengthening capacities

4. Problem and Solution analysis

- Identify root causes
- Explore stakeholders' roles in relation to the core problems
- Include traditional, local and scientific knowledge
- Identify possible solutions

5. Collaborative planning

- Develop landscape scenarios
- Integrate plans with GPDP
- Agree on tasks, responsibilities and communication strategies

6. Plan implementation

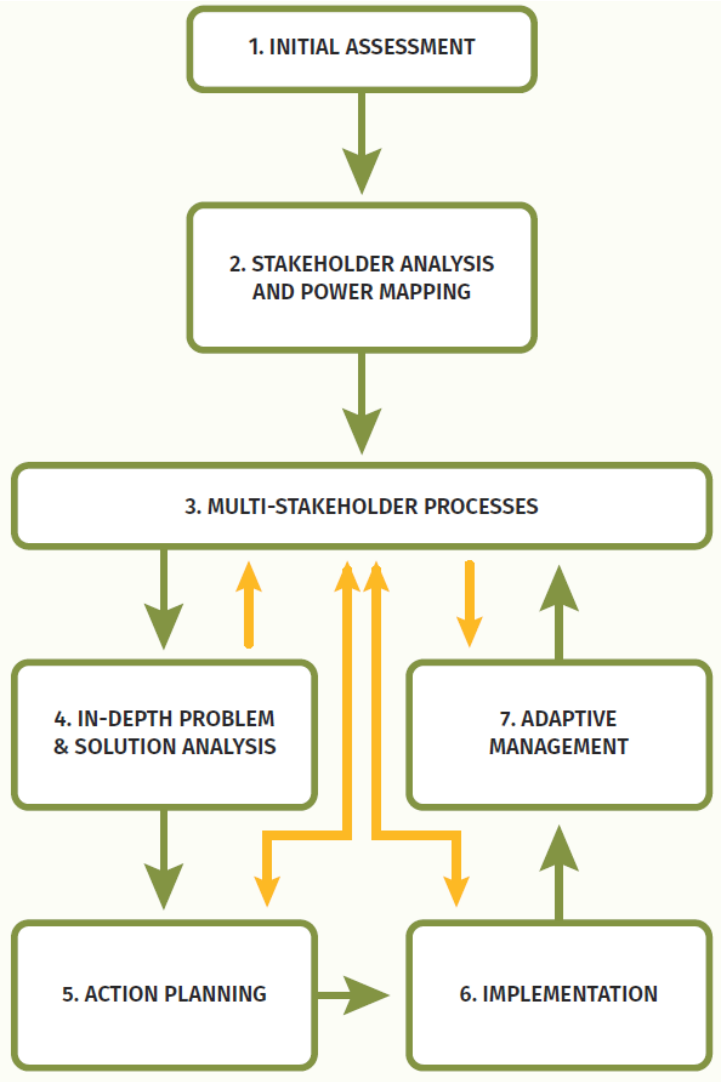
- Implement interventions that address the drivers of risk from leveraging funds from developmental programmes
- Link long-term risk reduction goals to socio-economic benefits
- Make use of synergies
- Promote ownership

7. Adaptive management

- M & E
- Track changes in communities
- Build strong case studies for successful interventions
- Mark key lessons learnt

Only 7 steps but a long term approach

1. Look upstream, at the entire river basin in India and Nepal – not just the critical site
2. Identify who is having an impact on water and who is being impacted – dams and irrigation
3. Engage the major stakeholders: Kosi river, Department of Fisheries, Agriculture, water resource,s private sector, communities
4. Undertake studies – land use and land cover, flood modelling, ecosystem services valuation – to identify the role of stakeholders and possible solutions
5. Develop a shared vision and figure out solutions together - embed research in policies & plans
6. Implement solutions to address key challenges – while securing short-term successes
7. Use monitoring and evaluation to adapt and improve the likelihood of success



Partners for Resilience : Strategic Partnership

DRR terminologies

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Disaster

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- **the serious disruption of the functioning of society, causing widespread human, material ore environmental losses, which exceed the ability of the affected communities to cope using their own resources. Disasters occur when the negative effects of the hazards are not well managed.**

Risk

- **The probability of meeting danger or suffering/harm**

Vulnerability

- **The degree to which an area, people, physical structures or economic assets are exposed to loss, injury or damage caused by the impact of a hazard.**

Capacity

- **Refers to individual and collective strength and resources that can be enhanced, mobilized and access, to allow individuals and communities to shape their future by reducing disaster risk. This includes prevention, mitigation, survivability and readiness of the community.**

Hazard

- **A potential event that could cause loss of life, or damage to property or the environment**

Disaster Risk Reduction

- **is a framework and a tool that determines the degree of risk and describes measures to increase capacities and reduce hazard impact on the element at risk so that disaster will be avoided.**

Survivability

- **to manage to stay alive or continue to exist, especially in difficult situations**

Readiness

- **group/community organization functioning as a system prepared for any hazard that is going to happen**

Duration

- **How long is hazard felt-earthquake and aftershocks: days/weeks/months that area is flooded, length of military operations**

Early Warning

- **The provision of timely and effective information, through identified institutions, that allows individuals exposed to take actions to avoid or reduce their risk and prepare for effective response**

Forewarning

- **Time between warning and impact**

Frequency

- **Does hazard occur seasonally, once a year or every five years.**

Period of Occurrence

- **The particular time of year a hazard normally occurs.**

Warning signs and Signals

- **Signs and signals scientific and indigenous indicators that hazard is likely to happen.**

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CBDRR_CMDRR

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Partners for Resilience : Strategic Partnership

CBDRM / CMDRR

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CMDRR

- **CMDRR is a process of bringing people together within the same community to enable them to collectively address a common disaster risk and to collectively pursue common disaster risk reduction measures.**
- ***CMDRR is a process that mobilizes a group of people in a systematic way towards achieving a safe and resilient community/group. Its end view is a dynamic community that equalizes power relations, binds the group cohesively in the process of making decisions, deals with conflicts, resolves issues, and manages individual and collective tasks through addressing and bouncing back from hazard events.***

Why community based?

- A disaster is localized and it happens in the community.
- People in the community themselves are the affected and the first responders.
- Climate adaptation happens locally at the community level.
- Communities are the foundation of the world!

CBDRR

- Community Based Disaster Risk Reduction (CBDRR), information from the community is gathered to determine interventions, which are primarily dependent on external facilitators.

CMDRR

- In Community Managed Disaster Risk Reduction (CMDRR), emphasis is placed on the interactive nature of people's participation during the entire project cycle,

CBDRR

- the CBDRR process is aimed at gathering information for the goal of developing local plans and programs.

CMDRR

- In CMDRR, the facilitation process is aimed at co-coordinating the facilitators and the people in the community. The goal of CMDRR is to facilitate learning and positive change at the individual and community level.

CBDRR

- In CBDRR the facilitators implement the project while the community participates.

CMDRR

- In CMDRR, the community implements the project while the external facilitator provides guidance.

CBDRR

- CBDRR is concerned with transferring technology to the community from the external facilitator.

CMDRR

- CMDRR is aimed at facilitating and enriching the learning process within the community, between the facilitator and the community, as well as through the network of the facilitators' organization and other stakeholders.

CBDRR

- CBDRR, to some extent, depends upon an external organization's capability to manage the project; in the long run, self-reliance of the community organization is not guaranteed.

CMDRR

- CMDRR institutionalizes Participatory Planning, Monitoring and Learning (PPMEL), as a systems approach and tool, to strengthen the community's organizational capability to ultimately manage and own its DRR project(s), thereby ensuring community resilience and self-reliance.

Module 2

Ecosystem Management for Building Resilience

Dr. Ritesh Kumar, Wetlands International South Asia

Wetlands INTERNATIONAL

Session purpose

- An introduction to ecosystem based approaches an ways of incorporation in integrated risk management
- Applying ecosystem based approaches for reducing water mediated disaster risks

Are these natural disasters ?

