



EVALUATE THE LIVESTOCK ROLE FOR POVERTY REDUCTION IN SELECTED DISTRICTS OF BALUCHISTAN PROVINCE

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Abstract

In order to measure the perceived perception of the livestock farmers regarding the role of livestock for poverty alleviation current study was carried out in Quetta, Pishin and Naseerabad districts of Baluchistan. These districts were selected randomly. Qualitative methods and cross-sectional research design were used in this research. One hundred (100) livestock farmers or respondents were selected. Random sampling method was used. SPSS software was applied for data fragmentation. Pearson Chi-Square test was applied based on $p \leq 0.05$ level. Results show that Less than half (56%) of the livestock respondents fell into the age group (31 to 40 years). Most (42%) of the livestock respondents were illiterate. Vast majority (92%) of the livestock farmers preferred the joint family system. More than half (52%) of the livestock farmers agreed that low family income was the major cause of poverty. Thus, it was concluded that significant differences were observed in three districts' livestock farmer perceptions by using the Pearson Chi-Square test. Therefore, this research was recommended that the government should develop the vivid mechanism in the livestock sector in order to



increase the per animal productivity for sustainable rural development and poverty reduction.

Keywords: Evaluate, Livestock Role, Poverty Reduction, Balochistan Province

1.1 Introduction

Around the world the livestock sector is the dominated division that provides diversified products such as animal meat, eggs, milk products, wool/fur, leather, and the like for human consumption. On the other hand, the farmed animals such as cattle, cow, sheep and goats are widely used for meat and plowing purposes (Encyclopedia Britannica, 2023).

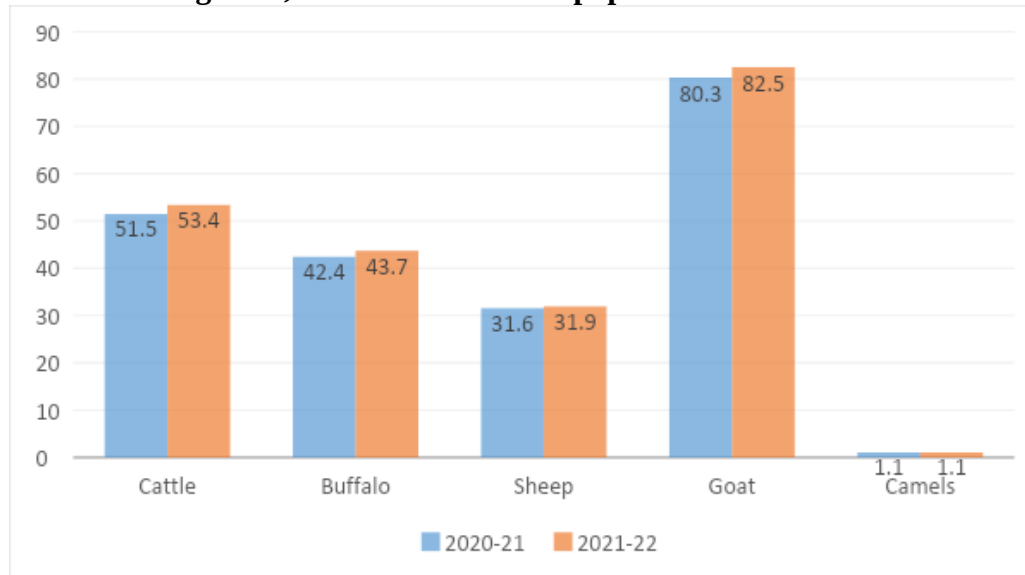
Animal husbandry practices are ancient and primeval occupation for human beings. In this context, the animal husbandry sector plays a vital role for economic development in many communities. However, livestock farming practices are fundamentally shifted towards intensive animal husbandry or animal farming. Thus intensive animal farming raises the numerous commercial output and yield (NASS, 2017).

Livestock sector is the mainstay of the country (Pakistan) economy. However, the livestock sector contributes 13% of foreign exchange at country level. In this context, livestock share approximately (30-40%) of livelihood options of the rural or livestock farmers. Livestock sector plays a major integral role for developing rural landscaping. Livestock sector sharing to 8.5% for export purposes and 1466 billion (Rs) for gross value addition. In this regard, the poultry sector remains the ultimate energetic sub-sectors in livestock. Therefore, the government of Pakistan invested 700 billion Rs., in the poultry industry. Country has achieved the rank of 11th largest poultry producer around the world and employed 1.5 million people in this sector (GoP, 2022).

