

SAFE-World Project/Initiative Summary

Country: Tanzania

Project/Initiative Title: Pemba Small Scale Irrigation Project (PSSIP) - Pemba 1988

Nos. farmers: 1000

Hectares: 500

Agro-Ecological Zone: I

Improvement types

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

Success	Limits
1b	3a, 4c

A. Key Impacts

A1 – Productivity

	Before/Without	After/With	% change
Rice	1000 kg/ha	3500kg/ha	250
Rice			Extra season – 2 crops per year

A2 – Impacts on natural capital

- ?? Before the project very little fertilizer was used farmers were mainly using local traditional varieties which are unresponsive to fertilizer application. The project introduced the use of exotic varieties which warranted use of more fertilizers.
- ?? Soil erosion is minimum, in fact has been controlled by the plot bunds. Soil nutrients and fertility in general has been declining following introduction of multicropping.
- ?? The project is promoting integrated pest management approach in pest control and is discouraging use of industrial pesticides. Botanicals are tried and promoted for pest control. This protects environment

A3 – Impacts on local community (social capital)

- ?? Labour migrated into the area. Government employment during construction works.
- ?? Almost all beneficiaries to the project (1500 farmers) were trained in new rice production skills.
- ?? Associations for each scheme was formed to run the schemes and manage them after the project.

A4 – Impacts on households and individuals (human capital)

- ?? Farmers are producing two crops of rice per year getting about 7 tons of paddy per ha. per year instead of 1 ton, hence more food availability.
- ?? Farmers are better able to cope with drought and market changes of rice than before and those who are not in the project. They may not need to buy rice from market or sell their

rice at higher prices.

?? Vulnerable groups have felt that they could escape inflated goods through cultivating rice.

A5 – Key changes in farm / regional system

?? Changes in yields due to increased cropping seasons per year and increased yields per unit area.

?? Now two crops per year are grown instead of one previously.

?? Yields per area have increased from 1 ton/ha. per year into 3.5 t/ha. per season (7t/ha/year now).

?? So far only about 50% of farms are using crop residues like rice straws to incorporate in the soil after each harvest, about 10 ha. of the irrigable area.50 ha. have Azolla

?? Because of being so small and resource poor most farmers use chemicals only at economic thresholds and use following IPM approach in pest control.

?? Approximately 20 % of farmers benefit from the impact also.

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	?? Introduction of irrigation system through gravitational conveyance of water from reservoir construction up stream. This enabled two crops per year instead of one. ?? Training farmer beneficiaries new packages of rice production under irrigation ecosystems
Type 2		
Type 3		
Type 4		
Type 5		
Type 6	x	?? Pre-seasonal and seasonal meetings with farmers and Association committee on the various aspects of engineering and agronomy activities. ?? Diagnostic surveys, RRA, topical observations were utilized before activities for farmers were planned.
Type 7		
Type 8		
Type 9		

C. Key Lessons: Success, Spread and Constraints

C2 – Aspects of local/national context contributing to success

Planning implementation and education of activities were done with staff together with farmers whereby ideas from different sides were discussed

C3 – Limitations preventing spread

- ?? Lack of support for sustainable agriculture activities - no research has been requested or done to effect this data.
- ?? Lack of funds to carry out research from the government.
- ?? Distorting subsidies - for quite a long time agricultural goods (rice) had been subsidized to the level that buying would be cheaper than them farming.
- ?? Lack of financial resources - farmers cannot afford to buy agricultural inputs requires for higher yields.
- ?? No credit facilities either.

D. Contact Point for Project/Initiative

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