

# Gender Action Plan

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**FP045: Ground Water Recharge and Solar Micro Irrigation to Ensure Food Security and Enhance Resilience in Vulnerable Tribal Areas of Odisha**

India | NABARD | B.16/02



GREEN  
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## Annexure 6 (A)

### Action Plan for Gender and Social Inclusion

Ground water recharge and solar micro-irrigation to ensure food security and enhance resilience in vulnerable tribal areas of Odisha

**Impact Narrative:** Overall, the project will contribute to the impacts of increased resilience and enhanced livelihoods of the most vulnerable women population. It would lead to increased resilience of health and wellbeing, and food and water security. Combined with government co-financing, GCF resources will support an integrated approach to strengthen the resilience of smallholder farmers including women in water stressed districts contributing to climate smart water management integrated with sustainable crop planning. The project would lead to reduced drudgery, reduced time and labour in collection of drinking water: 38.5% of the women travel half a km distance to fetch water and time involved per trip is about 2 hrs including congestion and conflict. So likely impact are (a) 25% increase in time saving ; (b) 25% increase in time spent on rest, recreation and learning activities, and; (c) increased study and guidance time for children (d) better health outcome for family with a special focus on pregnant and lactating women due to improved water quality.

**Impact (ii): Sustainable access by vulnerable females and males of all ages to water for household and commercial use and food security:** Deployment of solar pumps would provide sustainable access to clean and non-polluting source of energy leading to energy, food and water security for the vulnerable female population of Odisha. The integration of solar energy is first of its kind in the state and would help in wider replication, opening of the private market for solar pumps and large scale adoption of clean and non-pollution sources of energy such as solar lighting, solar cooker, etc. which would help in drudgery reduction for biomass collection and improve livelihood opportunities.

**Outcome:** Improved and stable employment opportunities and health outcomes for an estimated 2.6 million females in 15 districts in farm and off-farm micro-enterprises, as solar entrepreneurs and out of total number of jalasathi (para workers); one third of which will be women.

Activities	Indicators and targets	Timelines	Responsibilities
<b>Output 1:</b> Rejuvenation/construction of 10,000 tanks with ground water recharge systems to ensure ground water conservation and reduce vulnerability in 15 water stressed districts of the state.			
(i) Access of women (including landless) to water sources (Tank as well as Ground water sources) in project areas.	<ul style="list-style-type: none"> <li>• 100% in Project areas</li> </ul>	By 2021	EE
(ii) Participation of Poor female headed households (FHH) in water user associations. (Tanks are owned by Gram Panchayats which have 50% representation of Women. The state legislature unanimously gave its nod to the Orissa Panchayat Laws (Amendment) Bill, 2011 by amending the Orissa Gram Panchayat Act, 1964, Orissa Panchayat Samitee Act and the Orissa Zilla Parishad Act enhancing the quota for women from the existing 33% to 50%.)	<ul style="list-style-type: none"> <li>• 100% FHH in project areas</li> </ul>	By 2021	EE & Execution partners
(iii) Public awareness program for women are implemented at local level to ensure their participation:	<ul style="list-style-type: none"> <li>• 100% FHH in project areas</li> </ul>	By 2021	EE
<b>Output 2:</b> Access to year – round water by 5.1 million vulnerable communities for household and agricultural purposes			