Hazards are natural

Disasters are human made

Approach for Disaster Risk Reduction

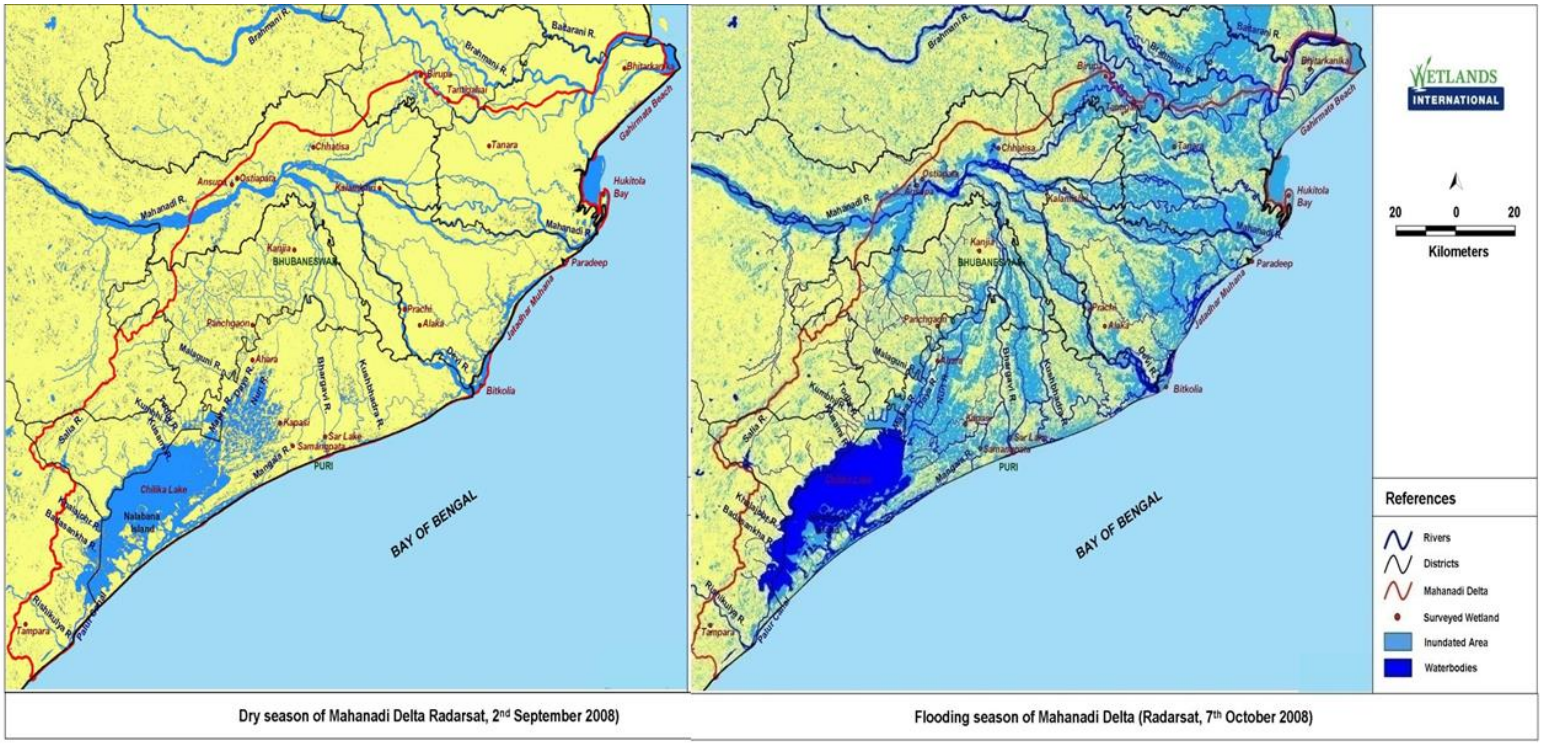
Increasing capacity to:

- Anticipate
- Respond
- Adapt

To increasing disaster risk

- How nature works
- How can this information be used for reducing disaster risk

What appears as a hazard might be natural functioning of landscape



Dry season of Mahanadi Delta Radarsat, 2nd September 2008)

Flooding season of Mahanadi Delta (Radarsat, 7th October 2008)

A river delta is built by accumulation of sediments which are brought in by floods. Deltas are therefore naturally flood prone.

Yet, deltas are most populated environments.

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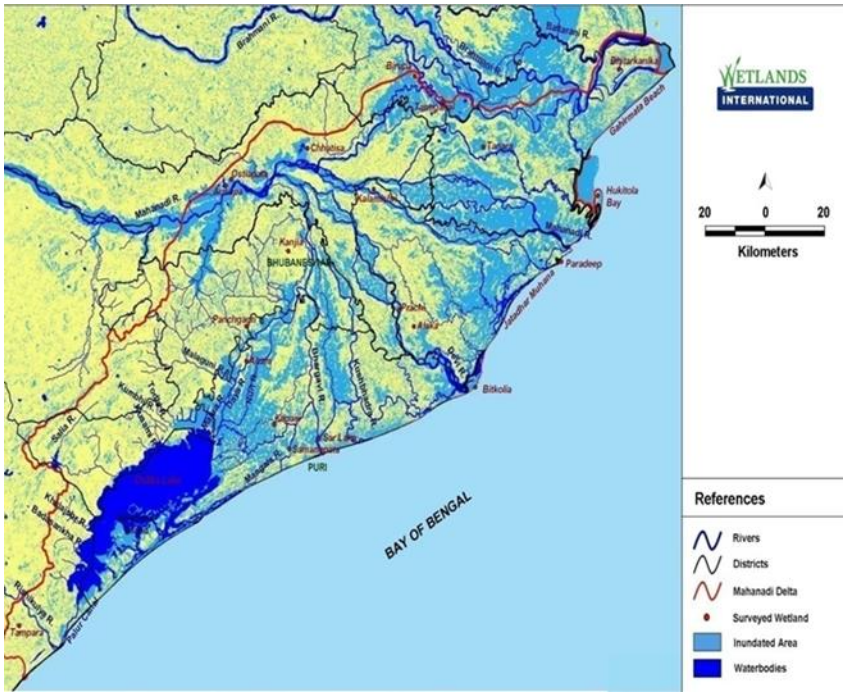
Development may create new risks if not aligned with nature's functions



Embankments are the most common flood protection measure in deltas.
Constructing embankments often impedes flow of water between floodplains and river channels.
This leads to extended water logging causing extensive damage to crops and settlements.

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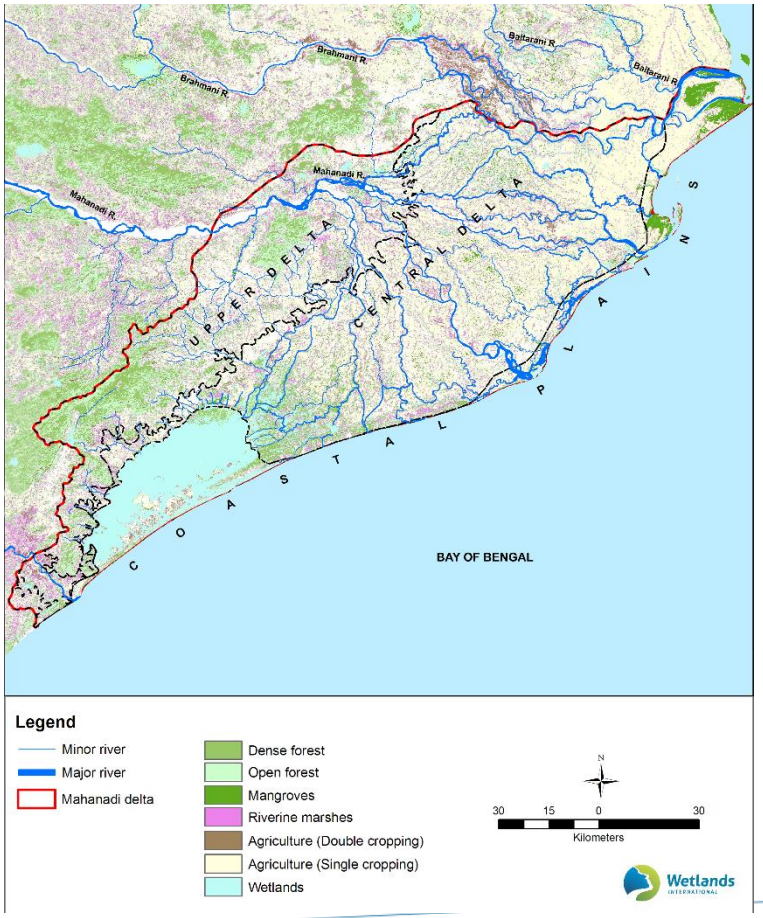
Working at village level or administrative boundaries may not be enough



Local level risk reduction plans need to incorporate the landscape level information to be effective.

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Section 2: Ecosystems, Disasters and Climate Change

The Interlinkages

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Community livelihoods are centred on ecosystems

As providers of food, water and fibre

Loktak Lake in Manipur is the main source of fish for local communities

The city of Kollam in Kerala depends on Sasthamcotta Lake for its water supply

Phragmites found in Kanwar Taal in Bihar are the main source of fuel and fibre for the communities

Ecosystems give us a sense of place and identity

The festival of Chaath celebrated in Bihar is a unique expression of communities association with water

The Kalijai Temple in Chilika Lake, Odisha is the hub of Makar Sankrati celebrations

