# Zarai Tarqiati Bank Limited Credit Program Role in the Development of Goat Production in Rural Area of District Mardan, Pakistan 

Dr.Naushad Khan<br>Institute of Development Studies, The University of Agriculture Peshawar, Pakistan<br>Dr.Munir Khan<br>Institute of Development Studies, The University of Agriculture Peshawar, Pakistan<br>Shista Naz<br>Institute of Development Studies, The University of Agriculture Peshawar, Pakistan<br>Dr.Muhammad Hanif<br>Research Officer veterinary research institute peshawar<br>Dr.Hamayun Khan<br>Department of Animal Science, The University of Agriculture Peshawar<br>Dr.Asghar Khan<br>Msc Livestock The University of Agriculture Peshawar<br>Dr. Jehangir khan<br>Msc Animal Nutrition The University of Agriculture Peshawar


#### Abstract

Pakistan is an agriculture country and the role of livestock is highly appreciated in agricultural development. The present study major objectives were to analyzed the effects of ZTBL credit program on goat productivity, correlation with size of land and average goat number, problems and constraints faced to farmers in financing procedure by ZTBL. The universe of the study is District Mardan which consist of three Tehsil, namely Mardan, Thakhth Bai and Katalang. Through interview schedule data were collected. Using descriptive statistics and paired t-test for data analysis. The total goat number after credit was 108 and before was 134 and difference was -24 . The average goat number after credit was 1.6875 and before was 2.0938 . The result was found significant at $10 \%$ level which indicates negative effect of the credit on goat number and miss-utilization of the credit by farmers in the study area. Average cost after credit was Rs. 16828 whereas before was Rs. 8680 and the result was found significant at $5 \%$ level. The cost difference was Rs. 8148 which explain the increase of the cost after credit program. The average annual return after credit was Rs. 35531 although before was Rs. 17562 and the result was found significant at $5 \%$ level. The return difference was Rs. 17969 which explain the positivity of the credit program. The correlation with size of land and average goat number of the respondents, were -.156 which shows negative relationship with goat number and land size. Major problems were complicated process of pass book preparation, non availability of collateral, non availability of loan in time, high interest rate, amount less than requirement and non cooperation of the bank staff were observed in the study area. On the basis of finding, provision of more loan in future, one window operation policy application, low interest rate by bank, cooperation of bank staff with farmers and monitoring cell development in the bank for enhancement of goat productivity were recommended.


Keywords: Credit program, Zarai Taqiati Bank Limited, Goat Production, Rural area of District Mardan

## 1. INTRODUCTION

Agriculture sector is important sector of the Pakistan economy which supply food to the whole nation and without this sector development, the survival of the human on the earth is impossible. Its contribution to labor force is $43.5 \%$, and GDP share is $20.9 \%$. Agriculture is not only the source of food and fiber of the 191.71 million population of Pakistan, but also the main supplier of raw material to agro-based industries in Pakistan. No policy of economic development can be realized without agricultural development (Economic Survey, 201415)

The agriculture sector consists of four sub sectors including crops, fisheries, forestry and livestock etc. The livestock share in GDP is $11.5 \%$ which indicates the importance of the livestock in the economy of Pakistan. Goat rearing is a very old profession. Mohammad may peace be upon him also rear the goats for enhancing
income level and milk production. Now a day developing countries used a good tool for poverty alleviation. it is very popular in south Africa and South Asia.

Goat is considered as poor man, cow. Some rural and urban people keep goats and use their milk for domestic consumption. The same is true about certain nomads who raise camels and use their milk, to meet family needs. Some camel men in periurban situation, sell milk in urban area. Certain breeds of camels in Pakistan have potential to called dairy animals but being slow breeders, they remained ignored since long(htt:/www.pakdairyinfo.com/introduction.htm).

Goat produce meat as well as milk however one litter milk consists of 32 gram protein and 1.7 gram calcium, but 1.7 gram calcium fulfills the daily requirement of a young boy. Similarly from the goats hairs blanket, sweater, coat and other products are prepared which exported to other countries and earns more foreign exchange for Pakistan. Rural urban people rear goats and use their milk for daily purpose and generate income for their daily activities (Goat htm).

According to economic survey of Pakistan 2013-14 the total population of livestock in Pakistan is 171 million even as the number of goat was 66.6 million. Province wise population in Punjab is 24.55 million, Sindh 15.56 million, KP 11.89 million and Baluchistan 14.59 million (Economic Survey, 2013-14).

