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# THE IMPACT OF DECREASING LIVESTOCK ON POVERTY IN EAST PART OF TURKEY

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## Abstract

Poverty is now in the heart of the discourse of development. Livestock is important in supporting the livelihoods of poor farmers, consumers, traders and labourers throughout the developing world. The greatest impact of livestock in sustainable development designed to help the poor is enhancement of livestock-production systems. We will discuss the negative and positive effects of poor livestock in east part of Turkey. Using data from Turkish Statistical Institution to analyse the impact “decreasing livestock” on poverty. We are discussing the efforts to reduce animal poverty and to prioritize the livestock diseases related to the poor. An empirical evidence from Latin America will show growth in livestock production has played important role. In these regions, improvements in animal health, new productivity gains and increased purchasing power should result in further increases in production. We will show the benefits of a more rigorous evaluation before new initiatives to measure the importance of the livestock to the poor are audited. We conclude with a consideration of how we can better grasp and use animal husbandry and animal health. Then how can we understand relationship between livestock and poverty and help control diseases. And how much is the impact of the livestock disease on poverty stemming from the disease control policy itself?

**Keywords:** Livestock, Poverty, Animal husbandry,

## Introduction

Approximately 987 million poor people in the world are dependent on livestock for their livelihoods or about 70% of the "extreme poor" of more than 1.4 billion (FAO, 2009). "Developing livestock" based on the map of world cattle breeding systems drawn by Kruska, Reid, Thornton, Henninger and Kristjanson (2003) with the classification of Sere've Steinfeld (1996) in 2003 and the assignment of different rates for poor livestock keepers. The number of "poor livestock keepers" is estimated at about 397 million, and 162 million of them live in Sub-Saharan Africa. Something in livestock is the product and service mix that supports the poor in their past in different ways. In livestock production in general, the productivity of the farm is constantly increasing, contributing to the product, fertilizer and draft power and food safety.

Animal husbandry is also one of the livelihood options for women who represent 70% of poor or very small farmers and the poor of the world (DFID, 2000). The livestock sector is currently experiencing a rapid growth that is likely to continue in the future due to population growth, urbanization and, most importantly, income growth in developing countries.

However, neglected by the livestock sector or reduced poverty forgotten in the strategy documents (PRSPs). The livestock sector in Mali, which sets national policies for the reduction of poverty, is often mentioned in official discourse, where policies are proposed to reduce poverty rather than detailed livestock , (Chapman, & Slaymaker, 2003). More generally, Blench et al. (2003) showed that there was no relationship between them. The importance and prominence of livestock in a given economy is attributed to PRSPs accordingly. Only four African countries (Guinea, Mauritania, Mozambique and Rwanda) proposed a detailed discussion with appropriate strategies for the livestock sector.

Some countries, Kenya, Sudan, Uganda and Burkina Faso and others like Ethiopia and Mali emphasize livestock at national level in planning strategies (Pica-Ciamarra, 2005), but today, most of the household incomes in Africa do not get tired of the importance of cereal crops, and the contributions of animals are often encountered or ignored in the past. Analyzes do not take into account the fact that livestock provides.

Labor for the sustainability of the home as well as fertilizer and agricultural system for milk and meat. They also have the fact that livestock also provide the fact that they provide regular cash meeting urgent social needs, agricultural procurement to improve equipment or entrances or home living conditions. The difficulty in coming to terms with the contribution of livestock to household economies has led to considerable scientific debate about the nature of livestock products, the value of the asset, and the use of the monetary unit.

## **Literature Review**

The livestock sector is wide and has a wide range of agro-ecological, social and continental, political dimensions between regions and countries. About 1.3 billion extremely poor people in the world of 900 million live in rural areas, many of whom trust. Agricultural activities for food and income. Approximately 1 billion farm animals are raised by more than 800 million poor livestock guardians in marginal, rural and environmental areas of developing countries. (International Agricultural Fund)

The goal of development (IFAD), poor livelihoods, is to live economically or socially at risk and politically marginalized, especially women, young people and landless poor in rural areas, making the most livelihoods or minimizing daily nutritional needs.

