Micro-land Ownership and Its Productivity in Larkana Kamber Shah Dad Kot

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Abstract

Poverty reduction goal set by UNO in 2015 is the most important and challengeable task for Pakistan. The aim of this study is to determine the micro-land ownership impact on productivity, land-income of the micro-landowners and its impact on the life of micro landowner. 200 micro-landowners were selected sample through stratified technique from the District Kamber Shah Dad Kot and Larkana. The results of the research revealed that micro-landowners' education level was better, and more than 80 percent population was literate. 37 percent micro-landowners were owned paka house buildings in the area. They availed the facilities of television 91 percent, mobile 95 percent, motorbike 32 percent and solar system with ratio 60 percent. Which shows that micro-land ownership has positive impact on the life of owners. The regression results revealed that the variables Machine, Labour, Education, seed, and fertilizer have positive and significant impact on micro land productivity. Model was significant with adjusted R² 0,88 which shows the variation in the model due to selected variables.

Keywords. Micro-landowners, Productivity, Income, Poverty.

INTRODUCTION

The World agriculture expert and scholars are firmed that the agriculture investment is very important for the reduction of poverty, hunger, and inequality. The agriculture is the main sector which provide employment for the population. (World Bank 2007). Due to landownership landowners could access to credit facility hence they use the credit for the better productivity. Research revealed that owners used more inputs and remained more productive in all the area assessed. The legal ownership may enhance the production of the farmers (Gershon Feder 1986). Productivity and farm size of small holdings was more due to use of fertilizer, improved seed, and other needful inputs hence it was needful to investigate this issue to improve access to credit and irrigation water resources to small holders. The productivity can be increased by removing the bottlenecks and with use of technology which will be the source of income for the smallholders in Bihar India (R.K.P Singh, Abhay Kumar 2108).

Objective of the study.

- 1. To assess the micro-land ownership and productivity relation.
- 2. To examine the income of the household of micro-landowner.
- 3. To examine the impact of income in the life of micro-landowner.

Literature review

Krishna H koiala (2015) "Impact of landownership on productivity and efficiency of rice farmers" The case of the Philippines: - The ratio of share crop and fixed rent of agriculture land in Philippine was 25 percent. Land has been distributed among landless person which has impact on productivity due to landownership. The results of this research revealed that fertilizer, fuel, irrigation cost and area have positive impact on rice production. Education and leasing of land showed more efficiency.

Amorn Pochanasomboon (2020) "Impact of land ownership on economic performance and viability of rice farming in Thailand" In this work performance of rice farmers was examines by using propensity score matching (PSM) technique. Sample divided into two categories weak landownership and full land ownership. The sample of full land ownership got increased yield than weak landownership therefore, the full landownership should be encouraged.

Sarah K Lowder (2015) "The Number, size, Distribution of farmers, smallholder farms, and family farms worldwide" reported that lot of work is done in this connection, but the information and documentations were incomplete. This article by using data of agricultural census found that the number of small and family farm were 570 million in the world. Those who have less than 2 hectors were twelve percent and seventy five percent were family farms. According to the data of 1960-2000 the average farm size was decreased in low-income countries whereas in upper income countries it was increased. The available data and estimations were very important for the planning.

Kirsna H Koirala (2016) "Impact of land ownership on productivity and efficiency of rice farmers: the case of the Philippines. In this research it was reported that agriculture production is due with a key factor of land. In the year 1988 the reform program was launched to distribute to the land in landless farmers. In this work the productivity of landowners was checked. The stochastic frontier's function method was used. Results revealed that farm productivity and landownership relation was positive.

Schengen Fan (2003)" Is small beautiful? Farm size, productivity, and poverty in Asia agriculture" Agriculture of Asia is full of small farm size. With the passage of time small holdings increase. These farmers were sharing a big share for the security of food and reduction of poverty. Empirically it was observed that the small farms were more productive than large one this case is under observation in the world. In the literature it was found that relationship between farm size and income is positive/e. government can help the small farmer by giving the ownership rights, better access to credit. new technology and new seeds for more production which would inverse the income of poor.

