LIVESTOCK TRENDS IN BALOCHISTAN: A WAY FORWARD

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ABSTRACT

In order to achieved the object of the trends of livestock and their implication at province level this research was carried out. Quetta, Pishin and Kalat district of Balochistan were elected purposively. Longitudinal research design was used. 300 hundred respondents from three district were selected, 100 from each district chosen by using random sampling. Cronbach's Alpha program was.99 to .82. One Way ANOVA test was used based on p<0.05 level. Results reveals that most 47% of the respondents were fall into the 31 to 45 years' age classes. Most 52% of the respondents did not gets education. Majority 90% of the respondents arranged married. Majority 78% of the respondents were preferred to lived paved household structures. Significant differences were found three out of four statements regarding livestock trends. Provincial government should be encouraging result-oriented and effective market-based production in order to improve the livestock farmers' economic condition. Credit policy and cohesive livestock methods should be implemented for sustainable livestock mechanism so as to upsurge the livestock farmer's production.

Keywords: livestock trends, Balochistan, way forward, Quetta,

1.1 Introduction

At province level the animal husbandry and livestock sector was the imperative and revenue generated sector. In this regard these sectors constitute 33% of GDP at province level. And also considered as the major sources of livelihood options for rural masses (FAO, 1997; and FAO, 2002).

Livestock sector contains the huge potential in Balochistan due to its unique topographical feature. However, in Balochistan the livestock resources and livestock population are including cattle 2.25, buffalo 0.31, goat 12.80, sheep 11.78 and camel 0.38 million respectively at Balochistan level. The figure indicates that there was huge potential in this regard. However, the small ruminants constituted around 35.1%. Which was near to half of the national population of small ruminants. Most of the livestock ruminant production or mechanism were consisting of the sedentary, transhumant and nomadic and constituting the 11.5% in this context (GoB, 2013).

Due to the rapid urbanization process and speedy commercial peri-urban process the mild and red meat demand are amazingly increasing. So, the livestock department has vertically increased their production and dairy products. In this regard the dairy units are routinely operative so as to produce the high milk production in urban areas (Nagy et al., 1991).

Owing to the prolonged drought spell mostly in upland areas of Balochistan, the livestock sector was facing various threats like inappropriate management practices and inadequate breed development packages. Around 93% of the province has vast rangelands. Which are suitable for small ruminants grazing ground. Owing to persisting drought spells these pasture and rangeland have severely damaged and deteriorated frequently (GoB, 2013).

On the other hand, lack of nutrition, feed, fodder and insufficient stock water amenities are the major limiting factors for small ruminants and livestock sector as a result the sustainable rural livestock production aims were not achieved. Insufficient and imbalanced feed and fodder within terms of biomass is mainly responsible for not enhancing the fabrication and health condition of livestock (GoB, 2013)

However, on the other side, the livestock markets at province level are not functional, while in this regard the sale of livestock at province level on saleable basis is commonly

missing. Generally, livestock markets are facing the lack of facilities, nonexistence of stock water facilities and lack of marketing information systems at province level. Absenteeism of drought predicting structure and inadequate budgetary distribution were the other problems as faced by the department (Kakar et al., 2008; and Mahmood and Rodriguez, 1991).

1.2 Production System Small Ruminant in Balochistan

Due to its unique geographical system the small ruminant production systems at Balochistan level differ from areas to areas and zone to zone. However, the suitable ecological conditions in Balochistan for small ruminant production is somewhat better for feed and fodder availability. But the recent drought condition has damaged the pasture and rangeland within terms of resources. At province level the ownership and production systems have been divided into three groups like sedentary, transhumance and nomadic as shown in figure-1 (GoB, 2013).

