

A CRITICAL EVALUATION OF MICRO CREDIT UTILIZED BY SMALL FARMING COMMUNITY: A CASE STUDY OF MANDI BAHA-UD-DIN

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Abstract

Credit is an important tool for the farming community to get command over the use of working capital, fixed capital and consumption goods. With the dawn of green revolution, there were rapid changes in crop production technology, so credit requirements have increased for Agriculture crop production. In Pakistan, agriculture is characterized as having large number of small and marginal farms with limited financial resources. To overcome this issue various financial institutions are working in the country to fulfill the needs of farmers for better agriculture productivity. This study is purposed to ascertain the impact of credit on agriculture production, linking agriculture production function as a dependent variable with the explanatory variables like agriculture credit, seed, water, labor force and other inputs like fertilizers and pesticides. By employing Cob Doughlas production function; we can filter out the real time role of agricultural credit in changing the crop production. Times series data at District level would be used to pursue the specific objectives. The study would generate helpful policy input.

Key Words: Credit, Micro Farming, Agricultural loans

Introduction

The main factors that are necessary for the agricultural growth are efficient use of agricultural input, technological change and also technical efficiency. Technological change arises as a result of research and development efforts. On the other hand technical efficiency is the adoption of new technology that is affected by the better flow of information, good infrastructure and increase availability of funds and management capabilities of farmers. Better mix of inputs always requires funds at the disposal of farmers. Farmers get these funds by their own savings or borrowings. In countries like Pakistan where savings are rare specially among

small farmers agricultural credit considered to be an important input along with technical efficiency for higher agricultural productivity (Iqbal *et al.*, 2003)

Credit plays an important role to improve the agricultural productivity and to alleviate poverty in rural areas (DFID, 2005). Credit affects the performance of agriculture in three different ways. It supports resource allocation, increases the technical efficiency of the farmers, enhance the intensity of fixed inputs (Carter, 1989). Agriculture credit is an important tool for development. It capitalizes farmers and entrepreneurs to undertake new investments of adopt new technologies. It helps smooth consumption by providing working capital and reduces poverty in the process. Both formal and informal lenders are active in rural credit market (Ghate, 1992).

In Pakistan, agriculture is characterized as having large number of small and marginal farms with limited financial resources. Because of having small land holdings and inadequate financial resources, they are unable to use inputs for higher production and to adopt new production technologies (Sarwar, 2001). It creates lower production in agriculture sector and results in many social problems like increased unemployment and poverty, So credit becomes necessary to purchase, fertilizers, pesticides, seeds and new equipment's (Umair, 1999).

Government of Pakistan provides institutional credit to the farmers through financial institutions like Zari Taraqati Bank Limited (ZTBL) formerly known as Agricultural Development Bank of Pakistan (ADBP), Commercial Banks, and Federal Bank for Cooperative. Government realizes that credit is necessary for achieving higher agriculture productivity so it ensures the timely supply of credit to the needy farmers. Commercial banks, having a large network of branches in the country including rural areas, and are playing a leading makeup in the provision of credit to the farmers and for this purpose they have initiated a number of program (Bashir *et al.*, 2007). Commercial banks reduce the losses from untimely repayment by choosing the careful management for the disbursement of credit among farmers (Anderson, 1990).

ZTBL consolidated and intensified its operation to play an effective role in financing of farm investments to modernize agriculture, increase farm production and raise farm income. The bank continued to push forward the on-going programs and projects relating to provision of credit and technology to targets covering landless, subsistence, small farmers and rural women through its credit program (Government of Pakistan, 2001).

In 1985 commercial banks were the largest credit institution in providing credit to the agricultural sector. Commercial bank' credit is chiefly to finance the seasonal inputs. They often provide long term credit 99 percent disbursement of loan by the commercial banks was in irrigated areas (NFC, 1983).

Federal bank of cooperatives are allied with the disbursement of short term loans (about 90%) for the purchase of inputs like seeds fertilizers and pesticides, on the other hand ADBP is coupled with the disbursement of medium and long term development finances for the purchase of tractors or tube wells (about 30%) estimated production function for agriculture sector stated that effect of credit comes through healthier financing of seed and fertilizer (Zuberi, 1989).

The distribution of credit in agricultural sector indicates that Government gives priority to agriculture sector. Out of total disbursements of Rs 159,281 million, an amount of Rs 111,841 million (70%) was disbursed for crop sector and small amount of Rs 23,903 million (15%) was provided to livestock sector (State Bank of Pakistan, 2008).

Research Question

- Whether agriculture credit is helpful to increase agriculture production or not?
- Is agriculture credit being channelized in right or wrong way?

- Whether agriculture credit is helpful in the improvement of agriculture crop production or livestock?
- What are the key issues being faced by the small farmers?
- What are the salient features of agriculture credit in Pakistan?

On the basis of above mentioned questions, some objectives have been set that will be helpful to achieve the answers of these questions.

Objectives of Study

- To find the impact of credit on agricultural production in Punjab.
- To examine the constraints in credit provision to farmers.
- To review the key policies in agriculture credit in Pakistan

Review of Literature

Iqbal et al., (2003) discussed various indicators of agricultural credit in Pakistan and results of an estimated production showed that institutional credit affects agricultural production positively. Water availability at the farm gate, labor, and cropping intensity are the other important variables that affect agricultural output positively. In another study Shahinfar and Sadrolashrafi., (1996). Found the role of agriculture credit in agricultural production in Khorasan province, Iran. Results had shown that credit has positive impact on agriculture production. Then Jayara (2009) also examined the role of credit in agriculture production in India. The results have shown that most of 51.67% of the farmers have received the loan amount between Rs 25001 to Rs 50000. 55% farmers cultivated Wheat out of these 60 farmers who cultivated Wheat 36.67% of farmers produced more than 20 bags of wheat.

