Determinants Of Financial Inclusion: A Study Of Some Selected Districts Of West Bengal

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INTRODUCTION

Financial inclusion is a process to bring the weaker and vulnerable sections of society within the ambit of the organized financial system. It creates conditions for access to timely and adequate credit and other financial services by vulnerable groups, such as weaker sections and low income groups at affordable cost **(Karmakar, 2007)**. In a narrow sense, the extent of non-indebtedness both in formal and informal sources can be considered as a crude measure of financial exclusion. NSSO defined *"Financial Exclusion"* households as those not having any debt to formal credit sources. The National Sample Survey data reveals that 45.9 million farmer households in India, i.e. 51.4 per cent of the nearly 89.3 million total households do not have any access to credit either from institutional or non-institutional sources. More importantly, despite the vast network of rural branches, only 27 per cent of the total farm households are indebted to formal sources; of them, one-third also borrow from informal sources. In other words, 73 per cent of farm households do have access to formal credit sources. However, apart from the fact that exclusion itself is large, it also varies widely across regions, social groups and asset holdings. It is to be noted that the highest levels of non-indebtedness to both formal and informal sources is observed among Scheduled Tribes (63.7 per cent) and it is followed by Scheduled Castes (49.8 per cent) and Other Backward Castes (48.58) farmer households. It is interesting to note that the access to formal credit market is found to be inversely associated with the size of landholdings. Marginal farmers, who account for 66 per cent of all farm holdings, remain by and large excluded from the formal financial sources of credit, and only about 20 per cent of them have access to credit from formal banking sources. In contrast, in the case of large farmer households, the incidence of exclusions is 33.6 per cent. An analysis of region-wise extent of financial inclusion suggests that the proportion of households having no access to formal credit is alarmingly high at 95.91 per cent, 81.26 per cent and 77.59 per cent in the North Eastern, Eastern and Central Regions respectively. The Southern region, on the other hand, exhibits relatively better levels of access to formal or informal sources (72.7 per cent), mainly on account of spread of banking habits and a more robust infrastructure (NSSO, 2005). Among the states of India, the proportion of non-indebted farmer households is highest in Jammu and Kashmir (68.2 per cent) followed by Himachal Pradesh (66.6 per cent) in the Northern Region. The level of exclusion is high in all states of the North-Eastern Region (61.2 per cent to 95.9 per cent) except Tripura. In the Eastern region, the highest incidence of exclusion is observed in Jharkhand (79.1 per cent) followed by Bihar (67 per cent), while it is 59.8 per cent in Chhatisgarh and 59.7 per cent in Uttar Pradesh in the Central Region of India. The extent of non-indebted farmer households in West Bengal (49.9 per cent) is found to be lower than the national average (51.4 per cent) (NSSO, 2005). In other words, that means the level of financial inclusion is highest in West Bengal than the all India average. In West Bengal, the post nationalization of commercial banks (the decade of the 1980s) was a period of steady expansion of formal credit. The nationalization of commercial banks in 1969 along with two successful policy implementations of the Left front government in West Bengal in 1980's, namely land reform in the form of *Operation Barga*[1] and the

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[1] The government of West Bengal initiated *Operation Barga* in 1978. The primary objective of *Operation Barga* was to restructure the agrarian relations and direct them to an egalitarian society by enlarging the land base of the rural poor. By the end of November, 2005, the total number of bargaders recorded in the Record of Rights was 15.31 lakh. The area under these bargaders amounted to 4.54 lakh hectares (Economic Review of West Bengal, 2005-06). The evidence reflects an unparallel history created in reforming property rights in India. However, in the surveyed villages, only 17 percent of the surveyed tenants had participated in the drive of *Operation Barga* and registered their leased in land. The policy of the West Bengal government to give sharecroppers the possibility of accessing institutional credit using their land rights (in the form of *pattadars* and *bargadars*) as collateral has also not found empirical support in this study.

