A New Hope to Revolutionize Wheat Cultivation in Afghanistan

Haji Abdul Basher, a farmer in Teemtak village of Kalafgan district in Takhar province, participated in Farmer Field School (FFS) conducted by the IPM project in his village in 2013. In the FFS, he learned how to improve the productivity of his wheat crop using the System of Wheat Intensification (SWI), a new method gaining popularity for its higher yields with less need of purchased inputs.

In Afghanistan, weeds are the major problem in wheat cultivation, Because of the broadcasting method of cultivation, about half of the plant populations growing in the wheat fields are weeds. As manual weeding is expensive and thereby not cost-effective, most farmers leave their wheat fields unweeded. This contributes to poor yields and to more pest and disease infestation. SWI is particularly designed to facilitate easy weeding, while improving the wheat productivity in a most cost-effective and sustainable manner.

Haji Abdul Basher has 25 hectares of crop land. He cultivates wheat every year on 20 hectares, on average. While learning in the FFS in 2013, he introduced SWI methods on around 2,000 square meters (one Jirib) of his land on a trial basis. Although it was his first year to practice SWI and he was not able to apply the methods fully, his harvest from this one Jirib was already 840 kg, equivalent to **4.2 t/h** compared with **3.5 t/h** from his other lands. This raised his confidence in the new method.

Inspired by the first year's result, in 2014 he expanded his use of SWI methods to **10 hectares** (50 Jiribs), and his harvest was an average of **5.25 t/h -- 50 % higher** than his previous harvest. This gave him a net increase of **17.5 tons** over his last year's total production from the same area with a net value of **USD 6,125,** based on the market price of wheat at the time. His overall return was even much higher because his production costs were less. He used only half the amount of chemical fertilizers that he used in previous years, and there was no need to spend any money for chemical pesticides.

In the next year (2015), Haji Bashir plans now to expand SWI use to all of his wheat field, which is 20 hectares. He is a large and influential farmer in the village. Seeing his extraordinary results, other farmers in the communities around are also planning to use SWI methods on their fields in large areas, although many have already begun using them on small areas based on their FFS learning. This raises a new hope to revolutionize wheat cultivation in Afghanistan, as is happening in many communities where FFS has been conducted.