Figure-1 Ownership and Production Systems
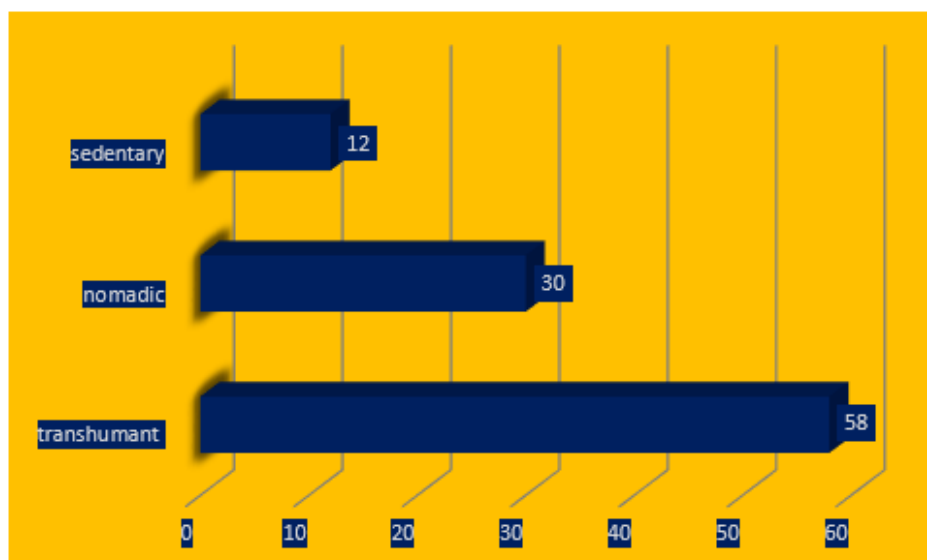
Source: GoB, (2013)

1.3 Nomadic Mechanism

Nomadic production mechanism was the prevailing system in Balochistan. In this system the nomadic wandering perceptually around year and did not stay in any places. By nature, the nomadic people migrated throughout the region piecemeal. The boundary to boundary crossing, area to area movement and country to country migration process were the common phenomena for nomadic people. However, these people or groups constitute the 30% of the goat and sheep populace. These people or groups were itinerant and roaming from north (uplands) towards south (lowlands). Mostly these human movements were observed during the winter season whereby the summer season is very brazenly hot. Especially in strategic areas, this sort of migration is carried out by nomadic people. Whereby these nomadic groups communicate and social contact with each other and also discuss the family, business, sell their animals matters and tribal issues while migrating from place to place (Kakar et al., 2008; and Mahmood and Rodriguez, 1991).

1.4 Transhumant Mechanism

These groups of the people had permanent residence and also had paved household units in diverse locations of the province but migrated just for feed, water and fodder for their livestock or animals around the region. During the winter season these people migrated from warm areas along with their livestock and animals. These sorts of people travel frequently by big automobiles from uplands towards lowlands areas. However, in this regard the Kacchi plains and areas whereby these people travelled fodder, water and feed for livestock. During the hot season these people go back to household units and also migrate from their home. Social-economic condition and trading manner of these people were the same as nomad's people (Kakar et al., 2008; and Mahmood and Rodriguez, 1991).

1.5 Sedentary Mechanism

Sedentary farmers in this regard are famous for cultivating the agriculture crops along with rearranging livestock and small ruminants so as to enhance his/her lifestyle and livelihood options. In this class the female just feeding or rearing livestock. These kind of group to developed to produced e byproduct form the domestic and livestock animal so that to increase their income (GoB, 2013).

1.6 Problem Statement

In Balochistan the livestock productivity is limited and facing diverse multiple constraints. In Balochistan there were various problems in livestock sector such as lack of physical infrastructural in remote areas, lack of institutional or government policy for livestock development, HRD or human resource development section is very poor or fragile, low capacity for feed and fodder of livestock during drought period productivity, insufficient and imbalance forage resources, inappropriate management mechanism, nonexistence program and plan for animal breed enhancement, unproductive disease control tools for animal and livestock, continued drought cycle, lack of marketing dynamics, deficiency of skilled labor, stubborn or very limited operating system for provincial government, R and D section missing at considerable rate, livestock and the like. Keeping in view the mentioned face and figure this effort was carried out so as to measure the trends of the livestock sector in Balochistan.