introduction of 3-tier Panchayat system have created conditions for rapid transformation of the rural economy of West Bengal. Along with the rest of India, there was a substantial expansion in banking infrastructure in rural West Bengal in the 1970's and 1980's. Consequently, there was a substantial reduction of the gap between West Bengal and India as a whole, in terms of the average population served by a rural bank branch. In contrast with the previous two decades, the supply of formal credit to rural West Bengal declined sharply in the post liberalization period (especially in 1990s). Another distinguishing trend in the post liberalization period was a decline in the rural bank branches, credit-deposit ratio and agricultural loans in outstanding credit in rural West Bengal **(Rawal, 2005)**. The characteristics of rural credit transactions in rural West Bengal have changed to a significant extent in recent years **(Datta and Chakraborty, 2005)**. With the process of financial inclusion, the level of interlinked credit exploitation has reduced to a noticeable extent, specially with the advent of the process of de-interlinkage **(Bhattacharyya, 2005)**. More importantly, the wave of micro credit through the formation of Self-Help Groups has brought about a paradigm shift in rural credit transactions in West Bengal, with larger inclusion of people in the banking network.However, financial inclusion is a broader concept. It does not remain confined only to the accessibility of formal or informal credit. An attempt has been made in this paper to examine the extent of interstate variation in the level of financial inclusion in India using a composite index, encompassing the broader concept of financial inclusion. Identifying the level of financial inclusion, an attempt has also been made in this paper to explore the inter-district variation in the level of financial inclusion in West Bengal. Moreover, the paper identifies the factors affecting the level of financial inclusion in the State.

DATA SOURCES

The study uses both primary and secondary data. The secondary data have been collected from Basic Statistical Return (R.B.I) 2008, Economic Survey, 2009-10, Economic Review of West Bengal, 2009-10, Report on State Domestic Product and District Domestic Product of West Bengal, 1999-00 to 2005-06 and Census 2001. The primary data was collected through a sample survey covering three districts of West Bengal, namely Birbhum, Bankura and North 24-Pargana. The selection of districts is guided by the secondary data on the level and extent of financial inclusion, which is measured, especially, through the coverage of the people under banking network[2]. In fact, the researchers had classified all the districts of the state into three broad stratified groups and then selected three districts: Birbhum from the lower strata, Bankura from the medium strata and North 24-parganas from the higher strata. Again, from the district, blocks have been chosen using the same criteria. Accordingly, Serenga, Indus and Bishnupur blocks of Bankura district; Suri, Labhpur and Illambazar blocks of Birbhum district; Bagda, Bangaon and Deganga blocks of North 24 Parganas district have been identified for the primary survey. Once a block is selected, the villages - Baro Gatra, Bankadaha and Indus are selected from Serenga, Bishnupur and Indus block respectively; Naotara, Kendua and Payer villages are selected from Labpur, Suri and Illambazar block respectively; Ambikapur, Chaygharia and Kolsur villages are selected from Bagda, Bangaon and Deganga respectively. The survey was carried out between October, 2006 and February, 2007, covering the kharif season. Again, a final visit was conducted in between April, 2007 and June, 2007 covering the rabi season. Thus, the reference period for field survey in this study is the agricultural year October, 2006 to June, 2007.

METHODOLOGY

Several indicators have been used in the literature to assess the extent of financial inclusion. These measures of financial access can broadly be divided into two broad categories; one based on the supply side information from the perspective of credit providers, such as banks and other service providers. The other is based on demand side information from the perspective of users-individuals, households or firms. Some of the commonly used indicators for measuring financial inclusion are: number of bank accounts (per 1000 adult population), number of bank branches (per million people), number of ATMs (per million people), amount of bank credit and amount of bank deposit. However, these indicators of financial access provide only partial information on the inclusiveness of the financial system of an economy and thus, in turn, fail to capture adequately, the overall extent of financial inclusion. An attempt has been made in the paper to analyze the inter-state variation of the extent of financial inclusion by using a comprehensive measure of financial inclusion **(following Sarma, 2008[3])**. In addition, a Binary Probit Regression is

[2] The data on average population per bank office (number per thousand) in all districts of West Bengal has been collected from Economic Review of West Bengal, 2005.

used to examine the determinants of formally financial inclusion by the rural households of West Bengal. Formally included households are considered those who use financial services provided by banks or by other formal financial service providers. Other financial service providers are comprised of postal banks, credit cooperatives, microfinance institutions **(World Bank, 2005)**.

