

Enhancement Of Wheat Productivity Through Credit Program Of Zarai Tarqati Bank Limited In Rural Areas Of District Mardan Khyber Pukhthun Khawa Pakistan

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ABSTRACT: Credit play key role in the development of agriculture. Farmers get loan from different sources from friends and banks for purchasing their inputs in the time of sowing for productivity increasing. The present study was carried out in rural area of District Mardan December 2012. The major objective was to see the effects of the credit program of ZTBL on wheat productivity in the study area. Three tehsil of district Mardan namely Katlang, Thakht Bai and Mardan were selected. On the basis of more beneficiaries of the bank two villages from each tehsil were chosen. The total number of the credit beneficiaries was 260 while the number of wheat growers was 243. All 243 wheat growers were selected for the study and through questionnaire schedule data were collected from the respondents Descriptive statistics paired t-test and correlation were used for data analysis. The average yield, cost and return per hectare were found more than before and highly significant which shows the positive effect of the credit program on the wheat productivity. During survey large number of problems, such as shortage of finance, high costs, non availability of quality seeds, high interest rate, complicated procedure of the bank, non availability of loan in time etc were observed in the growers field. On the basis of problems recommendations were suggested for problems solution which is given as loan should be provided to farmers according to inputs requirements; in time availability of credit is requested; low interest rate should be imposed on the loan by bank; one window operation policy should be implemented by bank and loan provision to tenants were suggested for boosting the wheat productivity in the study area etc.

Key words: Enhancement, Credit Program, Wheat Productivity, Rural Areas

1. INTRODUCTION

Agriculture is still the largest sector of Pakistan economy. Its contribution in GDP is 21.4 percent and employments share in labor force is 43.7percent while in export is 70%. Agriculture sector consists of sub sectors which include crops, vegetables, fruits, livestock, fisheries and forestry. The crop sub sector is further divided into important crops, other crops, cotton and ginning. The important crops account for 25.24 percent of agricultural value added and registered a growth of 2.3 percent compared to a growth of 7.6 percent last year. The important crops including , maize, wheat, rice, sugarcane and cotton witnessed growth in production of 6.7 percent, 3.23 percent, 10.05 percent, 6.98 percent and -4.19 percent respectively (GOP, 2013-2014). Food is essential element for survival of life. Wheat play pivotal role in contribution of human diets. Wheat (*Triticum aestivum* L.) belong to family Poaceae (Gramineae) and is an annual self pollinated, photo periodically long day cool season cereal crop and famous all over the world with respect to area and production. It was first cultivated in the Middle East probably in Iraq, Turkey or Syria. In prehistoric times it was also cultivated in Europe and was considered most valuable cereals of ancient Persia, Greece and Egypt. Australia, Argentina, Canada, China, France, India, United States of America and Pakistan is the leading countries for wheat production (FAO, Statistics, 2007). According to Economic Survey of Pakistan 2012-13, in 2005-06 the total area under wheat in Pakistan was 8448 million hectares while in 2009-10 the total area was 9042 million hectares, so the percent change increase is 7%. The total production in 2005-06 was 21277 million tons while in 2009-10 was

23864 million tons, so the increase change is 12%, however productivity in 2005-06 was 2519Kg/ha while in 2009-10 the productivity was 2936Kg/ha, so the percent change is 16%. The Agricultural finance is an important financial support to farmers for fulfilling their financial requirements for farming activities which fill the gap between their income and expenditure in farming operation. Farming not only requires finance for quality seeds, fertilizer and modern equipments but also requires liquid capital for other activities of the farm (Iqbal et.al, 2003). In Pakistan, there are two type of credit, formal and non formal. Formal credit is institutional credit which provided to farmer by institution such as ZaraiTarkiati Bank Limited (ZTBL), commercial banks, cooperatives and domestic private banks while non formal credit is the non-institutional credit which links with friends, neighbors, and professional money lenders in the country (Idress and Ibrahim, 1993). Government of Pakistan give high priority to ensure the timely availability of finance to the farmers for achieving higher production. Finance requirements of the farming community have shown an increasing trend over the years. Therefore, agricultural finance was increased by the government from Rs.42852. Millions to Rs.215965.34 millions during 1998-2011 while in 2011-2012 it decreased 66% due to unavoidable situation in the country. Institutional finance to the farmers is being provided through ZTBL, Commercial Banks, Cooperatives and Domestic Private Banks (Economic Survey 2011-12, Economic Affairs Finance Division, Islamabad). Access of small and marginal farmers to micro finance can significantly help them to avoid sliding down the poverty ladder. Providers of the micro finance have not generally