Assessing the contribution of livestock to reducing poverty requires measuring poverty. The most common measure of poverty is based on monetary indicators. For example, the poverty line of \$ 1.25 and the share of median income will be used extensively in developed and developing countries, respectively. They provide a basis for a common criterion to increase the diversity and simplicity and advantage of the indicators (Ravaillon, 2008). However, in developing countries where certain cash or equivalent incomes come from different sources, Second, they are far from reflecting all the dimensions of poverty such as basic needs, budget constraints, mental or psychological vulnerability and social marginalization. To end, these indications inevitably lead to a categorical approach to "going in and out of poverty" and thus creating a barrier to the sociological understanding of the functioning of society. An examination of the processes of exclusion and impoverishment (Messu, 2003). The quantitative approach to poverty rests on the basis of social prosperity on the basis of life styles and called social cohesion. This reflects the concerns of many researchers about the places and roles of livestock within the diversity of farming systems and its contribution to poverty reduction. And there is no real consensus on how we should define and measure poverty in partly non-monetary societies. First, its definition depends on the individual and collective perception (mainly culturally constructed) of what "basic needs," including social needs, are (Rahnema, 2003). Secondly, it depends on the mechanisms of accumulation of wealth in each society, which help distinguish the social categories of poor versus rich.

The relevance and contribution of livestock to rural livelihoods changes according to the agro-ecological zones, availability and source of animal feed. Animal husbandry is a food, income stream and productive input source when playing various roles in the caregivers' homes. In extreme environmental conditions, such as the characterization of arid areas or mountainous areas, mobile animal husbandry production systems can be sustainable land use, as human-animal interaction proves to be the only way to produce food while maintaining the natural resource base. In less extreme ecological areas, livestock is helping to diversify the livelihood system and increase the productivity and risk-bearing capacities of the agricultural system where it is possible to produce, while raising livelihoods and livelihoods, while mixed farming systems can increase the capacity to sustain local livelihoods (Pingali 1987).

## **Livestock Diseases**

Climate change depends on geographical area, land use, disease characteristics and animal sensitivity. Animal health climate change, especially elevated temperatures, may be directly or indirectly

affected (Nardone 2010). Direct effects are related to the increase in temperature that increases the morbidity and mortality potential. Indirect effects are related to the impact of climate change on microbial communities, spread of vector-borne diseases, foodborne illnesses, host resistance and feed and water scarcity. Homeowner who affects farm animals negatively. Climate change, disease spread, new diseases that cause skiing in serious disease outbreaks or may affect animals (Thornton 2015). The assessment of the dynamics of slaughter and livestock is important in adaptation flexibility. Global warming and precipitation changes affect the amount and spread of vector-borne pests such as flies, horns and mosquitoes. In addition, homeowners are more likely to have warmer conditions of infection. For example, in the case of climate change, Australian livestock has simulated effects, losing about 18% of the weight of animals lost in the event of increased tick infestation. Iberia also used a model to simulate “*culicoides imicola*” reaction; This is the main vector for the bluetongue virus, which often affects sheep and sometimes cattle, goats and deer. They reported that the global average of the population will increase with an increase of 2 C at the temperature. Nevertheless, these predicted spreads can be prevented by disease surveillance and technologies such as DNA fingerprinting, genomic sequencing, resistance testing, antiviral drugs, cross-breeding and more (Perry and Sones, 2009; Thornton, 2010).

In the meantime, there is a possibility that the emergence of new diseases will facilitate the combination of new genetic material and the ability to transmit them to those who have served as a mixture between humans and livestock. This is since diseases are dependent on animal exposure and interaction factors, making it difficult to predict the true risk of true risk.

