Plastic Film Technology - a ray of hope for marginalized communities in Badakhshan (A success story of vegetable production in Little Pamir)

Little Pamir is a very remote and isolated valley bordered by Tajikistan to the North, Pakistan to the South (Chitral and Hunza valleys), the Wakhan Valley and the Big Pamir to the West and China to the East (Xinjiang-Uyghur Autonomous Region). Although the western end of the Little Pamir is used to some extent by transhumance Wakhi

herders from Sarhad and upper Wakhan for seasonal grazing, the Little Pamir is mainly the home of Turkic-speaking Kirghiz and their herds. Little Pamir, also referred to as the Wakhan Corridor and The Roof of the World, has a population of around 890 people. The Kirghiz of Pamir do not know agriculture practices and for their livelihoods they are completely dependent on their herds and flocks, as they posses sizable number of livestock- sheep, goats, cattle, yaks, horses, and the endangered two-humped Bactrian camels mainly used for transportations of households goods during nomadic movement in Pamir region.



AKF Badakhshan has special focus on Wakhan and Pamir region because of the obvious reasons of remoteness, marginalization, abject poverty and some other social problem including opium addiction. All departments of AKF Badakhshan Program are engaged in community mobilization, institutional development, infrastructure, participatory management of natural resources mainly focusing on livestock development, forestry and rangeland management for sustainable livelihoods of the communities. Besides strong animal health, feed and nutrition development program, NRM department also wanted to test trial some vegetable production to address nutritional deficiency among Kirghiz people in Pamir particularly the children and women who never have chance to go outside their villages/kishloks.

As mentioned above that agriculture is not known to Kirghiz people of Pamir region. Based on our observation and experience in China and other parts of the world that vegetables can be grown even in harsher climatic conditions with some innovative technologies, in the year 2009 an expedition mission to Little Pamir was organized in collaboration with Scientists of Pamir Biological Institute (PBI) Khorog, Tajikistan. The objective of this mission was preliminary assessment of the area for any NRM intervention particularly for cultivation of vegetables in high altitude Pamir region to improve food security and add nutritional value to local foods and dishes.

Based on the field assessment report of PBI Scientists, NRM Khorog team established trial plots for vegetable production in Little Pamir using plastic film technology and fodder trial plot in Qarademu village in 1st week of July 2010. This village is considered summer living place for the Kirghiz and located an altitude of around 4000 meters above mean sea level. This intervention was first time in history of Pamir region and no one believed that vegetable can be grown in such harsh and cruel climatic conditions.

When the NRM team reached the site to establish this trial plot with community, the first challenge faced by the team was to convince the people to work and establish trial plot. The Kirghiz of Pamir traditionally do not do labor work and only rely on herding livestock as main job/work for sustenance. However, the team was lucky this time to find some Pakistani and Wakhi traders there in Pamir and got their services as labor to establish the 6 x 3 meters tunnel for vegetable trial and to establish 20 x 20 meters fodder trial plot. After land preparation, application of manure and bed preparation 5 types of vegetable seeds including cucumber, coriander, dill, onion and reddish were sown for this trial. During the establishment of plot the owner of land Habibullah Khan, his wife Razia and some other neighbor herder women were engaged and they were provided basic training in vegetable cultivation techniques for each variety of seed. Similarly alfalfa Wakhsh 300 variety seed trial plot was also established and both the plots were fenced against free ranching animals.

The field report revealed that all the vegetable types germinated and grown well and farmers particularly women took much interest and well managed the plot in this new initiative of vegetable production in their village. However, the women were not aware about harvesting vegetables; how to use, cook and eat green vegetable. On their request AKF NRM team members demonstrated and trained women how to use green vegetables with local traditional dishes, which was well received by the women. Beside the owner of the green house the neighboring 5 families also used the green vegetables in their daily dishes during summer season. They requested to further expand this vegetable production program in the next growing season and requested for more technical support and training in this regard. NRM visiting team identified a hot spring near the village which can be used in green house to increase temperature and more successfully raise different vegetables varieties for the Kirghiz community in Little Pamir.

The fodder trial plot, however, did not germinate may be due to cold and harsh climatic conditions of Pamir or there may be some problem with seed, this needs further investigation with PBI Scientists this year.



Apparently it is a very small initiative or business as usual for majority of us however it is more than a miracle for the herder Kirghiz community of Pamir which opened a new ray of hope for better future livelihood option in this harsh and hostile physical environment. NRM Badakhshan team is in upfront to take this initiative forward for the benefits of Kirghiz community in Pamir region in future.

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