addressed the credit need of the small and marginal farmers because of their priority of funding to the poor and some other problems which include (a) risk of investment in agriculture; (b) Seasonality of agricultural production; (c) Poor loan repayments, performance of agriculture lending; and (d) technical nature of an agriculture production system. As far the institutional finance is concerned, the small and landless farmers find it very difficult to avail it due to lack of availability of collateral and complex procedure to be followed. There is, therefore, a dire need to start a finance program to benefit the maximum number of poor communities without any complicated collateral system (Ahmad, 2007). In Pakistan number of initiatives in the recent past was started to provide financial assistance to farmers, to improve the farm productivity and socio-economic condition of the farmers. One of these initiatives is the emergence of the micro- finance Khushali bank in the country. The study was conducted to examine the effects of Khushali Bank Limited finance program on agricultural productivity and problems/constraints faced to farmer in the study area. The result of the study revealed that the availability of finances by bank showed a significant increase in the production of crops such as wheat, maize, sugarcane, tobacco, poplar while Such type activities also increased 16% income of the respondents in the project area. The less amount availability and high interest rate was found a barrier to farmer in taking loan from the bank. The respondents considered the amount Rs.12880 to each one by bank non sufficient for their field requirement. During survey it was also recorded that the interest rate was higher for uplifting their economic condition. The result also indicated that the outskirts farmer of the villages could not obtain profit from loan of the bank (Khan and Jan, 2012). Seeing to its vitality the cited title study was selected .The major objectives were:- i)to see the effects of ZTBL, credit program on wheat productivity on various size of farms (ii) to identify problems and constraints faced by farmer in financing procedure (iii) Recommendations for improvement of ZTBL’s finance program for agricultural development and enhancement of wheat productivity in the study area

2. MATERIAL AND METHODS

The study was carried out in rural area of District Mardan which consists of three Tehsils namely Mardan, Thakth Bahi and Katlang. Purposively on the basis of more beneficiaries two villages from each tehsil namely Gujar Garhi, Rustam, Lund Khawar, Shergarh, Katlang and Jamal Garhi respectively were selected. All beneficiaries consist of 260, and out of which 243 wheat growers tehsil Mardan 61, Thakth Bahi 65 and Katlang 117(in Gujar Garhi 38, Rustam 23, Lundkhwar 37, Shergarh 28, Katlang 66 and Jamal Garhi 51) were chosen for the study. Through questionnaire schedule data were collected from the respondents. Descriptive statistic, paired t test, and correlations were used for data analysis.

3. RESULT AND DISCUSSION

Table 1: Literacy Status of the sampled respondents in the study area

Particular Item	Frequency	Percentage
Illiterate	56	23
Literate	187	77
Total	260	100

Source:-Field Survey 2012

Table 1 indicates the Literacy status of the sampled respondent in the study area. According to table 23% is illiterate while 77% literate. Accordingly the Literacy rate is better than Pakistan Literacy rate which is 58%, Sind and Punjab 60% followed by Khyber Pukthunkhwa 52% while Baluchistan 46%(Economic Survey of Pakistan 2012-2013). Consequently it is a good sign for the farming community; in view of the fact that literacy play critical role in the development of a country. Literate farmers more easily absorbed the modern technology for enhancement of their field productivity than uneducated farmers. They read the research publication and pamphlets with no trouble. Through this way they improve their skill in farming and use in the fields and increase their farm productivity, which improve their standard of livelihood and enhance the GDP of the Nation.

Table 2: Educational Status of the Sampled Respondents in the Study area

Educational Status	Frequency	Percentage
Primary	20	11
Middle	32	17
Matric	65	35
F.A/F.Sc	28	15
B.A	31	17
M.A	11	05
Total	187	100

Source:-Field Survey 2012

Table 2 Shows the educational status of the sampled respondents in the study area. According to table primary strength is 11%, middle 16%, Matric 35% , F.A/F.Sc 15%, B.A 17% and M.A 5%. The data indicate that very few farmers have degree of M.A education even as, majority are matriculates followed by middle. The high level struggle for other jobs in the country, to earn more than farming, hence they do not take keen interest if job available in other sector of the economy.

