ECONOMIC EMPOWERMENT "PEASANTS" BEEF CATTLE THROUGH THE INTENSIVE SCALE HOUSE DISTRICT TRENNGALEK

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ABSTRACT

Poor farmers or often known as the "peasants" are generally farmers who do not have enough land or farm laborers who worked on the landowner to make ends meet. They are a community of farm workers who are poor and economically powerless. Poverty alleviation efforts in this farming community of society, have not shown encouraging results due to the inability of government in the provision of agricultural infrastructure in damage to the natural environment as part of its water supply in most major industrial farms. So the cost of agricultural production inputs becomes expensive and agricultural products to be unable to compete in the international market due to the high cost of the production process.

The purpose of this study was to find an alternative solution an increase in income of peasants, through additional activities on the sidelines of their work as farmers, so that an increase in income simultaneously both of jobs in agriculture and cattle business intensive scale of households, which support each other between agriculture and livestock, so it can provide economic added value for their livelihood.

The results showed that the system of intensive farming household scale for "small farmers", can provide extra income from value-added cattle business, in the form of biogas produced for household needs both for ignition of cooking and home lighting, and the results of manure residue biogas which can be used to fertilize their farm with compost result of the intensification of cattle scale household in a poor family governance "peasants" is.

Keywords: Peasant, Intensification, Cattle, Trenggalek

INTRODUCTION

Poor farmers, known as "peasants" in the rural environment has become a phenomenon that is widespread among Indonesian people, poverty is a concern because the land is narrowed, accompanied by a lack of technology applications in agricultural work. Traditional farmers who lack the capital, there are still many to be the solution in the midst of difficult life in rural farming communities.

On the other hand, the government's ignorance of the importance of agricultural infrastructure, such as public water management for irrigation agriculture, making farming communities cultivation very dependent on the season amid an increasingly severe environmental damage in Indonesia in general. Such a situation has been the main cause, the process of impoverishment in rural areas, especially in the agricultural sector in Indonesia.

For it to farmers in rural areas, there should be other activities in support of economic life in rural areas so that activities and activities in agriculture can be run simultaneously and can be sustained and routine adds in her come to meet the economic needs of the household.

One of these additional activities, among others, which can be presented in this paper is cattle. Cattle may be additional activities "peasants" as an effort to improve their economic
welfare on the sidelines of his activities as farmers "peasants" with intensive livestock systems household scale.

It is important to remember the needs of beef continues to increase nationwide in the middle exchange rate continued to decline in comparison with the value of the dollar. It is important to remember nationally in the number of livestock breeders of cattle that are not balanced by the number of cattle slaughtered. The market demand is much higher than the number of cattle that are farmers and the number of cattle born. To meet the shortage of demand for cattle or beef, imported thousands of cows and tons of meat continued and increasing every year. This is a market opportunity for farmers in the country. The table Volume imported beef and beef Year 2007-2014 can be seen in Table 1 as follows;

**Table 1. The volume of imports of cattle and beef in 2007-2014 Year of the Ox going, Cow seeds (tail) Meat (Kg) jerohan (Kg)**

<table>
<thead>
<tr>
<th>Year</th>
<th>The prime of Cow</th>
<th>Cow Seeds</th>
<th>Meat (Kg)</th>
<th>Bowels (Kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>27,700</td>
<td>-</td>
<td>23,315,3</td>
<td>8,942,2</td>
</tr>
<tr>
<td>2008</td>
<td>49,900</td>
<td>1,900</td>
<td>8,812,8</td>
<td>6,228,9</td>
</tr>
<tr>
<td>2009</td>
<td>118,400</td>
<td>200</td>
<td>10,552,9</td>
<td>7,746,0</td>
</tr>
<tr>
<td>2010</td>
<td>267,700</td>
<td>500</td>
<td>26,962,3</td>
<td>30,403,1</td>
</tr>
<tr>
<td>2011</td>
<td>168,100</td>
<td>4,600</td>
<td>16,516,6</td>
<td>24,626,2</td>
</tr>
<tr>
<td>2012</td>
<td>141,700</td>
<td>558</td>
<td>11,473,8</td>
<td>31,400,5</td>
</tr>
<tr>
<td>2013</td>
<td>342,200</td>
<td>173</td>
<td>10,671,4</td>
<td>35,778,5</td>
</tr>
<tr>
<td>2014</td>
<td>343,200</td>
<td>1,400</td>
<td>17,383,6</td>
<td>39,459,5</td>
</tr>
</tbody>
</table>

Source: Department of Animal Husbandry and Veterinary Kab. Trenggalek 2014.

