

International Seminar on 'Understanding the gender dimension of water and waste',  
World Water Week-2017, Stockholm International Water Institute (SIWI), Stockholm, 27<sup>th</sup> Aug-1<sup>st</sup> Sept. 2017

# **Are New Water Interventions Gender Neutral?**

## **A Study of *Pani-Panchayat* in Odisha, India**

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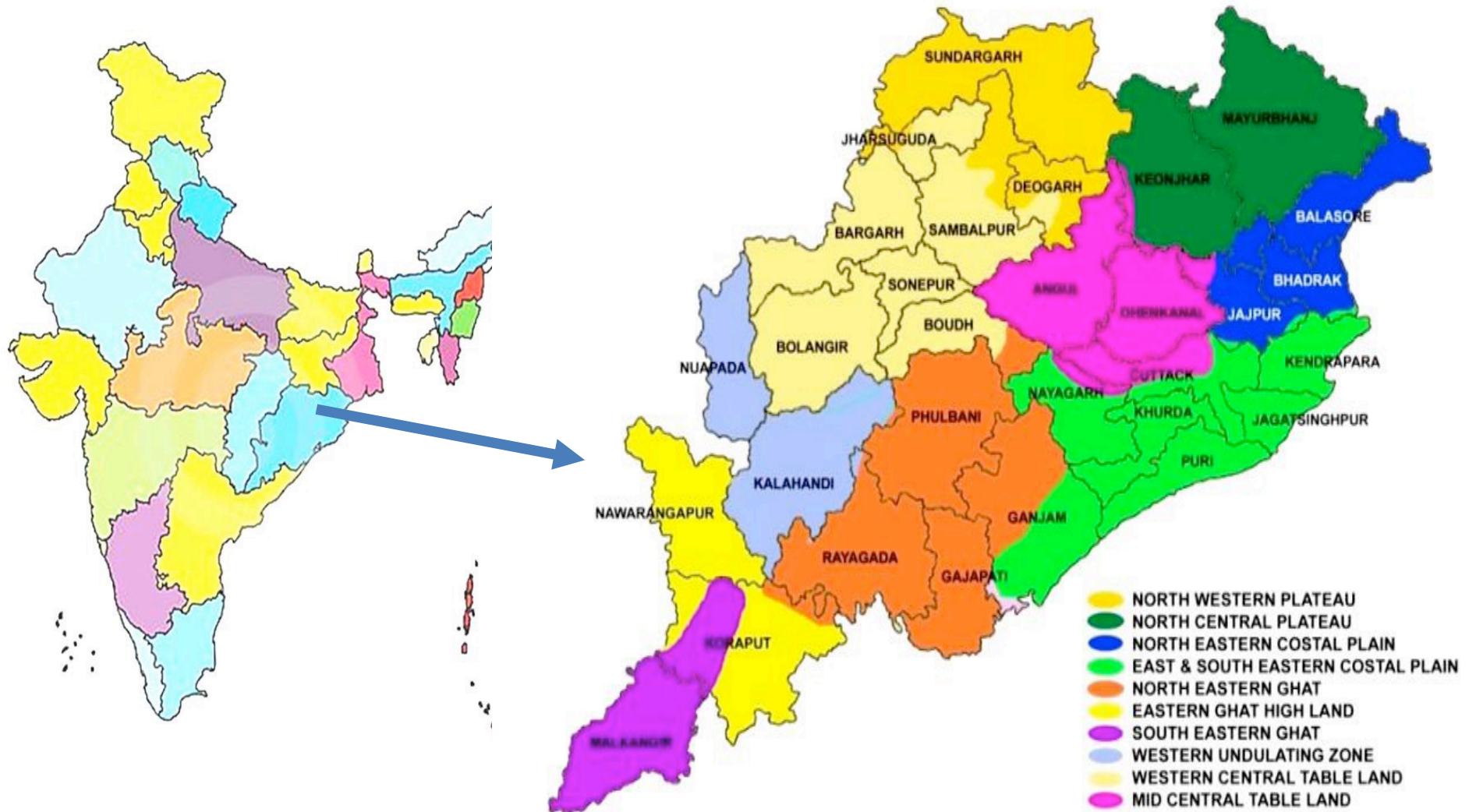
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## New Water Intervention in Odisha: *Pani-Panchayat (PP)*

