

Women Cultivators' Access to Institutional Credit and Effect on Agricultural Productivity-Profitability: A Case Study in West Bengal

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ABSTRACT

Women are integral part of food production process. Their importance in agriculture is paramount and their roles in agriculture vary from performing as farmers with legal land right (*de jure* female farmers) to working as family farm labour in spouses' land (*de facto* female farmers) to operating purely as agricultural labourer in farm wage market. With study area as west Bengal and sample size of 150 comprising *de jure* female farmers, *de facto* female farmers and a control group of male farmers 100 in each category chosen through 'Random Sampling Method', analysis on access to institutional farm credit and its effect on farm productivity and profitability reveal that However, unlike the male counterparts, the prime problem confronted by the female farmers is access to credit. They are resource-poor and lack adequate collateral assets to mortgage and procure loan. Inadequate collateral security to place as mortgage to formal-informal loaner institutions coupled with poor repayment capacity, owing to low financial status form formidable bottleneck in borrowing loans. For illiterate and vulnerable groups like women farmers institutional loan by form of Kisan Credit Card is a good option because it has additional advantages over other formal loans. However, it also sees limited accessibility because off unnecessary prolonged government procedure to obtain it. As a result they have to seek credit from private moneylenders even being aware that the informal moneylenders charge exorbitant interest rates. On consequence, they suffer from low farm productivity and thereby profitability, well below district average. On the other hand, *de facto* female farmers performed better both in terms of yield and economic returns per unit of land over the *de jure*. Such families received remittances from the migrated head of the household and the land owner. So such families managed better household monthly income, possessed more assets to mortgage and concomitantly had higher credit worthiness to their benefit. As a result, more than 80 percent of the *de facto* female farmers households resorted to crop loan, the male head and the land owner helping in this regard by making himself available for successful completion of the loan borrowing process. More importantly, more than 60 percent of such families derived advantage of formal crop loan characterized by highly subsidized interest rate. However, of the three groups male farmers outshone in every respect which is reflected in the level of yield and economic return per unit area. Interestingly, this coincides with the fact that, as high as 94 percent male farmers had taken crop loan to meet timely input cost, effectively instrumental in augmenting farm productivity and thereby profitability and 65 percent of it was borrowing from formal sources. In concise, higher the amount of crop loan borrowed for timely availability of farm inputs with preferable source being formal banks, more is the assurance of greater yield per unit of land.

Keywords: Paramount, agriculture, female farmers, mortgage, productivity

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Food is invincible for physical survival. Therefore Agriculture is the most important sector of any nation in the sense that it is the prime source of food and nutritional security for its population. Besides that in a developing country like India it is a vital source of employment as well. Agriculture has come a long way from the early years of independence when it would contribute around 50 percent to the total GDP and employed more than 80 percent of the population (Sundaram, 2001; CSO, 2011). According to Economic Survey, 2020 share of 'agriculture and allied sectors' in India's GDP is 19 percent. While CMIE data (Centre for Monitoring Indian Economy) shows the share of agriculture in total employment to be less than 50 percent during the corresponding period (Sharma, 2021). The country recorded impressive achievements in agriculture during three decades post the onset of Green Revolution in late sixties. This enabled the country to overcome widespread hunger and malnourishment, achieve self-sufficiency in food, reduce poverty and bring economic transformation in majority of rural families. The situation, however, started turning unfavourable for the primary sector from mid-nineties with waning away of the positive impact of green revolution which rendered slowdown in growth rate of output. Presently, cropping intensity is 136 percent. Further, rainfed drylands constitute 65 percent of the total net sown area. There is also an unprecedented degradation of land (107 million ha) and groundwater resource, and also fall in the rate of growth of total factor productivity. This deceleration has led to stagnation or even decline in farmers' income leading to agrarian distress, which is continuing to turn more and more serious (icar.org.in). Given this it becomes imperative to raise agriculture productivity which will give the farmers a critical scope to improve their economic conditions across gender in view of the fact that demand for agriculture is rising rapidly with increase in population and per caput income and growing demand from industry sector, off late, as well.

Need of Credit for Agricultural Development

India is dominated by small and marginal farmers (85 percent of the total farmer populace) and, as stated earlier, they are suffering from poor financial condition. As a result farmers usually obtain low crop production due to the lack of capital, and credit

is a capital alternative to enhance productivity in developing country like India. So borrowing credit is an important option to meet the agricultural need of the resource poor farmers. In other words, Agricultural credit refers to one of several credit vehicles used to finance agricultural transactions at different stages of crop growth for successful completion of the farm production process. The need for agriculture finance in this current time is more than before because of expedited rising cost of farm input given a steep increase in fertilizer and diesel prices on account of spike in international prices of the said raw material rendered by Covid led pandemic toll on the International Trade and its negative aftermath (Tiwari, 2021). Farmers take this aid especially to accomplish their production needs and buy various kinds of farming instruments. Besides them, the other needs of the Agricultural finance for the farmers include- agricultural marketing, post-harvesting storage, and transport of produce, supply of power, need for good quality seeds, procurement of fertilizers, diseases, and issues like low rainfall, mitigating the risks like damage due to pests and like.

Importance of Institutional Credit

As per instructions of Reserve Bank of India, formal financial institutions (RFIs) provide crop loan at highly subsidized interest rate in lieu to boost productivity, asset formation, income and food security of the rural poor. Besides that, there is additional advantage, i.e., when farm families are in severe distress on the occasion of wide-spread crop damage, farm loan waivers is offered by state governments which means that the government assumes the liability of the farmer and repays the bank in the case of default. However, in reality, rural banks have always shown reluctance in offering credit to small and marginal farmers which is driven by the following reasons:

- ♦ **High cost of service:** Banks find it costly to serve SMFs with low size transactions, and difficult to reach out to them as the farms and farmers are located in remote areas.
- ♦ **Limited mechanisms to assess the farmers' creditworthiness:** Formal financial institutions have limited access to farmers' financial information such as cash flows and past

credit history. Most farmers have either had no or negligible knowledge about banking. Further, banks are unable to verify whether the information provided by small and marginal farmers, such as earning from other sources, is reliable for financing decisions.

- ♦ **Fear of Default:** For borrowing bank loan farmers are required to mortgage collateral securities against which only, loan can be issued. The small and marginal farmer communities, paralyzed by unfortunate economic conditions, are hesitant in risking their limited possession. As a result the loaner bank has to confront passive resistances while the resource-poor farmers are mortgaging their prized assets. Besides that, a higher incidence of overdues and the resultant bad debts are a source of grave concern for the banking institutions. The major factors like natural calamities and the resultant inadequate income generation may put the loanee farmer into such position where he or she becomes a defaulter. Needless to say, more of defaulters in a single bank may squeeze up the banks' resources and subsequently push them in a vicious state of financial unsustainability, a potential threat.

