

# ZTBL Credit Program Effects On Marrow (Cucurbita Maximia) Productivity In The Community Of District Mardan Pakistan

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**ABSTRACT:** Credit availability play great role in the development of vegetable. Seeing to its importance the study was conducted in rural area of District Mardan. The main aim of the research title was to investigate the effects of Zarai Tarqati Bank Limited Finance Program on Marrow productivity, and to see the hurdles and obstacles to marrow growers by ZTBL. The total credit owners of ZTBL was 260 while 58 have grown the marrow in their farms. All 58 were interviewed and through questionnaire data were collected from the respondents. For analysis different statistics were applied. The result indicates average yield per hectare before 2812 Kg and after 4145Kg which was significant at 5% level. The total average per hectare cost before was Rs.17152 and after Rs.38708, and found the result significant at 5% level. The total return per hectare before was recorded Rs 83362 and after Rs.165791 and found significant at 5% confidence level. The study further explains that marrow growers facing large number of problems such as non availability of pure seed, water shortage, complicated procedure of credit availability and high interest rate of the bank, non availability of loan in time for purchasing inputs by bank, lack of proper market for their output, instability of support and subsidized price system. On the basis of hurdles and obstacles the study recommend pure seed accessibility, water channel improvement, credit provision on easy term, low interest rate by ZTBL, accessibility of proper market, support price and subsidized price system for enhancement of Marrow productivity.

**Key Words:-** Effects, Finance Program, Production, , Community

## 1. INTRODUCTION

Pakistani community majority based on agriculture and contribute 19.9 percent in the GDP of Pakistan while 43.5% share in the total labor force and similarly 70% in export earning (Economic Survey of Pakistan 2015-16). Agriculture has many branches but vegetable is a very important branch among them which play key role in vegetable provision to the community of Pakistan. It improve the immunity of the body against diseases. The vegetable production per hectare in Pakistan is very low due to modern machinery and pure seed application. Many research institutes in Pakistan working for the development of vegetables. The famous vegetables of Pakistan are Marrow (Cucurbita Maximia), Bitter gourd, Squash, lady finger, sponge gourd, spinach, etc, however in district Mardan Marrow, Bitter gourd and Squash are more popular than the others vegetables which are grown for commercial purpose in the study site (PARC). Marrow known as summer squash while in England it is called vegetable marrow. It is longer than Tenda and seeing like pumpkin. Marrow is low in calories and fat while rich in vitamin A and Vitamin C, iron and calcium and used as a medicine in diabetes, hypertension, high blood cholesterol. The marrow peel is very rich in carotenoid beta-carotene (healthyeating.sfgate.com/marrow-vegetable-3357).

District Mardan area is favorable for vegetable production. So many vegetables are sown in District Mardan in the season of summer and used as a cash crop. They give high return to the farmer. Marrow is exported to Dubai and other country and the middle men got high profit from this vegetable. It is labor extensive and also provide employment to rural community of Mardan District. Marrow activities needs high finance because the farmer of the study area is very poor. So for financial deficiency fulfillment different banks are working in the

study site. Among these banks Zarai Tarqati Bank limited has a great contribution, in credit provision to the farmers. Finance and credit are essential element for development of agriculture. Mohsin, et al (2011) investigated that credit is a very important factor which play vital role in development of vegetable. Khan and Jan, (2012) also stressed that finance availability by bank showed a significant improvement in the production of crops such as wheat, maize, sugarcane, tobacco. Such type practices increased 16 percent income of the farmer which indirectly boost the vegetable production in the study area. Madisa, et al (2011) argued that Botswana has established a financial scheme for improvement of vegetable production and this scheme result was also positive. Ahmad, (2007) studied that due to lack of collateral availability and complicated procedure of the bank, small and land less farmer face difficulty in availing the credit from the bank. Shahidur and Rashid (2003) study revealed that larger beneficiaries production is more than the small holders beneficiaries. Khan et. al (2017) concluded that credit has improved the production of bitter gourd in rural area of District Mardan. Seeing to its vitality the cited title study was selected i) to analyze the effects of ZTBL credit program on Marrow production and ii) to identified hurdles and obstacle faced by farmer in financing procedure in the targeted area.

## 2. MATERIAL AND METHODS

The study site was District Mardan and on the basis of more production this district was selected for the study to fully analyze the ZTBL credit program effects on Marrow production in the study area. District Mardan consist of three tehsils namely Mardan, Thakht Bai, and Katlang. The total credit owner number of the ZTBL was 260 while the Marrow Growers number was 58. All were selected for the study to analyze the effects of the credit

program on Marrow production per hectare yield. With the help of interviews schedule data were collected from the respondents. Descriptive statistics and paired t-test were used for data analysis.

### 3. RESULTS AND DISCUSSION

Table 1 shows average yield per hectare after credit 4145 Kg and before credit 2812 Kg. The difference was 1332 Kg and change was 47%. The result was found highly significant. The table shows that finance has positive effect on the Marrow production in the selected area and shows per hectare yield more than before. The data further explained that credit played important role in the development of Marrow production. Muhammad (2003) evaluated the Agha Khan Rural Support micro finance program effects on agriculture production and found credit program effects positive on the farming community.

