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# Contribution of Non Government Organizations(NGO) in Human Resource Development(HRD)of Bangladesh: A Comparative Study of Five Selected NGO s

Ali, M. Korban

University of Rajshahi

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**Contribution of Non Government Organizations(NGO)  
in Human Resource Development(HRD) of Bangladesh  
—A Comparative Study of Five Selected NGO s**

*A  
Dissertation  
Submitted to the University of Rajshahi  
in Fulfillment of the Requirements for the  
Degree of Doctor of Philosophy*

**By  
Prof. M. Korban Ali**

University of Rajshai  
January, 2006

Department of Population Science  
and Human Reosurce Development  
University of Rajshahi, Bangladesh

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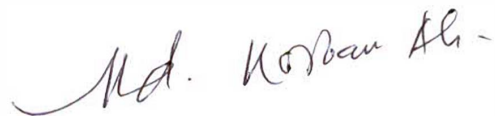
Department of Population Science  
and Human Resource Development  
University of Rajshahi, Bangladesh

**Dedicated  
to  
My Beloved Parents**

## Statement of Originality

This dissertation does not incorporate any part without acknowledgement of any material previously submitted for a higher degree or diploma in any University / Institute and to the best of my knowledge and belief, does not contain any material previously published or written by another person except where due reference is made in the text.

University of Rajshahi  
January, 2006



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University of Rajshahi  
January, 2006

**Prof. M. Korban Ali**  
Author

**Contribution of Non Government Organizations  
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# **CHAPTER I**

## **Introduction**

# CHAPTER I

## Introduction

### 1.1 Introduction

The world is heading faster towards modern trade, commerce, industry and advancement of technology. Some of the countries already have attained vast economic growth. Despite these, there is prevailing a remarkable sign of illiteracy, malnutrition and poverty around the world. According to UN billion of people were suffering from illiteracy, 50 million people were not getting chances of having primary education, 55 million people were passing their days either in un-fed or half-fed condition, 100 billions of people of the world were below the poverty level. Most of them were the resident of developing countries like Bangladesh, India, Sri Lanka and the African countries [Shelly, MR, 1999]. One of the ways to solve the above problems is to develop their human resources as early as possible. Again the world is also facing the challenge of open market economy. In order to face this challenge the developing countries like Bangladesh, Pakistan etc have to improve the qualities of human resources. Like other developing countries, Bangladesh can develop its human resources by improving its (1) Education (2) Health care and (3) Economic activities. This type of work of Human Resource Development (HRD) can be done by government or non-government organizations (NGOs) or institutions and individuals. Since the task accelerating the works of HRD is very important. So it is needed to know the contributions of all the government and non-government organizations. But with our limited scope, an attempt has been made to study the contributions of some (five) of the selected non- government organizations (NGOs).

The concept and idea of human resource development (HRE) was evolved in USA [UNDP, 1994, pp-90]. First the idea came as the topics of class room discussion at the George Washington University in 1969 and it took the formal shape in the American Society for training. The world is heading faster towards modern trade, commerce, industry and advancement of technology. Some of the countries already have attained vast economic growth. Despite these, there is prevailing a remarkable sign of illiteracy, malnutrition and poverty around the world. According to UN billion of people were suffering from illiteracy, 50 million people were not getting chances of having primary education, 55 million people were passing their days either in un-fed or half-fed condition, 100 billions of people of the world were below the poverty level. Most of them were the resident of developing countries like Bangladesh, India, Sri Lanka and the African countries [Shelly, MR, 1999]. One of the ways to solve the above problems is to



management is getting popularity and usefulness both in developing and developed countries of the world for attainment of the organizational and developmental goals.

Human Resource Development (HRD) is a process by which workforce of an organization is given full co-operation to develop them in one hand and on the other hand to develop the environment in which manpower can work effectively in continuous and organized manner.

The resources of an organization can be divided into two broad divisions ; one is material resources and other is human resources. Material resources cannot run on its own. But the human resource can use and manage the material resources properly for the well being of the human society. The human resource can be run on its own and again human resource can develop human resources. Thus human resource can run both material resources and human resources.

Human resource is the asset, power, spirit and guiding forces. Again human resource is a means of support to win goals of an organization. Thus it is regarded as the prime component of the Human Resource Development(HRD) system of management.

In fact, HRD system of management helps the human resources to acquire the capabilities to perform, develop, manage, organize and establish organizational culture, team work, motivation, professional skills and proficiency and congenial supervisors and subordinate relationship for smooth and effective performance of the organization.

There are five functional areas of management namely production, procurement, finance, marketing and personnel. HRD will regulate all these functions in effective style and method. HRD system of management looks into the creation of an environment of trust, mutuality and collaboration ie inter personal trust, confidence, faithfulness, mutual understanding, mutual help, mutual feedback, group dynamics and team spirit. This climate calls for openness, which can be generated through the use and application of HRD mechanism.

To assess the volume of human resources development of a country or a region some sorts of tools were needed. Fortunately the first Human Development Report (UNDP,

1990) introduced a new way of measuring human development by an Index called **Human Development Index (HDI)**. It was constructed by combining the indicators of life expectancy, educational attainment and income into composite human development index (HDI). The report acknowledged that no single index could ever completely capture such a complex concept. It acknowledged too that the HDI would remain subject to improvements, corrections and refinements, both as a result of a growing awareness of its deficiencies and to accommodate criticisms and suggestions from academics and policy makers. It is also to be emphasized that the HDI is not intended to replace the other detailed socio-economic indicators, these are essential for a fuller understanding of individual countries. The Human Development Report - 1993 (UNDP, 1993) constructed separate HDIs for different groups of five countries.

One innovative feature of the HDI is the way its components are combined. Each indicator is measured in different units : i) Life expectancy is in years of life ii) schooling is in years of schooling iii) income in purchasing power adjusted dollars and iv) adult literacy as a percentage. To combine the indicators , the range of values for each one is put into a scale of 0 to 1, where 0 is the minimum and 1 is the maximum.

### **1.2 Importance of the study:**

Most of the Non-Government Organizations (NGOs) started their functions as social organization soon after the liberation of Bangladesh. These were non profitable organizations and were playing vital role in the rehabilitation program of war affected Bangladesh. They collected donation from home and abroad and distribute them among the war sufferers. To conduct these programs, they engaged a sizeable number of employees with various scale of salary. Within few years, their activities reduced significantly, hence the salary of employees became their burden and they could not dismiss them from the employment for humanitarian ground. Hence there initiated a new issue of unemployment & under employment of the employees of NGOs.

To remove these difficulties they tried hard to be self reliant and searched out income generating activities. Thus most of these NGOs emerged as financial institutions. They

have also started to distribute micro-credits to assist the poor as well as to enhance their earnings. The percentage of recovery of these capital encouraged them to establish it as a business of micro-credit. Some of the big NGOs have also been successful in multi-sectoral business. These micro credit activities of NGOs were partially contributing in the process of Human Resource Development (HRD). As these organizations were distributing micro credits to the poor people and micro-credit receivers were using this money in various business, thereby they got the opportunity to increase their economic activities and thereby they could improve their standard of living by receiving educations and training facilities as well as health facilities. Thus it can be said that the NGOs are contributing in the process of HRD in Bangladesh.

A thorough investigation is needed to explore the pattern of contributions of NGOs towards HRD of Bangladesh. But it is very difficult task as there are innumerable NGOs in Bangladesh which are working with diversified objectives. Still to assess the contributions of the NGOs in HRD some (five) selected NGOs have been taken under consideration.

### **1.3 Objectives of the Study**

To assess the contributions of Non- Government Organizations (NGOs) in HRD through the Micro-credit program, micro-credit receivers of five selected NGOs were interviewed taking from four divisions, 8 Districts and 16 Thanas of Bangladesh. The contributions of NGOs have been assessed on the basis of the response of the respondents who received micro credit from NGOs. For our time limitations 5- NGOs have been taken under consideration. The selected NGOs are (i) Islami Bank Foundation (IBF) (ii) Grameen Bank (GB) (iii) Bangladesh Rural Advancement Committee (BRAC) (iv) Proshika and (v) ASHA.

As it is mentioned in section 1.1 that the main components of HDI are the improvement of education, increasing life expectancy (development of health facilities) & enhancing income generating activities. Hence an attempt has been made here to see how the NOGs are playing role in contributing in the development of Educational facilities,

improvement health facilities and enhancement of income generating activities. As it is seen that these NGOs are more interested to enhance the income generating activities of the poor in comparison to develop education and health facilities, So, special attention has been given for the investigation of the nature and characteristic of the income distribution of the respondents for selected NGOs. At the end a comparative study has been carried-out about the contributions of selected NGOs and identified their relative positions..

Keeping all these points in view the objectives of the study have been set up to study:

- (i) the contributions of NGOs in expanding education facilities in Bangladesh.
- (ii) the contributions of NGOs in increasing health facilities in Bangladesh.
- (iii) the contributions of NGOs in developing Economic activities in Bangladesh.
- (iv) the structural changes of the income distribution of various categories of the above contributing factors and NGOs.

#### **1.4. Review of Literate:**

As the idea of cardinal measure of HRD is very recent, so, the researches in HRD are very hardly be found in literature.

Despite these, there are various articles on HRD but most of those concentrated on the training and education. Some of the papers concentrated to study the formal education like school, college and university education. Some of the study concentrated to study military education & technical education. None attempted to study all the components of the HRD as a whole. However, some of the selected studies have been overviewed below.

Hossain and Sen,1992 studied in the rural areas and found household income depends on land ownership and its productivity, number of earning members, quality and composition of labor and the nature of employment, infrastructure and other facilities available, which enhance the scope as well as the return from income earning opportunities. The results of a regression analysis were presented for the

poor and non-poor rural households. From the results, a number of factors can be identified which contribute significantly to increasing the incomes of the poor households. While land access to modern technology and contribution of labor have significant positive impact on household incomes, impact of education varies with the level of education. A comparison of the results for the poor and the non-poor groups suggests that education is more effective in raising incomes along with access to land and capital. The findings also point to the beneficial impact of investing in rural infrastructure (e.g. rural electrification, transport) particularly for creating non-farm employment opportunities. Based on the findings, four major implications for poverty alleviating macroeconomic policies can be suggested. First, an appropriate mix of pricing, subsidy, credit and extension policies to promote expansion of new technology in agriculture. Second, development of rural infrastructure, particularly rural electrification to establish strong linkages for expanding the rural non-farm sector such as trade and services. Third, promotion of non-farm activities to provide income mobility for land-poor households. Fourth, human resource development, particularly access to education to develop skills and capabilities of the poor.

Amin and Pebley, 1994 used the event control family decision making as an index of women empowerment. The micro-credit receiving women and some non-receiving controlling men were taken under consideration to study impact the micro credits provided by the BRAC and Grameen Bank on women empowerment. They found that female BRAC members had a larger role in decision-making within the household than control group members.

Pitt and Khandker, 1995 were taken under consideration and it was also found that female BRAC members had a larger role in decision-making within the household than control group members.

Hashemi et al, 1996 found decision-making power for Grameen Bank and BRAC members. However, they expressed their findings by stating that for more

important decisions, such as those related to finances, only Grameen Bank members had significantly better scores compared to the control group. The larger contribution of Grameen Bank members to family support was explained as a selection of the sample. They also found a lot of positive effects of micro-credit programs on the situation of women opinions were not shared when it comes to women's control over loan use and domestic violence.

Goetz and Sen Gupta, 1996 investigated whether female members of Grameen Bank, BRAC, TMSS and RD-12 actually controlled their credit. They found that about 63% of the women involved in these programs only had 'partial', 'very limited' or 'no control'. They also found that single women had more control over their credit. This is also the case for women who invest in traditional activities. These traditional activities, such as live stock and agriculture, are often considered as female activities and do not generate much extra income. The higher the amount of money, the quicker men take over control. This finding can also explain the diminishing level of female control over credit when membership extends over time. It is also found for Grameen Bank and BRAC specifically, the results of Grameen Bank are much better than the ones of BRAC. 45% of the BRAC members in the sample are part of the groups with 'very limited' or 'no control'. This is only the case for 10% of the Grameen Bank members. However, we cannot conclude that BRAC's strategy is less effective. The difference may possibly be explained by the fact that Grameen Bank gives smaller loans to its members and encourages them to invest in traditional activities. The authors even wonder if the minimalist approach of Grameen Bank will remain effective in the long run.

Schuler and Riley, 1996 noticed that a loss of control over loan use did not have to exclude emancipation of women. Even if a wife entirely lacked control, the membership of the micro-credit institution could offer her a lot by bringing her in contact with other people and ideas. Without the prospect of getting access to credit, most women probably would not be permitted to join the programs and

educational or social benefits. In this way participation actually stimulates women's emancipation.

Hulme & Mosely, 1996 agreed on minor control of women over loan use and stated that credit does not encourage emancipation at all. A better status of female members can only be observed when it is compared with the status of other women but not in comparison with the men.

World Bank, 1996, studied the vast network of NGOs that have developed in Bangladesh and their report shows the experience in poverty alleviation efforts gained by them have created a unique opportunity to push forward the poverty alleviation agenda. The Government, while providing the general policy directions for development, has also recognized its limitations in bringing about sustained improvements in the lives of the poor through its own efforts. The NGOs are now considered to offer the source of a tremendous resource potential to help address the vast poverty alleviation needs. A review of the collaboration indicates three major types of arrangements: (a) sub contract; (b) joint implementation; and (c) Government as financier of NGO projects. The most common collaboration is the sub-contracting arrangement where Government agencies enter into contracts with NGOs. Joint implementation on a partnership arrangement, where NGOs are involved either as co-financier or joint executing agency with the Government, is least practiced. In the area of micro-credit there is an emerging trend for the Government to finance NGOs credit operations.

Bruntrup, et al., 1997 in an empirical studies on micro finance programs of two other large NGOs, viz., Proshika and ASA, produced similar positive impact. The impact assessment of Proshika conducted in 1998-99 found positive results of its programs in terms of increased income, savings, school enrollment rate, reduction in infant mortality and improvement in gender relations. The impact assessment of ASHA's program on its participants also showed positive results indicating an annual growth of 5-7% compared to the control group, increase in food

consumption, improvement in health and child education, and higher increase in assets

Husain, et al., 1998 in a World Bank study they produced evidences of wide-ranging impacts of micro finance on the condition of the borrowers . They examined programs of BRAC, Grameen Bank and Bangladesh Rural Development Board (BRDB), a public sector organization. The findings revealed that per capita expenditure increased due to micro finance among the borrowers of all these programs. Household's net worth increased too. A BRAC research examined the impact of poverty in wider dimension. The results showed that 52% of the BRAC member households were below the poverty line while a higher number (69%) of the overall households were lying below the line. The overall findings showed that among the BRAC members there had been gradual improvements in the indicators such as wealth, revenue earning assets, value of house structures, the level of cash earned, per capita expenditure on food and total household expenditure

Pitt and Khandker (1998) in their literature evaluating the impact of NGO programs on poverty at the household level in Bangladesh have focused largely on micro credit programs. They estimated the impact of participation in micro credit programs in Bangladesh on labor supply, schooling, household expenditure, and assets. They used a "quasi-experimental" survey design to correct for the bias due to unobserved heterogeneity at the individual and village- level, using fixed-effect estimation in a limited information maximum likelihood framework. They found that credit was a significant determinant of many of the outcome considered and that credit provided to women was more likely to have influence on these behavior than that provided to men.

Morduch, 1989 found a difference in different estimations, which were corrected for the fact that the unobservable characteristics responsible for program placement might be specific to populations within larger communities (and noting the use of



fixed effects) could exacerbate the biases and finds a smaller impact from access to credit. Households with access to credit did not have higher consumption levels or more schooling, though the variance in their consumption and employment were lower.

Morduch, 1999a, 1999b, 2000 elsewhere notes micro finance programs have required large subsidies, and they hope for the basic mechanism of micro credit, group-lending contracts with joint liability, have exceeded what the evidence shows it can achieve. The evidence for the effect of micro credit on reducing vulnerability to shocks and empowering women appears stronger than the evidence that it mitigates poverty.

Rahman 1999 observed the event control of family decision making as an index of women empowerment. The micro-credit receiving women and some non-receiving controlling men were used to study impact the micro credits provided by the BRAC and Grameen Bank on women empowerment. They found that female BRAC members had a larger role in decision-making within the household than control group members

Zaman (1999) found that it was very difficult to draw unequivocal conclusions out of the conflicting findings of women empowerment. However, a few researchers dared to come to the conclusion that the diversified opinions were due to a difference in methodology gives some interesting remarks.

Galasso and Ravallion, 2000 analyze a targeting performance of a decentralized welfare program & Bangladesh's Food-for-Education program. They found that at the community level, the performance differed a lot among villages. There is a tendency for the non poor to obtain a higher per capita allocation in less poor villages. Also they find that inequality affects the allocation and to higher inequality in land distribution corresponds higher appropriation by the non poor. They find little sign of the center targeting poor villages.

Kabeer, 2001, found that female BRAC members have a larger role in decision-making within the household than control group members. He confirmed this for both Grameen Bank and BRAC. They also found a lot of positive effects of micro-credit programmes on the situation of women, opinions were not shared when it came to women's control over loan use and domestic violence.

Patrick Develtere & Huybrechts, 2002 presented a paper titled "Evidence on the Social and Economic Impact of Grameen Bank and BRAC on the Poor in Bangladesh". Their main objectives were to emancipate women towards empowerment. They used the extent control of family decision making as an index of women empowerment. The micro-credit receiving women and some non-receiving controlling men were taken into consideration to study impact the micro credits provided by the BRAC and Grameen Bank on women empowerment. They got two contradicting results. They found that micro credit to the women treated as a source of income rather burden of a family. It raise status of women in decision making. But in the case of control over the loan use and family violence, decision of women were not shared.

Varun Gauri, 2002 summarized, "the extent of evidence of NGOs in Bangladesh reduced poverty is weak or mixed, though micro credit programs do appear have an impact on vulnerability to shocks and empowerment, and the determinants of NGO program location remain unexplored, though there is evidence that the location of development programs is compensatory in some places but not in others". This paper looks at the determinants of NGO program location, and the effect of NGOs in Bangladesh on community-level poverty rates.

### **1.5 Limitations of the Study**

As it is an exploratory type of work very few studies have concentrated in this area of research. So, there is hardly any scope of advancing this study towards sophistication. Again the co-operation of NGOs were not encouraging to provide official information. This study based totally on the information of the respondents. If we could incorporate some official information with the present data; this study could be improved to a remarkable standard. Again data which used in this study suffer from the problems of proper method of sampling. Despite these limitations an attempt has been made to fulfill the objectives of the study. The results and policy implication will be valid up to the data limitation.

### **1.6 Organization of the Study**

The present study has been presented in seven chapters. In the first chapter an introduction and the objectives of the study have been discussed. In the second chapter the data, its evaluation & method of analysis have been placed. In the third chapter the contribution of NGO in the field of education has been explained. In the fourth chapter contribution of NCO in the health facilities of the respondents and their family members have been placed. In the fifth chapter contribution of NGO in the income generating activities has been discussed. In the sixth chapter the distribution of income and expenditure of the respondents and their structural changed have been discussed. The seventh chapter is the concluding chapter containing findings and policy implication of the study.

# **CHAPTER II**

## **Data & Methodology**

# CHAPTER II

## Data & Methodology

### 2.1 Data used in the study:

The NGOs of Bangladesh are investing micro credits to the poor to alleviate the poverty and to improve their standard of living. Thus they are contributing in the process of HRD of Bangladesh. But the data on the contribution of NGOs were not available as such. As per objectives of the study, the contribution of Non- Government Organizations (NGOs) in Human Resource Development(HRD) has been assessed from the responses of the micro-credit receivers of Bangladesh.

The data used in the study was primary data, which was collected during January to March 2002. In order to cover the Bangladesh situation, survey was conducted in four divisions of Bangladesh: Dhaka, Rajshahi, Khulna & Chittagong. From each Division two districts have been selected. Again from each district two thanas (Upazilla) have been selected. The selected Divisions, Districts and Thanas (Upazilas) have been shown in the Table 2.1 below:

**Table. 2.1: Selection of Multistage Sampling Procedure of Respondents**

Sl. no.	Division	Districts	Thana	Respondents
1	Dhaka	Manikgonj	Harirumpur	344
			Gheyur	
		Munshigonj	Munshigonj	
			Tongi Bari	
2	Chittagong	Chittagong	Bashkhali	322
			Satkania	
		Cox's Bazar	Cox's Bazar	
			Ukhya	
3	Khulna	Khulna	Daulatpur	459
			Khalishpur	
		Jessore	Kotwali	
			Baghar Para	
4	Rajshahi	Rangpur	Kotwali	416
			Mithapukur	
		Dinajpur	Kotwali	
			Birol	
	Total			1551

Now from each upazila available respondents have been interviewed from 5 NGOs taking almost same number of respondents from each NGO. The selection of respondents from each upazila was purposive. As we are interested to study the Contribution of NGO in education, health & income generating activities so, this purposive selection of the respondents does not affect the objectives of the study.

The main objective of the study to compare the contribution of NGOs, so, division wise selection of respondents of five selected NGOs are shown in Table 2.2.

**Table-2.2: Distribution respondents by division and their Respective NGOs**

Divisions	Organizations					Total	Percent
	IBBL	GB	BRAC	ASHA	Proshika		
Dhaka	62	105	59	29	89	344	22.32
Chittagong	63	73	68	61	57	322	20.90
Khulna	97	43	104	106	109	459	29.78
Rajshahi	70	99	49	115	83	416	27.00
<b>S. Total</b>	<b>292</b>	<b>320</b>	<b>280</b>	<b>311</b>	<b>334</b>	<b>1541</b>	<b>100</b>
<b>Percent</b>	18.95	20.77	18.17	20.18	21.93	<b>100</b>	

The table shows that the selection of respondents from five NGOs are around 300 to 400 and there exist regional differences.

## 2.2 Socio-economic Background of the Respondents.

The panel –1 of Table 2.3 exhibits the distribution of the 1534 respondent by their ages and Organizations. It is observed that 72 (4.69%) respondents out of 1534 are in the age interval below 20 years, that of 527 (34.35%) respondents are in the age group 20-29 years, 563 (36.70%) respondents are in the age group 30-39 years, 266 (17.34%) respondents are in the age group 40-49 years and 106 (6.91%) respondents are in the open age interval 50 years and above. Thus it is evident that 95.31% of the respondents are in the age range 20+ years and only 4.69% of the respondents are outside the above age interval.

Panel II of the Table 2.3 represents the distribution 1541 respondents by sex and organization. It is found that out of 1541 respondents 1436 (93.19%) respondents are females where as 105 (6.81%) of them are males. It is also found that proportion of

female respondents of BRAC is the highest followed by ASHA. On the other hand the proportion of male respondent in PROSHIKA is the highest (13.91%).

The panel III of Table 2.3 shows the distribution of the respondents by their marital status and Organizations. It is found that out of 1534 respondents 1442 (94%) are currently married 2.74% are unmarried and 2.8% are widowed. It is also an interesting finding that micro-credits are issued mostly to the currently married respondents. Among the five NGOs, ASHA issued 97% micro-credits to the respondents who are currently married followed by BRAC (96.06%).

Panel IV of the Table 2.3 shows the distribution of the respondents by their years of schooling and organizations. It is found that out of 1414 respondents only 18 (1.27%) are illiterate other 1396 (98.73%) are literate. On the other hand among 1414, 33.31% have the one year of schooling ie they can read and write their names only, 32.53% of them have 2-5 years of schooling and 30.84% of them have 6-10 years of schooling. Using these data it can be said that 65.84% of the respondents have the 1-5 years of schooling. On the other hand (32.89%) of the respondents have 6+ years of schooling.

Panel V of the Table 2.3 shows the distribution of the 1499 respondents by occupation and Organization. It is found that 1225 (81.72%) of the respondents are housewives and doing the house hold works. Only 115 (7.67%) of them are engaged in the small business and 159 (10.61%) are engaged in the activities other than housewife and small business. From the above figures it is an interesting finding that the although 93 percent of the females are receiving micro-credits but only around 7.87% of them are doing micro business. The rest of the respondents are receiving micro-credits but are not doing micro-business. Perhaps they are paying the micro-credits to their husbands or to their near relations for business and they are working as housewives.

Panel VI of the Table 2.3 shows the distribution of the 1456 respondents by their monthly income and organizations. This panel shows the Income distribution of the respondents of five NGOs individually and an overall income distribution of 1456 respondents under study. The nature and characteristics of these distributions will be discussed in the sixth

chapter of this study. The last column of this panel shows the percentage distribution of the respondents for different income groups. It shows a typical pattern (Pareto type) of uni-modal right hand skewed distributions.

**Table-2.3: Distribution of Respondents by Organizations and other covariates.**

Covariates		Organizations					Total	Percent
		IBBL	GB	BRAC	ASHA	PROSHI KA		
Panel-I Age	up to 19	9	14	14	26	9	72	4.69
	20-29	113	91	90	126	107	527	34.35
	30-39	108	129	107	103	16	563	36.70
	40-49	47	63	52	32	72	266	17.34
	50+	14	22	17	21	32	106	6.91
	<b>S. Total</b>	<b>291</b>	<b>319</b>	<b>280</b>	<b>308</b>	<b>336</b>	<b>1534</b>	<b>100</b>
Pan-II Sex	Males	26	27	1	4	47	105	6.81
	Females	266	293	279	307	291	1436	93.19
	<b>S. Total</b>	<b>292</b>	<b>320</b>	<b>280</b>	<b>311</b>	<b>338</b>	<b>1541</b>	<b>100</b>
Panel-III Marital Status	Unmarried	9	8	3	3	19	42	2.74
	Married	270	298	268	302	304	1442	94.00
	Widowed	9	13	7	3	11	43	2.80
	Other	4	1	1	1	0	7	0.46
	<b>S. Total</b>	<b>292</b>	<b>320</b>	<b>279</b>	<b>309</b>	<b>334</b>	<b>1534</b>	<b>100</b>
Panel-IV Years of School	0	2	6	4	3	3	18	1.27
	1	102	96	75	102	96	471	33.31
	2-5	76	99	81	79	125	460	32.53
	6-10	78	91	68	103	96	436	30.84
	11+	6	3	1	5	14	29	2.05
	<b>S. Total</b>	<b>264</b>	<b>295</b>	<b>229</b>	<b>292</b>	<b>334</b>	<b>1414</b>	<b>100</b>
Panel-V Occu- pation	Housewife	234	254	246	271	200	1225	81.72
	Small Business	33	16	11	16	36	115	7.67
	Other	19	37	11	16	76	159	10.61
	<b>S. Total</b>	<b>286</b>	<b>307</b>	<b>268</b>	<b>303</b>	<b>334</b>	<b>1499</b>	<b>100</b>
Panel-VI Income	up to 999	-	19	2	-	14	35	2.40
	1000-1999	8	45	25	32	59	169	11.61
	2000-2999	69	78	64	104	94	409	28.09
	3000-3999	70	54	70	82	66	342	23.49
	4000-4999	38	41	38	28	34	179	12.29
	5000-5999	23	29	28	20	38	138	9.48
	6000-6999	28	20	20	9	9	86	5.91
	7000+	46	16	15	12	9	98	6.73
	<b>S. Total</b>	<b>282</b>	<b>302</b>	<b>262</b>	<b>287</b>	<b>333</b>	<b>1456</b>	<b>100</b>



### 2.3 Evaluation & adjustment of data:

The data have been edited coded and tabulated into various cross-tables. Almost all the tabulated data seemed to be in the expected pattern. There may be some errors involved but as these were not seemed to be serious, so, all the data have been analyzed without adjustment. It is worthwhile to mention that total number of respondents in different tables are different, it is because of the non-responses in some of the characters.

### 2.4 Methods used in the Analysis

The data under study have been cross classified in two way classifications. In most of the cases the percentages and their significance have been studied using statistical tests. The association between the attributes has been studied using  $\chi^2$  statistic where

$\chi^2 = \sum \frac{(O - E)^2}{E}$  which follows  $\chi^2$  with (r-1 (c-1) degrees of freedom. In fitting the

income distribution  $\chi^2$  test has also been used to test the goodness of fit. Again to test the

significance of the income elasticity t- statistic has been used where  $t = \frac{\hat{\beta}}{SE(\hat{\beta})}$  which

follows t- distribution with n-k d.f. To study the relation between the quantitative variables, product moment correlation co-efficient r has been calculated. To test the

significance of this r, t statistic has been used where  $t = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$  which follow t

distribution with n-2 d.f. [Mood et.al ,1974]

To study the structural changes of the income distribution chow-tests (using F statistic)

have been used; where  $F = \frac{(e'e_* - e'e)/q}{e'e'/n-k}$  which follow F distribution with q & n-k d.f

[Johnston,1972]. Again to study the impact of Socio-economic characteristics of the respondents on the contribution of NGOs in HRD multiple regression analysis technique has been used [Snedecor et.al, 1982]

### 2.5: Overview of the Organizations Under Study:

A brief description of the organizations under study has been placed to know their aims and objectives.

### **2.5.1; ISLAMI BANK FOUNDATION**

One of the distinguishing features of Islami Bank is that its overall activities are directed towards the welfare of the society. The Bank, since its inception, has dedicated itself for the upliftment and emancipation of the helpless and downtrodden people of the society. With this end in view, the Bank has created a separate fund, which was earlier known as Saclaqua Tahbil. In 1991, the Saclaqua Tahbil was reorganized and enlarged under the new name of 'Islami Bank Foundation' with a fund of Taka 38.00 million in order to conduct social-welfare activities on a wider scale. As one of the leading non-government voluntary organizations of the country, the Foundation has been working with unique and special programs for the welfare of distressed humanity and to make poor, downtrodden, landless and asset less people self-reliant,

The aims and objectives of the Foundation are to serve distressed humanity, promote people oriented mass education, extend health and Medicare facilities to the poverty-stricken people in urban and rural areas, create facilities for productive self-employment and develop human resources for improving economic condition and quality of life, assist healthy growth of art, culture and literature, science and technology, sports, research and propagation of Islamic teachings. The Foundation has taken up a number of schemes covering the whole of Bangladesh,

#### **Income Generating Programs**

Access to required finance and other related inputs may help many to become self employed. In absence of such opportunity the unemployed youths entangle themselves in various anti-social activities. Islami Bank Foundation has, therefore, taken up the following Self-employment projects:

1. Rickshaw
2. Sewing
3. Poultry Keeping
4. Rural Health Work
5. Milk Cow/Goat rearing
6. Small Trade

## **Educational Programs**

Education is the backbone of a nation. Awareness building, skill training, access to information-all depend on education. But it is regrettable that the rate of literacy is still very low in Bangladesh. Most of the children are deprived of the light of education due to poverty, lack of sufficient educational institutions, non-availability of text books and equipments etc. In a ward, the unfavorable socioeconomic conditions are responsible for this chaotic situation.

The Foundation has, therefore, taken up the following programs to improve the country's educational scenario:

- a) Support to Model Forqania Maktab
- b) Scholarship/lump grant for poor and Meritorious Students
- c) Financial support to Educational Institutions

**Health and Medicare Programs** Health and Medicare facilities are the basic and fundamental rights of each individual, but most of the people of our country are still deprived of it. The Foundation has, therefore, taken up the following programs to extend health, Medicare and sanitation facilities to the urban and rural areas:

- a. Establishment of Medical Centres
- b. Supporting charitable dispensaries
- c. Lump-sum help for medical treatment
- d. Tube well Installation
- e. Sanitary Latrine construction etc.

Such Assistance is also extended to the members of Rural Development Scheme (RDS) of IBBL. Under Health and Medicare programs preventive measures have also been taken, Special steps have been taken for construction of sanitary latrines and installation of tube wells in the villages covered under to whom Islami Bank Bangladesh Ltd. is providing finance for income generation activities.

### **Humanitarian Help Programs**

These programs aim at providing help to distressed people who are unable to meet their basic needs like food, clothing, shelter and medicine. The old widow and children without guardians get preference. Besides, the program extends assistance to orphanages, provide fund for the marriage of poor girls, assist indebted people, help distressed wayfarers etc,

### **Relief and Rehabilitation Programs**

Participation in relief and rehabilitation activities in natural disasters and in emergency forms an important program of Islami Bank Foundation. During calamities like flood, tornado, tidal surge etc. the Foundation mobilizes its own people as well as donates to the relief fund opened at the government level. The Foundation also tries its best to extend hands of assistance and co-operation to the Muslim brethren elsewhere in the world.

