



Enhancing Nutrition through Women led Horticulture in Thar (ENWH)



Rajendra Kumar,
Sr. Programme Coordinator,
GRAVIS
19-11-2025

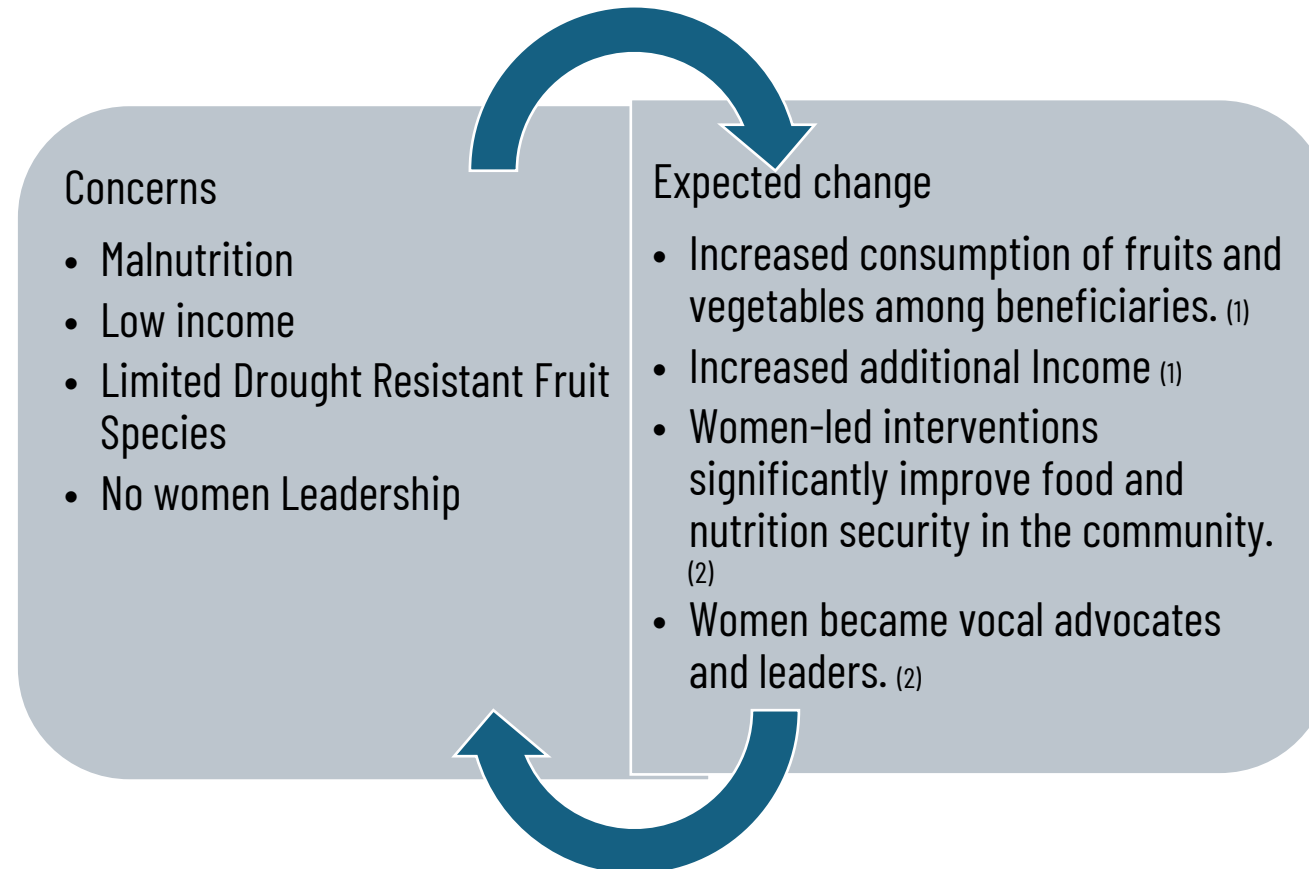
1. Introduction to project:

Project title: Enhancing Nutrition through Women led Horticulture in Thar (ENWH)

Lead organization: Gramin Vikas Vigyan Samiti (GRAVIS) **Major partners/Stakeholders:** Local CBOs, research organizations

Problem Statement: Farming communities in the Thar Desert face persistent drought and malnutrition and lack access to proven agroforestry models that can improve nutrition and income sustainably led by women.

