



ASSESS THE LIVESTOCK PRODUCTION AND SOCIO-ECONOMIC DYNAMICS OF RURAL FARMERS IN NUSHKI DISTRICT, BALOCHISTAN

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Abstract

In order to determine the perception of the livestock farmer this research was carried out. In this context, a descriptive type of research design was applied for assessing the livestock production and socio-economic dynamics of rural farmers in Nushki district, Balochistan. 100 livestock farmers were selected by using the random technique. Fitz-Gibbon and Morris (1987) table "sample size from given population" was used. Information in this context was broken down by using the standard statistical package like SPSS. Pearson Chi-Square technique was run in order to detect the association among variables based on point-5 level. Majority (58%) of the livestock farmers fell into the age category of 31 to 50 years. (45%) of the livestock farmers were uneducated. Overwhelming majority (78%) of the livestock farmers were married. Vast majority (90%) of females were preferred in the combined family arrangement. Non-significant differences were detected in all three statements based on ($p \leq 0.05$) alpha level. Therefore, keeping in view the objective of research it should be recommended that the provincial government



should assist the vulnerable livestock farmers by giving them subsidies in livestock materials mostly in disaster period so as to enhance their socio-economic situation. Balochistan government should assist the livestock farmers by using the public and private partnership so as to improve livelihood options of the livestock farmers and smartly deploying investments in the livestock sector.

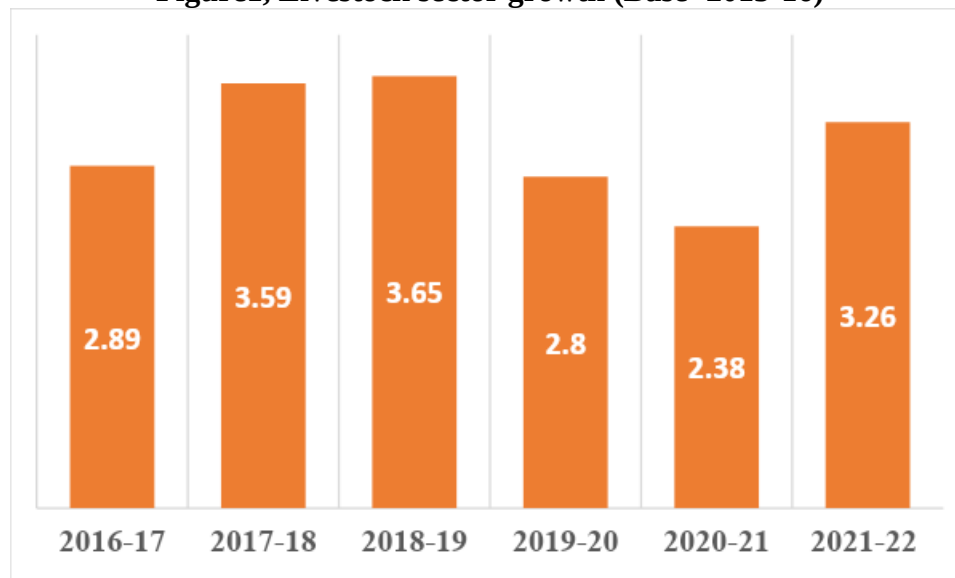
Keywords: *assessment, livestock sector, production, Balochistan region, socio-economic condition, livestock farmers.*

1.1 Introduction

Both livestock and agriculture sectors are the major contributors of the country 's economy. Livestock sector in this context, 61.89% sharing in agricultural sector. However, the livestock sector also contributes 14.04% of the country 's Gross domestic product (GDP) as shown in figure-1. The growth of the livestock sector was recorded 3.26% during the period of 2021-22 (Amir, 2020; and GoP, 2022).

Livestock sector is playing a significant role in the development of the country's economy and as major sources of socio-economic development for rural farmers. It was estimated that around 35 million of the country's people were involved in the livestock sector (Sumer, 2011). In addition, the livestock production, dairy industry and meat sector growth were observed 7.8% under the non-farm sector. On the other hand, the poultry sector growth was noted 6.9% during the period of 2021-22 (GoP, 2022).

Figure1, Livestock sector growth (Base=2015-16)



Source: Pakistan Bureau of Statistics (FBS, 2022)



Major populations of the sheep are widely found and grazing in central as well as northern Pakistan. In this context, the wool and fur are exported largely within large quantities to foreign. Further, in Pakistan roughly there are 170.1 million broilers, 49.6 million cattle, 41.2 million buffaloes, 30.9 million sheep and 78.2 million goats available during the period of 2020 (Amir, 2020).