Ecosystems as setting for livelihoods

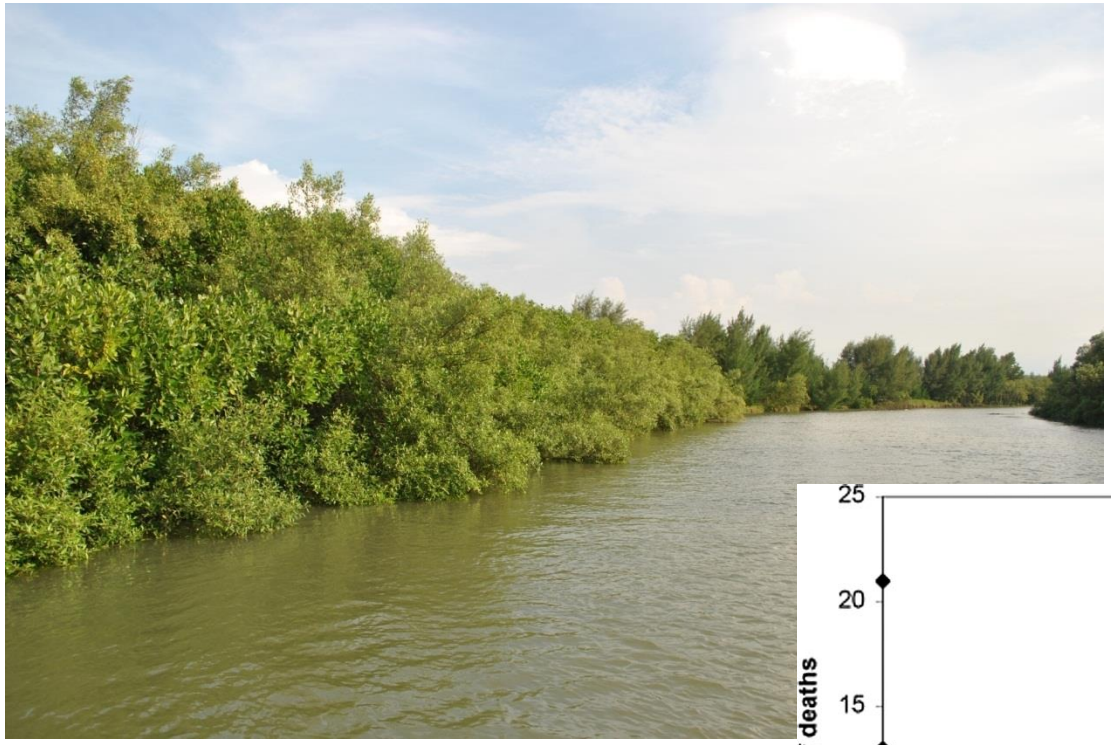
For recreation and aesthetics

The water birds that gather in Chilika Lake during winter are a main tourist attraction

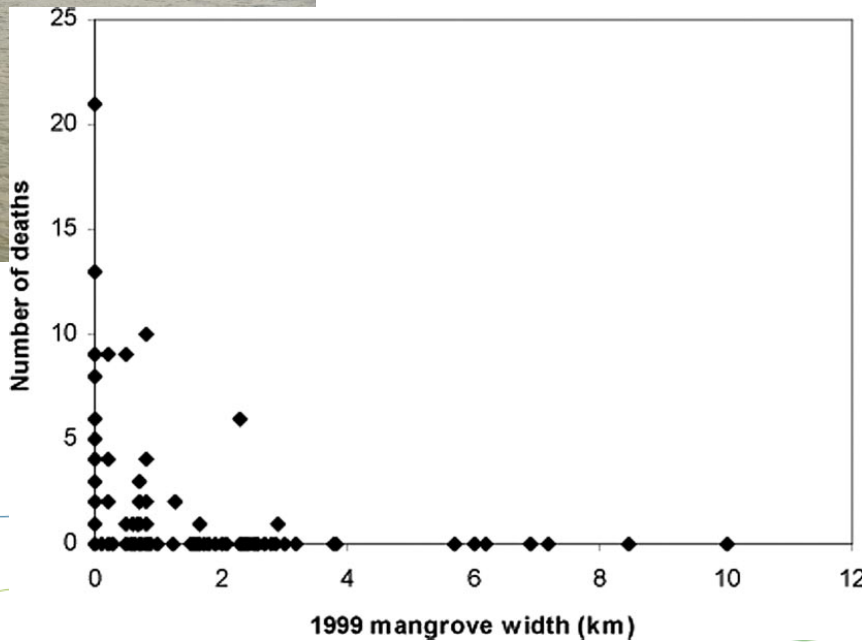
The backwaters of Kerala are visited by over 1million tourists annually

Ecosystems protect communities

Buffering impacts of cyclonic storms



In 1999 Odisha Super Cyclone villages with higher width of mangroves had lesser deaths as compared with those having lesser or no mangroves



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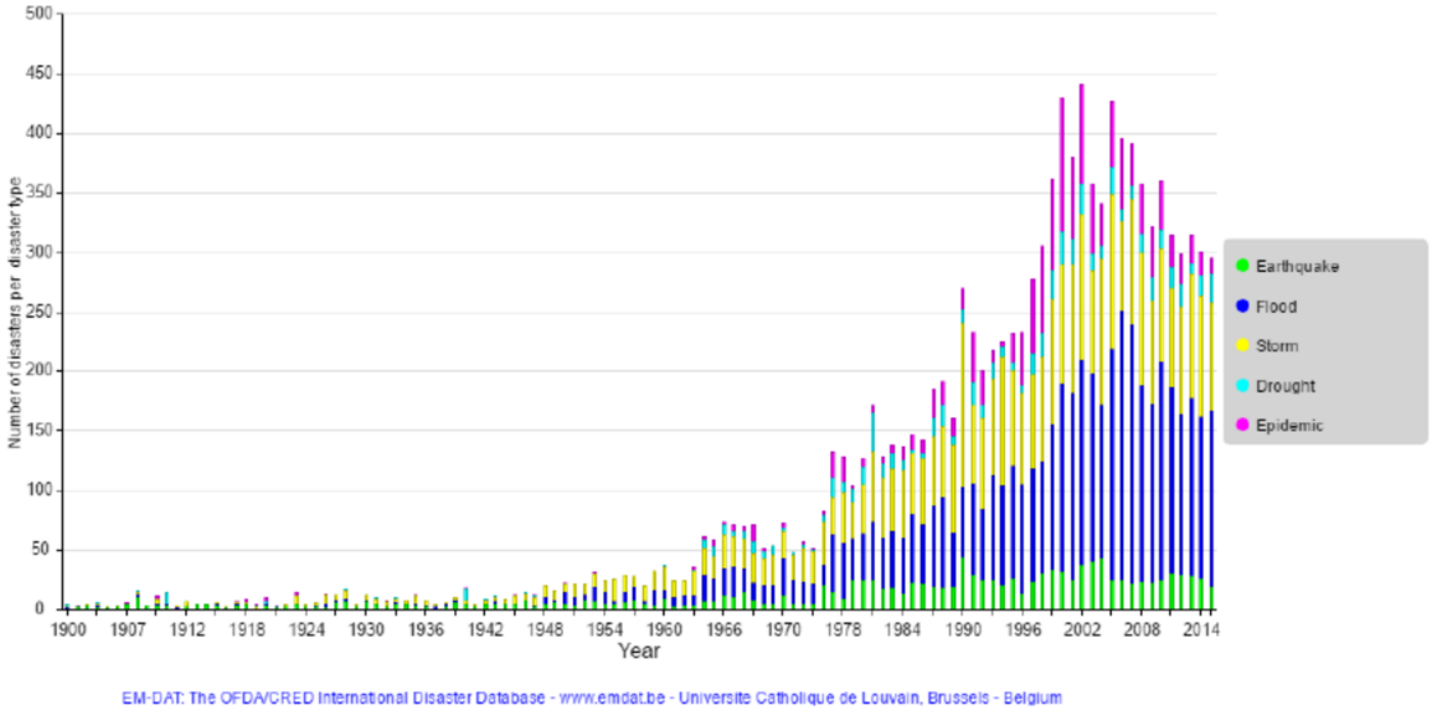
Ecosystems protect communities

As buffers of floods

Deepor and associated beels accommodate a significant proportion of high floods of Brahmaputra River. Without these wetlands flooding in Guwahati City would be much worse.

Climate change is likely to increase extreme events and disaster risk



An increase in meteorological, hydrological and climatological events due to climate change have increased the number of disasters world over.

A major proportion of disasters are water mediated.

