Location of Mr. Tobgay's farm household and fields

While Mr. Tobgay has not received any raining on water harvesting or management, his innovation demonstrates the idea of water harvesting techniques and how it can be managed to maximize benefit to subsistence farm households. This type of local innovation has a tremendous scope for addressing the water shortage problems during rice transplanting season which are prevalent amongst the farmers who are dependent on the small perennial or seasonal water sources.

Although, Mr. Tobgay uses the water that is available only during the rice transplanting season, there is a scope to harvest the water that is available before the rice transplanting season. This can increase water availability during transplanting season or even increase rice cultivation area. But it requires bigger storage capacity of on-farm reservoirs or ponds necessitating equally bigger capital investment. Meanwhile, more farmers can benefit from small innovations like that of Tobgay.

Thinlay Gyamtsho
WMR, RC Bajo

More Rice from SRI

With direction and handful of packages on System of Rice Intensification (SRI) from Agriculture sector, a small trial was conducted in one of the farmer's field in Samdingkha village under Tewang geog, Punakha. The trial was jointly set up by extension personnel of Chhubu and Tewang geog. Since the trial was the first of its kind, two small terraces were selected from one farmer co-operator. This was mainly to avoid wastage of farmer's resources like land, labour and time if the trial proved to be failure, but the trials proved successful enough to convince the farmer to continue into larger scale in the next cultivating season.

The young nursery seedlings (2-3 leaf stage) which are 15 days old, single seedling were transplanted in line with 25 cm wide spacing with the help of a rope. It was transplanted on 26th June 2008 following the farmers' management practices and inputs supply except maintaining low water level starting to throughout growing stage. The rice crop variety was local traditional Bondey, sher, height and quite early maturing than other local cultivars. During growing stages
frequent monitoring and observation was done especially to maintain water at the minimum level. It was also noticed that there was no any incidence of pests, disease and rodent during growing period, since weeds are the problem in less flooded condition, farmer had done twice hand weeding starting 15 days after transplanting and before panicle initiation. The rice crop was harvested on 13th October 2008; this took approximately three and half months. During the crop cut few farmers from nearby village were invited to observe yield performance. To compare the crop yield, 6 numbers of crop cut were taken, 3 numbers each from SRI trial plot and from normal transplanting field nearby. The crop cut result from 6 different plots is shown in Table 1.

<table>
<thead>
<tr>
<th>Type</th>
<th>Total weight (kg) from 3 sample plots</th>
<th>Area of crop cut (m²)</th>
<th>Nos. of average tiller/hill</th>
<th>Yield (kg/acre)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRI trial plot</td>
<td>9.45</td>
<td>6</td>
<td>20</td>
<td>2100</td>
</tr>
<tr>
<td>Normal cultivation plot</td>
<td>7.90</td>
<td>6</td>
<td>9</td>
<td>1753</td>
</tr>
</tbody>
</table>

During the day, farmers observed numbers of tillers per hill from SRI trial plot and compared with normal transplanted crop. They were impressed with both the plant growth and the grain yield. They were also briefed on SRI method of cultivation starting from nursery seedling stage, spacing and water level management. Much interest was expressed by farmers and said such technique is needed in their field where they mostly depend on rainfall during paddy cultivation. Further, farmers have also agreed to disseminate this technology with in their farming community.

Suraj Khawas
AAEO, Tewang geog, Punakha
Tshering Tobgay
AAEO, Chhubu geog, Punakha