- Odisha is a high water resource endowed state in India – recurrence of drought, crop loss, water & food insecurity, poverty, migration
- Odisha Pani-Panchayat Act 2002, to facilitate participative water management & development
- Equitable & dependable supply & distribution of water for optimum use & social justice
- Decoupling the water and land rights leading to increased productivity of land, water and people
- Women participation in water management & decision making - gender neutrality:

# Odisha in India



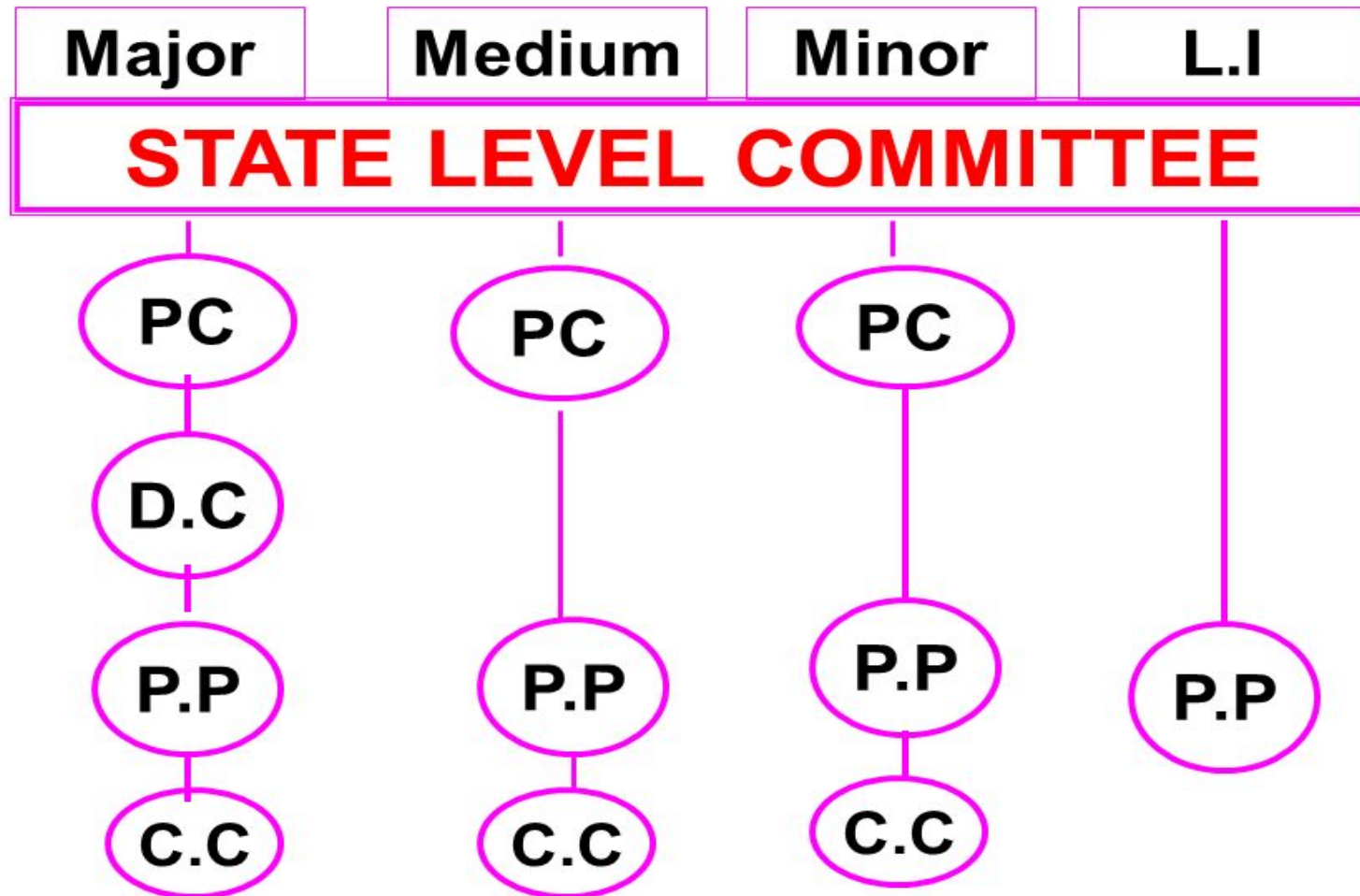
# Functions of Pani Panchayat

- prepare a crop plan suitable to local condition with focus on crop diversification
- maintenance of irrigation system - to regulate & promote the use of water
- assist the Line Dept. in preparation of demand and water rates, collect fees from water users
- to monitor flow of water for irrigation, resolve the disputes, raise resources, maintain accounts
- conduct of elections & key meetings, water budgeting, social audit

