

SAFE-World Project/Initiative Summary

Country: Indonesia

Project/Initiative Title: Sweetpotato IPM/ICM development and institutionalisation in Indonesia

1994

Scale: 1st phase – Individual farm Nos. farmers: 161 Hectares: 36.2ha
 2nd phase - communities

Agro-Ecological Zone: VI

Improvement types

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

Success and Limits to spread

Success 3e, 7	Limits 3a
------------------	--------------

A. Key Impacts

A1 – Productivity

	Before/Without	After/With	% change
Sweet Potato (wet season)	18000 kg/ha	68000 kg/ha	276
Sweet Potato (Dry season)	33000-39000 kg/ha	50000-62000 kg/ha	50-58

A2 – Impacts on natural capital

Increased use of organic fertiliser is likely to increase soil fertility in a sustained manner.

A3 – Impacts on local community (social capital)

Farmer groups are formed or reactivated; women involvement in training and follow-up activities enhanced (in most locations); informal co-operatives were formed in some locations

A4 – Impacts on households and individuals (human capital)

- Increase in farmers' ICM knowledge and skills (decision making, experimentation, problem solving).
- Collective experimentation by some farmer groups.
- Increase in farmer trainers' competence.
- Reduced use of pesticides favours reduced exposure and residues.

A5 – Key changes in farm / regional system

Yield increases were in most cases achieved with reduced external input, especially inorganic nitrogen fertiliser, and increased use of organic fertiliser.

Changes in input use: Reduced use of inorganic fertilisers and pesticides, increased use of (local) organic matter

Change in local/ regional food security: Potentially, when processing industry of sweetpotato is enhanced. Sweetpotato can be used as raw material for flour so that wheat flour (and perhaps rice) imports can be reduced.

- Enhancement of farmer competence (farmer researchers, farmer trainers and FFS participants)

Yield increase demonstrated in several locations

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

Type	Yes/No	Narrative
Type 1		
Type 2		
Type 3	x	Integrated Crop Management, with heavy emphasis on IPM, use of organic fertiliser, and farm-specific adaptation of broad technology guidelines through experimentation capacity enhancement.
Type 4	x	Project only provided “new” inputs for farmer experiments (e.g. planting material of new varieties, potassium fertiliser in fertilisation experiments), whereas “usual” inputs and labour were provided by the farmer researchers.
Type 5		
Type 6	x	1. Participatory methods in: <ul style="list-style-type: none"> - needs assessment, - technology and training development (farmer researchers) - monitoring and evaluation; 2. Non-formal education (Farmer Field Schools) 3. Group organisation through the Farmer Field Schools
Type 7		
Type 8		
Type 9	x	Attention was paid to increasing farmers’ marketing capacities (yield assessment, farmer group organisation, etc.).

C. Key Lessons: Success, Spread and Constraints

C1 – Key Lessons Learned

- Farmers can play a key role in technology and training development, and training implementation.
- Enhanced farmer competence, especially experimentation skills, are effective in disseminating new ideas within the community.
- Special attention to gender programme participant selection is needed to enhance women involvement.

Utilisation of existing resources (e.g. trainer networks) is effective

C2 – Aspects of local/national context contributing to success

- Strong network of competent IPM FFS facilitators already in place.
- Economic crisis, resulting in high price of imported goods (such as rice), hence more attention to local crops requiring low input levels (sweetpotato) by farmers and certain divisions within Dept. of Agriculture.

C3 – Limitations preventing spread

- Economic crisis, hence non-availability of funds hampering scaling-up through government structures.
- Bias towards rice, soybean and maize in government programmes, hence limited attention to rootcrops. This hampers scaling up through, for instance, the National IPM Programme.

C4 – Policy issues

- Bias towards other commodities (rice, soybean, maize) for the National IPM Program, which would otherwise be the perfect mechanism to scale up because of its good cadre of IPM FFS trainers.

C5 – Scaling-up

- Training of more trainers
- Funds for FFS implementation

D. Contact Point for Project/Initiative

Elske van de Fliert

Address/ Email: International Potato Centre (CIP ESEAP)
P.O. Box 929, Bogor 16309, Indonesia
e.van-de-fliert@cgiar.org