(iv)	Needs for household use of water and impact on women estimated	<ul style="list-style-type: none"> <li>100% of female households</li> </ul>	By 2021	M&E agency during baseline
(v)	Crop-water budgeting done including focus on crops that helps in female involvement (kitchen garden, drum sticks that helps in nutrition for females)	<ul style="list-style-type: none"> <li>Crop Water budgeting based on 9 agro climatic zone prepared.</li> </ul>	By 2021	Resource agency, WALMI and Krishi Vigyan Kendra
(vi)	Guidance on water quality, health and nutrition provide through anganwadi centres by women para workers	<ul style="list-style-type: none"> <li>Aganwadi centres in project area would be linked</li> </ul>	By 2018	EE and execution partners
(vii)	Livelihood improvement plan prepared including female marginal workers	<ul style="list-style-type: none"> <li>One report</li> </ul>	By 2020	EE and resource agency
<b>Output 3: 1000 solar pumps installed in pilot locations for demonstration in 15 districts</b>				
(viii)	Installation of 1000 solar pumping demonstration	<ul style="list-style-type: none"> <li>Access to water and energy to benefit 50 % of female beneficiaries</li> </ul>	By 2021	EE & Resource Agency and execution partners
(ix)	Women members trained in pilot locations on solar energy use, solar pump operation maintenance, etc.	<ul style="list-style-type: none"> <li>500 women members in 1000 pilot location trained</li> </ul>	By 2020	EE and execution partners
(x)	Interface meeting between women SHGs and vendors of solar panels to work out business modalities	<ul style="list-style-type: none"> <li>100 SHGs in pilot locations 500 women are certified by the vendor for panel assembling, maintenance, etc.</li> </ul>	By 2020	EE and resource agency, OREDA, Vendor
<b>Output 4: Capacity building plans implemented for livelihood support systems for water users and the landless in the tanks command area</b>				
(xi)	Training need assessment conducted through surveys and focus group discussions -- in tank command areas of selected GPs to identify: <ul style="list-style-type: none"> <li>specific groups of enterprises, such as handicrafts, cooked food production, agro-processing and services;</li> <li>existing constraints to their development;</li> <li>new opportunities related to improved solar energy access and use</li> </ul>	<ul style="list-style-type: none"> <li>100% of the women SHGs in the tank command to be covered</li> <li>Women headed enterprise interview/survey will be conducted on a stratified random basis</li> </ul>	6-18 months	EE & Resource agency

(xii)	Capacity building program developed and implemented based on: <ul style="list-style-type: none"> <li>identified business development activities;</li> <li>In FPO capacity building plan and business plan enterprises suitable for women to be given priority</li> <li>training of trainers; developing and implementing user awareness programs</li> </ul>	<ul style="list-style-type: none"> <li>Comprehensive capacity building plan with a clear focussed chapter on gender</li> </ul>	By 2020	EE & Resource agency
(xiii)	Training of village jalsathis to monitor wise water and energy use and document it for the project	<ul style="list-style-type: none"> <li>At least 5000 women jalsathis trained.</li> <li>At least 50% of women SHGs in the tank command to covered.</li> </ul>	By 2020	EE, Resource Agency
(xiv)	Training on water use for agricultural activities completed with gender focus for various government programme convergence: <ul style="list-style-type: none"> <li>Training to focus on sensitive livelihoods, trainings related to livestock / small ruminant management, etc.</li> </ul>	Out of total 300,000 trainees at least 30% would be women.	By 2021 (in a phased manner)	EE, Resource Agency
(xv)	Training on off farm initiatives completed with regard to fisheries and poultry	<ul style="list-style-type: none"> <li>Out of total 150,000 trainees at least 30% would be women</li> <li>100% of the SHGs in tank command area to be linked</li> </ul>	By 2021 (in a phased manner)	EE, Resource Agency
(xvi)	Creation of linkage of FPOs with financial cess and markets	<ul style="list-style-type: none"> <li>Gender focus to include more number of female farmers as members</li> </ul>	By 2021 (in a phased manner)	EE, Resource Agency
<b>Output 5: Quality monitoring system for ground water governance established</b>				
(xvii)	Quality manual for water should reflect women's issues adaptation and mitigation measures	<ul style="list-style-type: none"> <li>Quality manual to integrate gender issues and mitigation measures</li> </ul>	By 2021	EE
<b>Output 6: Knowledge management (institutional and regulatory) input provided for water and clean energy market development</b>				
(xviii)	Successful enterprise case study of women entrepreneurs, issues of woman livelihood, health issues, nutrition and project impact on their lives to be captured in the document and widely disseminated	<ul style="list-style-type: none"> <li>Process document, case study, policy brief</li> </ul>	6 <sup>th</sup> month onwards By 2021	Knowledge partner, resource agency, communication and documentation officer in PMU