

Study No. 129

**PARTICIPATION OF PLAINS TRIBAL WOMEN IN
NON AGRICULTURAL DEVELOPMENT
ACTIVITIES**

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2008**

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P R E F A C E

The study on "Participation of Plains Tribal Women in Non-agricultural Development Activities" was undertaken with the approval of the Directorate of Economics and Statistics, Ministry of Agriculture, Government of India. India is an inhabitant of 102.70 crore people comprising different castes and sub-castes along with 573 tribes and sub-tribes. The tribal population of the country as per 2001 Census was 8.43 crores. The estimated number of scheduled tribes in the N.E. region is 209 out of which Assam comprising of 23.

The study is based on 100 samples selected from Jorhat and Dhemajir districts. It was observed that cultivation was the main occupation of the male members of the sample families and weaving was the main occupation of the female members of both the sample districts. Total operational holdings were 67.26 hectares and 78.21 hectares in Jorhat and Dhemaji districts respectively. Out of 100 sample beneficiaries 40 sample households were provided 139.60 kgs. of cotton yarn and 8 number of looms, 40 households were provided 'Muga kit' and 20 households were provided with 'Eri kit'.

The total annual costs of production of cotton cloths were Rs. 1,552,991.00 and total annual return was Rs. 2,921,706. The B.C.R. was found at 1:1.88

The total costs and returns on Muga cloths production were Rs. 9,82,465.00 Rs. 14,480,050.00 respectively. The B.C.R. was found 1:1:47.

The total annual costs and returns on Eri cloths production were Rs. 6,16,557.00 and Rs. 819,400.00 respectively. The BCR was found 1:1:33.

Like all other studies the present one is also a joint production of the Centre. The report was prepared by Mrs. Runjun Savapandit under my guidance. Mrs. Junuma Dutta, typed the report. Mr. Nabajit Deka collected all the secondary information. I am thankful to all of them. I also thankful to Mrs. Moromi Gogoi and Miss Babita Hazarika for all the computer works.

It is hoped that the study will be helpful in understanding the problems and prospects of Plains tribal women in Assam

28th November, 2008

K.C. Talukdar
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Chapter-I

Introduction:

Women constitute half of the human resources and thus the economic wealth of the country and if about the half of the nation's human resources is neglected, the overall progress of the country would obviously be hampered. In the third world countries especially where agriculture still continues the main source of livelihood and the main area of work for most people, women's contribution is quite high. Recognizing the need for involving women in various development activities, the government of India has initiated several affirmative measures by way of programmes and schemes to bring them in to the main stream of development.

India is an inhabitant of 102.70 crore people comprising different castes and sub-castes along with 573 tribes and sub-tribes. They are broadly classified in to different classes and groups depending upon their present state of development and some other significant factors.

The tribal population of the country as per population census 2001 is 8.43 crores, constituting 8.20 per cent of the total population. More than half of the tribal population is concentrated in the States of Madhya Pradesh, Chattisgarh, Maharashtra, Orissa, Jharkhand and Gujarat. Dr. B.R. Ambedkar, the principal Architect of Indian Constitution has identified the tribal people as the weaker section of the society by giving them some shape groups in the constitution.

The North-eastern Region shelters a good number of tribes which are heterogeneous in terms of their dialect, culture and customs. The Scheduled tribes of North-East India can broadly be categorized in two types, namely (a) the hill tribes inhabiting in the hills of Arunachal Pradesh, Mizoram, Meghalaya and Nagaland and the hill districts of Assam, Manipur and Tripura; (b) and the plains tribes settling in the valley areas of Assam particularly in the Brahmaputra Valley. While most of the tribes remained isolated till the eras of British rule, there has been cultural diffusion between the plains tribes and non-tribal communities. Among the States of the region

Meghalaya, Mizoram, Nagaland and Arunachal Pradesh are tribal dominated while in the valley region of Assam, Manipur and Tripura they are minority. Altogether the number of scheduled tribes in the region is estimated to be 209 out of which Arunachal Pradesh has 101, Assam 23, Manipur 28, Meghalaya 14, Mizoram 5, Nagaland 20 and Tripura 18. The percentage of tribal population is about 22 per cent of the total population of the region, the proportion varied from about 94 per cent in Mizoram to about 13 per cent in Assam. More than 55 per cent of the tribal population of the region is in the States of Assam (37 per cent) and Meghalaya (19 per cent) and the rest (45 per cent) tribal population is found in the other five States of the region.

Participation of Women in Economic Activities in India and Assam :

It is evident from various Census reports that the work participation of men and women in different economic activities has a wide disparity in India as well as in Assam. Table -1.1 shows that as compared to male counterpart, a very small

Table 1.1

Work Force Participation Rates in India & Assam (1951-2001)

Census	India		Assam	
	Male	Female	Male	Female
1951	83.50	16.50	78.83	21.17
1961	68.47	31.53	66.64	33.36
1971	82.65	17.35	92.13	7.87
*1981	79.79	20.21	--	--
1991	75.15	24.85	71.26	28.74
2001	68.37	31.63	72.03	27.97

Source: Compiled from various Censuses of India and Assam, 1951, 1961, 1971, 1981, 1991 and 2001.

Note: * Census operation was not held in Assam in 1981.

percentage of women was engaged in economic activities. In 1951 Census, it was 16.50 per cent of total work force of the country i.e. less than one fifth of the male counterpart (83.50%), while in Assam (21.17 per cent) less than one fourth of the male

counterparts had been engaged. In 1961 Census, the work participation of women was considerably improved both at the national and state level. Thus, it was almost half of the male counterparts at the national level (31.53 per cent) and at the state level it was more than half of the male counterparts (33.36 per cent). In 1971 census, the rate of work participation of women in the country again declined to the extent of 17.35 per cent and at the state level it was only 7.87 per cent of total work force. In the 1981 census, at the National level there was a slight improvement to the extent of 29.21 per cent (i.e. less than one forth of the male counterparts). In 1991 Census, there were some improvement both at the national and the state levels, as the work

Table 1.2
Employment of Women in Organised Sector in India and Assam.

Year	India/ Assam	Public Sector		Private Sector		Grand Total (in Lacs)
		Male	Female	Male	Female	
1996-97	India	167.94 (60.11)	26.35 (9.43)	67.20 (24.05)	17.92 (6.41)	279.41 (100.00)
	Assam	4.76 (40.72)	0.72 (6.16)	3.44 (29.42)	2.77 (23.70)	11.69 (100.00)
1997-98	India	168.31 (59.59)	27.28 (9.66)	67.77 (23.99)	19.09 (6.76)	282.45 (100.00)
	Assam	4.71 (39.57)	0.74 (6.22)	3.41 (28.66)	3.04 (25.55)	11.90 (100.00)
1998-99	India	166.55 (59.13)	27.63 (9.81)	67.37 (23.92)	20.11 (7.14)	281.66 (100.00)
	Assam	5.35 (40.07)	0.79 (5.92)	3.63 (27.19)	3.58 (26.82)	13.35 (100.00)
1999-00	India	166.04 (59.06)	28.11 (10.00)	66.80 (23.76)	20.18 (7.18)	281.13 (100.00)
	Assam	4.59 (42.38)	0.76 (7.02)	2.69 (24.84)	2.79 (25.76)	10.83 (100.00)
2000-01	India	164.57 (58.86)	28.57 (10.22)	65.80 (23.53)	20.66 (7.39)	279.60 (100.00)
	Assam	4.56 (41.04)	0.79 (7.11)	3.02 (27.18)	2.76 (24.67)	11.11 (100.00)

Sources: 1. Statistical Hand Book of Assam, 1997, 1998, 1999, 2002.
2. Basic Statistics for North-Eastern Region, 2002.

Note: Figures in the brackets indicate percentages.

participation rate of women were 24.85 per cent at the national level and 28.74 per cent at the state level. In 2001 Census at the national level there was marginal improvement in the women work participation i.e. 31.63 per cent while in Assam it was slightly deteriorated as it was only 27.97 per cent (i.e. less than one third of the male counterparts).

Employment of women both in the public and the private sectors during 1996-97 to 2000-01 in India and Assam has been presented in Table-1.2. The Table shows that the percentage share of women at the national level was higher in public sector and in the State level; the percentage share was higher in private sector. In 1996-97, at the national level, the percentages of female employed in the public and the private sectors were 9.43 per cent and 6.41 per cent respectively and at the State level it were 6.16 per cent and 23.70 per cent respectively. Thus, as compared to men, the ratio of female employment was negligible at the national level. However, in private sector, as compared to national level the employment ratio of females in the state level was satisfactory. Similarly, in the year 1997-98, at the national level, the percentage share of women in public sector was 9.66 per cent and in the private sector it was 6.76 per cent and at the State level the percentage shares of women at the public sector was 6.22 per cent and at the private sector it was 25.55 per cent. In 1998-99, the percentage share of women in public as well as private sectors at the national level were 9.81 per cent and 7.14 per cent respectively and at the State level it was 5.92 per cent in public sector and 26.82 per cent in private sector. In the year 1999-2000, at the national level, the percentage share of women in public sector was 10.00 per cent and in private sector it was 7.18 per cent and in Assam the percentage of women in public sector was 7.02 per cent and in private sector it was 25.76 per cent. Similarly, in 2000-01, at the national level the percentage share of women in the public sector was 10.22 and in the private sector it was 7.39 per cent. In Assam it was 7.11 per cent in the public sector and 24.66 per cent in the private sector.

Thus, it may be concluded that at the national level, the employment of women both in the public and private sectors have been increasing gradually though it is much less as compared to male. In the State of Assam though the employment of

women in the public sector is negligible as compared to men but in case of private sector the employment of women is satisfactory. This is due to higher female labour employment in tea garden of Assam, which is also the contributing factor for higher female participation in economic activities in Assam, as most of the Tea Gardens are in the hands of private sector.

Status of Tribal in Assam:

Assam is the habitation of various tribal communities having different social structure and cultural heritage. The total population of Assam as per 2001 census is 66.55 lakhs consisting of 18.26 lakhs Scheduled Caste and 33.08

Table-1.3

District Wise Scheduled Caste and Scheduled Tribe Population of Assam

Districts	Scheduled Caste	Scheduled Tribe	P.C of SC Population to the total Population	P.C of ST Population to the total Population
Dhubri	63208	32523	3.86	1.97
Kokrajhar	31167	304985	3.44	33.67
Bongaigaon	92770	110696	10.25	12.33
Goalpara	39462	131800	4.80	16.03
Barpeta	93861	123266	5.70	7.48
Nalbari	86236	202577	7.51	17.63
Kamrup	170541	250393	6.76	9.93
Darrang	68464	249861	4.55	16.61
Sonitpur	87900	195083	5.23	11.60
Lakhimpur	70060	208864	7.88	23.49
Dhemaji	30472	270496	5.33	47.29
Morigaon	100346	120730	12.93	15.55
Nagaon	215209	89394	9.30	3.86
Golaghat	51169	93920	5.41	9.93
Jorhat	78663	123134	7.87	12.32
Sibsagar	35759	41533	3.40	7.95
Diobrupur	48024	88337	4.05	7.45
Tinsukia	31315	67234	2.72	5.85
Karbi-Anglong	29520	452963	3.63	55.69
N.C.Hills	3360	128428	1.79	68.28
Kariganj	130957	2901	12.99	0.29
Hailakandi	59251	821	10.91	0.15
Cachar	208235	18631	14.41	1.29
Assam	1825949	1679117	6.85	12.41

Source: Statistical Handbook of Assam, 2006

lakhs Scheduled Tribe population. The tribes in the plain districts of Assam includes 9 groups viz. Barman in Cachar, Boro, Boro-kachari, Deori, Hojai, Kachari including Sonowal, Lalung, Mech, Mising and Rabha. The district wise Scheduled Caste and Scheduled Tribe population of Assam are shown in Table-1.3.

Table shows that percentage of SC population is highest in Cachar district (14.41 per cent) and lowest in N.C.Hills district (1.79 per cent) while ST population is highest in N.C.Hills (68.28 per cent) district and lowest in Hailakandi district (0.15 per cent). Since 6.85% of total population in Assam is tribal; so overall development of the state can't be imagined ignoring this section of the population.

Generally, women are lagging behind in the pace of all types of development and so as their status in the society. In backward societies they are in more disadvantageous position than that of developed societies. But it is a well known fact, that no society or nation can be developed and civilized without developing the women. Thus time has come to analyze the role of women in different agriculture based and non-agriculture based activities.

The necessity of improving the status of women has now been recognized by all the sections of the society all over the World. In 1984, a fund for women namely the United Nations Development Fund for Women (UNIFEM) was instituted. It is an Autonomous Body, which trains and works with NGO's and government to improve the living standards of women in developing countries through providing technical and financial supports. In the fourth World Conference of UNIFEM held in Beijing (from 4th to 15th September, 1995) drew a powerful agenda for women's empowerment and gender equality. Although there is formal recognition of women's right and legal acceptance of Women's equality with men, they continue to face discrimination and marginalization. Therefore, with a view to improve the economic condition of the female population in India, various development schemes were introduced during the plan periods with provisions of active participation of women at par with their male counter part.

The Constitution of India provides not only equal rights and privileges for all the citizens, but also specially mentioned the need for making special provisions

for women. Subsequently, since the beginning of the Indian planning, the planners and policy makers have introduced various welfare and development programmes for women to improve their social and economic status in the society.

