# From Gardens to Growth: Implementation Research on Nutrition Gardens in Nand Ghars as Integrated Community Nutrition Platforms

**Shoba Suri-Observer Research Foundation** 

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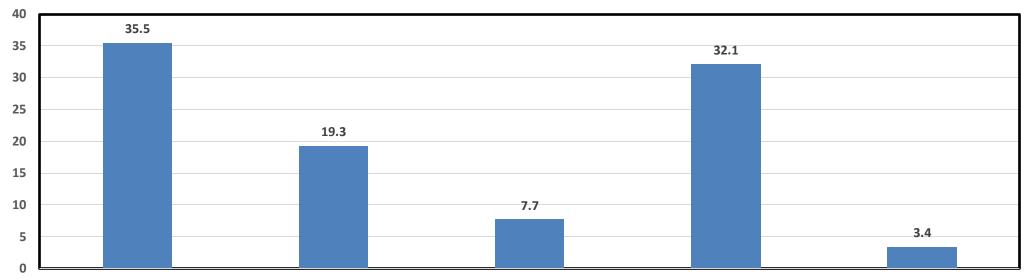
**Source: NFHS-5** 





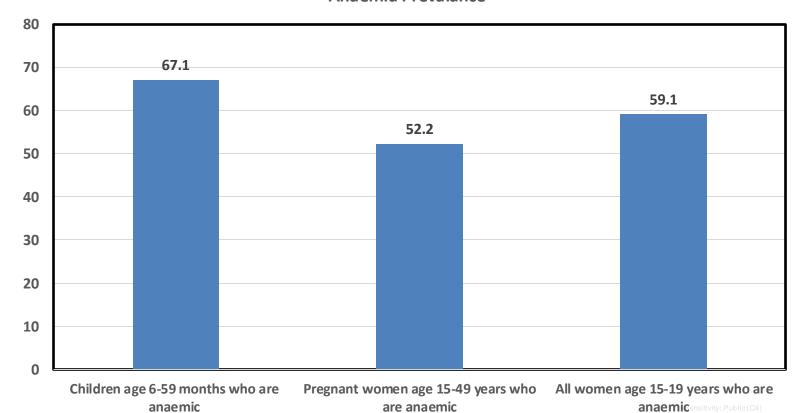
## **Rationale: The India Context**

#### **Malnutrition Status of Children**

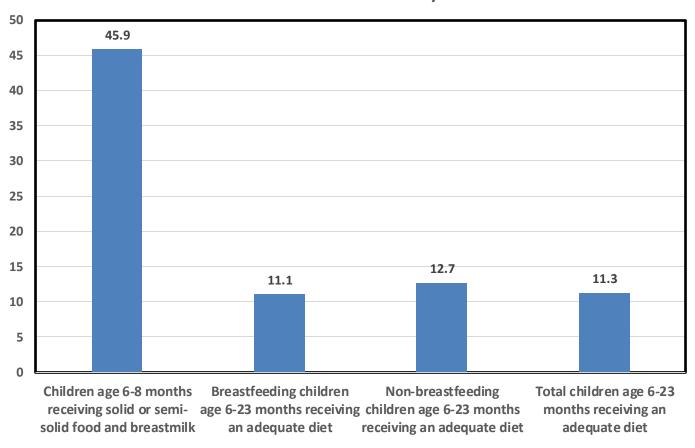


Children under 5 years who are Children under 5 years who are

#### **Anaemia Prevalance**



#### **IYCF and Food Security**



## Need for a multi-sectoral approach



## POSHAN 2.0 bridges gap and meet the SDGs







## **SDG** indicator



**POSHAN / Nutrition** 

2.1

End hunger with nutritious & sufficient food all year round

2.2

End all forms of malnutrition



Maternal & child health

3.1

Reduce MMR

3.2

End neonatal mortality



Child development

4.2

Ensure access to quality early childhood development & care







# Saksham Anganwadi and Poshan 2.0

#### **Transforming Anganwadis** into Learning & Nutrition Hubs

- Upgraded infrastructure, child-friendly spaces, and improved service delivery
- Integrated ECD approach with health, nutrition, and learning
- Enhanced capacity of AWWs through structured training