With regard to the direction of globalization and the reality of the implementation of regional autonomy, agribusiness national cattle should dare set a vision of the future, towards which the national cattle will be developed. Hence the need for an increase in world agribusiness cattle by getting the cooperation of farmers "peasants" are still poor in the rural areas through the intensification of maintenance and diversification in the economic empowerment of poor farmers are in institutional performance, zoning and support appropriate technology and human resource development, with farmers 'peasants' targeted cooperation intensive cattle development in the household scale.

**PROBLEM FORMULATION**

From the description above, it can be argued here the problem in this study are as follows:

"How to utilize the potential of efforts cattle business in household scale farmers "peasants" in the rural area is optimal, in order to improve their economic welfare ?."

**OBJECTIVE**

The purpose of this research is:

"In order to exploit the potential of increasing the cattle business in household scale farmers "peasants" in the rural area is optimal, in order to improve their economic welfare ?."

Additionally specifically the benefits of this research are as follows:
1. Can be used to identify the model of intensive cattle business on the scale of households in the rural environment.

2. Can be used to draft a model of intensive livestock in the household in order to provide economic added value for farmers "peasants" in a rural environment.

3. Can be used to create design models of economic empowerment of the rural poor in the cattle business oriented intensive household scale to improve the welfare of society.

METHODS

This research design by using action research model as participant action research, diagnosis action research and empirical action research (Kemmis & Taggart, 1988). In addition to high levels of this type of research keilmiahannya have been also in accordance with the purpose of research that is generating a model intensifikasi cattle, which can be a model that is reliable in improving the productivity and efficiency of the cattle business in the areas studied.

As the qualitative research (Lincoln and Guba, 1985), at this stage of the need assessment will be used method of focus group discussion. This method is very good to explore data from the District Veterinary department officials and cattle ranchers, because with this method they can express their opinions openly and groups. Nevertheless, the implementation of the focus of this discussion group, researchers (guides) must be filed problem question in a way that is understandable and in accordance with the respondent (Morgan, 1988).

RESULTS

Thoughts on the importance of the development of rural communities is that the implementation process of development in the regions (especially in rural areas) in catch up with urban areas can take place without damaging the joints of life and local wisdom (Local Wisdom), which still exists in rural communities. In the era of decentralized governance, and democratic today, is an opportunity to revitalize the Community Based Development in the development and empowerment of communities in rural areas. (Korten, 1986).

Results of population registration in 2009 showed that the total population of 50 million Trenggalek Life consists of 60 women and 40 men with a growth rate of 7%. A relatively large number of occupation is one potential that can be developed in support of the development of the area with the number of cattle farms agribis 30 thousand. (Bappeda Tgalek, 2014).

Cattle population in Trenggalek showed an increasing trend where in 2014, the number of cattle population amounted to 83,932 animals and consist of: adult 41,228 tail, a young 32,381 tails and children 10,234 tail, production of children (birth was 1,031 head / year, the cattle population in 14 districts and centers of cows is in districts monument. The population of seeds carried by farm people with relatively small ownership rate, which amounted to between 1-5 individuals / families, although there which has about 6-12 individuals / families. In some areas there is a cattle business which has more than 50 -100 cow tails. But the number is not significant.

The development of the construction of cattle began in 2003 until 2014 can be seen in the table below.
### Table 2. Number of cows in Trenggalek year in 2003-2014