On the part of the farmers, seeking formal loan entails a series of official proceedings which is cumbersome for the, generally illiterate, crew across gender and therefore raise inhibition among the said group. In addendum, as mentioned above, there is a lot of hesitation while the farmers are surrendering their precious resources for the sake of loan which they perceptibly fear losing in case they fail to repay in face of crop failure (Indian Express, 2022).

Given these kind of bottlenecks from both ends, often formal loans emerge to inaccessible for the small and marginal farmer community by gender and they eventually land up borrowing from informal sources of finance, namely local money lenders, landlords, traders who, though easily accessible, charge more than 20 percent rate of interest per annum and, more importantly, ensures mandatory repayment on time without fault. In other words, there is no question of loan wave off, whatever may be the intensity of crisis confronted by the borrowing farmer household as an aftermath of crop loss.

Therefore the marginalized cultivators, already reeling under the pressure of low farm productivity

and progressively increase in cost of cultivation, if stuck by unforeseen climatic events followed by wide-scale crop spoilt, has no other way but to commit suicide in lieu to escape resorting to beggary and destitution.

Currently, farmer suicides account for 11.2 percent of all suicides in India. This is because Farmers' debt surged around 58 per cent between 2013 and 2019. As a result, farmers' debt as a percentage of their annual income shot up by 13 percentage points, according to latest data released by the Ministry of Statistics and Programme Implementation (National Crime Report Bureau, 2019).

The very discussion clearly indicates the importance of institutional crop loan, backed by government protection, for the survival of the marginalized farmer cohort, the chief food producers of India.

Government Policies to improve Accessibility of Institutional Credit

Policy Initiatives taken by the Government for increasing flow of credit and removal of indebtedness from non-institutional sources of lending include steps like:

(a) Farm credit package: In 2004, Government of India, doubled the flow of agriculture credit in three years with reference to base year 2003-04. The flow of agriculture credit since 2003-04 has consistently exceeded the target. This is evident from the fact that agriculture credit flow which was at ₹ 86,981 crore in 2003-04 reached to ₹ 468,291 crore in 2010-11.

(b) Agriculture Debt Waiver and Debt Relief Scheme, (ADWDRS) 2008: To mitigate the distress of farming community in general and small and marginal farmers in particular and to declog the institutional credit channels and make farmers eligible for fresh credit, the Debt Waiver and Debt Relief Scheme, 2008 was announced in the Union Budget for 2008-09. The scheme covered direct agricultural loans disbursed (i) between 31 March 1997 and 31 March 2007 (ii) overdue as on 31 December 2007 and (iii) remaining unpaid until 29 February 2008.

In the case of small and marginal farmers, short term production loans (subject to a ceiling in respect of plantation and horticulture) and installments of

investment loans overdue were covered, while in the case of the other farmers, one time settlement was extended under which a rebate of 25 percent of the eligible amount was given on the condition that the farmer repays the balance 75 percent in three installments.

(c) Bringing Green Revolution in Eastern India (BGREI): Financing Agricultural Investments in the Eastern Region – Concessional Refinance Support: In order to support the banking system finance such key investments, NABARD has introduced a concessional refinance scheme in the year 2011-12, with an objective to accelerate investments in agriculture to enhance production and productivity of crops in the Eastern region (Assam, Bihar, Jharkhand, Chhattisgarh, West Bengal and Eastern Uttar Pradesh) by incentivizing the banks. Under the scheme, NABARD provides 100 percent refinance to banks at a concessional rate of 7.5 percent p.a.

Four activities viz, Water Resources development, Land development, Farm Equipments (including tractor financing on group mode basis) and Seed Production are covered. Concessional refinance is provided subject to condition of minimum 70 percent lending against credit potential for the identified activities assessed on the basis of projections made in the Potential Linked Plans.

(d) Revival Package for Short Term Cooperative Credit Structure: The Government is implementing a package for revival of Short-term Rural Cooperative Credit Structure in the country. The Revival Package is aimed at reviving/strengthening the Short-term Rural Cooperative Credit Structure (CCS) and make it a well-managed and vibrant medium to serve the credit needs of rural India, especially the small and marginal farmers.

(e) Guidelines for providing relief in event of occurrence of natural calamities: Reserve Bank has put in place a mechanism to address situations arising out of natural calamities. The banks have been issued necessary guidelines for undertaking necessary credit relief measures in event of occurrence of natural calamities. Banks have been advised to provide conversion/ reschedulement of loans and consider moratorium period of at least one year in all cases of restructuring. To enhance awareness, the banks are also required to give adequate publicity to

their disaster management arrangements, including the helpline numbers. Further, the banks have been advised not to insist for additional collateral security for such restructured loans. Asset classification for restructured loans will remain the same as prevalent at the time of restructuring for a period of one year as per extant guidelines. The relief measures initiated and undertaken are required to be reviewed periodically in the weekly/fortnightly meetings of specially constituted Task Forces or sub Committees of the SLBC till such time as conditions are normalized.

(f) Collateral free loans: The limit of collateral free farm loan has been increased from ₹ 50,000 to ₹ 1,00,000.

(g) Kisan Credit Card Scheme: In order to ensure that all eligible farmers are provided with hassle free and timely credit for their agricultural operation, Kisan Credit Card (KCC) scheme was introduced in 1998-99. Marginal farmers, share croppers, oral lessee and tenant farmers are eligible to be covered under the Scheme. The main objectives of the Scheme are; to meet the short term credit requirements for cultivation of crops, post harvest expenses, produce marketing loan, consumption requirements of farmer household, working capital for maintenance of farm assets and activities allied to agriculture, like dairy animals, inland fishery etc. Investment credit requirement for agriculture and allied activities like pump sets, sprayers, dairy animals etc. The State Governments have been advised to launch an intensive branch/village level campaign to provide Kisan Credit Card to all the eligible and willing farmers in a time bound manner. KCCs have now been converted into Smart Card cum Debit Cards to facilitate its operation through ATMs (RBI, 2016).

