



ASSESS THE LIVESTOCK DEVELOPMENT AND DISEASE MANAGEMENT: A CASE STUDY OF BALOCHISTAN

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Abstract

In order to measure the perception of the livestock farmers a quantitative research design was applied. Questionnaire was developed. Survey form was pre-tested to 15 livestock farmers before information gathering. Table of Krejcie and Morgan (1970) was cast-off regarding "determining the sample size from a given population". In this research or investigation, the predictor variable was independent variable and criterion variable was dependent variable. Results revealed that most (45%) of the livestock farmers were of the view that ticks are the major parasites in animals, while the remaining 34% of the livestock farmers were of the view that fleas are the major parasites in both farm and domestic animals. Most (64%) of the livestock farmers were of the view that internal worms (helminths) are prevalent parasites in animals, while the remaining 36% of the livestock farmers were of the view that protozoa are another prevalent parasite in both farm and domestic animals. In order to control the parasites in Quetta district and surrounding areas or adjacent districts, especially focus on hygiene condition of the animal, safe food system and best water practices kept and maintained for animals, and, if applicable, veterinary treatment or care for domestic of farm animals regulates so as to prevent the diseases and parasites.



Keywords: *assess, livestock development, Balochistan, disease management, case study*

1.1 Introduction:

Cattle farming and livestock are productive businesses around the world. Livestock sector basically are domesticated animals raised in an agrarian setup. In this regard the livestock sector is responsible for providing the meat of animals, poultry, milk, fur, leather, wool and the like for the products for consumption. Livestock are beneficial businesses that exclusively increase the socio-economic condition of the rural people. Livestock sector mostly consists of the farm animals that are raised in order to enhance their livelihood options; these ruminants consist of cattle, goats, sheep, and cows (Britannica, 2024).

Mostly, in western countries, the livestock sector remains predominant in the agriculture sector. In this regard, cows, rams, goats, llamas, stallions, other farm animals, donkeys, and mules, oxen, buffalo and camels are the significant animals for their meat, milk, butter, wool, fur, and the like. On the other hand, livestock made up 1/9 of all vertebrate biomass in the 21st century (American Horse Council, 2019; and Britannica, 2024).

Within the paradigm shifting scenario the livestock farming practices have mainly moved to intensive animal farming in this context. (USDA, 2017). As a proven concept, idea and notion the Intensive animal farming upsurges the vintage of numerous profitable outputs, nonetheless they also reflect the damaging impacts on animal welfare, the atmosphere as well as public health. In specific ways and means that dairy and sheep farming are the massive source of greenhouse gas releases from agricultural science. (Anomaly, 2015).

The animal breeding, upkeep, carnage and over-all subjugation of livestock termed as animal husbandry. Nevertheless, sophisticated agriculture has changed the lifestyles of the farmers of livestock farmers.

1.2 Disease Management

Good livestock practices such as proper feeding of the animal, proper hygiene condition of the animal bringing economic benefits and suitable wellbeing of the livestock farmers. But despite the facts, most of the animals still become sick, and they need proper treatment with livestock farmers, veterinary medicines and the veterinarian most in the European countries (EPRUMA, 2020).

Farm and domestic animals are vulnerable from various ailments like foot-and-mouth disease. In this regard, various parasites attacked these animals as a result their condition was becoming serious. In the market various vaccines in this context were available against certain diseases and parasites. But around the world various antibiotics are also widely used where appropriate (CSF, 2017; and NIAA, 2020).

In the past, antibiotics were regularly added to certain compound products so as to regulate the growth of the animals. Under intensive conditions the animals living are prone to internal and external parasites. However, the preemptive measures may decrease the parasite burdens of livestock as well as enlarge the productivity and profitability of both farm and domestic animals (Fraser, 2017; and AHI, 2017).

1.3 Problem statement



Livestock sector is considered as the building block of the Pakistani economy. More than 75% of the households evolved and engaged in the livestock sector in the county. However, at province level various factors are responsible for reducing livestock performance for example lack of trained manpower in the livestock sector; inadequate livestock input and poor appreciation towards modern livestock activities are very common. In Balochistan, the livestock sector is prone and faces the vital challenges from numerous parasites, counting ticks, fleas, internal worms and the like which are responsible for creating an economic problem. Therefore, present research was carried out so as to assess the livestock development and disease management: a case study of Balochistan

1.4 Research objectives

1. To calculate the biographic information or characteristics of the livestock farmers.
2. To assess livestock development and disease management in study areas.
3. To develop need-based recommendation and for policy implication of the livestock farmers.

