



VILLAGE ADHYAN

Toolkits for Community Engagement and Rural Transformation

Toolkit Series - 6 Creating Model Villages

Unnat Bharat Abhiyan (UBA)

SEG-Capacity Building, Strategy for Convergence
and Implementation of Various Govt. Schemes



National Institute of Rural Development & Panchayati Raj

(Ministry of Rural Development, Govt. of India)

Rajendranagar, Hyderabad – 500 030

www.nirdpr.org.in

Published on behalf of UBA-NCI, New Delhi

Author: Dr R Ramesh,
Associate Professor, Centre for Rural Infrastructure (CRI)
Unnat Bharat Abhiyan -SEG Coordinator
National Institute of Rural Development & Panchayati Raj (NIRDPR)
Hyderabad – 500 030
Contact : rramesh@nird.gov.in ; cri@nird.gov.in

Year of Publication: January 2026

Public Interest Use Declaration

This Toolkit Series is intended as a public good. It may be freely reproduced, translated, adapted, and distributed for non-commercial use in education, training, research, and community development with acknowledgement to UBA-NIRDPR, Hyderabad.

Users are encouraged to disseminate this Toolkit widely, including among neighbouring institutions, to maximise its social and developmental impact.

Preface

Village Adhyan Toolkits: Connect the Dots to Find the Flow

The **Village Adhyan Toolkits** are designed as **practical field guides** for learners engaging with villages. They are not meant to be read like an academic manual, but to be *used*—during field visits, community interactions, and reflection. From the outset, this series makes a deliberate choice: *perceived usability matters more than intellectual completeness*. The purpose is to support learning that actually happens on the ground.

Village Adhyan treats field learning as one journey supported by many pocket guides. No one carries an atlas into a village; they carry only the route needed for the day. In the same spirit, this Toolkit is arranged as **seven Learning Series**, each focusing on a distinct theme of village life, yet connected to the larger whole.

Each toolkit is modular, focused, and field-friendly, helping the learner clearly answer:

- *What shall I do with this toolkit?*
- *What should I observe?*
- *What should I ask?*
- *What should I reflect on?*

The likely insights at each stage are presented as **concise nuggets**, meant to be retained as **mental models**—simple ways of seeing connections, patterns, and flows in village realities.

Instead of a single bulky compendium, Village Adhyan is intentionally designed as a **Toolkit Series**. In a way, it works like a Netflix series rather than an 800-page textbook. Learning is broken into focused “episodes” that can be taken up one at a time, revisited when needed, or even skipped depending on context. This makes each toolkit psychologically approachable, clearly finishable, and easy to share, print, or update.

By presenting Village Adhyan as seven Learning Series—with a common structure and flow—the toolkits reduce cognitive load and invite use rather than hesitation. The pages that follow explain how each Learning Series supports this journey of exploration, helping learners gradually see villages not as isolated problems, but as interconnected systems.

R Ramesh
NIRDPR, Hyderabad

Toolkit Series - 6

CREATING MODEL VILLAGES

What is a Model Village?

A Model Village does not mean a village that is perfect in every sphere of development. Rather, it is a village that has developed one particular domain so effectively and sustainably that it creates a ripple or cascading effect across many other aspects of village life. The idea of a Model Village is rooted in inspiration, not perfection.

At its core, a Model Village demonstrates how focused effort, collective action, and smart use of available resources can bring visible and measurable transformation. Development does not have to begin everywhere at once. It can begin in one critical area and then naturally spread to related areas, improving overall quality of life.

Model Village in Water Sufficiency: A typical example is the idea of a “Water Sufficient Village.” When a village becomes self-reliant in water through rainwater harvesting, groundwater recharge, and judicious water use, the benefits extend far beyond drinking water.

- Nutrition improves as mineral-rich water contributes to better health.
- Health outcomes improve due to reduced water-borne diseases and better hygiene.
- Livelihoods grow as agriculture, livestock, and small enterprises receive reliable water support.
- Green cover increases through collective water and natural resource management.
- Women save time otherwise spent fetching water, allowing greater participation in livelihoods and community life.

Such a village becomes a living example of how one well-developed sphere can trigger progress in many others. The experience of villages such as Vellaputhur Gram Panchayat near Vedanthangal in Tamil Nadu shows how programmes like MGNREGS can be effectively leveraged to build water sufficiency and generate cascading development outcomes.

Millets Model Village: Another illustration is a “Millet Model Village.” When a village focuses on millet cultivation suited to its soil and rainfall, multiple benefits follow.

