# Direct partnership on cocoa processing in Papua Island, Indonesia For improving farmers' access to Japan market

Diany Faila Sophia Hartatri<sup>1</sup> and Hendy Firmanto<sup>1</sup> Indonesian Coffee and Cocoa Research Institute

#### Abstract

Direct partnership has involved three actors; they are small scale business unit, called CV Kakao Kita, international trading company (Company A) and Indonesian Coffee and Cocoa Research Institute (ICCRI). The cocoa processing and marketing activities of this partnership appears to offer exciting benefits for cocoa smallholders' livelihoods improvements. This paper reports on a direct partnership action in the Indonesian island of Papua, where such a direct partnership has been developed over five-year period. This particular experience found that smallholder cocoa farmers in Papua received slightly higher price. This leads by the farmer groups produce a higher quality of fermented dried cocoa beans. Furthermore, limited knowledge, skills and financial facilities in Papua has encouraged the international wholesaler to adopt farmers' empowerment approach. Therefore, the direct partnership between farmers and the buyer has also improved farmers' access to knowledge and skills particularly on cocoa processing method, and financial facilities, particularly saving facility. In addition, direct partnership approach has facilitated smallholder farmers in Papua to obtain buyer certainty and to obtain more access on marketing because the cocoa beans are bought by international wholesaler and sold to retailer in Japan market.

In order to improve the price of cocoa products, CV Kakao Kita has initiated collaborative work with ICCRI on processing intermediate and end products. Further, the intermediate and end products bought by Company A and then sell to distributors and consumers in Japan. This has paralleled with the Government of Indonesia's (GOI's) program namely downstream program which encourages cocoa export into intermediate and end products. However, the minimum knowledge and skills on good agricultural practices (GAP) and downstream processing have limited farmers to obtain higher income. Therefore, improving knowledge and skills of smallholder farmers on GAP and cocoa processing is required to support smallholder farmers' access to Japan market.

### Keywords:

Cocoa, Papua, partnership, smallholder farmer, livelihoods.

### INTRODUCTION

Globalization has increased farmers' opportunity to access to the international market and increase their livelihood and income. However, in Indonesia as a developing country, farmers have faced several challenges to obtain access to new market opportunities. These difficulties are mainly attributed to farmers' limited access to knowledge, skills and market information (Hartatri, 2014). This mainly caused by the minimum infrastructure because the location of cocoa producing region is located in remote areas. Furthermore, the limited extension services officers provided by the Government of Indonesia (GoI), private sector and NGOs has also exacerbated the low access of smallholder farmers to training, extension services and information. Further, this has led the low quantity and low quality of cocoa produced by smallholder farmers. In order to address these challenges, several actors have initiated direct partnership with smallholder farmers. The major aim is to improve the smallholder farmers' livelihoods throughout agricultural commodity development and value chains. According to Neilson (2014), the approach of value chain has appeared as a highly influential conceptual framework adopted by abundant worldwide development agencies over the last decade.

Indonesia is the third largest cocoa producing country, after Cote d'Ivoire and Ghana. More than 90% of cocoa production in Indonesia is produced by small farmers spread throughout the islands in Indonesia, including Papua Island. In Papua, cocoa is one of important commodity trade as source of smallholder and region incomes. Cocoa producing regions in Papua are mainly located in remote areas which have limited infrastructure. In addition, farmers in this cocoa producing area are also having limited access to obtain training, extension services, information and improve their skills, particularly regarding on good agricultural practices (GAP). Furthermore, the smallholder cocoa farmers are also find difficulties to access to financial facility for developing their cocoa agribusiness. Therefore, this has led cocoa is grown traditionally, even without chemical agricultural inputs, such as fertilizers and pesticides.