### **Dawah Programs**

One important objective of Islami Bank Foundation is to disseminate the true knowledge and teachings of Islam. The Foundation has, therefore, taken up various schemes to enlighten the common people as well as the elite and make them familiar with the concept of Islam. Islamic research magazines and other Islamic Literatures are being distributed among the Academicians, Journalists, Justices, Lawyers, High Officials, Bankers, Literatures and important Libraries and Institutions of the country. The Foundation is also working among the prisoners for their moral reforms.

### **Special Schemes**

- A. Islami Bank Hospital
- B. Community Hospital
- C. "Monoram" (Sales Centre for Products of Distressed Women)
- D. Service Centre
- E. Islami Bank Technical Institute
- F. Islami Bank Model School and College
- G. Centre for Integrated Development for the Disabled
- H. Centre For Development Dialogue

### **2.5.2: Grameen Bank LTD(GB)**

The Grameen Bank was established on the 2<sup>nd</sup> October in 1983 by Mohammad Eunos. It was established on the basis of the theory that loan may be disbursed to the poor without mortgage or security and that loan can be realized fully in time. By 31<sup>st</sup> may 1998 he collected 38,000 village members. A volume of loan amounting 2.4 billion Dollars were disbursed which exceeded amount of loan disbursed by all other authorities of Bangladesh. Grameen Bank Started to collect donation since 1995. Nearly 1.25 core of people had been benefited from the micro-credit system of Grameen Bank and about 4 lac of houses were built for the poor of Bangladesh. As a result the Standard of living of the poor have been changed by Grameen Bank. He has changed the idea of so called Bank loan system in exchange of collateral. Its effect was tremendous and now almost 59 countries of the world have accepted the new model of the micro credit system of the Grameen Bank.

Grameen Bank has been working on the basis of 16 (Sixteen) decisions as follows:

01. We shall follow the four principles of Grameen Bank-discipline, unity, courage and hard work- in all walks of our lives.
02. We shall bring prosperity to our families.
03. We shall not live in dilapidated houses. We shall repair our houses and work towards constructing new houses at the earliest.
04. We shall grow vegetables all the year round. we shall eat plenty of them and sell the surplus.
05. During the plantation seasons we shall plant as many seedling as possible.
06. We shall plan to keep our families small. we shall minimize our expenditures. we shall look after our health.
07. We shall educate our children and ensure that we can earn to pay for their education.
08. We shall always keep our children and the environment clean.
09. We shall build and use pit Latrines.
10. We shall drink water from tube-wells.

11. We shall not take any dowry at our sons' wedding, neither shall we give any dowry at our daughters wedding. We shall keep the center free from the curse of dowry. We shall not practice child marriage.
12. We shall not inflict any injustice on any one, neither shall we allow any one to do so.
13. We shall collectively undertake bigger investments for higher income.
14. We shall always be ready to help each other. If any one is in difficulty, we shall all help him or her.
15. If we come to know of any breach of discipline in any center, we shall all go there and help to restore discipline.
16. We shall introduce discipline in all our centers. We shall take part in all social activities collectively.

### **2.5.3: The Bangladesh Rural Advancement Committee (BRAC)**

As the rural population of Bangladesh increases, landlessness among people once dependent upon agriculture is a growing problem. The Bangladesh Rural Advancement Committee (BRAC) has been working with the rural poor since 1972, and in 1979 it began to provide credit via its 81 branches through the Rural Development Program (RDP). Ten years later, significant success of the RDP in generating incomes and employment through small businesses and building up assets can be seen.

BRAC was started in early 1972 as a relief measure following the war of liberation. Soon it became a community development organization providing health, family planning, education and economic support to different sectors of the rural community, but with particular emphasis on the most disadvantaged, such as women, fishermen and the landless. Since 1977, however, BRAC has been working exclusively with disadvantaged sections of the community.

BRAC's initial experience with credit dates back to the early 1970s. In 1974, BRAC provided credit to the villagers in its Sulla Project in Sylhet district through the Sulla Thana Central Co-operative Association. In the following year, credit was advanced

without interest to several landless groups; in 1976, BRAC started providing credit to landless through its Manikganj project.

### **BRAC's Rural Development Program**

The Rural Development Program (RDP) is one of the major programs of BRAC. Started in 1979, RDP had grown by December 1989 into a large program providing credit to target groups from 81 branches in 45 sub-districts of 22 districts. Its major objectives include:

- building viable organizations of the poor capable of bringing about desired changes in their own socio-economic and political circumstances;
- improving the socio-economic status of the rural poor through the provision of easy credit for income and employment generating activities; and
- developing the managerial and entrepreneurial capabilities of the poor.

To attain the above objectives, RDP works through different components in the following chronological order:

- Concretization. RDP starts its operation with a concretization program through BRAC's functional education curriculum. Classes are held separately for men and women.
- Institution building. The functional education classes normally lead to the formation of village organizations for men and women.
- Training. Different types of training are organized for the members of newly formed groups. Some of these are held at BRACs' own training centres, while others are held in RDP's local offices. The program also a para-legal aid program to provide legal awareness to group members.
- Credit support. The above activities normally take approximately six months before the group members become eligible to receive credit from RDP.
- Technical and Logistical support. Some of the income generation activities may require higher level technical and logistical supports which are provided by

BRAC. Examples include, vaccines for livestock and poultry, and marketing of locally produced items such as garments.

### **The Principles of Credit under the RDP**

Borrowers are expected to use the loan according to the purpose for which it was given, and no loan is given for consumption purposes. Loan repayment is started immediately and is made on a weekly basis.

Loans are given to members on recommendation from their village organizations. They are given "on margin" which means that the borrowing organization contributes its own resources to the extent that all members have a significant stake in the venture. Each group member saves every week, and this saving is kept in the member's account.

No collateral is demanded, and hence BRAC has to enquire beforehand about the borrower's ability to carry out the proposed venture and its potential profitability. This is supplemented by continuous but supportive monitoring by BRAC staff throughout the entire life of the scheme. When a loan is given to procure an income producing asset, however, the asset remains hypothecated to BRAC until the full recovery of the loan. In case of default, the asset is sold and the outstanding loan is recovered. Such a situation, however, seldom arises. For effective supervision of the loan from the group side, a management committee is selected by the group members.

The amount of the loan varies depending on the nature of the scheme. The smallest was for Tk. 500 and the largest for Tk. 4 million. Large loans are given for collective enterprises, such as deep tube wells, power tillers and so on, organized by several village organizations, whereas individual loans vary from Tk. 500 to Tk. 8,000.

There are three lengths of duration for which credit is advanced to group members -

- short-term for a period of 12 months or less
- medium-term credit for a period greater than 1 year but less than 3 years
- Long-term credit for 3 years or more.



On all loans, an interest rate of 16 per cent is charged. BRAC's target group comprises those men and women who sell their manual labour for subsistence; most of this group are found to be landless or near landless.

Each branch of RDP is headed by a manager who is assisted by four to five program organizers. Since 1983, RDP has recruited local male and female *gram shebak* (village volunteers) to assist in the credit activities. Approximately 45-50 villages (average village population 1,200) are covered through a branch and each *gram shebak* is assigned approximately 5 villages or 10 village organizations.

Until December 1989, RDP had been working from 81 centres in 45 sub-districts of Bangladesh which are scattered over 22 of Bangladesh's 64 districts. The RDP has been working in 3,359 villages and 65 percent of the households belong to RDP-defined target groups, 68 percent of whom are members of RDP groups.

#### **2.5.4: PROSHIKA**

It has been more than two decades since PROSHIKA, now one of the largest NGOs in Bangladesh, took its first step. Although the PROSHIKA development process started in a few villages of Dhaka and Comilla districts in 1975, the organization formally emerged in October, 1976. The name 'PROSHIKA' is an acronym of three Bangla words, which stand for training, education, and action.

PROSHIKA is now in its phase VI five-year plan stepping into the new millennium. A constant analysis of the magnitude of poverty and its trends, the strategies effective for its reduction and eventual elimination, and their meticulous implementation has brought PROSHIKA where it is today. The central ethos, however, all the while remained the same---human development and empowerment of the poor who gradually stand tall to achieve freedom from poverty by themselves. Empowerment means that the poor are united and organized, become aware of the real causes of their impoverishment, develop leadership among themselves, mobilize their material resources, increase income and employment, develop capacities to cope with natural disasters, become functionally

literate, take better care of their health, become engaged in environmental protection and regeneration, get elected in local government bodies and community institutions, and have better access to public and common property resources. Since its inception, PROSHIKA has been both a pioneer and practitioner of this holistic strategy of empowerment and has made a significant contribution to a modest reduction of poverty already achieved in Bangladesh.

### **Vision**

PROSHIKA envisages a society in Bangladesh which is economically productive and equitable, socially just, environmentally sound, and genuinely democratic.

### **Mission**

PROSHIKA's mission is to conduct an extensive, intensive, and participatory process of sustainable development through empowerment of the poor.

### **Objectives**

PROSHIKA's objectives are: i) structural poverty alleviation; ii) environmental protection and regeneration; iii) improvement in women's status; iv) increasing people's participation in public institutions, and v) increasing people's capacity to gain and exercise democratic and human rights.

## **PROSHIKA**

These objectives are achieved through a broad range of programs in education and training leading to income and employment generation, health education, building of health infrastructure, and environmental protection and regeneration. The programs are supported by research activities and advocacy campaigns which increasingly call for cooperation with like-minded development partners at the national and international levels. Thus the network of activities in which PROSHIKA is involved links the poorest of the poor with like-minded development actors worldwide.

The activities of PROSHIKA spread in 22,917 villages and 2,028 urban slums in 57 districts, PROSHIKA now works with nearly 2.82 million men and women members

drawn from rural and urban poor households, and has organized them into 148,354 primary groups of average 19 members each. As there are on average 1.3 members from each household having 5.5 family members, this translates into over 11.93 million program beneficiaries of PROSHIKA.

### **2.5.5: ASHA**

Asha which means “Hope” in several South Asian languages, is a non-profit women’s organization committed to ending all forms of violence against women and enhancing the status of South Asian women living in the metropolitan Washington, DC area. (South Asia includes Bangladesh, India, Pakistan, Nepal, Sri Lanka and Bhutan.) ASHA, founded in 1989, is the only organization in the Washington, DC area dedicated to providing culturally specific, multi-lingual support and referral services to women of South Asian descent.

ASHA is a volunteer organization composed of members who are committed to ending violence and abuse and enhancing the status of South Asian women living in the U.S. ASHA volunteers do not give professional advice but offer sympathetic, nonjudgmental support and provide information and resources to enable women to make their own decisions. Women can talk about their situations and discuss their options without fear of criticism or shame.

#### ASHA’s Regular Activities

- Monthly Organizational Meetings      · Educational Seminars and Workshops
- Fundraising and Networking      · Annual Volunteer and Advocates’ Training and Activities
- Support group for survivors (current and past ASHA)

## **CHAPTER III**

### **Contribution of NGO in HRD Through Education & Training**

## CHAPTER III

### Contributions of NGO in HRD Through Education & Training

As it is mentioned before that education is one of the major components of HRD. In macro study this component is assessed by adult literacy percentage which can be obtained from the educational background of the respondents. But we are interested to study contributions of the NGOs in education and training. So, we need the information about the training and education of the respondents after joining in the NGO activities. To get these information the respondents were asked whether they got the education and training from NGOs or not. On the basis of these responses the contributions of NGOs were assessed.

#### 3.1 Contributions Of NGOs Through Education & Training To Respondents.

As mentioned before that there is no data on contributions of NGOs in education and training to their clients (respondents). Hence to assess this contributions the respondents were asked whether they got any training & education from NGOs or not. The positive responses are treated as the contributions of the NGOs in education. Our aims are to study amount of contributions by the 5 selected NGOs. Before that the relationships of correlates with the contributing factors were assessed which may help us in explaining findings of the comparative study of contribution of the NGOs.

Keeping the above points in mind Table 3.1.1 has been constructed to study distribution of the respondents by their ages and chance of having training of the respondents from NGOs and to study their relations. It is observed from this table that out of 1503 respondents 202 (13.4%) have got the chance of education and training facilities from NGOs and the rest 1301 (86.6%) of the respondents did not get the chance of training from NGOs. Again among 202 respondents who got training facilities 4 (2%) are in the age interval below 20 years; 53 (26.2%) are in age interval 20-29 years; 84 (41.6%) are in the age interval 30-39 years, 42 (20.8%) are in the age interval 40-49 years, 19 (9.4%) are in the age interval '50 years and over'. It indicates that modal age group of the respondents in the age interval 30-39 years giving the modal age is approximately 34 years.

**Table-3.1.1: Distribution of the Respondents by Chance of own Training & Their Ages**

Chance of own Training	Age										Total %	
	19	%	20-29	%	30-39	%	40-49	%	50+	%		
No	68	94.4	462	89.7	469	84.8	219	83.9	83	81.4	1301	86.6
%	5.2	4.5	35.5	30.7	36.0	31.2	16.8	14.6	6.4	5.5	100.0	86.6
Yes	4	5.6	53	10.3	84	15.2	42	16.1	19	18.6	202	13.4
%	2.0	.3	26.2	3.5	41.6	5.6	20.8	2.8	9.4	1.3	100.0	13.4
Total	72	100.0	515	100.0	553	100.0	261	100.0	102	100.0	1503	100.0
%	4.8	4.8	34.3	34.3	36.8	36.8	17.4	17.4	6.8	5.8	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .009 \quad df = 4 \quad cal \chi^2 = 13.629$$

$\chi^2$  – statistic has been calculated to test the association between age intervals and chance of having training. The value  $\chi^2 = 13.629$  for 4 *df* implies that  $\alpha = 0.009$ . It indicates that there is an association between the above two attributes and it is statistically significant at around 1% level.

Table 3.1.2 has been constructed to study the sex differentials of having the chance of education and training facilities and to study their association. It is seen that out of 1507 respondents 105 (7%) are males and 1402 (93%) are females. Out of 1507 respondents only 202(13.4%) have the training facilities and the rest 1305 (86.6%) did not have the chance training facilities. Again out of the 1305 respondents who did not get the training facilities 83(6.4%) are males and 1222(93.6%) are females. But out of 202 respondents who got the chance of having training facilities 22 (10.9%) are males & 180 (89.1%) are females. It is also seen that the proportion of males (21%) among the respondents who got the chance of having training facilities are relatively higher compared to the female respondents(12.8%). Sex differentials are observed in training facilities which is statistically significant. Consequently it is found that the proportion male respondents (79.0%) are relatively lower among the respondents who did not get the chance of having training facilities compared to proportion (81.1%) of female respondents.

**Table-3.1.2: Distribution of the Respondents by Chance of own Training & Their Sex:**

Chance of own Training	Sex				Total	%
	Male	%	Female	%		
No	83	79.0	1222	87.2	1305	86.6
%	6.4	5.5	93.6	81.1	100.0	86.6
Yes	22	21.0	180	12.8	202	13.4
%	10.9	1.5	89.1	11.9	100.0	13.4
Total	105	100.0	1402	100.0	1507	100.0
%	7.0	7.0	93.0	93.0	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .019 \quad df = 1 \quad cal \chi^2 = 5.540$$

$\chi^2$  – Statistic has been calculated to study the association between the attributes sex and training facilities. The value of  $\chi^2 = 5.540$  for 1 degree of freedom implies that  $\alpha = 0.019 \cong 0.02$ . It indicates that there is an association between the attribute under consideration and this association is statistically significant at 2% level.

To study the association between marital status and chance of having training facilities Table-3.1.3 has been constructed. It is found from the table that out of 1504 respondents 1415 (94.1%) are married; 41 (2.7%) are unmarried; 41 (2.7%) are widowed & only 7 (0.5%) are of other marital status. The proportions of the respondents having the chance of training facilities for different marital status groups are 93.1%; 3.5% and 0.5% respectively. On the contrary the proportions of the respondents who did not have the chance of training facilities for different marital status groups ranges 94.2%; 2.6%, 2.7% & 0.5% respectively which are seemed to be significantly different from each other.

The  $\chi^2$  – statistic has been calculated to study the association between the attribute marital status and the chance of having training facilities. The value of  $\chi^2 = 0.549$  with 3 df implies  $\alpha = 0.908$  indicates that there is no significant association between the above two attributes.

**Table-3.1.3: Distribution of the Respondents by Chance of own training & Marital Status**

Marital Status	Chance of Own Training				# Total	%
	No	%	Yes	%		
Married	1227	94.2	188	93.1	1415	94.1
%	86.7	81.6	13.3	12.5	100.0	94.1
Unmarried	34	2.6	7	3.5	41	2.7
%	82.9	2.3	17.1	.5	100.0	2.7
Widowed	35	2.7	6	3.0	41	2.7
%	85.4	2.3	14.6	.4	100.0	2.7
Others	6	.5	1	.5	7	.5
%	85.7	.4	14.3	.1	100.0	.5
Total	1302	100.0	202	100.0	1504	100.0
%	86.6	86.6	13.4	13.4	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .908 \quad df = 3 \quad cal \chi^2 = .549$$

To study the relationship of the training facilities of the respondents with their existing educational background Table- 3.1.4 has been constructed. It is seen that out of 1394 only 18 (1.3%) are illiterate, 463 (33.2%) have the one year of schooling, 441 (31.6%) have 2-to 5 years of schooling , 443 (31.8%) have 6 to 10 years of schooling and 29 (2.1%) have 11+ years of schooling. It is also seen from the Table-3.2.4, 1221 (86.6%) of the respondents did not have the chance of training facilities and only 173 (12.4%) have the chance of training facilities. Out of these 173 respondents who got the facilities of training 1 (0.6%) are illiterate, 41 (23.7%) have the one year of schooling, 77 (44.5%) have 2-.5 years of schooling , 50 (28.9%) have 6-10 years of schooling and 29 (2.1%) have 11+ years of schooling. The proportion of the respondents who got the chance of having training facilities for different categories of years of schooling are quite different compared to the proportions of the respondents those who did not have the chance of having training facilities.



**Table-3.1.4: Distribution of the Respondents by Chance of own training & Years of Schooling**

Years of Schooling	Chance of own training				Total	%
	No	%	Yes	%		
0	17	1.4	1	.6	18	1.3
%	94.4	1.2	5.6	.1	100.0	1.3
1	422	34.6	41	2.5	463	33.2
%	91.1	30.3	8.9	2.9	100.0	33.2
2-5	364	29.8	77	4.5	441	31.6
%	82.5	26.1	17.5	5.5	100.0	31.6
6-10	393	32.2	50	2.9	443	31.8
%	88.7	28.2	11.3	3.6	100.0	31.8
11+	25	2.0	4	2.3	29	2.1
%	86.2	1.8	13.8	.3	100.0	2.1
Total	1221	100.0	173	100.0	1394	100.0
%	87.6	87.6	12.4	12.4	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .002 \quad df = 4 \quad cal \chi^2 = 17.073$$

$\chi^2$  - statistic has been calculated to study the association between the attributes educational status and chance of having the training facilities. The value of  $\chi^2 = 17.073$  for 4 degrees of freedom implies that  $\alpha = 0.002$ . It indicates that there is an association between the attribute under consideration and this association is highly significant at 0.02% level.

Table 3.1.5 has been constructed to see the relationship between the chance of own training facilities and the occupation of the respondents. It is seen that out 1467 respondents 189(12.9%) have reported that they have got the training facilities from NGOs. Again out of these 189 respondent 157(83%) are housewives, 19(10.1%) are engaged in small business, 13(6.9%) are engaged is other occupation. Thus it is seen that the respondents who got the training facilities are mostly housewives only 10% are

engaged in small business. It can be said that training facilities of the respondents hardly can change their occupation.

**Table-3.1.5: Distribution of the Respondents by Chance of own Training & Occupation**

Occupation	Chance of Training Facilities				Total	%
	No	%	Yes	%		
House wife	1044	81.7	157	83.1	1201	81.9
%	86.9	71.2	13.1	10.7	100.0	81.9
Small Business	96	7.5	19	10.1	115	7.8
%	83.5	6.5	16.5	1.3	100.0	7.8
Others	138	10.8	13	6.9	151	10.3
%	91.4	9.4	8.6	.9	100.0	10.3
Total	1278	100.0	189	100.0	1467	100.0
%	87.1	87.1	12.9	12.9	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .146 \quad df = 2 \quad \text{cal } \chi^2 = 3.852$$

$\chi^2$  statistic has been calculated to see the association between the attributes.  $\chi^2 = 3.852$  for 2 d.f implies  $\alpha = 0.146$ . It indicates that the attributes under consideration are associated with 14.6% level of significance.

To study the relationship between the monthly income of the respondents and the training facilities Table 3.1.6 has been constructed. Out of 1434 respondents 35 (2.4%) have the monthly income 'less than Tk. 1000'; 156 (10.9%) have the monthly income of Tk. 1000 – 1999; 405 (28.2%) have the income of Tk. 2000 – 2999; 340 (23.7%) have the monthly income of Tk. 3000 – 3999; 179 (12.5%) have the monthly income of Tk. 4000 – 4999; 138 (9.6%) have the monthly income of Tk. 5000 – 5999, 86 (6%) have the monthly income of Tk. 6000 – 6999 and 95 (6.6%) of the respondents have income of 'Tk. 7000 and above'.

**Table-3.1.6: Distribution of the Respondents by Chance of own Training & Monthly Income.**

Monthly Income	Chance of own Training				Total	%
	No	%	Yes	%		
up to 999	23	1.9	12	6.3	35	2.4
%	65.7	1.6	34.3	.8	100.0	2.4
1000-1999	132	10.6	24	12.6	156	10.9
%	84.6	9.2	15.4	1.7	100.0	10.9
2000-2999	352	28.3	53	27.7	405	28.2
%	86.9	24.5	13.1	3.7	100.0	28.2
3000-3999	300	24.1	40	20.9	340	23.7
%	88.2	20.9	11.8	2.8	100.0	23.7
4000-4999	157	12.6	22	11.5	179	12.5
%	87.7	10.9	12.3	1.5	100.0	12.5
5000-5999	123	9.9	15	7.9	138	9.6
%	89.1	8.6	10.9	1.0	100.0	9.6
6000-6999	73	5.9	13	6.8	86	6.0
%	84.9	5.1	15.1	.9	100.0	6.0
7000 & above	83	6.7	12	6.3	95	6.6
%	87.4	5.8	12.6	.3	100.0	6.6
Total	1243	100.0	191	100.0	1434	100.0
%	86.7	86.7	13.3	13.3	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .027 \quad df = 7 \quad cal \chi^2 = 15.794$$

Out of 1438 respondents 191 (13.3%) have got the chance of having training facilities from NGOs. The proportion of the respondents who got the chance of training facilities from NGO for various income groups are not same. Again out of 191 respondents who got the training facilities 12(6.3%) have the monthly income of 'Tk. below 1000',

24(12.6%) have the income of Tk, 1000 – 1999 ; 53(27.7%) have the income of Tk. 2000 – 2999 ; 40(20.9%) have the income of Tk. 3000 - 3999 ; 22(11.5%) have the income of Tk. 4000 - 4999 . 15(7.9%) have the income of Tk. 5000 - 5999,13(6.8%) have the income of Tk. 6000 - 6999 and 12(6.3%) have the income of ‘Tk. 7000 and over’. Thus it is seen that highest proportion (27.7%) of the respondents who got the training facilities are in the income group of Tk. 2000- 2999 followed by (20.9%) the income group of Tk. 3000 - 3999.

$\chi^2$  – statistic has been calculated to study the association of the attribute income group and chance of having the training facilities from NGOs. The  $\chi^2 = 15.794$  for 7 df implies  $\alpha = 0.027$ . It indicates that the association between the attributes is statistically significant at 2.7% level.

Table 3.1.7 has been constructed to assess the relationship between the attributes place of residence (divisions) and the chance of having training facilities from NGOs. It is found from the table that out of 1507 respondent 336(22.3%) are from Dhaka division, 314(20.8%) are from chittagong division, 455(30.2%) are from Khulna division and 402(26.7%) are from Rajshahi division. But among 202 respondents who got the training facilities 106(52.5%) are from Dhaka, 27(13.4%) are from chittagong; 29(14.4%) are from Khulna and 40(19.8%) are from Rajshahi division.

Thus it is found that the respondents of Dhaka division have got the training facilities at a highest proportion.(52.5%) followed by Rajshahi (19.8%) then Khulna (14.4%) and then Chittagong (13.4%) division.

$\chi^2$  statistic has been calculated to assess the association between the above two attributes. The value of  $\chi^2 = 15.043$  for 3 degrees of freedom implies  $\alpha = 0.000$ . It indicates that the association between the attributes are statistically significant.

**Table-3.1.7: Distribution of the Respondents by Chance of own Training & Place of Residence (Division)**

Divisions	Chance of Own training				Total %	
	No	%	Yes	%		
Dhaka	2301	7.6	106	52.5	336	22.3
%	68.5	15.3	31.5	7.0	100.0	22.3
Chittagong	287	22.0	27	13.4	314	20.8
%	91.4	19.0	8.6	1.8	100.0	20.8
Khulna	426	32.6	29	14.4	455	30.2
%	93.6	28.3	6.4	1.9	100.0	30.2
Rajshahi	362	27.7	40	19.8	402	26.7
%	90.0	24.0	10.0	2.7	100.0	26.7
Total	1305	100.0	202	100.0	1507	100.0
%	86.6	86.6	13.4	13.4	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .000 \quad df = 3 \quad cal \chi^2 = 125.043$$

To study the contributions of 5 selected NGOs in education and training of the respondents Table 3.1.8 has been constructed. It is seen from the table that out of 1507 respondents 289(19.2%) are from IBF, 314(20.8%) are from Grameen Bank, 279(18.5%) are from BRAC, 308(20.4%) are from ASHA and 317(21.0%) are from PROSHIKA. Out of these 1507 respondents only 202(13.4%) have got the chance of having training from NGOs. Rest 1305(86.6%) did not get the chance of training. Again out of 202 respondents who got the chance of training only 5(2.5%) are from IBF; 59(29.2%) are from Grameen Bank; 64(31.7%) are from BRAC, 19(9.4%) are from ASHA and 55(27.2%) are from PROSHIKA. Thus it is seen that the respondents of BRAC have the highest possibilities of getting the training facilities from NGOs followed by Grameen Bank and then PROSHIKA. Among the respondents of BRAC 22.9% got the training facilities from NGOs followed by Grameen Bank (18.8) and then PROSHIKA (17.4%). Looking on the overall proportion the probability of having training facilities from BRAC is the highest which is 4.2% followed by Grameen Bank (3.9%) then PROSHIKA (3.6%)

then ASHA (1.3%) and then IBF is the lowest(0.3%). Thus it can be concluded that BRAC has launched a training oriented programs.

**Table-3.1.8: Distribution of the Respondents by Chance of own Training & Organizations**

Organizations	Chance of Own Training				Total	%
	No	%	Yes	%		
IBF	284	21.8	5	2.5	289	19.2
%	98.3	18.8	1.7	3	100.0	19.2
GB	255	19.5	59	29.2	314	20.8
%	81.2	16.9	18.8	3.9	100.0	20.8
BRAC	215	16.5	64	31.7	279	18.5
%	77.1	14.3	22.9	4.2	100.0	18.5
ASA	289	22.1	19	9.4	303	20.4
%	93.8	19.2	6.2	1.3	100.0	20.4
PROSHIKA	262	20.1	55	27.2	317	21.0
%	82.6	17.4	17.4	3.6	100.0	21.0
Total	1305	100.0	202	100.0	1507	100.0
%	86.6	86.6	13.4	13.4	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .000 \quad df = 4 \quad cal \chi^2 = 81.774$$

$\chi^2$  statistic has been calculated to see the association between the attributes organization and the chance of having training facilities from NGOs.  $\chi^2 = 81.774$  for 4 d.f implies that  $\alpha = 0.000$ . It indicates that the attributes under consideration are very strongly associated

### 3.2: Multiple Regression Analysis of Training Facilities of Respondents.

Table 3.1.1 to 3.1.8 above exhibit the relationships between the attribute 'training facilities of the respondents' and its various correlates. Now to study the impacts of these correlates on the training facilities a multiple regression analysis technique has been carried-out. Table 3.2.1 shows results of this analysis.

The second and the third column of the table 3.2.1 shows the regression co-efficient and their corresponding standard errors for eight covariates of own training facilities of the respondents. The fifth column of the table shows the level of significance with the corresponding degree of freedom (d.f) shown in the fourth column.

From the table it can be concluded that first two age groups 'below 20 years' & 20 to 29 years have the significant effect on the chance of own training of the respondent at 1.1% and 3.5% level of significance respectively. Next two age groups 30-39 years and 40-49 years have also impact on the chance of having own training facilities but these are not statistically significant.

Again looking on the covariate sex, it is seen that there is an impact of sex on the chance of having own training facilities but this impact is not statistically significant.

Looking on the marital status of the respondents, it is also found that all the categories of marital status have the statistically insignificant impact on the chance of having own training facilities of the respondents.

Observing  $\beta$  value for occupation it is seen that first two categories of occupation have negative impact on the chance of having own training facilities of the respondents and these effects are statistically significant at 2.6% and 5% level respectively.

Looking on the monthly income of the respondents it is found that only the first income group 'Below Tk 1000' has statistically significant negative effect on the chance of having own training facilities. The rest of the income groups have no significant impact on the chance of having own training facilities.

Observing the impact of place (Division) of residence; it is seen that only the impact of Dhaka division has statistically significant impact on the chance of having own training facilities. Other divisions have no such significant effect on the chance of having own training facilities of the respondents.

Looking the impacts of organizations on the chance of having own training facilities it is found that IBF have very highly significant impact on the chance of having own training facilities. Where as ASA has also a significant effect at 1% level and BRAC has significant impact at 1.2% level of significance.

### 3.2.1: Multiple Regression Analysis for Own Training of Respondents

1 Variables	2 B	3 Std. Error	4 df	5 Sig.	6 Comments
Intercept	1.868	1.604	1	.244	
<b>AGE</b>					
Below 20 years]	1.927	.754	1	.011	**
20 – 29	.782	.370	1	.035	*
30 – 39	.407	.347	1	.241	
40 – 49	.469	.377	1	.213	
50 – 59	0	.	0	.	
<b>SEX</b>					
Males	-.660	.458	1	.149	
Females	0	.	0	.	
<b>MARITAL STATUS</b>					
Married	.238	1.379	1	.853	
Unmarried	-1.272	1.503	1	.597	
Widowed	-.248	1.468	1	.866	
Others	0	.	0	.	
<b>EDUCATION</b>					
0	1.435	1.295	1	.267	
1	.541	.709	1	.445	
2 – 5	-.205	.695	1	.769	
6 – 10	.276	.695	1	.691	
11 +	0	.	0	.	
<b>OCCUPATION</b>					
House wives	-.903	.405	1	.026	**
Small Business	-.973	.496	1	.030	*
Others	0	.	0	.	
<b>INCOME</b>					
Below Tk. 1,000	-1.120	.605	1	.064	
1000-1999	-.197	.499	1	.692	
2000-2999	-.159	.459	1	.729	
3000-3999	.255	.467	1	.585	
4000-4999	.502	.515	1	.329	
5000-5999	.625	.556	1	.261	
6000-6999	-.125	.557	1	.822	
7000+	0	.	0	.	
<b>DIVISION</b>					
Dhaka	-1.016	.252	1	.000	***
Chittagong	.494	.326	1	.130	
Khulna	.354	.300	1	.237	
Rajshahi	0	.	0	.	
<b>ORGANIZATION</b>					
IBF	2.241	.508	1	.000	***
GB	.026	.251	1	.918	
BRAC	-.682	.271	1	.012	**
ASHA	.874	.340	1	.010	**
Proshika	0	.	0	.	



### **3.3: Contribution of NGOs providing education & training facilities to the family members of the Respondents:**

As it is known to every body that HRD can also be attributed by providing education and training facilities to the family members of the respondents. Hence the distribution of respondents, whose family members have got the training facilities have been studied to assess the contributions of NGOs. An attempt has also been made to study the relationships with its various correlates using  $\chi^2$  -statistic. The comparative study of contributions of 5 selected NGOs have been carried-out the end of this section.

