Chapter VII

PARTICIPATION OF VARIOUS SOCIAL GROUPS IN AGRICULTURAL DEVELOPMENT

The nature of agricultural Development of an area can not be properly understood with out referring to population parameters. It is more so for the areas having a diverse population composition with varied-socio-economic aspiration & practices. The study area with significant ethnic diversity witnesses a diversified agrarian landscape. It is worth mentioning that these population groups, namely indigenous general caste population, Scheduled castes, Scheduled Tribes, Muslims of immigrant origin & Nepalese, and other living the district present a significantly varied agricultural practices with varying degree of development.

7.1 Community Reflection in Cropping Pattern

Cropping pattern means the proportion of area under various crops at a point of time. There is a strong impact of different social groups to the diversified cropping pattern of Sonitpur District. The pattern of cropland use of the district is varies from one social group to another. The section to follow discusses pattern of cropland used by different social groups viz., indigenous general castes, scheduled castes, and scheduled tribes, Muslims of immigrant origin and Nepalese in Sonitpur district of Assam.

The surveyed data reveals that a number of crops are generally cultivated by different communities of the district, among which rice, pulses, wheat, maize, oilseeds, sugarcane, vegetable, jute, etc. are important. Among all the crops rice as the staple food continues to dominate the crop lands of all the major social groups of the district.
Table 7.1 Social group wise cropping pattern in Sonitpur district, 2005-06

<table>
<thead>
<tr>
<th>Social Groups</th>
<th>Total cropped area of the surveyed farm families (in hectare)</th>
<th>Rice</th>
<th>Maize</th>
<th>Wheat</th>
<th>Pulses</th>
<th>Oilseed</th>
<th>Sugar cane</th>
<th>Vegetables</th>
<th>Jute</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indigenous general castes</td>
<td>433.00</td>
<td>69.75</td>
<td>0.68</td>
<td>1.47</td>
<td>9.23</td>
<td>4.45</td>
<td>3.98</td>
<td>5.47</td>
<td>1.88</td>
<td>3.08</td>
</tr>
<tr>
<td>Scheduled. tribes</td>
<td>48.19</td>
<td>73.33</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>6.94</td>
<td>6.39</td>
<td>11.11</td>
<td>5.33</td>
<td>2.5</td>
</tr>
<tr>
<td>Scheduled. Castes</td>
<td>31.45</td>
<td>75.32</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>4.25</td>
<td>2.13</td>
<td>5.33</td>
<td>4.68</td>
<td>2.55</td>
</tr>
<tr>
<td>Muslims of Immigrant origin</td>
<td>186.07</td>
<td>71.14</td>
<td>—</td>
<td>—</td>
<td>3.38</td>
<td>6.26</td>
<td>5.03</td>
<td>2.94</td>
<td>8.00</td>
<td>2.52</td>
</tr>
<tr>
<td>Nepalese</td>
<td>62.24</td>
<td>69.35</td>
<td>7.74</td>
<td>6.45</td>
<td>5.80</td>
<td>3.87</td>
<td>3.12</td>
<td>4.32</td>
<td>1.72</td>
<td>0.75</td>
</tr>
</tbody>
</table>

Source: primary Survey, 2006

Table 7.1 shows that indigenous general community, inhabits mostly in built up areas of the district devoted a large proportion of their total cropped area to rice cultivation i.e. 69.75%. This built up zone is made up of alluvial sediments carried by the Brahmaputra and its tributaries are essentially a very fertile region which is suitable for rice cultivation. The survey data reveals that next to rice, a considerable proportion of their total cropped area is dominated by cultivation of pulses like black gram, lentil, green gram, and pea etc. It is observed from the field survey that only 5.47% of total cropped area is used for vegetable cultivation by indigenous general castes. Most of the vegetable are raised in homestead gardens only for self consumption of the farm families. Occupying 4.45% of total cropped area oilseeds
like mustard and rapeseeds are the important crops cultivated by general caste indigenous population. Besides, sugarcane is also cultivated by general caste indigenous group. It accounts 3.98% of total cropped area of the community. A very little proportion of total cropped area is devoted to jute cultivation by general caste population of the district (1.88%). Besides, Maize and wheat are also cultivated for home consumption by this group of people in the district. The surveyed data reveals that these two crops account 0.68% and 1.47% of total cropped area used by the communities. Only 3.08% of their cropland is used for cultivation of other crops like banana, betel leaves, betel nut and coconuts as well as for small tea garden.