Japan is one of the developed countries that have high food safety standards. They tend to choose organic food. Therefore, non chemical planting system adopted by farmers in Papua has triggered an international trading company based in Japan (Company A) to build direct partnership with cocoa stakeholders in Papua. The Company A requires high quality and high food safety of intermediate and cocoa end products from cocoa farmers in Papua. Therefore, the Company A commences collaborative work with several actors; they are small scale business unit called CV Kakao Kita, and Indonesian Coffee and Cocoa Research Institute (ICCRI). The main aim of the direct partnerships is to improve smallholder farmers' access to Japan market. In addition, the direct partnership is also aimed to improve farmers' livelihoods. The aim of this study is to assess a case study of a direct partnership for improving farmers' access to Japan market in Papua Island, Indonesia.

## Methodology

We applied a case study approach by incorporating both quantitative and qualitative research methods to explore and analyze the data. Other methods included survey, in-depth semi-structured interviews with several key informants, such as farmers, CV. Kakao Kita, and participant observation in cocoa-growing communities. The survey was conducted in Kemtuk Gresi and Gresi Selatan sub districts, Jayapura in 2017. The survey was conducted to understand the benefits of a direct partnership for improving farmers' access to Japan market in Papua Island, Indonesia.

# Agriculture and poverty alleviation

Agriculture is generally recognized to be a critical sector in many developing countries for achieving poverty alleviation and sustainable development in the 21st century. The World Bank (2008:6) claims that the agricultural sector has been 2.7 and 3.5 times more effective in contributing to alleviating poverty compared to other sectors in Latin America and China respectively.

The World Bank (2008: 2) has proposed multiple ways of reducing rural poverty, such as producing higher value products, supporting people to move out of the agricultural sector, and encouraging nonagricultural

activity in rural areas. These innovations require policy invention initiatives and commitment from various stakeholders.

The agricultural sector has experienced dramatic shifts as the market became more dynamic, introducing more innovations in technology and institutional, new roles for society, the private sector and the state. This change has been affected particularly by private sectors tightening the relationships between consumers and producers along the value chains (Hatatri, 2014).

In many of the least developed countries, the agricultural sector still contributes the biggest share of Gross Domestic Product (GDP) compared to other sectors. Therefore, further, development of the agricultural sector is required by these countries for alleviating poverty, which mainly occurs in the rural areas. Development of the agricultural sector has been achieved through several ways. For example, recently, 'agricultural subsidies' have been introduced to alleviate the 'weak fiscal capacity' of smallholder farmers (The World Bank, 2008).

Governments, some development agencies and private sector have attempted to improve the incomes and livelihoods of the poor using specific development initiatives. For example, NGOs and the private sector conduct collaboration work for capacity building of smallholder farmers aiming to improve the productivity and quality of their cocoa production and to develop sustainable livelihoods for cocoa farming communities. In addition, for example, in 2009-2013 the GoI has imposed "Gernas, Gerakan Nasional" program aimed to improve cocoa productivity in Indonesia. In addition, in 2010, the GoI has imposed export tax policy aimed to increase cocoa export on intermediate and end cocoa products. This has increased the investment of cocoa company in Indonesia. Further, this has also increased the export of intermediate products, such as cocoa powder, cocoa liquor and cocoa butter; and end cocoa products of Indonesia. Meanwhile, the Indonesian cocoa beans export has decreased significantly during 2010. Development agencies and the private sector have also provided several development initiatives for improving household farmers' livelihoods.

In Indonesia, cocoa is grown in almost all regions in Indonesia that involved about 1.2 million farmers. However, there are some challenges in developing cocoa sector, such as limited access of farmers to knowledge, skills and information; limited access to bank loans, pest and diseases attacks, and old cocoa trees. These challenges have reduced the Indonesian cocoa production and cocoa quality products.

## Processing direct partnership in Papua

Papua is one of the cocoa producer areas in Indonesia. There are about 39,000 ha cocoa cultivated by approximately 26.000 cocoa household farmers. The cocoa productivity in this area was 491 kg/ha/year (Directorate General of Estate Crops, 2016). This low productivity is due to several reasons. Firstly, generally, the cocoa trees in this area are old aged. Secondly, the cocoa is mainly grown traditionally, without agricultural inputs use and pruning activities. This has increased pest and diseases attacks in the cocoa plantation. Thirdly, farmers have limited access to training, extension services, information and skills regarding both on on-farm and off farm activities. Further, the low productivity has led the low household farmers' income and also led the low quality of cocoa beans produced by smallholder farmers. Therefore, the farmers could not access the global market.