1.7 Objectives

1. To explore the biographic aspects of the respondents as independent variables.
2. To measure the trends of livestock at province level.
3. To develop suggestions for policy implications for livestock upgrading.

1.8 Methodology

Quetta, Pishin and Kalat district of Balochistan were elected purposely. Because in these districts the livestock stakeholder existed. Research design is the compressive and comprehensive structure through which the entire procedural aspect of any study embodies specific circumstances (Kincheloe, 1991; Nachmias & Nachmias, 1992; Stallings, 1997; and Cresswell, 1998). Therefore, in this reach the longitudinal research design was used to actualize the perception of respondents based on Likert types of scale (Likert, 1932; and Ellis, 2000) from the three districts like Quetta, Pishin and Kalat district in Balochistan. On the other hand, qualitative research was carried out (Patton, 2001). Primary data (face-to-face interaction) was obtained at field level however, and secondary data (RIE, online databases portal, NSD and ERIC) was gathered in various electronic sources accordingly (Stallings, 1997). 300 hundred respondents from three districts were selected, 100 from each district by using random sampling. Because the large target population size has an accurate outcome regarding study results generalization (Bryman and Bell, 2007). Cronbach's Alpha program checked the measurement about inner-consistency and logical flow of survey form; however, the inner-consistency was .99 to .82. Research point of view this numerical digit was obtained by the Cronbach's Alpha program was good (Pallant, 2007; and Nunnaly, 1978). Data was broken down by (SPSS 25). In this regard the Statistical Package for the Social Sciences depicted the outcome and other others necessary (George and Mallery, 2003).

ANOVA was used based on $p < 0.05$ level and the Tukey B[a] test was put into run for 95% confidence interval for mean score.

1.9 Finding and Biographic Information

Biographic aspects of the respondents as independent variables were observed in this research. Socio-demographic data in this regard was gathered at field level. Because socio-demographic variables are the major biographic information. On the other hand, biographic information is measured as the major indicators in this effort (Han, 2008).

Figure-2, Respondents Age Level
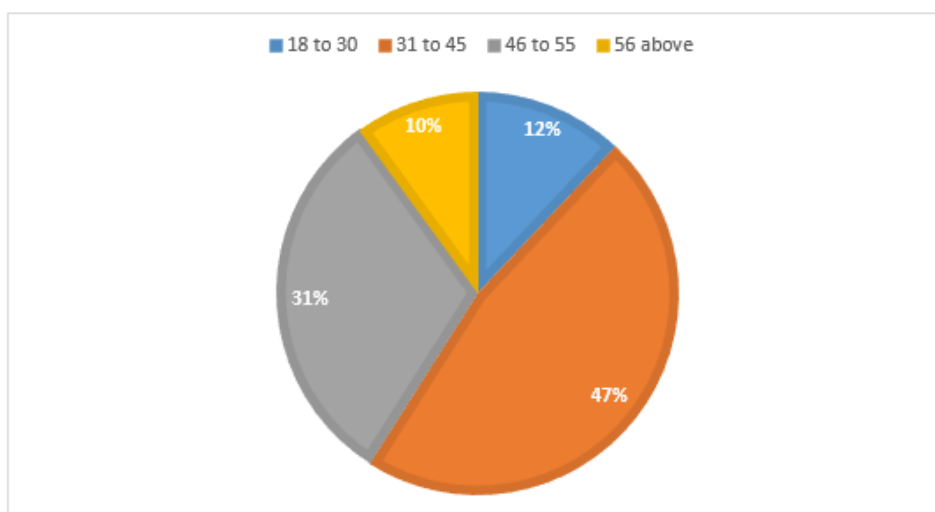
Age level of the respondents was the independent variables as shown in figure-2. In this regard the age questions were asked at field level from the respondents. Most 47% of the respondents fell into the 31 to 45 years' age classes. 46 to 55 years' age classes dropped into the 31%. Only 12 and 10% of the respondents fell into the 18 to 30 and 56 above year age categories respectively.