All round development of women has been one of the focal points of planning process in the country. The first Five Year Plan (1951-56) envisaged a number of welfare programmes for the economic upliftment of the females. Establishment of the Central Social Welfare Board(CSWB), organization of Mohila Mandals or Women's Clubs and the Community Development Programmes etc. were a few worth mentioning steps in this direction.

In the Second Five Year Plan (1956-1961), the empowerment of women was closely linked with the overall approach of intensive agricultural development programmes.

The Third and Fourth Five Year Plans (1961-66 & 1969-74) lay stress on female education as one of the major welfare measures. The Fifth Five Year Plan (1974-79) emphasized on providing training on various income earning activities for the economic development of the women section. Thus, the functional literacy programmes specially the women literacy programmes got top most priority. This plan coincided with International Women's Decade and the submission of the report of the committee on the status of women in the country. In 1976, Women's Welfare and Development Bureau was set up under the Ministry of Social Welfare to act as a nodal point to introduce and coordinate policies and programmes for women's upliftment.

The Sixth Five Year Plan (1980-85) showed a definite shift from welfare to development. It recognized that women's in general lack access to resources as a critical factor impeding their growth. The Seventh Five Year Plan (1985-90) emphasized on the need for gender equality and empowerment. For the first time emphasis was given upon qualitative aspects such as inculcation of confidence, generation of awareness with regards to rights and training in skills for better employment.

The Eighth Five Year Plan (1992-97) stressed on empowering women, especially at the grass root level through Panchayati Raj Institutions. The Ninth Five Year Plan (1997-02) introduced a strategy under women's component plan, which earmarked that not less than 30 per cent of funds/benefits for women be earmarked for the development of worker's programmes. The Tenth Five Year Plan (2002-07) approach aimed at empowering women through translating the recently adopted National Policy of Empowerment of Women in to action and ensuring survival, protection and development of women and children through Rights Based Approach.

Tribal Development Programmes in Assam:

The socio-economic and educational upliftment of the tribal people in the State of Assam is a major thrust area of the Government of Assam. For the welfare of the plain tribes and backward classes, the Directorate of Welfare of Plains Tribes and Backward Classes was set up in 1976. Since inception this directorate has been trying hard to uplift the socio-economic condition of plains tribes and backward classes in Assam by implementing different schemes and programmes. The various schemes taken up by the Government of Assam for the welfare of the plains tribal are:

A. Educational Development Programme:

1. For educational development of ST students, Government has awarded post matric scholarship to 1,02,700 numbers of students and pre-matric scholarship to 25,410 numbers of students with financial involvement of Rs.999.98 lakhs and Rs. 40 lakhs respectively during the year 2005-06.
2. Government provides stipend for Craftsmen Training to the plains tribal student who are undergoing training in various trades in Assam. The stipend was provided to 592 number of students with a financial involvement of Rs. 6.60 lakhs.
3. Under Infrastructure Development Scheme, several educational institutions and schools in rural areas have been provided financial assistance for renovation and repairing which includes development of science laboratories, play grounds etc. During the period from 2003-04 to 2005-06 the financial assistance has provided to 122 number of schools amounting to Rs. 165.73 lakhs.

B. Economic Development Scheme:

1. Under Family Oriented Income Generating Schemes (FOIGS) the Directorate of Welfare of Plain Tribes and Backward Classes provides assistance in the form of providing Tractor, Power tiller, Sewing Machine, Yarn, Eri, Muga kit etc. to the plain tribal people living below poverty line to remove or reduce poverty in the tribal society. During the year 2005-06 expenditure incurred 100 per cent received fund from the Government of India under Article 275(I) of the Constitution. During 2006-07, Government had utilized Rs.3601.59 lakh under the scheme as Special Central Assistance to TSP and also 32,500 number of families were assisted. For agriculture mechanization, Government also distributed 165 tractors to tribal SHGs for agriculture mechanization. Allocation for the year 2007-08 was Rs.3,463.00 lakh out of which Rs. 1,731.50 lakhs had been utilized so far.

C. Infrastructure Development Scheme (IDS):

This scheme covers renovation and repairing of educational institutions, construction of roads bridges, school buildings, community halls etc.

1. Renovation and Repairing of Educational Institutions:

Under IDS, several schemes/ institutions have been provided financial assistance for renovation, repairing etc. Thus rural tribal students have been availing such facilities for improving their educational and extra-curriculum activities.

2. Construction of Roads/ bridges:

The communication system in the rural tribal areas are still far from satisfactory. Therefore to improve the communication system, ATDA has taken up construction works of link-roads, link bridges, culverts etc. under the scheme. Directorate of Welfare of Plain Tribes and Backward Areas has spent Rs.974.19 lakh (under 70 nos. of Schemes) for infrastructural development programme in tribal concentrated areas to construct rural roads, bridges, school buildings, community halls etc.

3. Construction of Community Centre:

To promote Art and Culture among different communities, the Assam Tribal Development Authority has been granting financial assistance for

construction of community centres in Tribal Areas of various districts of the State.

4. Drinking Water Facilities:

In most of the rural areas, drinking water facilities is not sufficient. Therefore, ATDA has been providing financial assistance for installation of ring wells and tube wells etc.

5. Youth Welfare and Cultural Activities:

In order to assist the organizations doing welfare works amongst the tribal people, financial assistance have been given AIDA for construction of clubs, houses etc. for enhancing their Socio-Economic and Socio- Cultural activities.

6. Vocational Training Institute (VTI) Scheme:

The ATDA has been implementing another scheme under the central sector i.e. the Vocational Training Institute (VTI) Scheme. Under the scheme, 100 per cent central assistance is given to the State for setting up and running Vocational Training Institute within TSP areas. At present 26 numbers of VTI have been set up in different districts with financial implication of Rs. 276.00 lakh.

Besides FOIGS and IDS, the ATDA have been given financial assistance for tribal women for upliftment of their economic conditions. There is growing consciousness all over the world about the role of women in economic development. It has now been realized that economic progress in any sphere of economic activity is integrally related with the economic well being social and economic status of women. The United Nations proclaimed 1975 as the 'International Women Year' and the period between 1976 to 1985 as the United Nations 'Decade for Women' which demands programmatic measures to improve the quality of life of women. The United Nations has continuously served as a catalyst for the advancement of women and to promote gender equality through international co-operation. The first global conference on women was held in Mexico on 19th June, 1975 which adopted equal access for women in the area of education, training, political participation, increased employment opportunity, housing, nutrition and family welfare. In order to raise awareness on issues

concerning women and development a fund for women namely the United Nations Development Fund for Women (UNIFEM) was instituted. The UNIFEM had been recognized as a permanent autonomous body, which was designed to work with the NGOs and the Government to improve the overall conditions of women. The mid-decade International Conference on women was held in Copenhagen which pinpointed three areas for women development i.e. health, education and employment. The Conference also stressed on elimination of all forms of discrimination against women and stressed on participation of women in politics and in decision-making. The Third World Conference on women was held in Nairobi from 15th July 1985, which adopted forward-looking strategies for advancement of women by 2000 in key areas.

The Fourth World Conference on women held in Beijing in September 1995 a powerful agenda for women's economic empowerment and gender equality had been adopted, which is known as Beijing Declaration and a platform for the welfare and development of women. Twelve critical areas for priority action were identified for the advancement of women.

It is a well-known fact that woman in India, since time immemorial is a major component of working force in the country. Although their role as housewives and mothers compelled them to remain within the four walls of their home, yet they contribute substantially to the economy of the households as productive work force along with their male counterparts. In spite of these multiple roles, productive inputs in terms of working-hours contributed or generation of equivalent income have not been recorded. However, after the declaration of the United Nations 'Decade of Women', some of the scholars and social scientists have taken up some valuable studies and remarked that assignment criteria of farm work and actual division of labour between the sexes and active participation of women in economic activities are necessary for the overall development of a country. They also stressed that the women must have an equal economic share and participation in crucial economic and political activities.

Some studies conducted in rural area revealed that majority of rural women are illiterate and living under the gamut of cultural and social customs and traditions. To improve the economic and social status of women it is necessary to create confidence in the minds of women, so that, they can face any challenge, which may arise in their way of achievement. In this situation, the voluntary organizations like NGOs can play an important role in creating awareness amongst the women, so that they would able to realize their rights and potentiality. Some of the social scientists argued that due to modernization of economic activities and technological innovations, the women have been pushed back from their traditional occupations. A study conducted by Bina Mazumdar (1978) argued that, "the impact of transition to a modern economy has meant exclusion of an increasing number and proportion of women from active participation in the productive process. A considerable number continue to participate for no returns and no recognition." She opined that technological changes introduce the demand for new skills and specialization, which are very different from the traditional divisions of labour between sexes. So, education and specialization training are very essential for the workers. Besides, she also observed that women in the developing societies, who constitute the largest share of the world's illiterates, are handicapped by the lack of opportunities for acquisition of these new skills, at the same time their traditional productive skills become unwanted in the new economic environment.

In a study conducted by D. Narendra Kumar and D. Himachalam (1991) on women entrepreneurial development, pointed out that there is a greater need of bringing women to the main stream of economic development as they prove themselves successful in all fields, if they are given an opportunity. Moreover, they viewed that women should come out with commitment to the development activities, particularly to the industrial sector. To achieve this, the society should facilitate to growth of women's nature, their talents and abilities. They also suggested for the involvement of NGOs for successful implementation of any programmes of development, particularly for women.

Shanta Kohil Chnadra (1991) in her study on the problems faced by women entrepreneurs in Delhi opined that 'the areas and sectors where women's employment is either low or on the decline are to be identified and corrective measures be initiated to promote additional avenues for employment. It is necessary to initiate determined efforts to promote self-employment for ensuring a progressive reduction in the incidence of poverty and unemployment.' Further, author also opined that to achieve this objective, assistance is to be intensified in the areas of training and managerial skills, making available easy credit facilities, exploring making outlets, apart from developing the necessary infrastructure. A major step in the direction of promotion of women's employment and self-employment has been expanding and diversifying the educational facilities and training opportunities available to them.

Another study on economic status of women in rural areas of Assam conducted by Anuva Saikia (1992) viewed that any programme for uplifting of rural women must aim at raising the levels of employment and income. This can be done by raising the efficiency of rural women through education and training and by creating employment opportunities which are most suitable to the rural women like agriculture and its allied sectors and also in non-farm sectors like handloom and handicrafts, sericulture and in household industries. They must be encouraged to take up such activities on commercial basis by creating facilities of finance, easy availability of new materials and marketing facilities.

Archana Sharmah (1992) opined that the women in Assam are not getting their due share in the employment market particularly in the better-paid occupation. Considering large-scale illiteracy among the female population, this limits their scope for occupational mobility between the industries as well as within industries. She also suggested for proper policy measures to increase their occupational mobility, which can be done only through proper education and training.

Robindra Kr. Choudhury (1994) argued that in India, though the rate of female participation has increased; yet the economic status of women in

general has not changed as expected. Technological advancement has not been able to diversify the work participation of women particularly among the uneducated rural women. He also pointed out that the position of women in non-peasant household enterprise is comparatively better due to the fact that labour is exchanged for money and the extent of individual earnings in the family can be identified. Moreover, he pointed out that the position of women is better where labour rather than land productivity is the measure of earnings.

Ranjeeta Phukan (1998) conducted a study on women entrepreneurship development in Assam. She pointed out that the basic constraints of women entrepreneurship development are ignorant of information about various facilities available to them. The banking system in our country is also not conducive to women entrepreneurial development. Women are marginally covered by the banking system with inadequate size of loans, margin money requirement, long process in granting loan etc.

It is evident from the findings of the study conducted by Ruplekha Borah (1998) that rural women spent considerable time in agriculture and allied activities. She also found that women from low-income group were devoted more time in performance of their tasks resulting in higher drudgery. She further observed that to reduce drudgery from farm operations, there is need to educate farm women as well as training in vocational trades which would increase their work output and efficiency.

A study conducted by Jaynal Uddin Ahmed (2002) on "Constraints Experienced by Women Entrepreneurs in South Assam" revealed that even though the rural women played an important role in various economic activities and trained in various technologies, some of them are not able to start their own enterprise due to various constraints like, lack of financial assistance, limited scope of farming, seasonal availability of fruits and vegetables marketing problems, and difficulty in getting license etc. experienced by them.

Another important study on "Employment patterns of Rural Women

and their Involvement in Decision Making: A study in Jorhat District of Assam” conducted by Anuva Saikia (2004). The study revealed that women’s labour time exceeds 223 days in the year, taking into account all the activities in rural households. She pointed out that out of this; 84 days were spent in crop production, 87 days for livestock care activities, 34 days for handloom and weaving and 18 days for food processing. She also argued that despite their substantial contributions in terms of labour, women do not often have a say in important decisions within the households, especially those related to financial and property matters, although they do have a significant role in various agricultural enterprise.

