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Mission Statement

‘In partnership with the community, lead the State of Orissa towards clean, healthy and productive rivers and catchments’

I plan to contribute the following lessons learned:

1. Integrated Water Development Planning in Rushikulya River Basin
2. Constitution of an appropriate RBO



Asia

- International Boundary
- River
- ★ National Capital
- City or Town

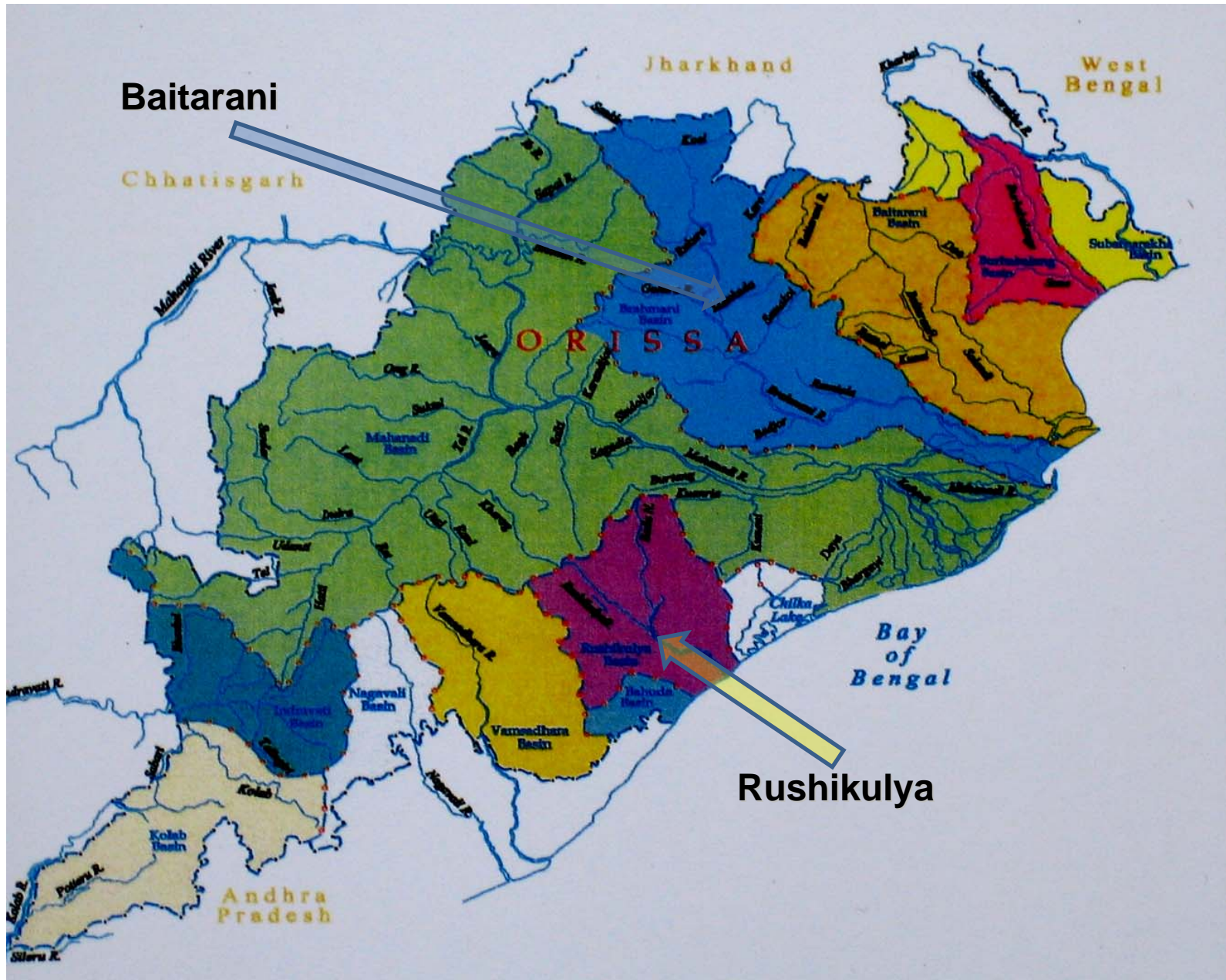