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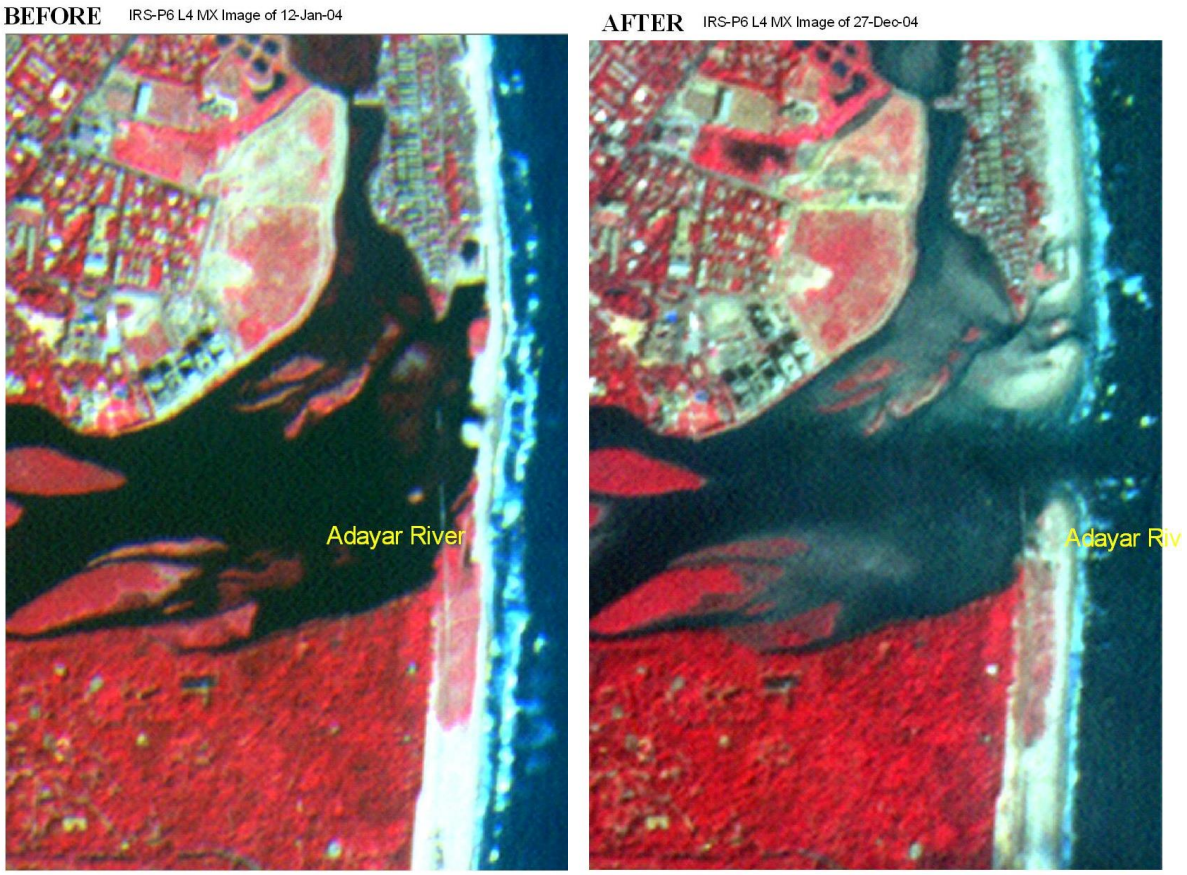
Ecosystems are vulnerable



The Indian Ocean Tsunami in 2004 altered the coastline of Chennai city.

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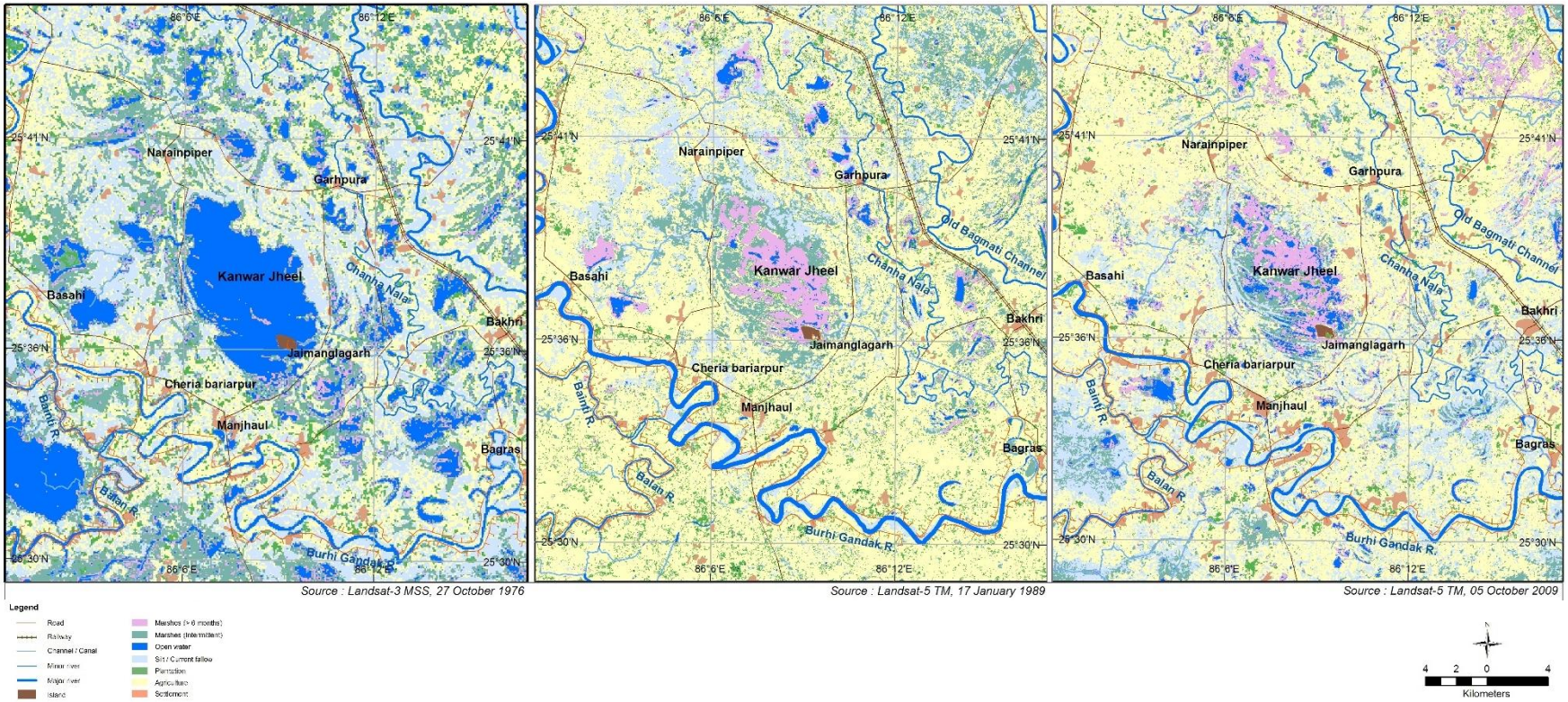
If ecosystems are vulnerable, so are dependant livelihoods



Kanwar Taal in Bihar helped maintain ground water for agriculture. Major areas of wetland drained leading to water scarcity and increasing cost of cultivation.

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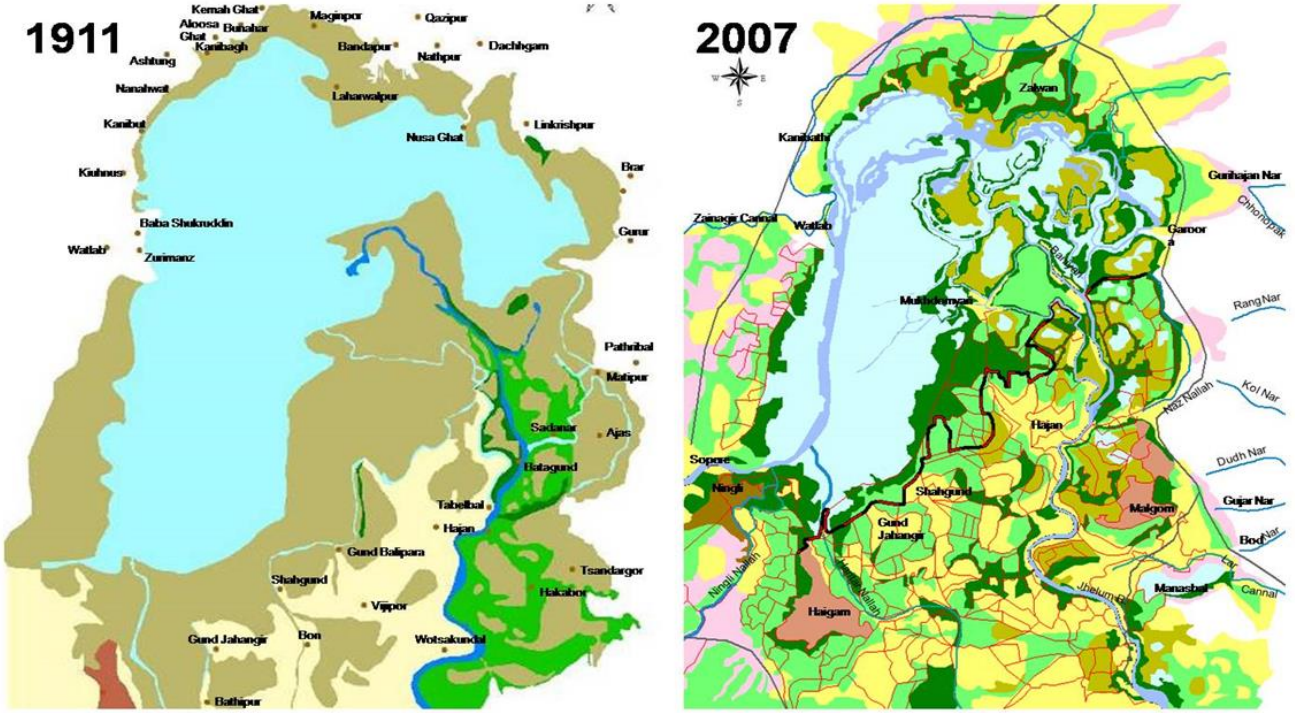
Degraded ecosystems enhance vulnerability



Wular Lake is the hydrological buffer for Srinagar city. Over 70% of the lake has been converted.

With climate change there is increasing intensity of flows.

Wetland no longer able to moderate flows leading to floods and droughts.