Need for the Study:

It is needless to mention that the women are working in agriculture and rural based allied activities. Of late, a good number of women are coming forward to accept the assistance offered by the Central and State government under different non-agricultural development schemes to improve their economic conditions. A number of schemes were implemented through District Industrial centre, Khadi and Village Industrial Board, Integrated Rural Development Project etc. for economic liberalization of women through self employment programme. Many enthusiastic enterprising women are coming forward to take advantage of such programmes and become self reliant in economic front. It is apprehended that the advantaged non-tribal group is taking the benefits of the programmes but the women living in the remote inaccessible areas, particularly the tribal women are lagging behind although special provisions are there for the tribal women.

In Assam very limited numbers of studies have been conducted by various research organizations and individual scholars regarding participation of tribal women in the non agricultural development activities. In fact most of the studies conducted in the recent past are sociological studies and some of them are agricultural proper. There is still ample scope of studying the tribal women’s status in relation to non-agricultural economic activities and the level of participation of women in Government sponsored entrepreneurial trades. The

proposed study is aimed at to evaluate the impact of the development schemes on Plains Tribal Women in achieving economic independence through non-agricultural self-employment schemes. Even though some studies on women emancipation in economic spheres have been undertaken, yet, these are not sufficient enough to judge the scale of participation of Plains Tribal Women in non-agricultural (including allied sector) development activities of the society.

Objectives of the Study:

The objectives of the proposed study are:

- (i) to examine the nature and types of assistance and the economic viability of the non-agricultural development schemes designed for the Plains Tribal Women.
- (ii) To assess the impact of the schemes to generation of employment and improving the economic conditions of the Plains Tribal Women.
- (iii) To examine the problems faced by the sample women entrepreneurs as well as implementing agencies in implementing the schemes for the economic benefit of Plains Tribal Women.
- (iv) To suggest policy implications.

Methodology:

In order to draw sample a complete lists of women beneficiaries under different non-agricultural development schemes of Government agencies were collected from the concerned authorities of the sample districts. Jorhat district of upper Brahmaputra Valley Zone and Dhemaji district of North Bank Plains were selected for the study on the basis of the concentration of plains tribal women entrepreneurs in consultation with the concerned State departments. From each selected district fifty women beneficiaries were selected by adopting random sampling method. Thus, a total of 100 plains tribal women beneficiaries were covered by the study. Of the total samples, 40 numbers from each cotton and 'muga' and 20 numbers from 'eri' weavers were taken for the study. To make a comparative analysis of the economic conditions of the beneficiary women, both pre and post benefit years were taken in to consideration. The field level data were

collected with the help of a set of specially designed schedules through personal interview method. Some secondary level information regarding the participation of women in different non-agricultural economic activities were collected from various published and un-published sources of the concerned districts and the State.

Reference Period:

The data incorporated in this report pertain to the year 2007-08.

CHAPTER – II

General Overview of the Surveyed Area and Socio-Economic Features of the Sample Households

In this chapter an attempt has been made to analyse the socio-economic condition of the sample beneficiary households based on primary level data and a brief descriptions of the sample districts. The socio-economic profile of the sample households would provide the basic information on the resource endowment of the selected households. The profile includes demographic aspects like age, sex, educational status, economic status, occupational status etc., land ownership, cropping pattern, assets position, income earned from different sources by the sample households etc.

Jorhat district :

Jorhat district, one of the relatively smaller districts of Brahmaputra Valley of Assam, ranking 14th in terms of area and 13th in terms of population is situated in between 27.15^o N to 26.30^o latitude and 93.45^o E to 94.30^oE longitude. The district is surrounded by the hill States of Nagaland in the south, Sivasagar district in the east, Golaghat district in the west and Lakhimpur district in the north. The district has an area of 2859.30 sq. km. and the population is 10.09 lakh (as per 2001 census). The climate of the district is moderate. The average annual rainfall is recorded at 2244 mm with North-West monsoon contributing the major share. The soil texture is alluvial with fine loom to clayey. The district is divided into 3 subdivisions viz, Jorhat, Majuli and Titabor and comprises of 8 blocks, 111 GPS and 800 revenue villages. The district is in the major tea belt of Assam with 135 tea gardens in organized sector, and many small tea gardens in unorganized sector. Paddy is the major agricultural crops grown in the district. The district is ranked at No.1 position as per state Human Resource Development Index of India.

Jorhat district, blessed with humid atmosphere and abundant rainfall is favourable for growing field crops and plantation crops. The low land is suitable for

rice cultivation while the high land offers excellent scope for pulses, vegetables, banana, citrus and other horticultural crops.

'Majuli' the biggest river island of the World on the river Brahmaputra, is located in the district. Majuli is 20 kms away from Jorhat District. Majuli island has an area of about 1,080 Sq km. and is located in the Brahmaputra Valley. This land mass, with a population of 1.6 lakhs, majority being tribes, has a very rich cultural heritage and has been the abode of Assamese vashnavite culture with tremendous option for spiritual and Eco-tourism. The island is a bio-diversity hotspot and has rich ecology with rare breeds of flora and fauna. Majuli enjoys the privilege of being the largest river island in the World. Crested in the bosom of the mighty Brahmaputra and fondly tucked up by the Lohit and Khabalu with loving care, Majuli's individual distinctiveness is that it is not uphill, down dale, snow capped mountains or warbling mountain springs which put a tourist into the thrall in Mujub, but it is the freedom of the wind, the freedom of the rivers, the vistas of freedom opening up one after another, the freedom of the birds and the pristine primitiveness, simplicity and innocence of the people living for centuries at close proximity of nature that sways, excites and thrifts the imagination of the tourists. During the monsoon, the rivers swell and vast tracts of land are sub-merged. The old and the young and even children steer clear on their rowing boats to safe destinations. The land mass keeps changing its shape after every summer. Its beauty reminds a visitor of the shifting realty of the rainbow.

Dhemaji District:

Dhemaji district is one among 200 the most backward districts in the country, situated in the remote corner of North East India on the north bank of river Brahmaputra and situated between the $94^{\circ} 12'18''E$ and $95^{\circ}41'32'' E$ longitudes and $27^{\circ} 05'27'' N$ and $27^{\circ}57'16'' N$ latitudes. It is divided into 2 subdivisions of 5 blocks having 1,163 inhabited villages. The total geographical area of the district is 3,236.95 sq.km. The economy of Dhemaji is basically agrarian. The district falls in the Upper Brahmaputra Valley Region and Eastern Himalayan Zone. The total population of the district is 5.69 lakh and population below poverty line is 3.06 lakh. SC/ ST

population accounts for 50.29% of the total population in Dhemaji district. Tribal Development Block is densely populated with tribals. The development of the tribals are given prior importance these days. Different Government sponsored programmes are oriented towards the development of these communities. The Central and the State Government have taken various steps for upliftment of the economic condition of the Scheduled Caste and Scheduled Tribes population through various Government programmes. Despite these efforts, the economic and social developments of this section of the population have not come up to the desired level. In order to quicken the pace of development, Government of India has already launched special projects/programmes for scheduled caste and scheduled tribes people through the Scheduled Caste and Scheduled Tribe Development Corporation by promoting family oriented schemes under agriculture and allied activities, Small Scale Industries and business & service sectors.

Women account for 48.40 per cent of the total population of 5.69 lakh in the district. But there are not enough facilities for women and children in the district.

Demographic features:

The major component of a society is the human resource. The development of human resource is one of the basic factor which determines the development of the rural economy. The human resources appears to be most critical factor, the utilization of which depends upon the age-group composition, skilled formation and entrepreneurial ability. There is a growing body of opinion that the rapid human capital formation is a necessary pre condition of economic growth and development. A country or a region may possess abundant natural and physical resources including capital but unless the formation and development of human capital the country cannot make progress. It has special significance if the families belong to a special tribe. Manpower plays an important role in upliftment of economic status of a family. The demographic feature of the sample households has been collected to examine their population structure. District wise distribution of population of the sample households by age and sex is worked out and presented in Table - 2.1(a) and Table -2.1(b).

Table 2.1(a)**Distribution of Population according to Age-groups
and Sex in Jorhat District**

Age Group	Male	Female	Total	Percentage
Below 15 Yrs.	28	26	54	19.57
15 ---- 25	31	28	59	21.38
25 ----- 35	26	23	49	17.75
35 ----- 45	23	22	45	16.30
45 ----- 55	18	15	33	11.96
55 ----- 65	17	14	31	11.23
65 & above	3	2	5	1.81
Total	146 (52.90)	130 (47.10)	276 (100.00)	100.00

Note: Figures in Parentheses indicates percentage to total Population

In Jorhat district total number of family members of the sample households is 276 comprising of 52.90 per cent (146) males and 47.10 per cent (130) females. There are 19.57 per cent population below 15 years of age group and 1.81 per cent in 65 and above age group. The percentage of working population to the total population is worked out at 78.62. The sex ratio is found at 890 female per thousand male which is lower than the State average of 934 in 2001 census.

In Dhemaji district total number of family members of the sample households is 332 comprising of 55.42 per cent (184) males and 44.58 per cent (148) females and 23.49 per cent population below 15 years of age group and 0.90 per cent in 65 and above age group. The population between the age group of 15 years to 65years is accounted at 75.61 per cent. The sex ratio is worked out at 804 females per thousand males which is considerably lower than the State average.

Table 2.1(b)

**Distribution of Population according to Age-groups
And Sex in Dhemaji District**

Age Group	Male	Female	Total	Percentage
Below 15 Yrs.	41	37	78	23.49
15 ---- 25	35	31	66	19.88
25 ---- 35	32	28	60	18.07
35 ---- 45	29	25	54	16.27
45 ---- 55	24	18	42	12.65
55 ---- 65	21	8	29	8.73
65 & above	2	1	3	0.90
Total	184	148	332	100.00
	(55.42)	(44.58)	(100.00)	

Note: Figures in Parentheses indicates percentage to total Population

Educational Status :

Education is one of the major parameters of human development of a society. Educational attainment of population is considered as one of the basic elements which determines the quality of manpower. Economic upliftment of a family is highly related to educational status of family members. Their level of awareness, knowledge and acceptability to new technology is, by and large depends on their level of education.

Distribution of population of the sample households according to literacy levels is worked out and presented in Table 2.2(a) and Table 2.2(b) for Jorhat district and Dhemaji district respectively.

Table 2.2(a) show that in Jorhat district 94.59 per cent of the total population of the sample households are literate and 5.41 per cent are illiterate. Out of total literate persons, 13.63 per cent comprising 15 males and 14 females are up to

Table: 2.2 (a)
Educational Status of the Sample Beneficiary Households in Jorhat District by Age-Groups

Age Groups	Illiterate		Lit. up to Primary		Up to M.E.Std.		Up to High School Std.		H.S.L.C. Passed		H.S. Passed		Graduate Level		Post Graduate & Above		Total	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
15 --- 25 Yrs.	0	0	2	1	3	2	9	15	7	6	6	1	3	2	1	1	31	28
25 --- 35 Yrs.	0	0	3	4	4	3	7	5	5	4	5	5	2	2	1	1	26	23
35 --- 45 Yrs.	1	1	5	5	5	3	6	6	3	4	1	2	1	1	1	0	23	22
45 --- 55 Yrs.	0	2	2	2	4	4	3	3	5	3	3	1	1	0	0	0	18	15
55 --- 65 Yrs.	3	3	3	1	3	6	4	2	2	1	2	1	0	0	0	0	17	14
65 & above	1	1	0	1	0	0	2	0	0	0	0	0	0	0	0	0	3	2
Total	5	7	15	14	19	18	31	31	22	17	16	10	7	5	3	2	118	104

Note: Population under 15 years are not considered.

Table:2.2 (b)
Educational Status of the Sample Beneficiary Households in Dhemaji District by Age-Groups

Age Groups	Illiterate		Lit. up to Primary		Up to M.E.Std.		Up to High School Std.		H.S.L.C. Passed		H.S. Passed		Graduate Level		Post Graduate & Above		Total	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
15 --- 25 Yrs.	0	0	1	1	6	4	11	13	8	7	5	4	3	2	1	0	35	31
25 --- 35 Yrs.	0	0	3	5	4	6	7	5	7	6	5	3	4	2	2	1	32	28
35 --- 45 Yrs.	1	1	4	5	6	4	8	8	4	5	3	1	2	1	1	0	29	25
45 --- 55 Yrs.	0	1	4	3	5	8	7	2	4	2	2	1	2	1	0	0	24	18
55 ---65 Yrs.	1	2	3	1	3	2	6	1	6	1	2	1	0	0	0	0	21	8
65 & above	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	1
Total	3	4	16	16	24	24	39	29	29	21	17	10	11	6	4	1	143	111

Note: Population under 15 years are not considered.

primary level, 16.67 per cent including 19 males and 18 females up to M.E standard, 27.93 per cent comprising 50 per cent males and 50 per cent females are up to high school standard, 17.57 per cent are H.S.L.C passed, 11.71 per cent H.S passed, 5.41 per cent graduate and only 2.25 per cent have education up to post graduate level.

In Dhemaji district 2.76 per cent population are illiterate and 97.24 per cent are literate. Out of total literate persons ;12.60 per cent are up to primary level, 18.90 per cent up to M.E standard, 26.77 per cent up to high school standard, 19.68 per cent are H.S.L.C. passed, 10.63 per cent H.S. passed, 6.69 per cent graduate and only 1.97 per cent population has studied up to post graduate level.

Table indicates sufficiently that although overall educational level in the sample is found satisfactory, but its quality and standard are observed to be poor.