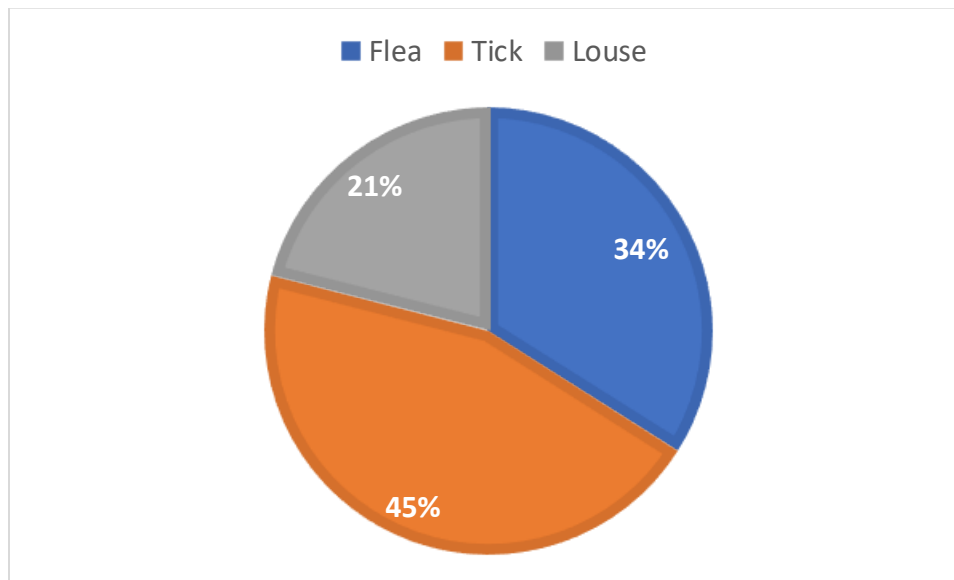
1.5 Methodology and procedure

Balochistan province is regarded as the imperative region of Pakistan within terms of livestock rearing. In this research three districts like Kech, Loralai and Naseerabad were purposely selected in order to measure the perceived perception of the respondents or livestock farmers. Basically in this investigation entire livestock farmers are considered as a research population (Cohen et al., 2000). In this context, a quantitative research design was applied (Lohr, 2012). Due to the facts that in the quantitative research design was most applicable and maximum appropriate to gather the numerical data at field level and also provided the scientific research questions in effective ways (Trochim, 2000; and Urdan, 2001). However, the quantitative research methods are apt to recapitulate the datum, and also developed the predictions as well as causal relationship among items or variables of broader research populations (Babbie, 2010; and Kellstedt, & Whitten, 2013). Quantitative research method in this research was to measure the objective paradigm and suitability for statistical measurement (Lohr, 2009;). Keeping in view objectives of the research a detailed questionnaire was built (Kerlinger, 1986). Interview schedule at field level was developed so as to gather quantitative information (George & Mallery, 2003). Survey form was also pre-tested to 15 livestock farmers before information gathering and that was vital for the research circle (Creswell, 1994; and Creswell, 2012). Current investigation enrolled and applied a quantitative method at field level and also included one hundred livestock farmers. Table of Krejcie and Morgan (1970) was cast-off regarding “determining the sample size from a given population”. In this research or investigation, the predictor variable was independent variable and criterion variable was dependent variable (Ary et al., 1996). MS Excel 2007 computer software was also used for breakdown of the data (Leedy, 1989).

1.6 Research findings and results

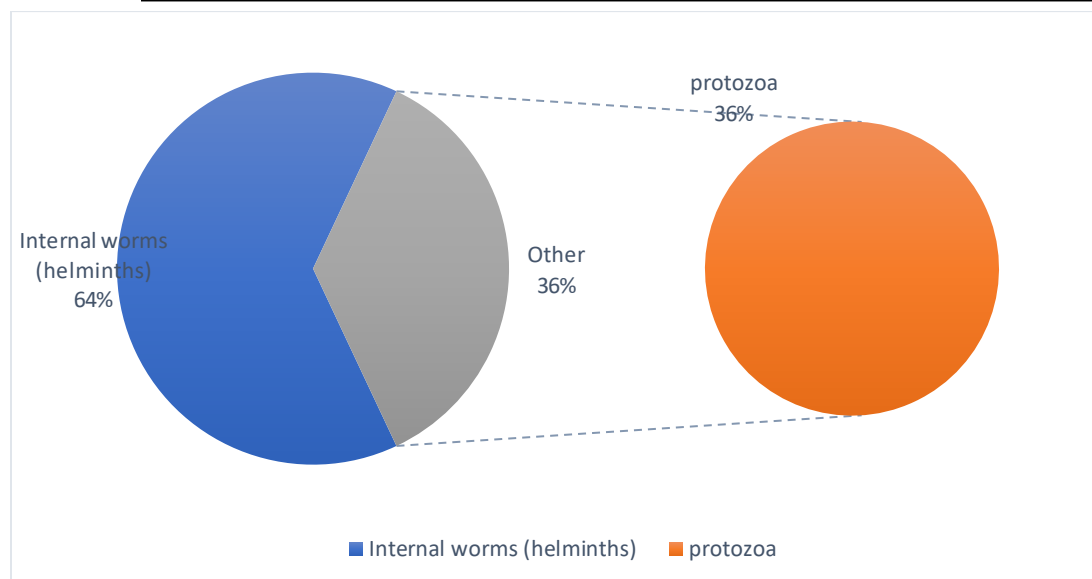
Current research was assessing livestock development and disease management: a case study of Balochistan. By the way, field data or information was collected. Various variables were used in this research. That are tabulated form and detailed are given below:

Figure-1, Perceived perception of the livestock farmers about level of parasites.



