

Dynamics of Banks' Lending Practices to Farmers in India

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Abstract

Purpose This paper evaluates whether small marginal farmers in India have financial constraints and examines how bank managers make lending decisions.

Design/methodology/approach A survey approach was employed, using semi-structured questionnaires with a sample of 42 banks and 185 farmers from the state of the Punjab in India. The questionnaires and semi-structured interviews were carried out on a one to one basis and in focus groups and their responses were analysed from the supply (banks) and demand (farmers) side regarding access to finance.

Findings The results indicate that the Indian farming sector is a complex and multidimensional one that has a dependency on both the private and public sectors due to its national importance to varying degrees. Financial lending decisions are dependent upon several non-quantifiable factors (culture, caste, family size, education) and relational bank lending practices. Such practices have an adverse impact on bankable loan applications, and this gives rise to moral hazards. Relational banking and recommendations minimise default rates, but this does not minimise information asymmetry. Subjectivity in decision-making persists, which is compounded by underdeveloped financial markets for small farmers, giving rise to financial exclusion and negatively impacting on economic growth. To overcome information asymmetry, banks rely on the qualitative factors and an excessive level of collateral when making lending decisions. The findings provide valuable insight into how banks make lending decisions and evaluate a complex matrix of relationships between farmers and providers of debt finance in a developing economy such as India.

Practical implications- Policymakers nationally and internationally could use the results of this research to develop relevant and targeted policies to promote the agricultural sector through adopting efficient provision of finance for farmers. A significant contribution of this research is to provide a fundamental evaluation of the issues facing farmers in accessing finance in developing countries.

Originality/value This study provides an original empirical insight into a sector of the economy that has implications for food security for a country. The study has relevance for a wide range of stakeholders and policymakers of both developed and emerging economies in the world.

Paper type: Research paper

1. Introduction

The rapid process of globalisation has influenced all sectors of the economy, including the agricultural sector and small and marginal farmers (Lennart, 2005; Malhan and

Rao, 2007; Mishra, 2013; Siddiqui, 2015; Kumar, 2017; Azad and Ancey, 2020). In most developing economies, agriculture continues to be the most important sector of the economy, accounting for the largest proportion of employment where 60 per cent of the workforce and 81 per cent of the population are engaged in agriculture (Chen and Ravallion, 2007; Mishra, 2013; Kaparde, 2020).

To appreciate the significance of farming within the Indian context, it is important to understand the context within which this research was carried out. The Indian economy has gained importance over the last two decades with the advent of the technology revolution, access to mass cheap labour and non-regulated work practices. However, this development masks the agrarian economy that is the backbone of India and serves to provide economic and political stability by ensuring food security. The Punjab occupies 1.5 per cent of the total area and 2.4 per cent of the total Indian population. The state of Indian Punjab has an area of 50,362 square kilometres, a population of 27,743,338, of which 66 per cent is based in the rural areas (2015 census data from “Statistical Pocket Book India”; Government of Punjab (GoP), 2018). The area of the Punjab is slightly less than that of Costa Rica, which is also an agricultural-based economy, located in Central America with an area of 51,100 square kilometres and a population of 4,327,228 persons, which is significantly less than the Punjab’s population (Palloni et al., 1996).

The Green Revolution in Punjab increased the income of farmers and catapulted to the status of being called the “grain bowl of India” henceforth, the domestic production exceeded consumption and the country not only became food self-sufficient, but also started to export food grains (Singh et al., 2005: 2009; Rahman, 2004). From an economic point of view, this was a shift from being a food importing country to a food exporter, which transformed Indian agriculture into a market-oriented production system from a traditional subsistence farming system (Gill et al., 1991). Thereafter, the Punjab has been known for its prosperity and as a land of prosperous agriculturists in comparison to the other states of India. The achievements of the Punjab have been very widely recognised and even reported by the World Bank (2004; 2009) in addition to mentioning agriculture as an important portfolio in developing countries.

The growth of the farming sector is intertwined with economic stability and development, provides critical support and a resource base for economic prosperity.

The emerging evidence suggests that poor farmers' financial needs are not met due to sector-specific and systematic problems in the functioning of the financial sector (Duggal and Singhal, 2002; Talule and Rasal, 2008; Sidhu et al., 2008; Singh et al., 2009; Memmel et al., 2019; Khanal and Omobitan, 2020). Imperfections in the financial sector adversely impact on the efficient functioning and performance of the agricultural sector; limiting the potential for economic and financial prosperity.

Given the importance of the sector, there is a paucity of research that has examined access to finance for marginal and small farmers. The literature relating to entrepreneurship in the West and in India tends to focus on commercial and manufacturing sectors of the economy. There is no comprehensive empirical study that examines the characteristics and motivation of small and marginal farmers (SMFs) and the barriers to accessing the optimum level of finance. To overcome this gap, this study explores the relationship between the key characteristics of farmers such as age, education, size of land holdings, gender, caste and family structures and their ability to raise appropriate finance for the growth and efficient operation of the farms. This study has examined the traditional bank loan sanctioning protocol by estimating the gap between the demand and supply side expectations; problems faced by farmers in obtaining institutional credit and various non-empirical (cultural, social status, personal relationship with bank manager, family size, education) factors, which have implications for banks' lending decisions.

