



# Transformative change for rural environmental sustainability in India:

*Case study of leveraging gender equality and women's empowerment for evaluating climate change adaptation*

- ▶ Yogesh D. Jadhav (Ph.D.)
- ▶ Barli Development Institute for Rural Women
- ▶ Session: Environment 3: Adaptation - Lessons from recent experience.

(2<sup>nd</sup> October: 5:00 - 6:30 p.m.)



With reference to transformative change in human and environmental systems...

असतो मा सद्गमय,  
तमसो मा ज्योतिर्गमय,  
मृत्युर्मा अमृतमगामय,  
ॐ शान्ति, शान्ति, शान्ति

*From the Pavamana mantra (from the ancient Indian Holy scripture,  
the Brihadaranyak Upanishad - An ode to the Creator)*

*(O God)*

Transform our lives from falsehood towards Truth,

Accompany us from darkness towards light,

Lead us from death towards immortality

Let there be peace, peace, peace (physical, mental, spiritual)



## Setting the context:

# Climate change impacting lives of rural and tribal communities

### Recent climate events and impacts:

During monsoon season (June-August 2019) India received excessive & uneven rainfall all across the country -

- ▶ Floods, siltation of rivers, soil erosion (inundating 70% of forest-fringe farmlands belonging to tribal communities)
- ▶ 150%+ excess average rains in majority of tribal dominated states, including Madhya Pradesh (the state where the Institute operates and the tribal women-trainees hail from)
- ▶ Flash floods and storms & resultant crop losses (85% of monsoon sown crops lost)

In recent summer (March-May 2019):

- ▶ Heat-waves and increase in frequency and length of droughts (destroying 45% of seasonal crops)
- ▶ Forest fires (a 38% rise in forest fire incidences)

.....Devastating the livelihoods of communities and negatively affecting all the SDGs

## Setting the context: Communities impacting rural environmental sustainability



- ▶ Depleting natural resources due to unsustainable agricultural practices
- ▶ Land-use change (urbanization, land conversion and diversion)
- ▶ Deforestation of tribal & forested landscapes due to land tenure ambiguity  
*(although there has been an effective increase in green cover (as per 2018 data), but this is mainly due to greening of urban and peri-urban areas).*
- ▶ Forest degradation (due to unsustainable management practices, uncontrolled grazing)
- ▶ Plight of indigenous communities due to alienation of **traditional land rights**

# Setting the context: Positioning women's empowerment and gender equality in climate change discourse



## Gender inequality in rural and tribal communities

- ▶ Lack of adequate rights to access & use the resources by rural women (100 % women don't have property ownership rights in the areas where the Institute works)
- ▶ Traditional patriarchal family structures & gendered prejudices (100% families in target area)
- ▶ Preference for male-child by families (100% families and respondents)
- ▶ Perception of development agencies (women as beneficiaries) (more than 80 %)

## Results of gender bias

- ▶ Low female literacy (just 1 in 1000 tribal girl ever reaches the High school)
- ▶ Skewed gender ratio at birth due to female foeticide, and ignorance about maternal and child health (918 girls per 1000 births)
- ▶ Rural poverty and resource scarcity (90% women involved with unpaid labour)



# The need for training rural and tribal women in evaluating climate change adaptation

- ▶ Remaining patches of climate resilient, biodiversity rich forest-lands - the tribal areas in India (especially central Indian tropical forests of Madhya Pradesh state (MP))

Lives of rural and tribal women are more vulnerable to changes in climate because:

- ▶ They are the primary users of forests and farms
- ▶ They are the custodians & direct users of indigenous knowledge on climate, environment and biodiversity
- ▶ Major contributors to sustaining rural livelihoods



As a result, the impacts of climate change and environmental degradation are first sensed by the rural and tribal women

To build sustained resilience, there is a need to empower and train the tribal women in evaluation of their rural environments and adapt to climate change

# Women as drivers of climate change adaptation: case study of BDIRW



Barli Development Institute for Rural Women, Indore (India)

- ▶ Mission: *To train and empower young rural and tribal women through building their capacity, skills and knowledge; to make them skilled human resources and social change agents, so that they would initiate the process of sustainable development by improving the lives of their families, communities and themselves.*
- ▶ Established in 1985; Conducts 6-months' (free) residential training programs
- ▶ Admissions held twice a year, with 260 rural and tribal women trained each year
- ▶ 116 batches trained till date; 8800+ trainees from 880+ villages trained
- ▶ Intensive and immersive training program which is Evidence-driven, engaging in experiential learning & uses continuous interactive evaluation methods



# Barli Development Institute for Rural Women (BDIRW)



- ▶ Trained more than 8800 rural and tribal women who came from more than 880 villages in India;
- ▶ Provides an enabling environment for young rural and tribal women in achieving SDGs.