To study relationship between the training facilities of the family members and the ages of the respondents Table-3.3.1 has been constructed. It is seen from this table that out of 1467 respondents 234 (16%) have informed that their family members have got the training facilities from the NGOs and the rest 1233 (84%) have informed that their family members did not get the training facilities.

Among the 234 respondents whose family members have got the training facilities. 3 (1.3%) are in the age group 'below 20 years'; 81(34.6%) are in the age group 20-29 years, 99(42.3%) are in the age group 30-39 years, 40(17.1%) are in the age group 40-49 years and 11(4.7%) are in the age group 'above 50 years'. Thus it is seen that the respondents of the age group 30-39 years have got the highest opportunity to train their family members (42.3%) followed by the respondents of age group 20-29 years (34.6%) and then the respondents (17%) of age group 40-49 years respectively. It can also be said that 94% of the respondents whose family members have got the chance of training are in the age range 20-49 years.

$\chi^2$  Statistic has been calculated to study the association between the attributes 'the training facilities of the family members' and 'the age of the respondents'. The value of  $\chi^2 = 11.536$  for 4 d.f implies  $\alpha = .021$ . It indicates that the association between the attributes are highly significant at 2% level.

**Table-3.3.1: Distribution of the Respondents by Chance of Training of Family Members & Age**

Age	Training of Family members				Total	%
	No	%	Yes	%		
upto 19	69	5.6	3	1.3	72	4.9
%	95.8	4.7	4.2	.2	100.0	4.9
20-29	426	34.5	81	34.6	507	34.6
%	84.0	29.0	16.0	9.5	100.0	34.6
30-39	440	35.7	99	42.3	539	36.7
%	81.6	30.0	18.4	8.7	100.0	36.7
40-49	210	17.0	40	17.1	250	17.0
%	84.0	14.3	16.0	2.7	100.0	17.0
50+	88	7.1	11	4.7	99	6.7
%	88.9	6.0	11.1	.7	100.0	6.7
Total	1233	100.0	234	100.0	1467	100.0
%	84.0	84.0	16.0	16.0	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .021 \quad df = 4 \quad cal \chi^2 = 11.536$$

To study the relation between the chance of having training of the family members of the respondents with the sex of the respondent Table 3.3.2 has been constructed. From this table it is found that out of 1471 respondents, 235 (16%) have reported that their family members get the opportunity of having training facilities from the NGOs and the rest 1236 (84%) did not get these opportunities.

Again out of these 1471 respondents 101 (6.9%) are males and 1370 (93.1%) are females. Out of the 235 respondents who have reported that their family members get the training 22 (9.4%) are males and 213 (90.6%) are females. It is seen from the table that among males 21.8% of the respondents have reported that their family members get the training facilities

**Table-3.3.2: Distribution of the Respondents by Chance of Training of Family Members & Sex**

SEX	Training of Family Members				Total	%
	No	%	Yes	%		
Male	79	6.4	22	9.4	101	6.9
%	78.2	5.4	21.8	1.5	100.0	6.9
Female	1157	93.6	213	90.6	1370	93.1
%	84.5	78.7	15.5	14.5	100.0	93.1
Total	1236	100.0	235	100.0	1471	100.0
%	84.0	84.0	16.0	16.0	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .099 \quad df = 1 \quad cal \chi^2 = 2.724$$

On the other hand among the females 15.5% have reported that their family members get the training facilities. Thus it can be said that family members of the male respondents were getting more training facilities compared to female respondents.

To see the relationship between the training facilities of the family members and sex of the respondent  $\chi^2$  statistic has been calculated which is shown below the table- 3.3.2. The value of  $\chi^2 = 2.724$  for 1 d.f implies  $\alpha = .099$ . It indicates that the relation between the attributes is significant at 10% level.

To study the relation between the attributes training of family member of the respondents and marital status of the respondents Table 3.3.3 has been constructed. It is seen from the table that out of 1469 respondents 235(16%) have reported that their family members get the training from NGO and 1234(84%) do not get this chance.

Again out of 235 respondent 222(94.5%) are married 2(0.9%) are unmarried 7(3%) are widowed and 4(1.7%) are of other marital status categories.

**Table-3.3.3: Distribution of the Respondents by Chance of Training of Family Members & Marital Status.**

Marital Status	Train of Family Member				Total	%
	No	%	Yes	%		
Married	1161	94.1	222	94.5	1383	94.1
%	83.9	79.0	16.1	15.1	100.0	94.1
Unmarried	38	3.1	2	9	40	2.7
%	95.0	2.6	5.0	.1	100.0	2.7
Widowed	32	2.6	7	3.0	39	2.7
%	82.1	2.2	17.9	.5	100.0	2.7
Others	3	.2	4	1.7	7	.5
%	42.9	.2	57.1	.3	100.0	.5
Total	1234	100.0	235	100.0	1469	100.0
%	84.0	84.0	16.0	16.0	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .006 \quad df = 3 \quad cal \chi^2 = 12.532$$

It is found that family members of married respondents have got highest proportion (94.5%) of training facilities where as family members of unmarried respondents have got lowest proportion (0.9%) of training. It may partially be due the fact that the unmarried respondent do not have any responsibility of train their family members or do not have any family members at all.

The  $\chi^2$ - statistic has been calculated to test the association between the above attributes. The value of  $\chi^2=12.532$  for 3 df implies  $\alpha = .006$ . It indicates that there is a strong relationship between the marital status and the training facilities of the family members of the respondents.

To see the relationship between the chance of training of the family members and educational background of the respondents Table-3.3.4 has been constructed. It is seen from this table that out of 1365 respondents 221 (16.2) respondents have reported that their family members get the chance of training by NGOs. Where as 1144 (83.8%) of the

respondents have reported that their family members do not get the chance of training by the NGOs.

**Table-3.3.4: Distribution of the Respondents by Chance of Training of Family Members & Years of Schooling**

Years of Schooling	Training of Family Members				Total	%
	No	%	Yes	%		
0	17	1.5			17	1.2
%	100.0	1.2			100.0	1.2
1	377	33.0	77	34.8	454	33.3
%	83.0	27.6	17.0	5.6	100.0	33.3
2-5	360	31.5	75	33.9	435	31.9
%	82.8	26.4	17.2	5.5	100.0	31.9
6-10	367	32.1	64	29.0	431	31.6
%	85.2	26.9	14.8	4.7	100.0	31.6
11+	23	2.0	5	2.3	28	2.1
%	82.1	1.7	17.9	.4	100.0	2.1
Total	1144	100.0	221	100.0	1365	100.0
%	83.8	83.8	16.2	13.2	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .347 \quad df = 4 \quad cal \chi^2 = 4.465$$

It is also seen that the respondents whose family members got the training facilities are all literate. Out of 221 respondents who have reported that their family members get the training facilities 77(34.8%) have one year of schooling; 75(33.9%) have 2-5 years of schooling; 64(29.0%) have 6-10 years of schooling and 5(2.3%) have the 11+ years of schooling respectively. First three proportions are approximately same and they are statistically alike.

$\chi^2$  statistic has been calculated to study relationship between the attributes. The  $\chi^2$ -value 4.465 for 1 d.f indicates that  $\alpha = 0.099$ . It indicates that the attribute education of the

respondents and the training facilities of the family members are statistically significant at 10% level.

Table 3.3.5 has been constructed to see the relationship between the attributes occupation and the chance of training of family members. It is found from the table that out of 1432 respondents 230(16.1%) have reported that their family members get the chance of training facilities and 1202(83.9%) do not get this chance. Again out of these 230 respondents who have reported that their family members get the chance of training facilities; 185(80.4%) are housewives; 29(12.6%) were engaged in small business; 16(7.0%) were in the other occupations. Thus it is seen that most of the family members of housewives get the training facilities compared to two other categories of occupation.

**Table-3.3.5 : Distribution of the Respondents by Chance of Training of Family Members & Occupation**

Occupation	Chance Training For Family Members				Total	%
	No	%	Yes	%		
Housewife	990	82.4	185	80.4	1175	82.1
%	84.3	69.1	15.7	12.9	100.0	82.1
<b>Small Business</b>	80	6.7	29	12.6	109	7.6
%	73.4	5.6	26.6	2.0	100.0	7.6
Others	132	11.0	16	7.0	148	10.3
%	89.2	9.2	10.8	1.1	100.0	10.3
Total	1202	100.0	230	100.0	1432	100.0
%	83.9	83.9	16.1	16.1	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .009 \quad df = 4 \quad cal \chi^2 = 13.629$$

$\chi^2$  statistic has been calculated to assess the association between the attributes under consideration. The value of  $\chi^2 = 12.103$  for 2 d.f implies  $\alpha = 0.002$ . It indicates that there is very strong association between the attributes.

Table 3.3.6 has been constructed to see the relationship between the attributes monthly income of the respondents and the chance of having training facilities of their family members. It is seen from this table that out of 1405 respondents 228(16.2%) have reported that their family members get the training facilities from NGOs where 1177(83.8%) have reported that their family members do not get the chance of training facilities.

**Table-3.3.6: Distribution of the Respondents by Chance of Training of Family Members & Income**

Income	Training of family members				Total	%
	No	%	Yes	%		
upto 999	32	2.7	2	9	34	2.4
%	94.1	2.3	5.9	1	100.0	2.4
1000-1999	134	11.4	24	10.5	158	11.2
%	84.8	9.5	15.2	1.7	100.0	11.2
2000-2999	352	29.9	42	18.4	394	28.0
%	89.3	25.1	10.7	3.0	100.0	28.0
3000-3999	275	23.4	54	23.7	329	23.4
%	83.6	19.6	16.4	3.8	100.0	23.4
4000-4999	143	12.1	32	14.0	175	12.5
%	81.7	10.2	18.3	2.3	100.0	12.5
5000-5999	120	10.2	16	7.0	136	9.7
%	88.2	8.5	11.8	1.1	100.0	9.7
6000-6999	67	5.7	19	8.3	86	6.1
%	77.9	4.8	22.1	1.4	100.0	6.1
7000 & above	54	4.6	39	17.1	93	6.6
%	58.1	3.8	41.9	2.8	100.0	6.6
Total	1177	100.0	228	100.0	1405	100.0
%	83.8	83.8	16.2	16.2	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .000 \quad df = 7 \quad cal \chi^2 = 61.721$$

Now out of 228 respondents who have reported that their family members got the training facilities 2(0.9%) have the monthly income of 'Taka below 1000'; 24(10.4%) have the monthly income of Tk. 1000-1999; 42(18.4%) have the monthly income of Tk. 200-2999, 54(23.7%) have the monthly income of Tk 3000-3999; 32(14.0%) have the monthly income of Tk. 4000-4999; 16(7.0%) have the monthly income of Tk. 5000-5999; 19(8.3%) have the monthly income of Tk. 6000-6999 and 39(17.1%) have the monthly income of Tk. 7000+.

The proportions of family members who got the training for various income groups are not identical to the proportion of overall respondents themselves. However the proportion of family members who does not get the training from NGO were almost same with that of the proportions of the respondent at in various income groups respectively.

$\chi^2$  statistic has been calculated to assess the association between the above two attributes. The value of  $\chi^2 = 125.043$  for 3 degrees of freedom implies  $\alpha = 0.000$ . It indicates that the association between the attributes are statistically significant.

Table 3.3.7 has been constructed to see the relationship between the attributes place of residence (Divisions) and the chance of having training of the family members of the respondents. It is seen from the Table that out of 1471 respondents 235(16%) have reported that their family members have get the training facilities. Again out of these 235 respondents 97(41.3%) are from Dhaka Division; 62(26.4%) are from Chittagong Division; 54(23.0%) are from Khulna and 22(9.4%) are from Rajshahi Division. Thus it is found that highest proportion of family members (41.3%) of the respondent who get the training facilities are from Dhaka division followed Chittagong (26.4%) division, then Khulna(23.0%) and then Rajshahi (9.4%) division.

$\chi^2$  statistic has been calculated to assess the association between the attributes under consideration. The value of  $\chi^2 = 89.177$  for 3 d.f implies  $\alpha = 0.000$ . It indicates that the attributes under consideration are very strongly associated.



**Table-3.3.7 : Distribution of the Respondents by Chance of Training of Family Members & Place of Residence**

Organizations	Chance of Train of Family Members				Total	%
	No	%	Yes	%		
Dhaka %	224	18.1	97	41.3	321	21.8
	69.8	15.2	30.2	6.6	100.0	21.8
Chitagong %	248	20.1	62	26.4	310	21.1
	80.0	16.9	20.0	4.2	100.0	21.1
Khulna %	389	31.5	54	23.0	443	30.1
	87.8	26.4	12.2	3.7	100.0	30.1
Rajshahi %	375	30.3	22	9.4	397	27.0
	94.5	25.5	5.5	1.5	100.0	27.0
Total %	1236	100.0	235	100.0	1471	100.0
	84.0	84.0	16.0	16.0	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .000 \quad df = 3 \quad cal \chi^2 = 89.177$$

Table 3.3.8 has been constructed to study the distribution of the respondents who have reported that their family members get the training facilities for 5 selected NGOs. It is seen from the table that out of 1471 respondents 235(16%) have reported that their family members get the training facilities and the rest 1236(84%) do not get this change. Again out of these 235 respondents, whose family members get the chance of training facilities 148(63%) are from IBF; 30(12.8%) are from Grameen Bank; 24(10.2%) are from BRAC; 8(3.4%) are from ASHA and 25(10.6%) are from PROSHIKA.

Thus it is found that the IBF has provided at least 5 times more (63%) training facilities of the family members of the respondents compared to the other NGOs; followed by Grameen Bank (12.8), PROSHIKA (10.6%), then BRAC (10.2%) and then ASHA (3.4%).

Again 51.6% of the respondents of IBF have reported that their family members get the training facilities. This proportion for Grameen Bank is 9.9%, for BRAC 9.1%, for

PROSHIKA 7.8% and for ASHA it is 2.7%. Again looking on the overall distribution the

probability of having training facilities for family members for IBF is 10.1%, which is 2% for Grameen Bank, 1.7% for PROSHIKA, 1.6% for BRAC and only 0.5% for ASHA. Thus it can be said that possibility of training of family members is the highest for IBF followed by Grameen Bank. It indicates that the respondents of IBF are more social to take care of their family members.

$\chi^2$  statistic has been calculated to assess the association between the attributes under consideration. The value of  $\chi^2 = 343.366$  for 4 d.f implies  $\alpha = 0.000$ . It indicates that the association between the above two attributes are very strongly associated.

**Table-3.3.8 : Distribution of the Respondents by Chance of Training of Family Members & Their Organizations:**

Organizations	Chance of Training of Family Members				Total	%
	No%		Yes%			
IBF	139	11.2	148	63.0	287	19.5
%	48.4	9.4	51.6	10.1	100.0	19.5
GB	273	22.1	30	12.8	303	20.6
%	90.1	18.6	9.9	2.0	100.0	20.6
BRAC	241	19.5	24	10.0	265	18.0
%	90.9	16.4	9.1	1.6	100.0	18.0
ASHA	288	23.3	8	3.4	296	20.1
%	97.3	19.6	2.7	.5	100.0	20.1
PROSHIKA	295	23.9	25	10.6	320	21.8
%	92.2	20.1	7.8	1.7	100.0	21.8
Total	1236	100.0	235	100.0	1471	100.0
%	84.0	84.0	16.0	16.0	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .000 \quad df = 4 \quad cal \chi^2 = 343.366$$

Now to study whether the training to the respondents affect the training to the family member of the respondents. To justify this issue Table 3.3.9 has been constructed. It is seen from this table that out 1466 respondents 193(13.2%) have got the chance of training and rest 1273(86.8%) did not get the chance of training from NGOs.

On the other hand 231(15.8%) have reported that their family members have got the chance of training from NGOs and rest 1235(84.2%) have reported that their family members do not get the chance of having training from NGOs.

**Table-3.3.9 : Distribution of the Respondents by Chance of own Training & Training of Family Members:**

Chance of own Training	Training for Family Members				Total	%
	No	%	Yes	%		
No	1097	88.8	176	76.2	1273	86.8
%	86.2	74.8	13.8	12.0	100.0	86.8
Yes	138	11.2	55	23.8	193	13.2
%	71.5	9.4	28.5	3.8	100.0	13.2
Total	1235	100.0	231	100.0	1466	100.0
%	84.2	84.2	15.8	15.8	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .000 \quad df = 1 \quad cal \chi^2 = 27.177$$

It is also found that out of 1466 respondents only 55(3.8%) respondents them selves as well as their family members got the chance of having training facilities from NGOs. Again 138(9.4%) respondents got the training facilities themselves but their family members did not get that opportunity. Where as 176(12.0%) of the respondents did not get the chance of having training facilities but their family members got the opportunity of having the training facilities from NGO. Again 1097(74.8%) of the respondents and their family members did not get the chance of training facilities from NGOs.

The  $\chi^2$  statistic has been calculated to study association between the attribute of having chance of training facilities by respondents them selves and having training facilities to

the family members of the respondents. The  $\chi^2 = 27.177$  for 1 d.f. implies  $\alpha = 0.000$ . It indicates there is very strong relation between the above two attributes.

### **3.4 : Multiple Regression Analysis for Training Facilities for the Family Members of the Respondents.**

In the previous section the relation of training facilities for the family members of the respondents with its correlates have been studied. Now to study the effect of these correlates on the training facilities of family members a multiple regression analysis has been carried-out. The results of the analysis has been presented in the Table 3.4.1.

The second and the third columns of the Table 3.4.1 show the regression coefficients and their corresponding standard errors of the various correlates of having the training facilities of the family members of the respondents. The fifth columns of the table shows the level of significance with the corresponding degrees of freedom (d.f) shown in the fourth column of the table.

Looking on the impact of age groups it is found that only the age group 30-39 has the statistically significant effect at 6.7% level on the training facilities of the family members of respondents . Other age groups have no significant effect.

It is also observed that none of the categories of the correlates : Sex, Marital Status, Educational background, Occupation, Monthly income have any statistically significant impact on the training facilities of the family members of the respondents.

Again observing the impact of place of residence (Division) it is found that Dhaka, Chittagong and Khulna have very highly significant impact on the training facilities of the family members of the respondents.

Looking on the impact for various organizations ,it is seen that only IBF has the statistically significant impact on the training facilities of the family members of the respondents.

Table 3.4.1: Multiple Regression Analysis for Training of Family Members

1	2	3	4	5	6
Variables	B	Std. Error	df	Sig.	Comments
Intercept	2.767	1.476	1	.061	
<b>AGE</b>					
Below 20 years]	.149	.855	1	.561	
20 - 29	-.638	.506	1	.207	
30 - 39	-.907	.496	1	.067	
40 - 49	-.577	.514	1	.262	
50 - 59	0	.	0	.	
<b>SEX</b>					
Males	.446	.506	1	.378	
Females	0	.	0	.	
<b>MARITAL STATUS</b>					
Married	.111	1.054	1	.916	
Unmarried	1.685	1.348	1	.211	
Widowed	.572	1.173	1	.625	
Others	0	.	0	.	
<b>EDUCATION</b>					
0	19.854	.000	1	.	
1	.268	.804	1	.739	
2 - 5	.240	.795	1	.763	
6 - -10	.159	.787	1	.840	
11 +	0	.	0	.	
<b>OCCUPATION</b>					
House wives	.152	.439	1	.730	
Small Business	-.023	.513	1	.964	
Others	0	.	0	.	
<b>INCOME</b>					
Below Tk. 1,000	.465	.862	1	.590	
1000-1999	-.646	.478	1	.176	
2000-2999	.407	.409	1	.319	
3000-3999	.283	.394	1	.473	
4000-4999	.310	.424	1	.434	
5000-5999	.741	.490	1	.121	
6000-6999	.479	.465	1	.303	
7000+	0	.	0	.	
<b>DIVISION</b>					
Dhaka	-2.380	.345	1	.000	***
Chittagong	-1.942	.372	1	.000	***
Khulna	-1.284	.339	1	.000	***
Rajshahi	0	.	0	.	
Own Training	2.037	.291	1	.000	***
	0	.	0	.	
<b>ORGANIZATION</b>					
IBF	-3.730	.345	1	.000	***
GB	-.108	.371	1	.772	
BRAC	-.246	.391	1	.530	
ASHA	.427	.506	1	.398	
Proshika	0	.	0	.	

## **CHAPTER IV**

### **Contribution of NGOs in HRD Providing Health Facilities**

## CHAPTER IV

### Contribution Of NGOs in HRD Providing Health Facilities

As it is known that HRD can attribute through extending the life expectancy of the people. As this index is not available so, it could be assumed that the HRD can be attributed through health facilities to the respondents and their family members. To assess the contributions of NGOs, the micro-credit receivers (respondents) were asked whether they and their family members got the health facilities or not. Their responses are dichotomized as yes and no. These responses are cross classified to study the relation and impact of other socio-economic variables like age, sex, marital status, education and monthly income etc. At the end of each section a comparative study has been carried out to exhibit the relative contributions of 5 selected NGOs.

#### **4.1: Contribution of NGOs in HRD Providing Health Facilities to the Respondents.**

To assess the contribution of NGOs in HRD through providing health facilities, the respondents were asked whether they got the health facilities from NGO or not. They responded either yes or no. The positive information has treated as contribution of NGOs and these data have been cross classified with its important correlates of the respondents such as age, sex, education, marital status and monthly income etc. An attempt has been made to study their inter-relationships and differentials. At the end of this section a comparative study has been carried-out to show the relative contributions of 5 selected NGOs.

Table 4.1.1 have been constructed to assess the contributions of NGO in proving medical (health) facilities to the respondents and to study the relationship of this facilities with the ages of the respondents. It is seen from the Table 4.1.1 that out of 1499 respondents 136(9.1%) have got the chance of the health facilities from NGOs and rest 1363(90.9%) have not got the chance of the health facilities.

Again out 1499 respondents 72(4.8%) are in age group 'below 20 years', 514 (34.3%) are in the age interval 20-29 years; 554(37.0%) are in the age interval 30-39 years,

257(17.1%) are in the age interval 40-49 years and 102(6.8%) are in the age interval '50 years and above'.

Now among the 136 respondent who have got the health facilities, 3(2.2%) are in the age group 'below 20 years'; 39(28.7%) are in the age interval 20-29 years; 64(47.1%) are in the age interval 30-39 years, 21(15.4%) are in the age interval 40-49 years and 9(6.6%) are in the age limit '50 years and above'.

**Table-4.1.1 Distribution of the Respondents by Chance of Health facility & Ages**

Ages	Chance of Health Facility		Total	
	No	Yes		
upto 19	69	3	72	4.8
%	95.8	4.2	100.0	4.8
20-29	475	39	514	34.3
%	92.4	7.6	100.0	34.3
30-39	490	64	554	37.0
%	88.4	11.6	100.0	37.0
40-49	236	21	257	17.1
%	91.8	8.2	100.0	17.1
50+	93	9	102	6.8
%	91.2	8.8	100.0	6.8
Total	1363	136	1499	100.0
%	90.9	9.1	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .097 \quad df = 4 \quad cal \chi^2 = 7.865$$

It indicates that highest proportion (47.1%) of the respondents got the health facilities in age interval 30-39 years followed by the respondents in the age group 20-29 years(28.7%) and then 40-49 years (15.45) and so on .



$\chi^2$  statistic has been calculated to study the association between the attributes ages of the respondents and chance of having health facilities.  $\chi^2 = 7.865$  for 4 d.f implies  $\alpha = 0.097$ . It indicates that there is relation between the attributes and it is significant at around 10% level of significance.

Table 4.1.2 has been constructed to see the contribution of NGOs in providing health facilities and to study sex differentials in it. It is found from this table that out of 1503 respondents 103(6.9%) are males and 1400(93.1%) are females. Again out of 1503 respondent 136(9%) have got health facilities and 1369(91%) do not get the health facilities from NGOs.

It is also seen that out of 136 respondents who have got the health facilities, 12(8.8%) are male and 124(91.2%) are females. The table also exhibits that males are getting relatively more (11.7%) health facilities than that of females (8.9%).

**Table-4.1.2: Distribution of the Respondents by Chance of Health facility & Sex**

Sex	Chance of Health Facility		Total
	No	Yes	
Male	91	12	103
%	88.3	6.1	100.0
Female	1276	124	1400
%	91.1	8.9	100.0
Total	1367	136	1503
%	91.0	9.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .340 \quad df = 1 \quad cal \chi^2 = .910$$

The  $\chi^2$  statistic has been calculated to study relation between the attributes sex and the chance of having health facilities. The calculated value of  $\chi^2 = .910$  indicates that there is no significant relation between the above two attributes.

Table 4.1.3 has been constructed to study the relationship between marital status and the health facilities and also to study marital status differentials of having health facilities from NGOs. It is found from the table that out of 1500 respondent 136(9.1%) have the health facilities from NGOs and rest 1364(90.9%) do not have the health facilities. Among the 136 respondents who have got the chance of health facilities 128 (94.1%) are married, 4 (2.9%) are unmarried, 3 (2.2%) are widowed. But among the married respondent only (9.1%) are getting the chance of health facilities whereas this proportion is 10% for unmarried respondents.

**Table-4.1.3: Distribution of the Respondents by Chance of Health facility by marital status**

Marital Status	Chance of Health facility		Total			
	No	Yes	No	Yes		
Married	1285	94.2	128	94.1	413	94.2
%	90.9	85.7	9.1	8.5	100.0	94.2
Unmarried	36	2.6	4	2.9	40	2.7
%	90.0	2.4	10.0	.5	100.0	2.7
Widowed	37	2.7	3	2.2	40	2.7
%	92.5	2.5	7.5	.2	100.0	2.7
Others	6	.4	1	.7	7	.5
%	85.7	.4	14.3	.1	100.0	.5
Total	1364	100.0	136	100.0	1500	100.0
%	90.9	90.9	9.1	9.1	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .942 \quad df = 3 \quad cal \chi^2 = .393$$

The  $\chi^2$  value has been calculated to study the relationship between the attribute marital status and the chance of having health facilities. The insignificant value of  $\chi^2$  for 3df is 0.393 indicates  $\alpha = .953$ . It implies that there is no significant relation between the above two attributes.

Table 4.1.4 has been constructed to see the relationship between the attributes health facilities of the respondents and their education background. It is seen from the table, that out of 1392 respondents 111(8%) have got the health facilities. Again out of these 111

respondents, none is illiterate, 23(20.7%) have 1 year of schooling, 52(46.8%) have 2-5 years of schooling, 34(30.6%) have 6-10 years of schooling and only 2(1.8%) have 11+ years of schooling. It is seen from this table that highest proportion of the respondents who got the health facilities (46.8%) have 2-5 years of schooling followed by respondent of ages 6- 10 years of schooling.

**Table-4.1.4: Distribution of the Respondents by Chance of Health Facility & Education**

Years of Schooling	Chance Health Facility				Total		
	No	%	Yes	%			
illiterate	17		1.3		17	1.2	
	%100.0		1.2		100.0	1.2	
	1438		34.2	23	20.7	461	33.1
	%95.0		31.5	5.0	1.7	100.0	33.1
2-5	392		30.6	52	46.8	444	31.9
	%88.3		28.2	11.7	3.7	100.0	31.9
6-10	408		31.9	34	30.6	442	31.8
	%92.3		29.3	7.7	2.4	100.0	31.8
11+	26		2.0	2	1.8	28	2.0
	%92.9		1.9	7.1	.1	100.0	2.0
Total	1281		100.0	111	100.0	1392	100.0
	%92.0		92.0	8.0	8.0	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .004 \quad df = 4 \quad cal \chi^2 = 15.597$$

$\chi^2$  statistic has been calculated to study the relationship between above two attributes.  $\chi^2 = 15.597$  for 4 d.f implies  $\alpha = 0.004$ . It indicates that the attributes are very strongly associated.

To see the interrelationship between occupation and the chance of having health facilities from NGOs Table 4.1.5 has been constructed. It is seen from the table that out of 1462

respondent 128(8.8%) has got the health facilities, where 1334(91.2%) do not get the health facilities. Again out of 1462 respondents 1198(82.0%) of the respondents are house wives, 113(7.7%) are engaged in small business and 151(10.3%) have the other occupations. Among the 128 respondents who got the health facilities 113(88.3%) are house wives, 10(7.7%) are engaged in small business and 5(3.9%) are in other occupation. Thus it is seen that house wives are getting more chance of having health facilities from NGOs. It is also observed that only 7.8% of the respondents who are getting health facilities are engaged in small business.

**Table-4.1.5: Distribution of the Respondents by Chance of Health facility & Occupation**

Occupation	Chance Health Facility				Total	
	No	%	Yes	%		
Housewife	1085	81.3	113	88.3	1198	81.9
%	90.6	74.2	9.4	7.7	100.0	81.9
Small Business	103	7.7	10	8.8	113	7.7
%	91.2	7.0	7.8	.7	100.0	7.7
Others:	146	10.9	5	3.9	151	10.3
%	96.7	10.0	3.3	.3	100.0	10.3
Total	1334	100.0	128	100.0	1462	100.0
%	91.2	91.2	8.8	8.8	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .043 \quad df = 2 \quad cal \chi^2 = 6.291$$

The  $\chi^2$  statistic has been calculated to study the inter-relationship between the attributes. The calculated value of  $\chi^2 = 6.291$  for 2 df implies  $\alpha = 0.043$ . It indicates that there is a significantly strong relation between the attributes at 4.3% level of significance.

Table 4.1.6 has been constructed to see the differential due to the income group and to study inter-relationship between monthly income and the chance of having health facilities. Table – 4.1.6 shows that out of 1430 respondent 131 (9.2%) have enjoyed the health facilities and the rest 1299 (90.8%) do not enjoy the health facilities from NGOS.

**Table-4.1.6: Distribution of the Respondents by Chance of Health Facility & Income**

Income	Chance of Health facility				Total	
	No		Yes			
upto 999	28	2.2	7	5.3	35	2.4
%	80.0	2.0	20.0	.5	100.0	2.4
1000-1999	149	11.5	10	7.6	159	11.1
%	93.7	10.4	6.3	.7	100.0	11.1
2000-2999	362	27.9	39	29.8	401	28.0
%	90.3	25.3	9.7	2.7	100.0	28.0
3000-3999	306	23.6	32	24.4	338	23.6
%	90.5	21.4	9.5	2.2	100.0	23.6
4000-4999	163	12.5	15	11.5	178	12.4
%	91.6	11.4	8.4	1.0	100.0	12.4
5000-5999	128	9.9	10	7.6	138	9.7
%	92.8	9.0	7.2	.7	100.0	9.7
6000-6999	76	5.9	10	7.6	86	6.0
%	88.4	5.3	11.6	.7	100.0	6.0
7000 & above	87	6.7	8	6.1	95	6.6
%	91.6	6.1	8.4	.6	100.0	6.6
Total	1299	100.0	131	100.0	1430	100.0
%	90.8	90.8	9.2	9.2	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .322 \quad df = 7 \quad cal \chi^2 = 8.123$$

Among the 131 respondents who enjoyed the health facilities 7 (5.3%) have the income 'below TK. 1000'; 10 (7.6%) have the income of TK. 1000-1999; 39 (29.8%) have the income of TK. 2000-2999; 32 (24.4%) have the income of TK. 3000-3999; 15 (11.5%) have the income of TK. 4000-4999; 10 (7.6 %) have the income of TK. 5000-5999; 10 (7.6%) have the income of TK. 6000-6999 and the rest 8 (6.1%) have the income of TK.

7000 and above respectively. Thus it can be said that the income group 2000-2999 has the largest proportion of respondents who get the health facilities.

$\chi^2$  statistics has been calculated to study association between the attributes income and the chance of having health facilities from NGOs. The value of  $\chi^2 = 8.13$  for 7 d.f indicates that  $\alpha = .322$  which implies that there is no significant relation between the attributes under Consideration.

Table -4.1.7 has been constructed to see the relationship between place of residence (Division) with the chance of having health facilities. It is seen that out of 1503 respondents 136 (9%) have enjoyed the health facilities and 1367(91%) do not get the health facilities.