Justification:



2. Project Objectives:

- To examine the **feasibility of local and indigenous fruit trees** in drought prone regions
- To **understand and promote women led community based agroforestry models** of fruit cultivation in Thar Desert region of Rajasthan
- To generate **scientific and field-based evidence** on the performance of selected drought-resistant fruit species—such as Ber (*Ziziphus mauritiana*), Pomegranate (*Punica granatum*), Ker (*Capparis decidua*), Khejri (*Prosopis cineraria*), Date Palm (*Phoenix dactylifera*), and drumstick (*Moringa oleifera*), under the arid and semi-arid climatic conditions of Thar Desert, with reference to their growth performance, yield potential, and drought tolerance.
- **To develop and validate** scalable women-led models of community agroforestry that integrate scientific experimentation with participatory management for sustainable fruit cultivation in dryland ecosystems by setting up Community-based Agroforestry Units (CAUs) with fruit trees towards enhanced **socio-economic and nutritional impacts on dietary diversity, health status, income generation, women empowerment, and overall wellbeing of the community.**
- To **document and disseminate** the experiences, including opportunities and challenges, for community-based agroforestry and horticulture, for replicability and to contribute to further research, policy advocacy



3. Methodology and implementation approach(1):

Research areas: Climate resilience, including drought tolerance.

Geographic location: Rural areas of Thar Desert agroecological region of Western Rajasthan. (Barmer, Jaisalmer, Jodhpur)

Target Group: Rural communities with special focus on women, women centric community based organizations

Target Intervention: Developing land use model i.e. Community based Agroforestry Units led by rural women, promotion of drought tolerant fruit species.

5 CAUs with fruit trees will be established for continued assessment and drawing comparisons.
Plantation in other common areas.

Approach : Community based approaches for planning, implementation, monitoring and evaluation.

Sites for setting up and assessment of CAUs in villages will be selected in consultations with women's self-help groups.

Data Collection methods: Qualitative and Quantitative

Baseline assessments will document soil conditions, rainfall, and socio-economic profiles, along with the current practices related to cultivation of fruits, their consumption and marketing.
Results will be evaluated through an endline survey.

3. Methodology and implementation approach(2):

Stage 1 Preparatory and Baseline Phase (3 months)

- Formation and orientation of team
- Selection of project sites for ground interventions
- PRA, Baseline need assessment

Stage 2 Growth Monitoring and Adaptive Management (12 months)

- Setting up of CAUs
- Performance monitoring of CAUs (plant growth, survival rates, yield performance, and water-use efficiency, soil mgt., GAP)
- Capacity Strengthening

Stage 3 Feasibility Assessment (6 months)

Data will be collected and analysed for survivals, value additions, market linkages, and impact evaluation for women empowerment, nutritional and other social and economic outcomes

Stage 4 Documentation, Dissemination and advocacy (3 months)

Dissemination of findings through workshops and policy dialogues with local institutions, agricultural departments, and research bodies

6. Social and nutrition impact pathway – Project outcomes/Impact:



Social Impact

- Empowerment of rural women as leaders and decision-makers in agroforestry, strengthening their roles in climate-resilient farming systems.
- Income generation through fruit cultivation, processing, and value chain participation, improving household financial stability.
- CAUs will strengthen community ownership and resilience by establishing participatory agroforestry units and promoting collective learning, livelihood practices
- Supports replicability and scalability by documenting field experiences and evidence-based models.



Nutritional Impact

- Increased fresh fruit consumption through enhanced availability of nutrient-rich, drought-resistant fruits like ber, ker, drumstick, and pomegranate.
- Improved health outcomes by addressing micronutrient deficiencies and ensuring dietary diversity in vulnerable desert communities.
- Affordable fruits for low income families.
- Increased agroforestry practices that helps communities in improving their livelihoods.

Slide 6. Environmental and climate advantages



Enhanced soil health and biodiversity

Adoption of efficient water use methods for cultivation

Promotion and adoption of drought resistant fruit species

Land restoration through CAUs

7. Scaling, sustainability and cost efficiency:



Community Engagement
leads to community
ownership and to gender
equality



Documentation and
Dissemination leads to
replication of the efforts



Capacity Strengthening
and Networking with
stakeholders leads to
sustainability



8. Budget summary and risk and mitigation strategy:



Total Budget INR 49,80,000 for 2 years

- Lead researcher and field staff honorarium – 18,00,000
- Consultants – 4,00,000
- Cost for setting up 5 CAUs and other plantation activities – 15,00,000
- Publication, dissemination – 4,00,000
- Advocacy and policy dialogues/workshops – 2,00,000
- Local travel – 2,00,000
- Implementation and administration costs – 4,80,000

Leverage from Organization and stakeholders

- Support of GRAVIS' senior team and of field staff and existing facilities
- Plants from research organizations such as CAZRI and KVKs
- Technical expertise from research agencies like CAZRI, KVKs and Aus
- In kind/labour contribution from the local community

Risks and Mitigation

- Plant Survival: Use of local Species, ensuring GAP practices, training of community
- Unavailability of water: Using water efficient practices viz. drip/pot irrigation, moisture retaining pits, etc.
- Community Ownership related issues- Facilitating community participation in planning, setting up clear roles and capacity building



Thanks