Keeping in view the importance of livestock, Sahiwal Breed and Red Sindhi cattle were used and most notable for milk production and dairy item purposes. Dairy products are used for ice cream, butter, cheeses and the like. On the other hand, the cattle dung is excreted and used for vital fuel, cooking and soil fertility (Sumer, 2011).

Farm animals are widely used for hard work (*Pur Mashaqat*) and transport at country level mostly in the rural areas (Sumer, 2011). In Pakistan livestock face various challenges like disease incidences found in animals, high mortality rates of animals and poorer marketing systems in the livestock sector.

Socio-economic dynamic of the rural farmers has not yet improved due to the neglected and underdeveloped direction in the livestock sector. In this context, the government of Pakistan started and took various initiatives and development projects mostly in the livestock sector to improve the socio-economic condition of the rural farmers (Siddiqi, 1977; and Sumer, 2011).

1.2 Text rationale

Livestock sector remains a prime and important sector in Balochistan economy. Majority of the rural people directly or indirectly depend upon this (livestock) sector for improving their socio-economic condition. But unfortunately the socio-economic condition of the rural farmers did not improve. Therefore, the current study was conducted based on empirical data in order to measure the perceived perception of the livestock farmers regarding their socio-economic prospects in the Nushki district, Balochistan.

1.3 Research objectives

1. To explore the demographic and socio-economic characteristics of the livestock farmers in study areas.
2. To find out the livestock management practices.
3. To develop need-based recommendations about socio-economic acceleration for livestock farmers for future policy implications.



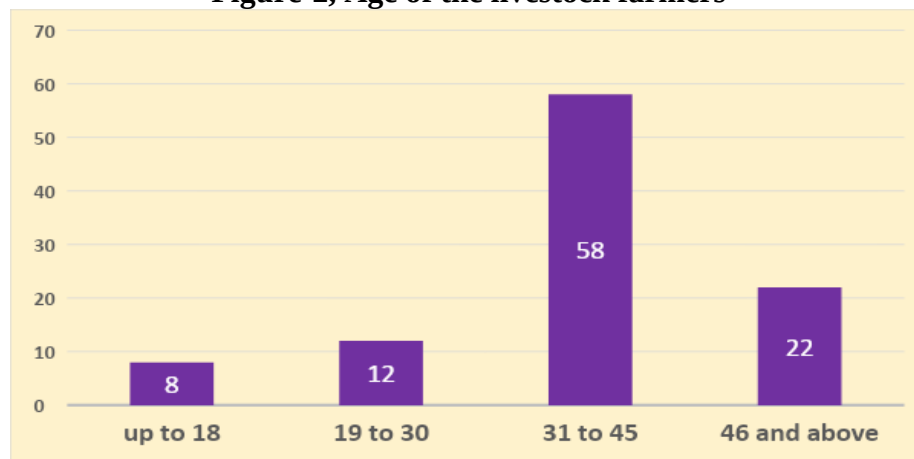
1.4 Research Methodology

In this research a descriptive research was applied (Ary et al., 1996). However, a descriptive research design was prime, impressive and most appropriate for gaining the livestock farmers insights regarding their socio-economic dynamics and livestock production in existing condition. On the other hand, descriptive research types were widely used in applied sciences (Gay & Mills, 2006). In this context, this research was conducted. Further, Nushki districts were selected for data collection at field level. In this concern, a random sampling technique was used and applied due to shortage of time and resources (Sekaran, 1992; and Babbie, 2004). A structured opinion poll as a research instrument was designed keeping in view objectives of the study. One hundred livestock farmers were selected as sample size. Thus the Fitz-Gibbon and Morris (1987) table in this context, was applied so that it measures the sample sizes from a given population. Eye to eye interaction was arranged in order to capture the perception of the livestock farmers regarding production and socio-economic dynamics. Hence, SPSS was used for data analysis (George & Mallery, 2003). Pearson Chi-Square technique in this context was run (Chi-square test, 2014). Likert five scaling was used. The p-value is set on five alpha levels (Cohen et al., 2000).