The total milk yield in Pakistan is 50.99 million tons, while goat is 0.822 million tons. The total human milk consumption in Pakistan is 41.133 million tons and the share of goat is 0.801 million tons. Pakistan globally contributed 6.45 percent in milk, 9.46 percent meat, 12 percent leather and 1 percent wool (http:/www.pakdairyinfo.com/introduction.htm).The mutton production in Pakistan is 616 thousand tons and contribution to world is $19 \%$, although milk is $4.75 \%$, but wool is $13.2 \%$ and skin $18 \%$. (Economic Survey, 2012-13).

Devendra, (1999) recorded the total population of goats in the world is 674 million while the developing country share is $94 \%$. Africa and Asia coverage was $81 \%$ of the total population in the developing countries. The largest populations were found in Asia, notably in India, Pakistan and China. In Africa, Nigeria, Ethopia, Sodan and Somalia the largest concentration was found. The preferred environments were found arid and semiarid regions. In one such region, Rajasthan, india for example, goats account for about $16 \%$ of the total national population and in Bangladesh with its wet humid environment, the goat population accounts for about $29 \%$ of the total grazing ruminants (Buffales, Cattle, Goats and Sheep). It is also noted that Asia $55 \%$ population of small ruminants are reared in rain fed area.

The total number of goat in the world is 861.9 million while in China the number of goat is 149.4 million, India 125.7 million, Pakistan 56.7 million, Bangladash 56.4 million, Nigeria 53.8 million, Sudan 43.1 million, Iran 25.3 million, Ethopia 21.8 million, Monglia 20 million, Indonesia 15.8 million. According to data the China is on the top, Pakistan is third in the goat number in the world. In world meat production China contribution is 1.8 million tons, India 0.5 million tons, Nigeria 0.3 million tons, Pakistan 0.3 million tons, Bangladash 0.2 million tons, Sudan 0.2 million tons, Iran 0.1 million tons, Indonesia 0.1 million tons, Ethopia 0.1 million tons, Neger 0.1 million tons. According to data the number of Pakistan is fourth (FAO STAT, 2000).

The data shows the importance of the goat rearing in Pakistan. On the other side goat is a good source of employment for the rural poor in Pakistan because in rural area of Pakistan the man power is surplus and majority people are unemployed, so there goat rearing is a good source for employment. In Pakistan there are two types of credit, formal and non formal credit. Formal credit is institutional credit which provided to farmers by institution such as Zari Tarqiati Bank limited, commercial banks, cooperatives and domestic private banks while non formal credit is the non-institutional credit which is provided by friends, neighbors and professional money lenders in the country (Idress and Ibrahim, 1993).

Government of Pakistan gives high priority to ensure the timely availability of finance to the farmers for gaining high production. Finance necessities of the farming community have shown an rising trend over the years . Therefore agriculture funding was increased by the government from Rs. 42852 millions to Rs.215965.34 millions during 1998-2011 while 2011-12 it decreased $66 \%$ due to unavoidable situation in the country. Institutional finance to farmers is being provided by ZTBL, commercial banks, cooperative and domestic private banks (Economic Survey 2011-12)

Similarly Zarai Tarqiati Bank Limited has given loan to farmers for enhancing goat productivity in district Mardan. The present study examine the effects of credit program of ZTBL on goat productivity, correlation of average goat number of the respondents and land size, problems and constraints faced to farmers in taking loan by ZTBL in the study area.

## 3. MATERIAL AND METHODS

The universe of the study is Mardan which bounded on the north to Buner District, and Malakand Protected area, on the east to Sawabi and Buner Districts, on the north by Nowshera District and Malakand protected area. The total area of the District is 1632 square kilometers and its soil and climatic conditions are very favorable for goat rearing. The universe of the study consist of three Tehsil, namely Mardan, Takhth Bai and Katlang. All

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beneficiaries of the bank was 64, Mardan 27, Takhth Bahi 12 and Katlang 25. Through interview schedule data were collected from the respondents and using descriptive statistics, correlation and paired $t$-test for data analysis.

## 3. RESULT AND DISCUSSIONS

Field survey indicates the literate number of the sampled farmers $73 \%$ and illiterate $27 \%$. According to economic survey of Pakistan 2014-15 the literacy rate of Pakistan is $58 \%$, Punjab $62 \%$, Sind $56 \%$, Kp $52 \%$ and Baluchistan $14 \%$. Table 1 reflects the educational level of the sampled respondents in the study area. The primary level is $17 \%$, Middle $34 \%$, Matric $30 \%$, F.A , F.Sc $6 \%$, B.A $11 \%$ and M.A $2 \%$. Literacy and education level play key role in the development of a country and without education the development of the country is impossible, so the government has highly focus on education, therefore increase the budgets from $2 \%$ to $4 \%$ and established new colleges, universities and technical institution in Pakistan. In goat rearing most sampled respondents in the study area is below B.A level and only $2 \%$ M.A level which reflects that high qualified and technical people did not take interest in this business. The getting money from the ZTBL used in other activities which can not increase the number of the goat in the study area.

