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# The impact of sharing arrangement institution on beef cattle breeding performance in Kupang District, East Nusa Tenggara Province, Indonesia

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**Abstract.** The aim of this study was to analyse the impact of sharing arrangement systems to performance of beef cattle breeding. This research was conducted in Kupang Regency – East Nusa Tenggara Province, Indonesia. The study used multi stage cluster random sampling method to determine the sample area and respondents. The sample areas consisted of 2 sub-districts and 6 villages, while the total respondents were 117 people comprised 74 Participant Farmers (PF) of sharing arrangement systems (SAS) and 43 non-participant farmers (NPF). 23 investors were selected for the survey. The result of the study indicated that the performance of NPF in terms of revenue, net profit, and return on investment (ROI) was better than PF respondents. The value of ROI was between 16.69–32.23 %. This indicated that utilization of farm asset was not optimum yet. It was found that farm efficiency was 1.73 which indicated that SAS does not increase farm productivity.

## 1. Introduction

Livestock production is an important part of agricultural sector which contributes to Gross Domestic Product (GDP) of Indonesia, and to the Indonesian overall economy. It also plays a vital role in many different aspects of people daily life, such as ensuring food security, providing nutrition, generating income and savings, and in many other social and cultural functions. Beef cattle play a significant role in the livelihood of many smallholder farm people living in rural areas, particularly as their family source of income, nutrition and welfare. Indeed, most rural people rely on farming, in one form or another, as their main occupation [1]. Livestock subsector provides food in the form of animal protein for the people. As a source of animal protein, beef is expected to meet the nutritional needs of the people. Beef contains 10 kinds of amino acids and essential fatty acids especially conjugated linoleic acid which is beneficial for the growth of neurons in the brain that determines the level of human intelligence [2]. Currently, beef consumption in Indonesia continues to increase, but the increase was not offset by the addition of adequate production. This condition causes low contribution to the nationwide production of beef cattle and resulting in widening gap between demand and supply. One of the solutions to overcome this gap is to increase domestic beef production. It seems that these efforts will be constrained given that more than 90% of beef production in Indonesia is produced by small farmers with 2-3 cows per household farmers [3]. Downstream products of beef cattle have not been optimally processed to attain high added-value products. Therefore, strategic steps for beef agro-industries development using resource-based in East Nusa Tenggara (ENT) should be taken into

