



# Soil Restoration and Rehabilitation of Degraded Soils for Food Security

**Dr. A V Bhavani Shankar**  
**National Bank for Agriculture and Rural Development**



# Initiatives



## Flagship Natural Resource Management Programmes

### Watershed Development Fund

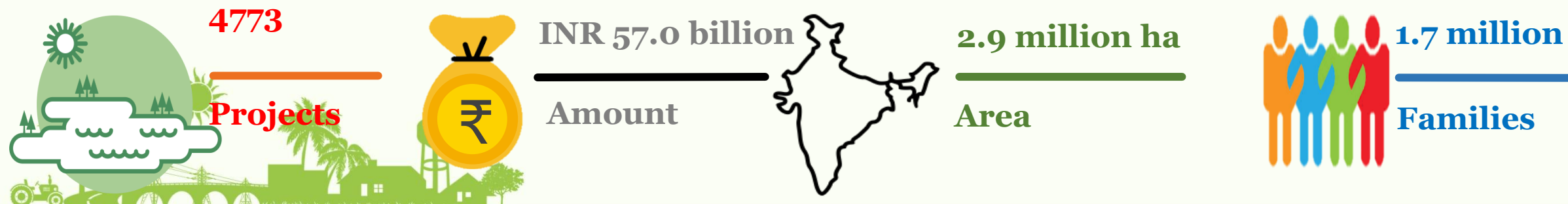
- Unit of project – micro watershed of 1000 ha
- Soil & Water Conservation
- Productivity enhancement measures
- Livelihood support
- Climate resilience
- Promotion of CBOs
- Capacity building & knowledge management

### Tribal Development Fund

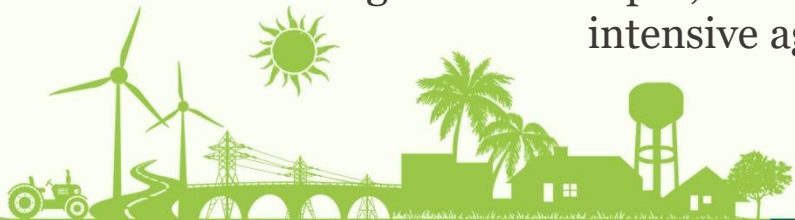
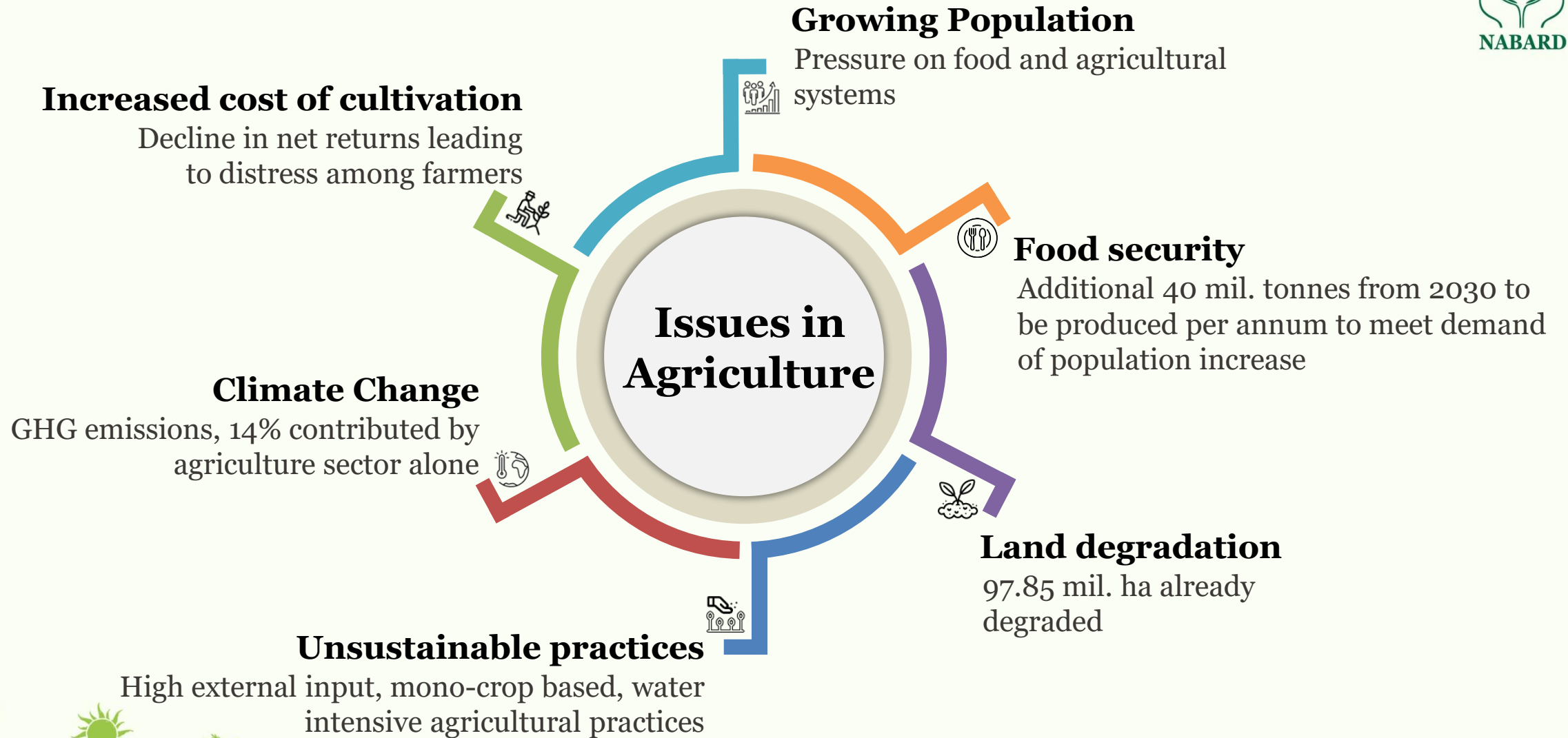
- Unit of project - 500 tribal families
- Orchard based livelihood
  - Horticulture, forestry & crops
  - Forward linkages
- Soil conservation
- Water resource development
- Women empowerment , Community health
- Capacity building
- Promotion of CBOs