2. Banks' Lending Structure

Food security and the agricultural sector's efficiency and investment is interlinked; it has implications for economic development, employment and the economy in general. Thus, while recognising the importance of the agriculture sector in India's development, the Government and the Reserve Bank of India created a broad-based institutional framework to cater for the ever-increasing credit needs of the agriculture sector. The evolution of institutional credit to agriculture could be broadly classified into four distinct phases: 1904-1969 [predominance of co-operatives and setting up of Reserve Bank of India (RBI)]; 1969-1975 [nationalisation of commercial banks and setting up of Regional Rural Banks (RRBs)]; 1975-1990 [setting up of National Bank for Agriculture and Rural Development (NABARD)]; from 1991 onwards (financial sector reforms); Special Agricultural Credit Plan (1994-95), launching of Kisan Credit Cards (KCCs) (1998-99), Doubling Agricultural Credit Plan within three years (2004),

and Agricultural Debt Waiver and Debt Relief Scheme (2008). The rural credit architecture consisted of cooperatives, commercial banks and regional rural banks. Although a multi-agency, approach was envisaged to cater for the diverse credit needs of rural people. It has been suggested (Satyasai, 2008; Golait, 2007, Singh et al., 2009; Kumar et al., 2010; Sandhu et al., 2015; Bhattacharya, 2017; Khanal and Omobitan, 2020) that in reality, the rural clientele hardly benefited from multiple providers of finance as the system suffered from many infrastructural deficiencies.

These structural and operational framework changes facilitated the process of institutionalization and the regulation of the rural financial market in India to some extent. However the informal sector remained unregulated (Sandhu, et al., 2015) yet, it is the major provider of finance as the Commercial Banks are not meeting the needs of the small and marginal farmers, while the cooperatives, on the other hand, lacked resources to meet the demand. To fill the finance gap within the agricultural sector, in 1975 the Regional Rural Banks were set up to meet the credit needs of marginal farmers. According to Garg and Pandey (2007), these dedicated lending institutions served the farmers well, but there remained major issues related to assessing loans applications for the marginal farmers who were not able to provide collateral. This paper focuses upon the traditional bank loan sanctioning protocol and considers the implications this has for the small and marginal farmers within the agricultural sector.

3. Literature Review

The promotion and fostering of agriculture demands skilled manpower on farms, good quality seeds, credit facilities, supervision and production (Chaudhary, 1987; Temu et al., 2001; Karshenas 2001; Mpuga 2004; Sidhu et al., 2008; Singh et al., 2009; Peng et al., 2018; Pandey, 2017; Memmel et al., 2019; D'Souza, 2020). With new scientific and technological developments, agricultural production, with respect to total yield per acre, could be boosted. However, financial constraints prevent farmers from adopting new technology, therefore, precluding them from optimising their agricultural output.

The role and importance of financial institutions in agricultural and economic development is well documented in literature (Lewis, 1954; Fei and Ranis, 1963; Karshenas, 2001; and Koivu, 2002; D'Souza, 2020). Many empirical studies have tended to concentrate on the factors associated with the requirement and importance of credit in agriculture (Karshenas, 2001; Mpuga, 2004; Bhattacharya, 2017; Kumar, 2017; Khanal and Omobitan, 2020). There are several studies, which reported that

technical change is crucial for agricultural development; the availability of credit acts as a catalyst in the adoption of new technology (Chaudhary, 1987; Sidhu et al., 2008); in order to increase agricultural production and reduce poverty.

In most developing countries, the agricultural sector was not the main priority until the early 1960s, large industrial projects were favoured over agriculture (Sidhu, 2001; Pederson, 2004). In the case of India until the early '60s, the government relied on the Western countries for agriculture, as they believed that the West had a competitive advantage over India in food production. This was borne out in 1967 when after two consecutive monsoon failures, the United States shipped one-fifth of its wheat crop to India to avert mass starvation. This food crisis was the trigger for the Green Revolution, modelled on the highly mechanized American style farming practices incorporating high-yielding crop varieties together with chemical fertilizers and pesticides (Dutta, 2003). The Green Revolution led to an increase in agricultural yield and the sector expanded (Sidhu, 2001; Pederson, 2004 and Tokar, 2004; Khaparde, 2020). The virtually endless need for new equipment and inputs left farmers in unsustainable long-term indebtedness (Sidhu, 2001). The need for substantial investment in the agricultural sector led to a debate between the government and the financial institutions as how to best finance the agricultural sector.

Henceforth, the funding policies of the World Bank and Indian government, promoted the adoption of technology (Tokar, 2004; Demirguic-Kunt et al., 2019) that led the institutions to offer subsidised financial packages. Often the cost of credit was lower than the market rate, which effectively excluded the private sector lending institutions (Tokar, 2004). Patel (2004) observed that the Green Revolution was mainly a package of industrial technologies for the rich farmers, which bypassed the SMF who produce 41% of the country's food. Supporting industrial technology for larger farmers deepened inequalities among Indian farmers over time. Eashvaraiah (2001) reports that the Indian agriculture sector rests in the hands of a few capitalist farmers who thrive at the expense of SMFs. Shwartzberg (2003) corroborated Eashvaraiah's findings; he states that the benefits of India's Green Revolution were concentrated in certain regions and for wealthier farmers.

For SMFs, access to credit remained a major problem (Swaminathan, 1999). It was not addressed until the 1970s when the Indian government revised its lending policy to offer credit to SMFs and tenant farmers through special programmes to overcome the finance deficit. Nonetheless, the initiative was withdrawn in 1971, which

had a detrimental impact on access to finance for the SMFs. Though the structural and institutional adjustment instigated by the government improved access to formal finance; the informal sector remained the major provider of finance to SMFs (Chopra, 1997; Sugden, et al., 2014; Sandhu et al., 2015; Pandey, 2017). The 1971 change in government policy, failed to make an appreciable improvement for SMFs as Commercial Banks were not able to meet the needs of the farmers, while the Cooperatives, on the other hand, lacked the resources to fulfil the demand (Chopra, 1998). Therefore, bank lending to agriculture in general declined, and SMFs, in particular, were affected, in areas where banks had a sparse distribution of the clientele and perceived the cost of lending to be too high.