Women's Contribution to Agriculture

Women play a significant and crucial role in agricultural development and allied fields. The nature and extent of women's involvement in agriculture varies greatly from region to region. But regardless of these variations, women are actively involved in various agricultural activities. Agriculture entails series of activities at different stages of production process and women form an integral part in each (Kamdar and Das, 2021). In fact, as per Swaminathan, the famous agricultural scientist, it was women

who first domesticated crop plant and thereby initiated the art and science of farming while men went out hunting (Thangapandian, 2021). Reviewed studies suggest that other than ploughing rest of farming operations are deeply intertwined with the perceptible contribution of women (Ghosh & Ghosh, 2014; Kamdar and Das, 2021). A report by Oxfam mentioned that in India, 75 per cent of full-time farm workers are women and contribute 60 to 80 per cent of the country's annual yield. The key activities include crop selection, seed selection, land preparation, planting, weeding, pest control, harvesting and processing. In any crop season, women are estimated to invest 3,300 hours in sowing and harvesting, as compared to 1,861 hours that are invested by men in the farming activity (Oxfem India, 2018). Economic Survey 2017-18 says that with growing rural to urban migration by men, there is 'feminisation' of agriculture sector, with increasing number of women in multiple roles as cultivators, entrepreneurs, and labourers. As per MoSPI, 2017, the workforce participation rate for rural females is significantly higher at 41.8 percent against urban women participation rate of 35.31 percent (MoSPI, 2017).

Women Farmers: A Prelude

Women's continual role in agriculture is well established, well realized but is often underestimated. Close to 75 percent of the full-time workers on Indian farms are women. In rural India, the percentage of women who bank on agriculture for their survival is as high as 84 percent. Women's participation rate in the agricultural sectors is about 47 percent in tea plantations; around 47 percent in cotton cultivation; 45 percent growing cereals and oil seeds, and 39 percent in vegetable production. Despite their perceptible presence and contribution, women, often, are not equipped with what they need to succeed in farming. One of the key areas for addressing inequality is land ownership. Land is the fundamental asset for farming. With 12 percent of women cultivators owning land, they often land up farming without being categorized as farm owners or landowners. As a result women have less access to inputs (seeds, fertiliser, labour) and finance, critical services (training, insurance) and organized markets when compared to their male counterparts. This inequality is accompanied by social and economic

cost. Research has consistently highlighted that inequity in access to above-mentioned resources impacts both the economic well-being of women farmers as well as overall agricultural output of the nation. The Food and Agriculture Organization of the United Nations estimates that if women were to have the same access to productive resources as men, they would increase the yields on their farms by 20-30 percent and this would end up adding at least 2.5-4 percent to the total agricultural output in developing countries. Similar inequalities are evident in price realization as well where, in view of unequal access to formal markets, women again are found to be suffering as they are noted to be realizing fewer prices for their output than their men counterparts (Ghosh and Ghosh, 2014; Kamdar and Das, 2021).

Concept of *de jure* female farmer households and *de facto* female farmer households:

- (a) *De Jure* Female Farmer Households are those where the male spouse in whose name land holding was, is dead and therefore on consequence the legal land right has been transferred in the name of the widowed wife. However, *de jure* female farmer households may also contain female heads who are divorced or never married and have inherited paternal agricultural land property.
- (b) *De facto* Female Farmers Households are those in which the adult male head of the household, who is the legal land holder, is working away from the household but remains involved through remittances and other economic and social ties while the wife physically carries out farm production and marketing process.

Women Farmers and Agricultural Credit: A Review of Literature

Globally, 36 percent of women working in agriculture underpin they have less access to finance than men. Some women are incapable of getting loans at all, due to legal or cultural barriers in their country, and if women do manage to get loans, they are often smaller than the loans granted to men for similar purposes. In Rwanda, for example, over ten thousand farmers received agricultural credits

and/or loans in 2016. However, only a quarter of these farmers were women, even though nearly 80 percent of Rwandan women work in agriculture, compared to approximately 55 percent of Rwandan men. Similarly, in other African countries as well most of the female farmers reported being aware of various sources they can access credit facility. However, several factors were identified to be militating against their access to credit. These factors include: High interest rate, lack of collaterals, low level of education and like. In conclusion, there is the need to encourage some of the financial institutions to support these farmers with concessionary loans. It is also recommended that Non-governmental organizations operating in the financial sector should come to the aid of these female farmers (Diagne, A. 1999; Fletschner, D. 2008; FAO, 2011; Dawelbait, F. A. S., 2011; Asian Development Bank, 2013; Doku, Grace and Hagan, 2020).

Likewise, in India a few studies conducting survey on the status of women farmers show that only 10-12 percent of women own land, less than 1 percent have participated in government training programs, 4 percent have access to institutional credit and only 7 percent have control over agricultural income (oxfem.org). However, research in this field is conspicuously low and therefore perceptible research gap prevails yet to be explored.

OBJECTIVE OF THE STUDY

To understand effect of women cultivators access to institutional credit and their subsequent effect on agricultural productivity-profitability in their farms.

Rationale for selecting Study Area as West Bengal

West Bengal is predominantly an agrarian State. In majority of its districts more than 70 per cent of land area is used in growing crops. Rural non-farm sector has undergone low diversification and more than 55 percent of the rural worker population derives employment from cultivation (Census of India, 2011). According to Agricultural Census, 2011-12, 84 percent of the operated area belongs to small and marginal farmers and the average size of the farm land holding is 0.77 ha (as in Ghosh, 2011). The cropping intensity in the State has increased from 131

per cent to 184 per cent in 18 agricultural districts during the last two decades, 34 percent higher than the country average (Tewari *et al.* 2012). The State has achieved an all-time record in food grains production and ranks first in production of rice in the country followed by potato (one-third of total potato production comes from West Bengal) in recent times, the two most labour-intensive crops having distinct characteristics of higher female participation (Reddy, 2013). On the other hand, the farm sector of West Bengal has failed to make significant progress in level of farm mechanization. Given this, it would be of significant importance to analyze the above objective with Study Area as West Bengal.

Besides the above reasons, familiarity with the language and culture form another major rationale for choosing West Bengal as the area of study.

METHODOLOGY

To carry out the proposed study in the setting of West Bengal both secondary and primary data is used to fulfill the objective. To collect primary data multi-stage purposive sampling was done and data was collected using semi-structured questionnaire schedule. First the district of Koch Bihar was purposively selected following two criterias, viz, high share of cultivators in total rural workforce (considering the state average) and subsequently substantial proportion of female cultivators in farmers' category. After short-listing the district from there one block namely Sitolkuchi); then from that block one gram panchayat; and finally from that gram panchayat one village was identified, all based on the above specified criteria (Table 1). The actual field was carried out in the village of Chotta Khalisamari where 73 percent of the rural workforces were cultivators of which 45 percent were female (Table 1).