❁**The Binary Probit Regression Analysis :** A binary variable (BV), is defined as BV = 1, if the respondent belongs to formally included category = 0, otherwise.

To determine the variables relevant for financial inclusion in formal financial network, the researchers assume an underlying response variable, BV*, defined by the following form of linear regression specification:

$BV^* = \beta x + u$ – – – – – – – – – – – – (i)

where $u \approx IN(0, \sigma^2_u)$. BV* is unobservable latent variable determined by the observed binary variable, BV, such that

BV = 0 if $BV^* \leq 0$

= 1 if otherwise

The probabilities that the household belongs to the group of bank customer or not is defined as

Prob (BV = 0/x,β) = F (- βx)

Prob (BV = 1/x, β) =F (βx)

where F is the cumulative distribution function of u. The maximum log likelihood function is given by

$$L(\beta)= \sum_{LL=0} \ln F(-\beta x) + \sum_{LL=1} \ln F(\beta x)$$

Result of the Binary Probit Model by maximizing log likelihood function is obtained by using sophisticated statistical package like *E-Views*. The explanatory variables and hypothesis (as specified by expected sign) are presented in the Table 1 given below. The social-economic and demographic factors that are expected to influence the process of financial inclusion have been identified: economic status of the household specifically - whether the household is belonging to poverty ridden or economically well off category, the level of education of the household measured by the years of schooling, caste and religion of the household, proportion of family members engaged in non-farm employment, dependency ratio as measured by the ratio of dependent members to total working members of the

Table 1: Expected Sign Of The Determinants To Determine Financial Exclusion

Independent Variables	Notation	Description	Financial Inclusion
Economic Status	STATUS	Dummy variable, 1 if the households belongs to average poverty line, 0 otherwise	+
Total years of schooling	SCHOOL	Actual years	+
Caste of the households	CASTE	Dummy variable, 1 if the households belongs to general, 0 otherwise	+
Religion of the households	RELIGION	Dummy variable, 1 if the households belongs to Hindu religion, 0 otherwise	+
Proportion of family members engaged in non-farm employment	NFIRM	Actual number	+
Dependency ratio	DEPEND	Dependent members as a ratio of total working members	–
Operated land	OPRT	Operated land (in *bigha*)	+
Recorded tenancy	BARGA	Dummy variable, 1 if the tenant recorded the holding and 0, otherwise	+
Development and social security scheme	SCHEME	Dummy variable, 1 if the household participated in any such scheme or not.	+
Awareness about banking Services	AWARE	Dummy variable, 1 if the respondent is aware of banking services, 0, otherwise	+

[3] In a similar study on cross-country experience of financial inclusion, Sarma (2008) examined the extent of financial inclusion by using data on all three dimensions [penetration (d_1), availability (d_2) and usage (d_3)] for 55 countries. Composite Index of Financial Inclusion.

$$= 1 - \sqrt{\frac{(1-d_1)^2 + (1-d_2)^2 + (1-d_3)^2}{3}}$$

family, asset holding of the household, *bargadar* with recorded right, participation in development and social security scheme, and awareness about banking services.

THE FINANCIAL INCLUSION IN INDIA: AN INTER-STATE ANALYSIS

To measure the inter-state variations in the level of financial inclusion in a broader sense, the researchers have considered three indicators of financial inclusion - namely banking penetration (the number of bank accounts as a proportion of the total adult population), availability of banking services (the number of bank branches per 1000 adult population), usages of banking services (the volume of credit and deposit as proportion of the state's Net State Domestic Product). Accordingly, the inter-state variations in the level of financial inclusion as estimated are shown in the Table 2 . Table 2 illustrates the values of IFI for 31 states of India. It can be seen that only three states of India (Chandigarh, Delhi and Goa) belong to the high financial inclusion group with the value of index of financial inclusion

