



SOCIETY FOR ELIMINATION OF RURAL POVERTY
Department of Rural Development, Government of Andhra Pradesh



Aaharam,
Arogyam and
Aadayam

 **A3 VANAM** 

**CROP
SYSTEM**



An **INTENSIVE, MULTI-LAYER POLY-CROPPING SYSTEM**
based on agroecological Principles of recycling for safe,
diverse and nutritive food & income enhancement.

SUMMARY



A3 VANAM is a diversified, ecologically intensive multi-tier, **poly-vegetable and year long horticulture crop system** promoted on about **0.30 to 0.50** acre of land. Developed in alignment with the IFC approach, the A3 VANAM model integrates **multi-layer vegetable cultivation, annual fruit trees, trellised creepers, green manure crops, and border plantations** - forming a circular nutrient ecosystem requiring minimal external inputs.

Local markets have a **high, unsaturated demand** for diverse, fresh, chemical-free vegetables. By combining multi-season vegetable production with perennial crops and on-farm nutrient recycling (composting, mulching, biomass integration), a farmer may be able earn **Rs. 20,000–50,000 per year**, with an investment of about **Rs. 16,000 in addition to regular household consumption**.

Once established, even **elderly or less-mobile individuals** can manage the crop system with low labour due to permanent raised beds, mulching, and drip/protective irrigation. The **A3 VANAM Crop System** can be promoted as a green-employment option in the IFC cluster.

INTRODUCTION



Society for Elimination of Rural Poverty Andhra Pradesh (SERP) is promoting **Integrated Farming Clusters (IFCs)** to enhance local economic opportunities through collective action. Watershed Support Services and Activities Network (WASSAN) provides technical support to the programme.

The **A3 VANAM** concept expands the success of integrated farming demonstrations by **combining intensive vegetable cultivation, 3–5 tier cropping, and regenerative soil practices**. This ensures year-round availability of vegetables for household nutrition and steady and small incomes from cluster-level marketing of surplus.

The initiative enhances ecological farming practices and contributes to improved nutrition security, diversified livelihoods, and higher resilience for small and marginal farmers. It is also a good entry point for farmers into practicing **Natural Farming**.

WHAT IS A3-VANAM?

A3 VANAM is about a half-acre poly-crop vegetable production system designed with:

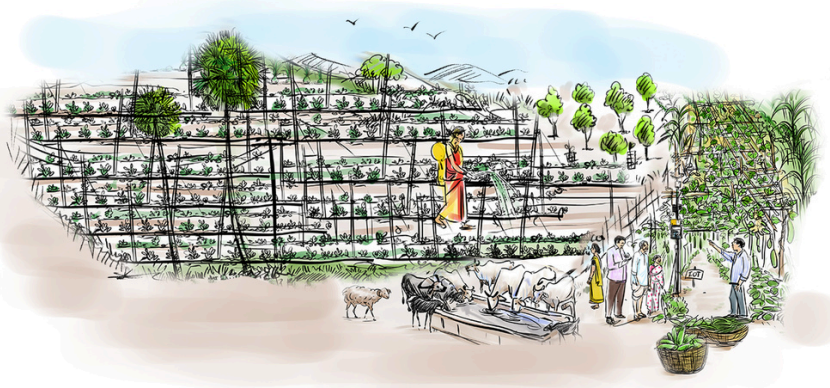
- Multi-layered cropping (Root crops, leafy greens, creepers, vegetables, shrubs, and tree layer)
- Permanent raised beds & mulching for low labour
- Drip/sprinkler irrigation for water-use efficiency
- Season-wise crop rotation and relay cropping
- On-farm composting, green manuring, bio-fertilizers, biochar production
- Pollinator corridors & border tree plantations
- Continuous harvesting system (CHS) for 365-day marketing



Each A3 VANAM Farm produces:

- 7–10 varieties of seasonal vegetables
- 4–6 perennial fruit/vegetable species
- Green leafy vegetables round the year
- Compost and mulch from within the system

It serves both household nutrition and market-linked income. Each IFC cluster can promote 50 A3 VANAM Plots to start with, forming a safe and nutritive Natural Farming Vegetable Production Hub ensuring continuous supply to households, village and nearby markets (Shandys).



MERITS AND CONSTRAINTS OF A3 VANAM

MERITS

- Year-round income through continuous harvest cycle
- High demand for fresh/local vegetables at premium prices
- Minimal external inputs due to mulching, composting, drip irrigation
- Suitable for elderly persons and women to engage in the operations due to low demanding manual labour
- Enhances soil health and climate resilience
- Local availability of vegetables improves household nutrition

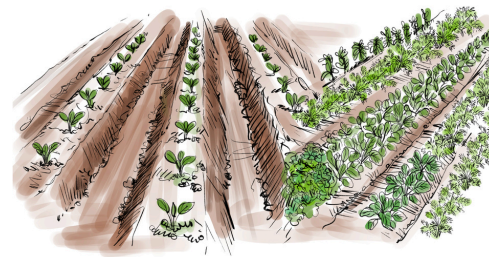
CONSTRAINTS

- Market access and price volatility
- Pest/disease management during monsoon
- Need for timely irrigation (though minimal) and crop planning
- Continuous availability of seeds and inputs
- Initial establishment cost for drip, beds, and fencing

A3 VANAM design solves many issues through ecological planning, continuous training, and LSC support.

OBJECTIVES

- Develop the IFC cluster as a Hub-for safe, diverse and nutritive vegetable production and local market hub.
- Strengthen household consumption, small and regular income to women in the cluster.
- Establish support systems (seeds, inputs and other services) for universalisation of A3 Vanam as an enterprise of the FPO.