Figure-3, Respondents Educational Level
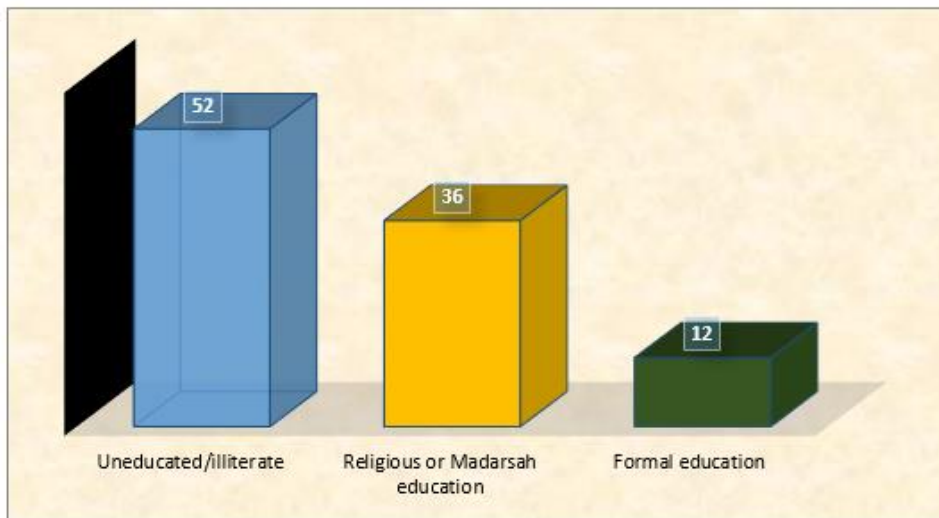
Educational status was major demographic information and data as shown in figure-3. Most 52% of the respondents did not get an education. While, 36-12% of the respondents acquired the religious/ Madrasah and formal education respectively.
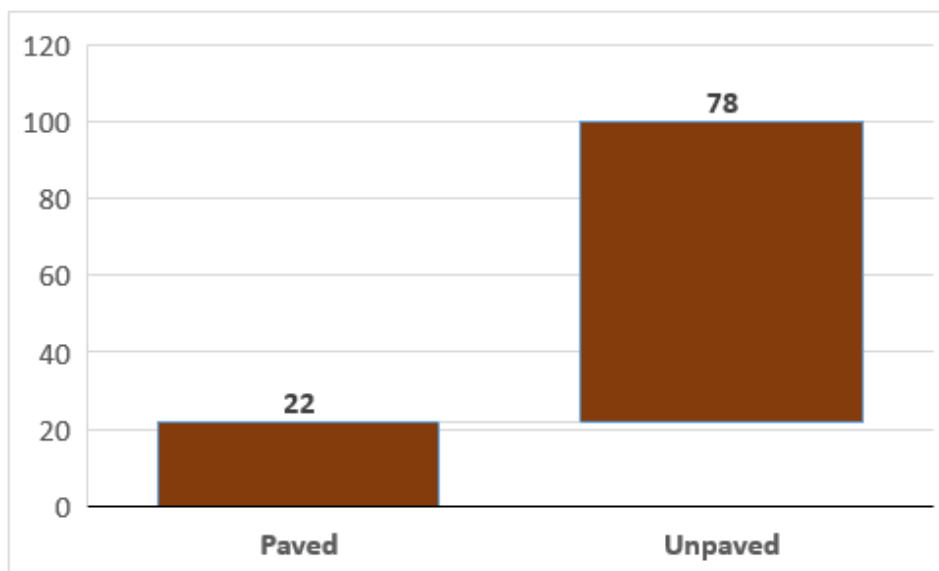
Figure-4, Respondents Marital Status
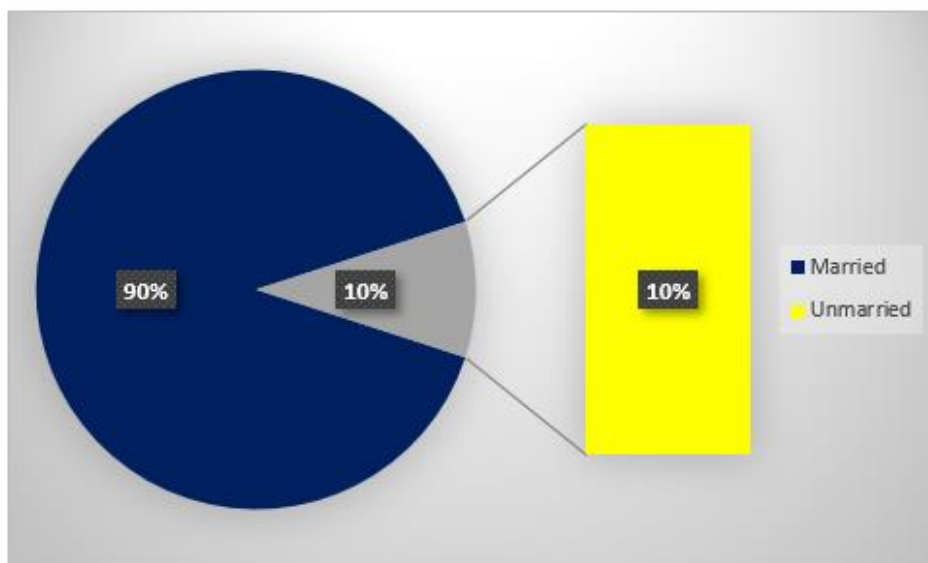
Respondents' marital status were the imperative aspects of the present research as shown in figure-4. Majority 90% of the respondents arranged to marry followed by 10% of the respondents who lived into the single status respectively.

Figure-5, Respondents Household Unit Structures

Respondents' household unit structures and their dynamics was shown in figure-5. Majority 78% of the respondents preferred to live in a paved household structure followed by 22% of the respondents who lived in paved households.

Table-1, Respondents Perceived Score About Livestock Trends

Trends	Quetta		Pishin		Kalat		Mean Square	f-vale	Sig*
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation			
Negative trends	3.8100a	.84918	3.1400b	1.62070	2.4000c	1.69967	2.079	23.928	.000**
Positive trends	3.2600a	1.33045	2.9400b	1.11754	3.4300b	1.35031	1.614	3.835	.023NS
Linear trends	3.3800a	1.04234	3.5900b	.97540	3.7500b	1.07661	1.066	3.231	.041*
Other	3.3500a	1.06719	2.7200b	1.64581	3.0700b	1.25734	9.963	5.506	.004*

*SD = Standard deviation   * significant at the 0.005 level.*

Respondents were asked about the livestock trends as shown in table-1. However, the data was gathered at field level. The alpha level was adjusted at the rate of 0.005 level. While the 95% confidence interval for mean score was set. Whereas, a high difference was observed about (f-value = 23.928, p < .005) as a negative trend in the livestock sector. While linear trends and other related parameters were found only significant at (p < .05) that were (f-value = 3.231, p < .005) and (f-value = 5.506, p < .005) respectively by using the Tukey Bª test based on 95% confidence interval level. While, non-significant was observed about (f-value = 3.835, p < .005) as a positive trend in the livestock sector. Hence, significant differences were found three out of four statements regarding livestock trends as shown in table-1.

1.10 Conclusions and Policy Implications

Livestock and animal husbandry remains the mainstay of the province's economy. And the major sources of income revenue generation for the rural farmers at province level. Livestock sector faced the inadequate policy due to ineffective administration as run by the provincial government. Therefore, based on realized outcomes following suggestion put forward for the diverse stakeholder. Provincial government should be encouraging result-oriented and effective market-based production in order to improve the livestock farmers' economic condition. Credit policy and cohesive livestock methods should be implemented for sustainable livestock mechanism so as to upsurge the livestock farmer's production. Fresh and state-of-art training series should be launched for livestock beneficiaries and livestock productivity in diverse districts of Balochistan.

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