To overcome the existing discrepancies, the Narasimham Working Group (1975) recommended the establishment of separate Regional Rural Banks, who were considered to be familiar with local and regional issues and problems and could respond effectively. Furthermore, the Committee to Review Arrangements for Institutional Credit for Agriculture and Rural Development recommended the formation of the National Bank for Agriculture and Rural Development (NABARD), an institute for the promotion of agricultural credit. This approach is consistent with the All India Rural Credit Review Committee (1969) recommendations of setting up a multi-agency approach for rural areas and especially for agricultural credit to harness the effectiveness of the Commercial Banks in providing agricultural credit. However, from the literature, it is not clear how the enhancement was supposed to be achieved though there appears to have been willingness from the government to intervene through the Social Control Policy introduced in 1967. Which led to the nationalization of 14 major Commercial Banks (whose maximum shareholding is with the government) in 1969 and six private sector (whose maximum shareholding is with the individuals and institutions) banks in 1980 (Surbhi, 2018). This authorised Commercial Banks to provide funds for agricultural and allied activities in the country; thus extending the influence of government over the banking system (Reserve Bank of India, 2003; Shah et al., 2007). The consequence of the Social Control Policy was the emergence of Regional Rural Banks in 1975 to especially serve the needs of SMFs.

The banks' reluctance to finance SMFs, especially to tenants who are unable to provide security, prevents the farmers from modernising or using new technology that adversely impacts on their productivity and in turn on the national output. Absence of technology amongst SMFs drives them out of business through being taken over by

larger neighbouring farmers who have greater financial resources to acquire technology, and hence dominate the agricultural sector at large. Within this context, India is no exception. This supports the argument of the need for progressive credit policy reforms to increase SMFs productivity (Kolajo, 1993; Chaudhary, 1987; Kohli and Singh, 1997; Coffey, 1998; Malhan and Rao, 2007; Sharma, 2011; Sugden et al., 2014; Kumar, 2017).

It has been observed that the number of financial institutions in rural areas has grown, nevertheless, it has not eased the access to finance for SMFs. To effect change, banks need to gain an understanding of the businesses and build the capacity to meet the needs of SMFs. Literature that has examined the problem associated with financing farmers, considered the causes of financial constraints but they have not provided an effective solution to overcome the financing constraints (Chopra, 1998; Sharma and Chamala, 2003; Dutta, 2003; Sidhu et al., 2008; Singh et al., 2009; Mishra 2013; Bhattacharya, 2017; Memmel et al., 2019). Therefore, there still exist unexplored areas or questions relating to the financing of the agriculture sector and the role of financial institutions in agriculture in general and the Punjab in particular.

4. Research Sample and Methodology

Researchers investigating the relationship between financial institutions and businesses have mostly employed qualitative methodology in the UK (Deakins and Hussain, 1991, 1992; Butler and Durkin 1998; Hussain and Zang, 2005; Drover et al., 2017) to investigate the issues related to finance constraint. In the case of banks' lending to farmers in India, it was observed that various non-empirical factors have implications on a bank's lending decisions; hence, to address this issue, this study uses a qualitative approach. This exploratory study exhibit that rhetoric is far from reality by establishing relationship between the key themes; which are several non-quantifiable factors (culture, caste, family size, education) and relational bank lending practices (social status, personal relationship with bank managers). The location, the Punjab, was selected due to its agricultural base, the geographical location and the attention it has received from successive governments over the last 50 years to promote the agriculture sector. The primary data source for this study is from the five districts, Gurdaspur, Amritsar, Jalandhar, Nawanshahr and Patiala, in the Punjab. From these districts, 350 farmers (demand side) were identified, and the data was gathered via semi-structured interviews by the researcher herself. The districts were

chosen based researcher familiarity and social networks. The sample was selected using the government's records maintained by each village's land revenue collector (Patwari). Initially, 500 farmers were selected using non-systematic sampling from the five districts. At the second stage, based on classification, 70 farmers were selected for each category, when the contacts were made, only 200 farmers were willing to participate in the research. Fifteen (15) interviewees did not answer all of the questions; they were excluded from the analysis. In particular, marginal and small farmers were reluctant to provide information. The sample of farmers (shown in Table 1) was stratified into five size groups according to the size of the holding: marginal (less than 1 acre), small (1-2 acres), medium (2-4 acres), large (4-10 acres) and very large (10 acres and above). The selected farmers were approached by the researcher directly to avoid the impression of pressure coming from the Patwari. To gain the farmers' confidence and support, recommendations were sought from village elders and the researchers' informal network and contacts were used.

Table 1: An overview of the sample of farmers selected from five districts

| Categories | Districts | | | | | Total across regions |
|-------------------------|-----------|-----------|-----------|------------|---------|----------------------|
| | Amritsar | Gurdaspur | Jalandhar | Nawanshahr | Patiala | |
| Marginal ¹ | 6 | 5 | 3 | 3 | 5 | 22 |
| Small ² | 6 | 5 | 6 | 6 | 5 | 28 |
| Medium ³ | 8 | 3 | 7 | 6 | 10 | 34 |
| Large ⁴ | 8 | 10 | 4 | 10 | 6 | 38 |
| Very Large ⁵ | 11 | 11 | 15 | 10 | 10 | 57 |
| Total | 39 | 38 | 35 | 35 | 38 | 185 |

To gain the views and experiences of banks (supply side), only those banks which were mentioned by interviewees were selected, namely commercial banks (public and private), co-operative societies and co-operative banks. There are a total of 5,413 financial institutions, including 802 commercial banks, eight (8) foreign banks and 802 branches of the Punjab State Cooperative Bank (Economic and Statistical Organisation, Government of India, 2014) but due to the time, logistical and financial