**Table-4.1.7 : Distribution of the Respondents by Chance of Health facility by Division**

Division	Chance of Health facility				Total	
	No		Yes			
Dhaka	249	18.2	84	61.8	333	22.2
%	74.8	16.6	25.2	5.6	100.0	22.2
Chitagong	302	22.1	11	8.1	313	20.8
%	96.5	20.1	3.5	.7	100.0	20.8
Khulna	430	31.5	24	17.6	454	30.2
%	94.7	28.6	5.3	1.6	100.0	30.2
Rajshahi	386	28.2	17	12.5	403	26.8
%	95.8	25.7	4.2	1.1	100.0	26.8
Total	1367	100.0	136	100.0	1503	100.0
%	91.0	91.0	9.0	9.0	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .000 \quad df = 3 \quad cal \chi^2 = 136.766$$

Again out of 1503 respondent 333 (22.2%) are from Dhaka division, 313 (20.8%) from Chittagong division, 454 (30.2%) are from Khulna and 403 (26.8%) are from Rajshahi Division. Among 136 respondent who have enjoyed the health facilities 84 (61.8%) are

from Dhaka division, 11 (8.1%) from chittagong division, 24 (17.6%) from Khulna division and 17 (12.5%) from Rajshahi division. It is seen that the respondents of Dhaka division are more likely to have the health facilities from NGOs. It may be due to the fact that NGO around Dhaka are launching more health oriented programs. But out of 333 respondents of Dhaka division 84 (25.2%) of them have the health facilities. These proportions are 3.5%, 5.3% and 4.2% for chittagong, Khulna and Rajshahi division respectively.

Table 4.1.8 has been constructed to study the contributions of NGOs on the health facilities and to identify their relative position in contributions. It is seen from the table that out of 1503 respondent 136 (9%) have enjoyed the health facilities.

**Table-4.1.8: Distribution of the Respondents by Chance of Health facility By Organization**

Organization	Chance of Health Facility				Total	
	No		Yes			
IBF	283	20.7	6	4.4	289	19.2
%	97.9	18.8	2.1	.4	100.0	19.2
G3	279	20.4	35	25.7	314	20.9
%	88.9	18.6	11.1	2.3	100.0	20.9
BRAC	225	16.5	52	38.2	277	18.4
%	81.2	15.0	18.8	3.5	100.0	18.4
ASHA	290	21.2	13	9.6	303	20.2
%	95.7	19.3	4.3	.9	100.0	20.2
PROSHIKA	290	21.2	30	22.1	320	21.3
%	90.6	19.3	9.4	2.0	100.0	21.3
Total	1367	100.0	136	100.0	1503	100.0
%	91	91	9	9	100	100

Source: Cross Tabulation from Raw data.

$$\alpha = .000 \quad df = 4 \quad cal \chi^2 = 58.954$$

Among the 136 respondent 6(4.4%) are from IBF, 35 (25.7%) from Grameen Bank, 52 (38.2%) from BRAC, 13 (9.6%) from ASA and 30 (22.1%) from PROSHIKA . Thus it can be said that BRAC launched their program which provides more health facilities followed by Grameen Bank, RROSHIKA, ASA and then IBF.

Among the respondents of BRAC, 18.8% were enjoying health facilities and this proportion is the highest followed by Grameen Bank (11.1%) then PROSHIKA (9.4%). Looking on the overall distribution of the respondents the probability of getting the health facilities in BRAC is 3.5%. This probability for Grameen Bank is 2.3%, for PROSHIKA it is 2.0%, for ASHA it is 0.9% and for IBF it is 0.4%.

$\chi^2$  statistic has been calculated to see the relationship between the NGOs with the chance of having health facilities. The calculated value of  $\chi^2=58.954$  for 4 d.f implies  $\alpha=0.000$ . It indicates that there is a strong relation between the attributes

#### **4.2 : Multiple Regression Analysis for Health Facilities of the Respondents.**

In the previous section the relation of health facilities with its correlates have been studied. Now to study the effect of these correlates on the health facilities a Multiple Regression Analysis has been carried-out. The results of the analysis have been presented in the Table 4.2.1.

The second and the third columns of the Table 4.2.1 show the regression co-efficient and their corresponding standard errors respectively from NGOs. The fourth and fifth columns of the table show degrees of freedom and their corresponding level of significances.

It is observed that all the categories of the correlates: Age, Sex, Marital Status and educational Background have no statistically significant effect on the health facilities of the respondents.



But the occupation housewives have the negative significant impact on the health facilities of the respondents. Other categories of occupation has no significant impact on it. It indicates that those who are housewives they are not getting essential health facilities from their respective NGOs compared to the other categories.

Looking on the impacts of monthly income it is seen that all most all the income group have insignificant impact on the health facilities of the responders. Only the first income group Tk below 1000 and the income group of Tk 5000 to 5999 have the impact on health facilities which significant at 11% and 9.8% level of significance respectively.

Again looking on the impact of place of residence it is seen that only Dhaka division has the statistically highly significant impact on the health facilities of the respondents.

Looking on the effects of organization on the health facilities it is seen that IBF and BRAC have statistically highly significant impact on the health facilities of the respondents.

**Table 4.2.1 : Multiple Regression Analysis for Health Facilities of Respondents**

1	2	3	4	5	6
Variables	B	Std. Error	df	Sig.	Comments
Intercept	4.011	2.311	1	.083	
<b>AGE</b>					
Below 20 years]	.267	.855	1	.755	
20 - 29	-.223	.557	1	.688	
30 - 39	-.643	.531	1	.225	
40 - 49	.104	.583	1	.858	
50 - 59	0	.	0	.	
<b>SEX</b>					
Males	-1.031	.672	1	.125	
Females	0	.	0	.	
<b>MARITAL STATUS</b>					
Married	.864	2.024	1	.609	
Unmarried	-.847	2.151	1	.694	
Widowed	.454	2.137	1	.832	
Others	0	.	0	.	
<b>EDUCATION</b>					
0	20.275	.000	1	.	
1	.820	.867	1	.345	
2 - 5	-.132	.850	1	.376	
6 - -10	.408	.848	1	.630	
11 +	0	.	0	.	
<b>OCCUPATION</b>					
House wives	-2.024	.723	1	.005	***
Small Business	-.862	.800	1	.281	
Others	0	.	0	.	
<b>INCOME</b>					
Below Tk. 1,000	-1.161	.727	1	.110	
1000-1999	.575	.640	1	.369	
2000-2999	-1.153E-02	.545	1	.983	
3000-3999	.419	.553	1	.449	
4000-4999	.798	.615	1	.195	
5000-5999	1.158	.701	1	.098	
6000-6999	-.295	.643	1	.646	
7000+	0	.	0	.	
<b>DIVISION</b>					
Dhaka	-1.902	.334	1	.000	***
Chittagong	.206	.445	1	.643	
Khulna	-.445	.376	1	.237	
Rajshahi	0	.	0	.	
<b>ORGANIZATION</b>					
IBF	1.906	.578	1	.001	***
GB	.153	.328	1	.641	
BRAC	-1.124	.329	1	.001	***
ASHA	.316	.402	1	.431	
Proshika	0	.	0	.	

### **4.3: Contribution of NGOs in HRD Providing Health Facilities to the Family Members of the Respondents.**

In the previous two sections we have discussed how HRD can be attributed providing health facilities to the respondents. It is known that HRD can also be done through extending life expectancy of the family members of the respondents. But this type of index is not available. So, health facilities to the family members of the respondents can also be used as an index of HRD of Bangladesh. An attempt has been made to exhibit what extent this HRD can be done by providing health facilities to the family members of the respondents. To do so, some cross tables with its socio-economic correlates have been presented below. At the end of the section comparative position of the 5 selected NGOs in contributing HRD of Bangladesh have been presented.

Table 4.3.1. has been constructed to assess the contribution of NGOS in providing health facilities to the family members of the respondents. Age differentials are also observed from the Table 4.3.1. It is seen that out of 1475 respondent 133 (9%) have reported that their family members get the health facilities where as 1342 (91%) do not get the health facilities. Again 71 (4.8%) of the respondents are in the age interval below 20 years, 506 (34.3%) are in the age interval 20-29 years, 546(37%) are in the age interval 30-39 years, 250 (17%) are in the age interval 40-49 years and 102 (5.9) are in the age interval 'above 50 years'.

Among the 133 respondent whose family members have got the health facilities 3 (2.2%) are in age interval 'below 20 years', 38 (28.6%) are in the age interval 20-29 years, 63 (47.4%) are in the age interval 30-39 years, 20 (15%) are in the again interval 40-49 and 9 (6.8%) are in the age interval 'above 50 years'.

It is observed that the highest proportion (47.4%) of the respondents in the age interval 30-39 years have reported that their family members get the health facilities from NGOS which is followed by the age group 20-29 years (28.6%).

**Table-4.3.1 Distribution of the Respondents by Health facility of family Members & Ages**

Ages	Health Facility of Family Members				Total	
	No		Yes			
upto 19	68	5.1	3	2.2	71	4.8
%	95.8	4.6	4.2	.2	100.0	4.8
20-29	468	34.9	38	28.6	506	34.3
%	92.5	31.7	7.5	2.6	100.0	34.3
30-39	483	36.0	63	47.4	546	37.0
%	88.5	32.7	11.5	4.3	100.0	37.0
40-49	230	17.1	20	15.0	250	17.0
%	92.0	15.7	8.0	1.4	100.0	17.1
50+	93	6.9	9	6.8	102	6.9
%	91.2	6.2	8.8	.6	100.0	6.8
Total	1342	100.0	133	100.0	1475	100.0
%	91.0	90.9	9.0	9.1	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .091 \quad df = 4 \quad cal \chi^2 = 7.371$$

$\chi^2$  statistic has been calculated to see the association between the chance of having health facility of family members and ages of the respondents. The calculated value of  $\chi^2=7.371$  for 4 df indicates that  $\alpha = .091$ . It indicates that the relationship between above attributes are significant at around 9% level of significance.

Table-4.3.2 has been constructed to see the relation between the chance of having health facilities for family members and sex of the respondents. It is seen from the table that out of 1472 respondents 101 (6.9%) are males and 1371 (93.1%) are females. It is also seen that 133(9%) of the respondents have reported that their family members get the health facilities from NGOs and the rest 91% do not get this opportunity. Again out of 133 respondents who have reported that their family members get the health facilities 12 (9%)

are males are 121 (91%) are females, So significant sex differentials are observed to family members who get the health facilities from NGO.

**Table-4.3.2 : Distribution of the Respondents by Health facility of family Members & Sex of the Respondents.**

Sex	Health facility of family Members				Total	
	No		Yes			
Male	89	6.7	12	8.8	101	6.9
%	88.1	6.1	11.9	.8	100.0	6.9
Female	1250	93.3	121	91.0	1371	93.1
%	91.1	84.9	8.9	8.3	100.0	93.1
Total	1339	100.0	133	100.0	1472	100.0
%	91.0	91.0	9.0	9.0	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .344 \quad df = 1 \quad cal \chi^2 = 0.875$$

$\chi^2$  statistics has been calculated to study relationship between the attributes. But calculated value of  $\chi^2$  for 1 df is 0.875 indicates that  $\alpha = 0.344$  which implies that there is no significant relation between the attributes under consideration.

Table- 4.3.3 has been constructed to see the interrelation between the marital status of the respondents and the chance of having health facilities of their family members. It is seen from the table that out of 1500 respondents 136 (9.1%) have reported that their family members get the health facilities from NGO . Again out of these 136 respondents 125 (94%) are married, 4(3%) are unmarried; 3 (2.2%) are widowed and 1 (0.8%) are of other marital status. Thus it can be said that proportion of the respondents who get the health facilities are almost identical with proportions of respondents as a whole.

$\chi^2$  statistic has been calculated to assess association between the attributes under consideration. The calculated value of  $\chi^2 = 0.953$  for 3 df implies  $\alpha = 0.380$ . It indicates that there is no significant association between the above two attributes.

**Table-4.3.3: Distribution of the Respondents by Health facility of family Members & marital status of the Respondents.**

Marital Status	Health facility of family Members				Total	
	No		Yes			
Marr ed	1265	94.3	125	94.0	1490	94.3
%	91.0	85.7	9.0	8.5	100.0	94.2
Unmarried	35	2.6	4	3.0	39	2.6
%	89.7	2.4	10.3	.3	100.0	2.7
Widowed	36	2.7	3	2.2	39	2.6
%	92.3	2.5	7.7	.2	100.0	2.7
Others	6	0.4	1	0.8	7	0.5
%	.4	85.7	14.3	.4	100.0	0.5
Total	1342	100.0	136	100.0	1500	100.0
%	91.0	91.0	9.1	9.1	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .953 \quad df = 3 \quad cal \chi^2 = .380$$

Table 4.3.4 has been constructed to study the association between the health facilities and years of schooling and to see the differentials for educational background. It is seen from the table that out of 1302 respondents 105(8.1%) have got the health facilities and out of these 105 respondents, none is illiterate, 23(21.9%) have one year of schooling; 50(47.6%) have 2-5 years of schooling; 30(28.6%) have 6-10 years of schooling and 2(1.9%) have 11+ years of schooling. Thus it is seen that 98.1% of the respondents who get the health facilities are 1 to 10 years of schooling. It can be said that proportions of respondents who do not have the health facilities for various marital status groups are almost identical with the proportion of respondents as a whole. But these proportions are statistically different for the respondents who get the health facilities.

$\chi^2$  statistic has been calculated to assess the significance of the association between the attributes under consideration. The value of  $\chi^2 = 153.367$  for 4 d.f implies that  $\alpha = 0.000$ . It indicates the relationship between the attributes are highly significant at around 1% level.

**Table 4.3.4: Distribution of the Respondents by Health Facility for Family**

**Members & Education of the Respondents.**

Years of Schooling	Chance Health Facility				Total	
	No	%	Yes	%		
illiterate	16	1.3			16	1.2
%	100.0	1.2			100.0	1.2
1	410	34.3	23	21.9	433	33.33
%	94.7	31.5	5.3	1.7	100.0	33.3
2-5	365	30.5	50	47.6	415	31.9
%	88.0	28.2	12.0	3.7	100.0	31.9
6-10	382	31.9	30	28.6	412	31.5
%	92.7	29.1	7.3	2.4	100.0	31.5
11+	24	2.0	2	1.9	26	2.0
%	92.3	1.9	7.7	7.7	100.0	2.0
Total	1197	100.0	105	100.0	1302	100.0
%	91.9	91.9	8.1	8.1	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .009 \quad df = 4 \quad cal \chi^2 = 153.367$$

Table 4.3.5 has been constructed to exhibit the relationship between the chance of having health facilities of the family members of the respondent and occupation. It is found from the table that out of 1435 respondent 125 (8.7%) have reported that their family members get the health facilities and 1310(91.3%) do not get these facilities. Again out of these 1435 respondents 1176 (82%) are housewives; 111(7.7%) are engaged in small business, 148 (10.3%) are engaged in other occupations. Out of 125 whose family members get the health facilities 110 (88%) are housewives; 10 (8%) are engaged in small business and 5 (4%) are engaged in other occupations. Thus it is seen that the respondents who are housewives, their family members are getting more chance of health facilities. But on looking among the housewives only 9.4% of the respondents have reported that their family members get health facilities.

**Table-4.3.5: Distribution of the Respondents by Health facility of family Members & Occupation of the Respondents.**

Occupation	Health facility of family Members				Total	
	No	%	Yes	%		
Housewife	1066	81.4	110	88.0	1176	82.0
%	90.6	74.2	9.4	7.7	100.0	81.9
Small Business	101	7.7	10	8.0	111	7.7
%	91.0	7.0	9.0	7.7	100.0	7.7
Others	143	10.9	5	4.0	148	10.3
%	96.6	10.0	3.4	3.3	100.0	10.3
Total	1310	100.0	125	100.0	1435	100.0
%	91.3	91.2	8.7	8.8	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .047 \quad df = 2 \quad cal \chi^2 = 6.211$$

$\chi^2$  statistic has been calculated for this cross tables to assess the association between the attributes under consideration. The calculated value of  $\chi^2 = 6.211$  for 2 df implies  $\alpha = 0.047$ . It indicates that the relationship between the attributes is statistically significant at around 5% level of significance.

Table 4.3.6. has been constructed to study the relationship between the attributes monthly income of the respondents and the chance of having health facilities for their family members. It is seen from this table that out of 1410 respondents 129 (9.2%) respondents have reported that their family members get the health facilities & rest 1281 (90.8%) do not get this type of benefit . Again out of 1410 respondents 35 (2.5%) have the monthly income of Taka below 1000; 157 (11.1%) have monthly income of TK 1000 -1999; 394 (27.9%) have the monthly income of TK 2000-2999; 333 (23.6%) have the monthly income of TK 3000-3999; 176 (12.5%) have the monthly income of TK. 4000-4999; 136 (9.7%) have the monthly income of TK 5000-5999; 86 (6.1%) have the monthly income of Taka 6000-6999 and 93 (6.6%) of have the monthly income of Taka above 7000 respectively.



**Table-4.3.6 : Distribution of the Respondents by Health facility of family Members & Income of the Respondents.**

Income	Health facility of family Members				Total	
	No		Yes			
upto 999	28	2.2	7	5.4	35	2.5
%	80.0	2.0	20.0	.5	100.0	2.4
1000-1999	147	11.5	10	7.8	157	11.1
%	93.6	10.4	6.4	.7	100.0	11.1
2000-2999	356	27.8	38	29.5	394	27.9
%	90.4	25.3	9.6	2.7	100.0	28.0
3000-3999	302	23.6	31	24.0	333	23.6
%	90.7	21.4	9.3	2.2	100.0	23.6
4000-4999	161	12.6	15	11.5	176	12.5
%	91.5	11.4	8.5	1.0	100.0	12.4
5000-5999	126	9.8	10	7.8	136	9.7
%	92.6	9.0	7.4	.7	100.0	9.7
6000-6999	76	5.9	10	7.8	86	6.1
%	88.4	5.3	11.6	.7	100.0	6.0
7000 & above	85	6.6	8	6.2	93	6.6
%	91.4	6.1	8.6	.6	100.0	6.6
Total	1281	100.0	129	100.0	1410	100.0
%	90.8	90.8	9.2	9.2	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .341 \quad df = 7 \quad cal \chi^2 = 7.891$$

It is observed that TK. 2000-2999 is model income group of the respondents . Again out of 129 respondents whose family members get the health facilities 7 (5.4%) are the income group of below TK 1000 , 10 (7.8%) are in the income group of TK 1000-1999; 38 (29.5%) are in the income group of TK.2000- 2999;31 (24%) are in the income group of TK 3000-3999;15 (11.5%) are in the income group of TK 4000-4999; 10 (7.8%) are in the income group of TK 5000-5999; 10 (7.8%) are in the income group of TK 6000-6999 and 8 (6.2%) are in the income group of TK 7000 and above.

It is found from the table that the family members of the respondents of the income group of TK. 2000-2999 get the higher proportion of (29.5%) health facilities followed by the respondents of the income group of TK 3000-3999 and then TK 4000-4999 respectively.

$\chi^2$  statistic has been calculated to assess the relationship between the attributes under consideration. The calculated value of  $\chi^2 = 7.891$  for 7 d.f implies  $\alpha = 0.341$ . It indicates that there is no significant relation between the above two attributes.

Table-4.3.7 has been constructed to see the relation between the place of residence (division) and the chance of having health facilities for the family members of the respondents. It is found that out of 1470 respondents 324 (22%) are from Dhaka division ; 306 (20.8%) from chittagong, 445 (30.3%) from Khulna and 397 (26.9%) from Rajshahi division . It is also seen that 132 (9%) respondents have reported that their family members got the health facilities from NGOS, rest 91% do not get this type of facilities.

**Table-4.3.7: Distribution of the Respondents by Health facility of family Members & Place of Residence(Division)**

Division	Health facility of family Members				Total	
	No		Yes			
Dhaka	242	18.1	82	62.1	324	22.0
%	74.7	16.6	25.3	5.6	100.0	22.2
Chitagong	295	22.1	11	8.3	306	20.8
%	96.4	20.1	3.6	.7	100.0	20.8
Khulna	422	31.5	23	17.4	445	30.3
%	94.8	28.6	5.2	1.6	100.0	30.2
Rajshahi	379	28.3	16	12.1	395	26.9
%	95.9	25.7	4.1	1.1	100.0	26.8
	1338	100.0	132	100.0	1470	100.0
%	91.0	91.0	9.0	9.0	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .000 \quad df = 3 \quad cal \chi^2 = 13.465$$

Out of these 132 respondents whose family member get the health facilities 82 (62.1%) are from Dhaka division, 11 (8.3%) from Chittagong, 23 (17.4%) from Khulna and 16 (12.1%) from Rajshahi division. It is clear that the family members of the respondents of Dhaka division got the highest proportion of health facilities followed by Khulna. Then Rajshahi and then Chittagong division.

$\chi^2$  statistic has been calculated to study the association between attributes under consideration. The calculated value of  $\chi^2=13.465$  for 3 df implies that  $\alpha=0.000$ . It indicates that the relation between the attributes are very strongly associated.

Table-4.3.8 has been constructed to study the contribution of 5 selected Non Government organizations (NGOs) in health facility of family members of the respondents. It is seen from the table that out of 1467 respondents 283 (19.3%) are from IBF, 306 (20.9%) are from Grameen Bank, 269 (18.3%) are from BRAC, 297 (20.2%) are from ASHA and 312 (21.3%) are from PROSHIKA. It is also found that out of 1467 respondents 130(8.9%) have reported that their family members get the health facilities from NGOs. Out of these 130 respondents 6 (4.6%) are from IBF; 33 (25.3%) are from Grameen Bank, 50 (38.5%) are from BRAC, 12 (9.2%) are from ASHA and 29 (22.3%) are from PROSHIKA.

Thus it is clear that the family members of the respondents of BRAC got the highest proportion (38.5%) of health facilities followed by Grameen Bank (25.4%) then PROSHIKA (22.3%) then ASHA and then IBF respectively. Thus it may be said that BRAC is more health service oriented towards their clients (micro credit receives). Looking on the overall distribution of the respondents, it is found that the probability of getting the health facilities of family members in BRAC is 3.5%. This probability for Grameen Bank is 2.3%, for PROSHIKA it is 2.0%, for ASHA it is 0.9% and for IBF it is 0.4%. These results are almost identical with the results of section 4.1.

**Table-4.3.8: Distribution of the Respondents by Health facility of family Members & Their Corresponding Organizations.**

Organization	Health facility of family Members				Total	
	No	Yes	No	Yes		
IBF	277	20.76	4.6		233	19.3
%	97.9	18.8	2.1	.4	100.0	19.2
GB	273	20.433	25.4		306	20.9
%	89.2	18.6	10.8	2.3	100.0	20.9
BRAC	219	16.450	38.5		269	18.3
%	81.4	15.0	18.6	3.5	100.0	18.4
ASHA	285	21.312	9.2		303	20.2
%	96.0	19.3	4.0	.9	100.0	20.2
PROSHIKA	283	21.229	22.3		297	21.3
%	90.7	19.3	9.3	2.0	100.0	21.3
Total	1337	100.0	130	100.0	1467	100.0
%	91.1	91.1	8.9	91.1	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .000 \quad df = 4 \quad cal \chi^2 = 58.954$$

$\chi^2$  statistic has been calculated to assess the relationship between the attributes under consideration. The calculated value of  $\chi^2=57.665$  for 4 df implies that  $\alpha= 0.000$ . It indicates that the relationship between the attributes are highly associated.

#### 4.4 : Multiple Regression Analysis for Health facilities to Family Members

In the previous sections the relation of health facilities of family members with its correlates have been studied. Now to study the effect of these correlate on the family health facilities a Multiple Regression Analysis has been carried out. The results of the analysis has been presented on the Table 4.4.1.

The second and the third columns of the Table 4.4.1 show the regression coefficients and their corresponding standard errors of the various correlates of the health facilities of the family members of the respondents. The fifth column of the table shows the level of significance with the various degrees of freedom (d.f) shown in the fourth column of the table.

It is found that various categories of Age, Sex, Marital Status and Education have no significant effect on the health facilities of the family members of the respondents.

Looking on the impact of various categories of occupations it is seen that the category Housewives have statistically significant impact on the health facilities of the family members of the respondents.

Observing the impact of various income groups it is found that income group of “Below Tk. 1000” and “Tk. 5000-5999” have the statistically significant effect at 10% and 7.8% level respectively on the health facilities of the family members of the respondents.

Again observing the place of residence (Division) it is found that only Dhaka, has statistically significant impact on the health facilities of the family members of the respondents.

Looking on the impact for various organizations: IBF & BRAC have the statistically significant impact on the health facilities of the family members of the respondents.

Table 4.4.1 : Multiple Regression Analysis for Health Facilities of Respondents

1	2	3	4	5	6
Variables	B	Std. Error	df	Sig.	Comments
Intercept	3.011	2.211	1	.073	
<b>AGE</b>					
Below 20 years]	.256	.723	1	.744	
20 - 29	-.223	.557	1	.623	
30 - 39	-.623	.531	1	.218	
40 - 49	.114	.583	1	.867	
50 - 59	0	.	0	.	
<b>SEX</b>					
Males	-1.021	.672	1	.133	
Females	0	.	0	.	
<b>MARITAL STATUS</b>					
Married	.854	2.024	1	.656	
Unmarried	-.857	2.151	1	.656	
Widowed	.444	2.137	1	.834	
Others	0	.	0	.	
<b>EDUCATION</b>					
0	19.235	.000	1	.	
1	.830	.867	1	.332	
2 - 5	-.142	.850	1	.823	
6 - -10	.425	.848	1	.622	
11 +	0	.	0	.	
<b>OCCUPATION</b>					
House wives	-2.124	.723	1	.014	*
Small Business	-.762	.800	1	.272	
Others	0	.	0	.	
<b>INCOME</b>					
Below Tk. 1,000	-1.141	.727	1	.103	
1000-1999	.535	.640	1	.345	
2000-2999	-.012	.545	1	.934	
3000-3999	.412	.553	1	.424	
4000-4999	.723	.615	1	.176	
5000-5999	1.123	.701	1	.078	
6000-6999	-.235	.643	1	.643	
7000+	0	.	0	.	
<b>DIVISION</b>					
Dhaka	-1.762	.334	1	.006	***
Chittagong	.216	.445	1	.623	
Khulna	-.435	.376	1	.245	
Rajshahi	0	.	0	.	
<b>ORGANIZATION</b>					
IBF	1.866	.578	1	.010	**
GB	.123	.328	1	.634	
BRAC	-1.154	.329	1	.011	**
ASHA	.326	.402	1	.434	
Proshika	0	.	0	.	

## **CHAPTER V**

### **Contribution of NGO in HRD Through Income Generating Activities**

## CHAPTER V

### **Contribution of NGO in HRD in HRD Through Income Generating Activities**

It is known that income generating activities are one of the main components of HRD. The NGOs in Bangladesh are providing micro credit facilities to their clients and the clients are using these credited amounts in various income generating activities. As a result the micro credit receivers have been able to earn money, spend money and to support their family members financially. There by the NGOs are contributing in the process of HRD in Bangladesh. To justify this hypothesis the micro credits receivers were asked about their monthly income, monthly expenditure and financial support to their family members. These information will indicate the indices of income generating activities of NGOs.

Again to see whether these activities are related to their socioeconomic background or not, some cross tables have been constructed. An attempt has also been made to test these relationships using  $\chi^2$  statistic. Again to study the impacts of these correlates, multiple regression analysis technique has been used. At the end a comparative positions of the contribution of 5 selected NGOs are placed as per objectives of the study.

#### **5.1 Contribution of NGOs in HRD Providing Income Facilities**

As it is known that monthly income of the respondents (micro credit receivers) is an index of income generating activities of the respondents. An attempt has been made here to see, how this monthly income is distributed among the respondents. Further, an attempt has also been made to see the relationship of monthly income with the other socio-economic background. The differentials due to these correlates have also been studied in this section. At the end multiple regression analysis has been carried out to study the impact of correlates on income. A comparative positions of the contributions 5 selected NGOs are also studied here.

Table 5.1.1 has been constructed to see the income distribution and to study the relationship of monthly income with the ages of respondents. It is found from the table



that out of 1453 respondents 35 (2.4%) have the monthly income below TK 1000; 167 (11.5%) have the monthly income of TK 1000-1999; 409 (23.1%) have the monthly income of TK 2000-2999; 341 (23.5%) have the monthly income of TK 3000-3999; 179 (12.3%) have the monthly income of TK 4000-4999; 138 (9.5%) have the monthly income of TK 5000-5999; 86 (5.9%) have the monthly income of TK 6000-6999 and 98 (6.7%) have the monthly income of TK 7000 and above.

**Table-5.1.1: Distribution of the Respondents by Monthly Income & Ages**

Income	Ages of Respondents										Total	
	upto 19		20-29		30-39		40-49		50+			
upto 999	1	1.4	6	1.2	11	2.0	13	5.1	4	4.0	35	2.4
%	2.9	.1	17.1	.4	31.4	.8	37.1	.9	11.4	.3	100.0	2.4
1000-1999	14	20.0	61	12.5	60	11.1	17	6.6	15	15.2	167	11.5
%	8.4	1.0	36.5	4.2	35.9	4.1	10.2	1.2	9.0	1.0	100.0	11.5
2000-2999	24	34.3	171	35.0	131	24.3	59	23.0	24	24.2	409	28.1
%	5.9	1.7	41.	11.8	32.0	9.0	14.4	4.1	5.9	1.7	100.0	28.1
3000-3999	13	18.6	121	24.8	130	24.1	57	22.3	20	20.2	341	23.5
%	3.8	.9	35.5	8.3	38.1	8.9	16.7	3.9	5.9	1.4	100.0	23.5
4000-4999	7	10.0	56	11.5	68	12.6	38	14.8	10	10.1	179	12.3
%	3.9	.5	31.3	3.9	38.0	4.7	21.2	2.6	5.6	.7	100.	12.3
5000-5999	5	7.1	29	5.9	69	12.8	28	10.9	7	7.1	138	9.5
%	3.6	.3	21.0	2.0	50.0	4.7	20.3	1.9	5.1	.5	100.0	9.5
6000-6999	3	4.3	21	4.3	35	6.5	20	7.8	7	7.1	86	5.9
	3.5	.2	24.4	1.4	40.7	2.4	23.3	1.4	8.1	.5	100.0	5.9
7000 +	3	4.3	23	4.7	36	6.7	24	9.4	12	12.1	98	6.7
%	3.1	.2	23.5	1.6	36.7	2.5	24.5	1.7	12.2	.8	100.	6.7
Total	70	100.0	488	100.0	540	100.0	256	100.0	99	100.0	1453	100.0
%	4.8	4.8	33.6	33.6	37.2	37.2	17.6	17.6	6.8	6.8	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .000 \quad df = 28 \quad cal \chi^2 = 71.678$$

The distribution of overall respondents follows positively skewed distribution with a mode in the income group of TK 2000-2999.

As per age concern out of 1453 respondents 70 (4.8%) are in the age group below 20 years, 488 (33.6%) are in the age group 20-29 years; 540 (37.2%) are in the age interval 30-39 years, 256 (17.6%) are in the age interval 40-49 years and 99 (6.8%) are in the age interval 50 years & above.

The relationship between attributes monthly income and ages of the respondents has been studied using  $\chi^2$  statistic. The calculated value of  $\chi^2 = 71.678$  for 28 df implies  $\alpha = 0.000$ . It indicates that there is highly significant relation between the attributes.

Table 5.1.2 has been constructed to see relation between monthly income and the sex of respondents. The income distribution of over all respondents are most identical as it is observed in Table 5.1.1. But it is seen that micro credit receivers are female dominant. The sex differentials are observed in various income groups.

But the modal income of males and females lie in the same income group of Tk. 2000-2999 giving the modal income of Tk, 2750 & Tk.2781.8 respectively.

$\chi^2$  statistic has been calculated to study the association between the attributes. The Calculated value of  $\chi^2 = 28.782$  for 7 df implies that  $\alpha = 0.000$ . It indicates that there is a very strong association between the attributes under consideration.

