

# SAFE-World Project/Initiative Summary

**Country: Kenya**

Project/Initiative Title:

FFS Coffee/Vegetables IPM, Kenya - Pilot project for implementation of farmer participatory pest management (IPM) in vegetable/cash crops in smallholder production systems in Kenya. (Funded by Global IPM Facility)

1996

Scale: Community

Nos. farmers: 65 households

Hectares: approx 195 (3ha per household)

Agro-Ecological Zone: XIII

Improvement types

1 x	2x	3x	4	5 x	6 x	7	8	9 x
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Success and Limits to spread

Success	Limits
3e	3a

## A. Key Impacts

### ***A1 - Productivity***

	Before/Without	After/With	% change
Crop 1 Coffee	0.43 kg/tree (non ffs)	1.05kg/tree (average 500 trees/farm of 2-4 ha) (ffs)	144

### ***A2 - Impacts on natural capital***

- ?? 100% FFS graduates vs. 45% non-FFS reported improved soil quality (better texture, higher indicator plant abundance) from implementing organic composting and manuring.
- ?? Higher reliance on local sources of compost, manure, botanical pesticides.

### ***A3 - Impacts on local community (social capital)***

- ?? FFS groups serve as forum for discussing crop management problems and non-agrochemical options
- ?? FFS groups generate ideas for experimentation and disseminate to other farmers
- ?? IPM principles applied at community level
- ?? Demand generated for further training and experimentation and from other groups
- ?? Local language use and invention of names for pests, diseases and natural enemies (influence on children) promotes sense of ownership of process
- ?? One group now selling excess vegetable production
- ?? Another group set up a credit fund from proceeds of group experiments
- ?? Conventional farmer groups learnt about and applied some organic methods
- ?? Farmers' traditional methods for pest and disease control now feeding into formal

research agenda

**A4 – Impacts on households and individuals (human capital)**

- ?? Ability to make better and more independent decisions in farm management
- ?? More confidence in crop management and interest in experimentation "we too are researchers"
- ?? Increased women's responsibility in coffee management esp pruning
- ?? Renewed interest in coffee husbandry despite low prices
- ?? Agroecological concepts learnt were applied to other crops not in training curriculum ie reflects understanding/adaptation not rote adoption
- ?? FFS curriculum developed for Kenyan context and 11 trainers trained

**A5 – Key changes in farm / regional system**

Other productivity: burning trash as nursery bed hygiene method saved money and resulted in better germination and seedling health

- ?? Decreased use of artificial fertilizers (replaced by organic sources),
- ?? Decreased use of insecticides and fungicides (replaced by botanical pesticides, action of natural enemies, cultural controls) in target and non-target crops over two years and in comparison with non-FFS (see tables in report to select most useful data)
- ?? Savings of 145US\$/yr average per household, mainly in agrochemicals but also in reduced hired labour

**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	<ul style="list-style-type: none"> <li>?? Pest and disease control decision-making based on field observation/agroecological principles rather than calendar applications</li> <li>?? Conservation of natural enemies</li> <li>?? Cultural controls for pest and disease management (eg mulching vs disease spread)</li> <li>?? Botanical and physical methods for pest and disease control</li> <li>?? Organic fertilization (liquid manure, compost, plant foliar feeds =plant teas)</li> </ul>
Type 2		

Type 3		
Type 4	x	Less non-renewable inputs used
Type 5	x	?? Group experimentation with research and extension (FPR) ?? Farmer group exchange visits Extension staff trained in participatory IPM technical and methodological methods
Type 6	x	FFS
Type 7		
Type 8		
Type 9	x	One FFS group found guaranteed market for pesticide-free vegetables

### C. Key Lessons: Success, Spread and Constraints

#### ***C1 – Key Lessons Learned***

- ?? Multi-stakeholder collaboration and acceptance of differing approaches among these enriches training process (but requires time)
- ?? Flexibility to adapt FFS curricula/process to needs and interest of each farmer group and over crop season
- ?? Projects functioning only at operational level do not generate sufficient institutional support for scaling-up

#### ***C2 – Aspects of local/national context contributing to success***

- ?? Interinstitutional partnership between NGO (KIOF), research (KARI, CRF) and extension (Min of Ag) facilitated by international organization CABI
- ?? Intensive Training of Trainers course for facilitators to change attitudes, behaviour, improve confidence, as much as provide technical inputs
- ?? Use of local languages in training

#### ***C3 – Limitations preventing spread***

- ?? Limited engagement/support at top level from extension within Ministry
- ?? Variable quality of FFS facilitators and departure of staff for further study
- ?? Time conflicts of facilitators with other work tasks
- ?? Lack of funds for visiting FFS groups on a regular basis
- ?? Initial suspicion between organic vs pesticide approaches of different stakeholders in project partnership

#### ***C4 – Policy issues***

- ?? Lack of influence on enabling policy/ decision-making environment at national level eg multi-institution Working Group on farmer participatory IPM to nurture pilot scale-up
- ?? Conflicting and uncoordinated service providers to farmers eg 60 different providers in one district
- ?? Reliance on donor funding rather than institutional budgets

#### **D. Contact Point for Project/Initiative**

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