ISSN No. (Print): 0975-1130 ISSN No. (Online): 2249-3239

Financial Constraints Impact on Small Ruminants' Production for the **Development of Economy of Balochistan-Pakistan**

Muhammad Shafiq*, Tayyabha Safdar**, Asma Azhar** and Zubia Masood*** *Department of Commerce, University of Balochistan, Quetta, Balochistan, PAKISTAN **Department of Commerce, SBK, Women's University, Quetta, Balochistan, PAKISTAN ***Department of Zoology, Jinnah University for Women (JUW), Karachi, PAKISTAN

> (Corresponding author: Dr. Zubia Masood) (Received 15 June 2017, Accepted 15 July, 2017) (Published by Research Trend, Website: www.researchtrend.net)

ABSTRACT: The objective of the study was to investigate the financial constraints of livestock with special reference to small ruminants of Balochistan during the year of 2016. Random sampling technique was used to collect the data through five-point Likert scale by using self-constructed close ended questionnaire which ultimately turned into closed ended interview as majority of Population was illiterate to less-educated. Hypotheses were tested using correlation and regression analysis. Results indicated that financial constraints in small ruminants' production is causing difficulties to Small ruminants holders (SRH) in Balochistan. Majority of inhabitants in Balochistan are engaged with small ruminants rearing activities for their livelihood. There are a number of constriction in the way to progress and prosperity for small ruminants' holders in the province; nevertheless, lack of finance is one the major hurdles which do not let them to flourish their businesses. Availability of internal finance (AIF), access to new debt or equity (ADE), sources of Finance (SF), access to micro-credit (AMC) and role of financial institution (RFI) are the few factors that have a direct impact on the financial constraints by increasing the difficulties to small ruminants holders (SRH) in the economy of Balochistan-Pakistan. This study is specifically focused on measuring the financial difficulties pertaining to rearing the small ruminants which ultimately hinder the development and prosperity in the province of Balochistan-Pakistan. Due to lack of money, the livestock holders can't invest more in livestock business which predominantly consist of sheep and goat. Hence, lack of finance is the major hurdle in development of Livestock.

Keywords: Financial restraints, Livestock, Balochistan

INTRODUCTION

Balochistan is one of the five provinces of Pakistan which is situated in the South West of the country. It is an important area due to its strategic location. Balochistan province has the world's third largest herd of goats (Area Development Program in Balochistan, 2015). The province is however the least developed among the four federating units of Pakistan in terms of social and economic indicators. Overall, 56 percent of Balochistan's population falls in the category of 'multidimensionally poor (Area Development Program in Balochistan, 2015). Agriculture is the mainstay of the dwellings, however, low rainfalls is the major impediments in the way to expand cropping practices in the province. This consequently lead to the common people to engage with livestock rearing especially small ruminants' rearing for their livelihood. Hence, the majority of population in the province accomplishes its

necessities by rearing small ruminants. Livestock of Balochistan, consist of sheep, goat, cattle, camel, buffalo, donkeys, poultry and mules but sheep and goats are significant due to their adaptability in the arid to semi-arid climate. Balochistan supplies 56% of mutton to rest of Pakistan (Livestock and Dairy Development Department, GoB, Quetta). However, there are a numerous difficulties for small ruminants' holders to expand their production. Lack of finance, is the major hurdle for smooth run of livestock business. They do not have sufficient equity capital to initiate their business on strong footing. Availability of microcredit is inaccessible to majority of small ruminants' holders. A financial constraint is a lack of money because of which you cannot buy something, or do something. Even though, livestock contributions to the economy are substantial as 47% share of GDP from livestock (Bauru of Statistics, 2012).

Additionally, 80% of people of Balochistan are involved with the livestock rearing activities (SMEDA, 2012). Despite of these major facts, livestock economy is persistently wagering. There are very less effort made by the stack holders to get livestock holders out of their ordeal. There is so much potential but small ruminants' holders share their major profit to those middleman and supplier of finances. There is huge investment potential but due to financial constraints livestock sector is struggling to grow rapidly (Balochistan Sub Strategy, 1999).

