Requirement for the success in BDF business to reduce GHG in the oil palm business, Malaysia

Takashi YAMAMOTO

Key word: Palm oil, Bio-diesel Fuel(BDF), Carbon neutral, Greenhouse effect gas (GHG), Land use change, Peat land, and Cost structure

1. Background

BDF is considered as a bio fuel to reduce GHG emission from vehicles that consume fossil diesel fuel. It produced 8.5 million tones in the world, 2007. The business market also have been bigger and bigger according to BDF popularization. On the other hand, there are problems that the emission of GHG by the land use change, the loss of biodiversity, and the land ownership for native people due to expanding the palm plantation in Malaysia. In this situation, Malaysian government has issued National Bio-fuel Policy March of 2006 to admit 91 companies to produce BDF. However only 5 BDF companies is said to manage to produce it because of the price soaring of CPO(Crude Palm Oil) as the raw material in 2 years.

There are very few previous studies on this matter from the viewpoint of the BDF business management. This study will demonstrate the requirement for the success in BDF business with NPV method and IRR method.

2. Results

- 2-1. The companies which produce palm oil should not cultivate the palm on the peat land in terms of the business management.
- 2-2. BDF companies can manage themselves if they use CPO at 742.35 RM/t as the optimum cost if the government withdraws of subsidy program for the fossil diesel fuel.

3. Conclusion

The BDF companies require the subsidy program to conduct their business if the CPO price is set at 742.35 RM/t. However, it is assumed that the withdrawal of subsidy program for the fossil diesel fuel will not be a practical option, as it will make the price of diesel oil 58% higher than the subsidized price in terms of consumers.

Therefore it is necessary for the government to introduce a new subsidy program for BDF not only for the fossil diesel fuel to considered the existing 8 BDF companies with consideration the eco-friendly development of the palm plantation.