1.5 Socio-economic outcomes

Socio-economic outcomes were a vital independent factor. In this context, one (1) to five (5) point Likert scaling was used. In this context, socio-economic characteristics of the livestock farmers are measured. Age of the livestock farmers, educational level of the livestock farmers, marital status of the livestock farmers and types of family of the livestock farmers were determined. In this regard, the socio-economic characteristics of the livestock farmers were given below:

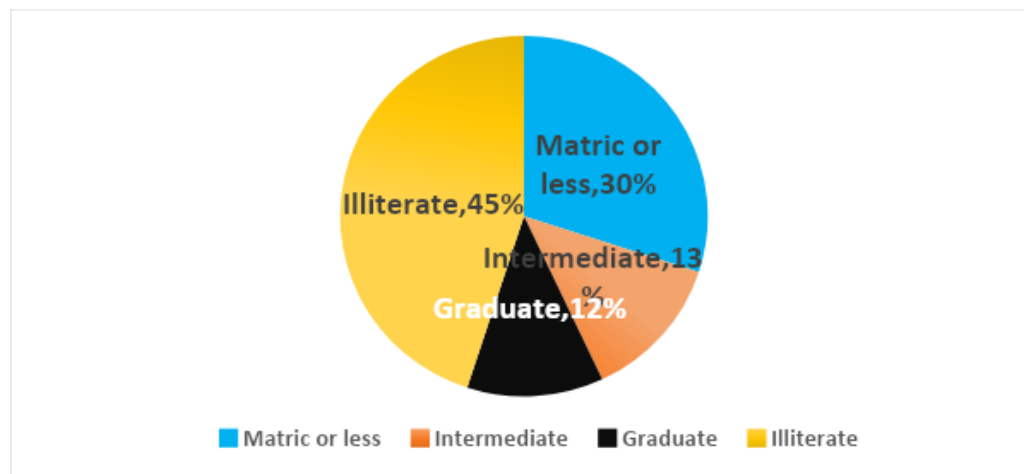
Figure-2, Age of the livestock farmers





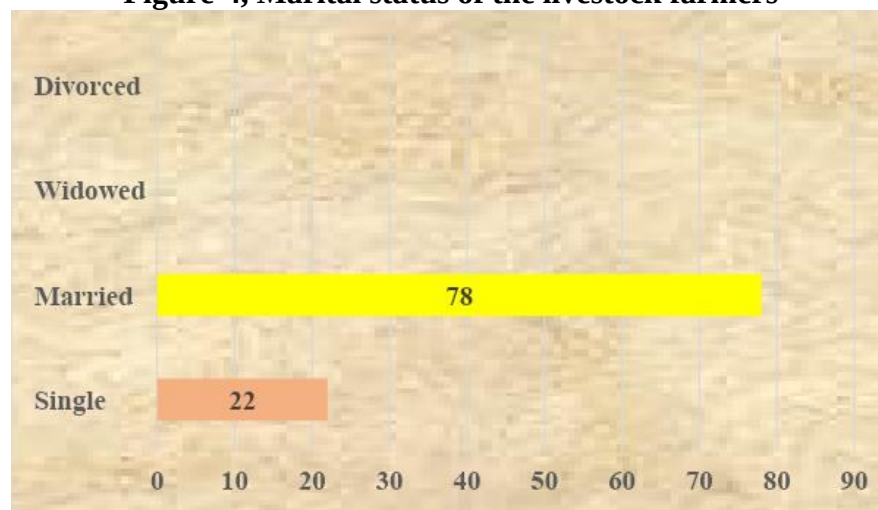
Age of the livestock farmers were asked in this research at field level. The outcome was depicted as shown in figure-2. Majority (58%) of the livestock farmers fell into the age category of 31 to 50 years. Followed by 23% of the livestock farmers who fell into the age category of 46 and above group. While, 12% and 8% of the livestock farmers fell into the age category of 19 to 30 and up to 18 years of age categories respectively.

Figure-3, Education level of the livestock farmers



Education as the major independent variables were inquired of the livestock farmers as shown in figure-3. Raw data was grouped. Results show that less than half (45%) of the livestock farmers were uneducated. Whereas, most 30% of the livestock farmers acquired matriculation or less formal education. While, 12-13% of the livestock farmers acquired graduation and intermediate level of education respectively.