Table 2: Index of Financial Inclusion Across Different States In India

State / UTs	D1 (Index for Penetration)	D2 (Index for Availability)	D3 (Index for Usage)	IFI	Rank
Chandigarh	1	1	0.60072217	0.76948	1
Delhi	0.700356191	0.43400912	1	0.63026	2
Goa	0.890261714	0.85755576	0.19117424	0.52162	3
Punjab	0.393437686	0.34752111	0.1720244	0.29782	4
Maharashtra	0.227880229	0.14855295	0.57070656	0.29162	5
Uttaranchal	0.294669003	0.36669723	0.1994318	0.28365	6
Karnataka	0.267811486	0.26281785	0.26196446	0.26419	7
Himachal Pradesh	0.302155439	0.41387546	0.09945424	0.26029	8
Sikkim	0.151439907	0.38929294	0.21753868	0.24606	9
Kerala	0.289038306	0.28941678	0.14777719	0.23915	10
Jammu & Kashmir	0.252194883	0.24447879	0.19116501	0.2288	11
Pondicherry	0.390538527	0.25959235	0.04987665	0.2206	12
Tamil Nadu	0.237077482	0.18194137	0.21904948	0.21235	13
Haryana	0.285734375	0.25420969	0.06875975	0.19717	14
Andhra Pradesh	0.229709619	0.16994206	0.13136675	0.17601	15
Gujarat	0.231912761	0.18022864	0.09409807	0.16681	16
Andaman & Nicobar	0.217353902	0.24033085	0.0500587	0.16493	17
Mehgalaya	0.119646143	0.24428188	0.05892299	0.13749	18
Uttar Pradesh	0.185374674	0.11157635	0.103148	0.13258	19
West Bengal	0.167597917	0.10337132	0.12545076	0.13173	20
Arunachal Pradesh	0.135204419	0.15680862	0.09613629	0.12902	21
Rajasthan	0.149495756	0.16100963	0.07215826	0.12666	22
Mizoram	0.061368893	0.26835078	0.05394974	0.12225	23
Jharkhand	0.139612806	0.12686698	0.09544152	0.12044	24
Madhya Pradesh	0.111062987	0.1295159	0.11129139	0.11725	25
Orissa	0.108477771	0.13202872	0.08106336	0.10695	26
Tripura	0.125690926	0.11013267	0.0242237	0.08559	27
Assam	0.106831305	0.07547193	0.03566726	0.0722	28
Bihar	0.071291966	0.06541688	0.067022	0.06791	29
Chhattisgarh	0.078191749	0.09193922	0.03045245	0.06649	30
Manipur	0	0	0	0.00000	31
All India	**0.201348381**	**0.16328529**	**0.19874218**	**0.18761**	

Sources: Authors' calculation based on Basic Statistical Return (Reserve Bank of India) 2008, Economic Survey, 2009-10.

0.5 or more. Another ten states, viz. Punjab, Maharashtra, Uttaranchal, Karnataka, Himachal Pradesh, Sikkim, Kerala, Jammu and Kashmir, Pondicherry and Tamil Nadu form the group of medium financial inclusion states, with the value of financial inclusion between 0.2 and 0.5. All the other states bear low values of index of financial inclusion, lying between 0.0000 and 0.19717. It is interesting to note that West Bengal falls in the category of a low financial inclusion state, with a value of index of financial inclusion 0.13173. It needs to be pointed out that most of the states with high IFI values belong to northern and western region. Overall, the empirical result seems to suggest that northern (Haryana, Himachal Pradesh, Punjab, Rajasthan, Chandigarh, Delhi), western (Gujarat, Maharashtra, Goa) and southern (Andhra Pradesh, Kerela, Karnataka, Tamil Nadu, Puducherry) regions are better performers in including the excluded in the financial network than north-eastern (Assam, Manipur, Meghalaya, Tripura, Arunachal Pradesh, Mizoram), eastern (Bihar, Orissa, West Bengal, Andaman and Nicobar Islands, Sikkim, Jharkhand) and central (Madhya Pradesh, Uttar Pradesh, Chhattisgarh, Uttaranchal) region. Under broader concept of financial inclusion, the state of West Bengal has been classified under the category of low financial inclusion states. However, there is inter-district variation in the level of financial inclusion in West Bengal. Two dimensions of financial inclusion - namely availability of banking services (the number of bank branches per 1000 adult population), usages of banking services (the volume of credit and deposit as proportion of the state's Net State Domestic Product) are used to measure the index of financial inclusion[4]. The computed values of index of financial inclusion for various districts of West Bengal are presented in the Table 3.