The indigenous scheduled tribe (S.T.) population of the district, which mainly includes Mishings and Bodos also exhibit a diversified cropping pattern. The primary survey reveals that like indigenous general caste people, the S.T population of the district also used a considerable population of their cropland to rice cultivation (73.33%). Next to rice they give much importance on cultivation of various pulses, as pulses accounts 6.94% of total cropped area of Scheduled Tribe people. The proportion of area devoted to oilseeds and vegetable cultivation by the tribal community is 6.39% and 5.33% of total cropped area. From the surveyed data one important aspect observed that, they devoted a considerable proportion of their crop land to sugarcane cultivation, which is 4.11% of total cropped area and is higher than the proportion of area used for cultivation of sugarcane by indigenous general caste population, Muslims of immigrant origin and Nepalese of the district. The main purpose of agriculture by S.T people is for self consumption. However, after consumption, what ever surplus is rest, they used to sell in local market. The jute cultivation accounts 2.5% of total cropped area of the S.T population. Besides, only 1.38% of their Copeland is used for cultivation of other crops.
Although the main occupation of the scheduled caste (S.C.) population of the district is fishing and allied activities, but the considerable proportion of them are also engaged in agriculture. The sample survey data reveal that Scheduled caste population of the district give more emphasis on cultivation of the food crops especially rice than other crops. That is why, a significantly higher proportion i.e. more than 75% of total crop area of S.C population dominated by rice cultivation. Besides, sugarcane and vegetable accounts more than 5% each of the total cropped area of scheduled caste population. Again the field's data reveal that they devote a very insignificant portion of cropland to cultivation of pulses and oilseeds, as the area accounted for these two crops are 4.25% and 2.13% of total cropped area. It may be mentioned here that Scheduled Caste population used a significant population of their crop area to cultivation of jute i.e. 4.68% of total cropped area, and is higher than the population of area devoted to cultivation of same crop by other social groups of the district. Besides, 2.55% of total cropped area is used for cultivation of other crops by the Scheduled Castes of the district.

The nature of cropping pattern by immigrant Muslim population of the district can be well visualized from Table 7.1. The immigrant Muslim community of the district is mainly inhabited in active food plain of Brahmaputra including the chars and chaporis which are characterized by fertile alluvial soil usually good for agriculture. The sample survey data reveal the fact that, of the total cropped area of immigrant Muslim community 71.14% is used for cultivation of rice. Again the primary survey reveals that the immigrant Muslim community devoted a considerable proportion of total cropped area i.e. 8.00% to cultivation of various vegetables. The proportion of total cropped area under vegetable cultivation is quite high among the immigrant Muslims of the district in comparison to other social groups.
It may be maintained here that the reverine tracts and *chars* inhabited by immigrant Muslim community are characterized by deposition of very fertile alluvium by annual flood of Brahmaputra and its tributaries. Therefore, such land are very fertile and provide suitable ground for cultivation of *rabi* Crops mostly vegetables. The main purpose of vegetable cultivation by immigrant Muslim community of the district is commercial, as this community supplies the required volume of vegetables to the market especially to the urban centers of the district.

It is seen that pulses accounts 6.26% of total cropped area of the immigrant Muslim community in the district. The population of area used for oilseeds cultivation by the community is 5.03% of total cropped area, which is higher than the proportion of area used by indigenous general cast people for the same crop. The area used for wheat and sugarcane cultivation by the community is 3.38% and 2.94% respectively of total cropped area. Besides, only 0.73% of total cropped area is used for cultivation of other crops by the immigrant Muslim community.

Like one social groups the Nepali community that are inhabit in the reverine tract and *char* areas of the district devoted a major proportion of total cropped area to rice cultivation (69.35%). The sample survey reveals that maize is an important crop next to rice among the Nepalese of the district. They used 7.74% of their total cropped area to cultivation of this crop. Wheat is another food crop that occupies a considerable proportion of cropland of the community i.e. 6.45%. It may be mention here that the community devoted highest proportion of area for cultivation of Maize and wheat than any other social groups of the district. 5.80% of the total cropped area is devoted to pulses Cultivation by the community. Cultivation of oilseeds particularly
mustered is a common picture of the crop field of Nepalese. The survey data reveal that 3.87% of total cropped area is used for oilseed cultivation by the Nepali community of the district. The area under vegetables and jute cultivation account 4.30% and 1.72 of total cropped area of the community. A very insignificant proportion of area is used for cultivation of other crops like spices, betel leaves etc. by community.