0 500 1000 KM
0 500 1000 Miles

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ORISSA



ELEVEN RIVER BASINS OF ORISSA

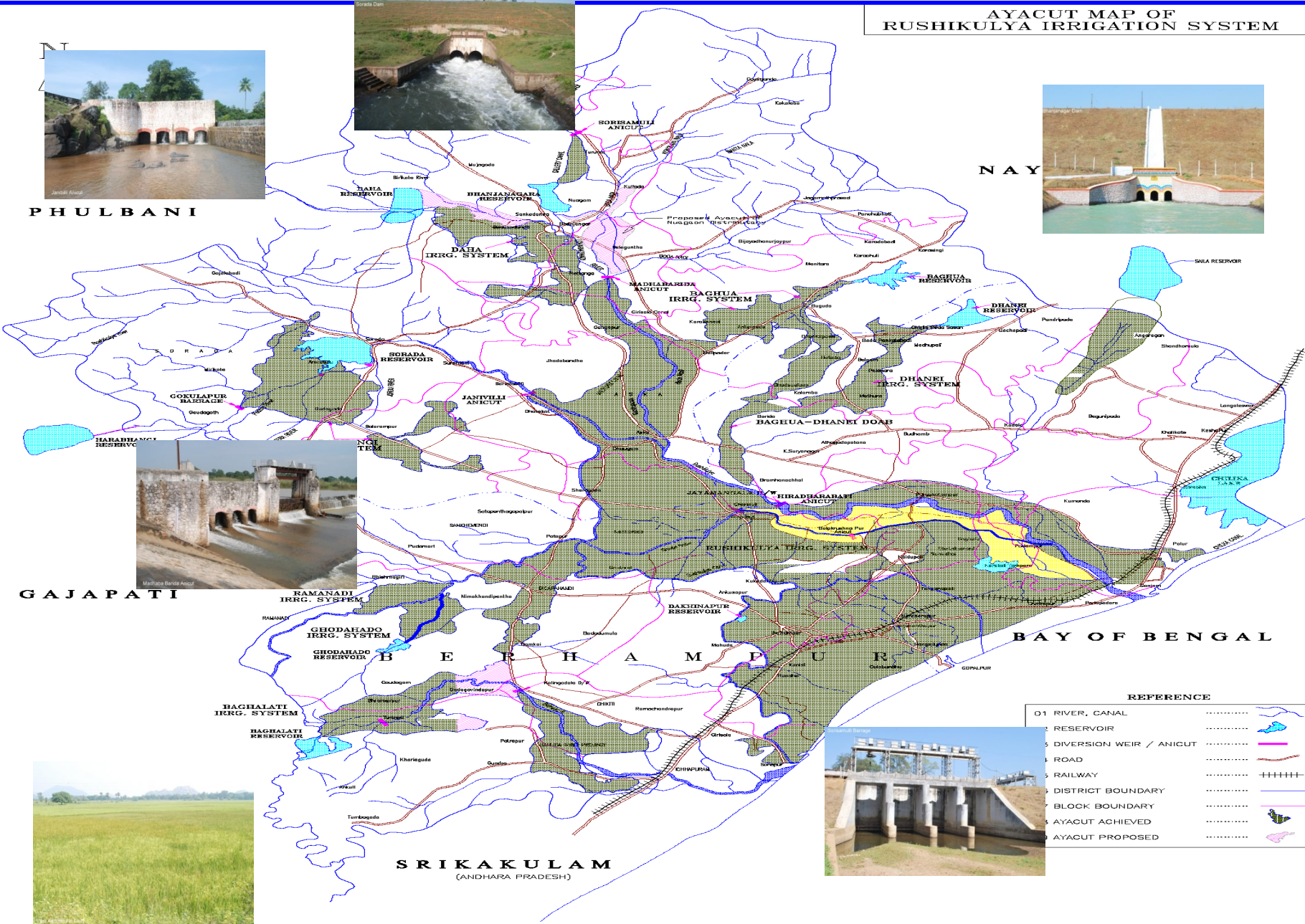


Rushikulya River Basin – an excellent integrated water development & management example

Highlights:

- 19th century system
- In operation over 100 years
- Built as a drought relief measure
- has 2 storage reservoirs
- 5 pick up weirs
- command area of 70000 ha
- 100 km main canals and 500 km of minor canals