**Table-5.1.2: Distribution of the Respondents by Monthly Income & Sex.**

Income	Sex		Total			
	Male	Female				
upto 999		35	2.6	35	2.4	
%		100.0	2.4	100.0	2.4	
1000-1999	14	13.6	155	11.4	169	11.6
%	8.3	1.0	91.7	10.6	100.0	11.6
2000-2999	23	22.3	387	28.6	410	28.1
%	5.6	1.6	9	26.6	100.0	28.1
3000-3999	20	19.4	322	23.8	342	23.5
%	5.8	1.4	94.2	22.1	100.0	23.5
4000-4999	13	12.6	166	12.3	179	12.3
%	7.3	.9	92.7	11.4	100.0	12.3
5000-5999	7	6.8	131	9.7	138	9.5
%	5.1	.5	94.9	9.0	100.0	9.5
6000-6999	7	6.8	79	5.8	86	5.9
%	8.1	.5	91.9	5.4	100.0	5.9
7000 & above	19	18.4	79	5.8	98	6.7
%	19.4	1.3	80.6	5.4	100.0	6.7
Total	103	100.	1354	100.0	1457	100.0
%	7.1	7.1	92.9	92.9	100.0	100.0

Source: Cross Tabulation from Raw data

$$\alpha = .000 \quad df = 7 \quad cal \chi^2 = 28.782$$

Table 5.1.3 has been constructed to assess the relationship between the attributes marital status and the income of the respondents. It is found from the table that out of 1452 respondents 1362 (93.8%) are married 40 (2.8%) are unmarried 43 (3.0%) are widowed and the rest 7 (0.5%) are of other categories of marital status. Thus it is seen that respondents under consideration are mostly married. It indicates that the NGOs are

investing micro-credit mostly to the currently married persons, not to the distressed persons like widowed, separated & divorced etc.

**Table-5.1.3: Distribution of the Respondents by Monthly Income & Marital status**

Income	Marital status						Total	%		
	Married	%	Unmarried	%	Widowed	%			Others	%
upto 999	31	2.3	1	2.5	3	7.0		35	2.4	
%	88.6	2.1	2.9	.1	8.6	.2		100.0	2.4	
1000-1999	155	11.4	2	5.0	7	16.3	3	42.9	167	11.5
%	92.8	10.7	1.2	.1	4.2	.5	1.8	.2	100.0	11.5
2000-2999	382	28.0	15	37.5	10	23.3	1	14.3	408	28.1
%	93.6	26.3	3.7	1.0	2.5	.7	.2	.1	100.0	28.1
3000-3999	320	23.5	11	27.5	9	20.9	1	14.3	341	23.5
%	93.8	22.0	3.2	.8	2.6	.6	.3	.1	100.0	23.5
4000-4999	175	12.8			4	9.3			179	12.3
%	97.8	12.1			2.2	.3			100.0	12.3
5000-5999	128	9.4	5	12.5	5	11.6			138	9.5
%	92.8	8.8	3.6	.3	3.6	.3			100.0	9.5
6000-6999	83	6.1	2	5.0	1	2.3			86	5.9
%	96.5	5.7	2.3	.1	1.2	.1			100.0	5.9
7000 ..	88	6.5	4	10.0	4	9.3	2	28.6	98	6.7
%	89.8	6.1	4.1	.3	4.1	.3	2.0	.1	100.0	6.7
Total	1362	100.0	40	100.0	43	100.0	7	100.0	1452	100.0
%	93.8	93.8	2.8	2.8	3.0	3.0	.5	.5	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .085 \quad df = 21 \quad cal \chi^2 = 30.360$$

Thus it can be said that micro-credit business of the NGOs can hardly alleviate poverty and sufferings of the distressed persons in Bangladesh. However, the highest proportion of the respondents of married, unmarried and widowed categories lie in income group of

TK 200-2999 giving their modal income of Tk. 2786.73, Tk.2764.71 & Tk.2744.68. On the other hand most of respondents of other marital status category lies in the income group of TK 1000-1999. It indicates that most of the divorced & separated women have very low monthly income. So, it can be said that the distressed people are hardly getting the chance of income generating activities by NGOs.

To study the association between the attributes under consideration  $\chi^2$  has been calculated. The calculated  $\chi^2=30.360$  for 21 df indicates  $\alpha=0.085$ . It implies that the attributes under consideration bear statistically significant association at 8.5% level of significance.

A contingency table- 5.1.4 has been constructed to assess the association between the two attributes monthly income and the years of schooling of the respondents. It is found from the table that out of 1348 respondents 17(1.3%) are illiterates, 447 (33.2%) have one year of education, 434 (32.2%) have 2-5 years of education, 422 (31.3%) have the 6-10 years of education and 28 (2.1%) have the 11+ years of education. Looking on the income distribution of various groups of education it is found that Illiterates and 11+ years of school category have the modal income in the income group of Tk. 3000-3999 giving the modal income of Tk. 3200.68 & Tk. 3601.12, whereas other three categories have the modal income in the income group of TK 2000-2999 giving the modal income of Tk.2852.38, Tk.2568.38 & Tk. 2841.00 respectively. It is very difficult to explain the relatively higher income (Tk. 3200.68) of illiterate respondents. It may be due to the data error or it can be explained as they are very much sincere enough to their business and earned more money than that of some literate categories.

$\chi^2$  value has been calculated to study the association between the attributes under consideration. The calculated  $\chi^2=44.729$  for 28 df implies  $\alpha = 0.023$ . It indicates that association between the attributes under consideration is statistically significant at 2.3% level of significance.

**Table-5.1.4 : Distribution of the Respondents by Monthly Income & Years of Schooling of the respondents**

Monthly Income	Years of Schooling										Total	%
	illiterate	%	1	%	2-5	%	6-10	%	11+	%		
upto 999			14	3.1	12	2.8	7	1.7			33	2.4
%			42.4	1.0	36.4	.9	21.2	.5			100.0	2.4
1000-1999	2	11.8	42	9.4	71	16.4	37	8.8	3	10.7	155	11.5
%	1.3	.1	27.1	3.1	45.8	5.3	23.9	2.7	1.9	.2	100.0	11.5
2000-2999	5	29.4	122	27.3	129	29.7	122	28.9	4	14.3	382	28.3
%	1.3	.4	31.9	9.1	33.8	9.6	31.9	9.1	1.0	.3	100.0	28.3
3000-3999	6	35.3	108	24.2	85	19.6	106	25.1	7	25.0	312	23.1
%	1.9	.4	34.6	8.0	27.2	6.3	34.0	7.9	2.2	.5	100.0	23.1
4000-4999	2	11.8	56	12.5	47	10.8	53	12.6	5	17.9	163	12.1
%	1.2	.1	34.4	4.2	28.8	3.5	32.5	3.9	3.1	.4	100.0	12.1
5000-5999	1	5.9	43	9.6	37	8.5	43	10.2	1	3.6	125	9.3
%	.8	.1	34.4	3.2	29.6	2.7	34.4	3.2	.8	.1	100.0	9.3
6000-6999			33	7.4	27	6.2	20	4.7	1	3.6	81	6.0
%			40.7	2.4	33.3	2.0	24.7	1.5	1.2	.1	100.0	6.0
7000 +	1	5.9	29	6.5	26	6.0	34	8.1	7	25.0	97	7.2
%	1.0	.1	29.9	2.2	26.8	1.9	35.1	2.5	7.2	.5	100.0	7.2
Total	17	100.0	447	100.0	434	100.0	422	100.0	28	100.0	1348	100.0
%	1.3	1.3	33.2	33.2	32.2	32.2	31.3	31.3	2.1	2.1	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .023 \quad df = 28 \quad cal \chi^2 = 44.729$$

Table 5.1.5 has been constructed to study the relationship between the attributes monthly income and occupation of the respondent. The overall income distribution is observed as it is seen in the previous tables. But out of 1421 respondents 1161 (81.7%) are housewives; 112 (7.9%) are involved in small business, 148 (10.4%) are involved in

other occupations. Thus it can be said that although the respondents received the micro-credit but these credits are not sufficient enough to change the occupation.

**Table-5.1.5: Distribution of the Respondents by Monthly Income & Occupation of the respondents**

Income	Occupation of Respondents						Total	%
	Housewife	%	Small Business	%	Others	%		
upto 999	33	2.8			2	1.4	35	2.5
%	94.3	2.3			5.7	.1	100.0	2.5
1000-1999	119	10.2	8	7.1	37	25.0	164	11.5
%	72.6	8.4	4.9	.6	22.6	2.6	100.0	11.5
2000-2999	336	28.9	23	20.5	42	28.4	401	28.2
%	83.8	23.6	5.7	1.6	10.5	3.0	100.0	28.2
3000-3999	294	25.3	20	6.0	22	6.5	336	23.6
%	87.5	20.7	17.9	1.4	14.9	1.5	100.0	23.6
4000-4999	147	12.7	14	12.5	15	10.1	176	12.4
%	83.5	10.3	8.0	1.0	8.5	1.1	100.0	12.4
5000-5999	105	9.0	13	11.6	14	9.5	132	9.3
%	79.5	7.4	9.8	.9	10.6	1.0	100.0	9.3
6000-6999	68	5.9	12	10.7	5	3.4	85	6.0
%	80.0	4.8	14.1	.8	5.9	.4	100.0	6.0
7000 & above	59	5.1	22	19.6	11	7.4	92	6.5
%	64.1	4.2	23.9	1.5	12.0	.8	100.0	6.5
Total	1161	100.0	112	100.0	148	100.0	1421	100.0
%	81.7	81.7	7.9	7.9	10.4	10.4	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .000 \quad df = 14 \quad cal \chi^2 = 82.308$$

It shows that the respondents are mainly housewives but as a part time worker of the family they are earning money.

It is also observed that only 7.9% are involved in small business; which is against the idea that the micro-credits helps the people to do a small business. Again the modal income of housewives is Tk. 2,838.57 and that of small business is Tk. 2,480.29

$\chi^2$  statistic has been calculated to study the relationship between the attributes under consideration. The calculated  $\chi^2=82.308$  for 14 df indicates that.  $\alpha=0.000$ . It implies that there is very strong association between the attributes under consideration.

Table 5.1.6 have been constructed to study the inter-relationship between the attributes place of residence (division) and the monthly income of the respondents. It is found that out of 1457 respondents 332 (22.8%) are from Dhaka division, 296 (20.3%) from chittagong division, 441 (30.3%) from Khulna division and 388 (26.6%) are from Rajshahi division.

The modal income of Dhaka and Rajshahi division are in the income group of TK 2000-2999 having the modal income of TK 2,879 and TK 2,464 and modal income of chittagong and Khulna division are in the income group of TK 3000 –3,999 giving the modal income of Tk. 3,560 and TK 3,146 respectively. It is found from the figures that modal income of the respondents of chittagong division is the highest (TK 3,560) followed Khulna division (TK 3,146) then Dhaka division (TK 2,879) and the lowest in Rajshahi division (TK 2,464).

The  $\chi^2$  statistic has been calculated to study inter –relation ship between the attributes under consideration. The calculated  $\chi^2 =276.057$  for 21 df implies  $\alpha=0.000$ . It indicates that the attributes under consideration are very strongly associated.



**Table-5.1.6: Distribution of the Respondents by Monthly Income & Division**

Income	Division								Total %	
	Dhaka	%	Chitagong	%	Khulna	%	Rajshahi	%		
upto 999	5	1.5	15	5.1	5	1.1	10	2.6	35	2.4
%	14.3	.3	42.9	1.0	14.3	.3	28.6	.7	100.0	2.4
1000-1999	32	9.6	21	7.1	29	6.6	87	22.4	169	11.6
%	18.9	2.2	12.4	1.4	17.2	2.0	51.5	6.0	100.0	11.6
2000-2999	90	27.1	38	12.8	118	26.8	164	42.3	410	28.1
%	22.0	6.2	9.3	2.6	28.8	8.1	40.0	11.3	100.0	28.1
3000-3999	82	24.7	57	19.3	128	29.0	75	19.3	342	23.5
%	24.0	5.6	16.7	3.9	37.4	8.8	21.9	5.1	100.0	23.5
4000-4999	46	13.9	42	14.2	71	16.1	20	5.2	179	12.3
%	25.7	3.2	23.5	2.9	39.7	4.9	11.2	1.4	100.0	12.3
5000-5999	27	8.1	38	12.8	55	12.5	18	4.6	138	9.5
%	19.6	1.9	27.5	2.6	39.9	3.8	13.0	1.2	100.0	9.5
6000-6999	15	4.5	41	13.9	20	4.5	10	2.6	86	5.9
%	17.4	1.0	47.7	2.8	23.3	1.4	11.6	.7	100.0	5.9
7000 +	35	10.5	44	14.9	15	3.4	4	1.0	98	6.7
%	35.7	2.4	44.9	3.0	15.3	1.0	4.1	.3	100.0	6.7
Total	332	100.0	296	100.0	441	100.0	388	100.0	1457	100.0
%	22.8	22.8	20.3	20.3	30.3	30.3	26.6	26.6	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .000 \quad df = 21 \quad cal \chi^2 = 276.057$$

Table 5.1.7 has been constructed to study the income distribution of the respondents for 5 different NGOs and to identify the relative situation of the contributing fashion. It is found from the table that out of 1456 respondents 282(19.4%) are from IBF, 302(20.7%) from Grameen Bank; 262(18.0%) are from BRAC, 287(19.7%) are from ASHA and 323(22.2%) are from PROSHIKA.

Looking on the income distribution it is seen that modal income of the respondents of IBF and BRAC lies in the expenditure group of Tk. 3000-3999 that of GB, ASHA and

PROSHIKA lie in the expenditure group of Tk 2000-2999 giving the modal income of Tk. 3,025.86, Tk. 3,158.62; Tk. 2,579.79, Tk.2767.58 and Tk. 2 553.85 respectively. It is seen that the monthly income of the respondents of BRAC is the highest of Tk. 3,158.62 followed by IBF (Tk.3025.86), then ASHA (Tk.2,767.58), then Grameen Bank (Tk.2,579.79) and then PROSHIKA (Tk.2,553.85).

**Table-5.1.7: Distribution of the Respondents by Monthly Income & Organizations**

Income	Organization								Total %			
	IBF %	GB %	BRAC %	ASHA %	PROSHIKA %							
upto 999		19	6.32	.8		14	4.3	35	2.4			
%		54.3	1.3	5.7	.1	40.0	1.0	100.0	2.4			
1000-1999	8	2.8	45	14.9	25	9.5	32	11.1	59	18.3	169	11.6
%	4.7	.5	26.6	3.1	14.8	1.7	18.9	2.2	34.9	4.1	100.0	11.6
2000-2999	69	24.5	78	25.8	64	24.4	104	36.2	94	29.1	409	28.1
%	16.9	4.7	19.1	5.4	15.6	4.4	25.4	7.1	23.0	6.5	100.0	28.1
3000-3999	70	24.8	54	17.9	70	26.7	82	28.6	66	20.4	342	23.5
%	20.5	4.8	15.8	3.7	20.5	4.8	24.0	5.6	19.3	4.5	100.0	23.5
4000-4999	38	13.5	41	13.6	38	14.5	28	9.8	34	10.5	179	12.3
%	21.2	2.6	22.9	2.8	21.2	2.6	15.6	1.9	19.0	2.3	100.0	12.3
5000-5999	23	8.2	29	9.6	28	10.7	20	7.0	38	11.8	138	9.5
%	16.7	1.6	21.0	2.0	20.3	1.9	14.5	1.4	27.5	2.6	100.0	9.5
6000-6999	28	9.9	20	6.6	20	7.6	9	3.1	9	2.8	86	5.9
%	32.6	1.9	23.3	1.4	23.3	1.4	10.5	.6	10.5	.6	100.0	5.9
7000 +	46	16.3	16	5.3	15	5.7	12	4.2	9	2.8	98	6.7
%	46.9	3.2	16.3	1.1	15.3	1.0	12.2	.8	9.2	.6	100.0	6.7
Total	232	100.0	302	100.0	262	100.0	287	100.0	323	100.0	1456	100.0
%	19.4	19.4	20.7	20.7	18.0	18.0	19.7	19.7	22.2	22.2	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .000 \quad df = 28 \quad cal \chi^2 = 172.432$$

$\chi^2$  Statistic has been calculated to see the association between the attributes under consideration. The calculated  $\chi^2 = 172.432$  for 28 df implies that  $\alpha = 0.000$ . It indicates that the attributes under consideration are very strongly associated.

### **5.2 Contribution of NGOs in HRD enhancing capacity to spend (expenditure).**

As it is known that income generating activities are one of major components of HRD. So, we can assess these activities by assessing the income of some community. As, income is normally distorted by misreporting error, so, expenditure may be used as an index of income generating activities. Again some time expenditure is used to estimate income of a family or house hold. If the respondents have the capacity of earning money they will have the ability to spend it. Thus amount of monthly expenditure can be used as an index of income generating activities of our respondents.

Firstly an attempt is made here to see the distribution of expenditure of the respondents and to study the inter-relationship of expenditure with their socio-economic characteristics. It is also tried to exhibit the socio-economic differentials of these characters. At the end a comparative study has also been carried-out for the expenditure pattern of the respondents of 5 selected NGOS and to identify their relative position in contributing HRD of Bangladesh.

Table 5.2.1 has been constructed to see the distribution of expenditure for various age groups of the respondents. It is observed that expenditure pattern for all the age groups follow positively skewed distribution. The modal expenditure of the age group of 'below 20 years' and 20-29 years lie in the expenditure group of Tk. 2000 to 2999 and the modal expenditure of the age interval 30-39 years, 40-49 years and 50+ years lie in the expenditure group of Tk. 3000 to 3999. The modal expenditure for the respondents of age group of 'below 20 years' is of Tk. 2135, for age group 20-29 years the modal expenditure is of Tk. 2,536; for the age group of 30-39 years the modal expenditure is of Tk. 3,226, for the age group of 40-49 years it is of Tk. 3,325 and that for the age group of 50+ years the modal expenditure is of Tk. 3,223. It is seen from this result there is an increasing trend of these modal expenditure with the age of the respondent except the open ended class.

**Table-5.2.1: Distribution of the Respondents by Monthly Expenditure & Ages of Respondents:**

Expenditure	Ages of the Respondents								Total	%		
	up to 19	%	20-29	%	30-39	%	40-49	%			50+	%
up to 999	2	.4	10	1.8	8	3.1	3	2.9	23	1.6		
%		8.7	.14	3.5	.7	34.8	.5	13.0	.2	100.0	1.6	
1000-1999	23	32.4	118	23.6	90	16.6	32	12.6	23	22.5	286	19.4
%	8.0	1.6	41.3	8.0	31.5	6.1	11.2	2.2	8.0	1.6	100.0	19.4
2000-2999	25	36.6	171	34.1	129	23.8	53	20.9	21	20.6	400	27.2
%	6.5	1.8	42.8	11.6	32.3	8.8	13.3	3.6	5.3	1.4	100.0	27.2
3000-3999	27	9.9	125	25.0	147	27.1	66	26.0	27	26.5	372	25.3
%	1.9	.5	33.6	8.5	39.5	10.0	17.7	4.5	7.3	1.8	100.0	25.3
4000-4999	30	14.1	45	9.0	86	15.8	39	15.4	6	5.9	186	12.6
%	5.4	.7	24.2	3.1	46.2	5.8	21.0	2.7	3.2	.4	100.0	12.6
5000-5999	33	4.2	18	3.6	47	8.7	25	9.8	11	10.8	104	7.1
%	2.9	.2	17.3	1.2	45.2	3.2	24.0	1.7	10.6	.7	100.0	7.1
6000-6999	31	1.4	12	2.4	17	3.1	17	6.7	5	4.9	52	3.5
%	1.9	.1	23.1	.8	32.7	1.2	32.7	1.2	9.6	.3	100.0	3.5
7000 & above	31	1.4	10	2.0	17	3.1	14	5.5	6	5.9	48	3.3
%	2.1	.1	20.8	.7	35.4	1.2	29.2	1.0	11.5	.4	100.0	3.3
Total	71	100.0	501	100.0	543	100.0	254	100.0	102	100.0	1471	100.0
%	4.8	4.8	34.1	34.1	36.9	36.9	17.3	17.3	6.9	6.9	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .000 \quad df = 28 \quad cal \chi^2 = 107.934$$

$\chi^2$  statistic has been calculated to assess the association between the attributes under consideration. The value of  $\chi^2 = 107.934$  for 28 d.f implies  $\alpha = 0.000$ . It indicates that

there is strong association between the attribute under consideration. Therefore a clear upward trend of expenditure is seen with the increase ages.

Table 5.2.2 has been constructed to see the association between the attributes expenditure of the respondents with the sex of the respondents.

**Table-5.2.2: Distribution of the Respondents by Monthly Expenditure & Sex of Respondents:**

Expenditure	Sex of Respondents				Total	%
	Male	%	Female	%		
upto 999			23	1.7	23	1.6
%			100.0	1.6	100.0	1.6
1000-1999	13	12.7	275	20.0	288	19.5
%	4.5	.9	95.5	18.6	100.0	19.5
2000-2999	19	18.6	383	27.9	402	27.3
%	4.7	1.3	95.3	26.0	100.0	27.3
3000-3999	30	29.4	342	24.9	372	25.2
%	8.1	2.0	91.9	23.2	100.0	25.2
4000-4999	13	12.7	173	12.6	186	12.6
%	7.0	.9	93.0	11.7	100.0	12.6
5000-5999	14	13.5	90	6.6	104	7.1
%	13.7	.9	86.5	6.1	100.0	7.1
6000-6999	8	7.8	44	3.2	52	3.5
%	15.4	.5	84.6	3.0	100.0	3.5
7000 +	5	4.9	43	3.1	48	3.3
%	10.4	.3	89.6	2.9	100.0	3.3
Total	102	100	1373	100	1475	100
%						

Source: Cross Tabulation from Raw data.

$$\alpha = .003 \quad df = 7 \quad cal \chi^2 = 21.678$$

The table shows that out of 1475 respondents 102(6.9%) are males and the rest 1373(93.1%) are females. Looking on the expenditure pattern of males, it is seen that modal expenditure of the males lies in the expenditure group of Tk. 3000-3999 giving modal expenditure of Tk. 3393. The pattern of expenditure for females is slightly different showing their modal expenditure group of Tk. 2000-2999 giving modal expenditure of Tk. 2725.

It indicates that modal expenditure of females are lower than that of males and their difference is Tk. 668. It may be due to fact that males can provide more time than females and they can do the hard work compared to females and can earn more money and spend it.

$\chi^2$  statistic has been calculated to assess the association between the two attributes under consideration. The calculated  $\chi^2 = 21.678$  for 7 d.f implies  $\alpha = 0.003$ . It indicates that the above two attributes are very strongly associated with each other.

Table 5.2.3 has been constructed to see the expenditure pattern of the respondents with various marital status groups. It is seen from the table that out of 1472 respondents 1382(93.1%) are married, 40(2.7%) are unmarried, 43(2.9%) are widowed and only 7(0.5%) are of the other categories. Looking on the expenditure pattern of different marital status group it is found that modal expenditure of the married, unmarried and widowed groups lie in the expenditure group of Tk. 2000-2999 giving their modal expenditure of Tk. 2,867, Tk. 2500 & Tk. 2753 respectively. It is seen that the married group of the respondents have the highest expenditure followed by widowed and then unmarried respondents. It may be the fact that the married respondents have their husbands/wives who can share their excess expenditure.

To assess the association between the attributes under consideration  $\chi^2$  statistic has been calculated. The  $\chi^2 = 46.398$  for 21 d.f. implies  $\alpha = 0.000$ . It indicates that the above two attributes are strongly associated.

**Table-5.2.3: Distribution of the Respondents by Monthly Expenditure Marital status of Respondents**

Expenditure	Marital status								Total	
	Married	%	Unmarried	%	Widowed	%	Others	%		%
upto 999	18	1.3	1	2.5	3	7.0	1	3.4	23	1.6
%	78.3	1.2	4.3	.1	13.0	2	14.3	1	100.0	1.6
1000-1999	272	19.7	5	12.5	8	18.6	2	.7	287	19.5
%	94.8	18.5	1.7	3	2.8	5	28.6	.1	100.0	19.5
2000-2999	372	26.9	16	40.0	11	25.6	1	.3	400	27.2
%	93.0	25.3	4.0	1.1	2.8	7	14.3	.1	100.0	27.2
3000-3999	356	25.8	5	12.5	10	23.3	1	.3	372	25.3
%	95.7	24.2	1.3	.3	2.7	.7	14.3	.1	100.0	25.3
4000-4999	172	12.4	8	20.0	6	14.0			186	12.6
%	92.5	11.7	4.3	.5	3.2	.4			100.0	12.6
5000-5999	100	7.2	3	7.5	1	2.3			104	7.1
%	96.2	6.8	2.9	.2	1.0	.1			100.0	7.1
6000-6999	51	3.7			1	2.3			52	3.5
%	98.1	3.5			1.9	.1			100.0	3.5
7000 +	41	3.0	2	5.0	3	7.0	2	.4	48	3.3
%	85.4	2.8	4.2	.1	6.3	.2	28.6	.1	100.0	3.3
Total	1382	100.0	40	100.0	43	100.0	7	.5	1472	100.0
%	93.9	93.9	2.7	2.7	2.9	2.9	100.0	.5	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .001 \quad df = 21 \quad cal \chi^2 = 46.398$$

To see the pattern of expenditure of respondents of five different categories of schooling Table 5.2.4 has been constructed. It is seen that out of 1365 respondents 18(1.3%) are illiterate, 452(33.1%) have one year of schooling, 438 (32.1%) have 2-6 years of schooling; 428 (31.4%) have 6-10 years of schooling and 29(2.1%) have 11+ years of schooling.

**Table-5.2. 4: Distribution of the Respondents by Monthly Expenditure & Years of Schooling of Respondents**

Monthly Expenditure	Years of Schooling								Total	%			
	illiterate	%	1	%	2-5	%	6-10	%			11+	%	
upto 999	1	5.6	3	.7	10	2.3	7	1.6			21	1.5	
	%	4.8	.1	14.3	.2	47.6	.7	33.3	.5		100.0	1.5	
1000-1999	3	16.7	64	14.2	117	26.7	77	18.0	2	6.9	263	19.3	
	%	1.1	.2	24.3	4.7	44.5	8.6	29.3	5.6	.8	.1	100.0	19.3
2000-2999	4	22.2	130	28.8	114	26.0	112	26.2	9	31.0	369	27.0	
	%	1.1	.3	35.2	9.5	30.9	8.4	30.4	8.2	2.4	.7	100.0	27.0
3000-3999	6	33.3	149	33.0	93	21.2	95	22.2	5	17.2	348	25.5	
	%	1.7	.4	42.8	10.9	26.7	6.8	27.3	7.0	1.4	.4	100.0	25.5
4000-4999	2	11.1	51	11.3	52	11.9	63	14.7	5	17.2	173	12.7	
	%	1.2	.1	29.5	3.7	30.1	3.8	36.4	4.6	2.9	.4	100.0	12.7
5000-5999	1	5.6	21	4.6	27	6.2	41	9.6	4	13.8	94	6.9	
	%	1.1	.1	22.3	1.5	28.7	2.0	43.6	3.0	4.3	.3	100.0	6.9
6000-6999			18	4.0	11	2.5	20	4.7	1	3.4	50	3.7	
	%		36.0	1.3	22.0	.8	40.0	1.5	2.0	.1	100.0	3.7	
7000 +	1	5.6	16	3.5	14	3.2	13	3.0	3	10.3	47	3.4	
	%	2.1	.1	34.0	1.2	29.8	1.0	27.7	1.0	6.4	.2	100.0	3.4
Total	18	100.0	452	100.0	438	100.0	428	100.0	29	100.0	1365	100.0	
	%	1.3	1.3	33.1	33.1	32.1	32.1	31.4	31.4	2.1	100.0	100.0	

Source: Cross Tabulation from Raw data.

$$\alpha = .000 \quad df = 28 \quad cal \chi^2 = 65.925$$

Looking on the pattern of expenditure for various educational groups it is found that the modal expenditure of the illiterates and 1 year of schooling lie in the expenditure group of Tk. 3000-3999 giving the modal expenditure of Tk. 3333/- and Tk. 3,162/- respectively. Again 2-5 years of schooling group have the modal expenditure in the



expenditure group of Tk. 1000-1999 giving the modal expenditure of Tk. 1,972/-; 6-10 years schooling and 11+ year schooling group have the modal expenditure in the expenditure group of Tk. 2000-2999 giving the modal expenditure Tk. 2,672, 2,652/- respectively.

To assess the relationship between the attributes under consideration  $\chi^2$  statistic has been calculated. The  $\chi^2 = 65.925$  for 28 d.f implies  $\alpha = 0.000$ . It indicates that the attributes are strongly associated with the each other.

Table 5.2.5 has been constructed to see the expenditure pattern of respondents for their various marital status. It is seen that out of 1436 respondents 1175(81.8%) are house wives, 113(7.9%) are engaged in small business and the rest 148(10.3%) are engaged in the other occupations. The expenditure pattern of housewife shows that their modal expenditure lies in expenditure group of Tk. 2000-2999 giving modal expenditure of Tk. 2839.

But the different pattern of expenditure is observed for the occupational group of small business. Their modal expenditure lies in the expenditure group of Tk. 3000-3999. It is seen that their modal expenditure is of Tk. 3,562. It indicates that the modal expenditure of housewives are less than that of the modal expenditure of the respondents who are engaged in small business. It may be the fact that housewives have the tendency to spend less than that of the respondent who are engaged in small business. Another reasons may be the fact that the House wives reported their own part of their expenditure.

To assess the association between the attributes under consideration  $\chi^2$  statistic has been calculated. The value of  $\chi^2 = 71.086$  for 14 d.f implies  $\alpha = 0.000$ . It indicates that the above attributes are vary strongly associated with each other.

**Table-5 2.5: Distribution of the Respondents by Monthly Expenditure & Occupation**

Monthly Expenditure	Occupation of Respondents						Total	%
	Housewife	%	Small Business	%	Others	%		
upto 999	19	1.6			4	2.7	23	1.6
%	82.6	1.3			17.4	.3	100.0	1.6
1000-1999	219	18.6	13	11.5	48	32.4	280	19.5
%	78.2	15.3	4.6	9	17.1	3.3	100.0	19.5
2000-2999	341	29.0	15	13.3	33	22.3	389	27.1
%	87.7	23.7	3.9	1.0	8.5	2.3	100.0	27.1
3000-3999	317	27.0	33	29.2	19	12.8	369	25.7
%	85.9	22.1	8.9	2.3	5.1	1.3	100.0	25.7
4000-4999	139	11.8	19	16.8	24	16.2	182	12.7
%	76.4	9.7	10.4	1.3	13.2	1.7	100.0	12.7
5000-5999	69	5.9	16	14.2	13	8.8	98	6.8
%	70.4	4.8	16.3	1.1	13.3	9	100.0	6.8
6000-6999	38	3.2	9	8.0	2	1.4	49	3.4
%	77.6	2.6	18.4	6	4.1	1	100.0	3.4
7000 +	33	2.8	8	7.1	5	3.4	46	3.2
%	71.7	2.3	17.4	6	10.9	3	100.0	3.2
Total	1175	100.0	113	1.00	148	100.0	1436	100.0
%	81.8	81.8	7.9	7.9	10.3	10.3	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .000 \quad df = 14 \quad cal \chi^2 = 71.086$$

Table 5.2.6 has been constructed to see the relation between monthly income and expenditure of the respondents. It is seen from the table that the most of the respondents have concentrated along diagonal of the bi-variate table. It indicates that there is a high correlation between the income and expenditure of the respondents.

The  $\chi^2$  statistic has been calculated to assess significance of the relation between income and expenditure. The value of  $\chi^2 = 131.552$  for 28 d.f implies  $\alpha = 0.000$ . It indicates that the income and expenditure are very strongly related.

Again to study the relationship between income and expenditure correlation co-efficient  $r = 0.995$  has also been calculated. To test the significance of this correlation co-efficient,

the statistic  $t = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$  has been estimated. The estimated value of  $t = 382.228$  for 1443

d.f implies  $\alpha = 0.000$ .

It indicates that the correlation co-efficient  $r$  is statistically significant. Thus it can be suggested that expenditure of the respondents can be used as proxy of income.