The government of Pakistan is frequently concentrating on food security, vivid economic growth for poverty alleviation dynamics by using the livestock sector. On the other hand, the government of Pakistan is also developing the regulatory measures for improving per unit animal productivity as shown in figure-1. In this context, for animal health coverage, a various measure is familiarizing like artificial insemination services, developing export meat processing zones, balanced ration uses, better animal breeding practices, monitoring the various livestock diseases and setting up Highly Pathogenic Avian Influenza (HPAI) in various agro ecological zone of Pakistan (GoP, 2022).



Figure-1, Estimated livestock population in Pakistan



At the country level the poultry sector remains as prime imperative segments of the livestock sector that contributes 1.5 million people employment. Government is encouraging rural poverty reduction initiatives by promoting poultry production (GoP, 2022).

1.2 Problem statement

1.3

Balochistan is the undeveloped province of Pakistan. Whereas, extreme poverty exists especially in rural areas. By dint of inferior physical infrastructure, low human indexes, poor livelihood options and socio-economic conditions, deprived education system especially for females in rural areas, persistent calamities incidence, and the like. These limiting factors could lead to extreme poverty as a result the socio-economic condition of the livestock farmers did not improve (GoP, 2012). Therefore, current effort was conducted in order to evaluate the livestock role for poverty reduction in selected districts of Balochistan province, Pakistan.

Keeping in view the importance of the livestock sector role for poverty reduction, the following specific objectives were designed.

1.3 Study objectives

- I. **Socio-demo statistics aspect:** to measure the socio-demo characteristics of the livestock farmers in the study area.
- II. **Dependent variable:** to observed the poverty effects on socio-economic condition of the livestock farmers
- III. **Policy implication:** to design result-oriented recommendations for livestock practitioners and planners in future prospects.



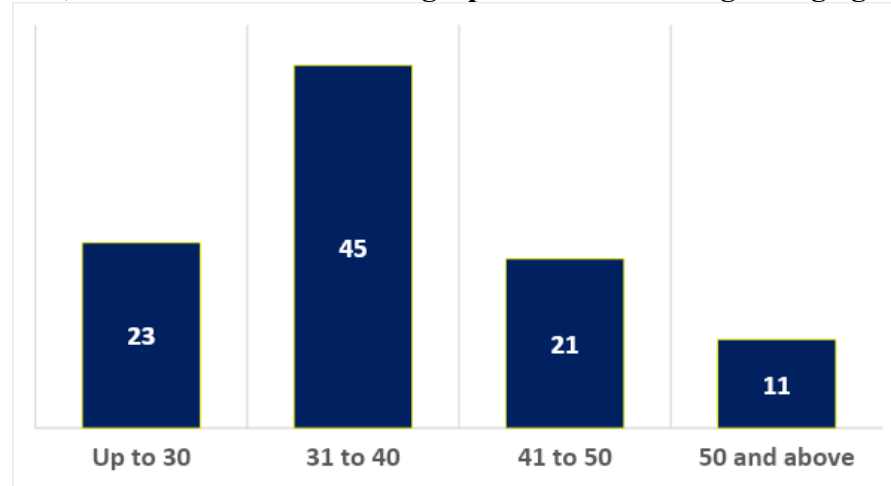
1.4 Methodology used in this Research

A cross-sectional research design was applied (Campbell & Stanley, 1963; and Mady, 1982) so as to evaluate the cause and effects relationship among variables in current research (Carmines & Zeller, 1979; and Shaddish et al., 1991). In this study socio-economic variables as the major independent variables were used and applied mostly to see their reflection or association based on assumption (Campbell and Fiske, 1959). In this context, socio-economic variables were developed (Trochim, 1989; and Krefting, 1991). Qualitative research method was used in order to observe the effects on livestock role for poverty alleviation in selected districts of Balochistan. Target population of this research consisted of one hundred (100) livestock respondents. Three districts like Quetta, Naseerabad and Pishin were selected by random sampling in this research. However, the table of McCall (1980) regarding “determining sample size from a given population” was selected. A detailed questionnaire in this context was developed as a research instrument. Five-point Likert Scaling was also used in this research (Merriam, 1988; Wolcott, 1990; and Patten & Mildred, 2002). Simple random sampling approach was applied (Adcock & Collier, 2001). Nevertheless, raw information of the livestock respondents were recorded or achieved at field level and after put into a computer (Pyrzczak, 2002). SPSS, a statistical software, was used for raw statistics breakdown. Pearson Chi-Square test was applied for determining the or observing the manifold association among both dependent and independent variables (Duffy, 1887).