#### **Nutrition Gardens for Community-Led Food** Security

- Nutri-gardens established in/around Anganwadis using local land and seasonal crops
- Promotes availability of fresh vegetables, greens, and herbs for children
- Demonstration model for households to replicate at home

#### **Improving Diet Diversity** for Children & Mothers

- Inclusion of garden produce in daily menus and THR
- Increases intake of micronutrient-rich foods (green leafy vegetables, drumstick, carrots, etc.)
- Supports anemia reduction and improved growth outcomes

#### **Community Engagement** & Women's Leadership

- Mothers' groups, SHGs, and local volunteers involved in planting and maintenance
- Nutrition education sessions during garden activities
- Builds local ownership and sustainability





## Methods/Analysis



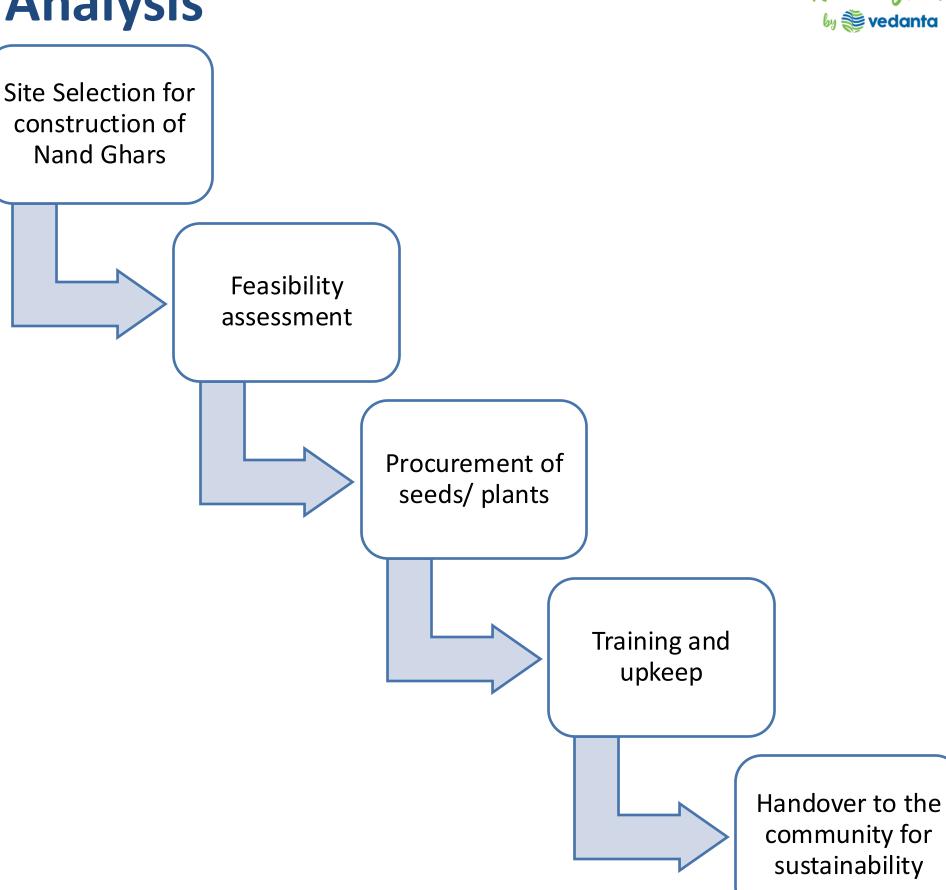
This operational research applied a mixed-methods design over six months

Quantitative data included surveys on dietary diversity, garden functionality, and anganwadi service utilization.

Qualitative tools included focus group discussions with caregivers, frontline workers, and key informant interviews, supported by human-centered design (HCD) tools.

Results examined links between garden functionality and nutrition/education indicators.

Thematic coding of narratives explored implementation barriers and enablers across food, health, and education systems.