AYACUT MAP OF RUSHIKULYA IRRIGATION SYSTEM



REFERENCE

01 RIVER, CANAL	
RESERVOIR	
DIVERSION WEIR / ANICUT	
ROAD	
RAILWAY	
DISTRICT BOUNDARY	
BLOCK BOUNDARY	
AYACUT ACHIEVED	
AYACUT PROPOSED	

EXECUTIVE ENGINEER
BHANJANAGAR IRRIGATION DIVISION
BHANJANAGAR



Madhaba Barida Anicut



Janibilli Anicut

Sorada Dam



Bhanjanagar Dam



Rushikulya River Basin – an excellent water management example

Infrastructure Highlights:

- Storages on tributaries to avoid silt and flood
- Pick up weirs on main streams as head works
- Command area reservoirs to store monsoon flow.
- canals linked to ponds for smaller commands

System serving for more than 130 years...

Due to integrated storage during the monsoon season, the water has been effectively used by the run of the river schemes for agriculture & Drinking purposes for its villages and the city of Berhampur. This system has made the farmers of the district best in the state for its efficient use.

Rushikulya River Basin – an excellent water management example

Operation Highlights:

- Main Canals operated by DoWR
- 288 WUA in the command area
- O & M of minor canals handed over to WUA
- Crops

Wet season mainly rice, winter vegetables, no summer crops

Rushikulya River Basin – an excellent water management example

Performance Highlights:

- Infrastructure still in good condition
- Irrigation efficiency best in state
- No major conflict between govt operators and farmer users.
- Crop productivity among best in state

Rushikulya River Basin – an excellent water management example

Way ahead:

- Strengthening and empowering WUA.
- Education and information to farmers
- More consultation of operators with users.

Rushikulya RBO now...

In Rushikulya Basin one River Basin Organisation with two tier structure of **Board** consisting of members of line departments and a **council** representing the political members has been functioning and started addressing the local developmental issues.

Weaknesses...Rushikulya RBO ...

- Too many water stakeholders at one meeting (close to 100)
- Need for strong, formal institutionalisation
- Unavailability of senior National & State administrators members
- Inadequate technical support for water planning and management
- No defined key water management issues
- Lack of action for years (since 2007 resolution)

Lessons learnt... RBO ...

- Common RBO format unsuitable, function and composition basin specific.
- Only consultative committees suitable in small basins (< 30000 sqkm.) now
- Strong support for planning from Govt.
- Defined basin specific burning issues to be discussed and solution sought first.
- Capacity development of RBO and WPO
- Representation from civil society.

So...new Baitarani RBO formed

Baitarani RBO formed

- One RBO institution of a consultative committee having political members of major constituencies of the basin, Line departments, civil society representatives, farmer organisations – 34 members
- Organisation will be backed by Orissa Water Planning Organisation
- Going to be launched this month by the State Government

Leadership for IWRM in River Basins

Keys for Success

How can RBOs help to improve leadership in the IWRM process in Asia's river basins?

1. For DOWR, leaders involved in the Baitarani RBO become more aware of cross-sectoral issues and are more confident in taking a lead for IWRM
2. For leaders of other organisations involved in the RBO, there is an increased understanding of cross-sectoral impacts and the need for a more integrated approach to planning and management

Leadership Challenges

Baitarani – The upper basin is mineral rich, Iron ore & Manganese

The Lower basin has problem of Saline ingress

There are issues of siltation, closure of water source, depletion of Ground Water, pollution & contamination.

The leadership in RBO has challenge to resolve and have harmonious growth of agriculture, mineral industries and maintain river quality for safe drinking water

Improving Water Quality in River Basins

Keys for Success

How can RBOs facilitate water quality improvement in Asia's river basins?

1. Since there are a number of sources of pollution that lead to degradation of water quality in the Baitarani River Basin, the RBO provides a forum for:
 - (i) increased understanding of how each sector impacts on others;
 - (ii) resolving issues related to water quality degradation

Climate Change Adaptation in River Basins

Keys for Success

How can RBOs facilitate climate change adaptation in Asia's river basins?

1. The Baitarani RBO facilitates the development of climate change adaptation strategies in a highly consultative manner, with inputs from a wide range of stakeholders
2. During implementation, the RBO will assist by providing a means to communicate the strategy down to stakeholders at basin level

Climate Change Adaptation in River Basins

Keys for Success

Water related disasters such as floods and droughts have severe social and economic consequences. Improved management of these extremes will produce high rates of return for economic growth and maintain social cohesion.

Thanks for attention