## **Methodology**

Our objective was to assess the contribution of livestock to reducing household poverty. Profiting from the data conducted between 2006-2015 by TUIK database. We have used SPSS software program to analyze collected data from TUIK by years and used the correlation and regression analyses to explain relationships between livestock and poverty. Family consumption, supply of manure and draft animals, and natural growth were not taken into account. The volume of the animals that we thought would affect on the poverty is taken into consideration. livestock was calculated on the basis of the value of animals collected at the market.

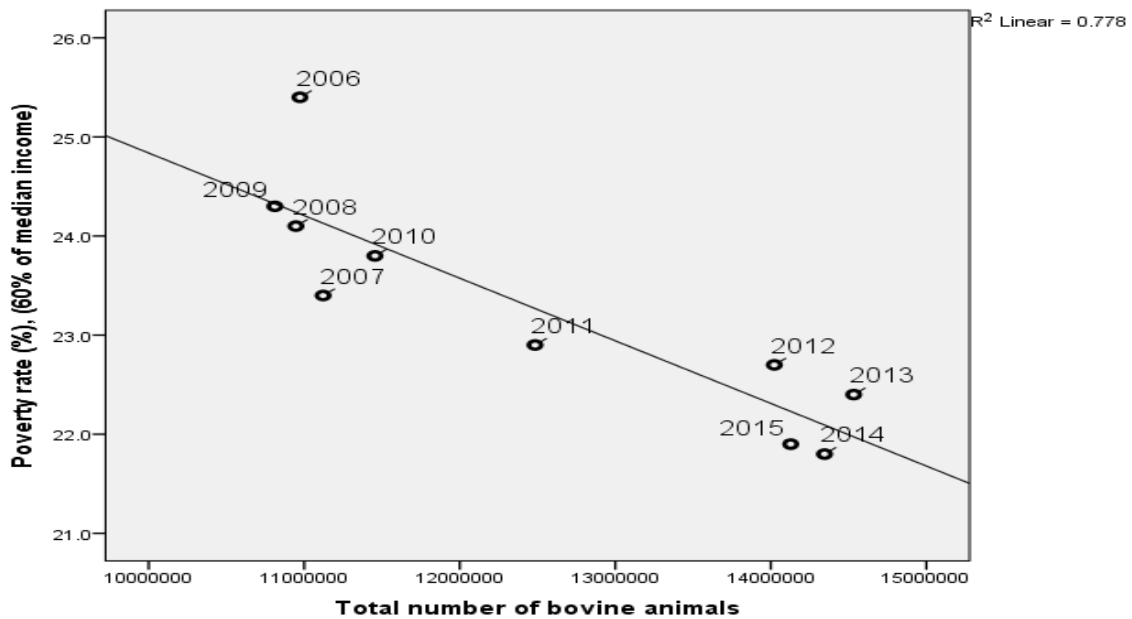
## **Relationships Between Livestock and Poverty**

We have collected the data from TUIK and in order to find relationships between livestock and poverty, we analysed the correlation and regression to try to find out the solution. But our first purpose was to find the NUT3 level data, however, TUIK did not provide them to us according to their regulations. The graph below will demonstrate the relationships between total number of “*Bovine animals and poverty rate according to %60 median Income level*”

