

SAFE-World Project/Initiative Summary

Country: Nepal

Project/Initiative Title: Appropriate Technologies for soil Conserving Farming Systems (ATSCFS).ICMIOD
1994

Scale: regional

Nos. farmers: 15,000

Hectares: 1,500 ha

Agro-Ecological Zone: III

Improvement types

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

Success	Limits
2a, 3a	3a, 6a

A. Key Impacts

A2 – Impacts on natural capital

Through adoption of the technology promoted by the project, soil loss is reduced by 70-98%, surface runoff reduced by 30-63%, soil fertility increased by 20-200%.

A5 – Key changes in farm / regional system

Significant reduction in soil loss, soil fertility improvement and water infiltration lead to increased crop yield and provide options for constant farming of the farmland. Data available only from two sites from China and one site from Nepal.

Adoption of the technology promoted by the project facilitates continuous farming of the sloping agricultural land, which will contribute to the food security in the project areas.

A farmer does not need to extend farming on to steep lands. Improvement in soil fertility will reduce his expense on chemical fertilizer to achieve sufficient food production.

Changes in input use: reduced soil loss and improved soil fertility result in use of less amount of chemical fertilizers than before adopting the technology, which lead to reduction in inputs. Application at a large scale will contribute to environmental protection. This offers an alternative that may lead to sustainable agricultural development in the mountains.

Change in local/ regional food security: Adoption of this technology facilitates continuous farming of the marginal farmlands in the mountain areas and increase farm production. Use of proper plant species may also provide fodder to livestock during dry season.

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		
Type 2	x	Agroforestry technology: Contour hedgerow intercropping technology (sloping agricultural land technology).
Type 3		
Type 4		
Type 5		
Type 6	x	Project provides funds for on-farm research and on-farm demonstration, development of human research (training of government officials, technical persons, extension workers, and farmers). National collaborating institutions provide support in kind, and farmers provide their land for project implementation. On-farm demonstration and on-farm research; participatory approaches, and institutional partnerships.
Type 7		
Type 8		
Type 9		

C. Key Lessons: Success, Spread and Constraints

C1 – Key Lessons Learned

Full commitments of national project staff, equity attitude toward farmers should be strongly recommended. Limitation of farmers' active participation should be avoided. Focus has been given to modification of the technology to suit local conditions and to increase income generating options.

C2 – Aspects of local/national context contributing to success

Strong government support; understanding of problems in agricultural development; increased income generating opportunities by adopting the technology.

C3 – Limitations preventing spread

Weak support from governments of some countries; farmers' limited understanding of results of soil erosion and lack of perception about land resources for their future generations; lack of direct cash return from the technology in some countries. Farmers in some countries have other alternatives and are not much interested in improved soil conserving farming systems.

C5 – Scaling-up

Strong government support; education of farmers on all aspects regarding sustainable agricultural development; on-site training of farmers about technologies, especially its benefits and shortcomings. Longer time of on-farm demonstration so that farmers have time to compare and to see changes.

D. Contact Point for Project/Initiative

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