Table. 1 Educational level of the sampled respondents

| Education Level | No | $\%$ |
| :--- | :---: | :---: |
| Primary | 08 | 17 |
| Middle | 16 | 34 |
| Matric | 14 | 30 |
| F.A and F.Sc | 03 | 06 |
| B.A | 05 | 11 |
| M.A | 01 | 02 |
| Total | 47 | 100 |

Source:- Field Survey 2014
The field survey shows owner cultivator number $95 \%$, owner -Cum-Tenant $5 \%$ and tenant zero. Table 3 shows the distribution of various size of land and correlation between land size and goat number of the sample farmers. Bellow 5 hectares the number of the goat owner was found $92 \%, 5-10$ hectares $3 \%, 10-15$ hectares $5 \%$, while above $10-15$ hectares was found zero. The correlation between land size and average goat number was found -.156. The result indicates that below-5 hectare, land owner keep more goats than the rest categories of the land. The correlation test shows that when the size of land increases, the average goat number decreases and the result reflect that poor people of the community only rear the goats and use this tool for poverty eradication in the study area. The study explains that the loan is not given to tenant community due to their landlessness while the real cultivator is the tenant, because of misplaced distribution of the money the specific objectives of the bank and country did not achieved and money used in other activities of day to day life which latter on also make the problem of the return to the bank in time and the beneficiaries become defaulter of the bank.

Table shows the correlation of the average goat number of the respondents and land size negative in the study area. The land size increases, the goat number decreases and when the land size decreases the goat number increasing, so it indicates that lower categories of land respondents only rear the goats while the upper categories used in other activities while they highly focus on cow and buffaloes in the study area

Table. 3 Distribution of Various Size of Land and Correlation between Land Size and Goat Number of sampled respondents

| Various Size of Land | No | $\%$ |
| :--- | :---: | :---: |
| Below 5 hectares | 59 | 92 |
| $5-10$ hectares | 02 | 03 |
| $10-15$ hectares | 03 | 05 |
| Total | 64 | 00 |

Sources:- Field Survey 2014
$\mathrm{r}=-.156$
According to field survey the short term credit owner was $47 \%$, medium term $53 \%$ while the long term credit owner number was found zero. Table 4 reveals the total amount of credit dispersed by ZTBL to goat owner in the study area. The total amount dispersed to goat owner was Rs. 16348000 , while the short term amount was Rs. 3131000 and medium term was Rs. 13217000 . And percent share of the amount of short term was $19 \%$ while medium term was $81 \%$. The data explains that the investment of long term credit was found nil in the study area. Out of total amount the medium term amount was more than the short tem while in number of respondents the difference was $6 \%$.

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Table. 4 Total Amount(Rs) of Credit Dispersed by ZTBL among Sampled Farmers

| Type of Credit | Amount(Rs) | $\%$ |
| :--- | :---: | :---: |
| Short term | 3131000 | 19 |
| Medium term | 13217000 | 81 |
| Long term | 00000000 | 00 |
| Total | 16348000 | 100 |

Source:- Field Survey 2014
According to field survey $72 \%$ has continued the credit while $28 \%$ has discontinued the credit due to high interest and religious pressure in the study area. Table 5 indicates the average goat number of the sampled goat owner in the study area. The average number before was 2.0938 and after was 1.6875 and the effect was found negative and significant at $10 \%$ level. So there the effect was negative while the loan were used in the food of goat and in other expenses. According to 2014-15 economic survey the number of population of goat number was found more than the other livestock. The data explain that the loan was miss-utilized by goat owner and so did not achieve the specific target of the bank and indicates monitoring cell failure in the study area.
Table. 5 Credit Effect on Average Goat Number of the sampled Farmers

| Name <br> Livestock | Number after <br> Crdit | Number before <br> Credit | Differences | \% <br> changes | Degree <br> Freedom | t- <br> value | P- <br> value |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Goat | 1.6875 | 2.0938 | -.40625 | -0.19 | 63 | -1.764 | .099 |