7.2 Attitude of Different Social Groups Towards Innovation

Caste & Community play important roles in technological change & innovation (Das, 1999). Generally level of development of values & behaviour of a social group is differing than the other social groups of a society. Therefore, the attitude of different social groups living in an area is also varies from one another. In case of agricultural innovation also, different community or social groups shows different attitude & interest. In order to find out impact of different social groups towards adoption of different innovative measures in agriculture, social group wise adoption of different innovative agricultural practices of the sample household of 28 sample villages are shown in table 7.2. The discussion follow is concerned with 416 households (10%) surveyed covering the major social groups of the district.

Use of Modern agriculture implements: Traditional techniques of agricultural operations still persist among the all social groups in Sonitpur district. Heavy pressures of population on land, small holdings, poverty of farmers & scarcity of capital to purchase machines, cheap labour etc are impediments in large scale mechanization. However, the mechanization is slowly making in roads ever since the lasts two or three decades. The sample survey data reveal that a very insignificant
proportion of farm families of all social groups uses tractors & power tiller in the crop land (table 7.2). However it is seen that the proportion of use of tractors & power tiller is highest among the Muslim peasants of immigrant origin in the district. Out of these total surveyed households of immigrant Muslims population, 2.59% & 7.80% farm families uses tractors & power tillers respectively. Muslims of immigrant origin community is followed by indigenous general caste population in terms use of these two machines in agricultural operation (table 7.2).

Table 7.2 Adoption of Innovative agricultural practices by different social groups.

<table>
<thead>
<tr>
<th>Social groups</th>
<th>Total no. of surveyed households</th>
<th>Percent of houses used fertilizer</th>
<th>Percentage of house hold used implements</th>
<th>Percent of HYV rice to total rice area</th>
<th>Percent of New crops to total cropped area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indigenous General castes</td>
<td>252</td>
<td>68.25</td>
<td>1.58</td>
<td>7.53</td>
<td>42.46</td>
</tr>
<tr>
<td>Scheduled Tribes</td>
<td>25</td>
<td>44</td>
<td>4</td>
<td>20</td>
<td>12</td>
</tr>
<tr>
<td>Scheduled Castes</td>
<td>23</td>
<td>65.21</td>
<td></td>
<td>21.74</td>
<td>8.69</td>
</tr>
<tr>
<td>Muslims of Immigrant origin</td>
<td>77</td>
<td>96.10</td>
<td>2.59</td>
<td>7.80</td>
<td>64.93</td>
</tr>
<tr>
<td>Nepalese</td>
<td>39</td>
<td>64.18</td>
<td></td>
<td>17.95</td>
<td>10.25</td>
</tr>
</tbody>
</table>

Source : Primary survey, 2006.

So far the use of iron plough in agricultural field is concerned; the sample survey data revealed that the proportion is highest among immigrant origin Muslim community (64.93%). Immigrant origin Muslim community is followed by indigenous general caste peasants in terms of use iron plough (42.46%). Among the Nepali Community of the district the proportion is however very low i.e, only 17.95% of farming families uses iron plough in their agricultural field.
As regards the use of sprayers in agriculture by various social groups is concerned, it has found that the proportion is again highest among Muslims of immigrant origin (42.85% of farm families), which is followed by indigenous general castes (26.58%), Scheduled Tribes (12%), Nepalese (10.25%) and Scheduled Castes (8.69%) respectively.

Diesel pump sets are used by the different community of Sonitpur district mainly for supplying underground water to rabi crop fields. There is a marked community variation in respect of use of this machine in the district. (table 7.2). The survey data reveals that among different social groups of the district Muslims of immigrant origin exhibits highest proportion of farm families that uses diesel pump set in their cultivation (12.98%). General caste Assamese people stands second position in terms of use of this machine (11.90%). It is seen that only 2.56% of surveyed Nepali community families uses Diesel pump set in agriculture.

So far the use of other implements like thresher, seeder, weeder etc. in agriculture is concerned, it is seen from the survey data that the proportion is significant among General castes people, i.e., 15.87% of farm families uses such instruments in cultivation indigenous general castes is followed by immigrant Muslims, Scheduled Castes & Nepali groups in terms of use of such improved machineries.(Table 7.2)

Uses of Chemical Fertilizers:

The application of chemical fertilizers like Nitrogen, Potash, & Phosphate plays a significant role in process of improving crop yield in the district. The field survey data reveals that there is marked variations in the level of application of chemical fertilizers among different social groups of the district (table 7.2). It is
observed that the total 252 surveyed household of Muslims of immigrant origin community 96.10% used fertilizers in their agriculture. Immigrant Muslim community is followed by indigenous general caste population group with 68.25% families using fertilizers. It also reveals from the sample survey that 65.21% and 64.18% of the farm families of Scheduled Castes & Nepali communities uses chemical fertilizers in their fields. The proportion of use of fertilizer is very low among the Scheduled Tribe community (44%).

