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Revisiting Snags for Obtaining Agricultural Credit in Pakistan: The Case of Small Farmers

Muhammad Bilal[1], Usman Shakoor[2], Ali Nasir[3], Qasim Raza[4]

[1, 2]PhD Scholar, Pir Mehr Ali Shah Arid Agriculture University Rawalpindi, Pakistan
[3]Pir Mehr Ali Shah Arid Agriculture University Rawalpindi, Pakistan
[4]M. Phil Scholar, Pakistan Institute of Development Economics (PIDE), Islamabad

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Correspondence:
Usman Shakoor. PhD Scholar, Pir Mehr Ali Shah Arid Agriculture University Rawalpindi, Pakistan

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Abstract

This paper investigates the limitations in obtaining agricultural credit and its flow between small farmers and the Zarai Taraqiati Bank Limited in Pakistan. The bank is Federal Government's dedicated institution to look after the financial matters of agriculture sector in the country. For investigation purpose, 4 villages of tehsil Samundri, District Faisalabad, Pakistan were selected. 25 respondents from each village were shortlisted through simple random sampling for interview. Application of Multiple Regression Analysis on the data obtained from respondents revealed that tenancy status, interest rate, collateral and payment were constant because of bank policy which needs to be reviewed. The regression coefficient of number of visit was highly significant, repayment (lump sum/installment) was non-significant and for time (in time/delayed) it was significant and negative which suggested that the farmers were not ready to accept delayed in loans in the study area. The regression analysis also complies with information received from the sampled farmers when percentage analysis test was applied. However, asserts this paper, the future for small farmers need not to be dark, if one recognizes that the resource constraints limiting them is basically a matter of organizing them.

Introduction

Pakistan is blessed with plenty of natural and human resources i.e. mountains, fertile lands, lakes, efficient and effective irrigation systems, variety of seasons, comparatively more productive agriculture sector and skilled human capital. Agriculture sector is still the single largest sector of the economy that contributes nearly 21.1 percent to Pakistan's national income and provides work for almost 43.7 percent of its workforce (Government of Pakistan, 2013-14).

To achieve revolution from subsistence agriculture/farming to commercialized one, agricultural credit is one of the most important contributing factors to attain the goal. Agricultural credit is an essential part of growth which aid in introduction of innovativeness in agriculture and also the

commercialization of the rural economy. On the other hand, despite of substantial efforts to modernize, strengthen and institutionalize the agricultural credit system, the realization falls short of assertions, policies and programs. Unless agriculture credit is scientifically institutionalized for small farmers, agricultural growth cannot be materialized in Pakistan. Due to small land holdings in the country, the yield of crops and thus the income is low that results in extremely diminutive saving among farmers of Pakistan. Therefore, it is dire need of time that credit agencies to come front to help farmers in undertaking the enhanced farm practices (Bashir & Azeem, 2008).

Credit provision to agriculture sector has augmented swiftly over the previous decades. It resulted in increased use of biocides, fertilizers, superior seeds, mechanization, and rise in the prices of these variables.

Looking at the agricultural credit system of Pakistan, it consists of non-institutional sources as well as institutional source of credit. The non-institutional sources include acquaintances, family, commission agents, traders and private moneylenders etc. The institutional sources include financial institutions like Zarai Taraqiati Bank Limited (ZTBL), commercial banks, and Federal Bank for Cooperatives. In recent times, some non-government organizations are also disbursing agricultural credit to the rural societies (Iqbal, et al., 2003).

It is beyond doubt that credit is a key element in modernization of agriculture. Not only, credit removes a financial constraint, but it also accelerates the adaptation of new technology. The government of Pakistan is running numerous programs to provide required amount of credit to farmers, particularly to small ones.

In a dynamic economy, there is always a continuous need for research regarding different aspects of credit, particularly the constraints in the flow of this important input to the target farmers. ZTBL disbursed Rs. 64.133 million in the year 2012. The share of production loan was Rs. 52.015 million and share of development loan was Rs. 12.118 million. Similarly, the mark up rate was 8% p.a for production loans and 13.25% p.a. for the development loans (ZTBL, 2012).

Present study was undertaken to review the current position of agricultural credit with a view to identify the constraints in the flow of institutional credit to farmers especially the small ones and to suggest improvements in the present system so as to make it more responsive to present day requirements of increasing production. The results of this

study will be of great significance for credit institutions and ultimately for the farming community. It will bring into light the problems having strategic policy implications for the reformulation of the policy for credit supply by the institutions and the government. The study in hand, thus, addressed to the following specific objectives.

- To identify constraints in getting agricultural credit to the small farmers.
- To evaluate the operational mechanism for disburse credit to small farmers from (ZTBL) Samundri.
- To suggests measures for improvement of the constraints faced by the small farmers in getting credit.