**Table-5.2. 6 : Distribution of the Respondents by Their Monthly Income & Expenditure**

Monthly Income	Expenditure							Total	%					
	upto 1999	2000-2999	3000-3999	4000-4999	5000-5999	6000 +								
	%	%	%	%	%	%	%							
upto 999	20	6.5	2.5	1.9	2.1	3.2	1.1	35	2.4					
	%57.1	1.4	5.7	.1	20.0	.5	5.7	.1	8.6	.2	2.9	.1	100.0	2.4
1000-1999	153	49.7	8.2	2.0	5.1	1.4		166	11.5					
	%92.2	10.6	4.8	.6	3.0	.3		100.0	11.5					
2000-2999	128	41.6	22.4	56.9	36	9.9	1.5	10	9.8	6	6.3	405	28.0	
	%31.6	8.9	55.3	15.5	8.9	2.5	.2	.1	2.5	.7	1.5	.4	100.0	28.0
3000-3999	94	1.3	14.0	35.5	186	51.2	2.7	3.8	4	3.9		341	23.6	
	%1.2	.3	41.1	9.7	54.5	12.9	2.1	.5	1.2	.3		100.0	23.6	
4000-4999	91	.3	6	1.5	90	24.8	7.9	43.2	1	1.0	2	179	12.4	
	%6	.1	3.4	.4	50.3	6.2	44.1	5.5	.6	.1	1.1	100.0	12.4	
5000-5999	91	.3	6	1.5	22	6.1	6.9	37.7	35	34	33	3.2	136	9.4
	%7	.1	4.4	.4	16.2	1.5	50.7	4.8	25.7	2.4	2.2	.2	100.0	9.4
6000-6999	91	.3	5	1.3	13	3.6	1.8	9.8	31	30.4	17	17.9	85	5.9
	%1.2	.1	5.9	.3	15.3	.9	21.2	1.2	36.5	2.1	20.0	1.2	100.0	5.9
7000 +			3	.8	4	1.1	1.7	3.8	18	17.5	66	69.5	98	6.8
	%		3.1	.2	4.1	.3	7.1	.5	18.4	1.2	67.3	4.6	100.0	6.8
Total	303	100.0	394	100.0	363	100.0	183	100.0	102	100.0	95	100.0	1445	100.0
	%21.3	21.3	27.3	27.3	25.1	25.1	12.7	12.7	7.1	7.1	6.6	6.6	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .000 \quad df = 35 \quad cal \chi^2 = 2417.378$$

To see the expenditure pattern of the respondents of 4 divisions Table 5.2.7 has been constructed. It is seen from the table that 336(22.8%) of the respondents are from Dhaka Division, 316(21.4%) are from chittagong; 439(29.8%) are from Khulna and 384(26%) are from Rajshahi Division.

**Table-5.2.7: Distribution of the Respondents by Monthly Expenditure & Division**

Expend ture	Division								Total	
	Dhaka		Chittagong		Khulna		Rajshahi			
up to 999	4	1.2			6	1.4	13	3.4	23	1.6
%	17.4	.3			26.1	.4	56.5	.9	100.0	1.6
1000-1999	44	13.1	24	7.6	67	15.3	153	39.8	288	19.5
%	15.3	3.0	8.3	1.6	23.3	4.5	53.1	10.4	100.0	19.5
2000-2999	86	25.6	65	20.6	129	29.4	122	31.8	402	27.3
%	21.4	5.8	16.2	4.4	32.1	8.7	30.3	8.3	100.0	27.3
3000-3999	88	26.2	108	34.2	121	27.6	55	14.3	372	25.2
%	23.7	6.0	29.0	7.3	32.5	8.2	14.8	3.7	100.0	25.2
4000-4999	42	12.5	50	15.8	72	16.4	22	5.7	186	12.6
%	22.6	2.8	26.9	3.4	38.7	4.9	11.8	1.5	100.0	12.6
5000-5999	40	11.9	21	6.6	29	6.6	14	3.6	104	7.1
%	38.5	2.7	20.2	1.4	27.9	2.0	13.5	.9	100.0	7.1
6000-6999	17	5.1	24	7.6	9	2.1	2	.5	52	3.5
%	32.7	1.2	46.2	1.6	17.3	.6	3.6	.1	100.0	3.5
7000 +	15	4.5	24	7.6	6	1.4	3	.8	48	3.3
%	31.3	1.0	50.0	1.6	12.5	.4	6.3	.2	100.0	3.3
Total	336	100.0	316	100.0	439	100.0	384	100.0	1475	100.0
%	22.8	22.8	21.4	21.4	29.8	29.8	26.0	26.0	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .000 \quad df = 21 \quad cal \chi^2 = 268.515$$

Looking on the expenditure pattern of the respondent it is found that the modal expenditure of Dhaka & Chittagong Divisions lies in the expenditure group of Tk. 3000-3999 and that Khulna Division lies in the expenditure group of Tk. 2000-2999 and the Rajshahi Division in the expenditure group of Tk. 1000-1999.

Calculating modes of the expenditure pattern of 4 divisions it is found that the modal expenditure of Dhaka is of Tk. 3,042/-, that of Chittagong is of Tk. 3,425/-, Khulna is of Tk. 2,887/- and the Rajshahi Division is of Tk 1,820/-.

To assess the relationship between the attributes  $\chi^2$  statistic has been estimated. The value of  $\chi^2 = 268.515$  for 21 d.f implies that  $\alpha = 0.000$ . It indicates that the attributes under consideration are strongly associated.

Table 5.2.8 has been constructed to study the expenditure pattern of the respondents for 5 different NGOs and to identify the relative situation of the contributing fashion. It is found from the table that out of 1474 respondents 286(19.4%) are from IBF, 308(20.9%) from Grameen Bank; 267(18.1%) are from BRAC, 295(20%) are from ASHA and 318(21.6%) are from PROSHIKA.

Looking on the expenditure pattern it is seen that modal expenditure of the respondents of IBF and ASHA lies in the expenditure group of Tk. 2000-2999, that of GB and of PROSHIKA in the expenditure group of Tk 1000-1999 and BRAC in the expenditure group 3000-3999 giving the modal expenditure of Tk. 2,845.64, Tk. 2,529.23; Tk. 1,869.89, Tk.1532.31 and Tk. 3,048.90 respectively. It is seen that the monthly expenditure of the respondents of BRAC is the highest of Tk. 3,048.9 followed by IBF(Tk.2,845.64), then ASHA (Tk.2,529.23), then Grameen Bank (Tk.1,869.89) and then PROSHIKA (Tk.1,532.31).

**Table-5.2.8: Distribution of the Respondents by Monthly Expenditure & Their Corresponding Organizations.**

Expenditure	Organizations										Total	%
	IBF %	GB	%	BRAC	%	ASHA %	PRO SHIKA	%				
up to 999	2	.7	6	1.9	3	1.1			12	3.8	23	1.6
%	8.7	.1	26.1	.4	13.0	.2			52.2	.8	100.0	1.6
1000-1999	18	6.3	78	25.3	48	18.0	62	21.0	84	26.4	290	19.7
%	6.3	1.2	27.1	5.3	16.7	3.3	21.5	4.2	28.5	5.6	100.0	19.5
2000-2999	90	31.5	67	21.8	74	27.7	113	38.3	58	18.2	402	27.3
%	22.4	6.1	16.7	4.5	18.4	5.0	28.1	7.7	14.4	3.9	100.0	27.3
3000-3999	77	26.9	68	22.1	76	28.5	68	23.1	80	25.8	369	25.0
%	20.9	5.2	18.4	4.6	20.6	5.2	18.34	4.6	21.7	5.6	100.0	25.2
4000-4999	41	14.3	45	14.6	34	12.7	28	9.5	38	11.9	186	12.6
%	22.0	2.8	24.2	3.1	18.3	2.3	15.1	1.9	20.4	2.6	100.0	12.6
5000-5999	22	7.7	25	8.1	14	5.2	8	2.7	35	11.0	104	7.1
%	21.2	1.5	24.0	1.7	13.5	.9	7.7	.5	33.7	2.4	100.0	7.1
6000-6999	18	6.3	8	2.6	9	3.4	7	2.4	10	3.1	52	3.5
%	34.6	1.2	15.4	.5	17.3	.6	13.5	.5	19.2	.7	100.0	3.5
7000 +	18	6.3	11	3.6	9	3.4	9	3.1	1	.3	48	3.3
%	37.5	1.2	22.9	.7	18.8	.6	18.8	.6	2.1	.1	100.0	3.3
Total	286	100.0	308	100.0	267	100.	295	100.0	318	100.0	1474	100.0
%	19.4	19.4	20.9	20.9	18.1	18.1	20.0	20.0	21.6	21.6	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .000 \quad df = 28 \quad cal \chi^2 = 131.552$$

To Assess the relationship between the attributes  $\chi^2$  statistic has been estimated. The value of  $\chi^2 = 313.552$  for 28 d.f implies that  $\alpha = 0.000$ . It indicates that the attributes under consideration is highly associated with each other.

### 5.3: Contribution of NGOs Through Financial Support to Family Members.

As it is mentioned before that financial support to the family members is an index of income generating activities of the respondents. Here an attempt has been made to see how this characteristic is related with its various correlates. The significance of these relationships have been tested using  $\chi^2$  statistic. To study the impact of the correlates on the financial support to the family members, multiple regression analysis has carried out. At the end the contributions of the selected NGOs have been assessed identifying their relative position. Table 5.3.1 has been constructed to see the relationship between the financial support to the family members and the ages of the respondents.

It is seen that out of 1535 respondents 1256(81.8%) can provide financial support to the family members and 279 (18.2%) can not provide financial support to the family members. Again out of 1256 respondents who can provide financial support to the family members 60(4.8%) are aged below 20 years; 444(35.4%) are in age interval 20- 29 years; 460 (36.6%) are in the age interval 30- 39 years; 215 (17.1%) are in age interval 40 – 49 years and 77 (6.1%) are in age interval 50+ years.

Again looking on the age distribution, it is found that 83.3% of the respondents of age group “below 20 years” can provide financial support to their family members. These proportions for age groups of 20-29 years, 30-39 years, 40-49 years & 50+ years are 84.3%, 81.7%, 80.5% and 72.6% respectively. First four of these proportions are statistical alike but the fifth proportion is significant different from others.

$\chi^2$  statistic has been calculated to study the association between attributes under consideration. The calculated value of  $\chi^2 = 8.515$  for 4 df implies  $\alpha = .074$ . It indicates that the association between attributes under consideration are statistically significant at 7.4% level.



**Table 5.3.1: Distribution of the Respondents by Financial Support to Family Members & Ages of the Respondents**

Age	Financial Support to Family Members				Total	%
	No	%	Yes	%		
upto 19	12	4.3	60	4.8	72	4.7
%	16.7	.8	83.3	3.9	100.0	4.7
20-29	83	29.7	444	35.4	527	34.3
%	15.7	5.4	84.3	28.9	100.0	34.3
30-39	103	36.9	460	36.6	563	36.7
%	18.3	6.7	81.7	30.0	100.0	36.7
40-49	52	18.6	215	17.1	267	17.4
%	19.5	3.4	80.5	14.0	100.0	17.4
50+	29	10.4	77	6.1	106	6.9
%	27.4	1.9	72.6	5.0	100.0	6.9
Total	279	100.0	1256	100.0	1535	100.0
%	18.2	18.2	81.8	81.8	100.0	100.0

$$\chi^2 = 8.515$$

$$df. = 4$$

$$\alpha = .074$$

Table 5.3.2 has been constructed to see the relationship between the financial support to the family members and the sex of the respondents. It is seen that out of 1542 respondents 1259(81.6%) can provide financial support to the family members and 283 (18.4%) cannot provide financial support to the family members. Again out of 1259 respondents 85(6.8%) are males and 1174(93.2%) are females. Again among the 106 males 85(80.2%) can provide the financial support to the family members where as among the 1436 females 1174 (81.8%) the financial support to the family members. Thus it can be said that the females can provide relatively more financial support to the family members. But this difference is not statistically significant.

**Table 5.3.2: Distribution of the Respondents by Financial Support to Family Members & Sex**

Sex	Financial Support to Family Members				Total	%
	No	%	Yes	%		
Male	21	7.4	85	6.8	106	6.9
%	19.8	1.4	80.2	5.5	100.0	6.9
Female	262	92.6	1174	93.2	1436	93.1
%	18.2	17.0	81.8	76.1	100.0	93.1
Total	283	100.0	1259	100.0	1542	100.0
%	18.4	18.4	81.6	81.6	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .688 \quad df = 1 \quad \chi^2 = .162$$

$\chi^2$  statistic has been calculated to study the association between attributes under consideration. The calculated value of  $\chi^2 = 0.162$  for 1 df implies  $\alpha = .688$ . It indicates that the association between attributes under consideration are not statistically significant.

Table 5.3.3 has been constructed to see the relationship between the financial support to the family members and the marital status of the respondents. It is seen that out of 1535 respondents 1256(81.8%) can provide financial support to the family members and 279 (18.2%) cannot provide financial support to the family members. Again out of 1256 respondents 1185(94.35) are married; 30(2.4%) are unmarried; 35(2.8%) are widowed and 6(0.5%) are of other categories of marital status. Again among the 1443 married respondents 1185(82.1%) can provide the financial support to the family members. On the other hand these proportions are 71.4% & 81.4% for unmarried & widowed respondents respectively. Thus it is found that these proportions for married and widowed are statistically alike but this proportion for unmarried respondents are significantly different from other proportions.

**Table 5.3.3: Distribution of the Respondents by Financial Support to Family Members & Marital Status**

Marital Status	Financial Support to Family Members				Total	%
	No	%	Yes	%		
Married	258	92.5	1185	94.3	1443	94.0
%	17.9	16.8	82.1	77.2	100.0	94.0
Unmarried	12	4.3	30	2.4	42	2.7
%	28.6	.8	71.4	2.0	100.0	2.7
Widowed	8	2.9	35	2.8	43	2.8
%	18.6	.5	81.4	2.3	100.0	2.8
Others	1	.4	6	.5	7	.5
%	14.3	.1	85.7	.4	100.0	.5
Total	279	100.0	1256	100.0	1535	100.0
%	18.2	18.2	81.8	81.8	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .360 \quad df = 3 \quad \chi^2 = 3.214$$

$\chi^2$  statistic has been calculated to study the association between attributes under consideration. The calculated value of  $\chi^2 = 3.214$  for 3 df implies  $\alpha = .360$ . It indicates that the association between attributes under consideration are not statistically significant.

Table 5.3.4 has been constructed to study the association between the financial support to the family members and years of schooling and to see the differentials for educational background. It is seen from the table that out of 1425 respondents 1158(81.3%) can provide financial support to the family members and 267(18.7%) can not provide financial support to the family members. Again out of these 1158 respondents who can provide financial support to the family members, 10(0.9%) are illiterate, 384(33.2%) have one year of schooling; 356(30.7%) have 2-5 years of schooling; 381(32.9%) have 6-10 years of schooling and 27(2.3%) have 11+ years of schooling.

Looking on educational group it is seen that those who have 11+ yeas of schooling; 93.1% of them can provide financial support to the family men bers. This proportion for

6-10 years of schooling is 85.2%; for 2-5 years of schooling it is 77.4%; for one year of schooling it is 81.5%; for illiterates it is 55.6%.

**Table 5.3.4: Distribution of the Respondents by Financial Support to Family Members & Years of Schooling.**

Years of Schooling	Financial Support to Family Members				Total	%
	No	%	Yes	%		
illiterate	8	3.0	10	.9	18	1.3
%	44.4	.6	55.6	.7	100.0	1.3
1	87	32.6	384	33.2	471	33.1
%	18.5	6.1	81.5	26.9	100.0	33.1
2-5	104	39.0	356	30.7	460	32.3
%	22.6	7.3	77.4	25.0	100.0	32.3
6-10	66	24.7	381	32.9	447	31.4
%	14.8	4.6	85.2	26.7	100.0	31.4
11+	2	.7	27	2.3	29	2.0
%	6.9	.1	93.1	1.9	100.0	2.0
Total	267	100.0	1158	100.0	1425	100.0
%	18.7	18.7	81.3	81.3	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .001 \quad df = 4 \quad \chi^2 = 19.665$$

$\chi^2$  statistic has been calculated to study the association between attributes under consideration. The calculated value of  $\chi^2 = 19.665$  for 4 df implies  $\alpha = .001$ . It indicates that the association between attributes under consideration are statistically significant.

Table 5.3.5 has been constructed to exhibit the relationship between the financial support to the family members and their occupation. It is found from the table that out of 1500 respondents 1226 (81.7%) can provide the financial support to the family members 274(18.3%) can not provide the financial support to the family members.

. Again it is seen that out of 1225 housewives 1011 (82.5%) can provide financial support to the family members .On the other hand it is also seen that out of 116 respondents who are engaged in small business 105 (90.5%) can provide financial support to the family members. The above two proportions are statistically different. Thus it can be said that respondents who are engaged in small business can provide more financial support to the family members

**Table 5.3.5: Distribution of the Respondents by Financial Support to Family Members & Occupation of Respondents.**

Occupation	Financial Support to Family Members				Total	%
	No	%	Yes	%		
Housewife	214	78.1	1011	82.5	1225	81.7
%	17.5	14.3	82.5	67.4	100.0	81.7
Small Business	11	4.0	105	8.6	116	7.7
%	9.5	.7	90.5	7.0	100.0	7.7
Others	49	17.9	110	9.0	159	10.6
%	30.8	3.3	69.2	7.3	100.0	10.6
Total	274	100.0	1226	100.0	1500	100.0
%	18.3	18.3	81.7	81.7	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .000 \quad df = 2 \quad \chi^2 = 23.292$$

$\chi^2$  statistic has been calculated to study the association between attributes under consideration. The calculated value of  $\chi^2 = 23.292$  for 2 df implies  $\alpha = .000$ . It indicates that the association between attributes under consideration are statistically significant.

Table 5.3.6. has been constructed to study the relationship between the attributes financial support to the family members and monthly income of the respondents. It is seen from this table that out of 1457 respondents 1198 (82.2%) can provide the financial

support to the family & rest 259 (17.8%) can not provide the financial support to the family members.

**Table 5.3.6: Distribution of the Respondents by Financial Support to Family Members & Monthly Income of Respondents.**

Monthly Income	Financial Support to Family Members				Total	%
	No	%	Yes	%		
upto 999	176.6		18	1.5	35	2.4
%	48.6	1.2	51.4	1.2	100.0	2.4
1000-1999	56	21.6	113	9.4	169	11.6
%	33.1	3.8	66.9	7.8	100.0	11.6
2000-2999	94	36.3	316	26.4	410	28.1
%	22.9	6.5	77.1	21.7	100.0	28.1
3000-3999	37	14.3	305	25.5	342	23.5
%	10.8	2.5	89.2	20.9	100.0	23.5
4000-4999	19	7.3	160	13.4	179	12.3
%	10.6	1.3	89.4	11.0	100.0	12.3
5000-5999	15	5.8	123	10.3	138	9.5
%	10.9	1.0	89.1	8.4	100.0	9.5
6000-6999	5	1.9	81	6.8	86	5.9
%	5.8	.3	94.2	5.6	100.0	5.9
7000 & above	16	6.2	82	6.8	98	6.7
%	16.3	1.1	83.7	5.6	100.0	6.7
Total	259	100.0	1198	100.0	1457	100.0
%	17.8	17.8	82.2	82.2	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .000 \quad df = 7 \quad \chi^2 = 88.101$$

The proportions of respondents of different income groups who can provide financial support to their family members are different. These proportions show an increasing trend with the increase of income. It indicates that as the income of the respondents increase the financial support to their family members will increase.

$\chi^2$  statistic has been calculated to study the association between attributes under consideration. The calculated value of  $\chi^2 = 88.101$  for 7 df implies  $\alpha = .000$ . It indicates that the association between attributes under consideration are statistically significant.

Table-5.3.7 has been constructed to see the relation between the financial support to the family members and the place of residence (division) of the respondents. It is found that out of 1542 respondents 344(22.3%) are from Dhaka division ; 323(20.9%) from Chittagong, 459 (29.8%) from Khulna and 416 (27.0%) are from Rajshahi division .

It is also seen that out of 1542 respondents 1259 (81.6%) respondents can provide the financial support to the family members and 283(18.4%) can not provide the financial support to the family members.

Out of these 1259 respondents who can provide the financial support to the family members 277(22.0%) are from Dhaka division, 265 (21.0%) from Chittagong, 399(31.7%) from Khulna and 318 (25.3%) are from Rajshahi division.

It is also seen that the proportion of respondents of Dhaka division who can provide the financial support to the family members is 80.5%. These proportions for Chittagong division, Khulna division & Rajshahi division are 82.0% , 86.9%, 76.4 % respectively. It indicates that the proportion of respondents of Rajshahi division who can provide the financial support to the family members are the lowest.

**Table 5.3.7 : Distribution of the Respondents by Financial Support of Family Members & Place of Residence (Division)**

Division	financial support to family members				Total	%
	No	%	Yes	%		
Dhaka	67	23.7	277	22.0	344	22.3
%	19.5	4.3	80.5	18.0	100.0	22.3
Chitagong	58	20.5	265	21.0	323	20.9
%	18.0	3.8	82.0	17.2	100.0	20.9
Khulna	60	21.2	399	31.7	459	29.8
%	13.1	3.9	86.9	25.9	100.0	29.8
Rajshahi	98	34.6	318	25.3	416	27.0
%	23.6	6.4	76.4	20.6	100.0	27.0
Total	283	100.0	1259	100.0	1542	100.0
%	18.4	18.4	81.6	81.6	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .001 \quad df = 3 \quad \chi^2 = 16.387$$

$\chi^2$  statistic has been calculated to assess the relationship between the attributes under consideration. The calculated value of  $\chi^2 = 16.387$  for 3 d.f implies  $\alpha = 0.001$ . It indicates that there is highly significant relation between the above two attributes.

Table-5.3.8 has been constructed to study the contribution of 5 selected NGOs in HRD through providing scope of financial support to their family members and to see relationship between the attributes 'financial support to the family members' and 'Non Government organizations (NGOS)'. It is seen from the table that out of 1541 respondents 1258 (81.6%) can provide the financial support to the family members and 283(18.4%) can not provide the financial support to the family member. Again out of 1258 respondents who can support to their family members, 236(18.8%) are from IBF; 274 (21.8%) are Grameen Bank., 245(19.5%) are from BRAC, 273 (21.7%) are from ASHA and 230 (18.3%) are from PROSHIKA .



It is also seen that the proportion of the respondents of IBF who can provide the financial support to the family members is 80.8. These proportions for Grameen Bank, BRAC, ASHA & PROSHIKA are 85.6%, 87.6%, 87.8% & 68.0% respectively. These figures indicate that the respondents of PROSHIKA can provide financial support to the family members in least proportion. Again looking overall distribution of the respondents, the probability of providing the financial support to their family members of the respondents of Grameen Bank is 17.8%. This proportion for ASHA is 17.7%, for BRAC it is 15.9%, for IBF it is 15.3% and PROSHIKA it is 14.9%. Thus it can be said that the family members of the respondents of Grameen Bank have the highest possibility of getting the financial support, followed by ASHA, then BRAC, then IBF and then PROSHIKA.

**Table 5.3.8: Distribution of the Respondents by Financial Support to Family Members & Organizations**

Organizations	Financial Support to Family Members				Total	%
	No	%	Yes	%		
IBF	56	19.8	236	18.3	292	18.9
%	19.2	3.6	80.8	15.3	100.0	18.9
GB	46	16.3	274	21.8	320	20.8
%	14.4	3.0	85.6	17.8	100.0	20.8
BRAC	35	12.4	245	19.5	280	18.2
%	12.5	2.3	87.5	15.9	100.0	18.2
ASHA	38	13.4	273	21.7	311	20.2
%	12.2	2.5	87.8	17.7	100.0	20.2
PROSHIKA	108	38.2	230	18.3	338	21.9
%	32.0	7.0	68.0	14.9	100.0	21.9
Total	283	100.0	1258	100.0	1541	100.0
%	18.4	18.4	81.6	81.6	100.0	100.0

Source: Cross Tabulation from Raw data.

$$\alpha = .000 \quad df = 4 \quad \chi^2 = 59.412$$

$\chi^2$  statistic has been calculated to assess the relationship between the attributes under consideration. The calculated value of  $\chi^2 = 59.412$  for 4 d.f implies  $\alpha = 0.000$ . It indicates that there is highly significant relation between the above two attributes.

#### **5.4: Multiple Regression Analysis for Financial Support to Family Members**

The effect of income and expenditure are assessed through financial assistance to the family members of the respondents. If the respondents earn sizeable amount of money, he/ she can provide financial support to their family members. They were asked whether they were providing financial support to their family members or not. Their response was either yes or no. In the previous section the relations of the attribute 'financial support to the family members' with its various correlates have been studied. A Multiple regression analysis has been carried-out to study the effect of its correlates on the above attribute. Their results of the analysis have been summarized in Table-5.4.1

The second and the third columns of the Table 5.4.1 shows the regression co-efficients and their corresponding standard errors. The fifth column of the table shows the level of significance with various d.f of the correlates of the financial support to family members of the respondents.

Looking on the co-efficient of various categories of age it is found that all age groups have the negative impact on the providing financial support to their family members. The negative effect is statistically significant for the age group 20-29 years at 2.5% level.

The various categories of Sex and marital status have no significant impact on providing financial support to their family members of the respondents.

Looking on impact of various categories education, it is seen that all the education categories have statistically significant impact on providing financial support to their family members. It indicates that as the respondents are more educated they are providing more financial support to their family members.

Observing the impact of occupation it is also observed that all the occupational groups have statistically significant negative impact on providing financial support to their family members. It indicates that as they are occupationally up graded their financial support to the family members reduces. It indicates the changing pattern of social system towards individualism.

Looking on the impact of income on the support to their family members, it is seen that the income groups 'below Tk. 1000'; Tk. 1000-1999; Tk. 2000-2999 & Tk. 6000-6999 have the positive and statistically significant impact at 0.01%, 0.09%, 8% and 2.6% level. Other income groups have no significant impact on proving financial support to their family members. It indicates that the respondents whose income is lesser they are providing financial support to their family members more.

Looking on the impact of place (Division) of residence on providing financial support to their family members it is seen that Dhaka and chittagong have the positive impact where as Khulna has the negative impact on providing financial support to their family members. This negative effect is also statistically significant at 7.8% level. It can be concluded that the respondents of Dhaka and Chittagong division are providing more support to their family members compared to the other two divisions.

Looking on the impact of various NGOs on providing financial support to the family members of the respondents it is found that all organizations have the negative impact and those impacts are statistically significant except the IBF.

Table 5.4.1 : Multiple Regression Analysis for Financial Support for Family Members

1	2	3	4	5	6
Variables	B	Std. Error	df	Sig.	Comments
Intercept	-3.272	1.606	1	.042	**
<b>AGE</b>					
Below 20 years]	-.592	.479	1	.217	
20 - 29	-.686	.306	1	.025	**
30 - 39	-.334	.300	1	.266	
40 - 49	-.352	.323	1	.276	
50 - 59	0	.	0	.	
<b>SEX</b>					
Males	.252	.376	1	.502	
Females	0	.	0	.	
<b>MARITAL STATUS</b>					
Married	.745	1.143	1	.515	
Unmarried	1.353	1.232	1	.272	
Widowed	.334	1.215	1	.783	
Others	0	.	0	.	
<b>EDUCATION</b>					
0	3.842	1.169	1	.001	***
1	2.281	1.053	1	.030	**
2 - 5	2.301	1.052	1	.029	**
6 - -10	1.984	1.050	1	.059	*
11 +	0	.	0	.	
<b>OCCUPATION</b>					
House wives	-.478	.265	1	.072	
Small Business	-1.196	.416	1	.004	***
Others	0	.	0	.	
<b>INCOME</b>					
Below Tk. 1,000	1.659	.496	1	.001	***
1000-1999	1.004	.383	1	.009	**
2000-2999	.603	.345	1	.080	
3000-3999	-.315	.361	1	.383	
4000-4999	-.321	.404	1	.426	
5000-5999	-.419	.425	1	.324	
6000-6999	-1.329	.595	1	.026	**
7000+	0	.	0	.	
<b>DIVISION</b>					
Dhaka	0.0367	.222	1	.869	
Chittagong	.179	.239	1	.456	
Khulna	-.393	.223	1	.078	
Rajshahi	0	.	0	.	
<b>ORGANIZATION</b>					
IBF	-0.031	.231	1	.895	
GB	-1.092	.240	1	.000	***
BRAC	-.767	.269	1	.004	***
ASHA	-.949	.252	1	.000	***
Proshika	0	.	0	.	

## **CHAPTER VI**

### **Income Distribution of Respondents and its Structural Change**

## CHAPTER VI

### **Income Distribution of Respondents and its Structural Change**

In the previous section, contributions of NGOs in economic activities have been studied and comparison has been made among the NGOs. Here, the distributions of income have been fitted for various NGOs and different contributing factors and their structural changes have been studied.

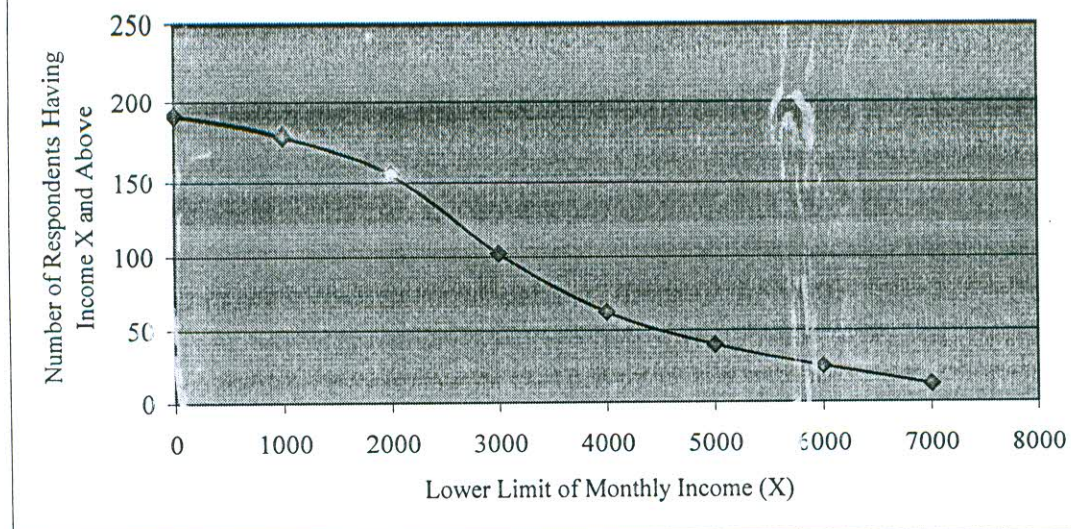
The word HRD indicates the capacity of manpower to earn money, spend it for their own development and to develop their family members (i) through Education and training (ii) Providing health facilities (iii) Providing financial assistance to their family members. All these activities depend on income of the people. Thus here an attempt has been made to study the income distribution of the respondents of NGOs and various categories of the contributing factors of HRD such as i) Own training ii) Training of Family members iii) Own health facilities iv) Family members health facilities. Chow tests have also been carried out to examine their structural changes for various NGOs and contributing factors. For easier understanding and explaining facility, structural changes for contributing factors have been studied first.

#### **6.1: Income Distribution of Respondents & Its Structural Change for Various Categories of own Training Facilities.**

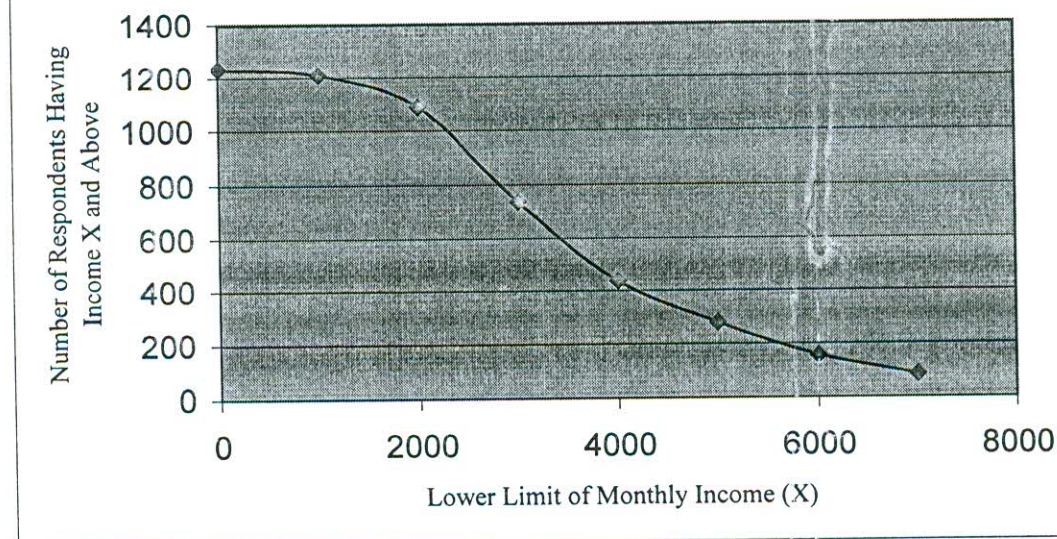
To study the income distribution of the respondents who got the training facilities from NGOs or not the lower limit of their income (X) and the number of respondents having income X or more have been plotted on the graph paper which are shown in the figure 6.1.1 and 6.1.2.