There are some notable deficiencies in the standard of education of the people in both the study area. So far as in attaining the professional qualification or higher education is concerned, poor financial condition is one of the basic constraints in case of large majority of the people followed by inadequate educational infrastructural facilities for higher education. School dropouts are observed to be quite substantial and hence the population in the working age groups is engaged in agriculture and allied activities and thus underemployment situation is visible in agriculture sector.

Economic Status:

The number of persons covered by the sample survey have been classified as worker or earner, helper or earning dependent and non-worker or dependent. Workers are usually in the age group of 15 to 60 years of age. The non-workers are usually in the age group of below 15 years and above 60 years of age. It may be mentioned here that persons below working age group and above 60 years of age sometimes participate in different income earning economic activities if adult working population are not adequate in the family. However, such population are negligible in the sample.

Economic status of family members of the sample households by age groups and sex is worked out and presented in Table -2.3 (a) and Table-2.3(b). In

Jorhat district it was found that 36.23 per cent comprising 22.10 per cent males and 14.13 per cent females are earner, 29.71 percent comprising 15.94 per cent males and 13.77 per cent females earning dependent and rest 34.06 per cent comprising of 14.86

Table:2.3 (a)
Distribution of Sample Households According to Economic Status in Jorhat District

Age Groups (Years)	Earner			Earning Dependent			Dependent			Total		Grand Total
	M	F	T	M	F	T	M	F	T	M	F	
Below 15	-	-	-	8	3	11	20	23	43	28	26	54
15 --- 25	4	-	4	12	9	21	15	19	34	31	28	59
25 --- 35	19	12	31	6	8	14	1	3	4	26	23	49
35 --- 45	16	14	30	7	6	13	-	2	2	23	22	45
45 --- 55	15	10	25	3	5	8	-	-	-	18	15	33
55 ---65	7	3	10	7	6	13	3	5	8	17	14	31
65 & above	-	-	-	1	1	2	2	1	3	3	2	5
Total	61	39	100	44	38	82	41	53	94	146	130	276
P.C. to Total	22.10	14.13	36.23	15.94	13.77	29.71	14.86	19.20	34.06	52.90	47.10	100.00

M--> Male F--> Female T--> Total

per cent males and 19.20 per cent females are non worker.

In Dhemaji district out of the total population of 332 persons, 37.05 percent comprising 23.49 per cent males and 13.55 per cent females are earner, 31.02 percent comprising 15.36 per cent males and 15.66 per cent females are earning dependent, and remaining 31.93 percent i.e.16.57 per cent males and 15.36 per cent females are dependent or non- worker. The sex composition of helpers and non-workers are by an large same in the Dhemaji district sample as shown in the Table.

Table:2.3 (b)
Distribution of Sample Households According to Economic Status in Dhemaji District

Age Groups (Years)	Earner			Earning Dependent			Dependent			Total		Grand Total
	M	F	T	M	F	T	M	F	T	M	F	
Below 15	-	-	-	9	13	22	32	24	56	41	37	78
15 --- 25	5	-	5	13	10	23	17	21	38	35	31	66
25 --- 35	25	16	41	6	11	17	1	1	2	32	28	60
35 --- 45	21	14	35	8	10	18	-	1	1	29	25	54
45 --- 55	20	12	32	4	6	10	-	-	-	24	18	42
55 ---65	7	3	10	10	2	12	4	3	7	21	8	29
65 & above	-	-	-	1	-	1	1	1	2	2	1	3
Total	78	45	123	51	52	103	55	51	106	184	148	332
P.C. to Total	23.49	13.60	37.05	15.36	15.66	31.02	16.57	15.36	31.93	55.42	44.58	100.00

M--> Male F--> Female T--> Total

Occupational Pattern:

The occupational distribution of population are worked out according to primary and secondary occupations. The main occupation of male members of the working population group is agriculture and the main occupation of female members is weaving. The occupational distribution of working population of the family members of the sample households are presented in Table -2.4(a) and Table -2.4(b). Table -2.4(a) shows that in Jorhat district out of the total working population 11.00 percent male population are primarily engaged in agriculture, 8.00 percent comprising of 75.00 percent male and 25.00 per cent female are agricultural labour, 14 percent (85.71 per cent male 14.29 per cent female) are non agricultural labour, 12.00 percent male population are engaged in livestock, forestry and Fishery, 28.00

percent female population are engaged in weaving, 7.00 percent in other household industries, 8.00 percent in services and 12.00 percent engaged themselves in trade, commerce and transport. In Jorhat district sample 94 workers found to have perused some activities as secondary occupation as shown in the Table -2.4(a).

Table: 2.4 (a)
Distribution of Working Population of the Sample Beneficiary
Households in Jorhat District by Category of Works

Category of Works	Primary			Secondary		
	Male	Female	Total	Male	Female	Total
Cultivators	11	0	11 (11.00)	18	6	24 (25.53)
Agricultural Labour	6	2	8 (8.00)	16	6	22 (23.40)
Non - Agril. Labour	12	2	14 (14.00)	6	3	9 (9.57)
Livestock, Forestry & Fishery	9	3	12 (12.00)	8	10	18 (19.15)
Weaving	0	28	28 (28.00)	0	11	11 (11.70)
Other Household Cottage Industries	5	2	7 (7.00)	4	9	13 (13.83)
Service	6	2	8 (8.00)	3	1	4 (4.26)
Trade, Commerce & Transport	12	0	12 (12.00)	4	0	4 (4.26)
Total Workers	61	39	100 (100.00)	59	35	94 (100.00)
Earning Dependent	44	38	82			
Dependent	41	53	94			
Total Population	146	130	276			

Note: Figures in Parentheses indicate Percentage to total Workers.

In Dhemaji district, of the total working population 27.64 percent male are primarily engaged in agriculture; 8.94 percent comprising of 7 male and 4 female in agricultural labour, 7.32 percent male are engaged as non agricultural labour,

4.07 percent comprising of 3 male and 2 female are engaged in livestock and fishery, 30.89 percent female members are engaged in weaving, 3.25 percent comprising of

Table: 2.4 (b)

Distribution of Working Population of the Sample Beneficiary Households in Dhemaji District by Category of Works

Category of Works	Primary			Secondary		
	Male	Female	Total	Male	Female	Total
Cultivators	34	0	34 (27.64)	7	11	18 (16.36)
Agricultural Labour	7	4	11 (8.94)	8	7	15 (13.64)
Non - Agril. Labour	9	0	9 (7.32)	10	4	14 (12.73)
Livestock, Forestry & Fishery	3	2	5 (4.07)	18	14	32 (29.09)
Weaving	0	38	38 (30.89)	0	7	7 (6.36)
Other Household Cottage Industries	3	1	4 (3.25)	8	3	11 (10.00)
Service	7	0	7 (5.69)	3	1	4 (3.64)
Trade, Commerce & Transport	15	0	15 (12.20)	14	2	16 (14.55)
Total Workers	78	45	123 (100.00)	68	49	117 (100.00)
Earning Dependent	51	52	103			
Dependent	55	51	106			
Total Population	184	148	332			

Note: Figures in Parentheses indicate Percentage to total Workers.

75.00 percent male and 25.00 percent female are engaged in other household cottage industry 5.69 percent per cent males engaged in services and 12.20 percent males are engaged in trade, commerce & transport. Of the total working population 117 number of workers are found to have pursued some economic activities as secondary occupation as shown in the Table- 2.4(b).

Land holding pattern of the Sample Household :

The pattern of land ownership and operational holding plays an important role in the determination of economic condition of the people. So, it is considered as an important aspect of this study. The operational holdings of the families are the true indicator of the economic condition of the family, as the level of employment and income are mainly depend upon the size of operational holdings. So far as land holdings are concerned, operational holdings is more important in determination of economic condition of the sample farmers. The concept of operational holding used in the study is owned land under personal cultivation plus land taken on leased and mortgaged- in. It may be noted that land is usually leased- in for cultivation purposes by the farm households when there is adverse land-man ratio, bullock labour, farm machineries etc. It is the situation when the owned land available for cultivation is not adequate to meet the family income and for better utilization of other resources available with the farmer. Tables -2.5(a) & Tables -2.5(b) show the land holding pattern of the sample households in Jorhat and Dhemaji districts respectively.

Table:2.5 (a)
Land Holding Pattern of the Sample Households in Jorhat
District by Farm Size Groups

Farm Size	HHs.	Own Land		Leased in Land		Mortgaged in		Total	Ave. Size of Holding
		Irr	Un-irr	Irr	Un-irr	Irr	Un-irr		
Below 1.00 ha.	24	0	9.96	0	3.11	0	0	13.07	0.54
1.00 --- 2.00 ha.	18	0	25.3	0	0	0	2.25	27.55	1.53
2.00 --- 4.00 ha.	7	4.20	14.97	2.56	0	0	0	21.73	3.10
4.00 ha. & above	1	3.35	1.56	0	0	0	0	4.91	4.91
Total	50	7.55	51.79	2.56	3.11	0.00	2.25	67.26	1.35

Irr ---> Irrigated

Un-irr----> Un-irrigated

In Jorhat district the total sample of 50 households possessed 67.26 hectares of land for cultivation. Of this, 59.34 hectares are own land, 5.67 hectares leased in land and rest 2.25 hectares are mortgaged in land. The average size of

holding is worked out at 1.35 hectares which is higher than the State average operational holding of 1.15 hectares according to 2001 census.

In Dhemaji district in a total sample of 50 households 72.39 hectares are own land comprising 13.94 hectares irrigated and 58.45 hectares un irrigated , 2.45 hectares are leased in land and 3.37 hectares are mortgaged in land . The average size of holding is 0.58 hectares, 1.52 hectares, 2.76 hectares and 4.39 hectares for marginal, small, medium and large farm size groups respectively. The over all average size of holding is

Table:2.5 (b)
Land Holding Pattern of the Sample Households in Dhemaji
District by Farm Size Groups

Farm Size	HHs.	Own Land		Leased in Land		Mortgage in		Total	Ave. Size of Holding
		Irr	Un-irr	Irr	Un-irr	Irr	Un-irr		
Below 1.00 ha.	21	0	9.83	0	2.45	0	0	12.28	0.58
1.00 --- 2.00 ha.	14	0	17.96	0	0	0	3.37	21.33	1.52
2.00 --- 4.00 ha.	13	8.59	27.24	0	0	0	0	35.83	2.76
4.00 ha. & above	2	5.35	3.42	0	0	0	0	8.77	4.39
Total	50	13.94	58.45	0	2.45	0.00	3.37	78.21	1.56

Irr---> Irrigated

Un-irr----> Un-irrigated

worked out at 1.56 hectares which is higher than the State average size of holdings.

Utilisation of Land by Size Groups of Sample Households:

Table -2.6(a) and Table -2.6(b) show the utilization of land for different purposes by the sample farmers according to farm size groups of operational holdings. It is seen from the Table-2.6(a) that in Jorhat district of the total land possessed by the sample households is 78.86 hectares of which 67.26 hectares (85.29 per cent)are cultivable land and 11.60 hectares (14.71 per cent) uncultivable land. Of the total cultivable holdings, 60.84 (90.45 per cent) hectares are under field crops and 6.42 (9.55 per cent) hectares are under other miscellaneous crops. Of the total uncultivable land, 5.98 hectares are under homestead and courtyard, 3.75 hectares under

Table:2.6 (a)
Utilisation of Land by Farm Size Groups in Jorhat District

Farm Size	HHs	Cultivable Land			Un- Cultivable Land					Grand Total
		Field Crop	Other Misc. Crops	Total	Homestead & Courtyard	Misc. tree Crops & Groves	Grazing Land	Fallow Land	Total	
Below 1.00 ha.	24	11.39	1.68	13.07	2.64	1.20	0	0	3.84	16.91
1.00 --- 2.00 ha.	18	25.81	1.74	27.55	2.17	1.44	0	0.39	4.00	31.55
2.00 --- 4.00 ha.	7	19.41	2.32	21.73	0.98	0.91	0.21	0.67	2.77	24.50
4.00 ha. & above	1	4.23	0.68	4.91	0.19	0.20	0.34	0.26	0.99	5.90
Total	50	60.84	6.42	67.26	5.98	3.75	0.55	1.32	11.60	78.86

Note: 1. Fallow Land includes Permanent fallow and Current Fallow

2. Other Misc. Crops includes Vegetables and other Horticultural Crops

Table:2.6 (b)
Utilisation of Land by Farm Size Groups in Dhemaji District

Farm Size	Cultivable Land				Un- Cultivable Land						Grand Total
	HHS	Field Crop	Other Misc. Crops	Total	Homestead & Courtyard	Misc.tree Crops & Groves	Grazing Land	Fallow Land	Total		
Below 1.00 ha.	21	10.76	1.52	12.28	2.31	1.05	0	0.08	3.44	15.72	
1.00 --- 2.00 ha.	14	20.10	1.23	21.33	1.69	1.12	0	0.34	3.15	24.48	
2.00 --- 4.00 ha.	13	30.67	5.16	35.83	1.82	1.69	0.36	0.70	4.57	40.40	
4.00 ha. & above	2	7.57	1.20	8.77	0.37	0.40	0.58	0.65	2.00	10.77	
Total	50	69.10	9.11	78.21	6.19	4.26	0.94	1.77	13.16	91.37	

Note: 1. Fallow Land includes Permanent fallow and Current Fallow

2. Other Misc. Crops includes Vegetables and other Horticultural Crops

miscellaneous crops and groves, 0.55 hectares under grazing land and remaining 1.32 hectares under fallow land.

