Enhancing Synergistic Roles of Stakeholders for Development of Sustainable Livestock Production
### Oral Presentation 4 Focus Season: Socio-Economic and Agribusiness

**Friday, 21 October 09:45-11:35  Room: Welirang**

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Productivity of Pigs and Contribution of Pig Farming on Household Income in Pinasungkulan Village Bitung City

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Abstract

This study aims to determine the productivity of pigs and contributing to the household income. Respondents are members of the pig farmers, Maesaan and Metuari in the Pinasungkulan Village, Bitung City, is a beneficiary group through CSR funds of PT MSM and TTN in 2014. This study uses in-depth interviews, analysis descriptive data on 20 members of the group which maintains 20 breeding pigs. The results showed that the productivity as follows: such as the number of litter per year of 2 times, the litter size of 10 piglets, while the number of weaned is 7 piglets. The output is sold as a piglet weaning with IDR700,000/piglets, generated through the maintenance of pregnant sows about 114 days, then lactating sows for 44-52 days, the maintenance of dry sows about 21 days, so the total time to maintain the sow that is 6 months. The conclusion that the productivity of pigs is quite high, with a contribution of 28.5% of household income.

Keywords: pig, productivity, contribution.

Introduction

People from North Sulawesi, is a potential consumer of pork, based on the percentage of the population of diverse Christian is 69.17% (Sulawesi Utara dalamAngka, 2015). It opened up business opportunities pigs to be developed by the community. The reality is, Bitung city government programs for the development of animal husbandry in the district Ranowulu. The region is expected to become a pillar of livestock commodities for export to other regions because there is a sea port in the city of Bitung (RPJMD Bitung, 2016).

There Pinasungkulan village, in the district of Bitung City Ranowulu, an area near the mine of PT MSM and TTN. As compensation, including the area around the mine, the people in that village get CSR funds. Maesaan group and metuari as recipients of funds, formed in 2014 and funded in the form of cages and pigs. Initially the group members do not know about how to raise pigs, resulting in the maintenance of pigs based on the experiences of others.

Advantages maintain pigs, which are prolific with the ability to have 8-14 piglets per birth (Sihombing, 2006), can utilize the byproduct and the rest of the kitchen because it is omnifora (Williamson and Payne, 1993). According to Fahmy and Bernard (1972), there are properties desirable breeder of poultry reared, the nature of pigs that are useful and meaningful economically so profitable pig breeders, such as power production, number and weight of piglets at birth, weaning and bred, mortality low and high feed efficiency.
Farming of pigs, has been cultivated almost two years in the Village Pinasungkulan through CSR funds of PT MSM and TTN. However, it remains unknown how the productivity of pigs and how the farming contribution to household income. Based on this background, it is necessary to do research, to determine the productivity of pigs in terms of quantity and pig farming contributes to the household income of pig farmers.

**Methodology**

This research was conducted in the Village Pinasungkulan Bitung City, is purposive sampling with the consideration that there are groups Metuari and Maesaan, who keep pigs since 2014. In-depth interviews conducted on 20 members of the household pig farmers, who have 40 breeding pigs, then use the analysis descriptive. Data taken with regard to the productivity of pigs is measured qualitatively (Chrysostomus, 2013), which is the number of births each year, the litter size, the number of pigs weaned, the mortality rate. Contributions farming of pigs against total household income is measured by comparing the pig farming income per year with the total amount of household income per year.

**Result and Discussion**

**Characteristics of Respondents**

The success of pigs farming is largely determined by the characteristics of households as respondents, were age and education level. Based on this research, the age range of the group, around 44-60 years. The age range indicates that generally farmers are still categorized as productive, so as to conduct the pig farming. The education level of farmers is 75% graduated from junior high school, so it is considered not sufficient to carry out the pig farming. Based on the age and education level of the farmers, there is an influence on the management of pig farming. Farmers are looking for information about the maintenance of aircraft, disease prevention, even treat sick animals.

**Qualitative Productivity of Pig Farming**

Table 1 is explained the qualitative productivity of pig farming in the Village Pinasungkulan through CSR funds of PT MSM and TTN.

**Table 1. Qualitatif Productivity of Pig Farming**

<table>
<thead>
<tr>
<th>Information</th>
<th>Average Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>the number of births each year</td>
<td>2</td>
</tr>
<tr>
<td>the litter size</td>
<td>10</td>
</tr>
<tr>
<td>the number of piglets weaned</td>
<td>7</td>
</tr>
</tbody>
</table>

Based on table 1, it is known that, the number of births each year of 2 times, that is, farmers group “Maesaan dan Metuari” mated the sows 2 times per year. The situation is related to the level of their knowledge of techniques mated. The litter size, which is 10 piglets per birth per year, but the number of piglets weaned, which is 7 piglets. It is known that genetically productive sows can be said for being able to produce as many as 10 piglets. However, the number of piglets weaned smaller than the litter size, or mortality of 0.3%. Based on the results of the study, mortality of piglets generally occurs after 1-2 weeks of birth. This is because the sow crushing piglets exists. This indicates that the lack of knowledge of farmers on the maintenance of breast-feeding mother, so the mortality of 0.3%. The litter size, describes fertility sows and boars as well as management of quality. (Deyoeand Krider, 1952; Lasley, 1978). This is influenced by environmental conditions, age of the pig, varieties of strains (Deyoeand Krider, 1952;Lasley, 1978; Pond and Maner, 1974).

**Contribution of Pig Farming to Total Income of Household**
Table 2 is explained the Contribution of Pig Farming to total income of Household in the Village Pinasungkulan through CSR funds of PT MSM and TTN.

### Table 2. Contribution of Pig Farming to Total Income of Household per Year

<table>
<thead>
<tr>
<th>Information</th>
<th>Revenue</th>
<th>Cost</th>
<th>Income</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pig farming</td>
<td>14,000,000</td>
<td>6,412,500</td>
<td>7,587,500</td>
<td>28.5</td>
</tr>
<tr>
<td>Corn farming</td>
<td>10,000,000</td>
<td>3,000,000</td>
<td>7,000,000</td>
<td>26.3</td>
</tr>
<tr>
<td>Coconut farming</td>
<td>15,000,000</td>
<td>3,000,000</td>
<td>12,000,000</td>
<td>45.1</td>
</tr>
<tr>
<td>Total Income</td>
<td>26,587,500</td>
<td></td>
<td></td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Data were analyzed

Based on table 2, it is known that, the total income per year of household in farmer group “Maesaan and Metuari” are IDR26,587,500. Pig farming contribution to household income that is IDR7,587,500, or about 28.5 percent. Currently, a member of the group maintains only one sow of each household, so it is necessary to increase the number of sows reared, so that revenue can be increased.

### Conclusion

Members of the group "Maesaan and Metuari" had prolific sows, although it requires increased knowledge of farmers in pig farming, so that livestock mortality rate can be reduced. Pig farming is a sideline for group members, because its contribution is still low to the total household income.

### References