# The Institute's training programs



Some of the climate change adaptation modules and resilience building practices learnt by the women-trainees at the Institute are given below:



- ▶ Composting: use of leaf litter for making farm-yard manure (instead of inorganic urea)
- ▶ Biological control of weeds through crop rotation, inter-cropping, and hand-weeding (instead of Round-up)
- ▶ Bio-dynamic control of insects and pests through using herbal and locally available plant materials (e.g. 5 leaf extract) instead of inorganic carcinogenic pesticides
- ▶ Managing soil fertility through reuse and recycling of treated septic waste-water (reducing manure use)
- ▶ Shelter-belts and windbreaks for conserving soil moisture
- ▶ Use of selective agri-horticulture techniques for on-farm conservation of biodiversity
- ▶ Cultivation of medicinal plants and fruiting trees as safety nets
- ▶ Training in climate smart agriculture, like drip irrigation, organic fertigation, furrow cropping, etc)

# Barli Development Institute for Rural Women (BDIRW) contd...



Pedagogy: Literacy and numeracy skills training using the 'creative word'; confidence-building through interactive debating & presentation, peer-tutoring and group learning - all contributing to rapid learning and enhancement of overall personality

The 6-month training includes:

- ▶ Mapping the 'felt' climatic changes using indigenous methods and local people's indicators (PI)
- ▶ Remediating, resilience-building and adapting to the impacts of climate change through hands-on training in:
  - ✓ Organic farming, biodynamic-agriculture, agroecological practices,
  - ✓ Indigenous methods of weed and pest control
  - ✓ Use of solar technologies for food processing (including cooking, food drying, power generation, among others)
  - ✓ Cultivation and use of medicinal plants for rural health
  - ✓ Vocational training (stitching and tailoring) for sustainable livelihoods
  - ✓ Community development through self-involvement in service activities after going back home

# Impacts of the training program

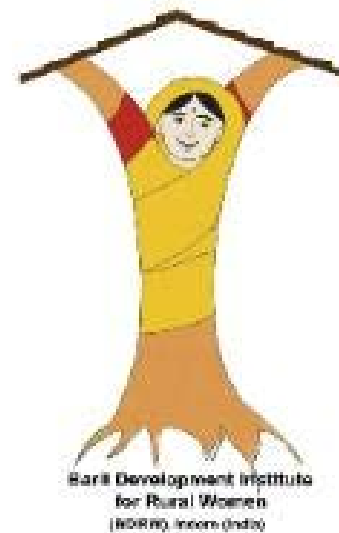


- ▶ The 6-month training at the Institute course results in rapid learning - **100 % become literate**
- ▶ **Inter-personal skills training**- boosts self-confidence, enhances informed decision-making as regards managing the rural environment in their villages
- ▶ **Health curriculum** training helps in achieving holistic rural health (maternal and natal care)
- ▶ Hands-on training in **sustainability practices** results in better management of rural farmlands and forests
- ▶ **Solar food processing training** - assists in conserving the rural environment and forests
- ▶ **Vocational training** (stitching and tailoring) - 100% women become self-reliant
- ▶ 80% of pass-outs start their own **small-scale rural enterprise** and become financially self-sufficient
- ▶ 90 % of these women take up or **restart their formal studies** after going home
- ▶ All the trainees assist in **improving the village communities** and their rural landscapes through knowledge sharing, imparting health knowledge to other women, educating the men-folk in sustainable agricultural practices, organise village-level campaigns for tree plantation, and cleanliness drives, among others.

# Recognitions and awards



- ▶ UNEP's Global 500 Roll of Honour (in 1992)
- ▶ Gold Award certification by GuideStar India for organisational best practices (transparency and accountability) (2016)
- ▶ OBE conferred by HM the Queen Elizabeth II in 2008
- ▶ Padma Shree by Government of India 2015
- ▶ Numerous state and regional awards for services to empowerment of rural and tribal women conferred by civic bodies, and including Rotary and Lions club



WINNER OF GOLD  
AWARD FOR  
ORGANISATIONAL TRANSPARENCY  
2016



# Building momentum towards achieving the SDGs



## SDG Goal no 1 & 8:

By learning vocational skills the women are able to come out of the poverty loop by shifting from their migratory and labour intensive vocations (i.e. of farm labourers) to obtain a gainful and stable employment in their villages (viz: in *Aanganwadis* i.e. local creches, & as *Aasha karyakarta* i.e. rural health workers & teachers in primary schools).

Graduating women get empowered to start their own rural enterprise and become self-employed (like stitching-tailoring boutique, a grocery shop, telephone booth).