### Impacts



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# KfW Soil Programme - At a glance

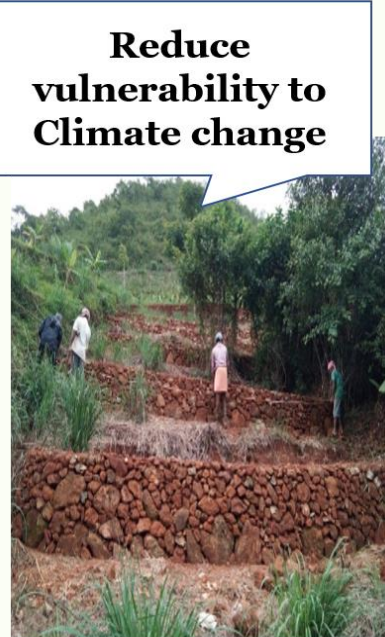


- Support under 'One World, No Hunger' initiative by Government of Germany through KfW
- **Purpose:** Rehabilitation and regeneration of degraded soils for ensuring food and nutrition security

## Programme Goal



**Efficient use of natural resources**



**Reduce vulnerability to Climate change**



**Increasing productivity and income of communities**

<b>226 Projects</b>	<b>EUR 19.5 Million (Grant)</b>	<b>Covers 800+ Project Locations</b>



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# Climate Change Vulnerability Assessment



## TOP-DOWN APPROACH

Identify the suitable technical agency

Assessment of impact of climate change by the experts

Climate Risk Mapping – Agriculture, Water, Soil, Animal Husbandry, Livelihood & Food Security

Climate Proofing – Climatic & non-Climatic Stresses, Activities Suggested

List of Interventions

## BOTTOM-UP APPROACH

Introduction to climate change concept

Livelihood Mapping

Identification of hazards

Assessment of impact of hazard on resources

Vulnerability assessment of social groups & critical sectors, their resilience capacity