1.5 Results of study

Demographic data was considered a vital independent variable that was used in this research. In this context, various demographic data was used, for example age composition of the livestock farmers, educational level of the livestock farmers and type of family of the livestock farmers. The detailed information was given below.

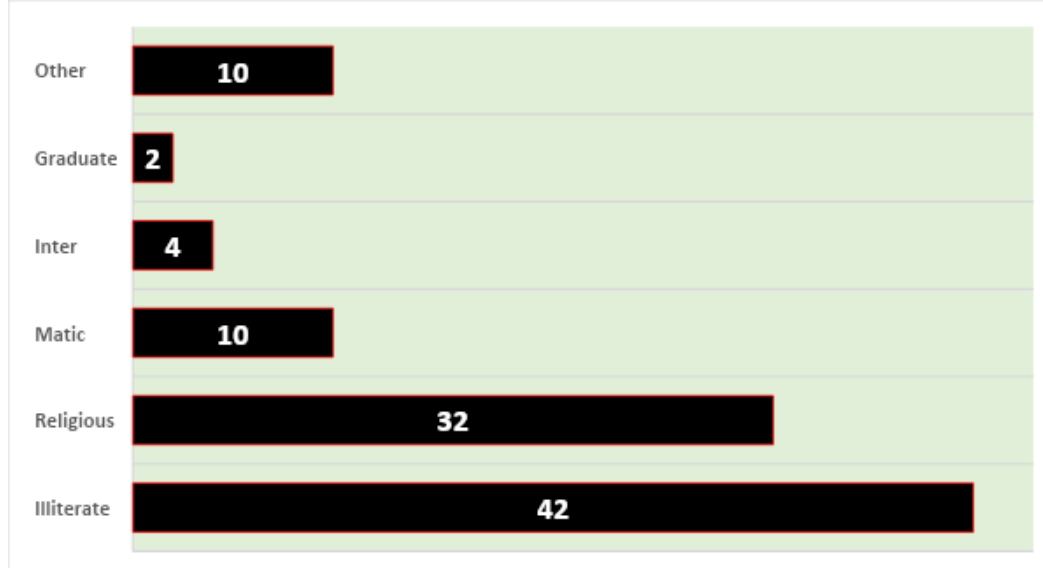
Figure-2, Livestock farmer’s demographic attribution regarding age factor





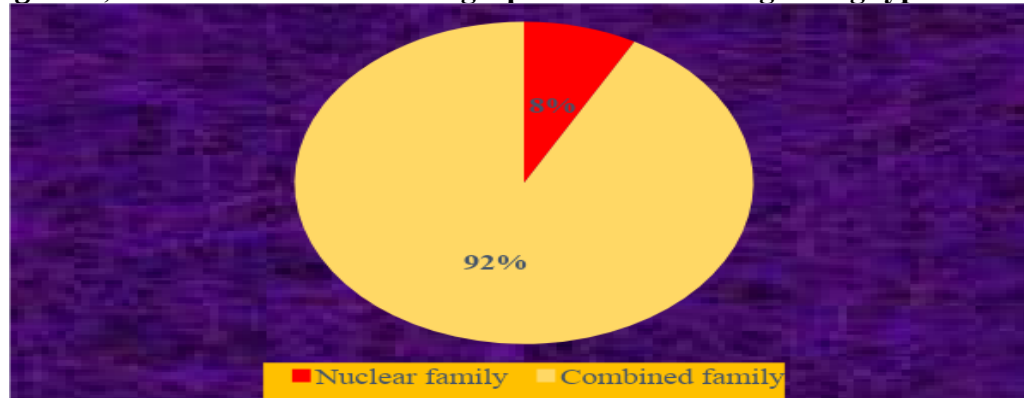
Age composition of the livestock farmers were asked and enquired in selected districts of Balochistan. In this regard, the data was captured at field level. Demographic data about age composition depicted in figure-2. Less than half (56%) of the livestock respondents fell into the age group (31 to 40 years). While, 23% of the livestock respondents fell into the age group (up to 30). Yet, 21% and 11% of the livestock respondents fell into 41 to 50 as well as and 51 and above year age respectively.