In Papua, there is one of the NGOs, namely Yayasan Pengembangan Masyarakat Desa (YPMD) who has worked for Papua community since 1984. YPMD has assisted small scale business unit, called CV. Kakao Kita since 2012. In the same year, there was an importer company based in Japan interested to build a partnership with the CV. Kakao Kita. The importer interested to purchase cocoa from Papua because the majority of cocoa grown in Papua is organic which suits with Japan's consumers demand. The aim of this partnership is to improve farmers' livelihoods through improving farmers' income; to trade good food for both consumers and producers and non-destructive to environment; and to facilitate the meeting of producers and consumers in Japan. In addition, in line with the export tax policy that has been imposed by the GoI to increase the Indonesian export through intermediate and finished products, the partnership also aimed to facilitate CV. Kakao Kita to produce intermediate and finished cocoa products.

The limitations in human resources and economy resources aspects in term of cocoa processing activities, this has forced the partnership to involve other party to process the Papua cocoa dried beans. Therefore,

there are several steps in the direct marketing partnership. The first step is partnership between the CV Kakao Kita and the importer company based in Japan. In this partnership, the CV. Kakao Kita sources cocoa dried beans to the importer company. The cocoa beans are sourced from several cocoa producing areas in Jayapura district, such as Nimbokrang, Gresi Selatan, Kemtuk Gresi, Moi and Demta.

The second step, the CV. Kakao Kita and importer company involved Indonesian Coffee and Cocoa research Institute (ICCRI) to process the cocoa beans produced by farmers in Jayapura. As mentioned above, that involving other party in the partnership is because the CV. Kakao Kita is still do not have ability to process the cocoa beans into intermediate, such as cocoa powder, cocoa liquor and cocoa butter; and finished products, such as chocolate bars. Furthermore, the involving of ICCRI is also conducted for minimizing the business risk commenced by the partnership. The ICCRI received the Papua cocoa beans from CV. Kakao Kita. Meanwhile, the role of the importer company is as a supervisor of the cocoa processing activity, to ensure that the intermediate and finished cocoa products resulted by ICCRI has the lowest possible level of microbial contaminants and heavy metals in accordance with the standards applicable in Japan. Then, the intermediate and finished cocoa products are delivered to the importer company to be exported to Japan market. The intermediate products are sold to cocoa processors, while the finished products, called by "Papua Paradise" are sold to distributors or directly to customers. In order to introduce and increase the selling of Papua cocoa products, the importer conducts active promotion to their customers.

The involving of ICCRI in the partnership program is planned only temporarily. Therefore, in the final step, the partnership will invest a small scale cocoa processing unit and provide training for cocoa processing activities. Nowadays, the importer company is preparing to invest some funds to establish small scale cocoa processing unit located in Papua as one of the business unit of the CV. Kakao Kita. In addition, several staffs of CV. Kakao Kita have been trained by ICCRI and the importer company in processing downstream cocoa products. Therefore, when the small scale cocoa processing unit is ready to process cocoa beans in the larger volume, the partnership will be only involved CV. Kakao Kita and the importer company.

### The results of direct cocoa processing partnership

The direct marketing partnership has provided several results. Firstly, the direct marketing partnership between CV. Kakao Kita and Company A has improved farmers' access to knowledge, information and skills, particularly on cocoa quality. Throughout the direct buying of cocoa beans conducted by CV. Kakao Kita has improved the opportunity of farmers to receive informal training. According to in-depth interview with several key informants, the direct buying is used to provide knowledge, information and skills to smallholder farmers on improving cocoa beans quality through conducting fermentation and drying cocoa in the correct method. This is mainly because the importer company requires high quality of cocoa beans. Since 2012, the smallholder farmers has resulted the fermented cocoa beans. According to the observation and quality beans analysis, the quality of cocoa beans resulted by farmers are bean count < 85/100 gram; shell percentage 15%; fermented beans >90%; and moisture content 7% - 10%.