Assessment of coping and adaptation strategies

Selection of activities / investments for CC adaptation

**Integrated Adaptation Strategies based on analysing and comparing bottom-up & top-down assessment**



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# Programme Components



**Additional Soil  
& Water  
conservation  
measures**



**Soil health  
improvement &  
productivity  
enhancement  
measures**



**Promotion of  
sustainable  
NRM, CCA  
farming  
practices &  
food security**



**Measures to  
mitigate CC  
risk**



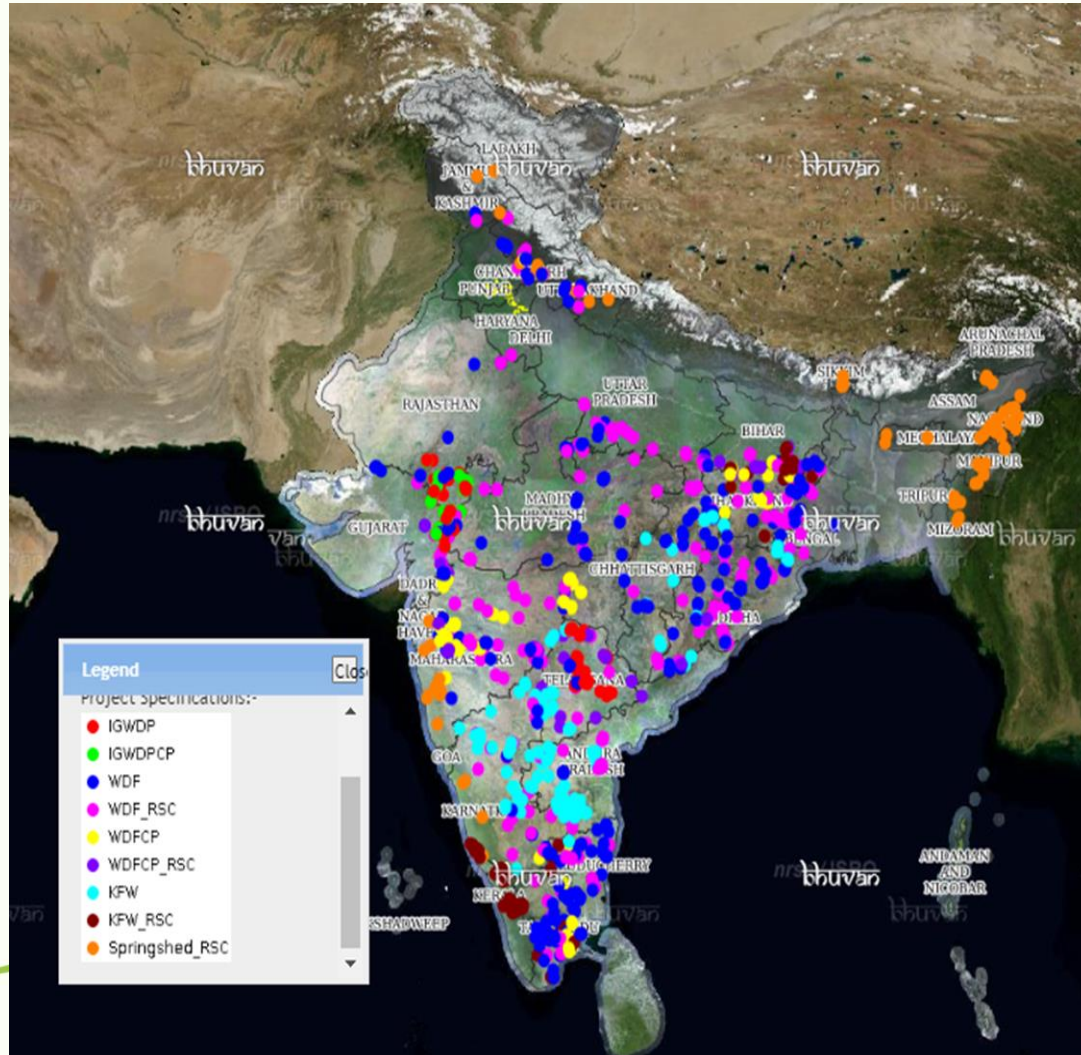
**Capacity  
building,  
institutional  
building &  
knowledge  
management**



# Geospatial technology based monitoring



## NABARD Bhuvan Portal



Hosted all projects under SEWOH (Phase I - III)



Online status of implementation for tracking of progress at HO, ROs as also at district level.



Geotagged Assets: 40,810



Impact Evaluation of SEWOH Projects



# Field Activities



**Trellis farming  
(vegetables)**



**Kitchen/Nutri. garden**

**Soil Health Card**



**Fruit plantation**

**Intercropping**



**SRI cultivation**

**Millet cultivation**



Latitude: 13.895101  
Longitude: 76.241983  
Elevation: 762.01m  
Accuracy: 3.2m  
Time: 23-01-2019 18:18  
Note: Devigere

Powered by: NoteSah



**Jeevamrutham  
preparation**

# Progress



 **46,000 ha** treated with soil & water conservation measures

 **51,000 ha** treated with soil improvement measures

 **29,589** kitchen gardens established

 **85%** beneficiaries took up soil testing and adopted recommendations


 **75%** beneficiaries reported improvement in nutrition

 **45%** beneficiaries adopted intercropping, mixed cropping, SRI, & improved varieties, etc.

 Increased per capita consumption of milk and chicken/meat

 Improved access to drinking water

 **1.15 lakh** farmers trained through **5,727** trainings

 **18-30 %** increase in farmers' income



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# Impact



## Enhancing Nutrition

Improving soil fertility and promoting diversified cropping systems increase the availability of nutrient-rich foods, benefiting communities, especially women and children, and supporting better nutritional outcomes.



## Climate Smart Agriculture

Climate-resilient farming practices help farmers adapt to unpredictable weather, ensuring sustainable food production despite climate change.



## Inclusive Development

Focusing on small and marginalized farmers, particularly women, the programme ensures equitable access to resources, training, and income diversification, benefiting vulnerable communities.

# Learnings



- **Integrating Nutritional Objectives:** Targeted investments in soil health, sustainable agriculture, and climate resilience can drive both food security and improved nutrition.
- **Leveraging Public & Private Funding:** Mobilizing resources for large-scale, sustainable agricultural interventions ensures broader impact.
- **Participatory Development:** Prioritizing local knowledge and community empowerment leads to effective solutions for food security and livelihoods.

**KfW Soil Programme** shows how investments in soil conservation, climate-smart practices, and nutrition-sensitive interventions tackle soil degradation, food insecurity, and poor nutrition. By aligning with SDGs and climate goals, it highlights how agricultural investments can enhance food security, climate resilience, and nutrition for vulnerable communities.





**Thank you !**