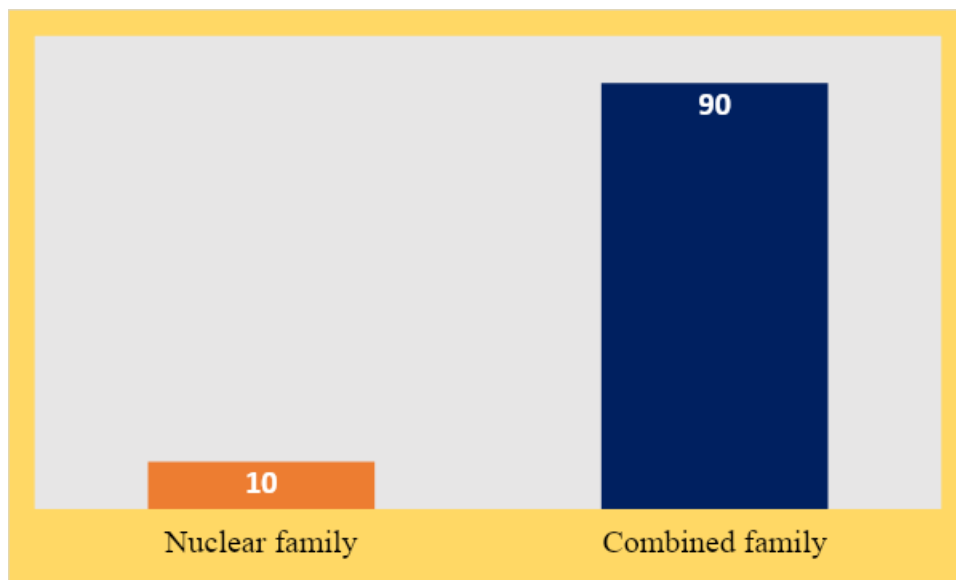
Figure-4, Marital status of the livestock farmers





Marital status in this research was an impressive variable and major independent variable. Married livestock farmers are more experienced and have sound professionalism as compared to unmarried as shown in figure-4. Captured data was analyzed by using SPSS. Overwhelming majority (78%) of the livestock farmers were married. While, 22% of the livestock farmers were single and unmarried.

Figure-5, Types of family of the livestock farmers



Types of family data were gathered at field level as shown in figure-5. Vast majority (90%) of females were preferred in the combined family arrangement however the remaining 10% of the livestock farmers preferred nuclear family setup.

Table-1, Pearson Chi-square score about livestock production, socio-economic and other dynamics

Livestock dynamics	Value	df	Asymp: Sig. (2-sided)
<i>Livestock production dynamic</i>			
Pearson Chi-Square	13.094 ^b	16	.666NA
Likelihood Ratio	15.423	16	.494
Linear-by-Linear Association	1.071	1	.301
Phi	.572	-	.666
Cramer's V	.286	-	.666
<i>Socio-economic dynamic</i>			



Pearson Chi-Square	5.360 ^c	3	.147NA
Likelihood Ratio	5.973	3	.113
Linear-by-Linear Association	5.009	1	.025
Phi	.423	-	.147
Cramer's V	.423	-	.147
Others dynamic			
Pearson Chi-Square	2.289 ^d	6	.891NA
Likelihood Ratio	2.990	6	.810
Linear-by-Linear Association	.904	1	.342
Phi	.276	-	.891
Cramer's V	.195	-	.891
No. of Valid Cases = One hundred livestock farmers "100"			
* based on 5% significant level			

Livestock farmers were requested regarding livestock production, socio-economic and other dynamics. The results depicted in table-1 are based on ($p \leq 0.05$) level. Pearson Chi-Square technique outcomes shows that there was no causal relationship among variables and not at all association seem among variables. Non-statistical significance differences were observed in livestock farmers' perceptions. Pearson Chi-Square results shows that livestock production was: (Chi-Square=13.094b), (Likelihood Ratio=15.423) and (Linear-by-Linear Association=1.071) receptively. Whereas, socio-economic dynamics was (Chi-Square=5.360c), (Likelihood Ratio=5.973) and (Linear-by-Linear Association= 5.009) receptively. On the other hand, other dynamics was Chi-Square=2.289d), (Likelihood Ratio=2.990) and (Linear-by-Linear Association= .904). Thus, in this context, non-significant differences were detected in all three statements based on ($p \leq 0.05$) alpha level.

1.5 Conclusion and need-based Recommendations

The livestock sector at province level is playing an imperative role and also performing a potential role for the improvement of socio-economic condition of the livestock farmers. Various studies showed that there were mammoth weaknesses in this sector that could be diminished by using the effective and pre-emptive measures in the livestock sector. Therefore, keeping in view the objective of research it should be recommended that the provincial government should assist the vulnerable livestock farmers by giving them subsidies in livestock materials mostly in disaster period so as to enhance their socio-economic situation. Balochistan government should assist the livestock farmers by using the public and private partnership so as to improve livelihood options of the livestock farmers and smartly deploying investments in the livestock sector.



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