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- II. シンポジウム要旨

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**Preliminary Study of Farming Systems in *Baghaichhari Muk Village, Chittagong Hill Tracts, Bangladesh***

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バングラデシュ、チッタゴン丘陵バグチャリ・ムク村におけるファーム・システムに関する予備的研究

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**1. General Background and Objectives:** The study of farming systems is important since they play vital roles in providing food security for the ethnic communities in Chittagong Hill Tracts (CHT). In Bangladesh, although several studies on farming systems and rural development researches have already been carried out in the plain areas, there have not been significant farming systems studies in CHT. The majority in Bangladesh is Bengali, mainly living in the plain areas. In CHT, the minority people except Bengali are majority in historical perspective. Most villagers in CHT are small land holders and depend on farming for their livelihood at subsistence level. The holistic study of farming systems research is needed in order to provide basic information for research and extension works. The present study aimed to find out the existing cropping systems, and socio-economic conditions in the village.

**2. The Study Site and Research Methods:** The study was carried out in *Baghaichhari Muk Village*, 51 No Dighinala Union, of Dighinala Upazila, Khagrachari District in the CHT, Bangladesh. The village is inhabited by the *Chakma* ethnic minority. There were 247 households in the study village, of which all households were interviewed. In addition, semi-structured interviews with selected farmers and field observations were conducted. The survey was carried out in 2003-2004.

**3. Results and Discussion:** There were three rice cropping systems; single, double, and triple in the village. Single rice cropping under rain-fed conditions was prevailing because irrigation facilities were very limited. In order to cope with the shortage of water, the villagers manually lifted stream water with bucket and bamboo baskets. Double rice cropping was conducted in limited area, where water was available during the summer season from April to October. To irrigate the rice field, farmers created a small water reservoir to collect water from the stream. Triple rice cropping was selected in the bottom of hill where water was available throughout the year. This area is locally called *Null Paddy Bhui*.

As indicated in Table 1, below 151.73 ha (72%) of the lands were owned by medium and large farm size categories, which constituted 29 % of total household in the village. On the other hand, owners of small farm size

categories which constituted 66% of the total households of the village owned only 58.95 ha (28%) of the total land in the village. This indicates that relatively smaller number of households controls larger size of farm land in the village.

Table 2 shows that most of the households in small, medium and large farm size categories rely on rice farming as a major livelihood sources. Whereas most of the landless households engage in non farming activities including daily labor, non timber forest product collection and others seasonal business in order to provide supplementary income in the *Baghaichhari Muk* Village. However, some of the landless households depend on farming as a primary activity by renting in the land from others.

Table 1. Farm size categories and land use types

Farm size categories (ha)	Total		Homestead land		Paddy land		Riverside land		Registered hill land		Jhum land	
	HH	Area (ha)	HH	Area (ha)	HH	Area (ha)	HH	Area (ha)	HH	Area (ha)	HH	Area (ha)
Land less	12 (5)	-	-	-	-	-	-	-	-	-	2 (1)	2.023 (17)
Small (<1.01)	163 (66)	58.95 (28)	160 (65)	26.089 (39)	71 (29)	25.083 (28)	9 (4)	1.33 (10)	8 (3)	4.447 (11)	9 (4)	8.889 (76)
Medium (1.01-3.03)	61 (25)	102.022 (48)	61 (25)	31.028 (46)	54 (22)	44.546 (49)	22 (9)	7.467 (55)	13 (5)	18.294 (46)	1 (.40)	0.809 (7)
Large (>3.03)	11 (4)	49.709 (24)	11 (4)	10.272 (15)	11 (4)	20.481 (23)	6 (2)	4.773 (35)	7 (3)	17.406 (43)	-	-
Total	247 (100)	210.681 (100)	222 (90)	67.389 (100)	136 (55)	90.11 (100)	37 (15)	13.57 (100)	28 (11)	40.147 (100)	12 (5)	11.721 (100)

Source: Household survey, 2003- 2004

Note: Figures in parentheses indicate percentages

Table 2. Occupational structure of the household heads in the study village. Unit: HH no (%)

Farm size categories (ha)	Total household numbers	Occupation of household heads			
		Farming		Non farming	
		Only Primary	With secondary	Only Primary	With secondary
Landless	12 (5)	4 (33)	-	7 (58)	1 (8)
Small	163 (66)	71 (44)	48 (29)	32 (20)	12 (7)
Medium	61 (25)	43 (70)	15 (24)	3 (5)	-
Large	11 (4)	5 (45)	2 (18)	4 (36)	-
Total	247 (100)	123 (50)	65 (26)	46 (19)	13 (5)

Source: Household survey, 2003- 2004