One of the plantation commodities that act as the foreign exchange is coffee. Most of the coffee exported to the various country are coffee beans and the rest are domestically consumed and stored as the carry over stocks by the traders and exporters to back up when the crop failure happens. So the consequence of the amount of coffee exported is Indonesia’s dependence on the situation and condition of the world coffee market. However, the coffee of Indonesia has the weakness, namely the quality of the coffee bean is low. It is caused by the traditionally coffee production by the farmers. Apart of being exported as the coffee beans, coffee can be exported as the processed coffee. There is a great opportunity for Indonesia to develop the downstream industry of coffee that later can be used to anticipate the saturation of coffee beans market, increase the added value, reduce the risk of the coffee price fluctuation, and enhance the role of Indonesia in the world. Yet, it is indicated that the benefits of government policies have not been so perceived by the farmers of Robusta and Arabica. So, this problem is solved by the modeling using the approach of dynamical system. It functions to describe the model overall and simulate the scenario of the
government policy in efforts to improve the welfare of the coffee farmers in Indonesia. Based on the research conducted, it is obtained the result that the scenario that is giving the most significant impact to the profit increasing for the farmers of Robusta and Arabica in Indonesia is by giving the finance for post-harvest that is obtained from 10% of the export duty revenues and determining the export duty revenues of the coffee beans in the amount of 5%.

Keywords : the quality of coffee beans, dynamical system, the welfare of the coffee farmers.