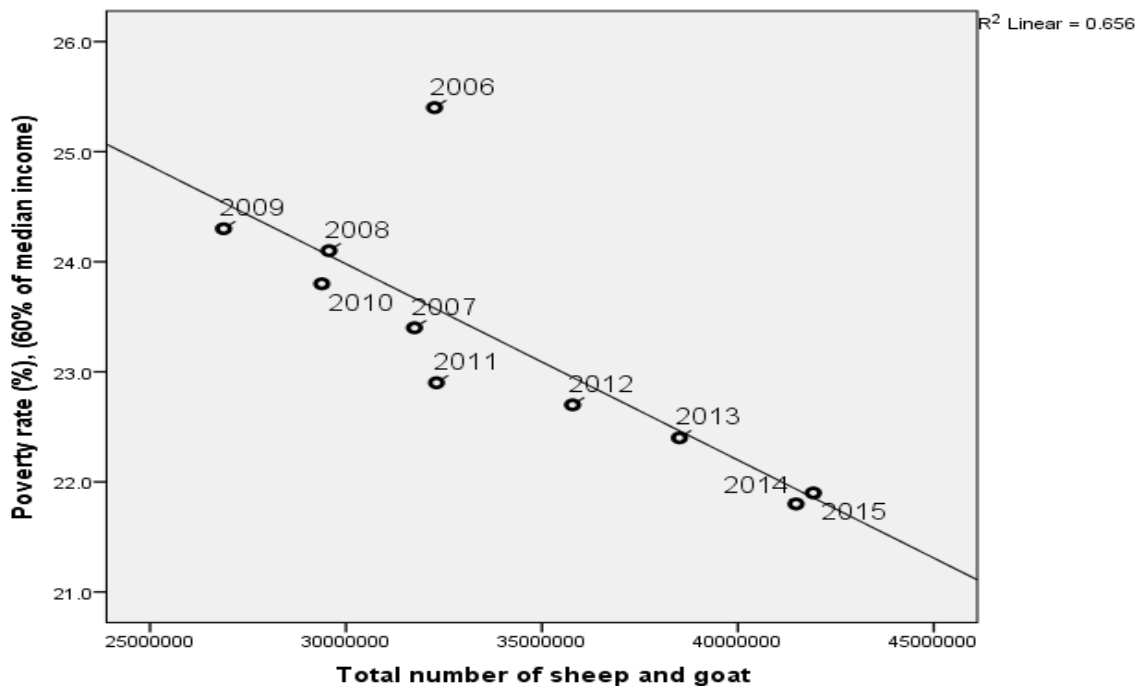
1. The graphs illustrates that Since 2006 to 2015 while poverty decreases, on the other hand total number of bovine animals increases. But in order to say there is a positive relationships we should have data as household level to prove it. But for now we could say yes there is a relationship between them. During our analyses we did not exclude some cities where there are a high capita of animals per people. We wanted to see the results as a whole country.

In 2006, there is a significant decreases in number of bovine animals. As we now in west side of Turkey bovine animals are much indistrilized rather than east because in the east part of Turkey people generally have animals for daily consumption.

2. We will show the relationships between “*total number of Sheep and Goat and poverty rate %60 median Income level*”.



Source: TUIK



Source: TUIK

When we look at the graph, It can be easily said that yes there is a significant relationships between variables. As we mentioned above for bovine kind animals it has significant effect on sheep and goat kind of animals. So in order to contribute on poverty alleviation our people who are in the rural area or urban cities should focus on the mass productions of animals to produce meat or milk sorts to reduce the poverty.

We will have also different kind of researches regarding the agricultural products and animals in details level. Then we will prove the relationships, but now we might say that there is significant relationship addressing the “R” which is about 0.656 for sheep and goat and for bovine is about 0.778 which is also relatively high.

## Conclusion

To sum up, we might add that increasing livestock and its products would help the poor people to have better life. But in that case government local policies would play important role to increase this livestock and affects would be reduction of poverty in those regions.

Suggestions are following:

- Increased income from agriculture generates employment in local non-tradable goods and services, and a strong case can be made for agriculture-induced poverty reduction through secondary employment creation.
- For the less favoured agricultural households, livestock do not provide many growth opportunities, but act as important safety nets. Policy emphasis here should be directed to reducing vulnerability, for example by protecting livestock assets.
- Experience suggests that – partly by default – agriculture remains one of the most important sectors for rural poverty alleviation, but that increases in productivity, particularly of labour, are necessary for agriculture to realize its poverty-reducing potential.

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