A methodology was developed by Mian *et al.*, (1998) to measure the role of institutional credit on food grain production in Bangladesh. Multi equation model was used to measure the impact of credit on food grain production. The study suggested that credit is the main catalyst in improving per acre productivity.

The effects of agricultural credit on farm productivity and the income of the small farmer as a result of credit provided by Zarai Taraqqiati Bank of Pakistan was conducted by Noor and Mohsin., (2008). The result showed that the credit advanced by ZTBL in the study area has made positive effect on the area of wheat and maize Bertand *et al.*, (2005). Stated that state of Mato grasso has become the leading producer in soybean production. This is due to the agriculture credit Williams et al., (2007) examined the effect of micro credit on food production using a cross-sectional data obtained from both the beneficiaries and non-beneficiaries of Nigeria Agricultural Credit and Rural Development Bank (NACRDB) in Osun State. It was observed that all the variables fitted in the model have the expected sign and significantly affected the total revenue for non-beneficiaries.

A study was carried out by Nwaru et al., (2006) by using the formal and informal credit sources to examine the impact of rural credit on resource use in arable crop production. Primary data collected from random samples of 132 arable crop farmers consisting of 57 credit using and 75 non credit using farmers used. Results show that the credit using farmers are more technically efficient than their non credit using counterparts.

Shah *et al.*, (2008) conducted a study to determine the impact of credit on farm productivity. The results indicated there was the positive relationship between agriculture credit and farm productivity and the recommended that finance is the important elements in each economic activity especially in the economy where agriculture is subsistence. In another study Bashir *et al.*, (2007) examined the role of credit disbursed by commercial banks on increasing the productivity of sugarcane crop in Faisalabad, Pakistan. There was positive effect on

sugarcane production due to credit. Research was conducted in two regions of India by Selvaraj *et al.*, (1998) to find out the credit access and its effects on resource allocation and agriculture production. The study reports that access to both formal and informal credit is crucial for adoption of improved varieties and wage payments.

Yazadi and Ekhlas., (1998) compared the factors that effect on the amount of formal credit received by 135 Iranian farmers and its effect on production. They found that credit had a significant impact on production and said that in developing countries agricultural credit play crucial role in improving living standards of farmers and to increase agricultural productivity.

Uzowulu *et al.*, (2008) ascertained the relationship between credit and agricultural development. The study showed that there was a positive but inelastic relationship between credit and agricultural output. Then it was also revealed that some factors that militate against the effectiveness of agricultural credit policies include lack of viable technologies, faulty production environments and wrong opinion of the roles of credit in development. Javed *et al.*, (2006) found the effect of micro-credit provided by the Punjab Rural Support Programme (PRSP) on crop productivity of wheat and sugarcane. And it proved to be helpful in increasing crop production and improving the living standard of the farmers. Regression analysis also indicated that credit and fertilizer were important while considering increased income received from wheat and sugarcane.

Kageyama. A., (2003) used the data collected in eight Brazilian states for two groups of small family, with and without access to a credit instrument (PRONAF-National Programme for the Strengthening of Family Farming) for the crops of 2000-2001 to find out the impact of credit on agriculture productivity. Numerous features of the two groups were compared. PRONAF credit was found not to be associated with higher household income, but strongly correlated with technological variables and agricultural productivity.

Materials and Methods

The present study is based on the secondary data of 1990-1991 to 2008-2009, to be collected from various publications of Agriculture Statistics of Pakistan and Ministry of Food Agriculture and Livestock (Economic Wing) Islamabad. Agriculture production will be used as a dependent variable linked with independent variables like capital, seed, water availability, labor and other inputs like fertilizers pesticides. Credit will be used as an independent variable because it does not effect on the agriculture production directly but effect through easing of financial constraints of the producers in purchasing inputs necessary for production.

Cotton, rice and sugarcane crops of Kharif season and wheat as a major crop of Rabi season would be taken into consideration for agriculture production. These four major crops on average, contribute 33.1 percent to value added in agriculture and 7.1 percent to GDP.

Irrigation water is the scarce input in some areas of the country. Thus overtime change in number of tube wells will be considered the variable affecting the agricultural production. Chemical fertilizer is used for the fertility of the land. With the passage of the time its use has become widespread and every farmer wants to crop and harvest its benefits. To ensure its use specifically at the farm of the farmers with weak financial position it is credited in kind by the financial institutions to increase productivity production. This leads towards their justification of this variable to be included in the specified model and its considered in nutrient terms. Labour is the primary input in every sector of the economy. However, its use pattern at farm level is of great importance due to seasonality. Thus the labor force working in agricultural sector has been considered the important variable for study purpose.

Developed Hypothesis for Future Studies

- H₁: Microcredit enhance productivity of small size farming.
H₂: Microcredit strengthen the production capabilities of farmers.
H₃: Microcredit alleviate poverty in rural areas.

Conclusion

In Pakistan, agriculture is characterized as having large number of small and marginal farms with limited financial resources. Because of having small land holdings and inadequate financial resources, they are unable to use inputs for higher production and to adopt new production technologies. It creates lower production in agriculture sector and results in many social problems like increased unemployment and poverty, so credit becomes necessary to purchase, fertilizers, pesticides, seeds and new equipment's.

Credit plays an important role to improve the agricultural productivity and to alleviate poverty in rural areas. Credit affects the performance of agriculture in three different ways. It supports resource allocation, increases the technical efficiency of the farmers, enhance the intensity of fixed inputs. Agriculture credit is an important tool for development. It capitalizes farmers and entrepreneurs to undertake new investments of adopt new technologies. It helps smooth consumption by providing working capital and reduces poverty in the process. Both formal and informal lenders are active in rural credit market.

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