¹ Less than 1 acre

² 1-2 acres

³ 2-4 acres

⁴ 4-10 acres

⁵ 10 acres and above

constraints of this study a sample of 42 bank managers (18 co-operatives, 24 commercial banks; consists of 20 public and 4 private). Co-operative sector banks are a different category altogether. Such banks are registered under the Cooperative Societies Act of 1904 whereas Commercial banks are subject to the control of the Reserve Bank of India directly. Co-operative banks are subject to the rules laid down by the Registrar of Co-operative Societies. The co-operatives banks have a relatively small share in the banking system. However, given their geographic and demographic outreach, they play a key role in providing financial assistance to economically weaker sections of the society especially cater the needs of the agriculturists (Subbarao, 2013; Babu et al., 2018).

These 42 bank managers were selected based on access and convenience. Access to these banks was negotiated through their Regional Offices, but the researcher because of convenience selected the nearest bank branches. Forty-two branches of banks were approached, and the interviews lasted between 40 minutes to one and a half hours.

Considering the complexity of the agricultural sector and the bank lending practices, this study employed two prong strategies. Firstly, every participant, farmers and bank lending managers was interviewed using a semi-structured questionnaire. The data was systematically extracted covering a range of socio-economic characteristics such as age, caste, farm size, farming experience with credit use and amount of loan obtained. All interviews were supplemented with field notes, which were written up as soon as practical after the interview, to address the issue of dependability (Bryman, 2007c). All interviews with farmers and bank managers were transcribed and data and narrations were analysed using a constant comparison approach (Deakins and Hussain, 1993).

5. Findings

5.1 Farmers (borrowers)

The results of the socio-economic characteristics or demographics of the farmers of our sample summarised in Table 2 above suggest that the average age of the farmers is 35 years and the sample had an age range of 31-60 years. The survey found that this group of farmers often become non-productive after their 60s and only contribute their knowledge to help out their children to manage the fields as the family often relies on traditional labour intensive practices. For this group of farmers, the financial

constraints often limit innovative approaches and technologies utilisation, a cause that continues to be a barrier for SMFs generation after generation. Table 3 also shows that one community, which is the Jat caste, mostly undereducated and male, dominates Punjabi agriculture. The sample supports the generally held belief that farming in India is male dominated and is seen as less attractive than working in commerce or industry or often, to working overseas as a migrant worker. In India, the stratified caste system influences the individual's rights to access to resources, and little effective voice (Sugden et al., 2014; Kuchimanhi et al., 2019). However, Jat Sikh community belong to the upper economic segment of the rural society. One of the farmer respondent (RF) mentioned,

“We got enough farmland, earning from that is sufficient to keep me and my family going. By getting more educated why to work for others, moreover, there are no jobs here. Instead of spending money on education, I will give that money to a travel agent and will send my son abroad as agricultural income is declining day by day.” (RF5)

In addition to financial constraint, lack of education is another issue amongst the farming community. The educational attainment of these farmers is low in comparison with other groups. There is a low importance placed by farmers on education, yet in the sample, the banks use educational achievements as one of the criteria for assessing potential loan applications.

Table 2: Characteristics of Farmers of the sample

| Background Characteristics | Number of Farmer (n=185) | % |
|-----------------------------------|-------------------------------------|------------|
| Age | 185 | 100 |
| 20 – 29 | 5 | 3 |
| 30 – 39 | 20 | 11 |
| 40 – 49 | 43 | 23 |
| 50 – 59 | 57 | 31 |
| 60 – 69 | 60 | 32 |
| Gender | 185 | 100 |
| Men | 178 | 96 |
| Women | 7 | 4 |
| Education | 185 | 100 |
| Below Matriculation | 120 | 65 |
| Matriculation | 52 | 28 |
| Graduate | 3 | 2 |
| Technical Diploma holder | 10 | 5 |

Table 3: Supplementary Socio-demographics of Farmers

| Additional Features | Number of Farmer (n=185) | % |
|----------------------------|-------------------------------------|----------|
| Marital status | 185 | 100 |
| Married | 170 | 92 |
| Single/divorced | 15 | 8 |
| Caste | 185 | 100 |
| Jat | 165 | 89 |
| Others | 20 | 11 |
| Children | 185 | 100 |
| Yes | 181 | 98 |
| 1- 4 | 98 | 54 |
| 5- 7 | 83 | 45 |
| No | 4 | 2 |

The research findings suggest that the illiteracy of farmers makes them hesitant to approach the banks for loans, there is less awareness of alternatives and they feel more comfortable borrowing from moneylenders. It has been noted that those farmers, even SMFs, who borrow from formal lending institutions (78 per cent) are more likely to use modern technology and high yielding varieties of seeds than those who borrow from moneylenders (22 per cent). These findings suggest that a number of socio-demographic factors, which include education, caste, gender, land size, social status and personal relationship with the bank managers, affects the amount of formal credit made available to the farmers. SMFs in our sample emphasised factors (see Table 4) such as the bureaucratic nature and procedural (technical or ceremonial) formalities required by banks to sanction the loans. There is perceived patronage associated with class and status, which tends to alienate farmers. Few farmer respondents captured the essence of these differences:

“Too many formalities to get loans, too much hassle and unnecessary visits to the bank and excuses by bank staff visit them this day or that. Indirectly they exploit farmers deliberately just to take bribes.” (RF2)

While, another farmer respondent mentioned:

“Social status and personal contacts with the bank manager play a great role in securing a loan. I can even prove it. Few years ago, I visited bank few time, to seek loan from the bank, but bank manager never paid heed. Eventually that bank manager was transferred from our branch. However, the new posted manager was our relative and he sanctioned me loan overnight. Therefore, we cannot say that bank managers work without references or personal contacts.” (RF33)

The respondents' perceived decisions are arbitrary in nature and the corrupt practices pursued by the officials of formal financial institutions are the barriers to accessing bank finance.