Therefore, the present investigation was focusing on the empirical assessment of determinants and the effects of financing constraints at the household level. Using a standard model of credit rationing that is based on disproportionate evidence from diverse factors which should impact the probability of financing constrictions. Improving business conditions strengthen the degree of informational asymmetry. Availability of internal financing and source of finance are found to have a significant effect. Availability of internal finance (AIF) to small ruminants' holders is meager to nothing due to extreme poverty. In most cases, they do not have any access to new debt or equity (ADE) and rely on those local individuals who charged heavy interest and take away the almost major profit from small ruminants' holders. Then there is no major sources of Finance (PC) available to them and have no easy access to microcredit (AMC). Role of financial institution (RFI) had a direct impact on the financial constraints by increasing the difficulties to small ruminants' holders in the economy of Balochistan-Pakistan.

Financial difficulties for livestock holders

Lack of money is considered to be the major hurdle in the development of the sector in Balochistan. Large ruminants' are reared by potential investors who have enough money but small ruminants' husbandry is being reared by the ordinary middle or lower middle class in Balochistan suffers from lack of money to carry out the business on a large scale. It is not possible for them to initiate rearing on a large scale. They don't have the sufficient money to invest more in livestock rearing so that they do remain poor (Humera et al., 2010). Commercial banks and other micro credit banks do not have a clear cut policy regarding this. Few microfinance or agriculture banks provide loan facilities, but their terms are strict to comply for livestock holders who are predominately illiterate (The SOFA Team and Cheryl Doss, 2011). Finance is emerging as an important constraint in the livestock sector in Baluchistan. Financial constraint does not let the livestock holder to expand their businesses. Livestock in advance countries like England, Australia, New Zealand and England, has become the significance industry for their economies (Thornton et al., 2002). They have developed special techniques and methods to rear their livestock in their respective countries (Shafiq, 2008). These advance countries are not only sufficient to accomplish their own needs, but also exporting the food items to the world. Australia and New Zealand have set up several industrial zones which entirely depend on the production of livestock (Afzal, 2003). As Repercussion, the livestock holders of those developed countries are prosperous and able to cope with any type of circumstances. In case of difficulty, government agencies are ready to help them in shape of monetary benefits; moreover, they also receive subsidies from the government each year (Humera et al., 2010). Countries like Holland, the government works for the development of the livestock holders, in this regard, meetings and trainings are conducted which create professional management abilities in farmers, livestock holders and livestock businessmen. One can perceive that there is a lot to do and very little has been done yet. Farmers can earn equal to four crops, income, if they would invest in livestock (Younis and Yaqoob, 2002). Pakistan is facing shortage of food resource supply up to 30 per cent to its demand. Balochistan can assist the country to overcome the austerity of food shortage by increasing the livestock supply, however, there is need to make master plans to achieve this goal.

MATERIALS AND METHODS

A. Constraints in Livestock development of Balochistan Livestock economy of Baluchistan is not as prosperous as it should be due to a number of constraints. Individuals who are involved in small ruminant rearing have numerous difficulties and hurdles, such as: lack of finance, old customs and traditions, improper marketing, continual drought spells and breed issues. Furthermore, over-grazing and maladministration are the common inconsiderate practices in the livestock management (Baluchistan Sub Strategy, 1999), the Government has to work on capacity building of livestock holder and the related departments (Haider, 2008). There is a gap of jurisdiction for the disputed control of rangelands between the tribes and the government. There has been decreasing in rainfall, depletion and degradation threatened the capacity engagement of rangelands in all over the Baluchistan (Baluchistan sub strategy, 1999). Shepherds are mostly illiterate and live in extreme poverty. On the other hand, flock owners have caused to create the major obstacles in the conduction of vaccination, medication and addition feed concentrate to livestock in the winter.

Vaccination, de-worming, anti-tick bathing are important issues which most of the times, herders do not follow. Non-modernization created the problems, which have slowed down the pace of progress in the livestock sector. Due to inaccessibility to necessary gadget and the proper use of these tools, livestock sector is recessed as compare to neighboring countries. Leading nations of the world have capitalized the advantage by providing more supply of food and quality of food supply. Nevertheless, it does not look true for developing or under developed nations of the world (Mitens and Swinnen, 2009) hardly manage in Baluchistan. Generally, under grazed areas are not utilized to their full potential because of their inaccessibility and the limited water availability. The increasing livestock population is overstocking most of the areas well above their carrying capacity (DeeMar, 2008). Overgrazing and deforestation have caused extensive destruction of the vegetation cover of the rangelands resulting in a declining status of these resources and loss of bio-diversity of both fauna and flora (Buzdar et al., 1989; Khan, 1991; FAO, 2003). The situation is further aggravated by the weak base of forage/fodder alternatives from agriculture, which currently meets only 20 to 30 per cent of the total requirement of the small ruminants in the province. (Livestock and Dairy Development Department, Government of Balochistan, Quetta, 2012).

