Eco-labelling Offers a Sustainable Future for Indonesian Coffee

Coffee is one of Indonesia’s most important export crops and provides a livelihood for many small-scale farmers. However, the country’s coffee sector is facing many problems relating to its low yields and its negative environmental impact. To help find a solution to these problems, a new EEPSEA study looked at whether eco-labelling offers a feasible way to improve the productivity and reduce the environmental impact of the sector.

The research is the work of Nuva, Yusif, Nia Kurniawati H. and Hanna from Bogor Agricultural University. They studied the impact of eco-labelling on Indonesia’s smallholder coffee farmers. Results show that cultivating eco-labelled coffee is more profitable than conventional coffee growing. The study also shows that eco-labelling can bring a range of environmental and social benefits. It therefore recommends that smallholder coffee farmers should be encouraged to obtain eco-labelling certification. It makes a number of suggestions on how the government and other agencies can do this.
The sustainable coffee challenge

Coffee plays a vital role in Indonesia’s agricultural sector, in terms of value, it was the country’s fourth most important food and agricultural commodities export in 2008. Unfortunately, coffee cultivation in the country is responsible for deforestation, soil degradation, and water pollution.

Indonesia’s Ministry of Agriculture has set long-term targets to increase the production of Arabica (Coffee arabica) and Robusta (Coffee canephora var. robusta). The plan is to increase current harvested areas and open up new areas for coffee cultivation. However, unless the expansion plans are carried out in a sustainable manner, this will further increase the environmental impact of coffee production.

Other studies have found that the eco-labelling of coffee can help increase productivity and solve some of the sector’s environmental challenges. This is because eco-labelling bodies impose better and more environmentally responsible farming techniques on the farmers who gain certification. In particular, effective certification has significantly reduced the use of key chemical pollutants, such as pesticides, chemical fertilizers, and herbicides.

What’s more, eco-labelling can increase farmers’ income because of the better price that they can command for the higher quality and ‘greener’ coffee they produce. For example, coffee certified as Fairtrade is guaranteed to provide a minimum price to producers. It also offers a greater voice and power to marginalized producers in the global economy.

The need for more information on eco-labelling

Despite the benefits of eco-labelling, it has not proved easy to implement this in the Indonesian coffee sector. More information is therefore needed on the potential benefits of eco-labelling to help persuade smallholder farmers (and other related stakeholders, such as coffee cooperatives) to take up the idea. To help provide this information, the research team assessed the impact of eco-labelling and certification in the Aceh Tengah and Bener Meriah districts in Aceh and Lampung Barat district in Lampung.

These areas were chosen for study as some coffee farmers in these regions have implemented organic-Fairtrade and organic-Rainforest Alliance eco-labels. This allowed the researchers to compare eco-labelled (certified) and non-eco-labelled (uncertified) coffee plantations.

Lampung and Aceh provinces are among the largest coffee-planted areas in Indonesia and have suffered significant environmental destruction as a result of the growth of this agricultural sector.

Assessing the financial performance of coffee farms

Financial analysis was used to compare the profitability of eco-labelled and non-eco-labelled smallholder coffee farms. Farmers’ perceptions of eco-labels in the coffee sector were also gauged as were the factors influencing smallholders’ decision to participate in eco-labelling. An assessment was also made of the feasibility and effectiveness of having coffee cooperatives act as facilitators for eco-labelling schemes.

Information was gathered on the costs and benefits of eco-labelling, and on the socioeconomic characteristics of farms and farmers. This was done by conducting in-depth interviews and using survey questionnaires among smallholder coffee farmers. Focus group discussions among key stakeholders were also conducted.

Secondary data were obtained from available public sources, including local coffee cooperatives. These data included aggregate coffee production, world coffee prices, and the quantity of coffee exported.

The study found that, in both Aceh and Lampung, 49% of farmers were eco-certified and 51% were non-certified. The average size of the harvested areas in both provinces was 1.6 hectares per farmer. Generally, most of the coffee farmers (69%) had 1-2 hectares of land area while some (14%) had more than 2 hectares of coffee plantation.
Are eco-labeled farms more profitable?

As expected, eco-labelled farms were more profitable than their non-eco-labelled counterparts. This was mainly because of the higher price that such farms get for their coffee.

The study found that on eco-labelled Arabica coffee farms, every IDR 1.00 spent on production costs increased farmers' profits by about IDR 1.93. The equivalent figure for non-eco-labelled Arabica coffee farms was IDR 1.62. On the other hand, eco-labelled Robusta coffee farms gain IDR 1.28 per IDR 1.00 spent on production costs. The equivalent figure for non-eco-labelled Robusta coffee farms was IDR 1.15.