In accomplishment of the objective firstly the sample was needed to be identified. So to start with, working population households were divided into two groups, namely-(a) female farmers households; (b) male farmers households. Then for selecting the sample households, a list of farmers, with respect to above categories, were separately procured from the concerned gram panchayat of the village. Then 'Random Sampling Method' was adopted for picking the sample for each of the categories. All

Table 1: Distribution of Population by Agricultural Work Category across Gender in West Bengal and in the Study Region of Koch Bihar

Population Details	Segregation by Gender	West Bengal	District of Koch Bihar	Chhota Khalisamari Village of Sitolkuchi Block
Total Population	M	46809027 (51)	1451542 (51)	345 (51)
	F	44467088 (49)	1367544 (49)	337 (49)
	Total	91776115 (100)	2819086 (100)	682 (100)
Total Rural Population	M	31844945 (51)	1304916 (52)	345 (51)
	F	30338168 (49)	1224736 (48)	337 (49)
	Total	62183113 (100)	2529652 (100)	682 (100)
Total Rural Workers (Main)	M	14021528 (85)	671543 (84)	192 (57)
	F	2470752 (15)	121554 (16)	143 (43)
	Total	16492280 (100)	793098 (100)	335 (100)
Total Rural Workers (Marginal)	M	3316850 (57)	168190 (87)	0
	F	2505957 (43)	25219 (13)	0
	Total	5822807 (100)	193409 (100)	0
Total Rural Workers (Main + Marginal)	M	17338378 (78)	839733 (85)	192 (57)
	F	4976709 (22)	146773 (15)	143 (43)
	Total	22315087 (100)	986507 (100)	335 (100)
Total Cultivators (Main)	M	3830056 (94)	282051 (91)	139 (56)
	F	251425 (6)	28269 (9)	109 (44)
	Total	4081481 (100)	310320 (100)	248 (100)
Total Cultivators (Marginal)	M	538226 (69)	33351 (63)	0
	F	332836 (31)	18976 (36)	0
	Total	781062 (100)	52327 (100)	0
Total Cultivators (Main + Marginal)	M	4368282 (88)	315402 (87)	139 (57)
	F	584261 (12)	47245 (13)	109 (43)
	Total	4952543 (100)	362647 (100)	248 (100)

Note: Figures in Parenthesis are Percentage to Total; **Source:** Primary Census Abstract, Census of India, 2011.

the categories were treated separately. The number of female cultivators were high in the village (see Table 1) but *de jure* female farmers having legal land rights in their name were low. 50 such *de jure* female farmers were interviewed after short-listing through usage of above said sampling method. To maintain parity a matching number of *de facto* female farmer households, chosen through 'Snow-Ball Sampling'¹, and a control group of male farmer households, again selected through Random Sampling, were finalized from whom eventually primary data was collected.

¹Snowball sampling is the method by which one surveyed household is asked for help in identification of another belonging to the same category/ having similar feature. This method was specifically followed for spotting the *de facto* female farmers' households because these are households where farm plots are in the name of male head of the household but he has migrated since some time as a consequence of which the wife is managing the farm in his absence.

Therefore total sample size aggregates to be 150. The year of survey is agricultural year of 2021-22 starting for July to June.

The secondary data was obtained from Census of India, 2011.

After compilation of the data necessary statistical tools were employed for analysis of the objective and drawing meaningful inferences.

Overview to the Agrarian Scenario of Cooch Behar

Koch Bihar, a district in the State of West Bengal situated on the extreme north-east corner of the State. The district of Koch Bihar geographically forms part of the Himalayan Terai of West Bengal.

It lies between the parallels 25°57'56" and 26°32'46" north latitude and the longitude of the easternmost point being 89°52'00" east and the longitude of the westernmost point being 88°45'02" east. The district comprises an area of 3387.0 sq. kilometers. However, 75 percent of the reported area is under cultivation which vividly indicates phenomenal importance of agriculture in sustaining livelihood of its populace (West Bengal District Statistical Handbook, 2014).

Table 2(a): Present Scenario of Cooch Behar district (as on 16/03/2017)

<i>Geographical Area – 338700 Ha</i>	
• Total Reporting Area – 331565 Ha	
• Forest Area - 4256 Ha	
• Area under Non-Agriculture Use – 69431 Ha	
• Barren and Unculturable Land – 263 Ha	
• Permanent Pasture and other Grazing Land- 8 Ha	
• Land under Miscellaneous Trees/Groves – 5800 Ha	
• Culturable Waste Land - 286 Ha	
• Fellow Land other than current fallow - 55 Ha	
• Current Fallow – 855 Ha	
• Net Area Sown -250611 Ha	
Annual Rainfall – 3200 to 3300 mm	
• Cropping Intensity - 204 percent	
• Agroclimatic Zone – Terai, Teesta, Alluvial	
• Agroclimatic Region- Eastern Himalayan Region -2	
• No. of Agricultural Sub-divisions – 4	
• No. of Agril Block – 11	
• No. of Bargadars -85959	
• No. of Patta Holders – 141865	
• No. of Small Farmers - 50748	
• No. of Marginal Farmers - 249437 Nos.	

Source: West Bengal District Statistical Handbook, 2014.

According to 2011 Census, 73 percent of its total workers belong to the categories of cultivators and agricultural labourers. As per data of Directorate of Agriculture of West Bengal, 2018 the total area under production of food grains is 295 thousand hectares of which 97 percent is utilized for aman and boro paddy cultivation (Table 2c). Other crops grown include pulses, oil seeds, and the miscellaneous crops like, potato, sugarcane but they occupy negligible net sown area. Table 2c shows yield rate of paddy in Cooch Behar is almost at par with state average of the said food grain which has been made possible

because of the deep loomy soil predominant in the study region is good at retaining water (see Table 2b). Loamy soil is rich in humus and very fertile, rich in clay and organic matter so it has very good capacity to retain water and therefore is ideal for growing paddy.

Table 2(b): Types of Soil district of Cooch Behar

Major Soils	Area (in '000 hectare)	Percentage of Total Soil
Sandy	4.91	1.4
Coarse Loamy	106.13	31.3
Deep to very deep Fine Loamy	181.20	53.4
Fine	26.03	7.7
Miscellaneous	20.43	6.2

Source: <http://coochbehar.nic.in>

Socio-economic Profile of the Respondent Farmers

The surveyed farmers of Chhota Khalisamari Village were primarily Hindu in terms of religious affiliation with majority belonging to Scheduled Caste Category (more than 55 percent) observable across all three categories of farmer households. They were followed by Other Backward Category or OBC (less than 30 percent) and in the bottom, lied Religious Minorities who were less than 20 percent of the total sample (Table 3).