These points are explained below:

1. Sampling and Area of Research. Primary Data are collected through random sampling technique through the close ended interview from twenty districts of Balochistan. The sample size was estimated from 900 local persons. The Targeted population of male respondents included i.e., those males who had attained the age of 18 and above includes the nomadic, transhumance, sedentary families and other common men and women who involve in livestock rearing activities. According to the possibility of unreturned questionnaires, 10 percent extra sample size questionnaire were distributed to male respondents and finally 549 questionnaires from male respondents were

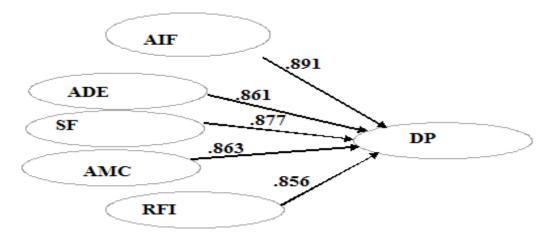
received that were very near to estimation of sample. By using SPSS 19.0, statistical tools were employed to test study hypotheses. The present research has the practical implication and form the type of data gathering a descriptive and casual. Questionnaire development and results analysis were performed by adopting the due process.

2. Measurements of Collecting Data. There were eight scales used in this research study to quantify the construct of interest. Several measures were included to analyze the variables such as; the potential and prospects, constraints and prosperity and development. Measures planned to gather demographic information regarding the subjects (Werts et al., 1974), including Age, Education, Occupation, type of livestock and their number of each type of livestock. Thus research has the practical implication regarding the subject matter and establishes the type of data gathering which was descriptive and casual. Statistical tools were applied in order to analyze the results of the proposed study. Process of data collection started with the help of selfadministered. well-structured self-constructed interview. The response scale had been five point Likert-type scale ranging from one (strongly disagree) to five (strongly agree). Measure which was used in the study was different from other measure in the prevailing study. Measure was quite significantly revising form the 2 points (Danserreau et al., 1975), it was also depicted quite significant differences from 4point (Linden & Graen, 1980) and from five item (Graen, Linden & Hoel, 1982). Before constructing the measure several scales were closely studied. Therefore, 5-point Likert-type scale was borrowed and adopted for the study. Moreover, the Cronbach alphas are consistent in the study. Thus, the 5-item Likert scale ranging from (1) "strongly disagree" to (5) "Strongly Agree" were used in the study. Person correlation and other descriptive statistics were shown the Table 1 below and are the few factors that have a direct impact on the financial constraints by increasing the difficulties to small ruminants holders (SRH) in the economy of Balochistan-Pakistan.

Table 1: Showing the Means, Standard Deviation, and Correlations of data.

Items	Mean	SD	1	2	3	4	5	6	Beta
1. Availability of internal finance (AIF)	3.1	1.0	1.00						.851
2. Access to new debt or equity (ADE)	3.5	0.9	.881	1.00					.801
3. sources of Finance (SF)	3.6	0.8	.852	.861	1.00				.904
4. Access to micro-credit (AMC)	3.0	1.1	.886	.880	.892	1.00			.841
5. role of financial institution (RFI)	3.1	1.2	.852	.871	.901	.901	1.00		.814
6. Economic Disparity & poverty (DP)	2.9	1.5	.854	.867	.854	.852	.897	1.00	

 $[\]ensuremath{^{*}}$ All items are Correlated significant at the 0.05 level (2-tailed). Cronbach, L. J. (1951),



Note: Significant at p< .05

Fig. 1. Path diagram for Theoretical Model.

3. Hypotheses

H1: There is positive relation between initial financing availability constraints for livestock holders and poverty.

H2: There is a constraints to access to debt and equity for livestock holders which prevails disparity poverty.