Table 4: Problems faced by farmers in availing formal credit

(% age of farmers (multiple responses))

| Problems | Farmers | | | | |
|---|----------|-------|--------|-------|------------|
| | Marginal | Small | Medium | Large | Very Large |
| Complex and lengthy procedure | 0 | 65 | 70 | 62 | 52 |
| Bribes to bank officials, agents, patwari and sponsoring agencies | 33 | 40 | 38 | 30 | 22 |
| Too many visits to bank to get loan | 0 | 35 | 28 | 5 | 2 |
| High Transaction costs | 10 | 25 | 15 | 12 | 11 |
| Unfriendly attitude of staff | 40 | 40 | 35 | 7 | 5 |
| Insufficient bank staff | 20 | 10 | 7 | 8 | 6 |

The results reported in Table 4 above show that the barriers encountered by farmers vary according to their land size. The relational bank lending practices appear to be prominent in banks' lending decisions. The small farmers have higher hurdles to jump in comparison in to large farmers; this perhaps reflects the attitude of banks in focusing on high value clients more so than SMFs.

"Bank employees prefer to serve the rich farmers but do not like to serve small and marginal farmers without taking money from them; even bank peons do not let them to enter the bank without charging money from the poor farmers. However, when we gave them money then the bank manager started treating us as his relatives and offered even chair to sit." (RF52)

The other factors that appear to be prominent in banks' lending decisions are the farmers' ownership rights, reflecting the collateralisation and risk mitigation because of the borrower possessing the ownership rights, which have an adverse impact on bankable loan applications. The findings also suggest that there is a direct relationship between the size of landholdings and the success rate of a loan application and the consideration a farmer receives from the formal financial institutions, something that has both operational and ethical issues for lenders.

"Not only has the personal relationship with bank manager but money has also played a role in securing loan. Though we know everything about banks' policies, it is only because of staff negligence and their hostile attitude, which prohibits us from approaching the bank. Small farmers' condition is not good, as they do not have any hearing anywhere." (RF29)

Most of the surveyed farmers (85 per cent) reported that bank managers give importance to caste, social status and gender. The results corroborate the vulnerability of weaker sections and small landowners in accessing bank finance. Gender also affects borrowing from financial institutions. Twenty six (26) per cent of bank managers reported that they accept women's savings (deposit) in the bank and gold and other assets as collateral, while the remaining 74 per cent do not consider women's savings

(deposit) as collateral. In particular, the survey found that there is a lack of literacy amongst females that affects their ability to access external finance. Lack of collateral, education and involvement in decision-making are major issues for female farmers, which serve as a barrier for them to become independent and progress despite the fact that major agricultural chores are performed by females (76 per cent) especially in the case of families with small and marginal landholdings. In India, one explanation of low female participation in decision-making and land management is due to the land ownership and succession within families. Females are disenfranchised from land ownership to prevent land transfer to their in laws (new family) that would dilute family ownership. Therefore, females do not have a culture of landholding accumulation and hence farming, the exception being farmer families who have only daughters. In such cases, even after marriage, daughters choose to stay with their parents so that their parents can deal with the issues relating to farming. When the parents die then their husbands or sons take over the role. Although, 81 percent of banks reported that female farmers do not need to provide formalities and guarantees, 19 percent suggested that they need a guarantee from a husband, blood relation, village head or all of them. At least in theory, females are not treated as exceptions and they too need to provide collateral when accessing external finance. In comparison, women from urban areas are more likely to access bank loans to finance small businesses such as beauty parlours, boutiques and others. This illustrates the point that women engaged in farming have major barriers. Sixty seven (67) percent of females in the sample reported to have experienced discrimination when accessing bank finance, especially at the early stage of the application. The major barriers are at the first stage of application, where male managers do not consider female applicants bankable putting females at a disadvantage.

5.2 Banks

Though the sectoral differences are obvious, the lending criteria of all banks in the sample were consistent with the empirical studies reported in the UK for SMEs. Ninety three (93) per cent of bank respondents considered collateral, security provided by the farmer or someone else, and a pre-condition for approving a loan. Whilst considering the application, other factors such as a family's standing within the community (63 per cent), previous financial track record (43 per cent) and the quality of land and crops

(33 per cent) were reported to be very important in arriving at a final lending decision. Respondent bank managers (RBM) mentioned,

“Past track record and personal relationship helps us to get a loan sanctioned very easily; and then we do not face any problem in customer verification.” (RBM7)

“Social status plays a role to some extent; size of land is very important. Farmers with an economically sound background can repay the loan easily. Personal relationship plays a significant role to verify the character of the farmer.” (RBM12)

From the sample, 96 percent of lending manager respondents thought that their main consideration was to minimise, default rates and maximise banks' returns and that the loan was a service for borrowers. These findings suggested that the agriculture sector was not considered to be in any way different from other sectors within which SMEs operate.

Specialised Co-operative banks, dedicated to the farming sector, require a borrower to be a member, a criteria which is not a requirement of commercial banks. The Cooperative banks/societies provides financial help to its members at the concessional rates, offer quality goods and services at utilitarian prices. Moreover, they assists in setting up production units and marketing of produces especially to small farmers for their agricultural products.

“Sometimes certain things are not available in the market, which we can take from the cooperative societies and even the pesticides and fertilizers provided by the societies are of good quality.” (RF41)

Cooperative societies financial strength depend on the capital contributed by its members and loan raising capacity from state cooperative banks. The membership fee is limited for which they are unable to raise large amount of resources as their members belong to the lower and middle class. Thus, cooperative are not suitable for the large-scale business, which require huge capital.

Whereas, Commercial banks are profit driven, 59 percent provided loans to customers who fulfilled their lending criteria and had sufficient collateral. Regarding the Co-operative bank managers, 87 percent considered tenant farmers and sharecroppers as risky clients. To mitigate the risk, 90 percent of bank managers from both Commercial and Co-operative banks expected the loan application to be accompanied with documentary evidence of any land owned; if leased or rented then a guarantor is required and tenant farmers and sharecroppers need to provide a cultivation land deed. Therefore, owner-cum-tenant farmers and owner-cum sharecroppers can access loans.

“The bank refused to lend any money because I did not qualify for the funds available, as I have land less than one acre. I even cannot take money from the cooperative society as I do not have membership with them because of land of less than one acre.” (RF26)

This suggests that small sized landholdings make it difficult for marginal and small farms to become viable economic units; hence, they augment their operational area through tenancy or leasing-in land. Tenancy is not documented or regulated; the contract is based on verbal contracts of cost and crop sharing, which has implications for obtaining credit from the formal financial institutions and often leads to contractual abuses.

Risk aversion levels differ between the private co-operative and bank managers; co-operative banks considered relational banking and reputation to be important variables, which may mitigate lack of collateral whereas, private banks prefer higher or at least 1:1 lending criteria, a ratio often used to lend to businesses. This indicates that private banks see no difference in lending to farmers and businesses. All private bank managers, in the sample, required the applicant to have land equal to or more than two acres, limiting the loan facility to medium and large farmers. The analysis of financial service providers (FSPs) illustrates the exclusion of landless, marginal and tenant farmers, as they are unable to provide the required collateral; that has an adverse impact on farmers' output, social cohesion and gives rise to sub-optimality in the agricultural sector, as the farmers are unable to take advantage of high quality seeds or technology. The literature suggests formal institutional credit provision in India accounts for 27 percent of total cultivator debt (Throat et al., 2006) while on the contrary, informal lenders account for 45 per cent of the rural lending and the trend is upward (Vaidyanathan, 2006). This suggests that formal lending institutions are unable to meet the demand.

Our findings corroborate Vaidyanathan (2006), (56 per cent) in that farmers rely on informal financial institutions for financing. Thirty three (33) percent of farmers interviewed use moneylenders, family and friends and 23 percent use others such as landlords and commission agents. The high reliance of farmers on informal moneylenders can be explained by historical reasons. Informal money lending families are long established institutions in their own right and have provided this service for many generations. The informal institutions are unregulated and they remain an integral part of the farming community. Moneylenders, have knowledge of individual families and farmland from which they are able to assess their risk exposure when lending and negotiating returns; something that neither a private nor a co-operative bank is able to do as they have their internal procedures and protocols to comply with and fail to internalise lending to the poor.

Bank managers also acknowledged the role of moneylenders, 87 percent of managers suggested that the greater availability of bank loans has forced informal moneylenders to become competitive and reform their lending practices. Fifty six (56) percent of co-operatives and 77 percent of private banks' respondents acknowledged that money lenders have a greater information symmetry and tacit knowledge in terms of land quality, historical output of certain land, commitment of farmers towards land and historical transaction deals which enables them to take on greater risks, the ability to be flexible and to respond quickly (Varghese, 2004). In particular, co-operatives' bank managers reported close links with informal lenders and often when they are unable to provide loans to referred customers and in return they were able to acquire intangible information about the quality of land or the borrower that enabled them to reach out to farmers where they previously were unable to sanction loans.

There are also some issues with loan 'delinquency', 36 per cent of bank managers reported that farmers use the loan for purposes others than those stated on the application form, often for unproductive (personal consumption) purposes. Reasons most cited for loan leakage are extravagant expenditure on social ceremonies, wrong project selection, less income from agriculture and inadequate credit. The findings suggest that the large farmers need money for expansion and development purposes while small farmers face financial constraints for farming purposes and separate loans for consumption purposes. Small and marginal farmers are often in debt to private moneylenders who often charge an exploitative rate of interest. There is a case to be made that small farmers require a credit package for production, investment and consumption and in order to curtail the vicious cycle, credit for the redemption of prior debts. Such packages are not available to them in the formal credit markets.

6. Discussion

Analysis of the experiences reported by SMFs in the Indian Punjab demonstrates that there is a complex set of dynamics that operate when SMFs attempt to access external finance, which prevents farmers from utilising advance technology and high quality seeds that creates welfare loss for the individual farmer and society at large. To illustrate the operations of rural lending practices of banks, this study uses literature review to develop formal financing model, shown in Figure I and maps current banks' lending and farmers' borrowing practices. There appears to be a gap between theory

and practice. Figure1 (theoretical or conventional Model), illustrates the agricultural lending system which mirrors the urban banking system that is based on the manufacturing and retail sectors; and relies heavily on collateral and accounting information. Use of such a model for the farming sector raises a number of issues such as the lack of farmers' abilities to comply with banks' formalities, lack of accounting data, their inability to prepare cash budgets and to complete extensive application forms to convince the bank about the viability of the proposal. In particular, where agricultural output depends on rain and other external environmental factors, it is difficult to estimate yield and cash flows. That limits the banks' ability to use credit scoring to assess loan applications; hence the reliance on collateral. Farmers who own their land are able to offer collateral but this is a particular issue for tenant farmers. Formal financial institutions do not lend money to uncollateralized (landless and tenants only) and under collateralized (small and marginal farmers) clients. Hence collateral is a major barrier, which leads to financial exclusion and pushes a large segment of the farming community to raise finance from informal sources, which often charge higher interest rates and use unethical practices and social pressure to disempower farmers and confiscate their land. In our sample, such practices were reported to serve as fear and a real threat to SMFs. The effect of this on the national economy is significant as such, a group will not utilise the land to its full potential.