Table 3 : Index of Financial Inclusion Across Different Districts In West Bengal

District	D1(Index for Availability)	D2 (Index for Usage)	IFI	Rank
Kolkata	1	1	1	1
Darjeeling	0.261631	0.091133	0.171982	2
Burdwan	0.119469	0.049571	0.083853	3
Birbhum	0.127472	0.025329	0.074989	4
North 24-Parganas	0.059191	0.082568	0.070806	5
Howrah	0.08297	0.057365	0.07008	6
Hooghly	0.076415	0.03389	0.054913	7
Bankura	0.073847	0.014139	0.043527	8
Midnapore	0.073231	0.010304	0.041251	9
Malda	0.066293	0.004586	0.034946	10
Purulia	0.043464	0.016983	0.030133	11
Cooch Behar	0.052121	0.000336	0.025885	12
Dakshin Dinajpur	0.030103	0.002153	0.016029	13
Jalpaiguri	0.014637	0.008173	0.0114	14
Nadia	0.004767	0.016538	0.010635	15
Mursidabad	0.012798	0	0.006378	16
South 24-Parganas	0	0.009743	0.00486	17
Uttar Dinajpur	0.002391	0.005231	0.00381	18
West Bengal	**0.123265**	**0.129828**	**0.12654**	**-**

Sources: Authors calculation based on Economic Review of West Bengal, 2009-10, Report on State Domestic Product and District Domestic Product of West Bengal, 1999-00 to 2005-06, and Census 2001.

[4] Due to lack of reliable data on one of the dimensions, viz., banking penetration, the researchers have considered only 2 dimensions (availability and usage) for 18 districts of West Bengal. For the availability dimension, the researchers have taken the data on number of bank offices at the end of June 2009 from Economic Review of West Bengal (2009-10). For the usage dimension, the researchers have used the data on deposits and advances as on end June 2009 from the same source. The data on Net District Domestic Product at current prices 2005-06 (latest) are available from the report on State Domestic Product and District Domestic Product of West Bengal, 1999-00 to 2005-06, (Bureau of Applied Economics and Statistics, Government of West Bengal, 2007). The number of adult population in West Bengal is approximated by the available data on the number of population above 15 years from Census 2001.

It is found that Kolkata occupies the highest ranking in the index of financial inclusion with a value of 1 in the dimension index. All the other districts bear low values of index of financial inclusion, lying between 0.0038 and 0.1720. These include districts like, Darjeeling (2nd), Burdwan (3rd), Birbhum (4th), North 24 Parganas (5th), Howrah (6th), Hooghly (7th), Bankura (8th), Midnapore (9th), Malda (10th), Purulia (11th), Cooch Bihar (12th), Dakshin Dinajpur (13th), Jalpaiguri (14th), Nadia (15th), Mursidabad (16th), South 24 Parganas (17th). Uttar Dinajpur belongs to the lowest rank in respect of index of financial inclusion, with a value of index of financial inclusion 0.0038. Like the inter-state and inter-district analysis, the study examines the extent of financial inclusion in nine selected villages from three districts of West Bengal. Three basic dimensions of an inclusive financial system are considered: Banking penetration (number of bank accounts as a proportion of the total adult population), availability of banking services (number of bank branches per 1000 adult population), and usage of the banking system (volume of credit as proportion of the total households in the villages, i.e. per capita availability of credit). The estimated values of index of financial inclusion are presented in the Table 4.