Methodology

This study was confined to Tehsil Samundri, District Faisalabad, Pakistan. Simple Random Sampling Techniques was exercised. All estimations are carried out by SPSS. Data was randomly collected from the four different villages of Tehsil Samundri.

Selection of Villages

The list of the villages of Tehsil Samundri was obtained from district headquarters. Four villages were selected randomly from the list. The details of these villages are; Chak no 476 G.B, Chak no 478 G.B, Chak no 213 G.B and Chak no 217 G.B. These villages are situated at a distance of 10 to 12 kilometers from the ZTBL branch of the Tehsil Samundri.

Selection of Respondents

Through preliminary survey, it was found that there were 133 villages in the study area. List of small farmers' loaners of landholding up to 12.5 acres was obtained from ZTBL. Hundred small farmers in total (both owner and tenant) and 25 from each village were selected randomly. The dependent variable in this study was the gross amount borrowed by small farmers from ZTBL's Samundri Branch for production purposes. The equation is under;

$$\mathbf{Y=f\{X_1,X_2,X_3,X_4,X_5,X_6,X_7,U\} \ldots\ldots\ldots\ldots(1)}$$

Where 'Y' is the gross amount borrowed.

Replacing the X's with the variables the equations (1) becomes;

Y= f {Tenancy, Collateral, Interest Rate, Repayment, Number of visit as number of days spent by applicant, Payment, Time, Error Term} ……(2)

Regression on Dummy (0, 1 technique) Variables

Factors and levels: It was necessary to describe different terms used during

regression. The word 'factor' denotes a variable. The categories into which each factor has been divided are called level of that factor. The use of 'factor' in place of 'variables' emphasizes that what is being called a factor cannot be measured precisely by cardinal values. On the other hand, the term 'levels' emphasizes that the grouping of a factor are just arbitrary divisions with no imposition of allotted values.

Factors	Levels
X_1=. Tenancy	Owner= 0
	Tenant=1
X_2= Collateral	Security=1
	Surety =0
X_3= Interest rate	Interest free =0
	Interest bearing =1
X_4= Repayment	Lump sum =0
	Installment =1
X_5=	Number of visit as number of days spent by applicant
X_6= Payment	Cash=0
	Kind=1
X_7= Time	Delayed =1
	In time =0
U=	Error Term

Percentage Analysis

Percentages will be calculated using the following formula;

$$P = N / n * 100$$

Where,
P= percentage
n= number of observations in a particular group
N= total number of observations

Results and Discussion

This section deals with the primary data collected from the sampled farmers. It also includes regression coefficient results, percentage analysis and the constraints faced by the sampled farmers. Mostly, the farmers of the study area were small and medium but as the study target was to concern small farmers only, about 46 % of the respondents were having the land ownership less than 5 acres which makes them to lowest level preference by the institution for advancing credit. As given in Table 1

Table 1: Percentage of Sampled Farmers With Respect To Land Holdings

Area in acres	No of farmers
2	15
3	18
4	13
5	10
6	5
7	3
8	7
9	4
10	11
11	6
12.5	8
Total	**100**

About 55 % of the sampled farmers reported that they faced difficulty for getting credit because of the delayed timing. The delayed credit to the sampled farmers make negative impact on their crop yield, because timely provision of credit could make their process of acquiring farm inputs feasible and attaining better yield as given in Table 2.

Table 2: Time for Getting Credit by Sampled Farmers

Time for getting credit	No. of Respondents
Delayed	55
In time	45
Total	**100**

Numbers of visit for getting loans were generally of high significance with respect to the respondents and study requirement. About 47 % of respondents reported that they had to make more than 5-8 visits for getting credit. As given in Table 3.

Table 3: Number of Visits by the Sampled Farmers for Getting Loans through ZTBL Samundri

No of visit	Total no farmers
2	15
3	18
4	30
5	25
6	7
7	5
8	10
Total	**100**

Sampled farmers opinion about the general behavior of the lending staff for sanctioning loan observed oppositely as described by the

bank official. About 65% of farmers were with the negative opinion regarding behavior of the lending staff. This is an alarming situation and critical finding of the study. As given in Table 4.

Table 4: Sampled Farmer's Opinion about the General Behavior of the Bank Staff for Sanctioning Loan

Categories	Sampled Farmers Opinion
very good	0
Good	10
Satisfactory	25
Bad	65
Total	**100**

An interesting observation recorded through the respondent interviews on the part of the credit institution is that they give preference to institutional credit not only due to less corruption but because surety is not pre-requisite and loan is advance in cash and in sufficient amount as given in Table 5.

