

Non Pesticidal Management

– An alternative to Endosulfan
in a large scale success story
from *Enabavi*, Andhrapradesh (India)

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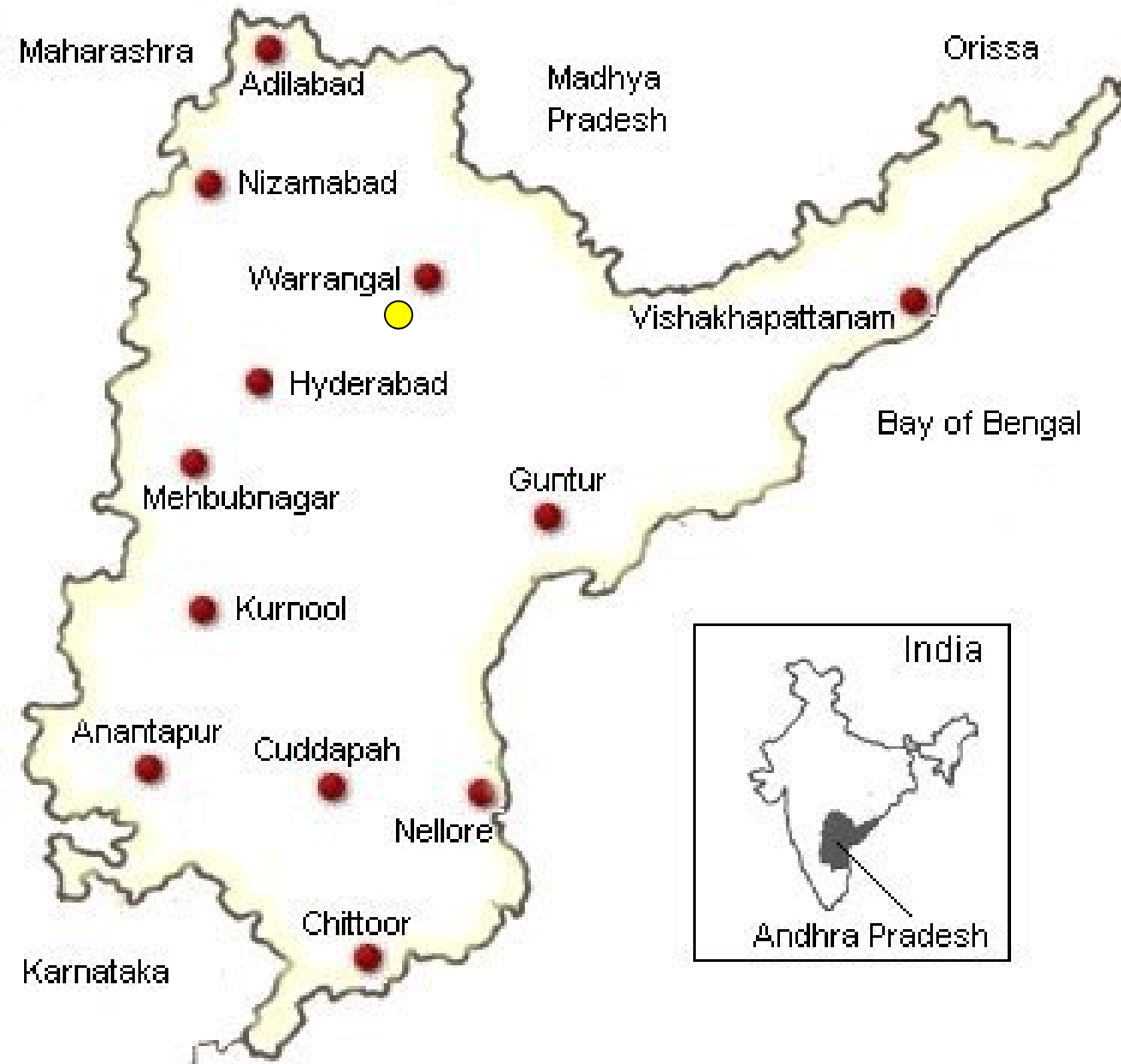
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With the support of IPEN
Pesticide Working Group



Map of Andhra Pradesh

Location





Enabavi

- A village 80 km north of Hyderabad in Warrangal District
- 51 families
- 182 acres
- Red gram, ground nut, pulses, sesame, cotton, tobacco, chillies, garlic, tomato, brinjal, onion, bhindi, cluster beans, palak, portulaca, amaranthus (green), cucumber, bottle gourd, bitter gourd, ridge gourd and pigeon peas.
- Open well and rain fed cultivation

Agrarian Crisis

- Large scale migration of farmers following drought
- Farmer suicides due to debt traps
- Escalation of input costs due to chemical intensive farming, leaving less savings or margins with the farmers

Non Pesticidal Management

Principles

- Ecological sustainability
- Economic sustainability
- Social empowerment
- Safe Food

Practices

- Prevention
- Precaution
- Management



Endosulfan usage

Crop	Area (acres)	No. of Crops / year	Usage	Quantity of endosulfan in Litres
Paddy	50	2	1 L/Acre	50
Cotton	6	1	2 L/Acre	12
Pigeon pea	30	1	2 L/Acre	60
Tobacco	40	1	0.5 L/Acre	2
Total	130			164

Money previously spent on endosulfan in Enabavi per year

@ Rs.300 / Litre = Rs. 49,200

Comparison – Net Income

	With chemical inputs	With NPM
Investment on cotton crop per acre	Rs 15,250	Rs. 8,550
Total yield	1200 Kilograms	1000 Kilograms
Total Gross income	Rs. 24,600	Rs. 22,000
Net Income	Rs. 9,350	Rs. 13,450

Replacing pesticides with NPM

Cost of Plant protection / acre

Crop	With pesticides	NPM	Savings
Cotton	Rs. 5,000	Rs. 1,000	Rs. 4,000
Chilli	Rs. 15,000	Rs. 2,000	Rs. 13,000
Redgram	Rs. 1,500	Rs. 300	Rs. 1,200
Groundnut	Rs. 1,500	Rs. 300	Rs. 1,200
Castor	Rs. 2,000	Rs. 400	Rs. 1,600
Paddy	Rs. 2,000	Rs. 225	Rs. 1775

Institutions and process

- Centre for Sustainable Agriculture
(www.csa-india.org)
 - Farmer self help groups
 - Producer Cooperatives
- Society for Elimination of Rural Poverty
(*Department of Rural Development, Govt. of Andhra Pradesh*)

Outcome

- CSA implemented NPM in 45 villages across 6 districts (6000 acres)
- SERP upscaled NPM in 3000 villages across 18 districts (1.2 million acres)
- IT is 5% of total land under agriculture in Andhra Pradesh
- Target 50% coverage by 2014

Lessons

- Prevention is better than cure
- Empower farmer to take control
- Maintaining effective pest balance
- NPM retains the money generated within the community
- NPM is sustainable with inborn incentives



Next steps

- Campaign
- Develop standards for operational programme
- Increase the availability and accessibility of inputs
- Branding and marketing for products