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Cow</th>
<th>The number of cattle in sale</th>
<th>The number of cows born</th>
<th>The number of cows entry</th>
<th>Number of cattle and beef incoming feeder out</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>7.021</td>
<td>1.276</td>
<td>1.356</td>
<td>1.562</td>
<td>4.402</td>
</tr>
<tr>
<td>2005</td>
<td>7.326</td>
<td>2.598</td>
<td>1.561</td>
<td>700</td>
<td>4.533</td>
</tr>
<tr>
<td>2006</td>
<td>7.384</td>
<td>3.417</td>
<td>2.458</td>
<td>2.473</td>
<td>5.473</td>
</tr>
<tr>
<td>2007</td>
<td>7.643</td>
<td>3.624</td>
<td>2.689</td>
<td>1.688</td>
<td>5.552</td>
</tr>
<tr>
<td>2008</td>
<td>8.475</td>
<td>4.258</td>
<td>3.345</td>
<td>875</td>
<td>5.646</td>
</tr>
<tr>
<td>2011</td>
<td>10.754</td>
<td>5.012</td>
<td>4.843</td>
<td>1.897</td>
<td>7.078</td>
</tr>
<tr>
<td>2012</td>
<td>9.862</td>
<td>4.876</td>
<td>4.327</td>
<td>1.261</td>
<td>7.386</td>
</tr>
<tr>
<td>2013</td>
<td>9.928</td>
<td>4.927</td>
<td>4.567</td>
<td>1.189</td>
<td>7.789</td>
</tr>
<tr>
<td>2014</td>
<td>10.042</td>
<td>5.125</td>
<td>4.678</td>
<td>1.234</td>
<td>7.876</td>
</tr>
</tbody>
</table>


Based on the geographical conditions and the potential for farms in Trenggalek very large to be developed further.

Trenggalek as one of the centers of cattle production, has a birth rate of cattle which are high compared with other districts. But the number of births, the cow still can not meet demand for the cows outside Trenggalek. Traders and large farmers in Psychology, in addition to buy cattle from farmers in Trenggalek, they still bring in cattle, both for and for going out of another district. The market opportunity is still not significantly affect "improving the economy of farmers in rural areas" because of the many problems in the upstream and downstream on cattle marketing channels that are less profitable for farmers. (Dwijanto, 1996)

**CAGE INTENSIVE CATTLE SYSTEMS HOUSE HOLD SCALE**

Results of research has been done on diversification of cattle, indicating that there are some businesses that can be developed from cattle, in addition to the benefits that can be obtained through the cattle.

Some results from the diversification that can be developed from cattle, at the level of the household scale, among others, can be developed as follows:

**Maintenance With Cage System Biogas**

Maintenance cage system with biogas in cattle can be done by making the system enclosure that allows the utilization of gas from cow manure is collected in a simple plastic gas tube, so
as to provide relief on the load will need gas for the family, everyday. Both for cooking and for lighting needs in the home of the gas produced from cow dung is being maintained.

Places maintenance on intensive cage system can be described as follows:

Type enclosure required intensive cage durability up to five years, whereas for beef cattle supplied seed treatment cage, cage and cage calf childbirth preparation. Requires shape, type and area the same enclosure with a tail that is:

   a. Spacious enclosure 160 cm x 135 cm
   b. The feed size of 95 cm x 40 cm x 40 cm
   c. Drinking spot measuring 40 cm x 40 cm x 40 cm
   d. The slope of the cage 50

To intensify the benefits of raising cattle, it can be developed for the benefit of household biogas needs of the cow herdsman.

Cages intensive, can provide optimal results for peasantss who generally maintain the cow with the system noise (borrow) of cattle of others, and this is an important development that needs domestic gas for ignition household use, can be obtained from the system enclosure made for the production of biogas from cow's maintenance results. Thus the expected access to capital (profits) were obtained pengaduh the cow, can provide greater benefits. In accordance with the results of interviews with the Head of Department of Animal Husbandry Unit Trenggalek Ir. Hery Yulianto (interview, May 15, 2014) as follows:

"Intensification of raising cattle can be developed for wider utilization for farmers (keepers) cows were poor, by designing the enclosure such that it becomes a biometanol gas production, which is very beneficial for the needs of the fire to cook in the household of the farmer-keeping. Thus reducing the cost of household combustion needed in particular for cooking and consumption purposes other fire everyday ".

Based on information from the head UPTD agriculture department Trenggalek, it can be explained that from the intensification of the maintenance of the cow breeder can gain maximum benefit for the needs of daily life to maintain the cow, because by developing perkandangan efficient beneficial doubles, so as to improve the welfare poor farmers cattle breeders, in an efficient, optimal and able to empower them with additional economic activity maintaining the beef cattle. Visually manufacture double cage useful for the production of biogas, can be seen in the following picture:

![Figure 1. Intensive Cattle Cage System Household Scale](image)
From the picture, in every poor family of cattle breeders who want to preserve the cows can make the enclosure which serves for the production of biogas from manure. The cow dung, can be utilized for the production of biogas, which can be used to pangapian for culinary purposes or for the purposes of the house lights. So that the cage is equipped with a system for the production of biogas, poor households who maintain the cow, can earn additional benefits for biogas for household purposes. So as to improve the welfare of poor families of cattle ranchers in a more optimal and should become an integral part in the agreement when the cattle rearing through penggaduhan or surrogate government as poverty alleviation local community media.