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Section 3: How nature works

Nature as an ecosystem

An ***ecosystem*** is a dynamic complex of plant, animal, and microorganism communities and the non-living environment, interacting as a functional unit.

Humans are an integral part of ecosystems.

What are ecosystems made of?

Living components

Ecosystem processes

Non-living components

Why are ecosystems important for humans?

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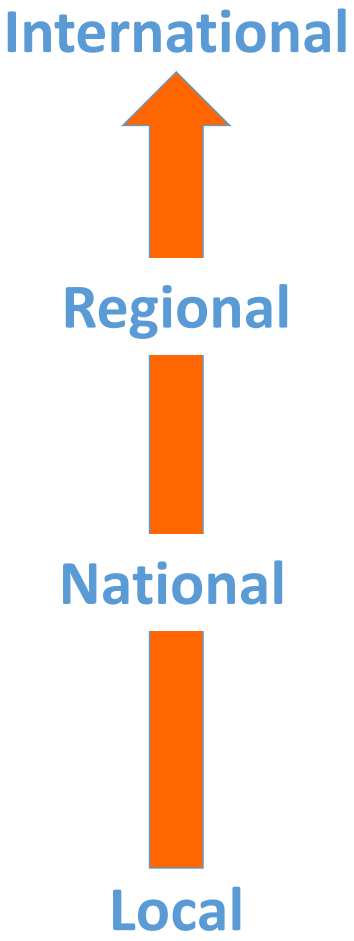
Ecosystem Approach

Involving People

Need to bring in different knowledge systems

Involving People

Multi-disciplinary approach



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Exercise 1:
What is my ecosystem ?
At what scale should I work ?

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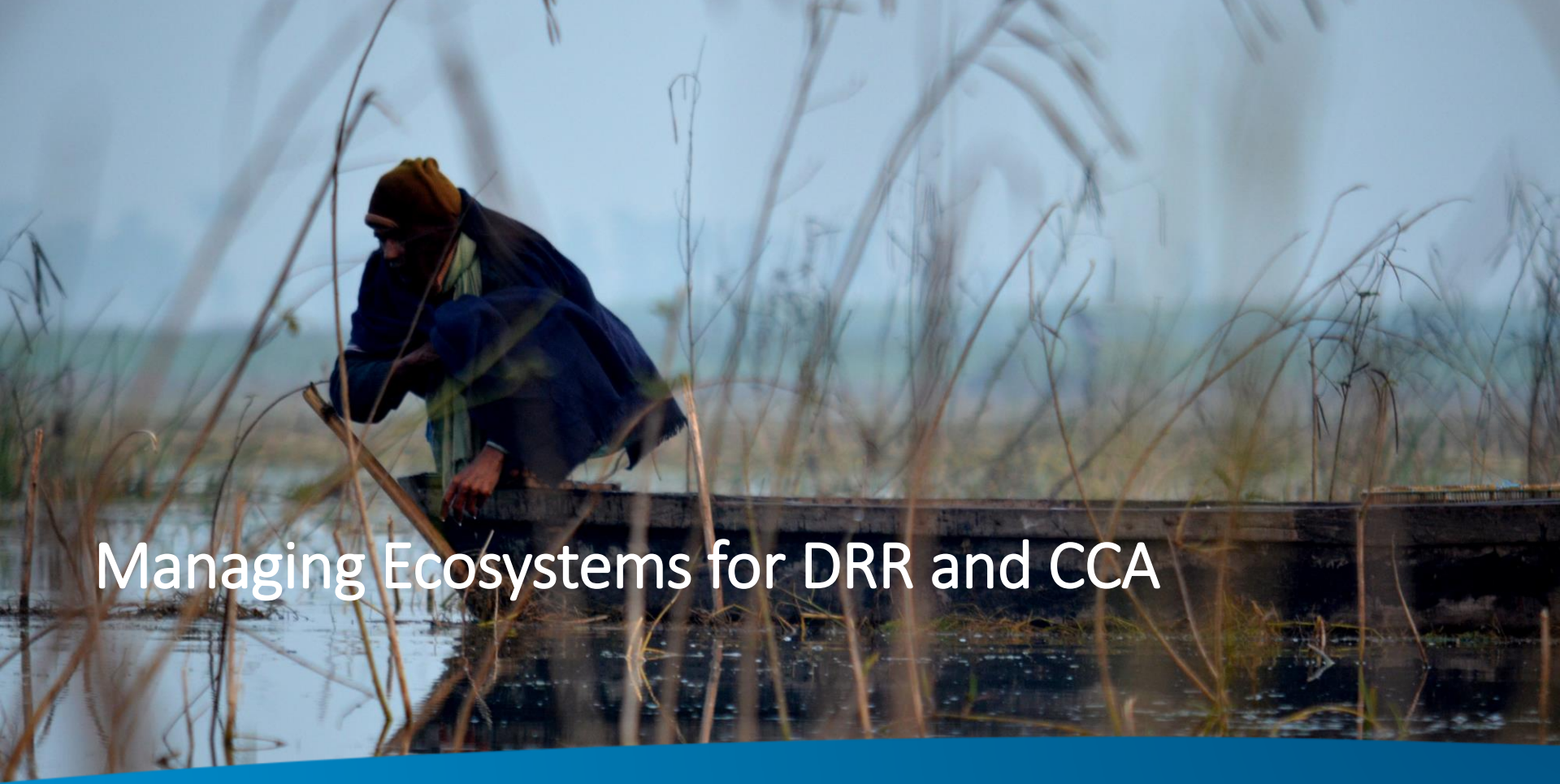
Watershed approach

Exercise 1 : Know your Landscape

- Draw a resource map of your village.
  - Source and sink of your major river
  - Complete forest patch
  - Slope pattern
- Map the hazards in your village

Exercise 1 : Know your Landscape

- How are these natural resources connected to the hazards in your village?
- How has the landscape been altered? Draw it on a timeline
- Has alteration created new hazards? Which are these?
- Discuss which of these hazards are a natural property of landscape.



Managing Ecosystems for DRR and CCA

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Hybrid approaches for DRR infrastructure can be more efficient

Hybrid check dams along the Java Coast in Indonesia have helped recover the coastline and mangrove forests.

Sometimes adaptation is the only option

Several communities in North Bihar have developed strategies to live with floods and benefit from fertile soils and fish harvest

Ecosystem management is not the stand alone solution

Mangrove plantations undertaken along the coastline in Odisha were damaged/uprooted during Cyclone Phailin

Exercise 2: What can we practically do?

Relevance for Partners for Resilience

- Be aware of your landscape
- Be aware of your natural resources and the factors governing their management
- Assess water hazards
- Develop a response option

At Village level

- Engage in village level water security planning
- Revive community institutions for water management
- Ensure that DRR interventions do not end up accentuating risks
  - Embankments leading to waterlogging
  - Community toilets contaminating groundwater
  - Construction in fragile areas
- Adopt sustainable production systems
  - Homesteads
  - Agriculture farms
  - Fisheries

At Village level

- Enahnce capacity of communities to be better prepared for water risks

  Local flood-warning systems

  Conecting with upstream dam-managers

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Exercise 2 : Identify Ecosystem Approaches and Resources

- Identify the hazards which can be mitigated or buffered using ecosystem approaches.
- Identify the hazards for which adaptation is necessary. How will you prepare communities for adaptation?
- Identify specific actions through which ecosystem management can help you achieve DRR and CCA.
  - At Household Level
  - At Village Level
  - At District Level
  - At Landscape Level

Exercise 2 : Identify ecosystem approaches and resources

- Which local schemes will help you achieve these interventions?
- Which department/agency will you engage with to leverage resources?
- What capacities would you need to implement such approaches?

Exercise 3 : Screening Developmental Investments

- List all major development projects done in the last 10 years in your village.
- Which of these have considered ecosystems approach?
- Which of these can potentially be affected by changes in the ecosystem?
- Which of these can potentially lead to damages to ecosystems?

Integrating ecosystem approaches within DDMPs

- Chapter 2: HVCRA
  ecosystem degradation as vulnerability
  map capacities to manage ecosystems
- Chapter 3: Institutional arrangements
  Include ecosystem managers
- Chapter 4: Prevention and mitigation measures
  Ecosystem conservation as a preventive and mitigative measure
- Chapter 5: Preparedness measures
  Include monitoring of wetlands and water infrastructure
- Chapter 6: Capacity building and training measures
  Include capacity to monitor and manage ecosystems
- Chapter 7: Response and relief measures
  Include management of ecosystems

Thank You!

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Partners for Resilience : Strategic Partnership

Climate Change & Integrated Risk Management

Aditi Kapoor

Climate & Resilience Advisor

IFRC/Red Cross Red Crescent Climate Centre

07 May 2018
New Delhi

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One thing is sure

the future will be different from the past

Weather or Climate?

Weather: Short Timescales
"hours, days"

Climate: Long Timescales
"average over the past 30 years"

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Match the term with the definition

Term	Definition
A. Weather	1. Refers to ***average weather conditions over a long period of time*** (30+ years)
B. Climate	2. Refers to conditions like rain, temperature and wind ***over hours to days***
C. Climate change	3. Refers to a statistically significant ***change*** in the state of the *climate (or average weather)* ***that persists for an extended period of time (decades or longer)***

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Answers:

Weather	Climate	Climate Change
Refers to conditions like rain, temperature and wind ***over hours to days***.	Refers to ***average weather conditions over a long period of time*** (30+ years).	Refers to a statistically significant ***change*** in the state of the *climate (or average weather)* ***that persists for an extended period of time (decades or longer).***

The difference is in the timescale!