Besides, results show that it is beneficial and economically feasible for coffee cooperatives to facilitate and organize the certification of smallholder coffee farmers. Indeed, most of the farmers in the study area who had gained certification did so through a cooperative. The study found that for every IDR 1.00 incurred by a cooperative for coffee certification there was an IDR 1.51 gain.

It was also clear that eco-label certification, especially Fairtrade certification, had a positive impact on social well-being. The premium price provided by certification increased farmers' profits, provided access to better education, and improved rural infrastructure development. For example, in Gayo Aceh, some of the premium fees obtained from the sale of eco-labelled coffee had been used to improve infrastructure and provide clean water.

What farmers think of eco-labels

About 74% of eco-label-certified smallholder coffee farmers in the study areas thought that implementing certification was useful and profitable. They highlighted the following key benefits: the premium fee they got for their coffee and the knowledge they gained about sustainable coffee cultivation and post-harvest processing.

However, some certified coffee farmers (21%) still felt that it was difficult to achieve certification. Their reasons included: the top-down nature of the invitation to participate in the certification process; the difficulty of obtaining large quantities of organic fertilizers; their dependence on land owners; the difficulty of eradicating weeds manually; and the belief that production would decrease without the use of chemical fertilizers.

Further barriers to certification

Among the non-certified smallholder coffee farmers, only 14% stated that they had heard about eco-label certification and its benefits. Furthermore, about 11% of non-certified coffee farmers stated that certification standards were difficult to accomplish and that it would take intensive work on their farms for them to be able to join an organic coffee farming system.

The study found a number of general problems that were standing in the way of the development of eco-labels: farmers and cooperatives received limited support from government; certification was quite difficult to implement due to the low educational level of farmers; barriers were created by the fact that different coffee-importing countries favor different certification schemes; and certification fees created a financial barrier to participation.

One other key difficulty faced by farmers was the issue of 'ownership' of the certification process. Many farmers thought that certification was not for them but only for cooperatives. The cooperatives also reported a problem with appointing leaders. They said that it was sometimes difficult to choose a leader democratically, and that they therefore often choose leaders based on trust. This is not allowed under most certification standards.

Opportunities for the development of eco-labels

Despite these concerns, it was found that most of the Aceh Arabica and Robusta Lampung coffee farmers were already cultivating their farms organically and performing key water
and land conservation efforts, such as terracing, making wind breaks, and planting shade trees. For example, in the Gayo Highlands, more than 80% of farmers already manage their coffee farms organically. Since many farmers run their farms organically, the study suggests that it should not be too difficult to persuade them to join cooperatives and get certification.

Although the study found that most smallholders have actually been practicing eco-label compliant farming methods, it also found that both a lack of manpower and high labor costs was stopping some farmers from going totally organic. Because of this, there was still a tendency amongst farmers to resort to chemical herbicides instead of weeding by hand, which is labour intensive. The study suggests that these problems could be solved through ‘gotong royong’ (volunteerism) in which farmers would reduce labor costs by helping each other with weeding duties.

The importance of information and support

Overall, the study found that the simpler it was for farmers to get information on a certification scheme, the more likely it was for them to participate. This implies that coffee certification in Indonesia has a good potential to be implemented if more is done to provide information, advice and support to smallholder coffee farmers.

As the study found that eco-labelling can be economically, socially, and environmentally beneficial to smallholder coffee farmers, it recommends that the Indonesian government should provide assistance to smallholder coffee farmers to help them gain certification.

It also suggests that credit and capital loan systems should be made available to smallholder coffee farmers, especially during the low production season. It further recommends that direct payments should be made to develop certification among farmers. In addition, promotion and training should be carried out. The aim of this work should be to give farmers a strong understanding of how to achieve certification and to highlight the financial and other benefits that come from acquiring certification.

Expanding markets and strengthening networks

In conclusion, the study suggests that the government can further encourage coffee farmers, cooperatives, and coffee exporters to collaborate in diversifying their target markets and open up new markets for coffee grown under the different eco-labelling schemes that exist.

Specifically the researchers call on the Ministries of Trade and Agriculture to use the result of the study to develop regulations that will ease the export of eco-labelled coffee and promote Indonesian sustainable coffee in importing countries.

It also recommends that the Association of Indonesian Coffee Exporters and Industries (AICE) can link farmers’ cooperatives with eco-label organizations and eco-labelled coffee importing agencies. Finally, it suggests that local governments can play their part by assisting smallholders to implement eco-labeling through the establishment of farmers’ cooperatives or similar institutions and through the promotion and support of eco-label-compliant farming techniques.