H3: There is lack of impediments of sources of funds which increase the poverty.

H4: The more the access to micro-finance constraints to SRH in Balochistan, the more the poverty and lack of development.

H5: There is a positive relationship between the role of financial institutions constraints and poverty.

RESULTS AND DISCUSSION

Research on small ruminants' regarding its marketing constraints suggests several constructs, such as; Availability of internal finance (AIF), access to new debt or equity (ADE), sources of Finance (SF), access to micro-credit (AMC) and role of financial institution (RFI) are the few factors that have a direct impact on the financial constraints by increasing the difficulties to small ruminants holders (SRH) in the economy of Balochistan-Pakistan. All the variables obstruct the profit generation for small ruminants' holders. The results of the study revealed that small ruminants' holders do not earn sufficient profit. All independent variables are positively related to dependent variables. Furthermore, majority of population consists of pastoral livelihood. Study results are closely associated and supportive towards the past research and findings on the potential of livestock in Balochistan, particularly small ruminants which substantiates the notion that the livestock generates ample income at every level and to capacitates the livestock holders to consolidate saving abilities. However, all constraints have created the hurdle to development and meagre profit for small ruminants' holders in Balochistan. Shown in figure: 1 IBM Amos 19 was used to measure the SEM. In the current study, confirmatory factor Analysis (CFA) has been utilized in order to verify the suitability measurement model for each variable. Adequacy of model fit was determined by several Goodness of fit statistics, these are; Root Mean Square Error of Approximation (RMSEA), Standardized Root Mean Square Residual (RMR), Goodness of Fit Index and Comparative Fit Index (CFI). The basic objective in the testing procedure of model is to estimate the goodness of fit between the hypothesized model and the sample. RMSEA is a traditional measure used to test the error of population approximation. It shows that sample data fit the population covariance matrix. If the value is less than 0.5 then it's a good fit whereas the average value.8 shows reasonably good fitness of the model. Standardized RMR defines the average across all standardized residuals, and ranges from zero to 1 in which 5 describes good fit of model. Standardized RMR depicts that there is inconsistency between the hypothesized correlation matrix and the observed sample averagely. On the other hand, Comparative Fit Index (CFI) measures relativeness of variance and covariance in the sample. It ranges from zero to 1, closeness of value to 1 being an indication of best fit; therefore, CFI procures the measure of comprehensive conversation of data (Byrne, 1998).

CONCLUSION

The primary purpose of this study was to develop and to test a model that examines the relationship of small ruminants' constraint to profit of small ruminants. The study found out that a number of constraints are positively influencing the less development and backwardness. The results of this study provide considerable insight into the small ruminants' importance. Hence, the test of model indicates that the financial, marketing and environmental constraints do not let the livestock sector to flourish. The study also indicates empirical sign of the effect of livelihood of livestock holder is interrupted by the various constraints in the province. This means the quality of livestock activities can be flourish by eliminating the financial, marketing, and environmental constraints. Illiteracy is one of major hurdle in the way of progress. Thus, the study provides guidelines to support decision makers to better comprehend how to progress the small ruminants' rearing activities. This study may provide better understanding in decision making about the outcomes and end results.

REFERENCES

- Afzal M. (2008). Investment Opportunities in Livestock Sector in Pakistan, Director General "The Daily News" Rawalpindi / Islamabad, Lahore and Karachi on September 18, 2006.
- Afzal, M. (2003). Livestock Its Role in Poverty Alleviation.Farming Outlook January-March, 2003.pp: 6-8. Department of Agriculture, University of Aberdeen, U.K.
- Afzal, M. (2009). Livestock its Role in Poverty Alleviation, Pp. 6-8. Farming Outlook January-March.
- Baloch, N., (2003). Production and marketing of small ruminants in District Mastung (Balochistan). M.Sc. (Hons.) Thesis, submitted to Sindh Agriculture Tando Jam.
- Balochistan Sub Strategy, (1999). Government of Balochistan, Quetta.
- Byrne, B. M. (1998). Structural Equation Modeling with LISREL, PRELIS and SIMPLIS: Basic Concepts, Applications, and Programming. Mahwah, NJ: Lawrence Erlbaum Associates.
- Cronbach, L. J. (1951). Coefficient Alpha and the internal structure of tests. *Psychometrika*, **16**(3), 297-333.
- Danserreau, F., JR., Graen, G., & Haga, W. J. (1975). A vertical dyad linkage approach to leadership within formal organization: A longitudinal investigation of the role making process. *Organizational Behavior and Human Performance*, **13**, 46-78.
- FAO. (1983). Report of the assistance of rangeland and livestock development survey in Balochistan.FAO Technical Cooperation Program, TCP/PAK/0107, FAO, Islamabad, Pakistan.