Use of HYV and High Market value Crops:

The use of HYV rice to total rice area indicates that the proportion is highest among Muslims of immigrant origin i.e. 79.48%. Of the total cropped area under the possession of surveyed immigrant Muslim community as high as 71.14% (132.35 hectares) was under rice. The HYV rice area accounted for 79.48% of the total area under rice among this social group. The immigrant Muslim community is followed by the indigenous general caste community with 68.71% of rice area under HYV seeds. The scheduled castes and Scheduled tribes of the district devoted 57.05% and 53.39% of their total rice area to HYV. The proportion is found to be very low among the Nepalese, as out of the total 43.16 hectares of rice area of the surveyed community only 21.4 hectares are used for HYV rice cultivation. Thus, only 49.58 % of total rice area is devoted for HYV by the community.(Table 7.2)

An observation on adoption of new varieties of high market value crops like Commercial banana, sunflower, betel leaves, citronella, etc. to total cropped area reveal that the proportion is highest among the indigenous general castes, as they used 3.10 % of their total cropped area to cultivation of such crops. The indigenous general community is followed by Scheduled castes and scheduled tribes with their 2.05% and 1.38% of area under these crops. The survey data reveal that the level of new
variety of crops is very insignificant among the Muslims of immigrant origin and Nepalese of the district. Only 0.73% and 0.53 % of their total cropped area is under such new high market value crops.

Summary:
The observation and findings contain in this chapter clearly indicate that, rice is the predominately food crop among the farmers of all the social groups in the district. Apart from rice, the cropping pattern among the social groups living in the district reflects the under mentioned aspects.

1. The indigenous general caste population community produces a significantly high proportion of marketable pulses, but in case of other crops they maintain a self-subsistence character in agricultural practices. Rice being the principal commodity for trading, though the surplus portions of other agricultural produces are marketed, no attitude is observed in commercial production of such commodities. It is also observed that mechanization and innovative practices in agriculture make a significant inroad in to the agricultural landscape of this community, with an indication that there is a growing tendency in raising crop productivity with a commercial thrust, particularly in rice and pulses. Further, chapter VI also indicate that there is a growing tendency for commercial production of tea, banana, citronella, mithapatti- Betel leaf through small household gardens among the farmers of the community

2. The indigenous Scheduled tribe community composed mainly of the Bodos and Mishings produce substantial proportion of marketable sugarcane, pulses and oilseeds, reflecting their traditional interest in commercialization of these crops. Poor interest in mechanization and innovative practices among the farmers of this
community registers a slow growth of agriculture, particularly, as regards productivity and cropping patterns.

3. The indigenous scheduled caste population composed mainly of Kaibatras and Baniyas have interest only in cultivating sugarcane on a commercial basis next to rice. Reluctance towards mechanization and innovative practices, the farmers of this community maintain a subsistence character in all fronts of agricultural activities.

4. The Muslims of immigrant origin exhibit commercial interest in cultivation of vegetables, pulses and oilseeds. With high degree of mechanization and innovative practices this community is treated as highly commercially motivated agricultural community of the study area. This community is highly sensitive towards the new developments and prospects towards enhancing productivity and cropping intensity. Thus, this community appear to dominate the agricultural market of the district apart from that of rice.

5. The priority crops of the Nepali immigrant community in commercialization of agricultural production are oilseeds, maize and vegetables next to rice. With poor degree of mechanization and innovative practices this community also maintains a subsistence character with a traditional commercial interest in the production of oilseeds, wheat and maize.

Thus, any agricultural developmental programme for the district needs multifaceted growth intensive strategies. The Scheduled tribes, Scheduled castes and Nepali community need commercial motivation in the production of oilseeds, pulses, wheat, maize and vegetables and mechanization as well as innovative practices in the production of these crops. The indigenous general caste population needs incentives to devote more in commercial crops like tea, citronella, banana, sugarcane and pulses.
with enhancement of mechanical application and innovative practices. The Muslims of immigrant origin need incentives for commercial production of oilseeds, jute and vegetables.

All the above observations are based on the traditional interest, skill and initial commercial self-orientations of various communities of the district.

References:


