Research on Innovative Models of Islamic Banking Product for Pakistani Farmers

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Abstract Islam being a complete code of life prohibits interest or rent on money in form of money as a source of income or profit. The objective of this paper is to propose the potential application of an Islamic banking product as a substitute financial product for the agriculture sector of Pakistan.
Previous studies and economic data available by State Bank of Pakistan's web site reveal that agriculture income represents only up to 60 percent of the income of an average farm household. Nearly 70 percent of farmers depend upon the credit market for their necessities. Purchase of agri-inputs, hiring workforce and machinery are their important necessities for a farmer, which require cash. Most of these needs are financed by the middlemen who also buy the crops from farmers.
This paper attempts to present applicable models of Islamic Banking keeping in view Pakistani agri-sector, by applying innovation and can be of importance for strategic decision making of Islamic Financial Institutions.
Key words Agriculture; Islamic banking; Innovation; Pakistan

1 Introduction

Interest is strictly prohibited by Islam as an income-generating source as it is one of the HARAMs mentioned in the Holly Quran. This article explores the possible practicality of forward sale agreement "Bai-Salam" as substitute source of agri-financing under Islamic banking mode. This agreement, against the advance payments, locks the agriculture inputs with outputs. This paper may prove to be a contribution in existing literature on the topic as large numbers of Pakistani farmers are reluctant to contact financial institutions due to unavailability of adequate collateral[1] and incomplete ownership titles. Also farmers avoid interest based banking including loans due to strict prohibition by religion. It is a fact of great astonish that in country having more than 95 percent Muslims, agricultural credit based on Islamic Finance principles is not available. Therefore, financial institutions may find a strategic gap and will try to fill it by addressing the needs of this vast market.

Table 1 Supply of Agricultural Credit by Institutions (PKR in Million)

Year	ZTBL	Commercial Banks	PPCBL	Domestic Privatized Banks	Total Rs. In Millions
2005-2006	47,594.14	67,967.40	5,889.49	16,023.38	137,474.41
2006-2007	56,473.05	80393.19	7988.06	23,976.16	168,830.46
2007-2008	66,938.99	94,749.29	5931.45	43,940.92	211,560.65
2008-2009	75,138.55	110,666.00	3,538.89	41,626.33	230,969.77

Source: Economic Survey 2009-2010, State Bank of Pakistan

Agriculture credit has proved to have a large impact on the rural economy[2]. Credit fulfills capital requirements of farmers to make new investments in crops or technology. Due to rapid mechanization, use of modern seeds and pesticides and application of fertilizers are some of the important factors that have raised the need of credit for farmers. At the same time, the low yields have been observed from agri-income when compared with other sectors' returns[3]. Agriculture sector contributes nearly 22 percent of the total GDP and employs 45 percent of the total labor in Pakistan[4]. Since Land is the main acceptable collateral, the access to credit through banks is much restricted to large landlords. According to State Bank of Pakistan[5], Agriculture credit through formal channels is limited to not more than 0.57 million farmers against the potential 5.44 million clients. This situation helps informal credit (from private money lenders including middlemen), which presently contributes 72 percent to total agriculture credit in Pakistan[6]. The credit issued for growing crops by the formal credit market is hardly 5 percent of the credit issued for private sector. However, informal credit may not be as conducive to development, as it is expensive; short-term and largely used for consumption[7].

1.1 Evolution of Islamic banking in Pakistan

1.1.1 Source of guidance

The Holy Quran, being a complete code of life, also sets the foundations for a just and balanced banking and financial system which prohibits interest and allows, rather appreciate trade as an alternate. Islamic Banks are supposed to practice interest free banking operations mainly by applying profit and loss sharing schemes. They are also not supposed to participate in prohibited business such as business of liquor, drugs and pork as well as gambling. Cost plus financing on traded goods (murabaha), profit and loss sharing (mudarabah), equity participation (mushariha), leasing (ijara) and Forward sale (Bai-Salam) are some of important Islamic banking products..

1.1.2 Early attempts

In Pakistan, the history of Islamic banking starts with government's initiative of introducing interest free agri-loans in 1979 with the help of commercial banks and Agriculture Development Bank. The drive behind was to help small farmers. Credit period was one year amounting to maximum of Rs 12,000 (at that time US$ 1,000/-) against two personal sureties. The accrued interest for these loans was paid by government through central bank to lending institutions at the end of year. From 1979 to 1985, interest free loans raised to 50 percent from 30 percent. This scheme was terminated in July 1988 due to misuse in loans through proxy loaning, family loaning and paper loaning at large scale. This was the end of interest free agri-financing that continues up till now.

As another move, at the same time in 1979, government initially decided to convert interest based non bank financial institutions named; House Building Finance Corporation, Bankers Equity, Investment Corporation of Pakistan on interest free basis and allowed commercial banks to offer depository accounts on profit and loss sharing basis. From June 1985 the government ceased all commercial banks to offer interest-based products. However, all interbank transactions, government related transactions and the foreign currency accounts were allowed continue on existing interest basis. Through circular no. BCD 13, State Bank of Pakistan in 1984, encouraged commercial banks to lend on markup and on buy back agreement basis. These techniques are nothing but a hidden form of interest [8]. The Supreme Court of Pakistan declared Buy back agreement buy-back agreement illegal in 1991.

1.1.3 Modern Islamic banking.

Contemporary Islamic banking started with the direction of Supreme Court of Pakistan to the Government to put serious efforts for the conversion of the financial system from interest based to interest-free through a special task force. Gradual implementation of Islamic banking was proposed by the task force in the report it submitted in August 2001 including the opening of independent Islamic banks, allowing conventional banks to operate Islamic banking branches and allowing conventional banks to introduce Islamic banking through special counters in their existing branches. Since then six full-fledged Islamic banks, 13 conventional banks have started operating in Pakistan. At the end of June 2007 Islamic banking in terms of assets and deposits represent 3.4 percent and 3.1 percent respectively of the total banking sector in the country[9].

1.2 Bai-Salam and its application as mode of agriculture financing.

In Bai-Salam contract, in exchange of full advance payment of commodity, the delivery occurs at some future date, delivery is hence said to be deferred. (Usmani, T 1998) suggests that the basic purpose of this sale contract is to meet the needs of the small farmers who need money to grow their crops and to fuse for general consumption up till harvest time [10]. The contract is beneficial for both parties as the farmer receives the money in advance at the time of need, while the buyer normally pays the price at bit lower rates and also finds an opportunity of business and possible future profits. Bank can demand a guarantee in different forms like mortgage, hypothecation or personal guarantee to reduce lending risk. This results in shared risks as the seller through this contract transfers the risk of fluctuation to the buyer, while the buyer transfers the business related risk to the seller through guaranteed quantity and quality supply of output on an agreed future date.

This contract can become an important alternate mode of agriculture financing especially in the Muslim countries where the farmers sometimes stay away from the financial institutions due to the element of interest and inappropriate disbarment and repayment schedules of the loans and the cash flow needs of different crops [11]. In its soul, the contract of Bai-Salam is a trading contract rather than a loan. It extra has advantages in agri-financing when compared with other modes of Islamic financings such as Profit and Loss Sharing (PLS) and Bai Muajjal (sale on deferred payments). PLS requires heavy work to determine the appropriate and adequate profit and loss sharing ration. On the other hand Bai Muajjal is converse to Bai-Salam. In this contract, available commodities are purchased at time of agreement but payments are to be made at some future dates to the sellers but Bai-Salam provides cash to the farmers

when it is required (at the time of sowing fertilizing or just before harvesting). The contract is in line with the standards of modern banking. Banks deal in money rather than commodities is the only limitation in this case. To solve this problem, bank can enter into two separate but parallel contracts, one with the seller and second with the buyer of the commodity. Bank can act as an intermediary between the two parties, but important, rather necessary is that these contracts with both parties must be independent of each other.

2 Objectives

The main objectives of this paper are:

(1) To look at the possibility of Bai-Salam contract as an alternating and innovative substitute to existing agriculture interest based credit schemes.

(2) To examine current status of agricultural financing, different dimensions and identify problems related to this sector.

(3) To suggest some innovative, interest-free financing models appropriate for Pakistan's agriculture sector based on Bai-Salam.

3 Selected Literature Review

Agriculture sector have never been attractive for financial institutions specially in the case of small farmer and they have been reluctant to issue loans for them due to their failure in providing collateral, higher default risks and high transaction costs associated with small loans. Alternatively, higher interest rate is also not a solution as it results in adverse situations[12]. Binswanger and Khandker (1995) have shown the impact of formal credit in India, which is usually provided at subsidized interest rates. They found that formal credit increases income and agri-productivity and calculated that benefits exceed the cost by at least 13 percent, using district level panel data[13]. Diagne and Zeller (2001) found in Malawi that rural banks, savings and cooperative societies give priority in issuing loans to households with diversified assets portfolios and diversified incomes. Households do not consider interest rates an important factor while deciding to choose financial institution. Non-price attributes such as types of loan provided, restriction on their use as well as the non financial services provided play an important role [14]. Khandker and Faruqee (2003) examined the performance of Agriculture Development Bank of Pakistan (now ZTBL). They calculated that a 10 percent amplification in formal credit increases agriculture production cost and productivity by 1 percent while consumption increases by 0.04 percent only. They also found that hiring labor and purchasing inputs are the main uses of the credit [15]. In developing countries specially, these are the informal lenders who play the main role in providing credit to rural households. Often amounts borrowed from informal lenders are primarily used for consumption purposes, usually at very high interest rates [16]. Aleem (1990) found that nearly 33 percent of total funds utilized in informal credit transactions originate from formal credit sources. In informal market, on average 19 percent interest rate is charged, nearly 5 percent above the formal credit. He also calculated a 25 percent average interest rate on inputs.

Floro and Yotopoulos (1991) in case of the Philippines pointed out that middleman have collateral assets as well as have extensive relationships with large traders due to frequent transactions; they also possess strong knowledge of local conditions such as the harvest time, efficiency, yield and the reputation of the farmer. The authors summed up that these middlemen are usually very effective in distributing loans and handling loan repayment at harvest time[17]. Local lenders are also much familiar with the production capacity of borrower as well as they are in better position to monitor the performance and conditions due to the fact that farmers usually operate in a limited geographical area[18]. Mansuri (1998) in case of Pakistan, pointed out that it often happens in the informal market that the person with the supply of credit does not have the ability to monitor and control the person with the greatest need of credit[19]. It was also found that landless tenants borrow from landlords, and households having some land borrow exclusively from middlemen. In northern Punjab where the land is more equally distributed, the landlords contribute 16 percent in debt. Rest is almost contributed by middlemen. In contrast in southern Punjab and Sindh where landholdings are more concentrated, landlords account for almost two thirds of all informal debt held by farm households[20].

Lack of competition, political interference at top level lowers the prices paid to producers. Formers commit willful default due to political umbrella and lack of punishments[21]. Brambilla and Guido (2006) observed that farmers sell crops to institutions other than those from whom they take the loans resulting in an increased credit price resulting in less profitable cotton production and hence increase in farmer

default[22].

Khandker et al. (2006) in case of Bangladesh found that a road project resulted in increase of farm productivity and transportation demand while input costs were decreased. The authors concluded that government policymaking in credit can influence household incomes directly and indirectly via the input and output markets as well as through improved access to key facilities like health and education[23]. Renos et al. (2003) measured the transaction costs at the time of selling of crops in the market. They presented that the transaction costs play determinant role which market (farmgate, local or distant market) farmers enter[24]. Pitt and Khandker (1998) examined the impact of credit from the Grameen Bank on a variety of individual and household outcomes, including school enrolment, labor supply, asset holding, fertility and contraceptive use. Significant effects of credit on the wellbeing of small households in Bangladesh were observed in the study[25].

Literature review shows that the agricultural productivity and efficiency heavily depends upon availability of credit to farmers on proper time. Farmers go towards private money lenders and brokers who charge higher interest rates as well as tie the farmers to sell their crops at rates lower than the market rates as a result of less or no access to formal credit. At the same time, financial institutions must take necessary precautionary measures to minimize the chances of adverse situations including delayed payments and willful defaults. Last but not least, reduced costs and increased production can also be achieved by improving infrastructure in rural areas and easy access of farmers to modern technology.

4 Proposed Models for Agriculture Financing under Islamic Banking.

Keeping in view the above discussion, we hereby propose two models that can be applied by the Islamic Financial Institutions for the large customer base of agriculture sector.

4.1 Middleman as Agent or Partner Model (MAP Model)

In the first model Bank can appoint a middleman as its agent or can have a partnership agreement with middleman. Middleman points out the potential farmers from his area. The credit is issued only upon the recommendation of the middleman. The bank provides credit direct to the farmers on personal guarantee and also develops feedback system to monitor the crop. At harvest time, middleman is responsible to collects the crops from the farmers, sells it in the market and returns the bank's share in profit as per contract.

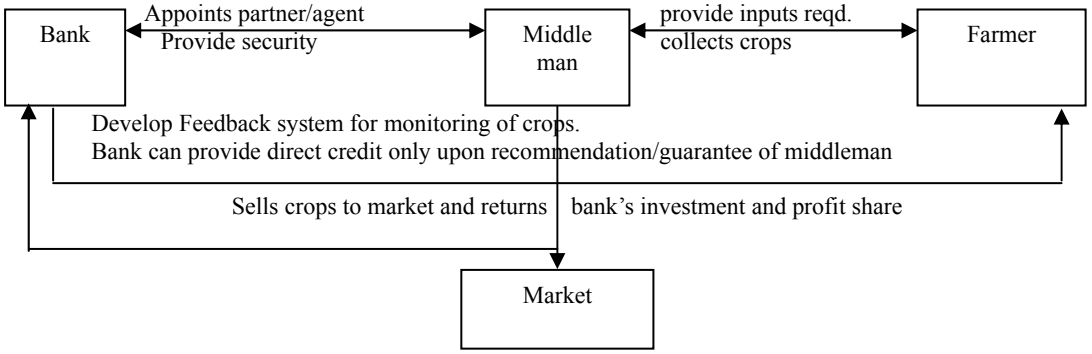

Figure 1 MAP Model for Innovative Application of Islamic Banking Product in Agri-Sector

4.2 Bank's Own Subsidiary Model (BOS)

Bank will forms a subsidiary, which can deal with the farmers on behalf of the bank. Bank provides direct credit to the farmers only upon the recommendations of its subsidiary, and when the farmers provide the required guarantees. It will be the responsibility of the subsidiary to provide technical advice, monitoring and collecting the crop from farmers. The subsidiary may also provide crop inputs for the farmers. At harvest time, the subsidiary will be responsible for selling it in the market and share the profit with the bank as well as returning the investment.

5 Conclusion

Pakistan's economy heavily depends upon agri-sector. Approximately 65 percent of the population lives in the rural areas and is directly or indirectly stakeholder in the sector. According to State Bank of Pakistan (2002), there were 3183 commercial bank branches in the rural areas with total deposits of Rs 159 billion and advances up to Rs 21.50 billion, with lending/deposit ratio of 13.44 percent. The figures

points to great scope for Islamic banks to enter in agriculture financing market. The paper tries to explore the innovative application of Bai-Salam instrument. Bai-Salam is a trade-based instrument, and against advance full payment, locks agriculture input with the output. Exploring the agriculture related problems and hurdles faced by farmers can help in proper application of this instrument. The available literature available shows that farmers hardly afford to purchase the inputs on cash. Even its tough enough for them to meet personal consumption expenses from farm income. Thus banks should take care before proceeding Bai-Salam instrument to reduce risks large-scale willful defaults.

Lastly, two innovative models are proposed in this paper for the feasible application of Bai-Salam. Banks can offer this instrument either with the help of middlemen who have insightful knowledge about the local area or they can take up the process as a new subsidiary. The ultimate objective of the proposed models is to develop such a system that can result in a win-win situation for both banks and farmers.

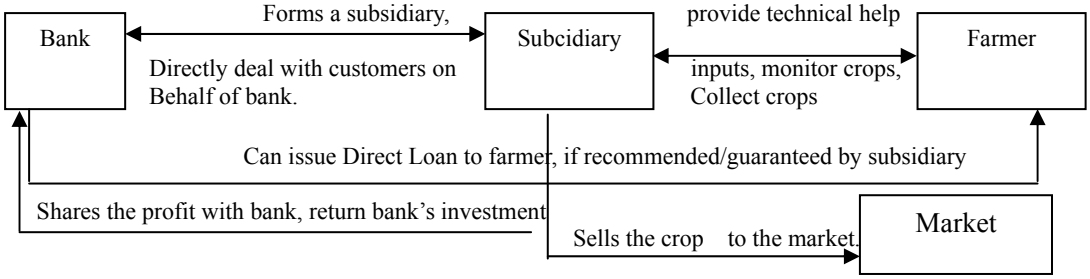

Figure 2 BOS Model for Innovative Application of Islamic Banking Product in Agri-Sector

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