Table 5: Reasons for the Preference of Institutional Credit Reported by the Sampled Farmers

Reasons	No. of Respondents
Timely provision	45
Loan in cash	30
Sufficient amount	15
Less corruption	5
Surety not required	5
Total	**100**

Gender Imbalance

Another hindrance in slow prosperity of commercialization of agriculture sector is due to lack of participation by the female segment of the society in obtaining agriculture credit. Out of 100 respondents, only 1 female borrower was recorded. This suggested that women's access to farm credit was very less in the study area.

In a similar study conducted by Fletschner (2008), she assessed that most of the studies in which impact of credit constraints on farm households' efficiency are estimated, have largely used the household as the unit of analysis. This could be problematic when there are gender-based market imperfections and asymmetries in how rights, resources, and responsibilities were distributed within the household. Constraints on women matter: in addition to the efficiency loss associated with the husbands' credit constraints, when women were unable to meet their needs for capital; their households experienced an additional 11% drop in efficiency.

Regression Analysis

In the regression equation, all the variables (factors) were 'dummy' except number of

visits. For dummy variables '0, 1 technique' was used. As the result showed that F- value was about 46.466 which is highly significant (at 0 percent level of significance) as shown in Table 6. This suggested that variable included were important. The model 'R' is 0.77 and 'R square' is 0.592 respectively.

Table 6: Model Summary

R	R Square	Adjusted R Square	Std Error of the Estimate	Change Statistics				
				R Square	F Change	df 1	df 2	Significance Level
0.77	0.592	0.579	2192.51	0.592	46.466	3	96	0

Note: *All estimations are carried out by SPSS*

After the analysis the results showed that the tenancy status, interest rate, collateral and payment were constant. The same type of relationship was found by Freeman et al., (1998). They conducted study about the assessment of farmers' credit and revealed that constant condition is important in order to understand the circumstances under which credit would have its greatest impact.

No consistent relationship was found between farmers' credit constraint condition and their borrowing status. Most of the variation in milk output per farm was explained by the number of crossbred milking cows in the dairy herd. As credit is likely to facilitate investment in crossbred dairy cows it will have substantial impacts on smallholder dairy farms especially if it is targeted to credit constrained farms.

In the present study because these variables were included in bank policy and remain same for all the respondents of the study area. The

Bank has a fixed policy. It never advanced loan to the tenants; surety must require for all the respondents. All borrowers should be interest bearing as bank disbursed credit at 8 % rate of interest and payment was in cash to small farmers generally for the production loans. These were the precondition by the bank which makes credit constraints for the small farmers because to meet these conditions is not possible by most of the small farmers working in that area. This is a drawback from the institutional point of view. For the suggestion to meet such circumstances, Nelal and Marshall (1999) conducted a similar project. One of the project components is small scale credit for rural farmers. The framework examined the desirable preconditions, the strategic

considerations, the optimum credit delivery systems and operational requirements to address the current constraints. The conclusion of the study reflects the need to test these assumptions and to discuss the feasibility of using the policy framework with those empowered to implement the strategies. These projects should initiate in our country for the assessment of the farmers needs and the ground realities by the formal credit institutions.

In another study Santonu (1997) examined why institutional credit facilities remain unable to extend credit to rural poor. Analysis indicates that poor farmers were not in position of producing mortgages but could only share their future harvest which is also subject to risk and uncertainty. Consequently moneylenders could not advance loan without surety. Moneylenders advance loans to ensure that their own income would not affect by the farmers financial situation. An extension of institutional credit to farmer's results only in subsidized of landlords. Major portion of loans goes to large farmers because of illiteracy of small farmers.

Elasticity's of the Variables Used in the Study

The regression coefficient of number of visits was highly significant as shown in Table 7. This suggests that more number of visits only makes it possible to get the gross amount borrowed from the institutional sources.

Table 7: Elasticity's of the Variables Used in the Study

Model	Un standardized Coefficients		Standardized coefficients	T	Sig	95% Confidence interval for Bound	
	B	Standard Error	Beta			Lower Bound	Upper Bound
(Constant)	-21086.8	7419.468		-2.842	0.005	-35814.35	-6359.301
Repayment	2595.32	5183.168	0.039	0.501	0.618	-7693.186	12883.826
Visit	22207.807	2391.999	0.931	9.284	0.00	17459.726	26955.888
Time	-18680.1	6502.525	-2.8	-2.873	0.005	-31587.54	-5772.725

Note: *All estimations are carried out by SPSS*

In other words, it was a constraint for the farmer's point of view because the transaction cost become high as the number of visit increases and their time was wasted. They have to travel more for obtaining the Pass-book. The procedure for obtaining the Pass-Book was also complicated as reported by the sampled farmers. Similar constraints were found by Sarfraz et al., (1984). He reported that during the first 9 years since the inception

of the pass book system, the pass books were issued to only 29 percent of small farmers as against 91 percent of those owning land above 50 acres. Moreover, although the official fee payable for a pass book was Rs.6, Rs.205 was the price which had to be paid to obtain it. This high price was due to illegal gratification to revenue staff.

