



## Islamic Relief, Bangladesh

# Pumpkin : Adaptive Crop Farming Practices in Haor Area of Bangladesh

## Background

Geographically, the Northeastern haor area is vulnerable to extensive annual flooding which limits agricultural growth. For six to seven months of the year, the cropped land is completely inundated under water. This makes livelihoods extremely vulnerable and limits the potentiality for agriculture production. According to National Food Policy Capacity Strengthening Programme (NFPCSP), study 18.1% households fell below the hardcore poverty line and 40.2% households below the absolute poverty line. The study also revealed that about 19% experienced severe food insecurity for six to seven months in a year. Whereas agriculture is the principal profession of the Haor people, day-by-day the net cultivable land for agriculture is decreasing due to siltation through flooding. Therefore, people are forced to give up cultivation, their traditional and oldest profession and struggling to find new employment.

Considering the above mentioned problems, Islamic Relief Bangladesh guiding Farmers Field Laboratory (FFL) under the Project of "Enhancing Climate Change Adaptation and Disaster Resilience in Bangladesh" in close collaboration with different research institutes, Department of Agricultural Extension (DAE) and Community Producer Group.

## Farmer Field Laboratory

Farmer's Field Laboratory (FFL) is a piece of land where a farmer tries to test a new technology using his existing knowledge and experience with the support of expert knowledge;

This is indeed a People-centered extension practices recognizing farmer's indigenous knowledge & skill;

FFL provides opportunities for learning by doing;  
It teaches basic agricultural and management skills that make farmers experts in their own farms;

## Pumpkin Farming Puts Smile on Farmers' Faces

Morning hovers on the edge of night. A cool breeze swirls gently in the dawning. Bikash Ranjan Chakrobarty was in a great hurry that day to harvest pumpkins though its skin turns a deep, solid color. After walked along the narrow partitions of neighbors' field finally we reached at Bikash's plot, with a big smile across his lips he eagerly showed his field filled with orange pumpkins. Successful cultivation of pumpkin on hoar area has changed fortune allowing him to lead a better life than before.



He narrated his past experience before the project started- "Life is not so easy in hoar area. Seasonal dimensions to food insecurity, seasonal flooding keep population of this area highly vulnerable almost round the year. In most part of the areas, there is only one annual rice harvest, that resultants seasonal variation in food availability and prices. Flash folds and floods are annual occurrences and land remains under water for almost 6-8 months every year." Before the project, he tried to cultivate pumpkins but lack of knowledge or the technology making him unsuccessful to gain profit.

He started cultivating pumpkin on his land three years ago whereas more farmers are now getting interested in pumpkin farming day by day. Like Bikash, other farmers were trained to pass on their new skills to other members of their communities, enabling them to benefit from the technologies and circulate them to a wider area.

He added - "Islamic Relief Bangladesh provided me seeds, fertilizer and pesticide, as well as training to mobilize local resources and support entrepreneurial initiatives. Firstly I observed the technology and tried to adapt this. At the end of rainy season in mid November, as the water level in the rivers recede the land getting ready for Pumpkin cultivation using the BARI cropping technique. At first I prepared 20 beds of one meter in diameter and one meter in depth. Pits were placed approximately two meters apart. After seven days seeds were planted in each pit. Pits were usually covered with straw mulch to preserve moisture. Pits were soaked 2-3 times a week with water. When the seedlings were 25-30 days old, quick compost was applied. One of the innovative ways we have learned from the project that we spray bio-pesticide (Mahogany and Neem seeds) instead of chemical pesticide which allows more productivity."



"Now the estimated selling price of per-pumpkin is 150 taka but if I sell in the lean season when the value of the pumpkins increase up to 2-3 folds. Bikash's believes that he will earn more than 100000 TK only through selling the pumpkin in the next phase."

He narrated that, "I feel happy when people come to me for learning the process of cultivation, I really enjoying to do this realizing that I can use my knowledge for others wellbeing."



Bikash said that- "Only 1,200-1,500 Tk is needed to cultivate one bigha of land (one bigha is equal to 27 decimal land) and a farmer can harvest 500-600 pieces of pumpkin from one bigha of land. Each large size pumpkin is sold for TK 130-150 at local markets, making it a profitable enterprise, and fuelling the farmers' passion for cultivating the crop."

Today Bikash has emerged as an epitome of success. People from this community come to him for asking different techniques regarding pumpkin cultivation.

Like Bikash, Samir Kanti Das, Nobolal Das, Nirmol Bapary of Sulla union narrated their success in pumpkin cultivation. All of them are happy after a bumper pumpkin output this year. All the farmers are busy in harvesting the crop from the fields. They are hopeful about making a good profit.

Somir Kanti Das (67), an extreme poor farmer of Hohibpur Union of Sulla Sub district told, "As I provide water and fertilizer to the plants regularly, the plants are growing well and I expect that I shall get the expected output which will help me to alleviate my poverty. He added - "Earlier I had been

facing food shortage but cultivation of pumpkin on two bighas of land brought economic advantage for me. I earned TK 50,000 by selling over 2200 pieces of sweet pumpkin last year. This year, I have cultivated the crop on large scale with the hope of getting satisfactory yield from previous year."

## Production Time and Farming Practices

	Poysh	Magh	Falgun	Chaitra	Boishak	Jaistha	Ashat	Shrabon	Bhaddra	Ashin	Kartik	Agraha	
Production Time	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Flash Flood Calendar													

Pumpkin cultivation takes a short time. It takes nearly four months after plantation, starts in the first week of January and harvest begins in the middle of March to early April which is safe from flash flood. The ultra-poor people of the hoar areas are getting financial and nutritional supports through cultivating sweet pumpkin on fallow hoar lands and it is gradually getting popular in the region.



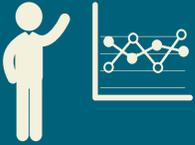
Generally it takes a short time to cultivate pumpkin, nearly four months after plantation.



To cultivate Pumpkin in a bigha land or 27 decimal lands only BDT 1,200-1,500 is needed.



Almost 500-600 pieces of pumpkin can be harvested from a bigha land.



Each large size Pumpkin is sold for Tk 130-150 at local markets, whereas the value increased 2-3 folds in the lean season.

## Islamic Relief Bangladesh

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