Lets play a game to learn about climate change…

The Climate Change Science Quiz!

6 Questions coming up….

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1. Why is the planet warming up?

A. The sun is getting closer and hotter as part of a natural sun cycle

B. Heat-trapping gases are building up in the atmosphere, preventing heat from the sun escaping back out into space

C. Scientists do not know why the earth is warming up, they just know that it is

The Answer is B!

Humans release heat-trapping gases into the atmosphere – Carbon dioxide (CO_2), Methane (CH_4), nitrous oxide (N_2O), halocarbons/chloroflurocarbons (gases sulpher hexafluoride containing chlorine, fluorine, bromine) and water vapour

These heat-trapping gases let sunlight in

But they prevent heat from escaping back out – causing the Greenhouse Effect

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2: What evidence of climate change have scientists already observed?

A. The planet is warmer on average

B. The sea level is rising

C. The amount of snow and ice have diminished

D. All of the above

Answer: D

A. The planet is warmer on average *by 0.85˚ C (2012 compared to 1880)*

B. The sea level is rising *by 1.8 mm/yr since 1961, and 3.1 mm/yr since 1993. The rate is increasing!*

C. Sea-ice extent over Artic decreased between 3.5 to 4.1% per decade over the period 1979-2012.

D. All of the above

3: What are the causes of this build-up of heat-trapping gases in the atmosphere?

A. Industry and energy supply

B. Agriculture and forestry (including deforestation)

C. Transportation and buildings

D. Burning of fossil fuels and land-use change

This is a trick question ☺

The Answer is D

A. Industry (19.4%) and energy supply (25.9%)

B. Agriculture (13.5%) and forestry (including deforestation) (17.4%)

C. Transportation (13.1%) and buildings (7.9%)

D. Burning of fossil fuels and land-use change
-because it includes all of the above!

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4: Can the terms ‘global warming’ and ‘climate change’ be used interchangeably?

- Yes, they refer to processes closely related, and people understand what you are referring to when you use either of them
- No, these are completely separate processes and should not be confused

The answer is Yes!

When the ocean, land and air get warmer (*global warming)*, it affects the water cycle – evaporation & precipitation - on earth and things change in the climate system (*climate change*)…

….Also affected are the wind patterns when land warms faster than the oceans….

5. If we stopped all greenhouse gas emissions today, would we still have climate change?

- **No,** the greenhouse gases in the atmosphere would quickly dissipate, immediately stopping the warming and related changes in the climate
- **Yes,** humans have been adding greenhouse gases to the atmosphere for so many years now, that even if all emissions stopped today, the planet would still continue to warm for decades to come

The answer is Yes!

Humans have been adding greenhouse gases to the atmosphere for so many years now, that even if all emissions stopped today, the planet would still continue to warm for decades to come.

6. Match the correct definitions

A. Climate Change Mitigation

B. Climate Change Adaptation

1. Action taken to reduce the amount of greenhouse gasses in the atmosphere.

2. Action taken to reduce the impacts of climate change on lives, livelihoods and ecosystems.

Answer
The matching was already done!

Mitigation

- Action taken to reduce the amount of greenhouse gasses in the atmosphere.

Adaptation

- Action taken to reduce the impacts of climate change on lives, livelihoods and ecosystems.

Climate Change Trends in India

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Summary of Recent Observed Trend of Extreme Events over India

Monsoon Rainfall	
Monsoon Rainfall variability	
Light/Moderate Rainfall	
Heavy/Very Heavy Rainfall	
Long Spell of Rainfall	
Short Spell of Rainfall	
Drought	

Source:Akhilesh Gupta, DST

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Summary of Recent Observed Trend of Extreme Events over India

Cyclonic Storms	↓
Cyclonic Disturbances	↓
Low Pressure Areas	↑
Large Scale Floods	↓
Flash Floods	↑
Heat Waves	↑

Source:Akhilesh Gupta, DST

Main climate change impacts

Rising temperatures *eg. heat waves; uneven temp patterns*

Sea level rise

Melting ice

Ocean acidification *eg. fish loss*

Scientists very sure

Ecosystems are changing....

Changing rainfall patterns

Changes in extreme events *eg. flash floods, meteorological droughts, patterns*

Less clear, and regional differences

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Climate Science Institutions Global and Indian

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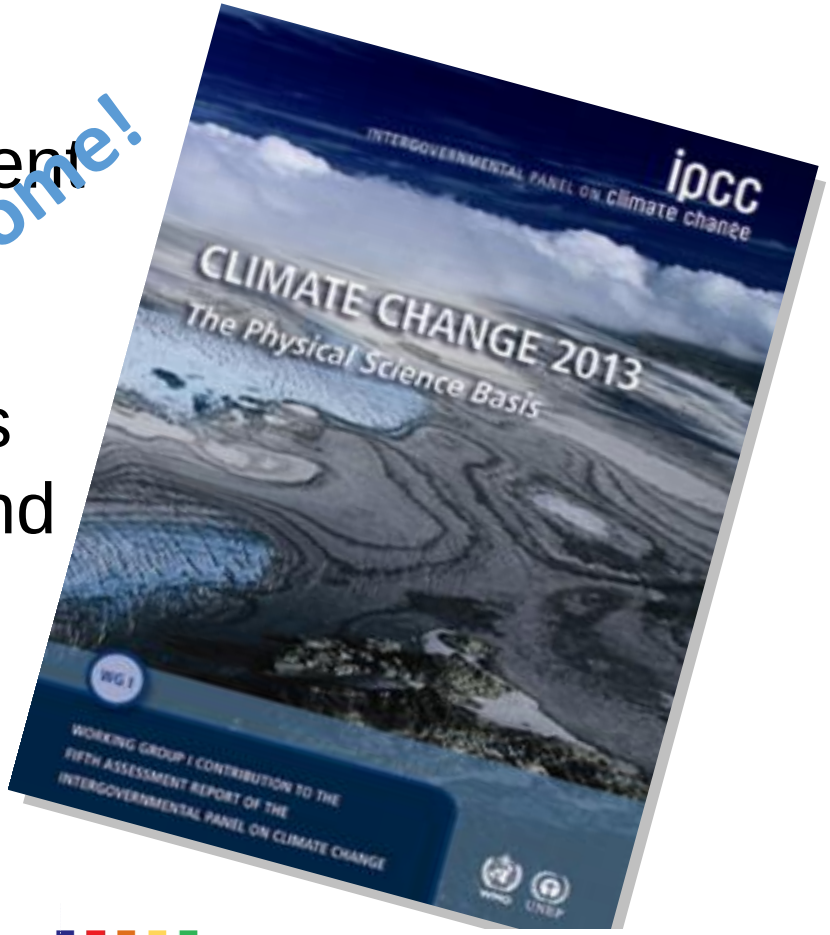
The **GLOBAL** body for peer reviewed scientific assessment of climate change

Set up by the United Nations Environment Programme and the World Meteorological Organization in 1988

Need more 'scientific' published research

NGOs Research is welcome!



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National Communication to UNFCCC NATCOM

- Inventory of sectorwise GHGs
- Impacts on different sectors & ecosystems - agriculture, water, coastal, forest, flood-plains, mountains, etc….50kmx50km radius
- Almost 100 scientific and social science institutions and over 350 Experts
- Government, autonomous, corporate non-government institutions, universities, research organisations

Climate Policy Initiatives Global and Indian

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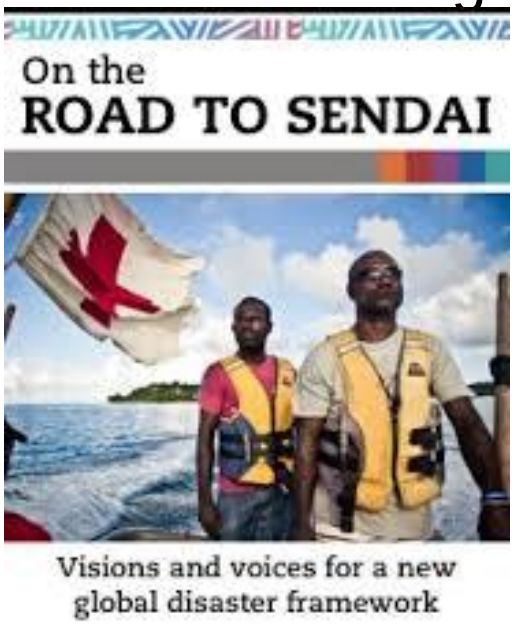
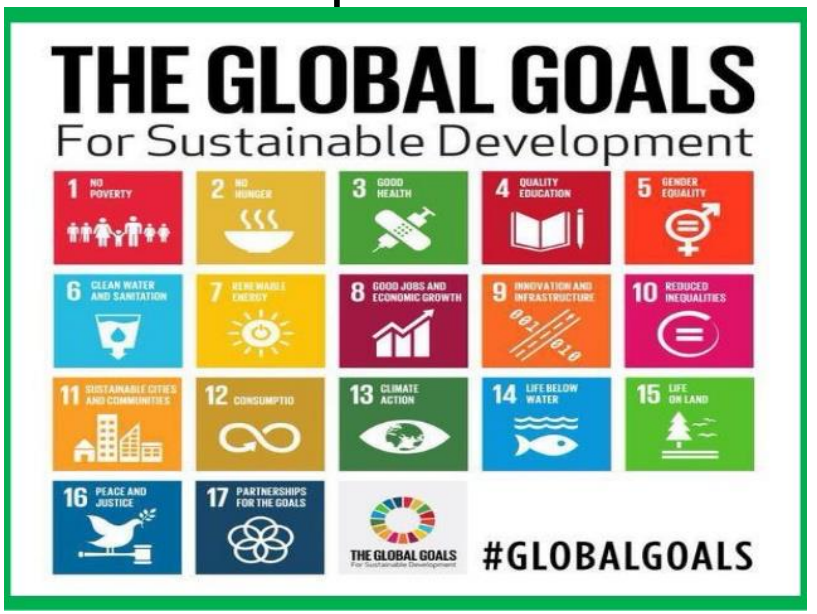
Partners for Resilience : Strategic Partnership