Coming to economic profile, all the farmers interviewed were noted to be small and marginal land holders (Table 3). While the *de jure* female farmers fell into the category of marginal land holding size, having average operational land size not more than 1 acre, at variance the *de facto* farmers were chiefly small farm land holders (1-2 Ha) and the average land size of such farmers were around 50 percent more than the former. However, the control groups of male farmer households were found to be at most privileged position in this regard. Though they too remained in the small farmer classification nevertheless their land size was calculated to be 32 percent more than *de facto* female farmers and a perceptible double that of *de jure* female cultivators.

Demographic composition and dependency ratio of a household are crucial components which should be taken note of because they give insight to earning

Table 2(c): Area, Production & Yield Rates of Principal Crops in the district of Cooch Behar

State/Crop/District	Year	Season	Area (Hectare)	Production (Tonnes)	Yield (Tonnes/Hectare)
Rice					
Coochbehar	2018-19	Autumn	6779	14431	2.13
		Summer	50449	191946	3.8
		Winter	230368	631578	2.74
		Total	287596	837955	2.91
Total – Rice (West Bengal) (2018-19)			5512572	16507249	2.99
Share of Koch Bihar to West Bengal (in Percentage)			19.16	19.69	—

Source: Directorate of Agriculture, Govt. of West Bengal.

Table 3: Socio-Economic and Demographic Characteristics of the Sample Farmers by Gender in Chhota Khalisamari Village

Category of Farmer Households	Particulars	Koch Bihar		
		Chhota Khalisamari Panchayat		
De Jure Female Farmer Household	Hindu	OBC		29(56)
		SC		14(28)
		Gen		–
		Religious	Minority	Muslims
	Religion and caste of the sample households			7(16)
		Total		50(100)
	Farm Details	Average Farm Land Holding (Ha)		
		0.85		
	Demographic Details	Total Number of Family Members		
		3.39		
		Total Male Members (15-59 yrs)		
		–		
		No. of Male Members Migrated		
		–		
		Female Members (15-59 yrs)		
		1.02		
		Number of Children (below 15 yrs)		
		2.1		
		Number of Aged Members (above age of 60 yrs)		
		0.27		
		Total number of Working Members (15-59 yrs)		
		1.02		
		Dependency Ratio		
		2.32		
De Facto Female Farmer Household	Hindu	SC		27(54)
		OBC		16(32)
		Gen		–
		Religious	Minority	Muslims
	Religion and caste of the sample households			7(14)
		Total		50(100)
	Farm Details	Average Farm Land Holding (Ha)		
		1.25		
	Demographic Details	Total Number of Family Members		
		4.63		
		Total Male Members (15-59 yrs)		
		1.04		
		No. of Male Members Migrated		
		1		
		Female Members (15-59 yrs)		
		1.06		
		Number of Children (below 15 yrs)		
		1.75		
		Number of Aged Members (above age of 60 yrs)		
		0.78		
		Total number of Working Members (15-59 yrs)		
		2.04		
		Dependency Ratio		
		1.24		

Male Farmer Household	Religion and caste of the sample households	Hindu	SC	30(60)
			OBC	11(23)
			Gen	—
		Religious Minority	Muslims	9(17)
		Total		50(100)
				(100)
	Farm Details	Average Farm Land Holding (Ha)		1.65
	Demographic Details	Total Number of Family Members		4.77
		Total Male Members (15-59 yrs)		1.87
		No. of Male Members Migrated		0.38
		Female Members (15-59 yrs)		1.05
		Number of Children (below 15 yrs)		1.37
		Number of Aged Members (above age of 60 yrs)		0.48
		Total number of Working Members (15-59 yrs)		2.87
	Dependency Ratio		0.65	

Note: Figures in Parentheses are percentage of Total in each Category; ‘Gen’ - General Category.

Source: Primary Survey, 2021-22.

Table 4(a): Productivity and Profitability of Paddy across Farmers’ Household

Farmer Category	Crop	Variety	Output/Ha (Kg)	Price/Quintal (₹)	Gross Earning/ Ha (₹)	Total Expenditure/ Ha (₹)	Net Profit/ Ha (₹)
De Jure Female Farmer Household	Paddy	MTU-7029 (Kharif)	2,150	1,200	25,800	23,001	2,799
		IET-17430 (Rabi)	2,450	1,250	30,525	27,701	2,924
De Facto Female Farmer Household	Paddy	MTU-7029 (Kharif)	2,520	1,250	31,500	27,965	3,535
		IET-17430 (Rabi)	2,754	1,250	34,425	31,007	3,418
Male Farmer Household	Paddy	MTU-7029 (Kharif)	2,890	1,250	36,125	31,869	4,256
		IET-17430 (Rabi)	2,923	1,300	37,999	32,287	5,712

Source: Primary Survey, 2021-22.

potential of a family and level of economic burden ought to be borne by the working members in feeding unemployed mouths. Table 3 further shows that not only *de jure* female farmers had marginal land holding but also they were female predominant households characterized by no seasonal migration and high dependency ratio of more than two times the working members’ size. This indicate precarious economic situation of such single mother female headed households. In contrast, the *de facto* female

farmers who had comparatively bigger land size at their disposal, though characterized by larger family size, had relatively lower dependency ratio owing to presence of more working inmates in the family. More importantly receiving remittances from the migrated husband was the key factor instrumental in financing agricultural works. With regard to male farmer households (the biggest land size owners of the three sample farmer categories), the family size was not only big, more male members were part of

active work force, all of which vividly underpins stronger economic prospect of the family.

Productivity and Profitability Details of Chief Crops Cultivated by Different Categories of Farmers' Households and their Borrowing Particulars

Mentioned earlier, the major crop observably grown in the study area was paddy. The productivity of paddy (Kg/ Ha) in Cooch Behar is almost at par with the state average of 2,600Kg/Ha (icar.org.in) given its ideal climate-edaphic characteristics. However, the yield rate of rabi paddy was found to be 20-25 percent more than kharif paddy. The specific variety of winter paddy raised in the region is scientifically known for rendering high output per unit of land unlike *kharif* type raised whose productivity is moderate in nature. Given this, farmers reported planting more seedlings in lieu to enhance rice intensification. Besides this, greater application of other working capital such as fertilizers and manures eventually led to augmented quantity of

harvest when compared with *kharif* paddy in which case intensity of the inputs used would be generally less taking cognizance of the fact that the particular *kharif* variety cultivated in the surveyed region is characterized by average yield capacity (Table 5a).