Sandip Kumar Verma "(2020) "Impact of size of holding on productivity of Ballia District Uttar Pradesh" The study used primary data collected through interview technique and questionnaire. 100 respondents were selected randomly. This study revealed that marginal and small holding was increased due to over population and family system. It was found that production of small and marginal farm size was more than large size farms which increased the income of small farmers and made living standard better.

Research Methodology

Area

This study selected the area district kamber Shahdad Kot and Larkana. It is consisting of eleven talukas. The population mostly depends on agriculture. Rice and wheat are the main crops in this area.

Data

Primary data was collected through a questionnaire from the micro landowners of the area.

Sample

Sample for this study was 200 micro landowners of Kamber shah Dad Kot and Larkana districts. Sample technique was stratified. It was divided proportionally into eleven talukas.

Formula of proportional stratified sample = n / N*TSS

TSS = Total sample size

Distribution of sample

Ν	Name of Taluka	Formula	Strata
N_1	Kamber Ali Khan	263934/1925902*200	27
N_2	Shah Dad Kot	126619/1925902*200	13
N ₃	Warah	169448/1925902*200	18
N_4	Qubo Saeed Khan	63706/1925902*200	7
N ₅	Miro Khan	98782/1925902*200	10
N ₆	Nasirabad	113779/1925902*200	12
N ₇	Sijawal Junejo	83026/1925902*200	9
N ₈	Larkana	431645*1925902*200	45
N ₉	Ratodero	226209*1925902*200	23
N10	Dokri	169033*1925902*200	18
N ₁₁	Bakrani	174721*1925902*200	18
	200		

Data Analysis

The productivity formula was used to find the productivity of micro landowners. For the cobb-Douglas transform method regression the SPSS was used.

The model

 $\label{eq:Ln} \begin{array}{l} \sum y = a + V_1 \ln \sum Fertilizer + V_2 \ln \sum Labour + V_3 \ln \sum Seed + V_4 \ln \sum Machine \\ + V_5 \ln Education \end{array} + \\ \end{array}$

Where

Y = productivity Rs/Acre

- V_1 = Fertilizer Rs /Acre
- V_2 = Labour man/Acre
- $V_3 = Seed Rs / Acre$
- $V_4 = Machine Rs/Acre$
- $V_5 =$ Years/ Micro landowner

Results and Discussion

Demographic results

Table No:1 Age of the Micro landowners

Age Group	Frequency	Percentage
18 to 30	22	11 %
31 to 40	69	34.5 %
41 to 50	91	45 %
51 to 60	18	9 %
Total	200	

Interpretations

Table no:1 shows the age of the population. It shows that the micro-landowners age was mostly in the group of 31 to 50 years, more than 75 % respondents age was between this group. 11 percent population belongs to younger age of group of 18 to 30 and 9 percent were above 50 years.

Education group	Frequency	Percentage
Illiterate	25	12.5 %
Primary	90	45 %
Middle	20	10 %
Matric	32	16 %
Inter	15	7.5 %
Graduation	10	5 %
Masters	8	4 %
Total	200	

Table No: 2 Education of the Micro Landowners

Interpretations

Education variable revealed that micro land- owners were well in education. More 80 percent micro land- owners were literate. This result was the positive impact of the increased incom

Table No: 3 family size

Family Group	Frequency	Percentage
01 to 05	71	35.5 %
06 to 10	99	49.5 %

11 to 15	30	15 %
Total	200	

Interpretations

The family size of micro-landowners is shown in the above table which indicates that 25 percent respondents were in the family group of 1 to 5 members,49 percent in the group of 6 to 10 members, only 15 percent respondents have a big family in the area.

Table N0: 4 House buildings

House Building	Frequency	Percentage
Paka	75	37.5 %
Katcha	125	62.5 %

.Interpretations

Micro-landowners' income impact is visible on house buildings. Paka house was owned by 37 percent owners among the selected respondents.