Most (45%) of the livestock farmers were of the view that ticks are the major parasites in animals, while the remaining 34% of the livestock farmers were of the view that fleas are the major parasites in both farm and domestic animals as shown in figure-1.

Figure-2, Perceived perception of the livestock farmers about scale of parasites



Most (64%) of the livestock farmers were of the view that internal worms (helminths) are prevailed parasites in animal, while remaining 36% of the livestock farmers were of the view that protozoa are another prevailed parasite in both farm and domestic animal as shown in figure-2.

1.7 Conclusions and recommendations

This research was conducted in three districts of Balochistan as a case study. By the way, information was composed regarding the assessment of livestock development and disease management: a case study of Balochistan. However, following recommendations put forwarded for policy implications: In order to control the parasites in Quetta district and surrounding areas or adjacent districts, especially focus on hygiene condition of the animal, safe food system and best water practices kept and maintained for animals, and, if applicable, veterinary treatment or care for domestic of farm animals regulates so as to prevent the diseases and parasites.



REFERENCES

- AHI, (2017). Parasite control. Animal Health Ireland. Archived from the original on 14 May 2017.
- American Horse Council, (2019). Congress Clarifies That Horses are Not "Pets," Advances Landmark Livestock Health Measures.
- Anomaly, J. (2015). What's Wrong With Factory Farming?. *Public Health Ethics*. 8 (3): 246–254. doi:10.1093/phe/phu001. hdl:10161/9733. ISSN 1754-9973. PMC 9757169. PMID 36540869. S2CID 39813493.
- Babbie, Earl, R. (2010). *The Practice of Social Research*. 12th ed. Belmont, CA: Wadsworth Cengage, 2010; Muijs, Daniel. *Doing Quantitative Research in Education with SPSS*. 2nd edition. London: SAGE Publications, 2010.
- Britannica, (2024). Livestock. *Agriculture & Agricultural Technology*. 15 June 2024. Britannica.com.
- Cohen L, Menion L, and Morrison, (2000). *Research Methodology in Education*. (5th ed.). London: Routledge.
- Creswell, J. W. (1994). *Research design: Qualitative & quantitative approaches*. Sage Publications, Inc., Thousand Oaks, CA, USA.
- Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Fourth edition. Pearson.
- CSF, (2017). Classical swine fever. The Center for Food Security and Public Health. Retrieved 20 May 2017.
- EPRUMA, (2020). Responsible Use of Animal Medicines. www.epruma.eu.
- Fraser, D. (2017). Scottish salmon farming's sea lice 'crisis'. BBC. Retrieved 20 May 2017.
- George, D., & Mallery, P. (2003). *SPSS for Windows Step by Step: A Simple Guide and Reference*. 11.0 Update (4th ed.). Boston: Allyn & Bacon.
- Kellstedt, P., & Whitten, G. (2013). *The fundamentals of political science research*. Cambridge University Press.
- Kerlinger, F. N. (1986). *Foundations of behavioral research*. (3rd ed.) New York: CBS College Publishing.
- Krejcie, R.V., & Morgan, D.W. 1970. Determining sample size for research activities. *Educational and psychological measurement*, 30, 607-610. Retrieved from <http://home.kku.ac.th/sompong/guest>
- Leedy, P., D. 1989. *Practical research* (4th ed.). New York: Macmillan Publishing Company, USA.
- Lohr, S. (2009). For today's graduate, just one word: Statistics. *The New York Times*, 158(54759), A1. Retrieved from <http://www.nytimes.com/2009/08/06/technology/06stats.html>.
- Lohr, S. (2012). The age of big data. *New York Times*, 11. Retrieved from <http://www.nytimes.com/2012/02/12/sunday-review/big-datas-impact-in-the-world.html>.
- NIAA, (2020). Scrapie Fact Sheet. National Institute for Animal Agriculture.
- Trochim, W. M. 2000. *The Research Methods Knowledge Base*, 2nd Edition. Atomic Dog Publishing, Cincinnati, OH.
- USDA, (2017). NASS – Census of Agriculture–Publications, en.wikipedia.org/wiki/Livestock.