

Income Analysis On Capital Assistance Model through the Revolving Ettawa Crossbred Goat in Yogyakarta Indonesia

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ABSTRACT

One of the main models of government aid capital sources commonly applied to the farmer's is help through the revolving goat. Revolving goats helpful to increase the population and the poverty alleviation programs in developing countries. This research aims to identify the kind of revenue and costs as well as additional income farmer's goat through revolving livestock aid capital sources. The study was conducted in Kulon Progo Regency as the center of goats development in Yogyakarta. The method used was survey with respondents taking as many as 40 farmers with purposive sampling method based on consideration of farmers who have received aid revolving livestock during the last three periods. Analysis to calculate the additional income for their assistance with using partial budget . The results showed that farmers received additional revenue in the form of goats and additional costs in the form of health and mortality of livestock without the cost of purchasing livestock and capital interest. With the assumption that the doe first mating that at the age of 1.5 years, 4 months and the weaning period Kidding Interval for 8 months with a maintenance period of 2.5 years, the average farmer's obtain as many as 4 additional goats are 2 young goats and 2 kids aged 6 month. In accordance with the agreement that the beneficiaries are required to roll kid female with 2 to 3 years of maintenance so that farmer's have been able to roll out kid females. Partial budget analysis showed presence of additional revenue for grant of IDR 8,732,549.00 / year so that the program can be continued is recommended to increase the population and income of farmers.

Keywords: Ettawa crossbred goat, poverty alleviation, revolving livestock, partial budget

INTRODUCTION

Ettawa crossbred goat is one of the small ruminant livestock that has potential for poverty alleviation program because it has short production projection cycles and high selling price (Kusumastuti et al, 2017) . Peacock (2005), the social and economic roles played by goats in food security and income generation are considered. Winarso (2010), by biological goats are quite productive and goat adaptive to local environmental conditions, thus facilitating its development. Kulonprogo regency is one of the potential districts as a center of Ettawa crossbred goat in Yogyakarta. Kusumastuti (2017), based on the analysis of LQ (Location Quotient), to support the measurement of Ettawa crossbred goat base area of Samigaluh Subdistrict of Kulonprogo Regency, Pagerharjo Village is a business center of Ettawa crossbred goat . This is due to having a group of goats and getting livestock support through KUBE (Joint Business Group) largest compared to other villages. In 2006 the government of

the Republic of Indonesia has launched the Poor Program of Empowerment (P2FM) through the Ministry of Social Affairs. The form of program implementation is to help accelerate poverty alleviation through the pattern of Joint Business Group (KUBE) with Productive Economic Enterprises (UEP) according to the potential of each poor community (Depsos, 2006). Therefore, this research is important to evaluate Program of Empowerment of Poverty through livestock Business Partnership by measuring how much additional income farmers after getting KUBE assistance.

MATERIAL AND METHOD

The study was located in Pagerharjo Village, Samigaluh District, Kulonprogo Regency. The research method used was survey. The preliminary stage was done to find information related to the research and also to determine the respondents to be sampled. Respondent as research material was farmer of recipient of Joint Business Group (KUBE). The respondent collecting 40 farmers with Purposive Sampling method, based on the average of goat rotation has been going on for 3 periods so that farmers who have obtained KUBE assistance in 3 last period (7.5 years) with assumption 2.5 years / period. Primary data was obtained by direct interview with the farmers that have been determined by using questionnaires that have been prepared previously. Primary data include 1) revenue from goat selling and by product 2) Production cost and 3) income of farmers after obtaining KUBE with partial budget analysis model (Kay, 2008).

Table 1. Partial budget framework

Description of planning changes			
A. Additional revenue			
1. Additional revenue Value		2. Decreasing cost value	
<ul style="list-style-type: none"> • Additional goat • Selling of compost 		<ul style="list-style-type: none"> • • 	
Total additional revenue (additional revenue + decreasing cost)			
B. Additional cost			
1. Decreasing revenue Value		2. Additional cost value	
<ul style="list-style-type: none"> • Mortality 		<ul style="list-style-type: none"> • Goat health 	
Total additional cost (decreasing revenue + additional cost)			
C. Income change (A-B)			
D. Recommendation			

RESULTS AND DISCUSSION

The form of assistance through the group program of joint effort (KUBE) is given to the group of 20 PE goats that is as much as 15 kid females and 5 kid males aged 4 to 6 months.