Table No:05 Other facilities Provision	
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Facility	Frequency	Percentage
TV	182	91 %
Solar	120	60 %
Freezer	98	49 %
Air Cooler	26	13 %
Mobile	190	95 %
Bike	65	32.5 %
Cycle	45	22.5 %
Dish	25	12.5 %

Interpretations

Income factor is very important for the comfort of life. Due to micro land the income of population is better, hence the comfort facilities are availed by the owners. 91 percent have television. 60 percent have solar facility, 49 percent have freezer and 95 percent have mobile. Air cooler facility was available for 13 percent respondents which revealed the significant impact of micro land ownership

Regression Results

Reliability Statistics

Cronbach's Alpha	N of Items
.812	7

Interpretations

The reliability ratio should be more than 0.05. In this research the reliability is 0.812 which indicates that data is reliable to be process for further results.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.943 ^a	.889	.886	.05895

a. Predictors: (Constant), Fertilizer, Education, Machine, Labour, Seed

Interpretations

In this research model the model summary shows the adjusted R square. It reveals the variation in the model due to independent variables. In this table it is 0.886 which explained the 88 percent variation in the model. The independent variables have good impact.

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	5.418	5	1.084	311.771	.000 ^b
1	Residual	.674	194	.003		
	Total	6.092	199			

a. Dependent Variable: Productivity

b. Predictors: (Constant), Ln Fertilizer, Ln education, Ln Machine, Ln Labour, Ln seed

Interpretations

The benchmark of the Anova test is 0.5. in this work the significant level is 0.000 which indicates that model is significant and positive to variables

Coefficients^a

Model		Unstandardize Coefficients	ed	Standardized t Coefficients		Sig.
		В	Std. Error	Beta		
	(Constant)	5.444	.580		9.378	.000
	Machine	.291	.063	.148	4.622	.000
1	Labour	.842	.089	.344	9.457	.000
1	Education	.025	.007	.132	3.883	.000
	Seed	.171	.023	.338	7.527	.000
	Fertilizer	.137	.042	.172	3.286	.001

a. Dependent Variable: Productivity

Interpretation

Table shows the coefficient results. The results of the models shows that all the variables have positive and significant impact on the dependent variable. The variable labour has a large impact which reveals that if other variables remain constant the One- rupee expenditure on labour increases the production by 0.842 percent. Machine variable increases 0.291 percent, Education 0.025 percent, seed 0.0171 percent and fertilizer 0.137 percent increases in the production.

Conclusion

Micro land ownership is considered for the increase of income to reduce poverty in the country Specially in the rural areas. This study was conducted to check out the relation between Micro land ownership and Productivity. The income of Household and its impact on the landowner's life. Two hundred sample was selected through stratified technique. The results revealed that micro land ownership relation with productivity is positive. Education level of the owners was better. The needful facilities for the comfort of the life were availed by the respondents with reasonable ratio. The model of the research revealed positive impact of independent variables on dependent variable productivity. The adjusted are square in the model is 0.88. Which is significant. On the variables have positive and significant impact micro landownership can be helpful in reduction of poverty in the rural areas.

Average Income of the Micro-landowner.

Formula Total Income / selected sample

Interpretation.

The income of the micro-landowner is averagely 129074 from the agriculture land.

Limitation of the study

Due to finance and Time constrains the limited area was selected for the study for this study. It may be in the large area to depict the more accurate results for the fighting of the poverty in rural areas.

References

World Bank. 2007. The World Bank Annual Report 2007. Washington, DC. © World Bank. https://openknowledge.worldbank.org/handle/10986/7534 License: CC BY 3.0 IGO."

Feder, G., & Slade, R. (1986). The impact of agricultural extension: The training and visit system in India. The World Bank Research Observer, 1(2), 139-161.

Kumar, A., Singh, R. K. P., Singh, K. M., & Mishra, J. S. (2018). Economics of paddy (Oryza sativa) production: A comparative study of Bihar and Punjab. Indian Journal of Agricultural Sciences, 88(2), 314-9.

Koirala, K. H., Mishra, A., & Mohanty, S. (2016). Impact of land ownership on productivity and efficiency of rice farmers: The case of the Philippines. Land use policy, 50, 371-378.

Pochanasomboon, Amorn, Witsanu Attavanich, and Akaranant Kidsom. 2020. "Impacts of Land Ownership on the Economic Performance and Viability of Rice Farming in Thailand" Land 9, no. 3: 71. https://doi.org/10.3390/land9030071