The conventional approaches as illustrated in Figure1 show that the real world is complex and the conventional model fails to capture the dynamics operating to empower SMFs to realise their full potentials. To illustrate these complexities, a revised model, illustrated in Fig.1 column two, has been constructed, referred to as the Practical Model. This revised model provides a fuller picture of the formal finance model by adding some implicit or unarticulated catalytic converters into the existing formal finance model (Theoretical or Conventional Model). The revised model helps us to gain a deeper insight into the current formal finance model. The models are compared and contrasted using existing literature (Mpuga, 2004; Srivastva and Basu, 2004) to glean evidence in order to analyse the clear picture of a formal finance model by showing all the prevailing malpractices operating within the formal financial institutions within the Indian Punjab. It is evident from the reported results that collateral is a prerequisite to obtain a loan from formal financial institutions, money, social status and personal contacts have a direct bearing on the outcome; farmers who lack these three components face credit delays or rejection. These qualitative

factors have an impact on securing loans, which is difficult to quantify but in our research, the respondents, both bankers and farmers, placed high value on such factors in securing bank finance. From the questionnaires, it was established that the banks mostly relied on quantifiable factors to assess a loan application. However, in-depth interviews suggested that in reality bank managers do consider qualitative factors. The findings suggest that bank managers take into account various soft issues or non-empirical factors (social status, personal relationship with bank managers). Whilst only 28 percent of bank managers considered the qualitative factors important; 60 percent of farmers emphasised their major impact on the lending decision making process. This finding suggests the relationship between bank and borrower has an influence on the success or failure of the application for the loan. These findings of the lender-borrower relationship and its influence on the lending decision are also reported by (Petersen and Rajan, 1994; Berger and Udell, 1995) and these results are consistent with the broad thrust of findings reported by Hussain et al., (2006) for their results for SMEs in the context of China, which suggests that cultural factors have an effect upon businesses' approach to banks (demand side). These findings suggest banks use qualitative factors in evaluating loan applications, which shows inconsistency in the treatment of applicants, a system that was used by UK bank managers in the 1980s and 90s, which was criticised by Deakins and Hussain (1994). A debate and further empirical research followed in the 1990s, which led banks to incorporate credit scoring to aid assessment of small loan applications. The use of qualitative factors by bank managers also raises other issues for banks to compare and to monitor bank managers' performance and biases, something that has begun to receive the scrutiny of regulators within the banks and also externally in India.

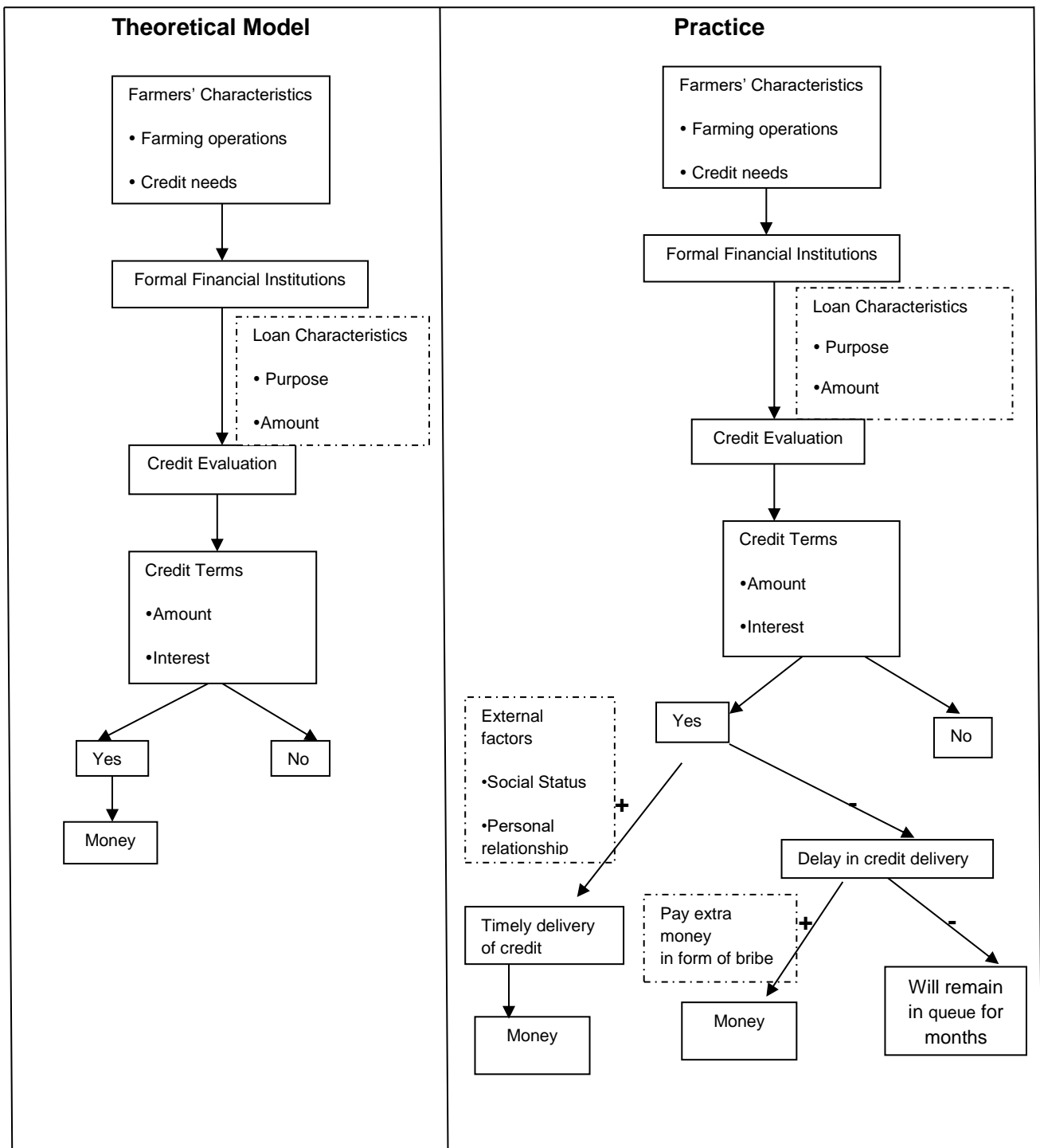


Figure I: Theoretical (Conventional) Versus Practical Models of Formal Agricultural Finance

In the context of this study, bank managers placed higher importance on two non-empirical factors, namely family status and personal relationship with the bank manager; these factors were openly acknowledged by 79 per cent of the managers in the sample to act as facilitators to obtain a loan from the bank; these factors could be considered as indirect factors affecting the decision making process. However in

reality, this give rise to questions such as, do these factors act as a facilitator or a mode of service facilitation? As the findings of this research suggest, financial institutions are not serving the needs of farmers. In addition, banks appear to be using a non-systematic approach in evaluating potential applications. Such an approach requires borrowers to have undue influence or money to use bribes to get a loan sanctioned from the bank. Forty seven (47) percent of the respondents in this research reported to have offered financial incentives or to know of someone who has on their behalf offered financial incentives to bank managers to approve a loan application and using influence or networks to gain a loan is a common practice. Such arrangements may work for a few but may not meet the needs of many, having an adverse impact on the efficient functioning of the loan markets for SMFs. Therefore, it becomes imperative to remove imprecation and improve access to finance for farmers; otherwise, if the existing malpractices remain prevalent, then they will only impact negatively on the prosperity of India and have negative socioeconomic effects.

Such practices will give rise to duality, where wealthy farmers will enjoy growth through the use of modern technology whereas SMFs will underperform. There is evidence of a rise in productivity for those who had better access to finance and modern technology (Cuffaro, 2001; Patel, 2004; Jodhka, 2006; Purohit et al, 2015; Bhattacharya, 2017; Khanal and Omobitan, 2020). In the case of India, wealthy farmers will become wealthier, whereas SMFs farmers will decline in numbers because of their inability to use appropriate technology and to obtain loans at competitive rates from formal institutions (Sharma and Chamala, 2003; Srivastva and Basu, 2004; Vaidyanathan, 2006).

Research by (Srivastava and Basu, 2004, Patel, 2004; Reis, 2006; Arner, 2007; Siddiqui, 2015; D'Souza, 2020) suggests that the proper functioning of financial institutions is a prerequisite for the economic and financial growth of a country; governments should act as facilitators and design innovative strategies and products to provide loans to the underprivileged rather than acting as controllers. Although recently, the Indian government assured that it would spend 359 billion rupees (\$5.2 billion) on doubling the income of India's estimated 120 million farmers over the next five years through measures such as better access to market and to raise the credit available to them (The Guardian, 2016). However, this improvement will not be possible until and unless policy makers and practitioners gather the courage to review

the current loan sanctioning system (Practical model shown in Figure I) rather than looking at the model in disguise (Theoretical Model shown in Figure I).

7. Conclusion

This research paper explored the relationship between financial institutions and farmers in India, an agrarian economy that is shifting its paradigm from agriculture to the knowledge based service sector. The agricultural sector is still of strategic importance, especially for states such as the Punjab which is a major producer of the country's grain. To improve the productivity and to modernise the small and marginal farmers, the banking sector practices and policies need to be reviewed and they should be encouraged through loan guarantee schemes to lend to SMFs. The government needs to exploit the flexibility and innovation of SMFs by encouraging financial institutions to be proactive, to develop financial products and to provide services that would facilitate easy access for small and marginal farmers. This research suggests that when accessing bank finance, information asymmetry is a major issue for Indian banks where farmers, especially small and marginal ones, have limited relationships with banks. Small businesses are generally conservative when providing financial information and SMFs are no exception. Information asymmetry and the underdevelopment of financial markets for small farmers has led to a financial exclusion that has had a negative impact on small and marginal farmers in India. This study confirms that small entrepreneurs, whether they are farmers or businesses, in developed countries like the UK or developing countries such as India, do encounter financial constraints; although the nature of the constraints is different. However the key difference in the case of India, referring back to traditional bank lending protocol (Model I) is that in addition to collateral, social status, caste and family background play an important role, when banks make lending decisions for SMFs. The analysis suggests that there are a variety of regulatory inadequacies and hindrances preventing the efficient delivery of finance to farmers, which may be attributed to a combination of factors. From the banks' perspectives, serving the SMFs and tenant farmers is not cost effective. Loan sizes are often small and there are too many compliance requirements imposed by the government, which adversely contribute to the finance gap for farmers. From the rural borrower's perspective, banks do not provide conveniently accessible and flexible products and services. Formal institutions have complex, lengthy and time-consuming procedures to access bank finance. Therefore,

farmers have to depend upon informal sources of finance, which are expensive, exploitative and unregulated. The study concludes that those farmers who borrowed from formal institutions experienced improvement in their economic conditions and their productivity improved too; as they improved the utilisation of technology, their investment in fixed assets, and the employment of assets that led to an improvement in the earnings of the farmers.

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