The figures 6.1.1 & 6.1.2 indicate that distributions of income follows Pareto type of distribution. Thus a Pareto law of income distribution like  $N = AX^{-\lambda}$  has been fitted using ordinary least square (OLS) method to the log linear model  $\log N = \log A - \lambda \log X$ . Setting  $\log N = y$ ,  $\log A = \alpha$ ,  $-\lambda = \beta$  and  $\log X = x$ ; the model becomes  $y = \alpha + \beta x$ .

**Fig- 6.1.1: Income Distributions of Respondents Having Training Facilities**



**Fig-6.1.2: Income Distributions of Respondents who did not have Training Facilities**



Estimated  $\hat{\beta}$  values & SE ( $\hat{\beta}$ ) have been shown in Table 6.1.1. Here  $\beta$  value represents the elasticity of income. Normally this value is expected to be negative as the values of income X is increased the number of persons having income X & more will decrease.

**Table 6.1.1: Estimated Income Elasticity and Their SE for the Respondents who got / did not get Training Facilities.**

Category of respondents	Elasticity $\hat{\beta}$	SE( $\hat{\beta}$ )	t - values	Significant level
Got training	$\hat{\beta}_1 = -.202$	.113	-1.786	.128
Did not get training	$\hat{\beta}_2 = -.197$	.116	-1.695	.141

The Estimated income elasticity  $\hat{\beta}_1$  value for the respondents who got the training facilities is -0.202 which indicates that if the income of respondent X is increased by 1%, the number of persons having income X & more will decrease by 0.202%. To test the null hypothesis that the population income elasticity  $\beta_1 = 0$  against alternative hypothesis  $\beta_1 \neq 0$ , t-statistic has been used. It is seen that  $\beta_1$  is significantly different from zero at 12.8% level of significance.

Again the estimated income elasticity  $\hat{\beta}_2$  value for the respondents who did not get the training facilities is -0.197 which indicates that if the income (X) of the respondents who did not get the training facilities is increased by 1% the number of respondents having income X and more will decrease by 0.197%. To test the null hypothesis that population income elasticity  $\beta_2 = 0$  against an alternative hypothesis  $\beta_2 \neq 0$ ; t-statistic has been used. It is seen that  $\beta_2$  is significantly different from zero at 14.1% level of significance.

To study the structural change for the regression model  $y = \alpha + \beta x$  for the above two categories we have to consider four sets of hypothesis which are as follows:

- |  |  |
|--|--|
| i) $\alpha_1 \neq \alpha_2$ & $\beta_1 \neq \beta_2$ | ii) $\alpha_1 \neq \alpha_2$ & $\beta_1 = \beta_2$ |
| iii) $\alpha_1 = \alpha_2$ & $\beta_1 \neq \beta_2$  | iv) $\alpha_1 = \alpha_2$ & $\beta_1 = \beta_2$ .  |

Since we are interested on the income elasticity, So a test has been carried out to test the null hypothesis that the population income elasticity of the two categories of respondents are identical or not ie to test the null hypothesis  $H_0: \alpha_1 = \alpha_2$  &  $\beta_1 = \beta_2$  against an alternative hypothesis  $H_0: \alpha_1 = \alpha_2$  &  $\beta_1 \neq \beta_2$  using Chow test for structural change. It has

been carried out using Snedecors' F statistic;  $F = \frac{(e'e - e'e)/q}{e'e/(n-k)}$  which follows F



distribution with  $q$  and  $n-k$  degrees of freedom (d.f). Here  $n = 16$ ,  $k = 3$ ,  $e'e$  represents restricted sum of squares of residual (SSR) which follows  $\chi^2$  distribution with  $n-k+1 = 14$  df;  $e'e$  represents unrestricted SSR which follows  $\chi^2$  distribution with  $(n-k)=13$  d.f and  $q = (n-k+1) - (n-k) = 1$  d.f. The calculation of F statistic has been summarized in Table 6.1.2.

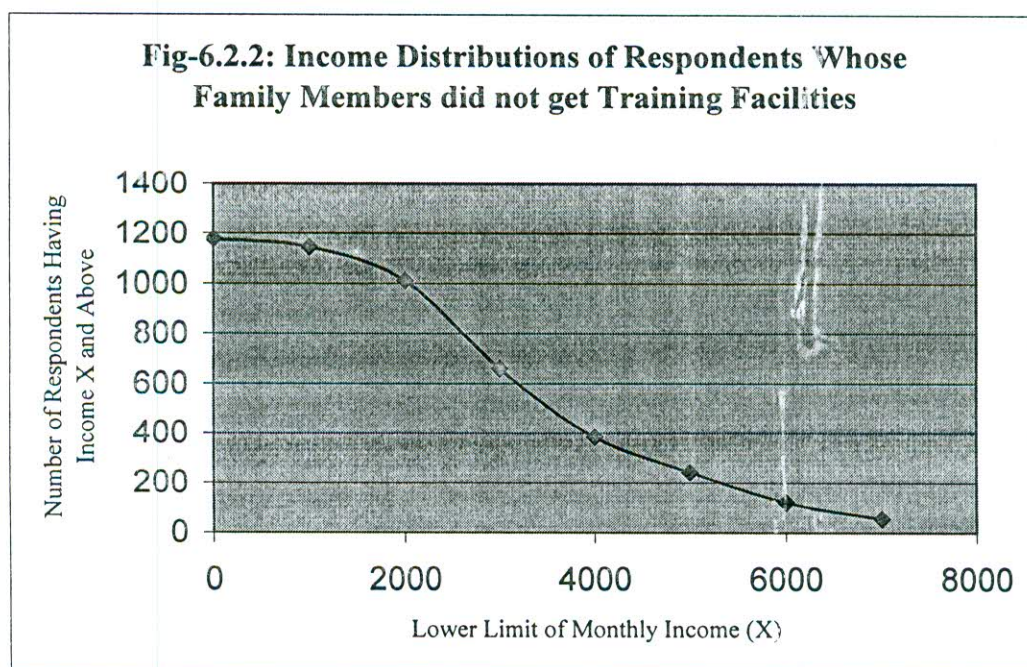
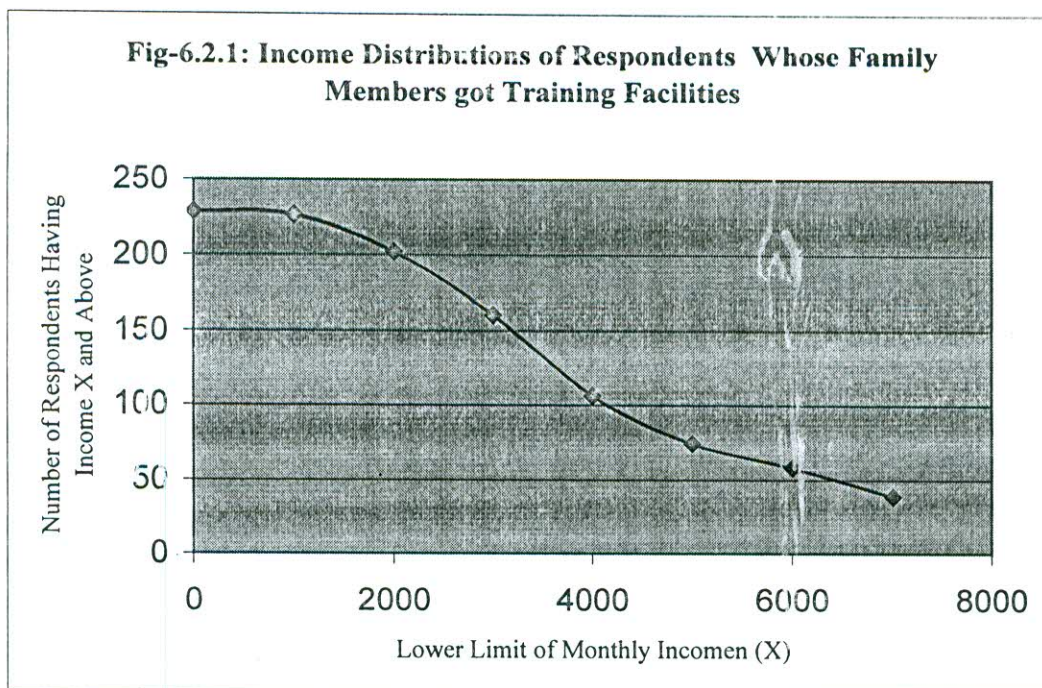
**Table 6.1.2: Chow Test for Structural Change of Income Distribution for Own Training Facilities**

Particulars	SSR, Diff. & Cal F	d.f	Tab F
Restricted	$e'e = 4.584$	14	
Unrestricted	$e'e = 2.150$	13	
Difference	$e'e - e'e = 2.434$	1	
F value	$F = \frac{(e'e - e'e)/1}{e'e/13} = 14.717$	1 & 13	$F_{.01} = 9.07$

The calculated value of  $F = 14.717$  and the tabulated value of  $F_{.01}$  with 1 & 13 d f is 9.07. Since calculated  $F$  is greater than the tabulated value of  $F_{.01}$ . Hence we may reject the null hypothesis that the income elasticity of two groups of people under consideration are significantly different at 1% level of significance. Thus it can be said that the income distribution of the respondents who got training facilities are different from them that of the distribution who did not have training facilities.

## **6.2: Income Distribution of Respondents and Its Structural change For various Categories of Training of Family members.**

To study the income distribution of the respondents who reported that their family members got the training facilities or not. The lower limit of their income (X) and the number of respondents (who reported that their family members got the training or not) having income X & more have been plotted on the graph paper which are shown in the figures 6.2.1 & 6.2.2



The figure 6.2.1, 6.2.2 indicate that distributions of income follow Pareto type of distribution. Thus a Pareto law of income distribution like  $N = AX^{-\lambda}$  has been fitted using ordinary least square (OLS) method to the log linear model  $\log N = \log A - \lambda \log X$ . Setting  $\log N = y$ ,  $\log A = \alpha$ ,  $-\lambda = \beta$  and  $\log X = x$ ; the model becomes  $y = \alpha + \beta x$ . The estimated  $\hat{\beta}$  values and  $SE(\hat{\beta})$  have been shown in Table 6.2.1. Here  $\beta$  value

represents the elasticity of income. Normally this value is expected to be negative as the values of income X is increased the number of persons having income X or more will decrease.

**Table 6.2.1: Estimated Income Elasticity and Its SE & t values for the Respondents whose Family Members got / did not get training facilities.**

Category of Family members	Elasticity $\hat{\beta}$	SE( $\hat{\beta}$ )	t - values	Significant level
Got training	$\hat{\beta}_1 = -.134$	.076	-1.768	.128
Did not get training	$\hat{\beta}_2 = -.214$	.131	-1.659	.148

The Estimated income elasticity  $\hat{\beta}_1$  value for the respondents who reported that their family members got training facilities is -0.134 which indicates that if the income of respondent is increased by 1%, the number of persons having income X or more will decrease by 0.134%. To test the null hypotheses that the population income elasticity  $\beta_1 = 0$  against an alternative hypothesis  $\beta_1 \neq 0$ , t-statistic has been used. It is seen that  $\beta_1$  is significantly different from zero at 12.8% level of significance.

Again the estimated income elasticity  $\hat{\beta}_2$  value for the respondents whose family members did not get the training facilities is -0.214 which indicates that if the income (X) of the respondents whose family members did not get the training facilities is increased by 1% the number of respondents having income X and more will decrease by 0.214%. To test the null hypothesis that population income elasticity  $\beta_2 = 0$  against an alternative hypothesis  $\beta_2 \neq 0$ ; t-statistic has been used. It is seen that  $\beta_2$  is significantly different from zero at 14.8% level of significance.

To study the structural change for the regression model  $y = \alpha + \beta x$  for the above two categories of training of family members we have to consider four sets of hypothesis which are as follows:

i)  $\alpha_1 \neq \alpha_2$  &  $\beta_1 \neq \beta_2$

ii)  $\alpha_1 \neq \alpha_2$  &  $\beta_1 = \beta_2$

iii)  $\alpha_1 = \alpha_2$  &  $\beta_1 \neq \beta_2$

iv)  $\alpha_1 = \alpha_2$  &  $\beta_1 = \beta_2$ .

Since we are interested on the income elasticity, So a test has been carried out to test the null hypothesis that the population income elasticity of the two categories of respondents are identical or not i.e. to test the null hypothesis  $H_0: \alpha_1 = \alpha_2 \ \& \ \beta_1 = \beta_2$  against an alternative hypothesis  $H_0: \alpha_1 = \alpha_2 \ \& \ \beta_1 \neq \beta_2$  using Chow test for structural change. It has

been carried out using Snedecors' F statistic;  $F = \frac{(e'.e. - e'e) / q}{e'e / (n - k)}$  which follows F

distribution with q and n-k degrees of freedom (d.f). Here  $n = 16$ ,  $k = 3$ ,  $e'.e.$  represents restricted sum of squares of residual (SSR) which follows  $\chi^2$  distribution with  $n-k+1 = 14$  df;  $e'e$  represents unrestricted SSR which follows  $\chi^2$  distribution with  $(n-k)=13$  d.f and  $q = (n-k+1) - (n-k) = 1$  d.f. The calculation of F - statistic has been summarized in Table 6.2.2.

**Table 6.2.2: Chow Test for Structural Change of Income Distribution for Family Training Facilities.**

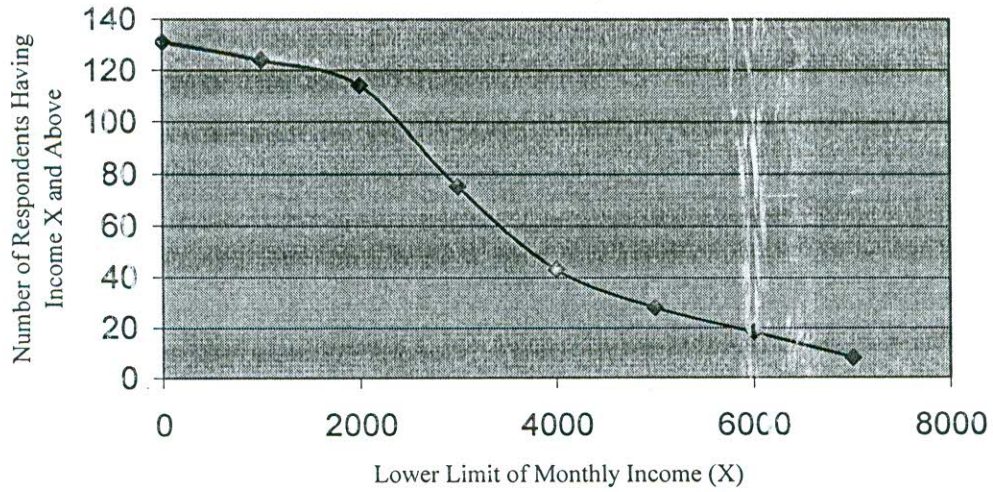
Particulars	SSR, Difference & Cal F	d.f	Tab F
Restricted	$e'.e.$ = 2.745	14	
Unrestricted	$e'e$ = 1.893	13	
Difference	$e'.e. - e'e$ = 0.852	1	
F value	$\frac{(e'.e. - e'e) / 1}{e'e / 13}$ = 5.851	13	$F_{.01} = 9.07$ $F_{.05} = 4.67$

The calculated value of  $F = 5.851$  and the tabulated value of  $F_{.01}$  value with 1 & 13 d.f is 9.07 and Tabulated value of  $F_{.05}$  with 1 & 13 d.f is 4.67. Since calculated value of F lies between the tabulated value of  $F_{.05}$  &  $F_{.01}$  hence we may reject the null hypothesis that the income elasticity of two groups of people under consideration are significantly different at 5% level of significance. On the other hand we can accept it at 1% level of significance.

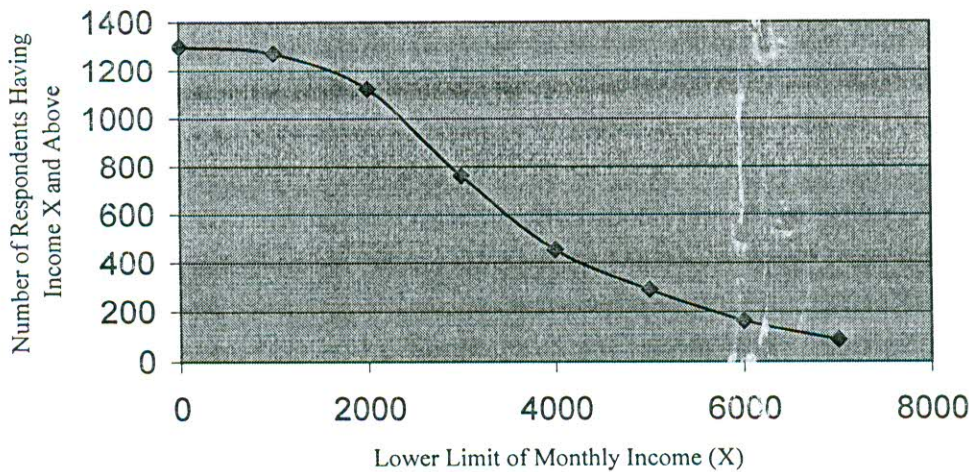
### **6.3: Income Distribution of Respondents & Its Structural change for various Categories Health Facilities of Respondents.**

To study the income distribution of the respondents who got the health facilities themselves or not, lower limit of their income (X) and the number of respondents having income 'X' or more have been plotted on the graph paper which are shown in the figures 6.3.1 and 6.3.2.

**Fig-6.3.1: Income Distributions of Respondents Having Health Facilities**



**Fig-6.3.2: Income Distributions of Respondents did not have Health Facilities**



The figures 6.3.1 & 6.3.2 indicate that distributions of income follows Pareto type of distribution. Thus a Pareto law of income distribution like  $N = AX^{-\lambda}$  has been fitted using ordinary least square (OLS) method to the log linear model  $\log N = \log A - \lambda \log X$ . Setting  $\log N = y$ ,  $\log A = \alpha$ ,  $-\lambda = \beta$  and  $\log X = x$ ; the model become  $y = \alpha + \beta x$ . The

estimated  $\hat{\beta}$  and SE ( $\hat{\beta}$ ) values have been shown in Table 6.3.1. Here  $\beta$  value represents the elasticity of income. Normally this value is expected to be negative as the values of income X is increased the number of persons having income X & more will decrease.

**Table 6.3.1: Estimated Income Elasticity and Its SE & t -value for the respondents who got / did not get Health facilities.**

Category of respondents	Elasticity $\hat{\beta}$	SE( $\hat{\beta}$ )	t - values	Significant level
Got Health facilities	$\hat{\beta}_1 = -.201$	.117	-1.718	.137
Did not get Health Facilities	$\hat{\beta}_2 = -.216$	.117	-1.844	.118

The Estimated income elasticity  $\hat{\beta}_1$  value for the respondents who got the health facilities is -0.201 which indicates that if the income X of respondent is increased by 1%, the number of persons having income X & more will decrease by 0.201%. To test the null hypotheses that the population income elasticity  $\beta = 0$  against alternative hypothesis  $\beta_1 \neq 0$ , t-statistic has been used. It is seen that  $\beta_1$  is significantly different from zero at 13.7% level of significance.

Again the estimated income elasticity  $\hat{\beta}_2$  value for the respondents who did not get the Health facilities is -0.216 which indicates that if the income (X) of the respondents who did not get the health facilities is increased by 1% the number of respondents having income X and more will decrease by 0.2167%. To test the null hypothesis that population income elasticity  $\beta_2 = 0$  against an alternative hypothesis  $\beta_2 \neq 0$ ; t-statistic has been used. It is seen that  $\beta_2$  is significantly different from zero at 11.8% level of significance.

To study the structural change for the regression model  $y = \alpha + \beta x$  for the above two categories of health facilities we have to consider four sets of hypothesis which are as follows:

- i)  $\alpha_1 \neq \alpha_2$  &  $\beta_1 \neq \beta_2$
- ii)  $\alpha_1 \neq \alpha_2$  &  $\beta_1 = \beta_2$
- iii)  $\alpha_1 = \alpha_2$  &  $\beta_1 \neq \beta_2$
- iv)  $\alpha_1 = \alpha_2$  &  $\beta_1 = \beta_2$ .

Since we are interested on the income elasticity, So a test has been carried out to test the null hypothesis that the population income elasticity of the two categories of respondents are identical or not i.e. to test the null hypothesis  $H_0: \alpha_1 = \alpha_2 \ \& \ \beta_1 = \beta_2$  against an alternative hypothesis  $H_1: \alpha_1 \neq \alpha_2 \ \& \ \beta_1 \neq \beta_2$  using Chow test for structural change. It has been carried out using Snedecors' F statistic;  $F = \frac{(e_*'e_* - e'e)/q}{e'e/(n-k)}$  which follows F distribution with q and n-k degrees of freedom (d.f). Here  $n = 16, k = 3, e_*'e_*$  represents restricted sum of squares of residual (SSR) which follows  $\chi^2$  distribution with  $n-k+1 = 14$  df;  $e'e$  represents unrestricted SSR which follows  $\chi^2$  distribution with  $(n-k)=13$  d.f and  $q = (n-k+1) - (n-k) = 1$  d.f. The calculation of F statistic is summarized in Table 6.3.2.

**Table 6.3.2: Chow Test for Structural Change of Income Distribution of Respondents for Health Facilities.**

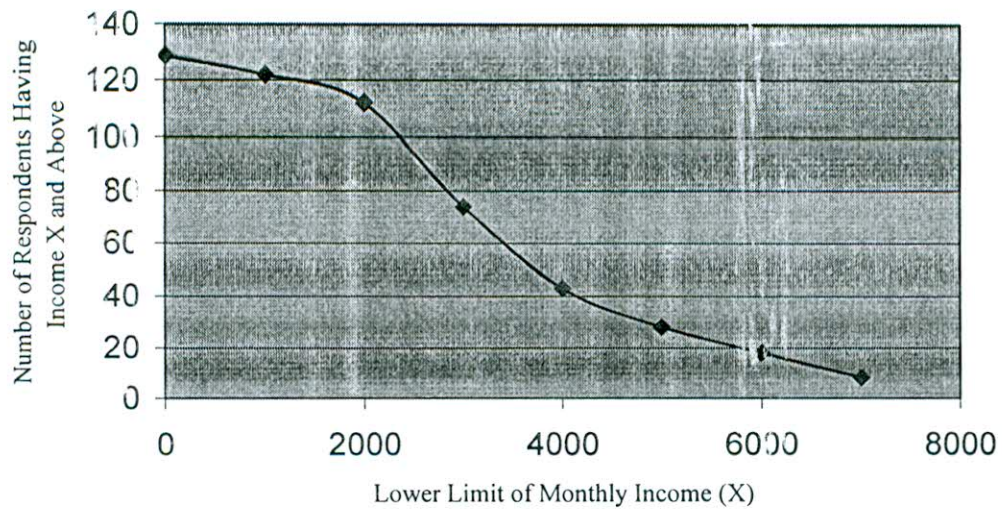
Particulars	SSR, Difference & CalF	d.f	Tab F
Restricted	$e_*'e_* = 4.979$	14	
Unrestricted	$e'e = 2.331$	13	
Difference	$e_*'e_* - e'e = 2.648$	1	
F value	$\frac{(e_*'e_* - e'e)/1}{e'e/13} = 2.491$	1, 13	$F_{.05} = 4.67$

The calculated value of  $F = 2.491$  and the tabulated value of  $F_{.05}$  with 1 & 13 d.f is 4.67. Since calculated value F less than tabulated value of  $F_{.05}$ . Hence we may accept the null hypothesis that the income elasticity of two groups of people under consideration are statistically alike at 5% level of significance.

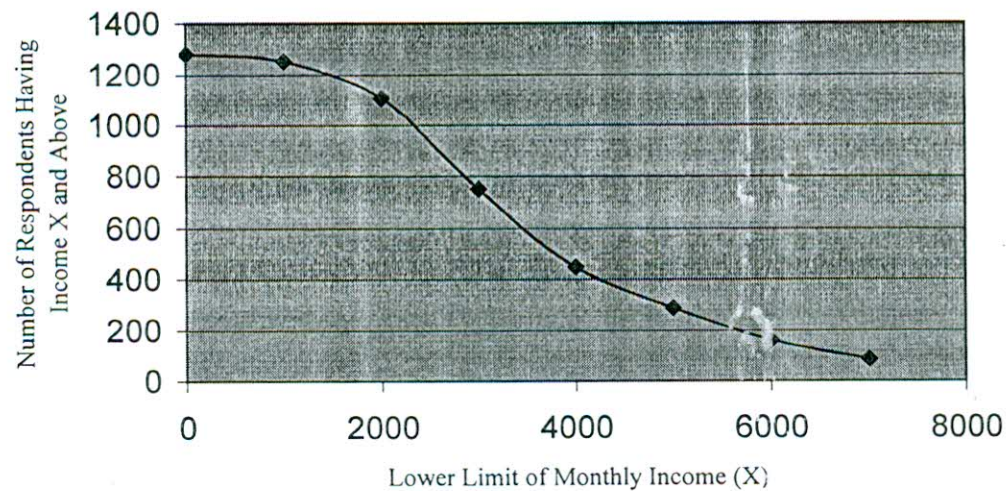
#### **6.4: Income Distribution of the Respondents & Its Structural Change for Various Categories of Family Health Facilities.**

To study the income distribution of the respondents whose family members got the health facilities or not, lower limit of their income (X) and the number of respondents having income X or more have been plotted on the graph paper which are shown in the figure 6.4.1 & 6.4.2.

**Fig-6.4.1: Income Distributions of Respondents Whose Family Members Got the Health Facilities**



**Fig-6.4.2: Income Distributions of Respondents Whose Family Member did not Get Health Facilities**



The above two figures indicate that distributions of income follow Pareto type of distribution. Thus a Pareto law of income distribution  $N = A.X^{-\lambda}$  has been fitted using ordinary least square (OLS) method to the log linear model  $\log N = \log A - \lambda \log X$ . Setting  $\log N = y$ ,  $\log A = \alpha$ ,  $-\lambda = \beta$  and  $\log X = x$ ; the model become  $y = \alpha + \beta x$ . Here  $\beta$  value represents the elasticity of income. Normally this value is expected to be



negative as the values of income X is increased the number of persons having income X or more will decrease. The estimated  $\hat{\beta}$  values SE ( $\hat{\beta}$ ) & t -value have been shown in Table - 6.4.1.

**Table 6.4.1: Estimated Income Elasticity, Its SE & t - value for the respondents whose family member got / did not get Health facilities.**

Category of respondents	Elasticity $\hat{\beta}$	SE( $\hat{\beta}$ )	t - values	Significant level
Got Family health facilities	$\hat{\beta}_1 = -.198$	.115	-1.718	.137
Did not get Family health facilities	$\hat{\beta}_2 = -.234$	.198	-1.179	.283

The Estimated income elasticity  $\hat{\beta}_1$  value for the respondents whose family members got the health facilities is -0.198 which indicates that as the income of respondent is increased by 1%, the number of persons having income X or more will decrease by 0.198%. To test the null hypotheses that the population income elasticity  $\beta_1 = 0$  against alternative hypothesis  $\beta_1 \neq 0$ , t-statistic has been used. It is seen that  $\beta_1$  is significantly different from zero at 13.7% level of significance.

Again the estimated income elasticity  $\hat{\beta}_2$  value for the respondents whose family members did not get the Family health facilities is -0.234. It indicates that if the income (X) of the respondents who did not get the health facilities is increased by 1% the number of respondents having income X and more will decrease by 0.234%. To test the null hypothesis that population income elasticity  $\beta_2 = 0$  against an alternative hypothesis  $\beta_2 \neq 0$ ; t-statistic has been used. It is seen that  $\beta_2$  is significantly different from zero at 28.3% level of significance.

To study the structural change for the regression model  $y = \alpha + \beta x$  for the above two categories we have to consider four sets of hypothesis which are as follows:

i)  $\alpha_1 \neq \alpha_2$  &  $\beta_1 \neq \beta_2$

ii)  $\alpha_1 \neq \alpha_2$  &  $\beta_1 = \beta_2$

iii)  $\alpha_1 = \alpha_2$  &  $\beta_1 \neq \beta_2$

iv)  $\alpha_1 = \alpha_2$  &  $\beta_1 = \beta_2$ .

Since we are interested on the income elasticity, So a test has been carried-out to test the null hypothesis that the population income elasticity of the two categories of respondents are identical or not i.e. to test the null hypothesis  $H_0: \alpha_1 = \alpha_2 \ \& \ \beta_1 = \beta_2$  against an alternative hypothesis  $H_0: \alpha_1 = \alpha_2 \ \& \ \beta_1 \neq \beta_2$  using Chow test for structural change. It has

been carried out using Snedecors' F statistic;  $F = \frac{(e'.e. - e'e)/q}{e'e/(n-k)}$  which follows F

distribution with q and n-k degrees of freedom (d.f). Here  $n = 16$ ,  $k = 3$ ,  $e'.e.$  represents restricted sum of squares of residual (SSR) which follows  $\chi^2$  distribution with  $n-k+1 = 14$  df;  $e'e$  represents unrestricted SSR which follows  $\chi^2$  distribution with  $(n-k) = 13$  d.f and  $q = (n-k+1) - (n-k) = 1$  d.f. The calculation of F - statistic has been summarized in Table 6.4.2.

**Table 6.4.2: Chow Test for Structural Change Income Distribution of Respondents for Family Health Facilities.**

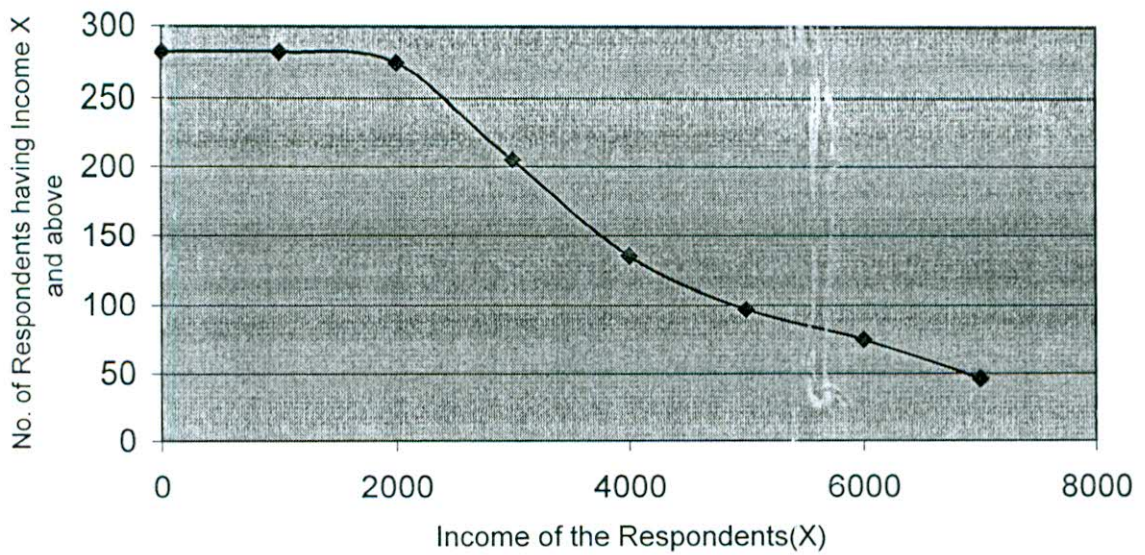
Particulars	SSR, Difference & Cal F	d.f	Tab F
Restricted	$e'.e.$ = 5.893	14	
Unrestricted	$e'e$ = 3.998	13	
Difference	$e'.e. - e'e$ = 1.895	1	
F value	$\frac{(e'.e. - e'e)/1}{e'e/13}$ = 6.162	13	$F_{.01} = 9.07$ $F_{.05} = 4.67$

The calculated value of  $F = 6.162$  and the tabulated value of  $F_{.05}$  with 1 & 13 d.f is 4.67 and the tabulated value of  $F_{.01}$  with 1 & 13 d.f is 9.07. Since calculated F lies in between tabulated value of  $F_{.05}$  &  $F_{.01}$ . Hence we may reject the null hypothesis that the income elasticity of two groups of people under consideration are significantly different at 5% level of significance. On the other hand we may accept the null hypothesis at 1% level of significance.