Source:- Field Survey 2014
Table 6 reflects the annual average cost of goat of the sampled respondents in the study area. The average cost before was Rs. 8680 while after was Rs. 16828 and the result was found significant at $5 \%$ level. The data explain that the cost before was less than after but the cost benefit ratio after was 2.11 and before was 2.02 , so there the difference is less while in cost and return, the difference is high which shows the cost push inflation in the study area. Khan et. al (2011) studied that the availability of financial resource had positive effects on the income generation, consumption pattern and educational level of the children. However large number growers have miss-utilized the credit due to fact that amount was less for the purchase of quality breeds of livestock in the study area
Table. 6 Annual Average cost of goat of the sampled respondents

| Name of <br> Livestock | Average cost <br> after credit | Average <br> cost before <br> credit | Differences | \% <br> Changes | Degree of <br> freedom | t-value | P-value |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Goat | 16828 | 8680 | 8148 | 93 | 63 | 7.304 | .000 |

Table 7 reveals the annual average return per goat of the sampled farmer in the study area. The per goat return before was Rs. 17562 and after was Rs.35531. The result was found significant whereas the difference between benefit cost ratio was found 2.11 and 2.02 which is nearest of one another. Despite the fact that return figure was found double than before which indicate the positivity of the credit program. Ahmad, et al (2015) found the benefit cost ratio for small group 1.29 while for large group the benefit cost ratio 1.45 , so the benefit cost ratio of the present study is better than the Kohistan district Khyber Pakhtun Khwa which indicates the positivity of the study area while due to less finance provision by bank the number did not increase the goat number, so it may be a chance if the government increase the fund according to requirement then the chances of the goat number increasing is more which will give more benefits to the farmers in the study area.
Table. 7 Annual Average returns per goat of the sampled Farmers

| Name of <br> livestock | Average <br> annual <br> return after <br> credit | Average <br> annual <br> return <br> before <br> credit | Differences | $\%$ Changes | Degree of <br> freedom | t-value | P-value |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Goat | 35531 | 17562 | 17969 | 102 | 63 | 4.212 | .000 |

Source:- Field Survey 2014
Table. 8 shows problems and constrained faced to the sampled respondents in taking loan by bank in the study area. According to table $70 \%$ respondents claimed that bank is away from the respondents, so it is a great problem for them and in time they have no knowledge about the loan when the loan will be released from the bank. Hundred percent respondents reported the passbook preparation, collateral availability, amount less than requirement, and non availability of credit in time while $31 \%$ claimed the non cooperation of bank staff. Instead of these problems high interest rate, religious tension and high cost of the fodders were also recorded in the study area.

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Table. 8 Problems and Constrained Faced to sampled Farmers by bank in taking loan

| Problems | Yes | $\%$ | No | $\%$ | Total | \%s |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Bank Away from farmers | 45 | 70 | 19 | 30 | 64 | 100 |
| Complicated process of Passbook preparation | 64 | 100 | 00 | 00 | 64 | 100 |
| Non Availability of Collateral | 64 | 100 | 00 | 00 | 64 | 100 |
| Amount Less than requirement | 64 | 100 | 00 | 00 | 64 | 100 |
| Non Availability of Credit in time | 64 | 100 | 00 | 00 | 64 | 100 |
| Non Cooperation of Bank Staff | 20 | 31 | 44 | 69 | 64 | 100 |

## 4. CONCLUSIONS AND RECOMMENDATIONS

The study concludes that ZTBL has given the credit to farmers for enhancement of goat productivity while loans was miss-utilized by goat owner due to monitoring cell failure and the number of the goats after was recorded less than before while due to cost push inflation, the cost and return after was found more than before which indicates the positivity of the credit program of ZTBL while in benefit cost ratio after and before little difference was found which shows no positive impact on the goat owner community. On the basis of the finding the following recommendations were suggested for future policy formulation for enhancement of goat productivity in the study area:- interest rate should be decreased and one window policy should be applied for collateral adjustment for the encouragement of Goat owner, loan should be given according to requirement of the goat owner and special program should be applied for maximization of the goat, Islamic principles should be applied by ZTBL for reduction of religious tension, bank staff cooperation with farmers is requested, monitoring cell should be developed for the control of miss utilization and grazing field should be developed and loan also provided to tenant community, for enhancing of goat productivity. Ahmad (2007) studied that as far the institutional finance is concerned, the small and landless farmers not easily avail the credit due to lack of availability of collateral and complex procedure followed by bank. Therefore, without complicated collateral system finance program is required, to easily poor community benefit from them for uplifting goat productivity in the study area.

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