Prices of output are determined largely based on the interaction of the market forces of demand and supply. Table 5a gives details of price per quintal of *kharif* and *rabi* paddy received by farmers of the surveyed area, viz., farm gate prices. Marginally higher farm gate price was offered for *rabi* paddy than *kharif*, attaching additional value to its better quality over the latter. Nevertheless, the farm gate price at which the farmers across the three classifications sold their output was not more than ₹ 1,200 and ₹1,300, a worth 25 percent less than MSP. This is because they highlighted not being able to wait for the government procurement owing to financial incapability to stock up the grains in costly cold-storage houses so as to avert spoilage, given that they largely belonged to marginal-small land holding categories and did not have sufficient economic surplus to avail such facilities.

Table 4(b): Cost Break-up of the Inputs of Kharif Paddy Cultivation/Ha by Farmer Groups

Particulars	Chhota Khalisamari Village		
	De Jure Female Farmer Households	De Facto Farmer Households	Male Farmer Households
(A) Variable Cost			
Total Labour Cost (₹)	8,000(36)	10,750(41)	12,500(43)
Animal Labour (₹)	240(1)	240(1)	240(1)
Tractor Cost (₹)	800(4)	900(3)	900(3)
Irrigation Cost (₹)	800(4)	800(3)	800(3)
Variable Capital Cost (₹)	11,000(50)	12,500(47)	14,055(48)
Depreciation Cost (₹)	105(1)	113(1)	133(1)
Interest on Working Capital (₹)	1000(4)	1,015(4)	1200(1)
Sub Total of Variable Cost (₹)	21,945(100)	26,318(100)	29,828(100)
	(95)	(97)	(93)
(B) Fixed Cost			
Land Revenue (₹)	36(12)	36(2)	36(5)
Rent paid for Leased-in Land (₹)	—	560(33)	905(47)
Interest on Fixed Capital (₹)	1020(88)	1051(65)	1100(48)
Sub Total of Fixed Cost (₹)	1,056(100)	1,647(100)	2041(100)
	(5)	(3)	(7)
(C) Total Cost of Cultivation (₹)	23,001	27,018	31,869
	(100)	(100)	(100)

Source: Primary Survey, 2021-22.

Table 4(c): Cost Break-up of the Inputs of Rabi Paddy Cultivation/Ha by Farmer Groups

Particulars	Chhota Khalisamari Village		
	De Jure Female Farmer Households	De Facto Farmer Households	Male Farmer Households
Variable Cost			
Total Labour Cost (₹)	10,750(40)	12,500(43)	13,100(43)
Animal Labour (₹)	240(1)	240(1)	240(1)
Tractor Cost (₹)	800(3)	900(4)	900(3)
Irrigation Cost (₹)	1,200(4)	1,200(4)	1,200(4)
Variable Capital Cost (₹)	12,555(47)	13,385(47)	13,500(45)
Depreciation Cost (₹)	100(1)	120(1)	106(1)
Interest on Working Capital (₹)	1000(4)	1,015(4)	1200(3)
Sub Total of Variable Cost (₹)	26,645(100)	29,360(100)	30,246(100)
	(96)	(95)	(94)
(B) Fixed Cost			
Land Revenue (₹)	36(11)	36(3)	36(2)
Rent paid for Leased-in Land (₹)	—	560(34)	905(44)
Interest on Fixed Capital (₹)	1020(89)	1051(63)	1100(54)
Sub Total of Fixed Cost (₹)	1056(100)	1,647(100)	2041(100)
	(4)	(4)	(6)
(C) Total Cost of Cultivation (₹)	27,701	31,007	32,287
	(100)	(100)	(100)

Source: Primary Survey, 2021-22.

Taking into consideration the volume of output per unit area, gross earning per Ha is calculated to be varying between ₹ 2,500 to ₹ 5000 the variability being largely dictated by the differential intensity of input use contingent upon the financial competence of the farmer households (see Table 4a).

A disaggregated analysis by farmers' groups reveals:

(a) **De Jure Female Farmers:** The *de jure* farmers underpinned suffering from cash crunch and lacking sufficient money to invest in agriculture since they were the primary bread earners single handedly striving to meet the consumption needs of their families after the death of their husbands. Lack of access to sufficient credit required to purchase optimum quantum of inputs has emerged to be the biggest challenge stressed by 42 percent respondents owing to which they could not procure any form of crop loan either from formal or informal sources. Inadequate collateral security to place as mortgage

to formal-informal loaner institutions coupled with poor repayment capacity, owing to low financial status (around ₹5, 500 monthly household incomes), also formed a formidable bottleneck in borrowing loans. For illiterate and vulnerable groups like women farmers institutional loan by form of Kisan Credit Card is a good option because it has additional advantages over other formal loans, reiterated as follows: (a) The Kisan Credit Card Yojana is exempted from standard credit card interest rates; (b) The cardholder can avail of interest rates ranging between 2 percent to 7 percent; (c) In addition, farmers can repay their loans based on the harvesting period of the crops for which they receive the loan. (d) The banks offer ATM cum credit cards that they can also use to withdraw funds from ATMs and acquire funds on credit; (e) The card offers a convenient repayment period of up to 12 months to easily pay off the loan amount. However, 75 percent of the surveyed *de jures* reported yet to receive Kisan Kredit Cards in their name upon application to be able to take term loans (Table 4d) as a result of which they had

resorted to borrowing some amount from private moneylenders even being aware that the informal moneylenders charge exorbitant interest rates (more than 20 percent per annum). Other key sources of informal borrowing were relatives and friends who often extend credit help without charging interest. Given this precariousness, the borrowed loan by the *de jure* cohort amounts to be low (less than ₹ 15,000) in lieu to avoid falling in vicious circle poverty ensuing debt trap. On consequence, despite limited availability of family labour (Table 3) they failed to hire sufficient external labour and purchase required amount of variable capital like seeds, fertilizers and pesticides which would enable obtaining an yield of *kharif* and *rabi* paddy in tune with the standard average of the region. Table 4a and 4b reveals that for cultivation of the *kharif* paddy the *de jure* female farmers incurred a labor cost which when calculated came to be 25 percent less than that of *de facto* and a significant 36 percent less than male. Besides that, variable capital used was also 12 percent and 22 percent lower than male farmers. All this led to an output per Ha of *kharif* paddy 15 percent lower than *de facto* and 25 percent below male counterparts. Coming to profitability, adding to the plight, asymmetric information about the prevailing market prices, observable widely amid the *de jure* females boiled down to the fact that they landed up receiving 8-10 percent lesser farm gate price per quintal than their colleagues of the other two groups. However,

according to many who were aware and challenged, the private purchasers mutated them by saying that the quality of their produce was inferior. As a result the net profit was calculated to be 21 percent less than *de facto* and 34 percent less than male farmers per unit area.

