CHAPTER – 6

SOCIO-ECONOMIC CHARACTERISTICS OF RURAL PEOPLE
Socio-economic characteristics of the rural people of Chailtabasti and Dargakona villages

Introduction: Agroforestry is a set of land-use technologies that is most suitable for marginal croplands farmed by resource-poor families (Bentley, 1991). Socio-demographic characteristics (population size, no. of households and communities, no. of man and women) and trends (population growth rates, directions and rates of rural-urban migration), economic activities, cultural practices, existing physical and social infrastructure (roads, schools, hospitals) all provide critical informations and help us to understand existing and future demands, both direct and indirect, for wood products (food, fuel, fibre) and other goods and services that can be obtained from agroforestry systems (Parker and Burch, Jr., 1992). Environmental, biological, cultural and socio-economic factors influence a farmer’s decision of whether to select or maintain a particular crop cultivar at any given time (Jarvis et al., 1998; Jarvis and Hodgkin, 2000). Homegardens are unique agroforestry systems that are often described in detail, but whose bio-physical and socio-economic characteristics have not been extensively studied. Homegardens are intensive land-use systems involving the deliberate management of multipurpose trees and shrubs (the woody component) grown in intimate association with herbaceous species (mainly annual, perennial, and seasonal agricultural crops), and livestock, are all managed within the compounds of individual homes (Fernandes and Nair, 1986). Thus, as is implied by the term, homegarden as an agroforestry system should ideally combine the ecological functions of forests with those of providing the socio-economic needs of the people (Soemarwoto and Soemarwoto, 1984). They are widespread throughout the tropics and are of immense importance in the socio-economic structure of the rural communities (Michon et al., 1983; Soemarwoto, 1987). Homegardens are of vital importance to the mainly subsistence-lavel existence of farmers in the tropics (Nair and Sreedharan, 1986; Swift and Anderson, 1993; High and Shackleton, 2000; Mendez et al., 2001). Personal
preferences, socio-economic status and culture seem to be the main determinants of the appearance, functions, and structures of homegardens (Christanty, 1990). The structure and composition of homegardens differ across sites depending on the ecological setting and socio-economic functions within different households economics (Fernandes and Nair, 1986; Soemarwoto and Conway, 1991). Understanding the factors and decision-making patterns that affect the management of homegardens in crucial for including homegardens as a strategic component of in-situ conservation of agrobiodiversity (Eyzaguirre and Watson, 2002).

METHOD OF STUDY:-

Socio-economic parameters were studied in both the study sites, Chailtabasti & Dargakona. 68 homegardens were selected from Chailtabasti and 49 homegardens from Dargakona. Selection criteria for homegardens was its size (<1ha). Since majority of the homegarden owners are smallholders, sampling was done mainly for smallholders (1ha) with some sampling done for large holders. Analysis of variables such as family size, land size, educational status, occupational and economic status for assessment of socio-economic characteristics were done by interaction through Questionnaire (Saxena, 1995; Rastogi et al., 1998; Mendez et al., 2001; Vogl et al., 2004).

Data were entered into Excel and analysed in Microsoft Excel 2003.
RESULTS:-
Socio-economic characteristics:-

Chailtabasti

The socio-economic status of the local communities residing in the study site was determined on the basis of occupation, education, roofing pattern, no. of family members, no. of cattles owned & homegarden size. (Fig:-1A). A total number of 68 households had been surveyed in Chailtabasti village. The villages surveyed were predominantly smallholders with 95.92% having homegarden size within the range of 0.1-1 hectare, 2.04% having within 1-2 hectare, and another 2.04% having more than 2 hect. The primary occupation was found, labour and farming 35.29% and 29.41% respectively). Majority of the villagers were labour followed by farmers. Other occupations include business, T.E garden worker, carpentry, shop keeping & govt. service. 47.06% households had between 1-5 no. of members in their family, and 7.35% had more than 10 no. of family members. 43.38% of the total villagers surveyed were illiterate, 32.11% were educated upto primary standard. Majority of the villagers (51.47%) had cattles with numbers ranging from 1-5 while 39.71% had no cattle at all. The total range of cattle found was 1-16. in this village, 14.71% households having goats and 2.94% have hens.