This contributes to the SDG Goal no: 1 (i.e. End poverty in all its forms everywhere); and Goal no. 8 (i.e Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all)



## Building momentum towards achieving the SDGs *contd..*



- ▶ **SDG Goal no 2:** Through use of advanced food preservation and processing techniques (including solar drying, heating, among others) the Institute trains the women in preservation of farm products including seasonal vegetables, fruits and other food items, thus ensuring food security in rural areas, and contributing towards achieving the SDG Goal no: 2 (viz: End hunger, achieve food security and improved nutrition, and promote sustainable agriculture)



## Building momentum towards achieving the SDGs *contd..*



- ▶ **SDG Goal no 3 & 6:** The training curriculum on Health (published by MacMillan India) covers hands-on knowledge on ensuring balanced health-care of rural communities (including children and women) by covering personal and social health issues

It includes: sanitation, immunization, vaccination, prevention and cure of both infectious and contagious diseases, first-aid, women's health, use of herbal cures, among others) thus contributing towards achieving both the SDGs viz: Goal no: 3 (viz: Ensure healthy life and promote wellbeing for all at all ages); and Goal no: 6 (viz. Ensure availability and sustainable management of water and sanitation for all).





## Building momentum towards achieving the SDGs *contd..*



- ▶ **SDG Goal no 5:** The rural women undergo the Institute's full-time residential training courses (of six months' duration, twice a year) which builds their self-confidence and empowered.

The integrated training pedagogy involving peer-to-peer tutoring, experiential learning approaches and the hands-on training in vocational skills empowers the rural and tribal women to acknowledging their self-worth, thus contributing towards achievement of SDGs Goal no. 5 (viz: Achieve Gender equality and Empower all women and girls).



## Building momentum towards achieving the SDGs *contd..*



- ▶ **SDG Goal no 7:** The Institute's campus is powered by solar technology gadgets and the trainees are trained in the use and maintenance of these installations.

The women-trainees also get hands-on knowledge and training in use and maintenance of solar concentrating technologies (viz: solar cookers, heating devices and solar dryers) and are encouraged to start using these technologies when they go back to their village homes; thus contributing towards the SDG Goal no 7 (viz: Ensure Access to Affordable, Reliable, Sustainable and Modern Energy for All)

## SDG7 contd.



Since past 20 years the trainees' kitchen at Barli Development Institute has been cooking all food for 130 persons using large Scheffler solar cookers, 3 meals per day for approximately 300 days per year.



## Village level impacts:

Use of solar cooking in income generation by rural women's groups in their villages



Solar cookers in the villages:

>It is gender friendly : the men want to cook on it.

>Small children don't get burns.

>Saves the toil as women no longer need to visit forests to gather firewood.

>Prevents crimes like rapes and molestation which take place while women visit forests for collecting woodfuel

>Useful for cooking cattle food



## Building momentum towards achieving the SDGs *contd..*



- ▶ **SDG Goal no 12 and 15:** The women are also provided hands-on training in eco-agriculture and use of sustainable agriculture techniques using organic methods and processes,

This contributes to the two SDGs viz: Goal no. 12 (viz: Ensure sustainable consumption and production patterns); and Goal no. 15 (viz: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss).





Thus the interventions of BDIRW are directly impacting at least 9 SDGs (SDG viz: 1,2,3,5,6,7,8,12,15) of the United Nations (adopted by the UN in September 2015), and helping build the momentum for transformative change.

# Way forward and scaling up...



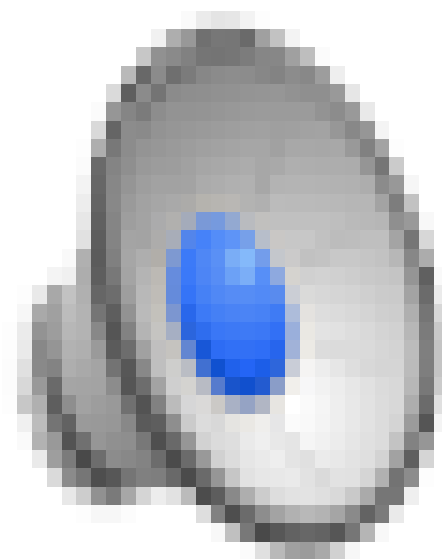
- ▶ Barli Development Institute for Rural Women is the only Institute in India which has attained a niche in the rural women's empowerment domain using holistic approaches, evidence based change management, transformative impacts through training and development of rural and tribal women.
- ▶ Our trained graduates have been evaluating, remediating and adapting to environmental changes and building the resilience of their tribal landscapes since more than 3 decades.
- ▶ BDIRW's robust training curricula and pedagogical methodologies have been organically (indigenously) developed, evolved and tested since past 34 years

With further support from donor agencies and technical assistance from research institutions, the Institute is ready to transition to become a nodal center for training rural women in: **interactive evidence-based climate change evaluation and adaptation in India and the Asia-Pacific**



# Story of Kali

<https://youtu.be/tDK4R8IF1kl>





# Barli Development Institute for Rural Women, Indore

(empowering Women since 1985...)