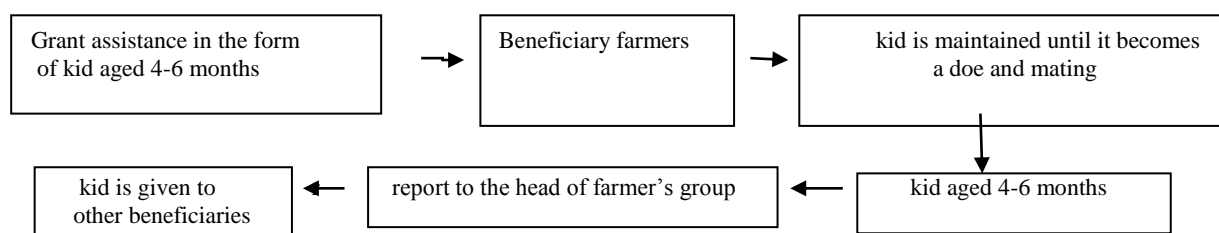


Figure 1. Framework of assistance of goat livestock moving

Recipients who farmer's groups that got recommendations from the livestock service are required to roll out kid female with a maintenance period of 2 to 3 years. The recipients are required to report to the head of the group to be recorded and recorded in the group rollout recording book. The subsequent recipients are usually already logged and waiting to receive their assistance. Farmer's income was calculated by the additional revenue minus the additional cost.. Additional revenue during KUBE assistance in the form of goat sales and compost. Additional costs include goat health and mortality.

Table 2. Partial budget of additional income of PE goat through KUBE assistance in Samigaluh Kulonprogo Sub-district

Description of planning changes (IDR/farmer/year)			
A. Additional revenue			
1. Additional revenue (IDR)	value	2. Decreasing cost (IDR)	value
• Additional kid		• -	-
9.253.934,00			
• Selling of compost			
239.456,00			
Total additional revenue 9.493.390,00			
B. Additional cost			
1. Decreasing revenue (IDR)	value	2. Additional cost (IDR)	value
• Mortality		• Goat health	
742.241,00		18.600,00	
Total additional cost 760.841,00			
C. Income change (A-B)		8.732.549,00	

Source : Wijaya , 2016

Recommendation : Additional income of IDR 8.732.549,00 / farmer / year so this program is recommended to be continued.

The average revenue of IDR 9,253,934.00 / farmer / year with average sales of goat ± 9.55 heads consists of 2.19 male head with sale price IDR 1.473.809,00 / head, 1.82 head of doe with price IDR 1.371.795,00 /head, 1.40 young goat with price IDR 820.000,00 / head, 2.08 male kid with price IDR 691.667,00 / head and 2,06 kid female with price IDR 438,235,00 / head .

Budisatria et al (2010), farmers produce manure to fertilize the land. Calculation of livestock manure sales with the assumption of dung sold in the capacity of 1 sack weighing 20 kg with the price of IDR 10.000, - so that if. the average sales of ± 24 sack / year , farmer have income IDR 239.456,00. Suranindyah et al. (2011), states that adult goats can produce

dung of 1 kg / head / day. Based on the results of interviews with farmers, not all livestock manure sold, mostly used for plantation crops fertilizer.

Table3. Calculation of the estimated amount of livestock manure generated based on goat ownership

Livestock ownership comes from KUBE assistance	Value (kg/year)
male	
2,19 head x 1 kg/day x 360 days	788,40
doe	
1,82 head x 1 kg/day x 360 days	655,20
young	
1,40 head x 0,5 kg/day x 360 days	252,00
male kid	
2,08 head x 0,15 kg/day x 360 days	112,32
female kid	
2,06 head x 0,15 kg/day x 360 days	111,24
Total	1.919,16

Source: Wijaya dkk , 2016

Estimated income from goat manure per year (1,919.16 kg / yr: 20kg x IDR 10.000,00) of IDR 959,580.00 / farmers / year (Table 3). Estimated comparison of goat manure value sold and goat manure used for fertilizer, derived from calculation of cattle dung acceptance lessen by real data calculation (IDR 959,580,00 - IDR 239,456,00 = IDR 720,124,00) or 75,05% of impurities goat is used for plant fertilizer.

Additional health expenses include vaccines, medicines, and herbal medicine for IDR 18,600.00 / farmer / year. Cost once goat care, farmer's pay a fee of ± IDR 12.400,00 / head. Treatment for vaccine or drug delivery by local veterinarian. Additional other costs are mortality of IDR 742,241.00 / farmer or 15.14% of the total goat population. The most frequent goat mortality is kid ± 2.2 head / farmer with assumption of price IDR 495.216,00 / head. The high mortality rate of kid can be caused by vulnerable kid to be attacked by various diseases and condition of environment.

The additional income of farmers is the total additional revenue minus the total additional cost. The additional income of farmers from KUBE aid is IDR 8,732,549.00 / year. Household rearing of all small animals especially goat increased from 43% to 65% in programme Malawi areas (Donald et al, 2010)

CONCLUSIONS

KUBE goat assistance is a grant through 4 to 6 month kid rolling and rolled back with a maintenance period of 2.5 years. During the KUBE assistance, the farmers received the receipt of additional kid and the cost of health and mortality without the cost of buying goat and capital interest so that it can increase the income of farmers. On the other hand to obtain better selling prices and lower mortality rates it is necessary to establish cooperation with the Livestock Service and Education Institutions to provide periodic guidance on maintenance goat, selection of goat quality, and marketing of goat.

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