**Table 1:** Credit Program Effects on Marrow Production on Average per hectare Yield in the Targeted Area

Name of Vegetable	Average Yield After Credit	Average Yield Before Credit	Percentage Change
Marrow	4145 Kg	2812 Kg	1332

**Source:** Field Survey 2012 (D.F=57, t value=4.904, P value=.000)

Table 2 shows the investment after credit Rs.38708 and before credit Rs.17152 and improvement 126%. The result was found highly significant at .05 level which shows that after credit, investment per hectare was improved due to provision of credit by ZTBL. The said credit has furnished the activities of the Marrow which has boosted the marrow production in the target area.

**Table 2:** Credit Program Effects on Average Cost per Hectare of the Marrow Vegetable in the Selected Area

Name of Vegetable	Average cost After Credit	Average Cost Before Credit	Percentage Change
Marrow	Rs.38708	Rs.17152	126

**Source:-** Field Survey 2012 ( D.F=57, t value=6.35, P value=.00)

Table 3: shows the average return before credit per hectare Rs.84362 and after credit the return Rs.165791, while improvement was 97%. The result was found highly significant at .05 level. The increase in productivity was 126%, while in return the change was 97%, so the change in productivity was higher than the return due to price fluctuation in the sampled area. Due to high production price negatively affected which decrease the total return of the vegetable grower. The price is correlated with supply of commodity; when the supply of the commodity increases then the price level decrease the return of the farmer. However, demand increase, also boost the level of the price. Supply and demand both have a great contribution in the total return. After credit the benefit cost ratio was 4.28 and before credit was 4.92 which explain that after credit one rupees produce 4.28

rupees, while in before credit one rupee produce 4.92 rupees, so the before benefit cost ratio was better than after benefit cost ratio. In other side productivity wise one rupee produce 0.11Kg, while in before one rupee produced 0.13 Kg, so in this case the before production of one rupee is more than after production. The Marrow net return after credit per hectare is Rs.127083 while before credit was Rs.67210.

**Table :3** Average Return per Hectare Yield of Marrow Vegetables in the Study Site

Name of Vegetable	Average Return After Credit	Average Return Before Credit	Percent Change
Marrow	Rs.165791	84362	97

**Source:-** Field Survey 2012 ( t-value= 7.408, P value=.000)

Table 4 shows hurdles and obstacles to sampled marrow growers by bank in the targeted area. Hundred percent respondents told that the credit availability was not in time and they did not purchased inputs in time which is a great hurdle for our production improvement while 78% reported about complication of passbook preparation. They told that patwari Halqa wanted money as incentive and used delay tactics in passbook preparation. They did not prepare the passbook in time. Eighty six percent claimed the non availability of collateral. They said that due to police arrestment no one ready as a grunter, to sign the form while 52% told that the bank staff did not cooperate with us which is a great bottleneck for credit access in the study area. Hundred percent respondents claimed that loan is less than the require amount because of this they did not purchase full inputs for their vegetable activities. Thirty four percent claimed that bank is away from their villages, so in time they did not aware from the bank program, so access to credit is also a great problem. Awotide et al (2015) found in his study that access to credit has positive impact on the productivity of Cassava farmers. There credit Institution focus highly for boosting credit services to rural farming households to benefit more households from the credit benefits. These type hurdles and obstacles are also present in the study area which affect the activity of the marrow grower negatively.

**Table : 4 Hurdles and Obstacles to Sampled Marrow Growers by ZTBL in the Study Site**

Hurdles and Obstacles	Yes	%	NO	%	Total	%
Availability of Credit not in the sowing time	58	100	00	00	58	100
Passbook Complication by Patwari Halqa	45	78	13	22	58	100
Non Availability of collateral	50	86	08	14	58	100
Non-Co operation of Bank Staff	30	52	28	48	58	100
Amount less than requirement	58	100	00	00	58	100
Bank away from the community	20	34	38	66	58	100

*Field Survey, 2012*

#### 4. CONCLUSION AND RECOMMENDATIONS

The study concluded that without finance the development of marrow production is impossible because through finance inputs are purchased and apply to marrow vegetable cultivation activities in time which increase the production of marrow per hectare yield. The marrow growers of the study area is very poor and cannot afford the expenses of the marrow vegetable while the ZTBL provide credit to marrow growers to some extent but not in time and not according to their requirement for full activities of marrow production. The study also concluded that the ZTBL finance program has positive impact on the marrow production and return while still some gap is left which should be achieved in future. So for their improvement the following suggestions are recommended:-

1. Proper marketing system is required in the study area.
2. Credit availability in time and on low interest rate by bank is requested
3. Quality seed availability by research system is demanded.
4. Water shortage problem should be solved by government.
5. Proper subsidized and support price system establishment is requested in the study area.
6. The required loan should be provided to farmer in time.
7. Farmer incentive and encouragement, annual exhibition and conference on national as well as on international level basis should be arranged for marrow production increasing.
8. Government focus on the price of agriculture inputs and checked for preventive measure of inflation is required in the study area
9. Agro-based industry should be developed at local level for enhancement of marrow production.

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