Table 4: Index of Financial Inclusion Across Different Villages In Three Selected Districts

Village	District	D1 (Index for Penetration)	D2 (Index for Availability)	D3 (Index for usage)	IFI	Rank
Ambikapur	N. 24 Parganas	0.629885067	0.879963856	0.559333159	0.660598	1
Baro Gatra	Bankura	0.475581863	1	0.403082409	0.541261	2
Kendua	Birbhum	0.207859207	0.787823929	1	0.526536	3
Payer	Birbhum	0.215871657	0.641874784	0.570250392	0.443884	4
Naotara	Birbhum	0.235654333	0.46161729	0.53279847	0.396577	5
Indus	Bankura	1	0	0.561903447	0.369675	6
Kolsur	N. 24 Parganas	0.283985987	0.519161912	0.148747403	0.300354	7
Bankadaha	Bankura	0.108086791	0.742191999	0	0.212181	8
Chaygahria	N. 24 Parganas	0	0.293272465	0.319531267	0.191194	9
Total	**All**	**0.341236748**	**0.600386426**	**0.471938869**	**0.460708**	**--**

Source: Primary survey 2007-08.

It is interesting to note that only one village in each district (Ambikapur in North 24 Parganas, Baro Gatra in Bankura and Kendua in Birbhum) belong to high financial inclusive villages. On the other hand, only one village in the district of North 24 Parganas (Chaygaria) and Bankura (Bankadaha) belong to low financial inclusive villages. Overall, the empirical result seems to suggest that the villages like Ambikapur, Baro Gatra and Kendua are better performers than the district average in including the excluded in the financial network than the villages like Payer, Naotara, Indus, Kolsur, Bankadaha and Chaygharia.

THE DETERMINANTS OF FINANCIAL INCLUSION IN WEST BENGAL: RESULTS AND DISCUSSION

It is desirable to examine the determinants of financial inclusion so as to undertake appropriate policy measures for bringing about a more inclusive society in terms of the access to financial services. Several socio- economic factors simultaneously determine the potentiality of borrowers of formal financial institutions. Broadly, the process of financial inclusion is conditioned upon a numbers of factors: some are social, some are economic, some are demographic and some are institutional. In the section, an attempt has been made to examine the various socio-economic determinants in explaining low level of financial inclusion in West Bengal. The study considered a sample of respondent households, who may or may not belong to banks or other formal financial service providers. A Probit Regression Analysis classification of the respondent households, denoted by CLASSI, is considered as a dependent variable, which equals 1 if the respondent belongs to formally included households and zero otherwise. The result of the Probit Regression Analysis is presented in the Table 5. The results of the Bivariate-Probit Regression Model identifies the broad determinants of financial inclusion.

☸ **Economic Status of the Households:** Economic status of the household is an important determinant of financial inclusion. In fact, economic inclusion is the pre-condition for financial inclusion. Economic status of the household is

Table 5: Determinants Of Financial Inclusion In The Study Area

Classification of the respondent dummy: CLASSI = 1 if the respondent belongs to formally included category and = 0 otherwise

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	0.335017	1.103668	0.303549	0.7615
STATUS	0.738771	0.356896	2.069986	0.0385
SCHOOL	0.080372	0.016493	4.873039	0.0000
NFIRM	1.383692	0.393228	3.518803	0.0004
DEPEND	-0.478053	0.136753	-3.495751	0.0005
CASTE	0.047701	0.360472	0.132328	0.8947
RELIGION	0.006194	0.034862	0.177669	0.8590
OPRT	2.186109	1.043794	2.094388	0.0362
BARGA	0.175866	0.283751	0.619791	0.5354
SCHEME	1.285728	0.972616	1.321927	0.1862
AWARE	2.662647	0.461003	5.775770	0.0000

Source: Field Survey 2006-07

Note: The statistical analysis has been made using *E-Views* statistical package

found to be positively and significantly correlated with the degree of financial inclusion. The probability of becoming a bank customer increases with higher degree of economic status of the households.

☸ **Level of Education**: Formation of human capital plays an important role in the process of financial inclusion. The level of education of the household, which is measured by the average years of schooling is found to be positively associated with the process of financial inclusion. The result is found statistically significant at 1 per cent level of significance.