With regard to *rabi* paddy, higher market price was prevalent per quintal as an acknowledgement of better quality. Despite this both productivity and profitability gap was perceived owing to lower use of working capital, namely manual labour, seeds, fertilizers and manures, by the afore set of underprivileged folks constrained by cash crisis when compared with that of *de facto* females and males, discussed earlier (refer Table 4a and 4c). The productivity of *rabi* paddy was 12 percent less than *de facto* and 19 percent less than males whereas the profitability of the said was 14 percent less than *de facto* and a whopping 48 percent less than the males (Table 5a). In case of *rabi* paddy the profitability gap between *de jure* women and males was exceptionally high given the fact that males not only had greater yield to their credit but also managed a farm gate price of their boro produce, 5 percent higher per quintal than the said target group (Table 4a).

(b) **De Facto Female Farmers:** The above information gives clear evidence as to better performance of the *de facto* female farmers both in terms of yield and economic returns per unit of land over the *de*

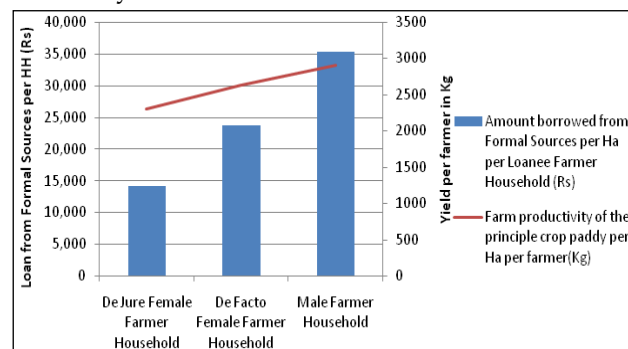
Table 4(d): Crop Loan Borrowing Details of the Sample Farmers by Classification

Particulars	De Jure Female Farmer Household	De Facto Female Farmer Household	Male Farmer Household
Total Sample Size	50	50	50
Monthly per Capita Household Income (₹)	1,165	2,500	3,700
Number of Farmers borrowed Crop Loan	29 (58)	43 (87)	47 (94)
Number of Farmers borrowed from Formal Institutional Sources	7 (24)	23 (53)	28 (59)
Amount borrowed from Formal Sources per Ha per Loanee Household (₹)	14,050	23,750	35,340
Number of Farmers borrowed from Informal Institutional Sources	22 (76)	17 (39)	15 (32)
Amount borrowed from Informal Sources per Ha per Loanee Household (₹)	12,750	21,300	27,950
Farmers who borrowed from Both Sources	—	3 (8)	4 (9)
Total Borrowing for Both Sources (₹)	—	22,500	33,450

Note: Figures in Parenthesis are Percentage to Total; **Source:** Primary Survey, 2021-22.

jure. In case of *de facto* female farmers households, husbands are alive and working in cities. So such families managed better household monthly income through receipt of notable remittances (around ₹ 12,000 per month of household income), possessed more assets to mortgage and concomitantly had higher credit worthiness to their benefit. As a result, 87 percent of the *de facto* female farmers households were found to be resorting to crop loan, the male head and the land owner helping in this regard by making himself available for successful completion of the loan borrowing process. More importantly, more than 60 percent of such families derived advantage of formal crop loan whose interest rates are highly subsidized in nature. In fact the total loan amount opted by the *de facto* families was 65 percent higher than *de jure* per Ha (Table 4d). This very fact reinforces the practicality of the notion that presence of husband is always an advantage for a woman in a male dominated society, even if he is not always physically available, given that the rural societal framework still now fails to provide sufficient space and opportunity to women to fully emancipate their potential. However, the *de facto* households definitely lagged behind the control group of male farmers in terms of both productivity and profitability of *kharif-rabi* paddy, the men who scored the highest in this respect, though the gulf between the two was smaller when comparing between *de jure* and males. While the paddy productivity gap per Ha between the *de facto* and male varied between 6 to 15 percent owing to lack of timely availability of cash for investment in inputs given that the spouse has to physically return to his rural hinterland to be able to complete the process of borrowing loan (from the formal-informal sources) which affected the yield in negative manner, therefore the profitability of male agriculturists per Ha came to be significantly higher, i.e., 21 percent in case of *amon* and a sizable 41 percent with context to *boro*. The profit margin was also lower because the female *de facto* respondents highlighted that, similar to *de jure* females, they, as well encountered problems in selling their products (which they managed themselves without their husbands who would go back their work-place after finishing the loan proceedings) at the then current market prices and on raising concern they were befooled by the crafty purchasers convincing these less-vocal section that they were either misinformed

or the quality of their output was below standard. In such circumstance they had no option but to accept what they were offered.



Source: Primary Survey, 2021-22

Fig. 1: Farmers across Gender, Formal Crop Loan and Farm Productivity

(c) **Male Farmers:** Of the three groups male farmers outshone in every respect which is reflected in the level of yield and economic return per unit area they derived against what fended by the other two groups comprising female cultivators. Interestingly, this coincides with the fact that, as high as 94 percent male farmers had taken crop loan to meet timely input cost, effectively instrumental in augmenting farm productivity and thereby, to some extent, profitability. More importantly, greater than 65 percent had preferably borrowed from formal institutional sources because of the benefits discussed in Section 4, which perceptibly score over loan procurement from private expensive unreliable sources that can trap them in a perpetual situation of indebtedness. To sum up, though men are not naturally better than women in farming, in a patriarchal society, man, equipped with higher literacy, possesses more prowess to deal with finances and marketing in a smarter manner, so as not to get swindled, besides wearing sound knowledge of farm management which put gender in win-win situation. In a male dominated society, even the state of the art farm machineries are designed in a manner conducive for male usage. So the gender discriminatory picture upheld by the study area is not a surprise (also refer Table 5).