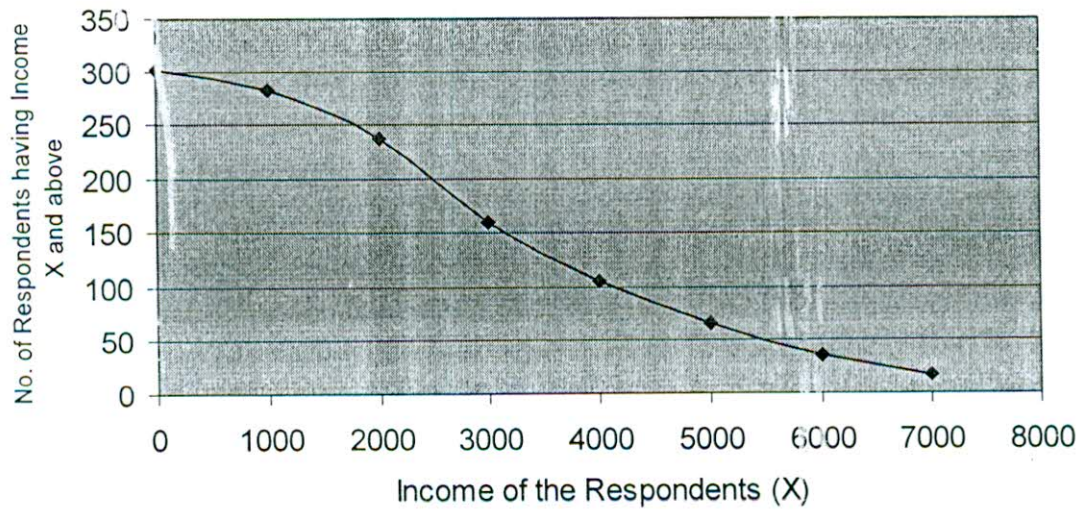
### 6.5: Income Distribution of Respondents for 5 Selected NGOs & Their Structural change.

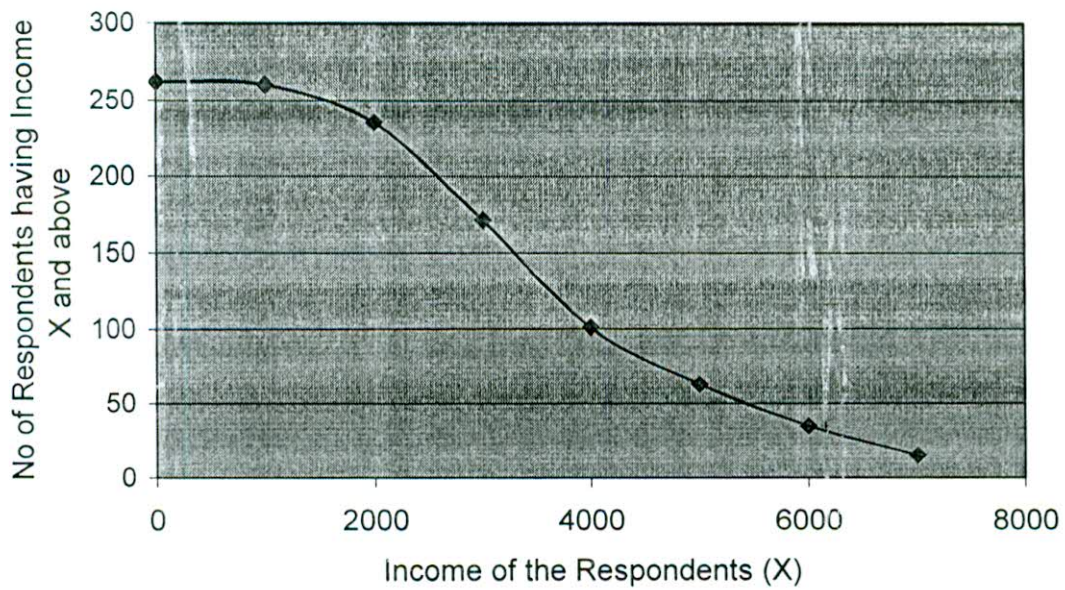
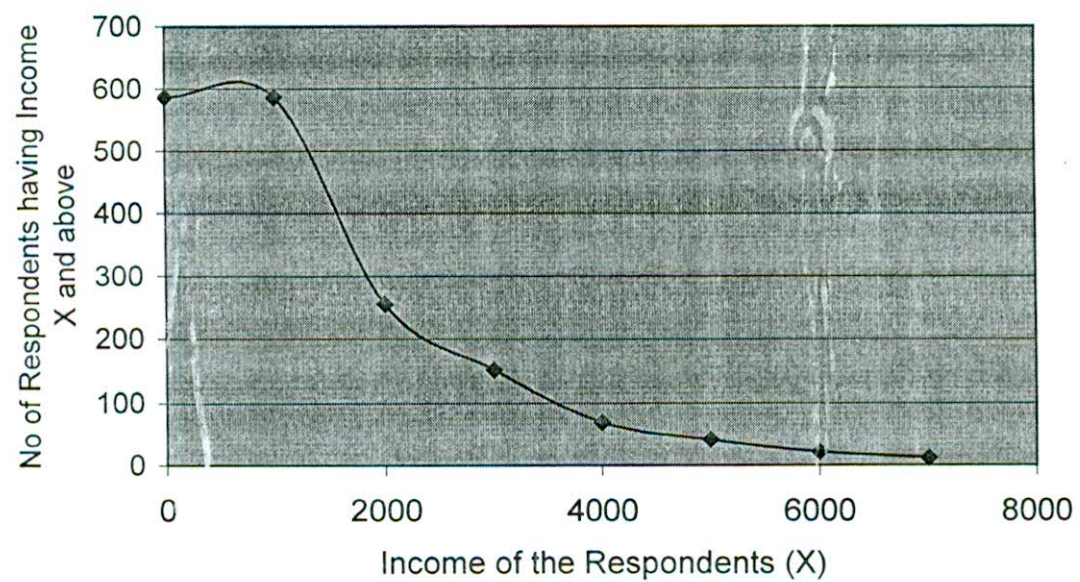
To study the income distribution of the respondents for 5 selected NGOs of Bangladesh, their income (X) and the number of respondents having income X or more have been plotted on the graph paper which is shown in the figure 6.1.1 to 6.1.5.

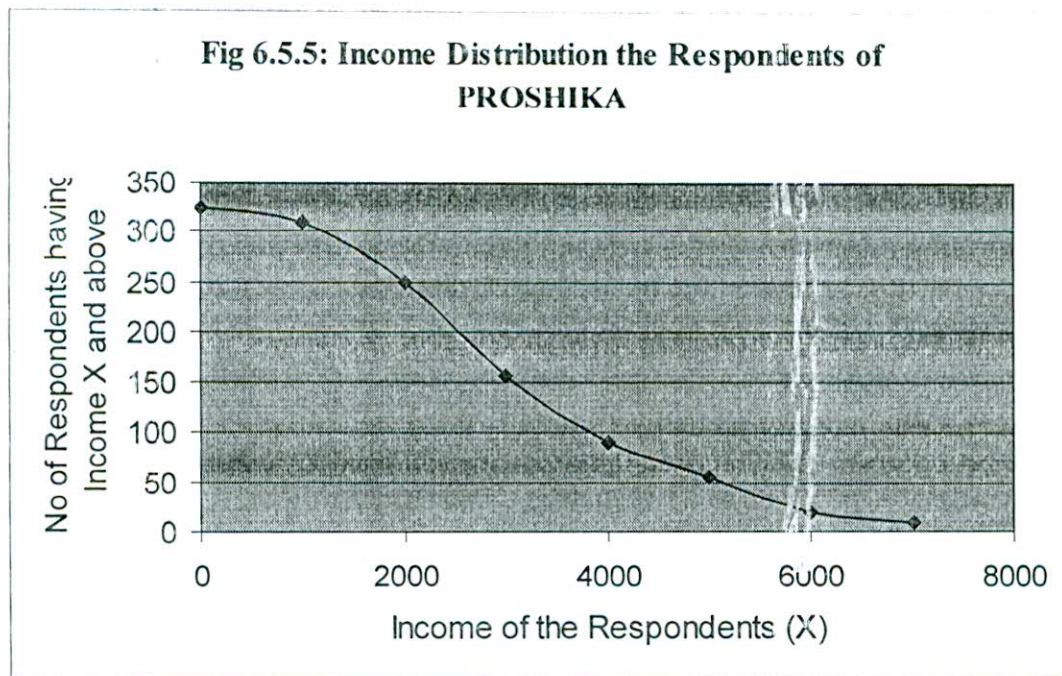
**Fig 6.5.1 Income Distribution of the Respondents of Islami Bank Foundation**



**Fig 6.5.2: Income Distribution of the Respondents of Grameen Bank**



**Fig 6.5.3: Income Distribution of the Respondents of BRAC****Fig 6.5.4: Income Distribution the Respondents of ASHA**



The above five figures indicate that distribution of income for all 5 selected NGOs follow Pareto type of distribution. Thus a Pareto law of income distribution like  $N = AX^{-\lambda}$  has been fitted using ordinary least square (OLS) method to the log linear model  $\log N = \log A - \lambda \log X$ . Setting  $\log N = y$ ,  $\log A = \alpha$ ,  $-\lambda = \beta$  and  $\log X = x$ ; the model become  $y = \alpha + \beta x$ . Here  $\beta$  value represents the elasticity of income. Normally this value is expected to be negative as the values of  $x$  is increased the number of persons having in  $X$  & more will decrease.

**Table 6.5.1: Estimated Income Elasticity and Their SE for the Respondents of Various NGOs.**

NGOs	Elasticity $\hat{\beta}$	SE( $\hat{\beta}$ )	t - values	Significant level
IBF	$\hat{\beta}_1 = -0.172$	0.254	-2.549	0.015
GB	$\hat{\beta}_2 = -0.224$	0.222	-3.314	0.002
BRAC	$\hat{\beta}_3 = -0.227$	0.207	-3.366	0.002
ASHA	$\hat{\beta}_4 = -0.245$	0.157	-3.621	0.001
PROSHIKA	$\hat{\beta}_5 = -0.252$	0.076	-3.727	0.001

The Estimated  $\hat{\beta}_1$  value for the IBF is -0.172. It is an income elasticity which indicates that if the income of respondent X is increased by 1%, the number of persons having income X or more will decrease by 0.172%. To test the null hypothesis that the population income elasticity  $H_0: \beta_1 = 0$  against an alternative hypothesis  $H_0: \beta_1 \neq 0$ , t statistic has been used. It is seen that  $\beta_1$  is significantly different from zero at 1.5% level of significance.

The Estimated  $\hat{\beta}_2$  value for Grameen Bank is -0.224. It is an income elasticity which indicates that if the income of respondent X is increased by 1%, the number of persons having income X or more will decrease by 0.224%. To test the null hypothesis that the population income elasticity  $H_0: \beta_1 = 0$  against an alternative hypothesis  $H_0: \beta_1 \neq 0$ , t statistic has been used. It is seen that  $\beta_1$  is significantly different from zero at .02% level of significance.

The Estimated  $\hat{\beta}_3$  value for BRAC is -0.227. It is an income elasticity which indicates that if the income of respondent X is increased by 1%, the number of persons having income X or more will decrease by 0.227%. To test the null hypothesis that the population income elasticity  $H_0: \beta_3 = 0$  against an alternative hypothesis  $H_0: \beta_3 \neq 0$ , t statistic has been used. It is seen that  $\beta_3$  is significantly different from zero at .02% level of significance.

The Estimated  $\hat{\beta}_4$  value for ASHA is -0.245. It is an income elasticity which indicates that if the income of respondent X is increased by 1%, the number of persons having income X or more will decrease by 0.245%. To test the null hypothesis that the population income elasticity  $H_0: \beta_4 = 0$  against an alternative hypothesis  $H_0: \beta_4 \neq 0$ , t statistic has been used. It is seen that  $\beta_4$  is significantly different from zero at .01% level of significance.

The Estimated  $\hat{\beta}_5$  value for PROSHIKA is -0.252. It is an income elasticity which indicates that if the income of respondent X is increased by 1%, the number of persons

having income X or more will decrease by 0.252%. To test the null hypothesis that the population income elasticity  $H_0: \beta_5 = 0$  against an alternative hypothesis  $H_1: \beta_5 \neq 0$ , t statistic has been used. It is seen that  $\beta_5$  is significantly different from zero at .01% level of significance.

To study the structural change for the regression model  $y = \alpha + \beta x$  for the above five NGOs we have to consider four sets of hypothesis which are as follows:

- i) H10:  $\alpha_1 \neq \alpha_2 \neq \alpha_3 \neq \alpha_4 \neq \alpha_5$  &  $\beta_1 \neq \beta_2 \neq \beta_3 \neq \beta_4 \neq \beta_5$
- ii) H20:  $\alpha_1 \neq \alpha_2 \neq \alpha_3 \neq \alpha_4 \neq \alpha_5$  &  $\beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5$
- iii) H30:  $\alpha_1 = \alpha_2 = \alpha_3 = \alpha_4 = \alpha_5$  &  $\beta_1 \neq \beta_2 \neq \beta_3 \neq \beta_4 \neq \beta_5$
- iv) H40:  $\alpha_1 = \alpha_2 = \alpha_3 = \alpha_4 = \alpha_5$  &  $\beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5$

Since we are interested on the income elasticity, So a test has been carried out to test the null hypothesis that the population income elasticity of the respondents of 5 NGOs are identical or not i.e. to test the null hypothesis

$$H40: \alpha_1 = \alpha_2 = \alpha_3 = \alpha_4 = \alpha_5 \text{ \& } \beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = \beta_6$$

against an alternative hypothesis

$$H30 : \alpha_1 = \alpha_2 = \alpha_3 = \alpha_4 = \alpha_5 \text{ \& } \beta_1 \neq \beta_2 \neq \beta_3 \neq \beta_4 \neq \beta_5 \neq \beta_6$$

using Chow test for structural change. It has been carried out using Snedecor's F statistic;

$$F = \frac{(e' e_r - e' e) / q}{e' e / (n - k)} \text{ which follows F distribution with q and n-k degrees of freedom (d.f).}$$

Here  $n = 40$ ,  $k = 6$ ,  $e' e_r$  represents restricted sum of squares of residual (SSR) which follows  $\chi^2$  distribution with  $n-k+4 = 38$  df;  $e' e$  represents unrestricted SSR which follows  $\chi^2$  distribution with  $(n-k)=34$  d.f and  $q = (n-k+4) - (n-k) = 4$  d.f. The calculation of F - statistic has been summarized in Table 6.5.2.

**Table 6.5.2: Chow Test for Structural Change for Family Training**

Particulars	SSR, Difference & Cal F	d.f	Tab F
Restricted	$e' e_r = 6.173$	38	
Unrestricted	$e' e = 5.832$	34	
Difference	$e' e_r - e' e = 0.341$	4	
F value	$F = \frac{(e' e_r - e' e) / 4}{e' e / 34} = 0.497$	4, 34	$F_{.05} = 2.659$

The calculated value of  $F = 0.497$  and the tabulated value of  $F_{0.05}$  with 4 & 34 d.f is 2.659.

Since calculated  $F$  is less than the Tabulated value of  $F_{0.05}$ . Hence we may accept the null hypothesis that the income elasticity of 5 selected NGOs under consideration are not statistically different from each other..



# **CHAPTER VII**

## **Conclusion**

## CHAPTER VII

### Conclusion

This piece of work has been done to study the contribution of NGOs in HRD of Bangladesh. As the term HRD include vast area and it has some components like education ,life expectancy and income generating activities. So an attempt has been made to see how far the NGOS are contributing in the improvement or development of these components of HRD.

Again the data on the contribution in HRD by the NGOs are not readily available. So, the respondents were asked whether the NGOs were contributing any components of HRD to them. Thus the respondents were asked

- i) whether they and their family members got the education and training facilities from NGOs
- ii) whether they and their family members got the health facilities from NGOs
- iii) whether they got the facilities of earning, spending and helping their family members through NGOs.

Primary data of 1541 respondents were used for this study which were collected from 4 divisions, 8 districts and 16 Upzillas of Bangladesh during January to March, 2002. The data were processed using SPSS Version- 10 and several tables were formed which exhibit the reasonable pattern. So, raw data have been used for analysis without any modifications and adjustments.

The data under consideration are the information about micro-credit receivers of five important NGOs of Bangladesh. According to the objectives of the study the contributions of 5 selected NGOs have been assessed in: i) developing education ii) increasing health facilities iii) expanding income generating activities and their structural changes. The summary of the main findings have been presented in the next section

## **7.1: Summary of the findings:**

As it is mentioned before that information of 1541 micro credit receivers(Respondents) are used in this study to assess the contributions of 5 selected NGOs. Hence at the beginning, the characteristics of the respondents have been studied. Later on the contributions of NGOs in education , health service and income generating activities have been presented chronologically.

### **7.1.1: Characteristics of the respondents:**

The main Characteristics of the respondents under study are as follows:

- i) They are predominantly females ie 93% of the respondents are females.
- ii) Most of them are literate ie 98% of the respondents are literate.
- iii) They are not highly educated ie only 2% of them have 11+ years of schooling.
- iv) They are predominantly married ie 94% of them are married.
- v) Most of them are housewives ie 82% of them are housewives.
- vi) They are matured enough ie 95% of them are in the age interval 20+ years.

### **7.1.2: Finding of the Contribution of NGOS in Education & Training:**

In chapter III section 3.1, the contributions of 5 selected NGOs have been assessed observing the extent training provided to the respondents. It is found that 5 selected NGOs as a whole are providing training facilities to 13.4% of their clients(Respondents). where as BRAC is providing training to 22.9% to its clients, Grameen Bank is providing 18.8%, PROSHIKA is providing 17.4%,ASHA is providing 6.2% and IBF is providing only 1.7% of its clients.

This training facilities provided by the NGOs bears significant relation with some of its correlates: age, sex, years of schooling, income and place of residence of the respondents. The multiple regression analysis in section 3.2 indicates that Age groups: 'below 20 years' & 20-29 years; Occupation: Housewives & Small Business ; Income group 'below Tk. 1000' Place of residence: Dhaka Division and NGOs :IBF, BRAC, ASHA have the significantly different impact on event of providing education & training to the

respondents. Various categories of other covariates have no significant impact on education and training.

In chapter III section 3.3, the contributions of 5 selected NGOs have been assessed observing the extent training provided to the family members of the respondents. It is found that 5 selected NGOs as a whole are providing training facilities to 16% of the family members of the clients (Respondents). where as IBF is providing 51.6%, Grameen Bank is providing 9.9%, BRAC is providing 9.1%, PROSHIKA is providing 7.8% and ASIHA is providing only 2.7% training to the family members of their clients.

This training facilities of the family members provided by the NGOs bears significant relation with some of its correlates: age, marital status, occupation, income and place of residence of the respondents. The multiple regression analysis in section 3.4 indicates that Place of residence: Dhaka, Chittagong & Khulna Division and NGOs :IBF have the significantly different impact on event for providing education & training to the family members of the respondents.

#### **7.1.3: Finding of the Contribution of NGOs in Health Facilities:**

In chapter IV section 4.1, the contributions of 5 selected NGOs have been assessed, observing the extent health facilities provided to the respondents. It is found that 5 selected NGOs as a whole are providing health facilities to 9.0% of their clients (Respondents). where as BRAC is providing health facilities to 18.8% to its clients, Grameen Bank is providing 11.1%, PROSHIKA is providing 9.4%, ASHA is providing 4.3% and IBF is providing health facilities only 2.1% of its clients.

This health facilities provided by the NGOs bears significant relation with some of its correlates: years of schooling, occupation, and place of residence of the respondents. The multiple regression analysis in section 4.2 indicates that Occupation: Housewives, Place of residence: Dhaka Division and NGOs :IBF & Grameen Bank have the significantly different impact on event of providing health facilities to the respondents.

In chapter IV section 4.3 , the contributions of 5 selected NGOs have been assessed, observing the extent health facilities provided to the family members of the respondents. It is found that 5 selected NGOs as a whole are providing health facilities to 8.9% of the family members of the clients(Respondents). where as BRAC is providing 18.6%health facilities , Grameen Bank is providing 10.8%, PROSHIKA is providing 9.3%, ASHA is providing 4.0.% and IBF is providing only 2.1% health facilities to the family members of the clients.

This health facilities provided to the family members by the NGOs bears significant relation with some of its correlates: years of schooling, occupation and place of residence of the respondents. The multiple regression analysis in section 4.4 indicates that occupation: housewives; Place of residence: Dhaka Division and NGOs : IBF and BRAC have the significantly different impact on event of providing health facilities to the family members of the respondents.

#### **7.1.4: Finding of the Contribution of NGOs in Income generating activities:**

In chapter V section 5.1, the contributions of 5 selected NCOs have been assessed, observing the extent monthly income of the respondents. It is found that 5 selected NGOs as a whole are providing modal income of Tk.2,782 to their clients(Respondents). where as IBF is providing modal income of Tk 3,259 , BRAC is providing modal income of Tk. 3,158, ASHA is providing modal income of Tk. 2,768, Grameen Bank is providing modal income of Tk. 2,580 and PROSHIKA is providing modal income of Tk. 2,554 to its clients.

This income facilities provided by the NGOs bears significant relation with some of its correlates: age, sex, years of schooling, occupation and place of residence of the respondents.

In chapter V section 5.2 , the contributions of 5 selected NGOs have been assessed observing, the extent monthly expenditure of the respondents. It is found that 5 selected

NGOs as a whole are providing modal expenditure of Tk.2,768 to their clients(Respondents). where as BRAC is providing modal expenditure of Tk. 3,049, IBF is providing modal expenditure of Tk 2,846, ASHA is providing modal expenditure of Tk. 2,529, Grameen Bank is providing modal expenditure of Tk. 1,870 and PROSHIKA is providing modal expenditure of Tk. 1,532 to its clients.

This expenditure facilities provided by the NGOs bears significant relation with some of its correlates: age, sex, marital status, years of schooling, occupation, income and place of residence of the respondents.

In chapter V section 5.3, the contributions of 5 selected NGOs have been assessed, observing the extent of financial support provided to the family members of the respondents. It is found that 81.6% of the respondents of 5 selected NGOs as a whole are providing financial support to the family members of the respondents. where as respondents of ASHA is providing, 87.8%, respondents of BRAC is providing 87.5%, respondents of Grameen Bank is providing 85.6%, respondents of IBF is providing 80.8% and the respondents of PROSHIKA is providing 68.0% financial support to their family members.

This financial support to the family members of the respondents bears significant relation with some of its correlates: Years of schooling, occupation, income and place of residence of the respondents.

The multiple regression analysis in section 5.4 indicates that Age group: 20-29 years, all categories of education, occupation: housewives & small business; Income group: "below Tk. 1000", Tk/ 1000-1999, & Tk 6000-6999; and NGOs :Grameen Bank , BRAC & ASHA have the significant impact on event of providing financial support to the family members of the respondents.

#### **7.1.5: Relative Positions of 5 Selected NGOs in Contributions of HRD:**

The contribution of NGOs have been assessed, from the proportions of respondents of five selected NGOs having that facilities. This proportions of the respondents are

expected to be more for those NGOs whose proportions of respondents ( Column-2 of Table 7.1.5) are higher. If the proportion of contribution of a NGO shown in column 3 to 7 is greater than that at the overall proportion shown in column 2 it is treated as satisfactory contribution and a + sign is used below it. If the proportion of contribution of a NGO shown in column 3 to 7 is less than that of the overall proportion shown in column 2 it is treated as non-satisfactory contribution and a - sign is used below it. The percentages of contribution have been assessed on the basis of these +ive & -ive signs which is shown in the column 8 of Table 7.1.5. These proportions have been used for assessing the comparative contributions of selected NGOs.

**Table 7.1.1: Relative Positions of the NGOs in Contributions of HRD of Bangladesh.**

1	2	3	4	5	6	7	8
NGOs	Percentage of Respondents	OTF %	FTF %	OHF %	FHF %	FSF %	Percentage of Contribution
IBF	18.9	2.5	63.0	4.4	4.6	18.3	20%
		-	+	-	-	-	
GB	20.8	29.2	12.8	25.7	24.4	21.8	80%
		+	-	+	+	+	
BRAC	18.2	31.7	10.2	38.2	38.5	19.5	80%
		+	-	+	+	+	
ASHA	20.2	9.4	3.4	9.6	9.2	21.7	20%
		-	-	-	-	+	
PROSHIKA	21.9	27.2	10.6	22.1	22.3	18.3	60%
		+	-	+	+	-	
Total	100	100	100	100	100	100	

OTF: Own Training Facilities; FTF: Family Training Facilities; OHF: Own Health Facilities; FHF: Family Health Facilities; FSF: Financial Support to Family members; (+): Satisfactory contribution; (-): Non-Satisfactory contribution.

Looking on relative positions of NGOs compared to population percentage in Contributing various components of HRD it is observed that Grameen Bank and BRAC are contributing in 80% of components of HRD satisfactorily. PROSHIKA contributed 60% ; IBF and ASHA are contributing 20% of the components of HRD satisfactorily.

Table 7.1.1 indicates that out of five NGOs; 2 NGOs (GB & BRAC) are contributing 80%, one NGO (PROSHIKA) is contributing 60% and 2 NGOs (IBF & ASHA) are contributing only 20% of the components of HRD in Bangladesh. So, it can be suggested that NGO should undertake their program to contribute in the components of HRD

satisfactorily. Thus IBF should take care of OTF, OHF, FHF & FSF programs; ASA should take care of OTF, FTF, OHF & FHF program; PROSHAKA should take care of FTF & FSF programs & Grameen Bank & BRAC should take care of FTF program.

The extent contributions in four components: OTF(13.14%) , FTF (16%), OHF(9.1%) FHF(9.1%) are not sufficient for HRD. The NGO should undertake their programs so, that they can contribute substantial part of HRD of Bangladesh. Otherwise the NGO activities will be treated as their micro-credit business rather social service to improve the standard of living of the respondents.

## **7.2 : Concluding Remarks:**

The aims and the objectives of the selected NGOs under study has been overviewed in section 2.4. All most all the NGOS raised very interesting & lucrative slogans. But reality is quite different. The common slogan of all the NGOs are to alleviate poverty of the poor, to remove illiteracy and to improve the socioeconomic condition of the distressed persons like widowed , divorced and separated women. But looking on the characteristics of the respondents of the target group of the NGOs are quite different features are observed.

It is seen that 93% of the respondents of 5 selected NGOs are women. It is quite good sign of NGO to involve women into the NGO activities to increase the source of income and hence to contribute in the process of empowerment of women. If the women can earn money they can contribute more in the important family decision [Amir & Pabley, 1995]

As it is observed that 98% of the respondents are literates, 85.3% of them have 1-5 years of schooling and 96.7% have 1-10 years of schooling so, they are very much immature regarding education. They need additional training to improve their work status as well as to improve their standard of living. But all the NGOs as a whole providing training facilities to only 13.4.% of their respondents. So contributions NGOs in training facilities of the respondents are very poor. A hopeless situation is also observed in the case training facilities to the family members.



It is also observed that 94% the respondents currently married, 2.8% are widowed & 0.5% are of other categories (separated & non respondent etc.). But the aims & objectives of all the NGO are to improve living conditions of the distressed persons, especially the women who are widowed and separated are helpless. The married persons can depend on their husband. So, it is expected that NGO activities should mostly be concentrated within widowed & separated women. But only 3% of such women are involved in the NGO activities. Reasons behind this may be the fact, the NGO are providing micro-credits to the respondents who are supported by their husband to pay back their loan. In other words, it can be said that the NGOs are less interested to provide micro-credit to distressed women rather the Women who can return their loan in time.

Looking on the occupational distribution it is seen that 82% of the respondents are housewives. Only 7.8% of them are engaged in small business. NGOs are providing micro-credits to women to do small business and to change their occupation status. But the efforts of these NGOs do not contribute in changing their occupation rather their main profession of housewives remain unchanged.

So, it can be said that NGOs failed to change the professional status of women. It can also be apprehended that the micro-credits are not being used by the respondents, rather by their husband. If the fact is so, it can be concluded that the NGOs can not contribute in the process of women empowerment rather they are empowering the husbands of their client in disguise. These types of works are done by NGOs only to recover their loans in time.

One of the important factors of HRD is to extend life expectancy of the people. Again this life expectancy depends on health facilities. But the NGOs under consideration as a whole are contributing health facilities to 9% of their clients. This proportion is the cumulative effect of three decades. Thus it can be concluded that NGOs are contributing very insignificant part towards HRD in the Society.

The NGOs are also contributing health facilities of family members of the respondents. But this contribution is also around 9% which is also the cumulative effect of three decades. Thus the contribution in this regard is also very negligible.

The contribution of NGOs in economic activities are remarkable. Almost all the respondents are able to earn money what ever may be the amount. The sex differentials are also observed showing the higher modal income of Tk 3393 for males compared to that of females (Tk 2725). It is also observed that married respondents have the highest modal income than that widowed and unmarried respondents.

The contribution of NGOs is also assessed through observing the proportion of respondents who are able to provide financial assistance to the family members. It is found that around 81% of the respondents can provide financial assistance to their family members. This contribution is least for the respondents of PROSHIKA. The differentials are observed for various educational groups.

### **7.3: Policy Implications:**

Initially the NGOs activities in Bangladesh were as a non profitable social organizations to help the needy poor, illiterate and distressed persons. To do these most of the NGOs introduced micro-credit programs. The main objective of these programs were to make the poor and distressed people specially the women self reliant and economically active in the society. But the present study indicates that in 3 decades they can hardly contribute any substantial amount to improve the standard of their target groups.

As it was expected that the NGO activities should be concentrated among the poor, widowed, separated & distressed women to remove their social problems and make them self reliant. But they failed to do this effectively for poor & distressed people.

In the name of women empowerment NGOs are providing micro-credits to the women. As a results they have been able to earn money, spend money and to provide financial assistance to their family members. But the volume of this income & expenditure is very

small. Hence it could be suggested to provide more credits to enhance their level income as well as expenditure of the respondents. Otherwise the poor will remain poor for ever and the poverty will not be elevated at all.

It is a general feeling that most of the widowed & separated women are the distressed people of the society. So the people expect that NGOs should help these distressed people. But the results show that NGOs are providing major part of their micro-credits to the currently married persons. Thus it could be suggested that NGOs should concentrate the activities to ward dressed people specially to the widowed and separated women. Government should take proper attention to this issue.

One of the slogans of the NGO is to remove illiteracy. To do this NGOs should involved illiterates in their programs and should provide education and training to a certain level. But the results show that 95% of respondents were literates. It is clear from their activities, that NGOs are not providing education to the respondents rather they are doing micro-credits business with the literate respondents.

Looking on the distribution of the respondents by occupational status it is found that 82% are housewives. It indicates that in three decades NGOs are not able to change the occupation of the respondents. It proves that the status of the women are not improving at all. Thus to improve the standard living and to enhance women empowerment a big push of income generating activities is needed. Hence NGOs can be suggested to provide sufficient credits to their client to earn more and to change their occupational status.

One other major question is why the occupation of the most of the micro-credit receivers did not change even after three decades of the NGO activities in Bangladesh. It is perhaps due to the fact that the women are receiving credits from the NGOs and those were used by their husband. Thus the women are using as an agent of collecting credits from NGOs instead of empowerment in the family decision. An effective measure should be undertaken so that the clients should use the credits by themselves.

If the objectives of the NGOs are the alleviation poverty of the society rather empowerment of the women then it could be suggested that the micro-credits may be provided to the poor, needy and active persons irrespective of males and females. They can use the loans more effectively to earn more money for their family needs and in turns to remove the poverty of the society.

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