Table3: Tenancy Status of the Sampled Farmers in the Study area

Particular Item	Frequency	Percentage
Owner	233	96
Owner-Cum-Tenant	010	04
Tenant	000	00
Total	243	100

Source:-Field Survey, 2012

Table 3 indicates the tenancy status of the sampled wheat growers in the study area. According to table 96% is owner, 4% owner Cum tenant while tenant is Zero. So the table data explains that the loan has given to only owner and owner cum tenant farmer while the real cultivator has missing by bank and have not provided loan by bank due to lack of land and collateral non availability..

Table 4 Distribution of Various Size of land in Hectares of Wheat growers and Correlation between land size and Wheat Productivity in the Study area

Various Size of Land	Frequency	Percentage	r=-.113 P=.079
1-5	219	90	
5-10	015	06	
10-15	005	02	
15-20	002	01	
Above-20	002	01	
Total	243	100	

Source:-Field Survey

Table 4 reveals the distribution of Various Size of land in Hectares of sampled farmers in the study area. According to table the coverage of 1-5 hectare category is 90%, 5-10 6%, in 10-15 the share is 2%, while 15-20 and above 20 hectares, the growers were found only 1%. Majority farmers were below 5 hectares land category. It also shows that economic holding farmer percentage is less than the non-economic holding farmer. Through heredity division the land divided into small pieces, generations after generation in the study area which have abolished the power of the Khanisam . The correlation between land size and per hectare wheat productivity was -.113 and non significant at .05 level while significant at .10 level. It shows that if one unit of land size increases then 11.3% negative change will be occurred in the wheat productivity in the study area. It also explain that land increasing affect the cost positively and lack of required inputs availability, the productivity per hectare also negatively affected.

Table 5: Type of Credit Availed by sampled Farmers in the study area

Type of Credit	Frequency	Percentage
Short Term	111	46
Medium Term	128	52
Long Term	004	02
Total	243	100

Source:- Field Survey 2012

Table 8: Average Yield, Cost and Return of the Wheat Crop per Hectare in the Study Area

Items	After Credit	Before Credit	Dif	Percent change	D.F	t-values	P-values
Yield (Kg)	3195	1962	1233	63	242	24.23	.000
Cost (Rs)	34324	18250	16074	88	242	6.10	.000
Return (Rs)	76688	31389	45299	145	242	36.87	.000

Source:- Field Survey 2012

Table 8 reflects Average Yield (Kg) cost and return of the Wheat per Hectare in the Study Area. According to the table, the average yield after credit was 3195Kg/ha and before credit was 1962 Kg per hectare. The percent increase

Table 5 reveals Type of Credit availed by sampled farmer in the study area. According to table the share of Short Term by sampled farmers is 46%, Medium Term 52% and Long Term 2%. The table explains that the Medium term exposure is higher than the other followed by Short term while long term counted only 2% It also shows that the economic holding farmer is less than the other farmer..

Table 6: Total Amount (Rs) of Credit Dispersed by ZTBL among Sampled Farmers in the Study Area

Type of Credit	Amount(Rs)	Percentage
Short term	9189000	17
Medium term	43736000	79
Long term	2550000	04
Total	55475000	100

Source:- Field Survey, 2012

Table 6 shows the total amount of credit dispersed by ZTBL among sampled farmers in the study area. According to table short term allocate 17% amount to sampled farmers, medium term 79% and Long term 4%. The medium term amount is more than the other terms followed by short term. The Long term credit share is very small in the project area. It shows that the bank do not focus highly on Long term credit and link extremely with medium term credit followed by short term. The data explains that the capability of long term credit investment in the project area is slow and the farmers have not applied more number to this credit excessively while the farmers take high interest in the other two types of credit due to their economic holding and capability in the study area

Table 7: Continues Status of Finance Program by Sampled Wheat growers in the study area

Particular item	No	Percentage
Yes	171	70
No	072	30
Total	243	100

Source:-Field Survey 2012

Table 7 shows continues status, of finance program by sampled wheat growers in the study area. According to table 70% has continued the finance program while 30% wheat growers has discontinued the program and told that due to late payment, religious tension and due to insult, they have discontinued the loan from the bank.

was 63 percent; t-value 24.233 and P value .000. So, the null hypothesis was rejected and the result was found highly significant at .05 levels, which show that credit program had positive effects on wheat productivity in the study area.