- Fontana, M. and L. Natali (2008). Gendered patterns of time use in Tanzania: Public investment in infrastructure can help? Paper prepared for the IFPRI Project on 'Evaluating the Long-Term Impact of Gender-focused Policy Interventions.
- Geological Survey, (2005). Government of Pakistan, Quetta. Government of Balochistan, Planning and Development Department, Concept Eight Year Plan 1993-1998, Quetta, Pakistan.
- Giles, H. Van and Baig, S. (1992). Environmental Program Balochistan, Pakistan. Land Resources and Urban Sciences Department, International Institute for Aerospace Survey and Earth Sciences LARUS-TC, Enschede, the Netherlands and Ecology unit Soil survey of Pakistan EU- SSP, Lahore, Pakistan.
- Giles, H. Van and Baig, S. (1992). Environmental Program Balochistan, Pakistan. Land Resources and Urban Sciences Department, International Institute for Aerospace Survey and Earth Sciences LARUS-TC, Enschede, the Netherlands and Ecology unit Soil survey of Pakistan EU- SSP, Lahore, Pakistan.
- Graen, G. B., Linden, R., & Hoel, W. (1982). Role of leadership in the livestock withdrawal process. *Journal of applied Psychology*, **67**(6): 868-872.
- Jasra A.W. and G.B. Isani (2002). Development Constraints and Drifting of Camel Production Systems in Pakistan. *International Journal of Agriculture & Biology* 1560-8530/2003/05-1-14-16 http://www.ijab.org.
- Linden, R. C., & Graen, G. (1980). Generalizability of the vertical dyad linkage model of leadership. *Academy of Management Journal*, **23**(3), 451-465.
- Livestock & Dairy Development Department (2012). Government of Balochistan, Quetta.
- Livestock & Dairy Development Department, (2012). Livestock Sub strategy Balochistan, Government of Balochistan, Quetta.
- Nadeem A., and Sajida T., (2004). Women and Livestock Management in Sindh (Pakistan agriculture research council PARC).
- Pirzadeh, T., Ul Islam, (1981). Consumption Patterns of Milk and Meat in Lahore.Results of a Consumer Survey. Livestock Production and Marketing Survey Punjab. Report No.11. Directorate of Livestock Production Extension and Artificial Insemination Service, Punjab, (LPE/AI), Lahore and GTZ, Eschborn.
- Population and Housing Census of Pakistan, (1998). Census Bulletin -5, provisional Results Balochistan, Population Census Organization, Statistics Division, Government of Pakistan.
- Shafiq .M. (2008). Analysis of the Role of Women in Livestock Production in Balochistan, Pakistan *Journal Of Agriculture & Social Sciences* ISSN Print: 1813-2235; ISSN Online: 1814-960X 07-322/ZIP/2008/04-1-1 8-22
- Shafiq, M., Inayatullah and F. Muhammad, (2005). The effect of livestock on economic development of Pakistan with special reference to Balochistan. *Balochistan Res. J.U.O.B.*, **3**(1): 01-07.

- Small & Medium Enterprises Development Authority, (2012).

 "Pre-Study on Purification breed of small ruminants.

 Small and Medium Enterprise Development Authority,
 Government of Pakistan.
- Thornton P.K., Kruska R.L., Henninger N., Kristjanson P.M., Reid R.S., Atieno F., Odero A.N. and Ndegwa T. (2002). Mapping poverty and livestock in the developing world.
- ILRI (International Livestock Research Institute), Nairobi, Kenya. 124 pp.
- Werts, C.E. Linn, R. L., & Joreskog, K.G. (1974). Intra class reliability estimates: Testing structural assumptions. *Educational and Psychological Measurement*, **34**(1): 25-33.