In Dhemaji district of the total operational holdings of 78.21 hectares 69.10 (88.35 percent) hectares are under field crops and 9.11 (11.65 per cent) hectares are under miscellaneous crops. Of the total uncultivable land, 6.19 hectares are under homestead and courtyard, 4.26 hectares under miscellaneous crops and groves, 0.94 hectares under grazing land and remaining 1.77 hectares under fallow land.

Cropping Pattern :

The cropping pattern and crops grown by the sample families in Jorhat and Dhemaji district are shown in Table -2.7 (a) and Table -2.7 (b). The cropping pattern and crops grown by the sample families do not exhibit much difference because of the fact that such crops are grown by all the farmers in the State since time immemorial. In the sample area, there is no substitution of traditional crops by more remunerative ones. Cultivation of winter paddy after harvesting of summer paddy and cultivation of rabi vegetables as a second crop after harvesting of autumn/winter paddy have been found in case of the sample farmers. Traditionally, paddy dominates the cropping pattern in the State. Sali paddy or winter paddy occupied dominant place both under irrigated and un-irrigated conditions. It is seen from the table that in both the districts major portion of the land are allocated to paddy cultivation and vegetable cultivation. The sample families of the study area also allocated some parts of land for growing some miscellaneous crops like potato, mustard, pulses and vegetables cultivation however, the area allocated to such miscellaneous crops are almost negligible.

Area, Production and Yield of field crops :

In Jorhat district paddy (Ahu & Sali) is cultivated in both under irrigated and rainfed condition. The average yield of HYV Ahu paddy is 3,590 kg/ha in irrigated condition and in un-irrigated condition the yield of paddy varied from 3,232 kg/ha to 3,590 kg/ha with an average yield of 3,316 kg/ha. The yield of local Sali paddy in un-irrigated condition varied from 2,714 kg/ha to 2,937 kg/ha with an average yield of 2,772 kg/ha. The average yield of HYV Sali paddy in irrigated

Table : 2.7(a)
Crop Production Details of Sample Households in Jorhat District by Farm size groups

(Area --> Hectare, Prodn. ---> qtl., Yield ----> Kg / ha.)

Farm Size (Ha.)	HHs	Ahu Paddy			Sali Paddy			Potato	Mustard	Pulses	Vegetables		Grand Total	Cropping Intensity		
		Local		HYV	Local		HYV				Un. Irr.	Un. Irr.			Un. Irr.	Un. Irr.
		Irr.	Un. Irr.		Irr.	Un. Irr.										
Below 1.00 ha.	A	24	0	2.49	0	3.25	0	3.29	0	7.75	0.78	0	1.98	150		
	P			80.05		108.71		96.63		236.84	43.21		108.17			
	Y			3,215		3,345		2,937		3,056	5,540		5,463			
1.00-2.00 ha.	A	18	0	0.85	0	12.76	0	4.65	0	18.91	0.93	0.43	1.68	147		
	P			26.04		412.45		126.70		554.06	51.17	2.11	89.19			
	Y			3,064		3,232		2,725		2,930	5,502	491	5,309			
2.00-4.00 ha.	A	7	0	0	6.76	3.54	0	5.54	4.20	9.43	0	0.45	1.04	144		
	P				247.47	127.10		150.34	130.26	273.66		2.00	55.04			
	Y				3,661	3,590		2,714	3,101	2,902		444	5,292			
4.00 & above	A	1	0	0	1.35	0	0	0	3.35	1.56	0	0	0.68	141		
	P				43.69				102.99	44.51			34.14			
	Y				3,236				3,074	2,853			5,021			
Total	A	50	0	3.34	8.11	19.55	0	13.48	7.55	37.65	1.71	0.88	5.38	146		
	P			106.09	291.16	648.26		373.67	233.25	1109.07	94.38	4.11	286.54			
	Y			3,176	3,590	3,316		2,772	3,089	2,946	5,519	467	5,326			

Table : 2.7 (b)
Crop Production Details of Sample Households in Dhemaji District by Farm size groups
 (Area -->Hectare, Prodn. --->qtl. , Yield ---> Kg / ha.)

Farm Size	HHs	Ahu Paddy				Sali Paddy				Potato	Mustard	Pulses	Vegetables	Grand Total	Cropping Intensity
		Local		HYV		Local		HYV							
		Irr.	Un. Irr.	Irr.	Un. Irr.	Irr.	Un. Irr.	Irr.	Un. Irr.						
Below 1.00 ha	A	21	0	0	6.20	0	2.49	0	7.95	0.69	0.32	0	1.06	18.71	152
	P				237.75		77.71		264.28	39.94	1.66		55.35		
	Y				3835		3121		3324	5788	519		5222		
1.00--2.00 ha.	A	14	0	7.26	0	5.32	0	4.65	0	12.95	0.28	0	1.08	31.84	149
	P			238.67	178.46		138.13		400.43	15.97	1.49		51.76		
	Y			3287	3355		2971		3092	5704	497		4793		
2.00--4.00 ha.	A	13	0	0	4.63	9.23	0	6.85	8.59	15.35	1.67	0.43	4.85	52.36	146
	P				177.52	304.23		182.55	279.52	460.98	93.99	2.39	227.32		
	Y				3834	3296		2665	3254	3003	5628	556	4687		
4.00 & above	A	2	0	0	4.95	0.67	0	0	5.35	0.76	0.25	0	0.66	12.64	144
	P				184.63	20.96			161.68	20.57	13.91		30.69		
	Y				3730	3128			3022	2707	5564		4650		
Total	A	50	0	7.26	9.58	21.42	0	13.99	13.94	37.01	2.89	1.38	7.65	115.6	941
	P			238.67	362.15	741.40		398.39	441.20	1146.26	163.81	6.81	365.12		
	Y			3287	3780	3461		2848	3165	3097	5668	493	4773		

condition is 3,089 kg/ha. In an irrigated condition the yield of HYV Sali paddy varied from 2,853 kg/ha to 3,056 kg/ha with an average yield of 2,946 kg/ha. It is seen that the yield of paddy is higher in the size group of below 1 hectare in both irrigated and rainfed condition. The average yield of other field crops like potato, mustard, pulses and vegetables are 5,519 kg/ha, 467 kg/ha, 506 kg/ha and 5,326 kg/ha respectively.

In Dhemaji district the average yield of local Ahu paddy in an irrigated condition is 3,287 kg/ha. The average yield of HYV Ahu paddy is 3,780 kg/ha (in irrigated condition) and 3,461 kg/ha in an irrigated condition. The yield of local Sali paddy in an irrigated condition varied from 2,665 kg/ha to 3,121 kg/ha with an overall average yield of 2,848 kg/ha. The average yield of HYV Sali paddy in irrigated condition is 3165 kg/ha. In an irrigated condition the yield of HYV Sali paddy varied from 2,707 kg/ha to 3,324 kg/ha with an overall average yield of 3,097 kg/ha. The yield of paddy in both rainfed and irrigated condition is higher in the size group of below 1.00 hectare. The average yield of potato, mustard, pulses and vegetables are 5,668 kg/ha, 493 kg/ha, 556 kg/ha and 4,773 kg/ha respectively.

Income from various sources:

Distribution of annual income from various sources by farm size group in both the districts are worked out and presented in Table -2.8(a) and Table -2.8(b) respectively. Though the main source of income of the sample households is weaving yet some of the sample households managed to earn some additional income from some other sources also. Total income earned by the sample families from various sources in Jorhat district is Rs.5,050,499 out of which 20.27 per cent comes from cultivation, 7.56 per cent from wage labour, 7.54 per cent from livestock and fishery, 47.31 per cent from weaving, 2.62 per cent from other household cottage industries, 13.94 per cent from service and 0.76 per cent from trade and commerce and transport. It is seen that per cent of income from weaving is highest (47.31) followed by cultivation (20.27), service (15.94) wage labour (7.56) livestock (7.54), other household cottage industries and Trade (0.76) in Jorhat district sample.

In Dhemaji district sample the total income of 50 households are Rs.4,898,520 out of which major portion of income comes from weaving (57.15)

Table:2.8 (a)
Distribution of Annual Income by Sources of Sample Households in Jorhat District
(Value in Rs.)

Farm Size (Ha.)	HHs	Sources of Income										Total	Annual HH Income
		Cultivation	Wage Labour	Livestock, Fore-stry & Fishery	Weaving	Other Household Cottage Industries	Service	Trade, Com. & Transport	Annual HH Income				
Below 1.00	24	467,736 (20.37)	201,600 (8.78)	122,400 (5.33)	1,116,034 (48.57)	41,600 (1.81)	336,600 (14.66)	11,220 (0.49)	2,297,190 (100.00)	90,476			
1.00--2.00	18	370,224 (19.93)	180,000 (9.69)	138,120 (7.43)	878,467 (47.28)	46,235 (2.49)	230,400 (12.40)	14,400 (0.78)	1,857,846 (100.00)	103,214			
2.00--4.00	7	152,852 (19.58)	0	90,440 (11.58)	351,859 (45.07)	35,865 (4.59)	136,800 (17.52)	12,870 (1.65)	780,686 (100.00)	118,669			
4.00 & above	1	32,989 (28.64)	0	30,030 (26.07)	43,528 (37.79)	8,630 (7.49)	0	0	115,177 (100.00)	140,177			
Total	50	1,023,712 (20.27)	381,582 (7.56)	380,940 (7.54)	2,389,709 (47.31)	132,314 (2.62)	703,755 (13.94)	38,487 (0.76)	5,050,499 (100.00)	100,003			

Note: Figures in Parenthesis indicate percentage to total annual Household Income

Table:2.8 (b)
Distribution of Annual Income by Sources of Sample Households in Dhemaji District
(Value in Rs.)

Farm Size (Ha.)	Sources of Income										Annual HH Income
	HHs	Cultivation	Wage Labour	Livestock, Fore- stry & Fishery	Weaving	Other Household Cottage Industries	Service	Trade, Com. & Transport	Total		
Below 1.00	21	388,269 (20.84)	144,000 (7.73)	96,000 (5.15)	1,127,141 (60.49)	9,000 (0.48)	91,800 (4.93)	7,140 (0.38)	1,863,350 (100.00)	88,731	
1.00--2.00	14	175,952 (12.23)	86,400 (6.01)	144,000 (10.01)	921,252 (64.05)	6,300 (0.44)	100,800 (7.01)	3,600 (0.25)	1,438,304 (100.00)	102,736	
2.00--4.00	13	270,868 (19.64)	0	188,760 (13.68)	705,250 (51.12)	14,560 (1.06)	181,800 (13.18)	18,270 (1.32)	1,379,508 (100.00)	106,116	
4.00 & above	2	84,978 (39.03)	0	21,525 (9.89)	46,000 (21.13)	0	65,230 (4.73)	0	217,733 (100.00)	108,867	
Total	50	919,975 (18.78)	230,386 (4.70)	450,246 (9.19)	2,799,446 (57.15)	29,858 (0.61)	439,600 (8.97)	29,008 (0.59)	4,898,520 (100.00)	97,985	

Note: Figures in Parenthesis indicate percentage to total annual Household Income

followed by cultivation (18.78 per cent), livestock, forestry & fishery (9.19 per cent), service (8.97 per cent), wage labour (4.70 per cent) and other household cottage industries (0.59 per cent). The gross income found to have varied from Rs. 2,17,733 to Rs. 1,863,350. The per household income increases with the increase in the size of farm.

It can be concluded that the sample weaver families are almost absolutely dependent on weaving as their principal sources of income.

Chapter-III

Economic Viability of the Developmental Schemes designed for Tribal Women

In rural areas women are mainly working in agriculture and rural based allied activities. Of late, a number of women are coming forward to accept the assistance by the central and State Governments under different non-agricultural development schemes to improve their economic conditions. A number of schemes have been implemented through District Industrial Board, Integrated Rural Development Project etc. for economic liberalization of women through self employment programme.

The present study is concentrated with the schemes-

- (i) Cotton yarn and Looms (ii) 'Muga' kit and (iii) 'Eri' kit provided by the Tribal Development Authority and Social Welfare Department.

Table: 3.1
Distribution of aids by the Government among the Beneficiary Weavers

Scheme----->	HHs	No./Qty (Kg.)	Value (in Rs.)
Cotton Weaver:			
Loom	8	8	14,560
Cotton Thread	32	1,396	253,897
Muga Weaver:			
Chalani	23	23	1,104
Dola	15	15	825
Net	30	30	7,950
Eri Weaver:			
Hand Lamp	20	20	1970
Dola	20	20	900
Dabri	18	18	864
Sprayer	12	12	6,240

Table-3.1 shows the distribution of aids provided by the Government among the beneficiary weavers. Out of 100 sample beneficiary weavers, 40 sample households were provided 139.60 kg of cotton yarn and 8 number of looms, 40 house holds were provided 'Muga' kit ('Chalani', 'Dola' and 'Net') and the remaining 20 household were provided 'Eri' kit (Hand lamp, 'Dola', 'Dabri' and Sprayer) by the State Government.