Nutrition improves as millets are rich in fibre and micronutrients.

- Livelihoods expand when women’s self-help groups engage in processing and value addition, and youth participate in branding and marketing local products.
- Health outcomes improve through reduced lifestyle diseases.
- Climate resilience increases because millets require less water.
- Cultural pride is revived as traditional food practices and community identity are strengthened.

The experience of Attappadi in Kerala is often cited as an example of such an approach.

The essence of a Model Village lies in this cascading effect. What begins as a focused intervention in one domain—water, housing, energy, sanitation, millets, solar power, or biogas—gradually touches multiple dimensions of village life, including health, income, environment, and social cohesion.

Therefore, “model” should not be understood as “perfect.” It should be understood as “inspirational.” Every village can become a Model Village in its own way by identifying one strong idea, nurturing it deeply, and allowing its impact to flow naturally into other areas. Development spreads like ripples in water—create one strong ripple, and the rest will follow.

Village Adhyan Checklist

How to Identify a *Model Village Idea*

Purpose:

To identify **one focused development idea** in a village that has the potential to create **cascading (ripple) effects** across multiple sectors—livelihoods, health, environment, and social well-being.

Core Principle:

A Model Village is not perfect. It is **inspirational**—strong in one domain, influential in many.

A. Start with the Village’s Strongest Lever

Identify **one domain** where the village already has some advantage or urgency.

Tick ✓ where there is clear potential:

- Water (source, tanks, ponds, groundwater, rainfall pattern)
- Agriculture / Crops (millets, horticulture, livestock, fisheries)
- Natural Resources (forest, commons, pasture, wasteland)

- Energy (solar, wind, biogas potential)
- Sanitation / Waste management
- Housing / Infrastructure
- Skills / SHGs / Youth enterprises

A good model idea builds on something the village already has—or urgently needs.

B. Check for Ripple (Cascading) Potential

Ask: **If this one area improves, what else will improve?**

Tick all that apply:

- Health & nutrition
- Livelihoods & income
- Women's time, dignity, or participation
- Climate resilience / sustainability
- Environment / greenery / commons
- Social cooperation / collective action

If improvement stays confined to only one sector, it is not yet a strong model idea.

C. Identify the Core Problem the Idea Solves

A strong Model Village idea solves a **felt, everyday problem**.

- Problem affects many households
- Problem affects the poorest or most vulnerable
- Problem is recurring (not one-time)
- Problem blocks multiple outcomes (health, income, dignity)

Model ideas address root problems, not cosmetic improvements.

D. Assess Community Ownership Potential

Transformation requires **people's participation**, not only government action.

Check signs of ownership:

- Gram Sabha discussions show interest
- SHGs / youth / farmers show willingness to participate
- Village has leaders or champions for the idea
- Past collective action exists (water works, plantation, sanitation drive)

Without community buy-in, no idea becomes a model.

E. Check Feasibility Using Existing Schemes

A good Model Village idea should be **implementable**, not merely aspirational only.

Confirm whether it can be supported through:

- MGNREGS (assets, NRM, labour-intensive works)
- JJM / SBM-G / PMAY-G / NRLM
- Panchayat funds / XV FC grants
- Line department convergence
- Low-cost, locally manageable technology

If it requires entirely new funding or exotic technology, rethink the idea.

F. Time-Bound Transformation Test

Ask the critical question:

- Can visible change begin within **1–3 years**?
- Can at least one outcome be demonstrated clearly?
- Can the idea be taken to **saturation** in that domain?

Model villages emerge from mission-mode action, not indefinite pilots.

G. Name the Model Clearly (Very Important)

A Model Village idea must be **simple to explain**.

Examples:

- Water Sufficient Village
- Millet Model Village
- Solar Energy Model Village
- Zero-Waste / Sanitation Model Village
- Bio-gas Model Village
- Housing & Energy Model Village

If you cannot name it clearly, the idea is not yet clear.

H. Final Model Village Idea Statement (Fill This)

Every team must complete this:

“This village can become a Model Village for _____,

because by strengthening this one domain, it will improve

_____, _____, and _____ within the next ___ years.”

Village Adhyan Insight (to remember)

A Model Village is not built by doing everything at once.

*It is built by doing **one thing exceptionally well**,*

so that everything else begins to change.