The dominant roofing pattern found in this area was of Corrugated sheet (45.59%) followed by thatch (35.3%) and rests were of bamboo, thatch etc.
Fig 1 A: Socio-economic characteristics of the site Chailtabasti.
Dargakona

The socio-economic status of the local communities residing in the study site was determined on the basis of occupation, education, roofing pattern, no. of family members, no. of catties owned & homegarden size. (Fig: 1B). A total of 49 households had been surveyed. The villagers of this site were also smallholders, 97.06% having homegardens within the size of 0.1-1 hectare and 2.94 % having within 1-2 hect. The primary occupation found in this area was labour (24.49%), followed by both farming and masonry (12.24% each). 10.20% having business as their occupation. The other occupations were garden worker, govt. employee, painter, cook, tailor and electrician etc. 8.16% females had been earning income in this area. Regarding education, 32.48% were illiterate, 32.15% were of primary standard and 26.69% villagers were of secondary standard.

The dominant roofing pattern found in this area was Corrugated sheet (71.43%) followed jointly by bamboo (16.33%). Majority of the villagers (57.14%) had no cattle at all and 38.78% had catties with number ranging from 1-5. only 4.08% had catties more than 5 numbers. The range of catties found in this area was 1-6. goats were found in 14 households and it is 28.57% of total households studied in Dargakona village and also 4.08% of households have hens.

DISCUSSION:-

Socio-economic factors have large influence on the behaviour and decisions of the managers of homegardens (Shreshta et al., 2002). The inhabitants of the study sites are basically smallholders (<1ha) as indicated by the socio-economic survey. The homegarden size and diversity was found to be related to the socio-economic condition of the families that maintain them. Homegarden size of the present study is
Fig 1B: Socio-economic characteristics of the site Dargakona.
comparable with the range of global inventory of other tropical homegardens reported by Fernandes and Nair (1986). Bamboo is an important agroforestry component in both the study sites and almost all farmers have bamboo groves depending on their socio-economic status and landholding size. Tea garden labour is the main occupation and in such households majority of them are involved as labors in tea gardens. Poorer families with no paddy land holdings had smaller homegardens & therefore less diversity and they mostly use leaves of Imperata cylindrica, Vetiveria zizanoides and bamboo as their roofing material. Tea gardens laborers with larger families, and more earning members use corrugated sheets as their roofing material, indicating better socio-economic condition. The villagers with better socio-economic condition in terms of more earning members and larger homegarden size have a variety of agroforestry species and also showed a greater interest to plant more Aquilaria malaccensis seedlings in their homegardens.

Regarding educational status, the major share goes to illiterate and primary level education. A satisfactory percentage of secondary level education was also found in the study sites. The number of educated members in the family was represented by children and youngstars. This educational status is also found both directly and indirectly related to homegarden size. In the families where number of earning members are more and are engaged in other private jobs, with qualification upto elementary level and more have smaller homegarden size because in homegardens, external labor input is negligible and the maintenance of the homegardens are done by the family members and family members are engaged in other jobs where income is much better or have migrated to other places, it became difficult to maintain homegarden diversity and there is a decline in interest towards homegardening. But the exceptional cases were also found, where elders are taking care of their homegardens and younger generations are doing other jobs such as small business, worker in various projects, construction, driver, masonry etc

Cattle is another important parameter in studying socio-economic status of rural people. Cattle are primarily kept for manure (Rugalema et al.,1994) and for medium and large holders they are often a source of milk for personal consumption and for sale.
Small animals in particular represent a source of production of low-cost proteins in homegardens, especially for the low-income households (Wienman and Leal, 1998). Yet another advantage is the case of selling the animals and their products in the local markets and their year-round production, unlike the orchard plant products, which can be seasonal (Del Angel Perez and Mendoza, 2004). These small animals include goats, hen, sparrows, ducks, sheep etc. Farmers with large holdings and large families often keep large cattle stock. Farmers often have bulls or buffaloes in their livestock which are then used for plowing during the rice planting season. Smaller farmers however, can afford to keep only 1-3 cows and even no cattle also found in most of the houses. They have to lease bulls or buffaloes during the rice farming seasons for plowing. Most of the labours with smaller homegardens do not have any cattle and instead prefer to have poultry birds such as hen, cock and duck, sparrows etc. These are source of meat and even cash for the them. Chickens are particularly important in the homegardens of the developing countries worldwide, primarily for their ability to generate cash income from the production of eggs, meat and chicken manure. They also contribute to biological pest control by preying on insects and grasps, and facilitate household waste recycling (Montagnini, 2006). In Dargakona village, a smaller percentage of households have pigs along with other poultry animals.