

# SAFE-World Project/Initiative Summary

**Country: Kenya**

Project/Initiative Title: Christian Community Development Unit (CCDU): Njukini Irrigation Scheme

Nos. farmers: 100

Hectares: 40

Improvement types

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

Success	Limits
1a,1b,1c	5a,5b,7b

## A. Key Impacts

### ***A2 – Impacts on natural capital***

- ?? Earlier there was completely no awareness of the poisoning effects of pesticides and chemical fertilizers. When we started IPM, we started even to educate farmers on harmful effects of pesticides to their health, biodiversity, animals, pollution to the water and effects. So now at least there is some awareness though very little.
- ?? Organic farming application reduced use of chemical fertilizers remarkably hence saving for some farmers. Also cleaner and safer food (chemical/pesticide free). Farmers don't burn husks but use it in compost manure. So soil MULCH retained.
- ?? There is improvement on environmental conservation aspects like soil erosion, soil fertility (compost manure), improved crop resistance by planting indigenous resistant crop varieties e.g. maize called katurmani etc.
- ?? Inter-cropping helped in yield improvement, biological pesticide control, improvement on soil texture. Planting trees has helped to attract birds which control insect pests which destroy food crops. Awareness still low. Needs to be promoted more.

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

- ?? The improved yield has attracted more farmers into the scheme. Many farmers are able to meet their financial obligations from profits. Two volunteers from my NGO are educating farmers on sustainable agriculture methods and also training indigenous leaders. The impact is still slow due to lack of credit facility for the local farmers, lack of financial resources to organise local awareness workshop and training in the scheme. No local leaders have been trained to manage the programs.
- ?? Sustainable farming methods have improved status of neighbouring vulnerable nomadic Maasai community who suffered in the eighties when farmers in the scheme diverted all the water in river Njukini into the farm thereby denying Maasai cattle water downstream.

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

Farmers have benefited by an improved food productivity as a result of IMP methods introduced, but not all are practising the IPM method.

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

- ?? Food production started declining at Njukini irrigation scheme in 1988. This was because of poor farming methods which were unsustainable. In September 1992 I attended Partnerships for Change Conference at Manchester and learnt sustainability. I started educating farmers and we commenced IPM methods of farming. Productivity started increasing again remarkably in 1994 as per my graph. Productivity is still on upward increase though slowly as a result of sustainable farming practices.
- ?? Out of 347 farmers a quarter understand sustainable agriculture and they practice it though not fully.
- ?? These approaches are being applied in 100 acres out of 1000 acres.
- ?? Positive impacts are benefiting directly 100 families of about 10 members, i.e. 1000 people total.

**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>?? Good soil management - terracing, mulching, soil analysis, water and soil conservation, stopped burning grass and crop husks and use compost, tilling the farm across (contour ploughing).</li> <li>?? Good farming methods - crop rotation, planting indigenous resistant crop species, agroforestry, inter-cropping, IPM farming methods introduction, livestock manures to substitute chemical (expensive) fertilizers, application of traditional and cultural methods, control livestock activities in farms.</li> <li>?? Application of simple appropriate technology e.g. ox plough hoe and jembe, organic farming application.</li> <li>?? Relying on History of factors like rainfall, soil fertility as told by the local indigenous inhabitants.</li> </ul>
Type 2		
Type 3		
Type 4		
Type 5		
Type 6	x	<ul style="list-style-type: none"> <li>?? Listening to and planning with the farmer and incorporating or merging your ideas with theirs.</li> <li>?? Innovation and simple technology: Farmers get water into their farms by flow of gravity which is very simple</li> </ul>

		<p>technology.</p> <p>?? Participating Research and Exchange programs. Farmers visit other farm groups and learn new useful ideas. Also trials of medicinal trees like Neem trees, tobacco, pepper etc, are carried out locally by farmers.</p> <p>?? Monitoring and Evaluation - Done on true example of successes and failures.</p>
Type 7		
Type 8		
Type 9		

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

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

- ?? We have been applying farmer participatory approach whereby the farmer involves in planning and decision making.
- ?? We apply bottom up approach (not old system of top down approach). This has broken a lot of institutional barriers. We share problems with the farmers and decide together.
- ?? We discourage formal bureaucratic decision-making systems which are cumbersome, discouraging and time wasting.
- ?? Everybody should exercise ownership. This motivates farmers a lot (self motivation).

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

- ?? Marketing of farm produce is the biggest problem at Njukini. Many farmers get discouraged because their produce goes bad in the farms during rainy seasons - roads are impassable. Also middlemen exploit these farmers so much.
- ?? The approach adopted has not been copied by farmers in neighbouring areas due to lack of means to disseminate information like transport vehicles, stationery, media support, money to organise seminars, trainers (volunteers). The approach is still not yet fully practised at the scheme alone due to financial constraints to organise training.
- ?? Unfavourable Market Prices - Most farmers lose a lot and get discouraged when prices of a commodity fall suddenly below expectation. Next season they all don't plant that crop hence shortage.
- ?? Structural Adjustment/currency devaluation affect small scale farmers by creating heavy losses compared to inputs.
- ?? Unequal Terms of Global Trade - EU is biased to African countries in terms of marketing farm produce. African countries have limited market.
- ?? Freight Charges - A very big problem to small scale poor farmers who would wish to export their farm produce abroad. This problem is the biggest handicap which must be addressed properly.
- ?? Poor or no Transport Networks - three quarters of farm produce not in our farms during rainy seasons.
- ?? Lack of Financial Support - A big problem. A lot of money used by developed world in buying weapons should be diverted to third world countries to support food production.

#### ***C5 – Scaling up***

Farmers still don't understand well sustainable agriculture so their total involvement is still low. Education by seminars still needed so that they can better cope with drought, environmental changes.

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

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