Global Agreements





PARIS2015
UN CLIMATE CHANGE CONFERENCE
COP21·CMP11

"Climate Action By All"
The Paris Climate Agreement

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Climate Policy in India

- National Action Plan on Climate Change – MoEF
  - 8-9 National Missions each under different ministries/departments
- State Action Plans on Climate Change
- Weather Forecast becomes better, more accessible – IMD
- Climate change projections – NATCOM @MoEFCC
- Disaster Management Plans at the district and State levels
- National Adaptation Fund – MoEF
- Rural development programmes - for building resilience
- Crop & livestock programmes & Agro-advisories….

Climate-related (& Landscape) policies

- Energy policies
- Water policies
- Environment policies
- Landuse policies
- Climate policies
- Agriculture policies
- Education policies
- Health policies
- WASH policies
- Disaster risk reduction policies
- Policies related to the working of panchayats
- Housing policies
- Social welfare policies…….et al

Action taken to reduce the impacts of climate change on lives, livelihoods and ecosystems.

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Key IRM Action Points

Community & Policy Level

1. **Assess the potential impacts** of CC & landscape risks in PRAs
2. **Address the consequences** of CC & landscape activities across sectors - disaster management, health, WASH, food & water security
3. **Raise awareness** – help people and institutions learn about local climate risks, disaster risks, landscape risks and their consequences on lives & livelihoods
4. **Establish and enhance partnerships** with local meteorological office, government agencies, NGOs, etc.
5. **Initiate policy dialogue & solutions** on all 3 risks with PRIs, DM, States & at national and global levels.
6. **Document and share** experiences and information - PfR website, newsletters, media.

- The goal of CMDRR is to facilitate learning and positive change at the individual and community level.
- In CMDRR, the community implements the project while the external facilitator provides guidance.
- CMDRR is aimed at facilitating and enriching the learning process through the network of the facilitators' organization and other stakeholders.
- CMDRR institutionalizes PRAs to strengthen the community's resilience and self-reliance.

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Thank you!

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Sustainable livelihoods for Integrated Risk Management (IRM)

Subtitle Here! – Aller Bold 18

Name, Aller 18

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Learning Objectives

- Participants appreciate the **linkages** between livelihoods, ecosystem management, disaster risk reduction and climate change adaptation
- Participants **understand application** of the sustainable livelihood approach to build resilient livelihoods
- Participants are able to use the sustainable livelihood approach to **identify appropriate intervention** in village level plans
- Participants are able to **map key actors and programmes** required to adopt the sustainable livelihood approach to build resilient livelihoods

Livelihoods, Ecosystems, Disasters and Climate Change

Linkages

Dushyant Mohil

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Livelihoods are the building blocks of Development

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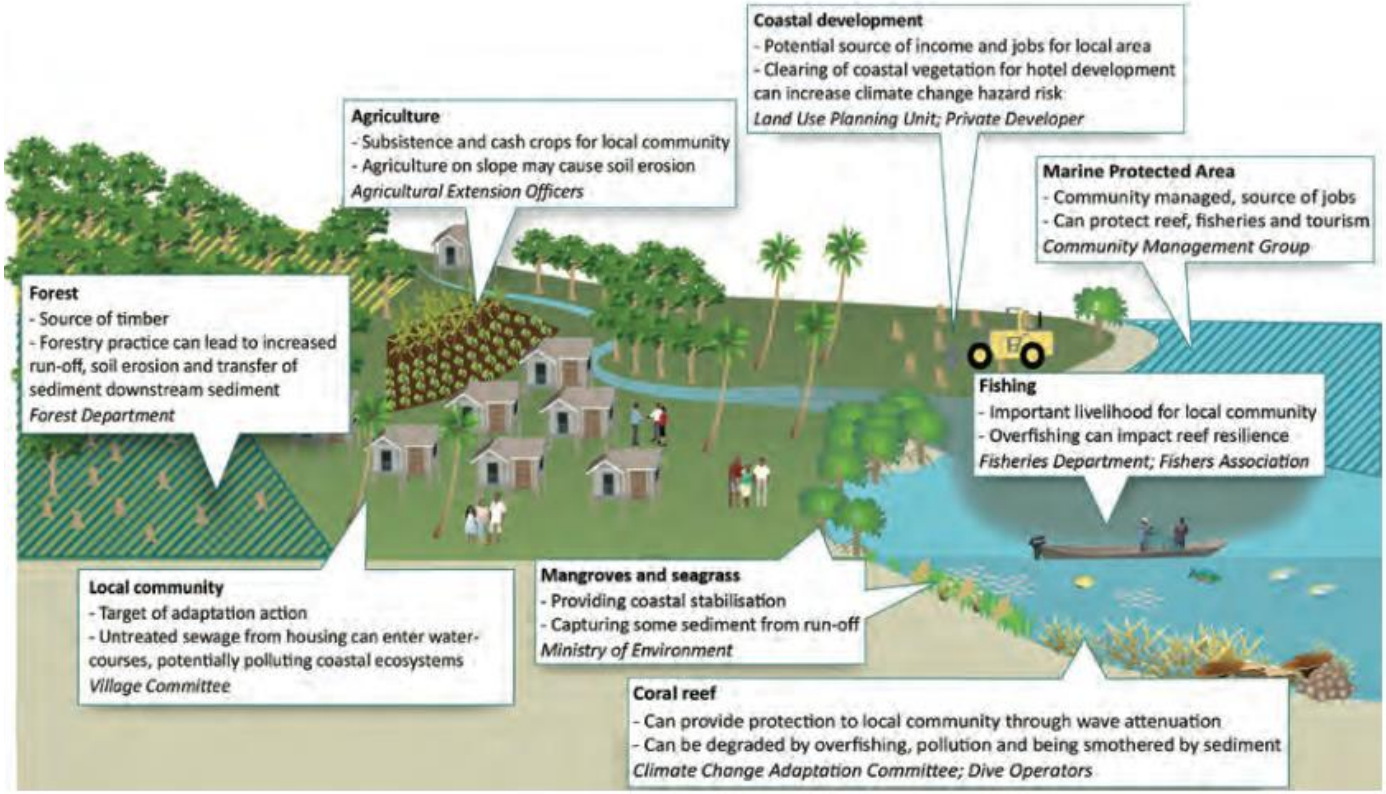
Healthy and well managed ecosystems ensure livelihoods opportunities

- Fisheries
- Agriculture
- Tourism
- Water source
- Water ways
- Hydro power
- Timbers
- NTFP



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Ecosystem degradation increases livelihood vulnerability

- Lost of fishery resources (Decrease in migratory fish species by 30% due to Ithai Barrage in Loktak Lake)

Osteobrama belangeri (Pengba)

- Drinking water scarcity also attributed due to sediment deposition Sasthamkotta Lake

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Disasters affect community livelihoods

- Damage to key livelihood capital

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Climate change influences livelihood capital

Sl. No.	Key climate change outcomes	Potential threats	Impact on livelihood capital	
			Direct	Indirect
1	Sea level rise	Loss of coastal wetlands	Natural capital	Other capitals
2	Temperature rise	Change in cropping pattern and fish migration	Natural capital	Other capitals
3	Pest attack	Crop loss	Financial capital	Other capitals
4	Glacier retreat	Floods in valley and change in alpine crop	All capital	
5	Unpredictable weather	Floods, cyclone and droughts	All capital	