Tools and implements required for Cotton Weaving:

Some assistances were given by Government Departments to the

Table:3.2
Tools and Implements Required for Cotton Weaving by the
Sample Beneficiary Households (Value in Rs.)

Name of Appliances	Home Produced		Purchased		Given by Govt.		Total	
	No.	Value	No.	Value	No.	Value	No.	Value
1. Shed	54	135,000 (46.74)	0	0	0	0	54	135,000 (29.44)
2. Loom	66	120,120 (41.59)	68	123760 (81.61)	8	14,560	142	258,440 (56.36)
3. Ugha	1,320	19,800 (6.86)	820	12300 (8.11)	0	0	2,140	32,100 (7.00)
4. Cheraki	184	3,496 (1.21)	89	1691 (1.12)	0	0	273	5,187 (1.13)
5. Machu	426	7,668 (2.65)	0	0	0	0	426	7,668 (1.67)
6. Rush	0	0 0.00	158	7900 (5.21)	0	0	158	7,900 (1.72)
7. Puttal	405	810 (0.28)	0	0	0	0	405	810 (0.18)
8. Kathi	1,136	1,136 (0.39)	0	0	0	0	1,136	1,136 (0.25)
9. Holi	738	789 (0.27)	0	0	0	0	738	789 (0.17)
10. Charkha	0	0	30	6000 (3.96)	16	3,520	46	9,520 (2.08)
Total		288,819 (100.00)		151651 (100.00)		18,080		458,550 (100.00)

sample beneficiary weavers. But the other implements required for cotton weavers such as – loom shed, ‘ugha,’ ‘chereki’, loom, ‘machu’, ‘rash’, ‘puttal’, ‘kathi’, ‘holi’ and ‘charkha’ etc. were arranged by the sample households themselves. Only cotton yarn and looms are supplied by the Government Department. Tools and implements required for cotton weaving is shown in Table-3.2. Total cost of home produced implements are Rs.288,819.00, the value of purchased items are Rs. 151,651.00 and the value of items given by government department are Rs. 18,080.00. It is seen that the cost of shed and looms are higher than other implements. The total cost of looms ; both home produces and purchased are Rs. 243,880.00 where the cost of looms given by the Government Department is only Rs. 14,560.00.

Tools and implements required for Muga Weaving:

Raw materials and implements required for preparation of ‘Muga’ yarn and ‘Muga’ cloths are- shed, ‘saja’, ‘kharika’ , ‘chalani’, ‘Dola’, ‘Khora’, ‘Dhenu’, ‘Pachi’, ‘Khorahi’, net, farm shed and looms. Tools and implements required for ‘Muga’ weaving are presented in Table- 3.3. Total value of these implements are Rs. 389,319.00 of which 65.48 percent home produced 31.98 percent purchased and 2.54 per cent government assistance. It is seen that of the total expenditure of home produced and purchased implements Government assistance is very nominal. Of the total home produced expenditure; 44.72 per cent spent on shed, 36.75 per cent on loom, 2.26 per cent on purchasing ‘saja’ and remaining 16.27 per cent cost are incurred for purchasing ‘kharika’, ‘chalani’ , ‘dola’, ‘khora’, ‘dhenu’, ‘pachi’, ‘kharahi’ and farm shed. The sample weavers households purchase only loom, ‘pachi’, kharahi’, ‘chalani’, ‘dola’ and net from the nearby markets or from other persons which constituted 31.98 per cent of total expenditure.. The Government provided ‘dola’, ‘chalani’ and net consisting only 2.54 per cent of the total expenditure of Rs. 3.89,319.00. The value of home produced tools and implements constituted the major portion of the total expenditure , i.e.65.48 per cent.

Table:3.3
Tools and Implements Required for Muga Weaving by the
Sample Beneficiary Households

Name of Appliances	Home Produced		Purchased		Given by Govt.		Total	
	No.	Value	No.	Value	No.	Value	No.	Value
1. Shed	40	114000 (44.72)	0	0	0	0	40	114000 (29.88)
2. Loom	44	93676 (36.75)	52	110708 88.91	0	0	96	204384 (52.50)
3. Saja	48	5760 (2.26)	0	0	0	0	48	5760 (1.48)
4. Kharika	956	573.6 (0.23)	0	0	0	0	956	573.6 (0.15)
5. Chalani	56	2688 (1.05)	43	2064 (1.66)	23	1104 (11.18)	122	5856 (1.50)
6. Dola	87	4785 (1.88)	17	935 (0.75)	15	825 (8.35)	119	6545 (1.68)
6. Khora	57	2565 (1.01)	0	0	0	0	57	2565 (0.66)
7. Dhenu	43	1075 (0.42)	0	0	0	0	43	1075 (0.28)
8. Pachi	19	1235 (0.48)	41	2665 (2.14)	0	0	60	3900 (1.00)
9. Khorahi	22	660 (0.26)	42	1260 (1.01)	0	0	64	1920 (0.49)
10. Net	0	0	26	6890 (5.53)	30	7950 80.47	56	14840 (3.81)
11. Farm Shed	45	27900 (10.94)	0	0	0	0	45	27900 (7.17)
Total		254918 (100.00)		124522 (100.00)		9879 (100.00)	0	389319 (100.00)

Tools and implements required for Eri Weaving :

For preparation of 'Eri', yarn and 'Eri' cloths, shed, sprayer, hand lamp, bamboo 'Dola', bamboo 'Dabri', wooden shelf, Rush, loom, 'Kharika' etc are required. But Government department supplied only, one lamp, 'Dola'

and one sprayer to beneficiary households as muga kit.. Total value of such implements are Rs. 140,209 of which 43.56 per cent home produced, 49.33 per cent purchased and 7.11 per cent supplied by govt. department as shown in Table - 3.4.

Table:3.4
Tools and Implements Required for Eri Weaving by the
Sample Beneficiary Households

Name of Appliances	Home Produced		Purchased		Given by Govt.		Total	
	No.	Value	No.	Value	No.	Value	No.	Value
1. Shed	20	29,000 (47.49)	0	0	0	0	20	29000 (20.68)
2. Loom	15	24750 (40.53)	28	46,200 (66.80)	0	0	43	70950 (50.60)
3. Hand Lamp	0	0	14	1,400 (2.02)	20	1,970 (19.75)	34	3370 (2.40)
4. Sprayer	0	0	18	9,360 (13.53)	12	6240 (62.56)	30	15600 (11.13)
5. Bamboo Dola	26	1170 (1.92)	21	945 (1.37)	20	900 (9.02)	67	3015 (2.15)
6. Bamboo Dabri	87	3915 (6.41)	42	2,016 (2.91)	18	864 (8.66)	147	6795 (4.85)
7. Wooden Shelf	6	870 (1.42)	39	6,825 (9.87)	0	0	45	7695 (5.49)
8. Rush	24	1152 (1.89)	44	2,420 (3.50)	0	0	68	3572 (2.55)
9. Kharika	424	212 (0.35)	0	0	0	0	424	212 (0.15)
Total		61069 (100.00)		69,166 (100.00)		9974 (100.00)		140209 (100.00)

Raw materials required for preparation of Cotton Cloths :

To produce cotton cloths plain yarn and coloured yarn both are required. The quantity and value of yarns from various sources are presented in Table -3.5. Total quantity of yarns required for preparation cotton cloths in our sample are 3101.85 kg and the value is Rs. 471,161. Of the total quantity of 3101.85 kg. yarn, 55.00 percent is purchased from the market and 45 percent is supplied by govt. department.

Table:-3.5

Raw Materials Required for Sample Beneficiary Cotton Weavers in Cloths Production								
Raw Materials	Quantity	Value	Home Produced		Purchased From Market		Supplied By Government	
	(Kg)	(Rs.)	Quantity	Value	Quantity	Value	Quantity	Value
Plain Yarn	2,905.71	435,857	0	0	1,598.14	200,494	1,307.57	235,363
Colour Yarn	196.14	35,304	0	0	107.87	16,770	88.26	18,535
Total	3,101.85	471,161	0	0	1,706.01	217,264	1,395.83	253,897

Raw materials required for preparation of Muga Cloths:

To produce Muga cloths Muga yarn, coloured yarn and Guna are required.

The quantity and value of these materials are worked out and presented in Table - -3.6.

Table:-3.6

Raw Materials Required for Sample Beneficiary Muga Weavers in Cloths Production								
Raw Materials	Quantity	Value	Home Produced		Purchased From Market		Supplied By Government	
	(Kg)	(Rs.)	Quantity	Value	Quantity	Value	Quantity	Value
Muga Yarn	168.50	648,725	134.80	518,980	33.7	129,745	0	0
Colour Yarn	15.28	3,820	0	0	15.28	3,820	0	0
Guna	0.95	3,848	0	0	0.95	3,800	0	0
Total	184.73	656,393	134.80	518,980	49.93	137,365	0	0

The total quantity used by the sample households are 184.73 kg and the value is Rs. 6,56,393.00 of which 72.97 percent are home produced and 27.03 percent purchased from market.

Raw materials required for preparation of Eri Cloths:

Eri yarn required for preparation of Eri cloths are presented in Table - 3.7. The total quantity of Eri Yarn required in our sample is 306.41 kg of which 82.00 cent are home produced are 18 percent are purchased from market.

Table:-3.7
Raw Materials Required for Sample Beneficiary Eri Weavers in Cloths Production

Raw Materials	Quantity (Kg)	Value (Rs.)	Home Produced		Purchased From Market		Supplied By Government	
			Quantity	Value	Quantity	Value	Quantity	Value
Eri Yarn	306.41	142,481	251.26	116,834	55.15	25,647	0	0
Total	306.41	142,481	251.26	116,834	55.15	25,647	0	0

Production of different Cloths by the Sample Weavers :

The sample households are associated with production of different varieties of cotton cloths in their looms. These are- 'Mekhala', 'Chadar', Shirting, 'Gamusa' and many others. Total production of various types of cotton cloths and the value of these products are presented in Table -3.8. Total number of various cotton cloths prepared by the sample families are 20,319 numbers and the value is Rs. 2,921,706.

Table : 3.8
Production of Cotton Cloths of the Sample Households

Varity of Cloths	No. of Items		Keep for Family Members		Sale	
	Quantity	Value (Rs)	Quantity	Value (Rs)	Quantity	Value (Rs)
1 Mekhala	5,010	1,052,100	1,002	210,420	4,008	841,680
2. Chadar	3,758	977,080	752	195,416	3,006	781,664
3. Shirting	1,037	186,588	104	18,659	933	167,929
4. Gamusa	9,170	504,350	3,668	201,740	5,502	302,610
5. Others	1,344	201,588	202	30,238	1,142	171,350
Total		2,921,706		656,473		2,265,233

Note: Others includes Handkerchief, cloth wear etc.

Of the total product they sale 71.81 per cent and the rest 28.19 per cent is kept for use of family members.

Muga weaver prepares 'Riha', 'Mekhala', 'Chadar', Shirting and Saree in their looms. Total no of different cloths are 1,414 and the value is Rs. 1448,050. Of the total product they sale 87.27 percent and rest 12.73 percent keep for family

Table : 3.9
Production of Muga Cloths of the Sample Households

Varity of Cloths	No. of Items		Keep for Family Members		Sale	
	Quantity	Value (Rs)	Quantity	Value (Rs)	Quantity	Value (Rs)
1. Riha	355	468,600	32	44,800	323	423,800
2. Mekhala	655	412,650	122	85,400	533	327,250
3. Chadar	256	358,400	23	37,260	233	321,140
4. Shirting	102	61,200	1	650	101	60,550
5. Saree	46	147,200	2	46,900	44	100,300
Total	1,414	1,448,050		215,010		1,233,040

members as shown in Table -3.9. Eri weavers prepared 'Eri chadar', Shawl and others from Eri yarn. Total number of various 'Eri' cloths prepared by the sample

Table : 3.10
Production of Eri Cloths of the Sample Households

Varity of Cloths	No. of Items		Keep for Family Members		Sale	
	Quantity	Value (Rs)	Quantity	Value (Rs)	Quantity	Value (Rs)
1. Eri Chadar	430	365,500	48	40,800	382	324,700
2. Shawl	1,255	376,500	140	42,000	1,115	334,500
3. Others	516	77,400	35	5,250	481	72,150
Total	2,201	819,400		88,050		731,350

Note: Others includes Shirting, Tie etc.

families are 2,201 and the value is Rs. 819,400. Of the total product they sale 89.87 percent and 10.13 per cent . keep for family use which are shown in Table -3.10.