From the above discourse, it can be concluded that higher the amount of crop loan borrowed for timely availability of farm inputs, more is the assurance of

Table 5: Gap in Productivity and Profitability across the Farmer Groups

Particulars	Cooch Behar
	Chhota Khalisamari Village
Yield Gap in <i>Kharif</i> Paddy between and De Jure and De Facto Female Farmer Households (in Percentage)	17*
Yield Gap in <i>Rabi</i> Paddy between De Jure and De Facto Female Farmer Households (in Percentage)	12 N.S.
Profitability Gap per Ha in <i>Kharif</i> Paddy between De Jure Female Farmer Households and De Facto Farmer Households (in Percentage)	26**
Profitability Gap per Ha in <i>Rabi</i> Paddy between De Jure Female Farmer Households and De Facto Farmer Households (in Percentage)	17*
Yield Gap in <i>Kharif</i> Paddy between and De Jure Female Farmer Households and Male Farmer Households (in Percentage)	34***
Yield Gap in <i>Rabi</i> Paddy between De Jure Female Farmer Households and Male Farmer Households (in Percentage)	19*
Profitability Gap per Ha in <i>Kharif</i> Paddy between De Jure Female Farmer Households and Male Farmer Households (in Percentage)	52***
Profitability Gap per Ha in <i>Rabi</i> Paddy between De Jure Female Farmer Households and Male Farmer Households (in Percentage)	95***
Yield Gap in <i>Kharif</i> Paddy between De Facto Female Farmer Households and Male Farmer Households (in Percentage)	15 N.S.
Yield Gap in <i>Rabi</i> Paddy between De Facto Female Farmer Households and Male Farmer Households	6 N.S.
Profitability Gap per Ha in <i>Kharif</i> Paddy between De Facto Female Farmer Households and Male Farmer Households (in Percentage)	21**
Profitability Gap per Ha in <i>Rabi</i> Paddy between De Facto Female Farmer Households and Male Farmer Households (in Percentage)	67***

Notes: Paired 'T' Test was conducted to compare the gap in yield and net return for female and male cultivators. Level of Significance of the mean difference is explained in the Table as follows -N.S. - Non-Significance, '***' - 1 percent , significance level, '**' - 5 percent significance level, '*' - 10 percent significance level; **Source:** Primary Survey.

higher yield per unit of land. Moreover, it is credit from formal bank which is the preferred option for majority of the loanee farmers because of its accompanied benefits which extend greater security to the farmers and they find themselves in much better position to maximize farm productivity and thereby profitability. However, credit from banks entails mortgaging collateral securities where the resource-poor widowed women land holders encounter a set-back. Hence, given their low credit worthiness, those handful who opt for loan, usually can go for only small borrowing and therefore experience an yield well below the district average. On the other hand, *de facto* female farmers stand at a better position given the physical presence of their husbands, the legal land- owners to support them through decision-making and helping them out with loan borrowing through various government and non-government sources. Nevertheless, it

is the male farmers who outshine the other two farmer categories in terms of both productivity and profitability, handling farm management, agriculture related finances and marketing by themselves. Interestingly more than 65 percent of them reported borrowing from the formal institutions to be on a safer side.

CONCLUSION

Women are integral part of food production process. Their importance in agriculture is paramount and their roles in agriculture vary from performing as farmers with legal land right (*de jure* female farmers) to working as family farm labour in spouses' land (*de facto* female farmers) to operating purely as agricultural labourer in farm wage market. However, unlike the male counterparts, the prime problem confronted by the female farmers is access to credit.

They are resource-poor and lack adequate collateral assets to mortgage and procure loan. Inadequate collateral security to place as mortgage to formal-informal loaner institutions coupled with poor repayment capacity, owing to low financial status form formidable bottleneck in borrowing loans. For illiterate and vulnerable groups like women farmers institutional loan by form of Kisan Credit Card is a good option because it has additional advantages over other formal loans. However, it also sees limited accessibility because off unnecessary prolonged government procedure to obtain it. As a result they have to seek credit from private moneylenders even being aware that the informal moneylenders charge exorbitant interest rates. Other important sources of informal borrowing are relatives and friends who often extend credit help without charging interest. Given this precariousness, the borrowed loan by the *de jure* cohort amounts to be low in lieu to avoid falling in vicious circle poverty. On consequence, they suffer from low farm productivity and thereby profitability, well below district average.

On the other hand, *de facto* female farmers performed better both in terms of yield and economic returns per unit of land over the *de jure*. Such families received remittances from the migrated head of the household and the land owner. So such families managed better household monthly income, possessed more assets to mortgage and concomitantly had higher credit worthiness to their benefit. As a result, more than 80 percent of the *de facto* female farmers households resorted to crop loan, the male head and the land owner helping in this regard by making himself available for successful completion of the loan borrowing process. More importantly, more than 60 percent of such families derived advantage of formal crop loan characterized by highly subsidized interest rate

However, of the three groups male farmers outshone in every respect which is reflected in the level of yield and economic return per unit area. Interestingly, this coincides with the fact that, as high as 94 percent male farmers had taken crop loan to meet timely input cost, effectively instrumental in augmenting farm productivity and thereby profitability and 65 percent of it was borrowing from formal sources.

In concise, higher the amount of crop loan borrowed for timely availability of farm inputs with preferable

source being formal banks, more is the assurance of greater yield per unit of land.

Policy Suggestions on Gender-Friendly Institutional Changes for Agricultural Development

- ♦ In *de jure* female farmer households, 42 percent of the widowed single women grieved that despite death of their husband they were trapped in the process of getting the land plots converted in their names which is barring them from taking advantage of different government schemes to get subsidized loans which could enable them to adopt state-of-the-art technology in their agriculture and subsequently improve their livelihood besides contributing to food security. In view of this plight, it become an imperative responsibility of the government to ensure and expedite the process of official name transfer of the land so that within short span of the husband's death declaration the land becomes in the name of the wife and they can carry out the food production process with allayed problem of cash crunch.
- ♦ Since *de jure* widowed women farmers are resource-poor in nature with limited asset ownership the ceiling limit of collateral free loan should be increased to more than 1 lakh per female farmer so that they can potentially improve their farm yield without fear of cash crunch and can contribute to agricultural development.
- ♦ Making special provision of Gender oriented extension services for the women land-owners so that despite wide-spread illiteracy they have thorough knowledge about balanced dosage of inputs required to be used at farm level so as to optimize farm productivity-profitability and improve loan repayment capacity, a potent fear that lingers among the loanee female *de jures* while borrowing loan that they may eventually land up being defaulters.

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