With the availability of the biogas system enclosure, allowing dairy farmers to use cow dung for the supply of gas needs daily for cooking interests, the interests of lighting, and various other needs resulting from the biogas cattle results. Thus the farming community "peasants" who also raise cattle, can obtain economic benefits over a regular basis for maintenance of cattle. Gains derived from biogas maintenance of the cow, at least the farmers no longer need to issue a regular fare for lighting and cooking needs as well as time and energy could be a lot more to be able to raise cattle more intensively.

**Organic Fertilizer Production of Cow Manure**

Manure produced from livestock raising material can be used for compost, or organic fertilizer that can be packaged in a particular wrap and can be sold as organic fertilizer to supplement the family income of the dairy farmers.

Further benefits, which can be optimized from the intensive cage system is the use of manure for fertilizer. Beneficiaries for this fertilizer, done after the process of biogas is completed, so that the actual manufacture of organic fertilizer is a product of the continuation of the process of biogas production. Cow dung that has been processed into biogas through septitank, is further processed to produce fertilizer is organic fertilizer cow dung.

In this process the manure from the biogas, flowed out of septitank to then dried and processed into organic fertilizer that can be packaged in a certain trade products and can be sold to the public, by cattle farmers concerned. This process can provide additional income that is quite economical, for breeder cattle farmers "peasants" because it can provide further benefit from the maintenance of cattle. Besides working cattle ranchers, can use the fertilizer to agricultural interests of its own, if the farmer has agricultural land that needs to be nurtured from the cow dung manure biogas.

This pattern can be a business opportunity farmers "peasants" through cattle developed in an area of particular community so as to generate additional profit or additional business opportunity of the results of the cattle business.

Maintenance system by means of intensive, mainly based on the experience of those who feel that the results of the various crops that dilahan moor give good production if the land is given sufficient manure, chemical fertilizers while also given.

Thus the presence of system maintenance intensive household scale, through a system of cages intensively oriented biogas can provide more profits for keepers of cattle (although sometimes not own property / mengaduh) but can provide multi effect economically positive for the cattle business, especially community groups which is generally still poor. So that intensification of cattle for farmers "peasants" is, in addition to providing the benefits of these efforts, the communities farmers would also provide a double benefit, to meet the needs of households daily for cattle ranchers poor are often referred to as farmers "peasants" ,
CONCLUSIONS

Based on the results of research and discussion and analysis mentioned above, in this research report can be summarized as follows:

1. The investment costs for dairy farms with household scale intensify system is estimated to be between USD 30 million, - up to Rp. 50,000,000, - including biogas enclosure system is needed, for the maintenance of between 2 to 5 mice based on the ability of the family to care for the cattle. Cost of such, it becomes very hard for poor farmers in the rural environment, in the absence of costs for a large investment. So that a comprehensive system of rowdy or poverty alleviation programs of farmers "peasants" through a system of raising cattle + cage biogas and compost, it is possible to increase the income of poor farmers who work in the real exertion and thoughts directly to keep cows.

2. Each poor family farmers "peasants" who generally work as farm laborers and casual laborers in rural areas only have the capability to maintain a maximum of 5 cows tails, for each family. So keep cows exceeded that amount, will increasingly burden the farmers keepers because there are other activities that are not fixed but can directly provide income to meet the needs of everyday consumption. Therefore, as compensation for energy and thoughts to keep cows, need to get additional rewards everyday needs through intensive livestock systems, which can provide economic added value of biogas and compost produced.

3. The system of intensive cattle and cattle business diversification can be a solution in order to alleviate their poverty through the cage results biogas and organic fertilizer it produces. Development of Biogas Cage with simple technology, to meet the household energy, both for the sake ignition everyday cooking or for the benefit of daily home lighting, as well as the result of cow dung compost. It is possible an additional increase household income of dairy farmers is concerned, and the improvement of their economy.

REFERANCE