☸ **Asset Holdings**: The position of asset holding of the household plays a crucial role in the process of financial inclusion. The asset position of rural households, as approximated by the level of operated land, is found to be directly associated with the process of financial inclusion. A positive and significant coefficient signifies that households with poor asset ownership fail to satisfy required collateral requirements and thus, find it difficult to be financially included with the formal financial institutions.

☸ **Non-Farm Employment:** The development of non-farm sector needs to overcome the financial constraint for switching over from agricultural to non-agricultural employment. The co-efficient of non-farm employment is found to be positive, signifying that there is a direct association between the non-farm employment, and the process of financial inclusion. The people working in the non-farm sector are found to be financially more included than those engaged in the agricultural sector.

☸ ***Operation Barga*** **:** Land reform is a successful policy initiative of the Government of West Bengal. The land reform is characterized by consolidation of holdings, identification of ceiling surplus land, and its distribution, especially to the landless and marginal farmers. Another important feature of land reform in West Bengal is the tenancy reform in the form of *Operation Barga*. The sharecroppers are provided with legal land rights through the distribution of *patta's*. It was the policy of the government to link credit with legalized tenure to give sharecroppers the possibility of accessing institutional credit by using their *patta's* as collateral. The positive co-efficient of the regression result supports this contention. However, the result is not found to be statistically significant. However, it is an undeniable fact that *Operation Barga* augmented the economic well - being of the weaker section of the society, especially the landless and marginal farms, which has far reaching consequences in the process of financial inclusion.

☸ **Rural Development and Social Security Schemes:** The rural development and social security schemes of both the central and state government have significant bearings on the process of financial inclusion. Several social security schemes like NREGA, JRY, IAY, Old age Pension, Minimum wage Scheme have played an important role to include the excluded people in the financial network. As expected, the co-efficient of social security schemes is found to be positively associated with the process of financial inclusion. However, the result is not found to be statistically significant.

☸ **Information Asymmetry**: The existence of information asymmetry in rural credit transactions is captured by the variable AWARE, which denotes the knowledge of the respondents regarding the existence of formal banks in the study area. The positive and statistically significant co-efficient of the customers' awareness of banking services supports the hypothesis that a customer having imperfect information on banking services is more likely to exclude from formal financial institutions for necessary financial assistance. Thus, a major source of imperfections in rural credit markets is the presence of information constraint as regards to the availability of financial institutions and financial services in the localities.

☸ **Household Characteristics:** Households characteristics also influence the process of financial inclusion. A household with larger dependent members to total family members is found to be financially more excluded than less number of dependent members. The co-efficient of the variable indicating dependency ratio is found to be negative and statistically significant. It supports the hypothesis that the process of financial exclusion is aggravated by the pressure of dependent members in the family.

☸ **Caste and Religion**: Caste and Religion are unlikely to influence the process of financial inclusion. This is evident from the fact that the co-efficient of caste and religion, though positive, are statistically insignificant.

CONCLUSION

Financial inclusion is a process to include the people who lack formal financial services. There is observed to be a wide inter-state variation in the level of financial inclusion in India. Among the states of India , Chandigarh is at the top and Manipur is at the bottom in terms of the level of financial inclusion. West Bengal lies among the lower category states of India in the process of financial inclusion. District-wise variation of the extent of financial inclusion is not so pronounced, as most of all districts belong to low financial inclusion category. Inter-village analysis of financial inclusion suggests that some surveyed villages are better performers than others in including the excluded in formal financial network. In this context, the study dealt with the socio-economic determinants of financial inclusion in rural West Bengal. Empirical results using Bivariate Probit model suggest that the asset level of the household, as determined by the operated land holding, significantly enhances the probability of becoming a bank customers. The policy initiative of the government of West Bengal to link credit with legalized tenure by means of *Operation Barga* did not find significant empirical support in the study. The most striking result is that the customers' lack of awareness of banking services significantly determines the level of inaccessibility of basic financial services. Broadly, the existence of information asymmetry in financial services acts as an obstacle in the process of financial inclusion.

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