The regression coefficient of repayment (lump sum/installment) was non-significant because of varying repayment mode and rate of sampled farmers. Similar study was conducted by Sjah et al., (2003). He analyzed that performance of credit in terms of agricultural production, farmers' earnings, credit repayment, and factors contributing to the performance. A survey conducted in Central Lombok, Indonesia, where the current KKP government credit scheme is provided to agricultural producers. Three villages within the regency were sampled, representing various repayment rates of government credit. Data were collected using face-to-face, semi-structured interviews with 65 farmers who made use of government or other sources of agricultural credit. There was a varying repayment rate by individual credit users, which reflected farmers' capability, character, and motivations.

Similarly regression coefficient of time (in time/delayed) was significant and negative which suggested that the farmers were not ready to accept delayed loans in the study area. The delay in credit as reported by sampled farmers was due to corruption as table no. 5 of the sampled farmers showed that the only 5 % respondents out of 100 reported against corruption 95 % said that the element of corruption matter a lot. Similar results obtained by Chaudhuri and Gupta (1996). Their paper presented a theory of interest rate determination in the informal credit market in backward agriculture. The market for informal credit was created by the delay in disbursement of formal credit. The delay was controlled by the official of the formal credit agency, and he was bribed by the farmer to reduce the delayed. The official and the moneylender play a non-cooperative game in choosing the bribing rate and the informal interest rate, respectively. The informal sector interest rate and the effective formal sector interest rate (incorporating the bribe) were equal in equilibrium. Agricultural price and credit subsidy policies may raise the interest rate in the informal credit market.

Conclusion

The study presented in this paper is left with this conclusion and suggestion for policy makers that the formal institutes especially ZTBL should relax the small farmers in collateral and tenancy condition because

many farmers are involved in agriculture farming but have no land. They usually have land on rent for farming or working as tenants. ZTBL in these conditions is not advancing loans for these farmers.

If this policy i.e., advancing the loans to farmers who have rented land or are tenants will be adopted then the contribution of agriculture sector in national economy can become more significant. This will allow these farmers to adopt better and advanced mode of production to increase not only production but also the yield.

In addition to this, time for disbursing loan should be minimized and interest rate should be minimized. It will be beneficial if a framework is chalked out to ignore the interest rate on the agriculture credit

References

[1] 1. Bashir, M.K. and M.M. Azeem, 2008. Agricultural Credit in Pakistan: Constraints and Options. Pak. j. life soc. sci., 6(1): 47-49.

[2] 2. Chaudhuri, S. and M.R. Gupta, 1996. Delayed Formal Credit, Bribing and the Informal Credit Market in Agriculture: A theoretical analysis. Journal of Development Economics, 51: 433-449.

[3] 3. Fletschner, D., 2008. Women's Access to Credit: Does It Matter for Household Efficiency. Amer. J. Agr. Econ., 90(3): 669–683.

[4] 4. Freemana, H. A., K. Ehuib and M.A. Jabbar, 1998. Credit constraints and smallholder dairy production in the East African highlands: application of a switching regression model. Agricultural Economics Volume, 19(1-2): 33-44.

[5] 5. Government of Pakistan, 2013-14. Economic Survey of Pakistan. Economic Advisor's Wing. Ministry of Finance, Islamabad.

[6] 6. Iqbal, M., A. Munir and A. Kalbe, 2003. The Impact of Institutional Credit on Agricultural Production in Pakistan. Pakistan Institute of Development Economics, 42(4 Part II): 469–485.

[7] 7. Nela1, N. and D. Marshall, 1999. Credit Management for Rural Development: Albania, a Special Case. Public Administration and Development, 19: 165-177.

[8] 8. Santanu, B., 1997. Why institutional credit agencies are reluctant to lend to the rural poor: a theoretical analysis of the Indian rural market. J. world develop. Rev., 25(4): 267-280.

[9] 9. Sarfraz, K. Q., A. Kalbe, A. N. Siddiqui and E. Ghani, 1984. Rural Credit and Rural Development: Some

Issues.1984. The Pakistan Development Review. XXIII(2 & 3): 273-285.

[10] 10. Sjah, T., C. Donald and L. Russell, 2003. Factors Contributing to the Performance of Agricultural Credit in Lombok Indonesia. Presented at International Farm Management Congress 2003. Available at: Onlineatifmaonline.org/pdf/congress/Sjah%20Cameron%20Russell.pdf.

[11] 11. ZTBL (2012). Available at: http://www.ztbl.com.pk/AnnualReports.aspx.