Javed et al. (2006), Khan et al. (2007) and Syed (2012) examined that the beneficiaries' yield was found more than the non beneficiaries due to efficient utilization of the credit in the study area. The present research is also supported by this statement. Claessens et al. (2006) found that credit application had not only increased the productivity of the wheat, but also had played crucial role in consumer surplus increasing and undernourishment decreasing. However the present research has also solved the problem of food crisis, through wheat productivity increasing, and decreased undernourishment in the study area. However the most of researchers highly focused on the return, while did not highlight the undernourishment reduction and consumer surplus in their studies, because the main problem is the solution of the food crisis. The table further explain the Average cost (Rs) of the Wheat per Hectare Yield of the Respondents in the Study Area. According to the table, the average Investment after credit of per hectare was Rs.34324, while before credit was Rs.18250. The percent change in per hectare Investment was 88% and t-value was 6.100 with p-value .000. Therefore, the hypothesis was rejected and the result was found highly significant. Similarly, Matsumoto and Yamano (2010) reported that low return was obtained due to low output price and high input Investment of agricultural production. The present study also supported this statement, because the farmer produced more production, while due to low price of the crops and high Investment of the inputs, the farmer get the less net return from their crops. So, prices discourage the net return of the respondents, while due to low return the farmers turn to other crops cultivation i.e. the sugarcane 750 Kg Gur value in 2008 was Rs.10000 while in 2011, its value was Rs.5000, while the inputs Investment value was found more than before credit, because of this the farmer turn to wheat cultivation due to high price of wheat crop and left the sugarcane cultivation. So, price has played crucial role, in the increase of yield of wheat. According to table the average return (Rs) per hectare of the wheat crop after credit was Rs.76688/ha and before credit was Rs.31389/ha. The percent change was 145%, while the t value was 36.873 with p value .000. So, therefore the hypothesis was rejected and the result was found highly significant at .05 levels, which show that after credit the price of the wheat raised to high level and return was found more than before credit. The factors behind the price upward movement was the cost push and demand push inflations. The benefit Investment ratio before credit was Rs.1.71 and after credit was Rs.2.23 and the increase was 30%, so, it shows that before credit one rupees investment return of wheat was Rs.1.71, but after credit the one rupees investment return was Rs.2.3 rupees in the study area and it shows the positive effect of the credit. Claessens et al. (2006) found that financial sector development significantly reduced hunger and price hike, which was inversely related to the return of the farmer, while the researchers only see to the farmers return and do not focus on the consumer surplus and undernourishment in the study area, while in the present study the credit played crucial role in both consumer surplus and undernourishment and give tremendous role in food crisis solution.

Table. 9: Problems and Constrained Faced to Sampled Wheat Growers by Bank in Taking Credit in the Study Area

Problem	Yes	%	NO	%	Total	%
Non availability of credit in time	144	59	99	41	243	100
Complication of Passbook preparation by PatwariHalqa	157	65	86	35	243	100
Non Availability of collateral	138	57	105	43	243	100
Non-Co operation of Bank Staff	103	42	139	57	243	100
Amount less than requirement	146	60	97	40	243	100
Bank away from the community	125	51	118	49	243	100

Field Survey, 2012

Table 9 shows the problems and constrained faced to sampled farmers by bank in taking credit in the study area. According to table 59% reported that credit is not available in time by bank because of this they do not purchased inputs in time for their farming. Sixty five percent claimed that the passbook preparation was very complicated and patwari halqa did not prepare the passbook in time and use delay tactics and demand for money. Through this way the influential people very easily prepare the passbook. Fifty seven percent told that non availability of collateral is very serious problem in the study area. Due to police arrestment the people of the area do not ready for collateral for signing the form. Fourty two percent recorded that the bank staff do not co-operate with us and meet with rude behavior, through this way they disappointed from them and later on sell the land and pay the amount to the bank while in future do not take interest in bank loaning. According to result 60% said that the amount is less than requirement and do not fulfill their field requirement for crop productivity. Fifty one percent claimed that the bank is away from the farming community and very easily cannot obtain the loan from the bank.

4.CONCLUSION AND RECOMENDATIONS

The study finally concluded that ZTBL Finance program has positive effects while some problems affect the productivity negatively, so its solution is required in time. The lately amount payment by bank affect the inputs purchasing power in time in the study area. Impolite behavior by bank staff decreases the interest of farmers for future loan enchanting. Police arrestments create fear and terror, decrease the loan numbering in the study area. Some recommendations are given for its solution; interest rate should be decreased; one window operation policy should be applied by ZTBL; pesticides and insecticides center should be established in the study area; loan amount should be given according to farmers requirements; Islamic principles should be applied by ZTBL, to reduce the religious tension of farmers in the study area; bank staff cooperation with farmers is requested; qualified Staff should be appointed by Bank Directorate; monitoring cell should be developed.

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