Model Village in Carbon Neutrality

The Case of Meenangadi Grama Panchayat, Kerala

1. What Does “Carbon Neutral Model Village” Mean?

A **Carbon Neutral Model Village** is one where **carbon emissions are systematically reduced**, and the **remaining emissions are balanced by absorption or sequestration**, through nature-based and technology-based solutions—*at the local governance level*.

In this model:

- Development continues, but **with minimal carbon footprint**
- **Local livelihoods, infrastructure, and ecosystems** are strengthened together
- Climate action is **people-centric, decentralised, and measurable**

In Kerala’s local governance framework, **carbon neutrality** aligns primarily with:

- **SDG Theme 5: Clean and Green Village**
and intersects strongly with:
- **Theme 4: Water Sufficient Village**
- **Theme 6: Self-Sufficient Infrastructure in Village**

2. Vision and Leadership: Meenangadi’s Carbon Neutral Mission

The leadership of **Meenangadi Grama Panchayat (Wayanad, Kerala)** articulated a **clear and ambitious vision**: *To become India’s first Carbon Neutral Gram Panchayat*.

This vision was not symbolic. It was operationalised through:

- **Sector-wise mitigation and adaptation strategies**
- **Community-wide participation**
- **Integration of climate action with livelihoods and biodiversity**
- **Long-term resilience planning**

This comprehensive and evidence-based approach earned **national-level recognition and a Carbon Neutrality Award in 2024 from the Central Government**.

3. How Meenangadi Achieved Carbon Neutrality

(Sector-wise Transformation Strategy)

a. Forestry & Tree Protection (Deforestation Control)

- Tree banking and **tree mortgaging systems**
- Incentives for tree planting and protection
- Community-led social forestry

Impact:

Enhanced carbon sequestration + biodiversity conservation

b. Carbon Neutral Kitchens (Household Level)

- Reduction of emissions from traditional cooking
- Promotion of cleaner energy practices

Impact:

Lower household emissions + health benefits for women

c. Carbon Neutral Farming

- Organic agriculture
- Increasing **soil organic carbon**
- Low-input, climate-resilient farming

Impact:

Reduced agricultural emissions + sustainable livelihoods

d. Energy Sector Transformation

- LED bulbs
- Solar utensils
- Rooftop solar panels
- Energy parks and audits

Impact:

Shift from fossil fuel dependence to renewables

e. Sustainable Transport

- Promotion of **electric vehicles**
- Use of bicycles for local mobility

Impact:

Lower transport emissions + healthier mobility choices

f. AFOLU Strategy (Agriculture, Forestry & Land Use)

- Biogas plants
- Bamboo cultivation
- Geotextile production
- Social forestry initiatives

Impact:

Dual benefit of emission reduction and income generation

g. Waste Management (Solid & Liquid)

- Decentralised waste management systems
- Reduction of methane and unmanaged waste emissions

Impact:

Cleaner villages + lower carbon footprint

h. Biodiversity Management

- Biodiversity Management Committees
- People's Biodiversity Registers

Impact:

Ecosystem protection + climate resilience

i. Water Conservation

- Revival of water bodies
- Water conservation practices

Impact:

Climate adaptation + water security

j. Carbon Neutral Tourism & Green Income

- Oxygen parks
- Carbon-neutral tourism initiatives

Impact:

Green livelihoods + environmental awareness

k. Eco-friendly Cremation Practices

- LPG-based crematoriums

Impact:

Reduced emissions even in socially sensitive sectors

l. IEC and Behaviour Change

- Climate literacy campaigns
- Workshops, seminars

- Mass media and social media outreach
- Community mobilisation

Impact:

Carbon neutrality became a **people's movement**, not just a project

4. Why Meenangadi is a *Model Village*?

Meenangadi is a **Model Village** because:

- It focused on **one core idea**—carbon neutrality
- It acted **across sectors**, not in silos (keeping the focus on ‘carbon neutrality’)
- It linked **climate action with livelihoods** automatically
- It demonstrated **replicability** in one sector, that created ripple in several others

This is being inspirational.

