



Multiple-use water services (MUS); Case study A unique leadership

Dipchang Atmasahai gut from Sonoabori village, Mirogoan dist., Assam India with twenty women member's lead by Ms. Rupa Bordoloi, one of the largest group joined the project; Strengthening Indigenous people's response to Multiple Use water services supported by ARYGHAM during summer 2011, where majority of the group members are landless households from the Tiwa; a plains tribe community.

The village Sonoabori located at a lower elevation in the form of a depressed concave lens compared to the surrounding project villages and being the natural drainage outlet beard the major brunt of surface runoff during floods together with a long stagnation period, which made the village communities perpetually poor. The project considered this as an opportunity and together with the women's group based on their knowledge identified an MUS site within a homestead where water retention period would be longer. The group during 2011 started off with a summer home garden area of 0.09 ha adjoining the farm pond area 0.06 ha where they undertook a mixed cropping of ladies finger, yardlong been, chilly, brinjal, French been, cucumber & pumpkin. Observing the pot size and the quantity of seeds provided, group members were initially skeptical. As the production of vegetables in the home garden took off members realize that they could now breakup into a subgroup & share a part of the harvest every alternate day besides selling 95 kg ladies finger, 62 kg of yardlong been & 20 kg of french been providing an earning of INR3065/-.

We as a group joined the project late, as it took time for us to understand and get prepared; we were about seven months old then. While we heard people talk about the project & its activities within the village, one day when we were together, we observed Shramik women's group carrying radish from their farm plot for sale at INR 5/- per bunch. Finding the radish to be fresh I bought a few and inquired how this could happen. They informed that it was the project which provided seed and monetary support for undertaking land preparation activities. On hearing this group member's got excited and expressed that if such an opportunity existed in the village, why can't we the group meet the project and request for support, on hearing this I felt my work to convince the group was over. My husband, who was with the males group Sankalpa, already involved with the project on inquiring, would advice us to take a back stage & wait. My repeated persistence and argument, one fine day my husband agreed and called up the local lead volunteer and requested him to introduce our group to the project representatives, which resulted in gaining support after the first meeting. People ask me at times, is it not difficult to run a large group? My reaction is once my group members understand they never wait.

Earlier we did not know neither saw opportunities other than savings INR 20/- per month. Occasionally we earned INR 50/- from daily wage working in people's farm to save. Of all the groups we were the most foolish, there was none to guide. Joining the project we see a number of avenues for food & income generation. Now at least in a season we are able to save INR 4000 to 5000/- in addition to our group savings. We now plan to expand by another MUS site as our group is large. Our male family members are pleased with the additional food and cash earnings within the family and are not creating any hurdles; rather they want us to play the role of producers & they are offering to help us in the marketing of our produce.

The seed ducks have started to lay eggs, we have nineteen ducks and we have agreed to upscale to 200 ducks so that we have appreciable eggs to sell. Each of our member households has three to four hens which will help us in hatching. In future we hope to sell eggs full of baskets.



With the renovation of the abandoned pond during end July 2011; late summer 780 fish fingerling of 10-12 cm size; 380 Bhakua (Catla catla) 200 Rohu (Labeo rohita), 190 mrigal (Cirrhinus rigala), 5 Common carp; (Cyprinus carpio), 5 kandhuli (Notopterus otopterus) and 19 ducklings (local pati variety) were provided for rearing in the farm pond. Water quality monitoring in regards to pH and TDS prior to the release of fish fingerlings lead to a very low mortality rate of 3.2 % whilst continuous water quality management through periodic liming by the MUS group helped in maintaining the necessary oxygen level demands and the fish fingerling during end December weighed about 700-800 gm. As challenge to stock management existed from predators; *wild cat, snakes and frogs*, the group restored to netting the pond boundary. During January 2012 "Bihu", the MUS group part harvested 61 kg of fish and sold 40 kg. As the water level in the farm pond did not declined substantially the group members decided to harvest another batches during April 2012. Following the summer home garden substantial gains from winter vegetables (250 kg potato, 30 kg radish) grown at MUS site was also achieved.

The group now empowered for food & livelihood security for sustainability was finally brought under a framework of best practice for financial mgt. Members empowered and confident currently seek better options to potable water & sanitation and are willing to pay for the services.

We have gained maximum from fish rearing, mortality rate of fish fingerlings released was very less, it was only 25 out of the 780 fingerling released, had we completely cleared the rotting pith and the puni (Pistia stratioites) their would have been no mortality. We have been liming the pond water fortnightly, which is why our fish growth is better compared to the other. Our maximum financial gain as of now has been from fish from our farmpond. We have weighed the individual fish varieties, the body weight has reached 700 to 800 gm; Rohu 800gm, Dhekera 700 gm, common carp 750 gm, Grass carp 800 gm in five months. We could not harvest the large ones because our fishing net was tattered, while we have release the small fingerlings for them to grow further.

We are economically very poor, as of which we cannot afford to purchase health & fresh vegetables, now since we are growing vegetables we all have a desire to feed upon. Last summer we feed upon a maximum on ladies finger. Now this year 2012, we realize that we need to expand our cropping area so that we have appreciable surplus to market and increase our cash returns. We have realized that growing "Okra & yard long bean does not need much water" besides to grow them we can increase soil moisture by adding dung to the soil.

Since the last three months we have been relieved from paying our monthly group savings, as we have financial gains from a number of activities. We earned INR 3000/- from daily wage in paddy (Sali & bao) harvesting, INR 3065 from summer vegetables, INR 6100 from sale of fish, as part harvest & INR 3400 from winter vegetables besides our 19 ducks value INR 3800/- . Our family members are happy as we need not contribute the monthly saving money from the family income; rather they appreciate that we are in a position to access financial help in times of need & distress for our family. Financial burdens have reduced in our homes; we have been constantly receiving some vegetables from the home garden. Besides during the festive occasions; "bihu" each of us have gained five kg of potato along with vegetables and fish to feast and this lead to a considerable savings at home.

Water availability in our village has reduced compared to the past, wetland & crop fields are drying up. Shallow tube wells (STW) less than 100 feet deep during winter does not yield adequate water, it is ideal to draw surface water which is nutrient rich rather than drawing water from STW's which requires more fuel. You can irrigate 0.16 ha with 1 liter of diesel from surface water. Now we have decided to invest our present savings in strengthen the present farm pond (MUS site) and in fencing activities of the new additional MUS site to upscale our activities.

Seeing our achievements other women from the village desire to join our group. Even though we differ on issue at times, we enjoy a lot while we meet to group work, as it is the time we get to meet as otherwise we are busy in our farm fields & domestic work. Finding time for group work during the major paddy (Sali) cultivation season is demanding.