Figure-3, Livestock farmer's demographic attribution regarding educational level



Levels of educational was imperative demographic information. Therefore, in this research the demographic information was collected at field level as shown in figure-3. Most (42%) of the livestock respondents were illiterate. Most 32% of the livestock respondents having religious education or Madrasa education. Whereas, most 10% and 10% of livestock farmers were acquired the matriculation certificate and others education formal respectively.

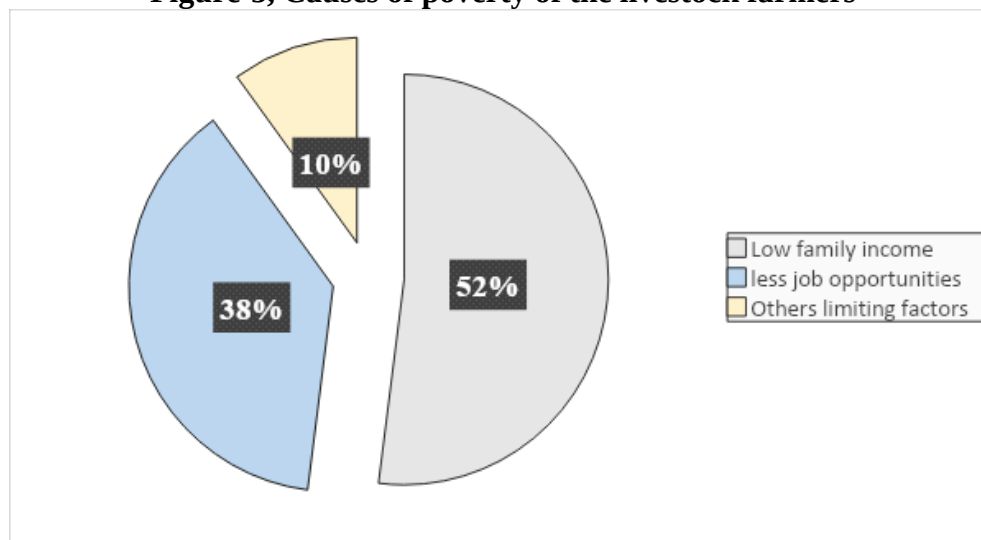
Figure-4, Livestock farmer's demographic attribution regarding type of family





Types of family in Pakistan widely used and very important demographic information as shown in figure-4. In this content, the raw information was collected at field level. Captured information was analyzed by Statistical Package for the Social Sciences, (SPSS) IBM software package. Vast majority (92%) of the livestock farmers preferred the joint family system. On the other hand, only 8% of the livestock respondents joined the single family system.

Figure-5, Causes of poverty of the livestock farmers



In this research the causes of poverty were asked because the causes of poverty major limiting factors in this regard. The result was revealed or displayed in figure-5. More than half (52%) of the livestock farmers agreed that low family income was the major cause of poverty. While most 38% of the livestock farmers were of the view that the less job opportunities were the other prime causes of extreme poverty. Whereas, only 10% of the livestock farmers were of the view that other limiting factors were responsible for poverty persistence.

The p-value was set on $p \leq 0.05$ level. In this context, the Pearson Chi-Square was applied to evaluate the livestock role for poverty reduction in selected districts of Balochistan province as shown in table-1. In this context, highly statistically significant differences were observed in Naseerabad district livestock farmers.



Table-1, Livestock farmer perceptions about livestock role for poverty reduction as districts-wise

Livestock role for poverty reduction	Value	df	Asymp: Sig. (2-sided)
<i>Quetta district</i>			
Pearson Chi-Square	15.456 ^a	8	.051*
Likelihood Ratio	19.325	8	.013
Linear-by-Linear Association	.119	1	.731
Phi	.393	-	.051
Cramer's V	.278	-	.051
<i>Pishin district</i>			
Pearson Chi-Square	19.470 ^a	8	.013*
Likelihood Ratio	25.655	8	.001
Linear-by-Linear Association	8.399	1	.004
Phi	.441	-	.013
Cramer's V	.312	-	.013
<i>Naseerabad district</i>			
Pearson Chi-Square	31.192 ^a	4	.000**
Likelihood Ratio	34.061	4	.000
Linear-by-Linear Association	10.088	1	.001
Phi	.559	-	.000
Cramer's V	.395	-	.000
No. of Valid Cases = One hundred livestock farmers from three selected district "One hundred (100)"			
* based on 5% significant level			

