

SAFE-World Project/Initiative Summary

Country: India

Project/Initiative Title: National IPM Programme

Nos. farmers: 77,000

Hectares: 38500 ha

Agro-Ecological Zone: I

Improvement types

1x	2	3	4x	5	6x	7	8	9
----	---	---	----	---	----	---	---	---

A. Key Impacts

A1 – Productivity

	Before/Without	After/With	% change
Rice	2800 kg/ha	3050 kg/ha	9

A2 – Impacts on natural capital

- ?? Row planting
- ?? Biofertilizers
- ?? Organic manures
- ?? Band fertilizers
- ?? Restoration of natural biodiversity of rice fields

A3 – Impacts on local community (social capital)

- ?? 2600 FFS on rice, cotton, sugar cane and oil
- ?? 12400 demonstrations run to reinforce learnings

A4 – Impacts on households and individuals (human capital)

Income up Rs 1000 to 1250 / ha

A5 – Key changes in farm / regional system

- ?? Pesticide use down 50% on average
- ?? Fertiliser use increasing
- ?? In Tamil Nadu, 90% of farmers in certain areas no longer use any pesticides

B. Types of Sustainable Agriculture Improvements

Type 1: Better use of available renewable natural capital

Type 2: Intensification of single sub-component of farm system

Type 3: Diversify by adding new productive natural capital and regenerative components

Type 4: Better use of non-renewable inputs and technologies

Type 5: Social and participatory processes leading to group action for making better use of natural capital

- Type 6: Human capital building through training-learning programmes
 Type 7: Access to Finance
 Type 8: Add value by processing to reduce losses and increase returns
 Type 9: Add value by direct or organised marketing of produce to consumers

	Yes/No	Narrative
Type 1	x	
Type 2		
Type 3		
Type 4	x	
Type 5		
Type 6	x	FFS
Type 7		
Type 8		
Type 9		

C. Key Lessons: Success, Spread and Constraints

C2 - Aspects of local/national context contributing to success

- ?? National policy commitment to IPM in 1993
- ?? Infrastructure support to states for biocontrol measures
- ?? 10% tax imposed on pesticides
- ?? Banning of some hazardous products

D. Contact Point for Project/Initiative

c/o Rachel Hine
 Senior Research Officer,
 Centre for Environment and Society
<mailto:rehine@essex.ac.uk>

E. Project Narrative

India: National IPM Programme

Like a range of other Asian countries, the national IPM programme in India uses farmer field schools to build farmer capacity and knowledge on agroecology (Eveleens et al, 1996). Some 77,000 farmers have been trained in 2600 FFS on rice, cotton, sugarcane and oilseeds. A further 12,400 demonstrations have been conducted after FFSs to help spread the concepts and practice of IPM, though questions remain as to whether these tend simply to pass messages or empower farmers to think and act differently.

FFS are also being used to address wider soil, water and nutrient management issues. In Tamil Nadu, for example, farmers are learning about row planting, planting distance, biofertilizers (*Azospirillum*, *Azolla*), organic manures and basal fertilizer applications. Farmers' use of biocontrol agents (eg *Trichogramma*, neem) means that pesticide use has

fallen by 50% on average. Incomes have increased by Rs 1000-1250/ha, and rice yields have increased by 250 kg/ha.

A range of policy measures have helped to intensify commitment to IPM since 1993, including infrastructure support to states for biocontrol laboratories, support for human resource development in FFSs, support for production of biocontrol agents, registration of hazardous pesticides, and a 10% tax on pesticides.

Tamil Nadu - Rice IPM for farm women

- ?? Able to identify pest and 'defender' species (becoming experts in their own fields)
- ?? Managing whole crop according to ecological principles
- ?? Using biocontrol agents (eg. Neem, Trichogramma) and biofertilizers (Azospinillum, Azolla)
- ?? 50 villages pesticide use down 50%
- ?? incomes up Rs 400-500 per acre ; extra 250kg/ha of rice