

## ABSTRACT

### **Production Efficiency Analysis of Broiler Poultry Partnership and Independent Model in Palu Central Sulawesi**

The success of the production of broiler poultry is determined by the exertion done in order to face market competition. It is not only giving new field work but also income for independent and partnership model.

This research is done for analyzing the different average income, analyzing the allocation of factors affected the production, technical efficiency, price efficiency/allocation and economical efficiency of broiler poultry for both partnership and independent model. Data used is the production of one raising period of broiler poultry both partnership and independent model start from December 2008-February 2009 in Palu, Central Sulawesi. Analysis model used is Stochastic Frontier Cobb-Douglas with Battese & Coelli model (1995) Technical efficiency Effect Model as the other option.

This research found that Independent broiler poultry, have higher income level compare with partnership model, it is showed with R/C ratio value of independent poultry is 1.26 higher compare with partnership poultry with ratio value 1.06. in this case, independent poultry is better than partnership poultry.

From the research through production factor showed that chickens variable (DOC) and food significantly effected toward  $\alpha = 1\%$  and positively connected with production, with high coefficient. It means that increased chickens (DOC) or food will raise the production. On the other hand, the limitation of vaccination variable, medicine and vitamin also affected, but it shows negative relationship toward production. The other variable affected toward  $\alpha = 5\%$  and positive relationship toward production are employees and fuel, because the poultry ability in managing the husbandry is very important for the success of production. fuel factor also important for heating the brooder so the chicken seeds(DOC) will perfectly raised. While the electricity and the coop are not affected the production.

Technical efficiency Analysis reached by broiler poultry is 0.868 in a whole. While the factors toward  $\alpha = 10\%$  affected the Technical Efficiency is the age of the poultry. The young poultry have higher productivity so it will add the technical efficiency, while experiences, sex and education level are not affecting the technical efficiency.

Price/allocation Efficiency analysis of partnership and independent model shows that both of them are not efficient enough, while means of each efficiency level is 1.816 and 1.838. Because the technical efficiency and the price are not reached yet, so economical efficiency is 1.587 and 1.593 ( $>1$ ) shows that broiler poultry both partnership and independent model are not economically efficient. Whole research implies that there are many things to do for allocating the production factors more efficient in order to get maximum production.

Keywords: Broiler, Efficiency, Stochastic Production Frontier