Employment of Labour for Production of different Cloths by the Sample Weavers

Handloom weaving is a labour intensive traditional profession. Generally family members are involved in weaving culture. Besides family members, a large member of hired labours (weavers) are engaged in weaving of

Table : 3.11(a)

Mandays of Employment by the Sample Beneficiary Cotton Weavers in Cloths Production

Nature of work	Family Labour		Wages	Hired labour		Wages	(Wages in Rs.) Total		
	Male	Female		Male	Female		Male	Female	Wages
	Processing of Yarn	0	2,399	107,950	0	176	7,910	0	2,575
Spinning	0	1,199	53,975	0	88	3,955	0	1,287	57,930 (6.41)
Preparing of Loom	0	1,799	80,962	0	132	5,933	0	1,931	86,895 (9.62)
Weaving	0	13,194	593,723	0	967	43,506	0	14,161	637,228 (70.54)
Others	839	73	3,283	48	0	2,160	887	73	5,443 (0.60)
Total	839	18,664	839,893	48	1,362	63,463	887	20,027	903,356 (100.00)

Note: Others include Transportation of Raw Materials and Marketing of Finished Product

cotton, Muga and Eri clothes. Table- 3.11 (a), Table -3.11 (b) and Table -3.11 (c) shows the man days of labour employed (both family labour and hired labour) and wages to the family labour as well as wages to the hired labour. Total number of man days required in cotton cloths production are 20,914 of which 93.25 percent family labour and 6.75 percent hired labour. Total wages required to family labour is Rs. 893,893.00 and to hired labour is Rs.63,463.00. A heavy

amount of expenditure had to be borne by the sample households as wages to family and hired labours for weaving.

Total number of mandays required for Muga cloths production are 5,453 of which 93.86 percent family labour and 6.14 percent hired labour. Total wages (both family & hired) required for muga clothes production are Rs.245,385.00 of which 93.86 percent for family labour and 6.14 percent for hired labour. Wages for weaving is higher than other wages which is 71.83 percent of the total wages.

Table : 3.11(b)

**Mandays of Employment by the Sample Beneficiary
Muga Weavers in Production**

Nature of work	Family Labour		Wages	Hired labour		Wages	(Wages in Rs.) Total		
	Male	Female		Male	Female		Male	Female	Wages
	Seed collection and breeding	60	25	3,825	0	0	0	60	25
Plantation of food plants and cleaning	57	20	3,465	0	0	0	57	20	3,465 (1.41)
Rearing and watching	140	118	11,610	0	0	0	140	118	11,610 (4.73)
Processing of cocoons	52	137	8,505	0	115	5,175	52	252	13,680 (5.57)
Spinning	0	397	17,865	0	220	9,900	0	617	27,765 (11.31)
Colouring of Yarn	0	55	2,475	0	0	0	0	55	2,475 (1.01)
Weaving	0	3,917	176,265	0	0	0	0	3,917	176,265 (71.83)
Others	124	16	6,300	0	0	0	124	16	6,300 (2.57)
Total	433	4,685	230,310	0	335	15,075	433	5,020	245,385 (100.00)

Note: Others include Transportation of Raw Materials and Marketing of Finished Product

In Eri clothes production total number of man days required 9,382 and the total wages are Rs. 428,778. In Eri clothes production hired labour is not engaged by the sample household. Only family members are engaged for this purpose.

Table : 3.11(c)
Mandays of Employment by the Sample Beneficiary Eri Weavers in Cloths Production

Nature of work	Family Labour		Wages	Hired labour		Wages	(Wages in Rs.)		
	Male	Female		Male	Female		Total		
			Male			Female	Wages		
Seed collection and breeding	20	0	900	0	0	0	20	0	900 (0.21)
Plantation of food plants and cleaning	30	8	1,710	0	0	0	30	8	1,710 (0.40)
Rearing and watching	67	36	4,635	0	0	0	67	36	4,635 (1.08)
Processing of cocoons	145	1,410	69,975	0	59	2,655	145	1,469	72,630 (16.94)
Spinning	82	1,860	87,390	0	87	3,915	82	1,947	91,305 (21.29)
Weaving	0	5,510	247,950	0	0	0	0	5,510	247,950 (57.83)
Others	173	41	9,648	0	0	0	173	41	9,648 (2.25)
Total	517	8,865	422,208	0	0	6,570	517	8,865	428,778 (100.00)

Note: Others include Transportation of Raw Materials and Marketing of Finished Product

Annual Expenditure and Estimates of Benefit Cost Ratio :

Annual expenditure and estimation of Benefit Cost Ratio(BCR) on Cotton cloths production is worked out and presented in Table 3.12. As per records collected from the sample weavers on the prices and quantities of the yarn and other required tools and implements are evaluated at prevailing market prices of the study area. Table shows that under the variable cost head, expenditure incurred on yarn, family and hired labour, transportation costs, interest on variable costs, miscellaneous costs etc. are estimated at 93.44 per cent. The variable cost is

Table: 3.12
Annual Expenditure and Estimates of Benefit-Cost Ratio on Cloths
Production by the Sample Cotton Beneficiary Weavers

Items of Costs :	Value (in Rs.)	Percentage
<u>Variable Costs:</u>		
Plain Yarn	435,857	28.07
Colour Yarn	35,304	2.27
Total Raw Material Costs	471,161	30.34
<u>Expenditure on Human Labour</u>		
Family Labour	836,609	53.87
Hired Labour	61,303	3.95
Total Labour Costs	897,912	57.82
Transportation Cost of Raw Materials and Finished Products	5,443	0.35
Miscellaneous Costs @ 2%	27,490	1.77
Interest on Variable Costs @ 3.5 %	49,070	3.16
A.Total Variable Cost	1,451,077	93.44
Per Loom Costs	10,219	0.66
<u>Fixed Costs:</u>		
Depreciation Costs on Tools and Implements (10%)	37,547	2.42
Depreciation Costs on Shed and Buildings (10%)	13,500	0.87
Interest on Variable Cost @ 3.5%	50,788	3.27
B.Total Fixed Costs	101,835	6.56
Per Loom Costs	717	0.05
Total Costs (A+B)	1,552,911	100.00
Per Loom Costs	10,936	
Total Return	2,921,706	
Per Loom Return	20,575	
Total Net Return	1,368,795	
Per Loom Net Return	9,639	
Benefit-Cost Ratio	1.88	

Table: 3.13
Annual Expenditure and Estimates of Benefit-Cost Ratio on Cloths
Production by the Sample Beneficiary Muga Weavers

Items of Costs :	Value (in Rs.)	Percentage
<u>Variable Costs:</u>		
Muga Yarn	648,725	66.03
Colour Yarn	3,820	0.39
Guna	3,848	0.39
Total Raw Material Costs	656,393	66.81
<u>Expenditure on Human Labour</u>		
Family Labour	224,010	22.80
Hired Labour	15,075	1.53
Total Labour Costs	239,085	24.34
Transportation Cost of Raw Materials and Finished Products	6,300	0.64
Miscllaneous Costs @ 2%	18,036	1.84
Interest on Variable Capital @ 3.5%	32,193	3.28
A.Total Variable Cost	952,007	96.90
Per Loom Costs	9,917	1.01
<u>Fixed Costs:</u>		
Depreciation Costs on Tools and Implements (10%)	18,028	1.83
Depreciation Costs on Shed and Buildings (10%)	11,400	1.16
Interest on Fixed Capital @ 3.5%	1,030	0.10
B.Total Fixed Costs	30,458	3.10
Per Loom Costs	317	0.03
Total Costs (A+B)	982,465	100.00
Per Loom Costs	10,234	
Total Return	1448050	
Per Loom Return	15,084	
Total Net Return	465,585	
Per Loom Net Return	4,850	
Benefit-Cost Ratio	1.47	

Table: 3.14
Annual Expenditure and Estimates of Benefit-Cost Ratio on Cloths
Production by the Sample Beneficiary Eri Weavers

Items of Costs	Value (in Rs.)	Percentage
<u>Variable Costs:</u>		
Eri Yarn	142,481	
Total Raw Material Costs	142,481	23.11
<u>Expenditure on Human Labour</u>		
Family Labour	412,560	66.91
Hired Labour	6,570	1.07
Total Labour Costs	419,130	67.98
Transportation Cost of Raw Materials and Finished Products	9,648	1.56
Miscellaneous Costs @ 2%	11,425	1.85
Interest on Variable Capital @ 3.5%	20,394	3.31
A.Total Variable Cost	603,078	97.81
Per Loom Costs	14,025	2.27
<u>Fixed Costs:</u>		
Depreciation Costs on Tools and Implements (10%)	10,124	1.64
Depreciation Costs on Shed and Buildings (10%)	2,900	0.47
Interest on Fixed Capital @ 3.5%	456	0.07
B.Total Fixed Costs	13,479	2.19
Per Loom Costs	313	0.05
Total Costs (A+B)	616,557	100.00
Per Loom Costs	14,339	
Total Return	819,400	
Per Loom Return	19,056	
Total Net Return	202,843	
Per Loom Net Return	4,717	
Benefit-Cost Ratio	1.33	

highest in labour followed by raw materials, interest on variable costs, miscellaneous costs and transportation cost of raw materials and finished products, Interest on variable cost etc. The variable cost is worked out at 6.56 percent.

The fixed cost is comprised of depreciation costs on tools and implements and depreciation costs on shed and buildings and Interest on variable cost. It is found from the table that the total annual costs on production of cotton cloths are Rs.1,552,911.00 of which 30.34 per cent raw material costs, 57.82 per cent. labour costs. Total annual return from cotton cloths found at Rs. 2,921,706.00 and the per loom return found at Rs. 20,575.00. It is evident from the analysis of B.C.R. that the sample families enjoyed some profit as the positive B.C.R. (1:1.88) is found in cotton cloths production. This indicates that cloth production is economically viable in case of sample cotton weavers.

Annual expenditure and estimation of B.C.R. on Muga cloths production is worked out and presented in Table -3.13 . Out of the total annual cost of Rs.982,465.00, 66.81 per cent on raw material costs and 24.34 per cent on labour cost. Total annual return is found at Rs. 1448050.00 and per loom return is 15,084.00 and the B.C.R. is found at 1:1.47. It is also evident from the analysis that the sample families enjoyed some profit as the positive B.C.R. is found in Muga cloth production.

Annual expenditure and estimation of B.C.R. on Eri cloth production is worked out and presented in Table -3.14. It is seen that the total annual expenditure is Rs.616,557.00 out of which 23.11 per cent is expenditure of raw material and 67.98 per cent expenditure on labour. As a whole total variable cost is found at Rs.603,078.00 Total return from eri cloth production is found at Rs. 819,400.00 and the B.C.R. is found at 1:1.33. From the analysis it is evident that sample families enjoyed some profit as the positive B.C.R. is found in Eri cloth production.

From the finding of the study it is revealed that the contribution of tribal women in economic upliftment of their family is very much satisfactory. The total income from various sources is found at Rs. 99,49,019.00 of which 52.16 cent comes from weaving.

Chapter – IV

Problems and Suggestions:

The tribal women living in rural areas face many problems in their day to day life. There are not enough facilities for development programmes of women and children in tribal areas. Some of the major problems faced by the tribal women in the way of development have been discussed in the following paragraph.

- (1) Most of the tribal women are not literate. Few years back only male children were admitted to school for their education. Female children were not allowed to go to school for some social bindings. Now a days though these bindings are overcome by the tribal people, yet they hesitate to come forward to accept assistance given by government department. Even they hesitate to told that they earn some money by selling cloths prepared by themselves in their looms because they feel themselves as inferior . So it is necessary to provide them required inspiration to come forward to have proper education so that they can step equally in the pace of development.
- (2) The transport system in the rural tribal areas is still far from satisfactory. During rainy season villages are delinked. All link roads, link bridges, culverts are damaged by floods. Even they can't come out to bring their daily needed goods from market. Therefore it is very much essential to develop the transport system of those areas.
- (3) One of the major problems faced by them is lack of required finance. Tribal people do not have surplus income to invest in their business for purchasing tools- implements and raw materials including muga yarn, muga seed cocoons etc. The price of muga seed cocoons is generally double than that of reeling cocoons. The sample families in Dhemaji have reported about the shortage of necessary fund to purchase seed cocoons in time. It is to be noted that not a single family has received any financial assistance from the concerned department. Thus it can be

said that due to lack of required fund they face financial problems to run their business smoothly.

- (4) It is seen that in rural tribal areas health service facilities are very poor. Primary health centres are not there in all the tribal villages. In some primary health centres medical aids are given by the pharmacists and nurses instead of doctor. Besides these tribal people are very much superstitious. It is true that in some remote areas people believe in old method of treatment i.e. they have to go to a wizard (Bez/Baidya) when they suffer from different diseases. So it becomes utmost essential to motivate the tribal people to overcome these superstitions. Until and unless these superstitions are removed from tribal society they will not come out from those old methods of treatment to enjoy the benefit of modern medical science. For this purpose they must have proper education of health and hygiene.
- (5) Now a days SHGs are formed in almost all the villages. But the number of women SHGs are limited. So, women SHGs are to be given importance to take up economic activities. Women representatives from SHGs should be involved in planning process at the panchayat level.
- (6) Government assistance to the tribal women are not sufficient. Government supplied only net, lamp and 'dola' in Muga kit package. Only with these equipments they are unable to prepare Muga Yarn. Most of the tribal people are very poor, they cannot afford for such expensive culture. So, they confine themselves in cotton weaving only.
- (7) Although the Muga silk worm/Eri silk worm rearing in Assam is a family enterprise, it requires a good number of manpower. So shortage of manpower is a problem of Muga silk worm/Eri silk worm rearing in the study area. On the other hand their poverty does not allow them to engage hired labour in their works.
- (8) Shortage of worm feed i.e. food plants is also another problem of Muga silk worm. The same problem is faced by the sample Eri silk worm rearers in the study area. For this reason and due to high price of muga cocoons almost all the families depend on market for muga yarn.