Pearson Chi-Square outcomes in Naseerabad stated that: (Chi-Square=31.192a), (Likelihood Ratio=34.061) and (Linear-by-Linear Association=.10.088) receptively. Whereas, on the other hand, in Quetta and Pishin districts only statistically significant differences were observed. Pearson Chi-Square value was statistically significant in Quetta district livestock respondents was: (Chi-Square=15.456a), (Likelihood Ratio=.19.325) and (Linear-by-Linear Association=.119) receptively. Pearson Chi-Square value remains significant in Pishin district livestock respondents was: (Chi-Square=19.470a), (Likelihood Ratio=25.655) and (Linear-by-Linear Association= 8.399) receptively. Thus, it was concluded that significant differences were observed in three districts' livestock farmer perceptions.



1.6 Conclusion and Recommendations

The livestock sector is the prime and foremost component of the economy, particularly in developing countries like Pakistan. Effective large scale dairy products marketing and meat consumption and their promotion remains as the major dynamics for reducing the rural poverty in the developing world continues like Pakistan. Therefore, this research was recommended that the government should develop the vivid mechanism in the livestock sector in order to increase the per animal productivity for sustainable rural development and poverty reduction. Provincial government should be refining the regulation in livestock sector marketing for better transformation of livestock business in commercial ventures for poverty reduction in order to improve the socio-economic condition of the livestock farmers.



REFERENCES

- Adcock, R. & Collier, D. (2001). Measurement validity: A shared standard for qualitative and quantitative research. *American Political Science Review* 95: 529-546.
- Campbell, D. T. and Stanley, J. C. (1963). Experimental and quasi-experimental designs for research on teaching, Chicago: Rand McNally, 1963. 171-246. The seminal article on types of validity.
- Campbell, D.T. & Fiske, D.W. (1959). Convergent and discriminant validation by the multi-trait-multimethod matrix. *Psychological Bulletin*, 56, 81-105.
- Carmines, E. G. & Zeller, R. A. (1979). Reliability and validity assessment. Quantitative Applications in the Social Sciences series 07-017, Newbury Park, CA: Sage Publications.
- Duffy, M., E. (1887). Methodological Triangulation: A Vehicle for Merging Quantitative and Qualitative Research Methods. *IMAGE: Journal of Nursing Scholarship*, 19(3), 130-133. <http://www.georgetown.edu/departments/psychology/researchmethods/writing/webresearch.htm>.
- Encyclopedia Britannica, (2023). Livestock. Britannica.com. <https://www.britannica.com/animal/livestock>.
- GoP, (2012). Government of Pakistan. National disaster management plan. Government of Pakistan, Ministry of Climate Change, National Disaster Management Authority, Islamabad.
- GoP, (2022). Pakistan Economic Survey-2021-22. Government of Pakistan Finance Division.
- Krefting, L. (1991). Rigor in qualitative research: The assessment of trustworthiness. *The American Journal of Occupational Therapy*, 45(3), 214-222.
- Mady, D. (1982). Benefits of Qualitative and Quantitative methods in program evaluation, with illustrations. *Educational Evaluation and Policy Analysis*, 4, 223-236.
- McCall, C. (1980). Sampling and statistics Handbook for research in Education. National Education Association: USA.
- Merriam, S.B. (1988). Case study research in education: A qualitative approach. San Francisco: JosseyBass, p. 18.
- NASS, (2017). Census of Agriculture - Publications - 2012. USDA. Archived from the original on 2017-11-22. Retrieved 2017-11-29.
- Patten, and Mildred, L. (2002). Understanding research methods: An Overview of the essentials (3rd ed.). Los Angeles: Pyrczak Publishing.
- Pyrczak, F. (2002). Success at statistics: A Worktext with humor (2nd ed.). Los Angeles: Pyrczak Publishing.
- Shaddish, W, Cook, T. Leviton, L. (1991). Foundations of Program Evaluation: Theories of Practice. SAGE Publishing Company. Newbury Park.
- Trochim, W. (1989). An Introduction to Concept Mapping for Planning and Evaluation. *Evaluation and Program Planning*, 12, 1-16.
- Wolcott, H., R. (1990). Qualitative inquiry in education: The continuing debate.