# Structure of Pani-Panchayat

PANI PANCHAYAT

WUAs structure



C.C. : Chak Committee / P.P.: Pani Panchayat / D.C: Distributary Committee

P.C.: Project Committee

# Objectives

- impact of pani-panchayat on water governance & management with focus on gender (drought & water scarcity),
- changes in household resource uses, risk coping and gender relations (intra-household risk sharing)
- new water institutions to improve efficiency and gender neutrality in water sector (Local adaptations & practices in access to and use of water, local institutions, new interventions)

# Water & Gender Relations in Study Areas

- **Water use:** unequal distribution, poor water management, limited availability & access, dominant groups encroach CPRs,
- **Drought:** increasing frequency & severity, lean season distress, continuous dry spell, adverse impacts on women
- **Coping with water:** out migration, informal borrowings, liquidation of assets, reduction in expenditures (non-water)
- **Region & group specific diversity in water:** different in impacts and risk coping - not gender neutral
- **Food insecurity:** crop failure, food consumption coping (change in quality and quantity)
- **Water policy interventions:** unable to overcome water issues at regional and community/group level – Panipanchayat in Odisha

# Study Areas, Methodology & Data

- Selection of study areas: area based resources approach, agro-climatic zones, nature & pattern of farming, water sources
- Field surveys: *Kendrapada & Navrangpur* districts of Odisha collected data from total 115 households (marginal 29%, small 41% and medium and large farmers 30%) categories participating in PP in four villages, two each from each district covering both dry & backward and irrigated areas in the state
  - Kendrapada (high rainfall irrigated agriculture)
  - Navrangpur (medium rainfall dry & backward agriculture)
- Diversities in water resources, management and uses given priority with focus on women participation and other features such as local water issues and adaptations



## Participation in PP: *Irrigated & Developed Areas*

- Region-1 (Irrigated Developed Area): canal irrigated high value cropping intensity and adoption of modern farming practices
  - inadequate water to meet the high intensity cropping induced farmers initially to participate in new PP system
  - PP failed in meeting current water demand and resolving water disputes due to malfunctioning of new institutions, dominance of elite caste & classes, local politics, collapse of traditional water institutions and increasing farmers indebtedness.
  - diverse water user groups/members, wrong technical design, heterogeneous and scattered command areas and losses of water in transit, outweigh the natural benefits of high rainfall and irrigation potential.
  - PP fails to resolve disputes, meet the quantity & equity in water access discourage women to continue with PP.  
Participation in high return variety of non-farm activities also matter

## **Participation in PP: *Dry & Backward Areas***

- Region-2: (Dry & Agricultural backwardness): absence of controlled water supply, low adoption of modern variety, subsistence farming, high instability in crop production and productivity, declined farm employment and income, migration
  - Small farmers who fail to overcome water constraints under existing irrigation system were initially attracted towards PP but discontinued due to inherent local conditions that do not match with the new PP intervention
  - uneven distribution of land, dominance of exploitative economic agents, tenancy, usurious rural credit system, etc. keep their participation low.
  - Women, landless and people from lower strata were grossly excluded - in a state of forced deprivation and participated in distressed-induced non-farm activities not based on land and water

## Result & Analysis

- Overall Participation in PP
  - Dominance by upper caste male & and richer members,
  - ill-defined property rights,
  - lack of group activities & dynamics
  - ignores local socioeconomic set up fails to ensure community participation,
  - exclusion of local needs and institutions,
  - constraints in input supply (credit, seed, extension services) discourage participation
  - It seems the line dept. outsourced responsibility of operations & maintenance to user groups under PP

# Results & Analysis

- **Water & Gender:**
  - Unequal access and use of water by the land poor & women found across study areas irrespective of level of rainfall, water endowment and local adaptations
  - Problem relating to water distribution, management and dispute resolution found not gender neutral
  - Water scarcity, poor water use and management pose formidable challenges for the land poor and women particularly in dry areas that push gender inequality.

## Concluding Bullets

- New water intervention of PP for a decentralized, people-oriented and demand-driven water management, looks not implementable solutions.
- For better water management, distribution and use working relationships between existing local institutions and newly created PP/WAUs is crucial but found grossly missing in the study areas.
- PP initially encouraged participation of women and the weaker sections but they were excluded later due to poor management and water dispute resolution which found not gender neutral.
- Strengthening local water institutions, participation of women in water use decision making, land rights, input supply are crucial and need policy attention for success of PP.