- (9) Another important problem is damages caused by the floods to the business run by the tribal women. During the flood season they can't run their business and have to stop for a long period. The same problem is faced by the sample families in both sample areas Dhemji and Majuli. In each and every year flood not only damages the business establishments but also the food plants of the silk worms.
- (10) Most of the tribal women are lagging behind in developing their skills by adopting different schemes given by government departments, social welfare department and tribal development department. This is because they do not have the right information of the benefits and facilities of those schemes on right time.
- (11) The Central and State Governments have taken various steps for upliftment of the economic conditions of the tribal people through various programmes conducted in different times by the concerned departments. Most of the tribal women are unknown about these programmes. They should be trained up in different activities like, muga /Eri rearing, weaving, food processing etc.
- (12) Market facilities in the tribal area is not satisfactory. Efficient marketing network is essential for the weavers to dispose the finished products as it encourages them to produce more for marketing purpose. The marketing facilities are underdeveloped not only in Dhemaji and Jorhat districts but also in all over Assam. The basic facilities for marketing is virtually absent in rural areas due to poor road transport communication. To improve the efficiency of marketing and to save the weavers from exploitation and malpractices of middlemen emphasis has been laid on the development of Self Help Groups (SHG) marketing society. Through such societies only the weavers may take the advantage of collective bargaining to obtain a fair price for the product.
- (13) The weavers do not have information on market demand and prevailing prices of different products. Most of the weavers do not have any contact with the district wholesale market or Central Sericulture Board as a result they accept whatever price is offered to them by the traders and middlemen.
- (14) The weavers in sample districts adopted the out dated absolute and outmoded system of processing, spinning and weaving. This age old practices of weaving

consider labour as the basic inputs which the weavers can get from their own family and neighborhood. Labour is considered as the prime important factor in traditional rearing, processing, spinning and weaving, not much importance has been given to modern system like application of spinning machine and improved looms and shuttles etc. Non-adoption of modern systems and application of traditional tools and implements have resulted in low production.

- (15) The system of distribution of different kits by the govt. department is one of the vital factor in encouraging the weavers for weaving. The aids are distributed by the Tribal development department and social welfare department through Gaon Panchayat Samabai Samittee. Distributed items are not sufficient for the weavers. Sometimes needed weavers do not get the aids due to wrong selection of beneficiaries by the gaon panchayat.
- (16)The linkage of the tribals to the banking is still poor. They are unknown about the facilities of banking system. It is necessary to give some knowledge by gram sevak, by NGO's or any other volunteer person so that they may be able take the advantages given by the government or bank.

Suggestions:

The basic objective of Tribal Deyelopment authorities is to encourage the Tribal Women in their income generating non-agricultural activities by providing them various aid by the department . Based on our observation and findings the following policy suggestions have been forwarded:

- (1) Creation of basic infrastructural facilities such as connecting roads, bridges, transport, marketing facility, electricity etc. are considered as most essential. (**Attention :Department of P,W.D & Department of power and Electricity Board, Govt. of Assam**).
- (2) Investment strategy should be broad-based and the assets provided by the different departments should be sufficient enough to generate income and employment to help the women in raising their standard of living. (**Attention: ATDA**).
- (3) The financial institutions should come forward to lend credit at lower rate of

interest along with liberalization of the loan formalities and they should speed up the disposal of loans, so that the women could get the financial help in due time.

(Attention: Commercial Banks & Regional Rural Banks).

- (4) Sometimes, Fair and exhibitions etc. should be arranged to popularize local products through display or advertisement, as the consumers are less aware of locally manufactured products. This will change the attitude of local people that the local products are better than outside products. **(Attention: Handloom and Textile Department, Government of Assam, NGOs)**
- (5) Government sponsored schemes for providing different kits should be offered to economically weak families. **(Attention: ATDA and Social welfare department.)**
- (6) Training programme should be arranged in rural areas to encourage the women and to adopt modern system of weaving. Training should be of short duration, because women cannot stay away from home for a long period. **(Attention: Department of Extension Education, Govt. of Assam, department of Agriculture, Govt. of Assam and NGOs)**
- (7) Adoption of modern technologies, especially use of sophisticated tools and equipments as well as machineries in weaving requires reasonable amount of money. Lack of finance in case of the poor weaver families should be mitigated by providing institutional finance to the willing weaver families of the sample area. **(Attention: Commercial Banks & Regional Rural Banks, NABARD, Directorate of Handloom and Textile, Govt. of Assam).**
- (8) Appropriate steps should be taken to safe guard the golden yarn 'Muga'. Unless the muga yarn production is increased substantially, the price of already much costly muga yarn will be increased further and there is every possibility that the day is not very far when entire muga culture will be jeopardized by way of replacing it by low cost Tasar yarn. **(Attention: Central Silk Board of India and Department of Sericulture, Govt. of Assam.)**
- (9) A harmonious combination of traditional designs with new ideas taking the help of

computer technologies should be worked out to evolve more appealing patterns in the muga and cotton cloths woven by the weavers. This will help in attracting more customers both in local and outside markets. A research cum training centre in this regard is expected to cater a long pending necessity of the sample areas.

(Attention: Central Silk Board of India and Directorate of Handloom and Textile, Govt. of Assam)

- (10) The sample weavers should visit industrially developed states of the country to gather fair knowledge on latest development in the process of production and marketing potentialities which will help them in enhancing their profits and making the production units viable one. In this regard, Government may organize educational tour which will help the enthusiastic weavers to a great extent. **(Attention: Directorate of Agriculture Government of Assam and Directorate of Extension Education, Government of Assam)**

Chapter – V

Summary and Conclusion

The necessity of improving the economic status of women has now been recognized by all sections of the society all over the world. Recognizing the need of involving women in various development activities, the government of India has initiated several affirmative measures by the way of implementing different programmes and schemes to bring them in to the main stream of development.

India is an inhabitant of 102.70 crore people comprising different castes and sub-castes along with 573 tribes and sub-tribes. The tribal population of the country as per population census of 2001 is 8.43 crores, constituting 8.20 percent of the total population. The scheduled tribes of North-East India can be broadly divided into two types, viz.(a) the hill tribes, inhabiting in the hills of Arunachal Pradesh, Mizoram, Meghalaya and Nagaland and the hill districts of Assam, Manipur and Tripura, (b) and the plains tribes, settling in the valley areas of Assam particularly in the Brahmaputra valley. The number of scheduled tribes in the region is estimated to be 209 out of which Assam has 23 scheduled tribes. It is evident from various census reports that the work participation of men and women in different economic activities has a wide disparity in India as well as in Assam. In 1951 census, it was 16.50 per cent of the total work force of the country while in Assam it was 21.17 percent. The work participation of women has considerably increased in India and in 2001, it was 31.63 percent of the total work force of the country and 27.97 percent in Assam. All round development of women has been one of the focal points of planning process in the country.

The socio economic and educational upliftment of the tribal people in the state of Assam is a major trust area of the Government of Assam. For the welfare of the plain tribes and backward classes, the Directorate of plains Tribes and Backward classes was set up in 1976. Since inception this Directorate has been trying hard to uplift the socio-economic condition of plains tribes and backward classes in Assam by implementing different schemes and programmes such as Educational Development

programmes, Economic Development Programmes, Infrastructure Development scheme etc. The findings of the present study on "Participation of plains Tribes women in Non-Agricultural Development Activities" is based on the study of 100 sample women beneficiaries from the two districts of Assam i.e. Jorhat and Dhemaji.

Total population of the Jorhat district sample is 276 comprising of 52.90 percent males and 47.10 percent females. In Dhemaji district total number of family members of the sample households is 332, comprising of 55.42 per cent males and 44.58 percent females.

In Jorhat district sample, 94.59 percent of the total population were literate and 5.41 percent were illiterate. In Demaji district sample 97.24 percent were literate and 2.76 percent were illiterate.

The main occupation of female members of the working population group was weaving. Out of the total working population 28 percent female population in Jorhat district and 30.89 percent female population in Dhemaji district were engaged in weaving.

In Jorhat district, in a total of 50 households, 59.34 hectares were own land, 5.67 hectares were leased in land and 2.25 hectares were mortgaged in land. Of the total operational holdings of 67.26 hectares, 60.84 hectares were under field crops and 6.42 hectares were under other miscellaneous crops. In Dhemaji district in a total sample of 50 households 72.39 hectares were own land, 2.45 hectares were leased in land and 3.37 hectares were mortgaged in land. Out of total operational holdings of 78.21 hectares, 69.10 hectares were under miscellaneous crops.

The overall average yield of HYV Ahu paddy was 3,590 kg/ha with irrigation and for local Sali paddy 2,772 kg/ha under rain fed situation. HYV Sali paddy was 3,089 kg/ha in Jorhat district. In Dhemaji district the average yield of HYV Ahu paddy was 3,780 kg/ha. under irrigated condition and 3,461 kg/ha. under un-irrigated condition. The overall productivity of Sali paddy was found 3,165 kg/ha in irrigated and 3,097 kg/ha in un-irrigated condition.

In Jorhat district total income from various sources varied from Rs. 1,15,177.00 to Rs. 2,297,190.00 and in Dhemaji district total income varies from Rs. 2,17,733.00 to Rs. 1,863,350.00

The present study was concentrated with the schemes –(i) Cotton Yarn and looms, (ii) Muga Kit and (iii) Eri Kit provided by the Tribal Development Authority and Social Welfare Department.

Out of 100 sample beneficiaries, 40 sample households were provided 139.60 kgs of Cotton Yarn and 8 number of looms, 40 house holds were provided Muga Kit and another 20 households were provided Eri Kit.

Total quantity of yarns required for preparation of cotton cloths in the sample households was 3,101.85 kgs. valued Rs. 471,161.00. Out of the total quantity of 3,101.85 kgs. yarn, 55.00 percent were purchased from the market and 45.00 percent were supplied by government department. The total quantity of muga yarn used by the sample households for preparation of Muga cloths were 184.73 kg valued Rs. 6,56,393.00 of which 72.97 percent were home produced and 27.03 percent purchased from market.

The total quantity of Eri Yarn required in our sample households is 306.41 kg of which 82.00 percent were home produced and 18.00 percent were purchased from market.

Total numbers of various cotton cloths prepared by the sample families are 20,319 valued is Rs. 2,921,706.00. Out of the total product they sold 71.81 percent and the rest 28.19 percent were kept for the use of family members.

Total number of different Muga cloths prepared by the Muga weavers were 1,414 valued Rs. 14,48,050.00. Out of the total product they sold 87.27 percent.

Eri weavers prepared 2,201 numbers of various Eri cloths valued Rs. 8,19,400.00, out of which they sold 89.87 percent and 10.13 percent was kept for family use.

The total annual costs on production of cotton cloths were Rs. 1,552,991.00 and total annual return was Rs. 2,921,706.00. The BCR was found at 1:1.88.

The total annual cost and return on Muga cloths production were Rs. 9,82,465.00 and Rs. 14,48,050.00 respectively. The BCR was found at 1:1.47.

The total annual cost and return on Eri cloths production is Rs.6,16,557.00 and Rs. 8,19,400.00 respectively. The BCR is found at 1:1.33.

From the analysis of BCR it is evident that all the sample families enjoyed some profit as the positive B.C.R. is found in Cotton, Muga and Eri cloths production.

The tribal women living in rural areas face many problems. Some of them are:

- (1) Literacy problem.
- (2) Transportation problem.
- (3) Financial problem.
- (4) Poor health services.
- (5) Insufficient government aids.
- (6) Shortage of worm feed and food plants (for Muga rearing).
- (7) Damages caused by flood.
- (8) Lack of proper information about various training programmes.
- (9) Poor marketing facilities.
- (10) Lack of proper information on market demand and prevailing prices of different products
- (11) Adoption of modern system of weaving
- (12) Inadequate distribution of different kits by the government department.
- (13) Lack of knowledge about the facilities of banking system.

Suggestions:

Based on our observation and findings some suggestions have been forwarded :

- (1) Creation of basic infrastructural facilities.
- (2) Investment strategies should be broad-based and the assets provided by different departments should be sufficient enough.
- (3) Easy disbursement of loans by the financial institutions.
- (4) Arrangement of fair and exhibitions of their products.

- (5) Government aids should be offered to economically weak families.
- (6) Training programmes should be arranged in rural areas to encourage the women to adopt modern system and techniques of weaving.
- (7) Appropriate steps should be taken to provide safe guard to the golden yarn 'Muga'
- (8) A research cum training centre is expected to establish to cater a long pending necessity of the sample areas.
- (9) Arrangement should be made for weavers so that, they can visit industrially developed states of the country to gather fair knowledge on latest development in the process of production and marketing potentialities.

Conclusion:

Though tribal women play an important role in various economic activities in the study area, it is not sufficient to stand boldly in their day to day life. Due to inadequate infrastructural supports, lack of proper education, lack of capital, inadequate Government aids, inadequate marketing facilities etc. most of the women beneficiaries are unable to expand their existing ventures. In this regard developments of infrastructure is necessary. Training programmes could help the tribal women in development of self confidence and communication skill to interact with various marketing agencies and financial organizations. Proper steps should be taken by the government to develop socio economic support for women including caring of children, health care, productive insurance and peaceful working atmosphere so that the contribution of tribal women to their family income increased which in turn can help in economic upliftment of the tribal society.

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