

Profitability of Integrated Farming System under Natural Farming

Sh. Mushtaq Ahmad, a well-educated farmer from a hilly region in district Poonch, cultivates 16 kanals of land with diverse crops like maize, oats, wheat, and various vegetables. He also grows fruit plants such as apples, Pecan nuts and pears. Eager to enhance his farming skills and boost his economy, being an enthusiastic farmer Mushtaq Ahmad always seeks to learn innovative farming techniques to replicate scientific Agriculture in his field.



He is practicing an integrated approach to agriculture. Apart from cultivating agricultural crops, he is also rearing livestock such as 2 cows and goats.

Being a regular visitor to KVK Poonch, he became aware of the ill effects of chemical fertilizers and pesticides. In addition, he observed that a significant portion of his income was being spent on the purchase of these inputs, which not only polluted the soil and environment but also caused considerable financial strain.

During one of the awareness programmes organised by KVK Poonch, the farmer got the opportunity to participate in various exposure visits. During an exposure visit to Sher-e-Kashmir University of Agricultural Sciences and Technology (SKUAST), Jammu, he had the chance to observe a well-developed Integrated Farming System (IFS) model established by the University on one hectare of land under Natural Farming. He also visited the Organic Farming Centre of the University, where he learned about different farming techniques such as organic farming, natural farming, apiculture, and mushroom cultivation.

He is a recipient of **Best Farmer Award** conferred by Hon'ble Chief Minister during Kisan Mela at SKUAST-Jammu

Uniqueness of work related to NF

He was highly impressed by the IFS model and decided to replicate it on his own farm. As a result, during 2022-23, he attended a two-day training programme on Natural Farming at KVK Poonch. Inspired by natural farming practices, he shifted from chemical-based agriculture to cow-based agriculture. In 2023, KVK Poonch provided key inputs for

establishing a demonstration unit on an Integrated Farming System under Natural Farming on his farm.

Major practices of NF adopted:

Sh. Mushtaq Ahmed initially used chemical fertilizers on his farm but he soon realized adverse effect of chemical fertilizer on soil health. He shifted to natural farming, adopting cow-based inputs like Jeevamrut, a microbial liquid made from the dung and urine of indigenous cows. This practice underscored his belief that one cow can sufficiently fertilize many kanals of land without chemical inputs.

Year-Wise Economic Impact of Natural Farming

		Maize	Wheat	Apple/pear	vegetables	desi Cow (02)
2022-23	Area (acre)	0.75	0.75	1	0.25	2 cows
	Yield (q/area)	16.0	24.0	13.6	65.6	2880 lts
	Cost of Cultivation (Rs/area)	7500	12840	10320	7420	66000
	Gross income (Rs/area)	21060	36000	29600	24600	144,000
	Net Income (Rs/area)	13560	23160	19280	17180	78000
	B.C Ratio	2.81	2.80	2.87	3.32	2.18
2023-24	Area (acre)	0.75	0.75	0.75	0.5	2 cows
	Yield (q/area)	16.5	22.40	14.56	72.8	2800
	Cost of Cultivation (Rs/area)	7740	12300	8178	15280	74000
	Gross income (Rs/area)	21480	33600	22932	58240	156400
	Net Income (Rs/area)	13740	21300	14754	42960	70000
	B.C Ratio	2.78	2.73	2.80	3.81	2.20
2024-25	Area (acre)	0.75	0.75	0.75	0.5	2 cows
	Yield (q/area)	18.4	24.0	14.2	76.0	2740
	Cost of Cultivation (Rs/area)	8988	12300	8988	15600	78000
	Gross income (Rs/area)	23496	36000	24030	66500	164400
	Net Income (Rs/area)	14508	23700	15042	50900	86400
	B.C Ratio	2.61	2.93	2.67	4.26	2.11

The farmer used to earn 1.4-1.50 lakhs through conventional farming till 2023 and after adoption of natural farming, he is earning between 1.8-1.9 lakhs in 2024-25.

Details of area renovation center developed at farm:

An Area Renovation Centre in 0.8 ha was developed at the farmer's field under the guidance and technical support of **KVK Poonch** with the objective of restoring soil health, promoting natural farming practices, and reducing dependence on chemical inputs.

The renovation center was established in 0.80 ha of farm due to degraded soil affected by prolonged use of chemical fertilizers and pesticides was taken up for improvement through cow-based natural farming inputs. The center serves as a demonstration and learning unit for neighbouring farmers.

Key activities carried out under the Area Renovation Centre include:

- Application of Jeevamrit, Beejamrit, and Ghana Jeevamrit prepared from indigenous cow dung and urine.
- Use of mulching (dry and live mulching) to conserve soil moisture and enhance microbial activity.
- Incorporation of green manuring and crop residues to improve organic matter content.
- Adoption of intercropping and crop rotation to maintain soil fertility and reduce pest incidence.
- Use of botanical formulations for pest and disease management in place of chemical pesticides.

Marketing Strategy of Production:

Produce grown under natural farming was marketed mainly through direct sales to local consumers, local vendors and institutional linkages like School Hostels, small hotels, anganwadi centers to ensure better price realization and reduced involvement of middlemen. Farm-gate sales and nearby local market helped in building consumer trust for chemical-free produce.

With facilitation from **KVK Poonch**, the farmer participated in exhibitions and farmer–scientist interactions, which improved market visibility. Simple value addition through cleaning, grading, and packaging was adopted. These strategies resulted in higher net returns, stable demand, and improved market **access**, making natural farming economically sustainable.

Influence on other farmers:

The IFS model of Sh. Mushtaq Ahmed now functions as a model unit for natural farming, motivating other farmers in the area to adopt sustainable and eco-friendly agricultural practices.

He is a source of inspiration and is frequently consulted by fellow farmers regarding the practices of Natural Farming. The centre

Impact

Through his unwavering dedication and innovative spirit, he not only revitalized his land but also inspired fellow farmers in his native village to follow Natural farming. His story serves as a beacon of hope and a blueprint for sustainable agricultural practices, demonstrating that innovation, determination, and respect for nature can lead to extraordinary success.



How KVK can help in promotion of NF

KVK is already extending full cooperation to farmer for strengthening his skills in natural farming from time to time. He was provided with demonstration kit to establish natural farming demonstration farm including drums, tub and pump. He was sent on exposure visit to CSK HPKV Palampur in the year 2021 by KVK Poonch. In future, KVK can arrange some exposure visit to KVK Kurushetra or to Solan to provide training to the farmer in natural farming techniques.

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