In addition, through the partnership the importer company invited their costumers from Japan to visit cocoa producers in Papua. The field visits by customers were aimed to ensure that the cocoa is grown and produced safely for both producers and consumers and does not destructive for the environment. Also, the customers provide market information to the farmers during their field visits.

Secondly, the improved of cocoa beans quality produced by smallholder farmers has impacted on the increased farm-gate price of dried cocoa beans. The survey shows that the price of cocoa beans received by smallholder farmers was IDR 5,000 higher than that of the selling price given by village collectors. Therefore, by conducting quality upgrading, smallholder farmers in Papua received higher price.

Thirdly, Indonesian cocoa farmers have lack access to financial facilities, such as credit and saving. The minimum access to credit and may reduce the use of agricultural inputs. Moreover, this will also bring the difficulties in fulfilling their basic daily needs, such as children school fee and foods. Throughout the partnership, CV. Kakao Kita has encouraged their farmers to save some money earned from cocoa sales. This is conducting by introducing a local bank, called Phidectama bank to the villages of cocoa producing

areas. Then, farmers will also have access to credit in the same bank. Therefore, the partnership brings benefit for farmers in accessing financial facilities.

Fourthly, as mentioned above that the partnership has improved market certainty of cocoa beans produced by farmers. Finally, the processing activity which is conducted as part of the partnership has produced end products and intermediate products. The end products have been marketed as single-origin product to Japan market. In the Japan market, the Papua cocoa is marketed as Papua Paradise brand. This brand is marketed directly to the consumers in the specialty market. Meanwhile, the intermediate products are sold to local processor company in Japan. Exhibition and promotion are conducted actively by the Company A to improve the selling of Papua cocoa products. Therefore, the direct partnership of cocoa processing in Papua has improved the market access of Papua cocoa beans to Japan market.

Off farm aspects, including post harvest handling, cocoa processing activities for producing both intermediate and finished products are important for improving smallholder farmers' income; however, paying attention to on-farm aspect is also important for cocoa sustainability farming. This is because the low production of cocoa may trigger farmers to grow other commodity. This leads the unsustainable of cocoa farming in the next future. Providing training in the on-farm aspect, such as pruning, shade trees management, fertilizing and pest and diseases control management or even providing cocoa seedlings to farmers are also important for the sustainable cocoa farming in the smallholder farmers' level and the sustainable of the cocoa processing partnership program.

Improving local human resources skills on cocoa downstream processing is also important to improve the impact of processing partnership program. In addition, investment on cocoa processing unit is also should be prioritized to enlarge the impacts of the collaboration work particularly in developing cocoa business in Papua. Further, this will lead the improved farmers' livelihoods in Papua.

#### Conclusion

Direct processing partnership program between small scale business unit, called CV Kakao Kita, international trading company (Company A) and Indonesian Coffee and Cocoa Research Institute (ICCRI) was established for improving farmers' income and to meet the demand of Japan's consumers on good food chocolate products. As business units, CV Kakao Kita is hoped to bring several benefits to farmers. The partnership program provides several benefits for farmers; e.g., better opportunity for accessing knowledge, skills and information, saving, credit, buyer certainty, and higher farm-gate price. A significant aspect in the processing partnership program involved the development of direct market links with cocoa buyer in Japan. This study offers insights on the potential of smallholders to improve their livelihood through links to the partnership and higher value markets. However, focusing on both on-farm and off-farm aspects at the same time might help address the livelihood of cocoa farmers in Papua. In addition, the improvement of human resources and investment on small scale cocoa processing unit in Papua is required during the implementation of the processing partnership. Therefore, supporting the small scale business unit and private sector through the implementation of the partnership program may increase the impact of cocoa processing partnership program.

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