Understand application of the sustainable livelihood approach

Linkages

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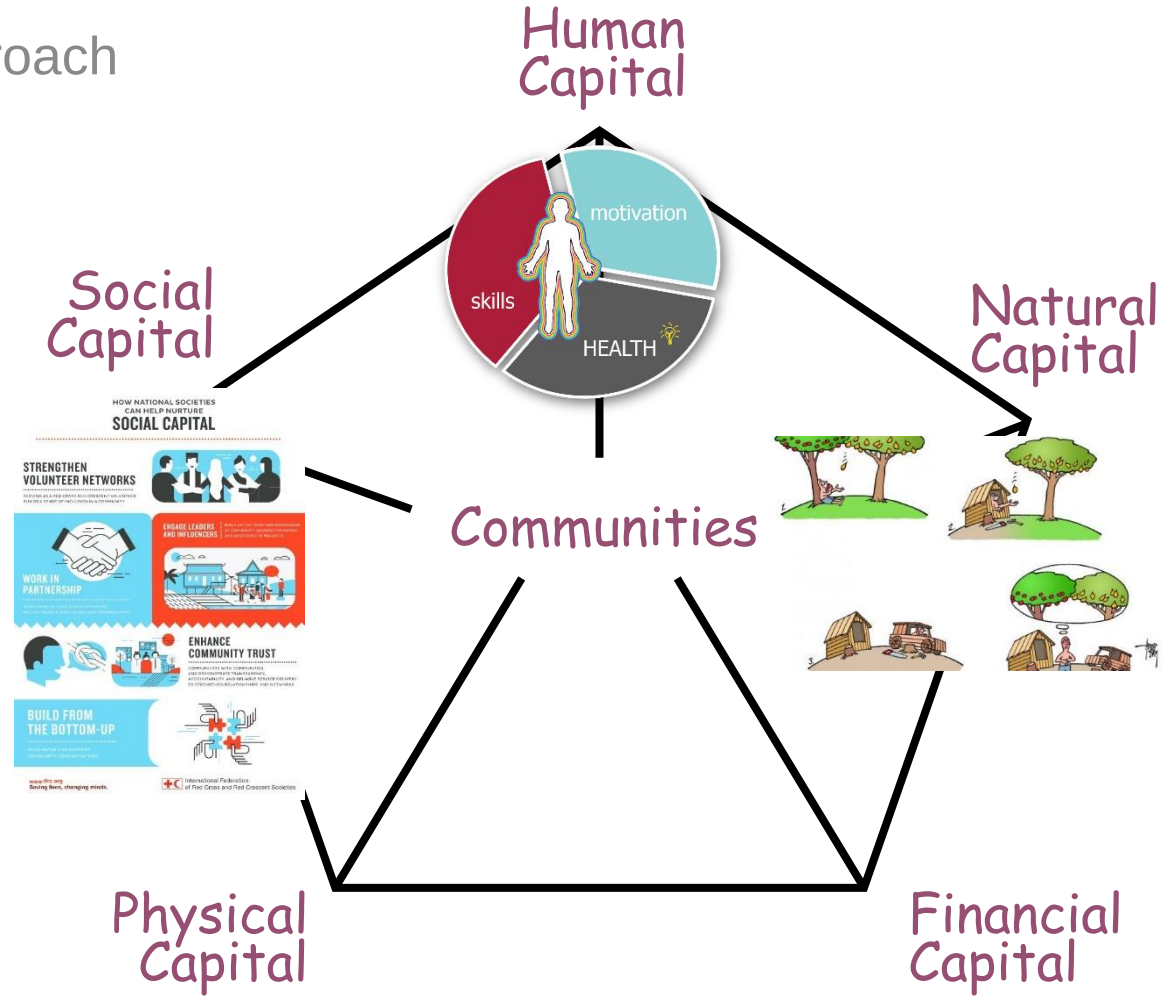
Approach to build resilient livelihoods

Sustainable livelihood approach

- Livelihood Capitals
- Vulnerability Context
- Transforming Structures and Processes
- Livelihood strategies
- Livelihood Outcomes



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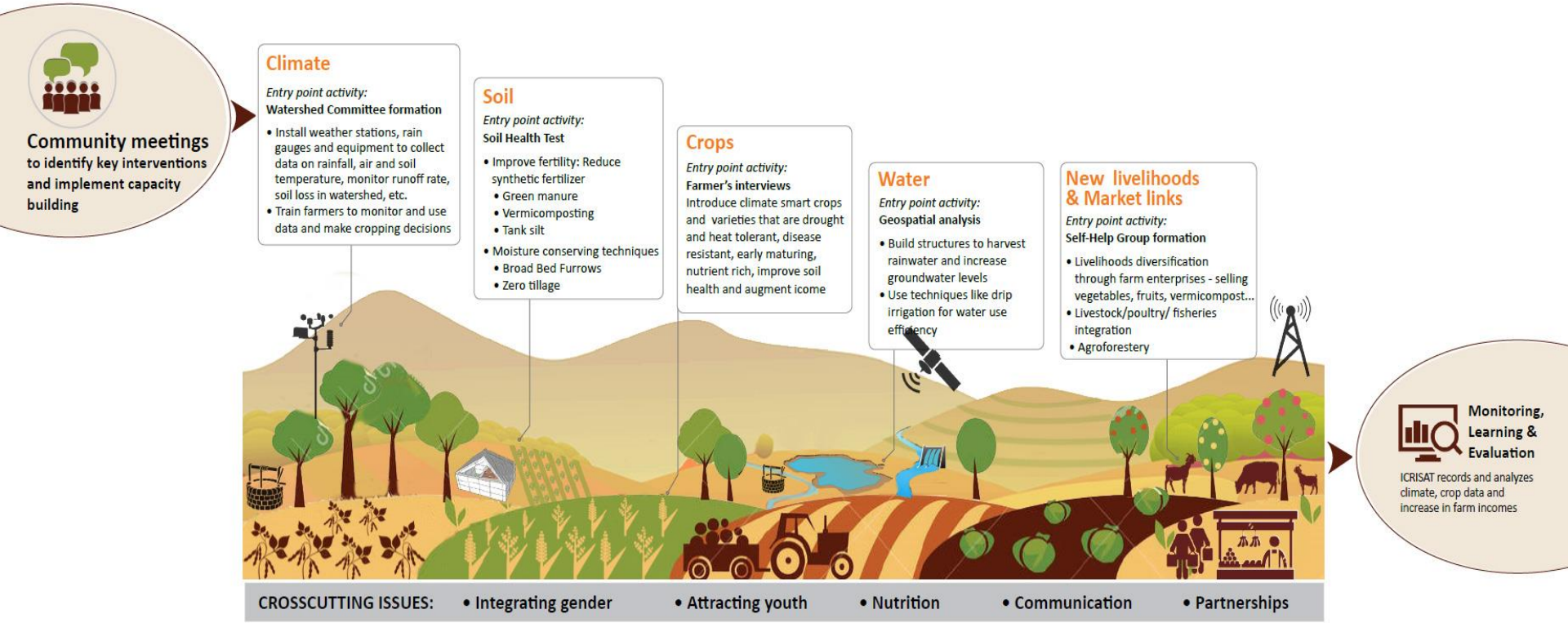
Entry point activities



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Improved skills and access to information & technology

- Training enable people to pursue different livelihood strategies and achieve their livelihood objectives

Rickshaw puller cum trained eco guide in Keoladeo National Park, Rajasthan

Source: www.sunrisebirding.com

Poacher to conservationist : Livelihood from illegal waterbird hunting to community managed eco tourism in Chilika Lake

Improved access to and better management of natural resources

- The natural resource stocks from which resource flows and services useful for livelihoods

Opening of new sea mouth in 2001 Chilika Restoration programme: Increased 3 fold fish production

Supportive and cohesive social environment

- Fish cooperative Societies unite for their fishing rights in chaur and maun around Kanwar Jheel, Bihar

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Access to basic infrastructure

Nindakara Fish harbor in Ashtamudi Lake

Access to financial resources

- White lime cooperative Societies provide subsidies and credit to shell collectors in Vemabnad Kol Lake, Kerala

Resilient livelihoods are core to IRM

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Weak vs. Strong livelihoods (Resilient livelihood)

Sustainable vs. Unsustainable livelihoods (Reduce pressure on natural resources)

Rigid vs. Adaptive livelihoods (Climate change adaptation)

Damaged paddy crops in Balasore's Baliapal block. Telegraph picture

Linkages

Resilient livelihoods are core to IRM

- Weak vs. Strong livelihoods (Resilient livelihood)
- Sustainable vs. Unsustainable livelihoods (Reduce pressure on natural resources)
- Rigid vs. Adaptive livelihoods (Climate change adaptation)

Exercise:

Linkages

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- Identify main livelihood activities in your landscape.
- For each livelihood activity list the different livelihood capitals.
- Analyse/assess each livelihood capital's vulnerability/gap.

Map key actors and programmes

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AGRICULTURAL INSURANCE – Pradhan Mantri Fasal Bima Yojana (PMFBY)

- The Scheme replaced the existing crop insurance schemes both
- MNAIS and NAIS.
- PMFBY will increase the insurance coverage to 50 per cent of the total crop area of 194.40 million hectare from the existing level of about 25—27 per cent crop area.
- Actuarial premium based scheme with provision for upfront premium subsidy to be released to insurance companies
- The farmer share of premium- One Season One Rate
- The gap between the actuarial premiums and the rates payable by farmers would be fully met by the government. There is no upward limit on government subsidy

Risk Transfer Mechanisms

- Livestock Insurance Scheme
- AGRICULTURAL INSURANCE – Pradhan Mantri Fasal Bima Yojana (PMFBY)