WHO IS ELIGIBLE?

- Small-holder farmers with **0.3–0.5** acre land near habitation with access to even minimal irrigation.
- Able to allocate **daily 1 to 2 hours** for A3 Vanam management.
- Member of SHG / FIG / FPO.
- No overdue loans in SHGs or banks.
- Households with elderly or disabled person who can manage watering, harvest, and maintenance.
- Preferably farmers with experience in kitchen gardening or vegetable cultivation.

FINANCIAL SUPPORT AVAILABLE

- Total cost ≈ **Rs. 16,000** (excluding land)
- Farmer must invest at least **Rs. 6,000** (labour, beds, compost pits, fencing) initially in preparation of the Vanam.
- One time support of Rs.1000 towards preparing the beds .
- Eligible for **loan up to Rs. 10,000**, repayable in **1 year at 4% interest**, if needed.
- Loan supported through SHGs/MMS/Banks.
- Annual service fee: **Rs. 200 to LSC**.

SUPPORT FROM THE LIVELIHOODS SERVICE CENTRE (LSC)

LSC will provide:

- Orientation on A3 VANAM design & market plans
- Technical guidance—layout, crop plan, drip system planning with expert farmer resource persons
- Training on the preparation of natural farming inputs, composting, pest management
- Support in sourcing seeds, saplings, trellis material at affordable rates
- Equipment rental
- Assistance in developing business plan & loan proposal
- Regular crop advisory, pest disease management support
- Annual service package against farmer contribution of Rs.500 per year to FPO as service fee that includes:
(a) Crop health monitoring (b) Pest/disease advisory, (c) Soil health assessment, (d) Need based input supply at cost including seeds, bio-inputs and (e) Market linkage support

The IFC program invests on keeping the necessary farm-equipment on rental basis, in promoting starting a shop for seed and bio-input material required and other support systems.

HOW TO APPLY?

- LSC will orient the SHGs/ FIGs and others → Interested farmer submits Expression of Interest (EOI).
- EOI must include:
 - Name, address, mobile number.
 - Farm location and size, availability of irrigation.
 - Willingness to invest and take loan.
- A TRP (Technical Resource Person) visits the household, helps plan layout, prepares proposal
- Farmer signs commitment on own investment + loan needs.
- TRP submits application to LSC.

PROCESSING OF APPLICATIONS

- LSC forms a Proposal Approval Committee (PAC).
- PAC appraises based on eligibility, TRP recommendations, credit history, interview.
- Approves/rejects with explanation.
- Recommends loan amount & instalments to LSC finance committee.
- Farmer signs service fee agreement (Rs. 100 annually).

MEL AND MIS

- EOI leads to creation of Farmer ID code
- Loan tracking, repayment monitoring
- TRP monthly/quarterly visits
- ODK-based performance reporting (yield, income, crop diversity)
- Annual A3 VANAM Farmers' Meet to share best practices, publish learnings

BUDGET RELEASE

- Finance committee processes loan.
- Issues sanction letter.
- Releases instalments from MMS/Banks.
- Manages documentation, MIS, repayment schedule.

IMPLEMENTATION PROCESS

First instalment is released only after:

- Plot allocation
- Fencing completed
- Detailed training attended

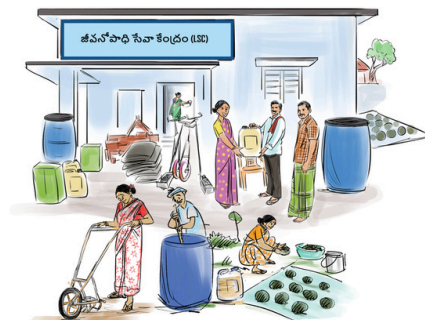
Next steps:

- TRP prepares **farm layout** (beds, trees, drip lines, compost pits, shade nets)
- LSC procures inputs with farmer consent
- TRP supervises implementation, quality checks
- Loan is disbursed in phased instalments
- Completion certificate after all components installed



CROP HEALTH & ADVISORY SYSTEM

- Farmers join a digital reporting group/app.
- Monthly TRP visits for monitoring.
- Pest/disease alerts issued cluster-wise.
- Natural farming inputs training:
 - Beejamrutham
 - Jeevamrutham
 - GhanaJeevamrutham
 - Neemastram
 - Agnastram
 - Brahmastram
 - Pheromone traps
- LSC maintains a database of crop health indicators.
- Supports in planning 365-day vegetable calendar.



A3 VANAM — KEY OUTPUTS & IMPACT

- Year-round vegetable supply
- Income generation of Rs. 25,000–50,000 per year
- Improved household nutrition (12+ varieties consumed annually)
- Climate-resilient agro-ecological farming
- Women-led green enterprises in IFC clusters
- Reduced dependence on external chemical inputs



INDICATIVE BUDGET

A3 VANAM Crop System (50 Cents)

Budget per unit: (indicative components and budget serving as a guide)

Sl. No.	Particulars	Units	Unit cost (Rs.)	No of Units	Total Cost (Rs.)
1.	Seedlings/ Saplings	No	1	5000	5000.00
2.	Seeds	Grams	4	1000	4000.00
3.	Land preparation	Hrs	600	2	1200.00
4.	Beds/Furrows Making	Lumpsum	600	2	1200.00
5.	Sticks / Canopy & Live fencing	Lumpsum	2500	NA	2500.00
6.	Bio Inputs/ Concoctions	Lumpsum	2000	NA	2000.00
7.	Display Board	Lumpsum	100	1	100.00
					16000.00

TECHNICAL MANUAL

- A detailed technical PPT/ Knowledge Material is available to guide the TRP and the farmer.
- For detailed technical information, refer the PPT.



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