## **Nutri Gardens at Nand Ghars**



- 1,200+ nutri gardens developed at Nand Ghars across Rajasthan.
- Criteria for selection- Presence of boundary walls, space availability at the Nand Ghar centres, soil condition.
- Nand Ghars lacking space availability, the kitchen gardens are developed by the beneficiaries in their home backyards.
- Cultivated with a diverse range of vegetables: Green leafy vegetables, seasonal vegetables & fruits.
- 18,300+ children benefitted through improved access to fresh and nutritious vegetables.
- Fresh vegetables from Nutri Garden incorporated into the daily hot cooked meals to enhance the nutrition & improve dietary diversity.











## **Nutri Gardens at Nand Ghars- Best Practices**



## **Strengthening Worker Capacity**

Regular training workshops in collaboration with expert NGOs and agriculture institutions.

### **Smart Plant Selection**

Prioritize seasonal, green leafy vegetables and nutrient-rich fruits

## **Community Participation & Ownership**

Involve local villagers, parents, and volunteers in planting and monitoring

## **Integration with Nand Ghar Nutrition Services**

Use fresh garden produce in daily hot cooked meals for children at Nand Ghars.





# Nutri Gardens at Nand Ghars- Key Challenges



Key Challenges	Issues	Key action steps taken
Water Scarcity	Limited and irregular water availability, especially in arid regions like Barmer	Promoting cultivation of low water requiring crops (palak, methi, dhaniya)
Livestock / Animal Damage	Goats and stray animals entering the garden and eating plants	Developing enclosed or barbed fenced Nutri Gardens
Limited Space at Nand Ghars	Many centers do not have sufficient open or fenced space for kitchen gardens	Promoting home-based kitchen gardens with parents and beneficiaries
Low Awareness on Benefits	Limited understanding among parents on the importance of nutri gardens	Demonstration sessions by Nand Ghar on nutri gardens





## **Case Study**









**Before** 



After

- AWW Shakuntala & Supervisor Meenakshi created a small demo garden at the Nand Ghar courtyard.
- Demonstration used minimal space and water, showcasing easy-to-grow vegetables (spinach, bottle gourd, ridge gourd).
- Women were involved hands-on in sowing, watering, and observing growth.
- Visible progress motivated women to start similar gardens at home.
- Within 2–3 months, many families began growing seasonal vegetables themselves.
- Outcomes: improved dietary diversity and enhanced community-led nutrition.





# Significance & Application



Nutrition gardens offer a practical, low-cost, nutrition sensitive strategy to enhance dietary diversity and support integrated child development

Women manage the gardens, learn sustainable agriculture skills, and often sell surplus produce therefore boosting livelihoods and agency

Embedding upkeep mechanisms into ICDS and rural development programs is essential for long-term nutritional impact and improved food system resilience at the community level

#### **Applications**

#### **Supplementary Nutrition for Nand Ghar Meals**

Fresh vegetables, leafy greens, and herbs directly enrich children's hot cooked meals and THR items.

- **Demonstration Sites for Nutrition Education**Used for PAM meetings, mother's sessions, and recipe demonstrations to teach families about seasonal, local, diverse diets.
- Learning Resource for Children
  Interactive space for ECE activities children learn about plants, colours, seasons, responsibility, and environmental care.
- Household Replication Models
  Families replicate mini-gardens (pots, vertical beds) at home, improving long-term dietary practices.
- SHG-Led Micro-Entrepreneurship
  SHGs sell seedlings, compost, or surplus vegetables generating income while improving community nutrition.
- Platform for Convergence with Agriculture & Horticulture Departments

Leverages technical guidance, seeds, saplings, and training for community-level scaling.







## **Implications for Scaling & Policy**

Successful scale-up requires coordinated efforts between WCD, agriculture, and education departments, with active roles for Panchayati Raj Institutions and civil society

Large-scale rollout requires a structured training curriculum on micro-gardening, composting, seasonal planning, and yield optimisation

Sustained impact depends on frontline capacity building, regular input supply, community ownership, and convergence with local food systems and nutrition missions

States need to document outcomes on diet diversity, child nutrition, and household food security. Evidence can help justify larger public investment and national scale adoption.





# Thank you