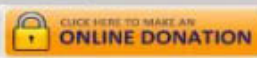


Home Page

- Home
- About Barli
- Training-programmes
- Vocational Training
- Contact Us
- Our-publications
- Information to Download
- Links to our Friends
- NEW! Visitors Groups
- Core team
- News Archives Links
- Latest News
- IFSPC2009

How you can help us ?

**Donate Online**  
(for Instructions/Steps :  
[click here](#))



- Contribute your time by Volunteering with us
- Contribute your resources (donate old yet useful items)
- Contribute your waste (news-paper waste)

Admission for the 104th batch

The Institute empowers rural and tribal women to become agents of social change through inculcation of a positive attitude, acquisition of holistic knowledge, and fosters development of a wide range of skills essential to improve their lives, the welfare of their families and advancement of their village communities.



*Appointments...*  
Director ,  
Chief Operating Officer  
On 17th April 2011  
**Mrs Tahera Jadhav** was appointed as the new Executive Director & **Mr Yogesh Jadhav** took over as Chief Operating Officer of Barli Development Institute.

[\(To Download Barli Institute's Brochure - Click here !\)](#)

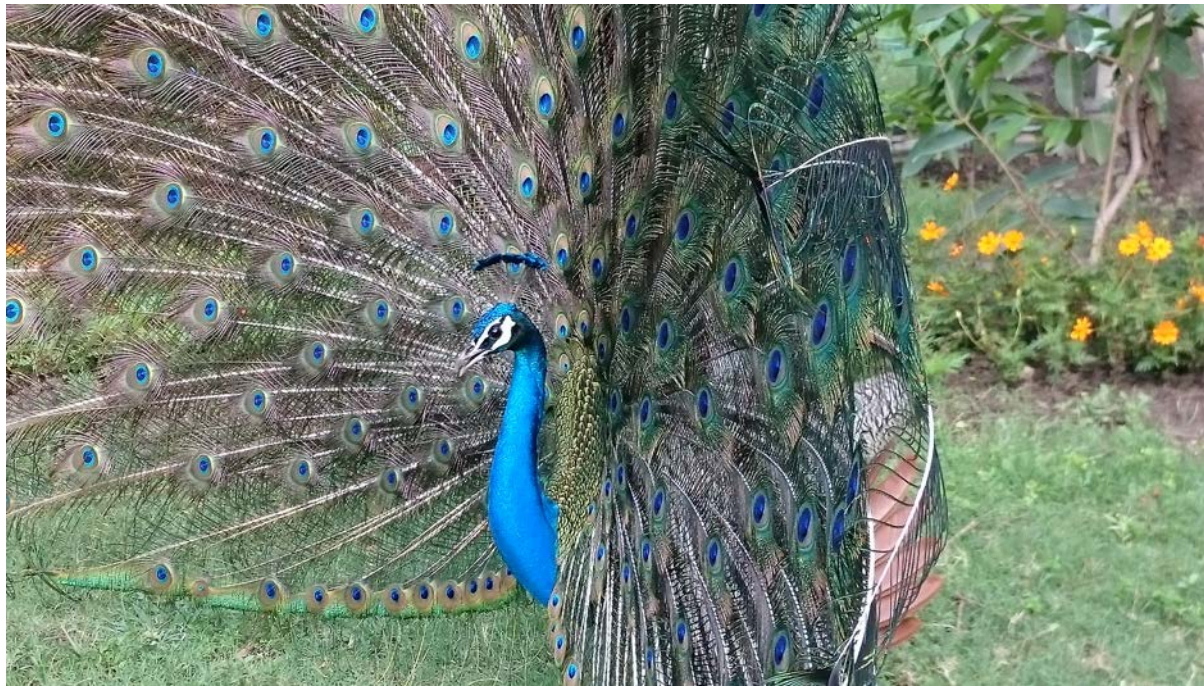
Follow us on:  
 Follow


- Past events*
- \* Republic Day 2013
  - \* Graduation ceremony 103 batch
  - \* Parents Meeting 13-15 Sept. 2012
  - \* Independence Day 15 August 2012 \* World

Please Visit  
<http://www.barli.org>

Though this web site still under development, already there is access to more than 70 pages of information including downloadable information including online versions of the Institutes newsletter Barli Ki Duniya



# Thank You

Barli Development Institute for Rural Women

180 Bhamori, New Dewas Road, Indore MP India

Web Site <http://www.barli.org>

Email [ydjadhav@gmail.com](mailto:ydjadhav@gmail.com); [barli01@gmail.com](mailto:barli01@gmail.com)

Telephone 0091 731 2554066 , 9827557489