

A Successful Case of Enhancing Agriculture Productivity through IPM/FFS

In 2012, a Farmer Field School (FFS) was established in Khasapaz village of Dehdadi district in Balk Province. Its objective was to train farmers in the village to improve their capacity in raising the productivity of wheat, as it is the main crop in the village.

A study field was established in 1,000 square meters area (one Jirib) in one of farmer's field, that of Mr. Hanif, for all 10 farmers attending the FFS to learn how to grow wheat using the System of Wheat Intensification (SWI) method.

This includes planting wheat in rows using a locally-made rake for making furrows and a drum seeder to drop wheat seeds in the furrows, so that a rotary weeder, another locally-made tool introduced by the project, can be used later to clean the weeds, which are the major problem in wheat cultivation in Afghanistan. Only 7 kg of seeds were needed to cultivate the study field as against 35 kg needed for the conventional broadcasting method of cultivation.



Wheat yield from the 1,000 sq. m. study plot was 672 kg, equivalent to **6.72 tons/ha**, which was double the farmers' usual average yield in the area. Farmers were highly encouraged by the higher yield and requested the project to continue the FFS for the next year. In 2013, a larger study field (2,000 sq.m.) was established. 15 more farmers joined the FFS. While learning in the FFS, 8 farmers used the method on their own fields, on an area of 26 Jiribs (5.2 hectares) and achieved similar results. This has highly attracted farmers to increase the area for SWI. In 2014, 11 farmers used SWI on an area of 71 Jiribs, equal to **14 hectares**. The following table provides the names of the farmers practicing SWI on their fields with detailed data on their yields.

S/ No	Farmer Name	SWI used in 2013 (jiribs)	SWI used in 2014 (jiribs)	Wheat yields with SWI in 2014 (t/h)	Wheat yields on other plots (t/h)	% increase
1	Mohammad Hanif	4	7110	5.25	3.5	50
2	Sher Mohammad	1	12	4.76	2.975	60
3	Mohammad Hasan	10	15	4.83	2.8	73
4	A.Shokoor	2	5	3.885	2.45	59
5	Khair Mohammad	1	2	4.97	3.15	58
6	Khan Mohammad	2	5	5.25	3.325	58
7	Jan Mohammad	0	8	8.96	4.48	100
8	Sayed Mohammad	0	6	4.725	3.15	50
9	Mohammad Naser	0	2	5.6	2.8	100
10	Fazel Ahmad	5	5	3.5	2.275	54
11	Zainullah	1	1	4.9	2.8	75
Total		26	71			71

The net return from SWI is even higher, as there was no need for farmers to spend money for chemical control of pests. Also, most farmers have reduced their chemical fertilizer use to almost half, and their cost for seeds used has also become less. With this higher net output and a healthier product, SWI is gaining popularity day by day. More and more farmers are planning to use SWI in the coming days. This is happening to most of the communities where IPM/FFS has been introduced. For more information on SWI: www.ipm-af.org