

# 'Green Lady of Bihar' and Sustainable Watershed Management in India

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# INTRODUCTION

- A case of bottom-up women's participation from India under leadership of Jaya Devi
- In a water-stressed poverty-stricken area – Dharhara Kol in Bihar - to achieve water sustainability and hence sustainable development.
- Two micro-watersheds studied - Kareli and Koilu.



# FINDINGS (1)

- **Problem:** Rain-shadow area with low rainfall which also became lost in the bare hill slopes - causing low water table, barren uncultivated lands, poor agricultural productivity and hence widespread poverty
- **Action:** Gender-sensitive community-based watershed management under leadership of Jaya Devi
  - Women and men organized into self-help groups and watershed committees to undertake rainwater harvesting and water conservation practices
  - Construction of watershed structures like checkdams/anicuts, water absorption trenches (WAT) and gabions to slow the flow of runoff; percolation tanks & dams to store water and increase groundwater recharge
  - Community rules – for protection of restored greenery & use of rejuvenated natural resources

# FINDINGS (2)



Jaya Devi with 'Real Heroes' award received in 2012

## Jaya Devi:

- A poor rural lady belonging to a socio-economically backward community, educated only upto Class 5
- Motivated to transform her community to empower them to be freed of moneylenders' clutches
- Started with women's self-help groups (SHGs), attempted women's communal farming
- Failure due to shortage of water transformed her into a woman water leader

# FINDINGS (3)

## **Outcomes and implications for sustainable development**

About 9000 families living in six watersheds benefited immensely through:

- Increased 'blue water' storage on the surface and 'green water' retention in the soil
- 5000 hectares of restored barren land which could be cultivated or provide fodder for livestock
- Agricultural production boosted several times, due to greater water & moisture availability in fields
- New livelihood options e.g. fishing in rejuvenated ponds
- Provision of adequate and safe drinking water – reduced women's drudgery, improved health, etc.
- Poverty alleviation, gender empowerment & increased equality, enjoyment of human rights
- Better climate resilience

# ACTIONS (1)



Organizing fellow women for action as the  
Chairperson of Kareli Watershed Committee

# ACTIONS (2)



A percolation tank for holding local runoff under construction in Koilu watershed



A checkdam in Kareli watershed

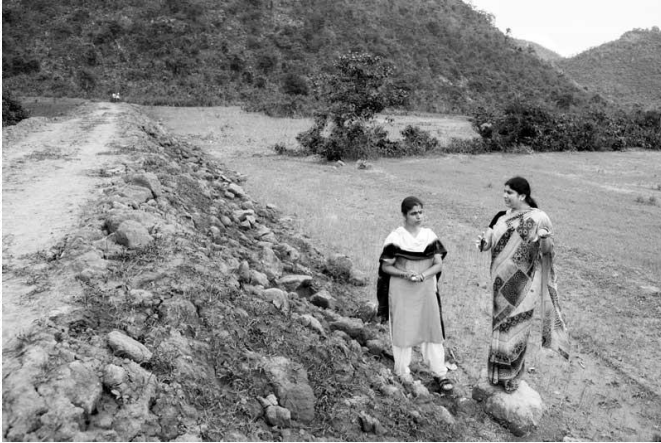


The above percolation tank filled by local runoff during monsoon season in Koilu watershed



A water reservoir called 'ahar' recharged by above checkdam in Kareli watershed

# ACTIONS (3)



Jaya Devi explaining about a checkdam being constructed across Kareli Nala which would make 1000 h land cultivable downstream



A 'water absorption trench' at the base of a hill in Koilu watershed



A 'gabion' in Kareli watershed



Rejuvenated forest in Kareli watershed



# OUTCOMES



Recharged handpump yielding drinking water round the year in Kareli watershed



High water table in an agricultural well in Koilu watershed



Paddy crop in Koilu watershed



A field of ripe wheat crop in Kareli watershed

# CONCLUSIONS

- In recognition of her efforts at bringing water and greenery in barren land, Jaya Devi is known as the 'Green Lady of Bihar' and the 'Water Lady of India'
- Through ecosystem- and IWRM-based approaches, she brought empowerment for herself, fellow women & her entire poverty-stricken community
- Her relentless efforts now recognized, bringing awards and accolades : 'Real Heroes' award, National Youth award, Grassroots Women of the Decade Achievers award, invitation to 4th Asian Youth Workers' training program in Korea, etc.
- LESSON: Need to promote 'bottom-up' women's participation by motivating and supporting local women leaders who are accepted by the community in terms of their own criteria rather than through 'top-down' approaches

Read more on Jaya Devi: [www.millenniumwaterstory.org](http://www.millenniumwaterstory.org)