5. Village Adhyan Checklist

How to Build a Carbon Neutral Model Village

A. Vision & Governance

- Clear Panchayat-level climate vision
- Political and administrative leadership commitment
- Alignment with SDGs and state themes

B. Emission Reduction (Mitigation)

- Renewable energy adoption (solar, LED, biogas)
- Clean cooking solutions
- Electric / non-motorised transport
- Waste management systems reducing methane

C. Carbon Sequestration

- Tree plantation and protection mechanisms
- Soil carbon enhancement through farming
- Social forestry and bamboo cultivation

D. Livelihood Integration

- Green livelihoods (biogas, bamboo, tourism)
- SHG and youth participation
- Local value addition

E. Nature & Biodiversity

- Biodiversity registers
- Conservation committees
- Water body revival

F. Behaviour Change & Participation

- Climate literacy programmes
- IEC campaigns
- Community mobilisation

G. Measurability & Recognition

- Sector-wise action plans
- Carbon reduction/sequestration tracking
- External assessment or certification

Final Village Adhyan Insight

A Carbon Neutral Model Village is not built by technology alone.

*It is built by governance, participation, and purpose—
where every local action contributes to a global solution.*

SEG-Capacity Building, Strategy for Convergence and Implementation of Various Govt. Schemes

Village Adhyan Toolkit Series

Toolkit – 1: The Overall Framework

Learning through Exploration: This toolkit introduces the core approach of Village Adhyan. It focuses on how to ask exploratory questions—questions that are not meant to extract quick or isolated answers, but to trace pathways: from cause to consequence, from policy intent to field practice, and from individual experience to systemic patterns. Village Adhyan is about learning to connect, sequence, and relate—to see village realities as flows rather than isolated dots. This toolkit helps students de-learn fragmented thinking and cultivate inquiry that leads to deeper understanding.

Toolkit – 2: Rural Infrastructure

Foundations for Human Development: This toolkit focuses on understanding rural infrastructure systems such as health infrastructure, education infrastructure, Anganwadi centres, drinking water supply, sanitation, housing, roads, electricity, and digital connectivity. Students learn to examine not just physical availability, but functionality, access, quality, and maintenance, and how infrastructure shapes outcomes in health, education, livelihoods, and dignity.

Toolkit – 3: Rural Livelihoods, Skilling and Entrepreneurship

How Rural Households Earn a Living: This toolkit examines farm and non-farm livelihoods, skilling, entrepreneurship, and emerging livelihood opportunities. It emphasizes livelihood enhancement and diversification, seasonal vulnerability, income stability, and the link between livelihoods, skills, assets, local ecosystems and how empowerment emerges through productive engagement. Students are encouraged to see livelihoods as dynamic strategies, not static occupations. It also introduces relevant schemes of the Ministry of Rural Development, and Ministry of Small, Micro Enterprises.

Toolkit – 4: Entitlements and Social Assistance Support

Social Protection and Resilience: This toolkit focuses on entitlements and deprivation, including social assistance for the aged, persons with disabilities, widows, destitute households, and vulnerable groups. It also covers income support, insurance, and resilience-building measures, particularly for those engaged in informal work, rural arts, crafts, and traditional livelihoods. Students learn to distinguish between eligibility, access, delivery, and dignity in welfare systems.

Toolkit – 5: Last-Mile Service Delivery

From Coverage to Saturation: This toolkit examines the challenges of last-mile delivery and the pursuit of saturation of key development indicators—such as ensuring every child attends an Anganwadi, full immunization, freedom from malnutrition and anaemia, universal SHG inclusion for poor women, and smooth transitions from secondary education to higher secondary, technical education, or skilling pathways. The emphasis is on understanding why gaps persist despite schemes, and how coordination and follow-up matter.

Toolkit – 6: Creating Model Villages

Model Villages: This toolkit focuses on the idea of Model Villages, emphasizing that a Model Village is rooted in inspiration, not perfection. A Model Village does not mean a village that is perfect in every sphere of development. At its core, a Model Village demonstrates how focused effort, collective action, and smart use of available resources can bring visible and measurable transformation. It puts across that development does not have to begin everywhere at once. It can begin in one critical area and then naturally spread to related areas, improving overall quality of life. Model village is about ‘inspirational ripple’.

Toolkit – 7: Creating Smart Villages for Vikshit Bharat 2047

Smart Villages: This toolkit focuses on the idea of Smart Villages, emphasizing the creation of a digitally empowered rural citizen—the “Techno Rural Person.” It explores how Digital Public Infrastructure (DPI) can enable seamless Government-to-Citizen services, improve transparency, access opportunities, and support inclusive development. This toolkit connects village-level transformation with the larger vision of Viksit Bharat 2047.

Each **Village Adhyan Toolkit** is designed to be used independently while also fitting into a coherent whole. Together, they encourage students to move from observation to exploration, from fragments to flows, and from understanding problems to imagining pathways for transformation. Elements such as technology, gender, inclusivity etc. can go cutting across all these categories.

