SUCCESS STORIES

Contributing to the UN Sustainable Development Goals through the Sustainable Cocoa Production Program
The Sustainable Cocoa Production Program (SCPP) has made considerable progress towards the UN Sustainable Development Goals (SDGs) in Indonesia’s cocoa sector. From the outset, SCPP has made the aspects of people, profit and planet an integral part of its sustainable approach. With support from private and public donors, SCPP is helping to address 11 of the 17 SDGs and creating a more fertile cocoa industry that supports innovation, sustainability, and farmer livelihoods.

Within these pages you will meet incredible individuals supported by SCPP who are making a difference in their community. There is Muhajar and Halimah, a couple that is committed to increasing their community’s knowledge about nutrition and food security. Another standout individual is Muhammad Iqbal, a young farmer who has managed to become a leader in his local cooperative and an inspiration for other young people to take-up cocoa farming.

This current edition of Success Stories also introduces Petrus Pedro, a promising farmer from the latest expansion area in Flores, who has potential to become an important Lead Farmer and encourage responsible consumption and production. Finally, we will highlight Koka Jaya Cooperative’s innovative approach to establish a fertilizer voucher scheme that ensures the cooperative’s poorest members have access to fertilizer so they can increase their production and get themselves out of poverty.

Happy reading!
The Teacher Gets Taught

In 2007, Novalinda and her husband decided to convert their 1.5 hectare profit-sharing farm area into a cocoa farm and replanted 800 cacao trees. While waiting for the cocoa yield, they planted short-term commodities such as banana and lime in between the cacao trees as a way to fulfill their daily needs. A year later, Novalinda added another 700 cacao seedlings through a subsidy by the local government. After 22 months, the first yield turned out to be very low because they had pruned the branches wrong. They realized that they needed to improve their cocoa farming skills and decided to join the ten-day FFS in October 2014. “Through the FFS we were able to practice techniques such as side and top grafting on a demo plot firsthand. Previously we’ve only been able to read about it. Now, we’ve already side grafted some of our less productive trees with superior clones such as BL-50 for better production,” says Novalinda.

From One to Five Tons

Within only two years they have been able to multiply their production by five, from one ton in 2014 to five tons in 2016. Novalinda and her husband fairly divide the work needed on their farm. Jamaan focuses on maintaining their farm to a high standard with two daily helpers during fertilization and harvest sessions. Novalinda is responsible for post-harvest handling activities such as fermentation until the beans are sold to the next off-taker in the supply chain. Novalinda still lives for teaching, so her husband built an outdoor classroom area on her farm where she volunteers to train other farmers in her village. Many fellow farmers come to her farm for advice and free budwood so they can also improve their own farms.

Based on sales records from December 2016, the couple have earned IDR 9 million (USD 676) per month after deducting labor and fertilizer costs and zakat (2.5% obligatory religious payment) on their wealth. Thanks to cocoa, their daughter Jumiatul Janovia (27) was able to study a bachelor’s degree, majoring in obstetrics. Novalinda’s success benefits not only her family but also the surrounding cocoa community.

Novalinda, who is an active high school teacher, had to share her time between teaching, farming, and joining the Barry Callebaut and Swisscontact Farmer Field School (FFS). She transferred the knowledge she gained from the FFS to her husband, Jamaan, so he can equally support their farm.

Novalinda (53) is a self-taught cocoa farmer who believes that knowledge and education is the key to achieving success in cocoa farming. Armed with just a few basic books on cocoa cultivation, Novalinda started her cocoa farm and is now able to produce five tons of cocoa from just 1.5 hectares of farmland.

“WE HOPE THAT THE PROGRAM CAN CONTINUE TO SUPPORT SMALL-SCALE FARMERS LIKE US BECAUSE THERE ARE STILL MANY FARMERS WHO ARE EAGER TO LEARN AND ACHIEVE HIGHER PRODUCTIVITY”
In 2009, Haeruddin replanted 800 cacao trees on his one-hectare farm under the protective shelter of shade trees, replicating other successful cocoa farmers in the area. However, the harvest did not provide enough income to sustain his family, so he set out to find a new approach to growing cocoa.

Improving Production and Contributing to Sustainability

Haeruddin had decided to enroll as a participant in the Farmer Field School (FFS) in October 2014. With his newly gained knowledge and technical skills, he is now a SCPP Lead Farmer and facilitates Good Agricultural Practices (GAP) sessions. He immediately began to train 30 other farmers under the local Harapan Areppae farmer group.

As taught in the FFS, he pruned and nourished his cacao trees with organic manure from his goats and appropriate fertilizer. Like other cocoa farmers in the area, Haeruddin integrates a crop-livestock system. He feeds his goats the leaves from his shade trees and only has to spend an additional IDR 40,000 (USD 3.1) a year to supplement the extra expenses from his goats. “With this integrated crop-livestock system, I can earn additional income totaling IDR 30 million (USD 2,308) on cocoa farming alone. His success in cocoa has motivated some of his neighbors to plunge into cocoa farming as well. Haeruddin, who is heavily involved with the Harapan Areppae farmer group, notes that the group’s bean sale records from selling to the nearest Cargill and Mondelez buying unit is the highest in the area. Thanks to his hard work and ability to lead, Haeruddin was given the opportunity to attend the 3rd anniversary of the Indonesian Cocoa Day in Jogjakarta last September 2015. “While in Jogjakarta I had the opportunity to share my experiences and gain invaluable knowledge and tips from other successful farmers from all around our archipelago. I believe success will come to those who persevere and I am truly grateful for the opportunities given to me,” ends Haeruddin.
I Putu Kariana moved his family from the island paradise of Bali to Central Sulawesi’s Parigi Moutong district in 1996. After working in construction for several years, he decided to take the plunge into cocoa farming when he saw the success of other farmers.

Learning About Sustainability
Not wanting to stand by and watch other people’s success, in 1999 I Putu planted 2,000 cacao plants over two hectares of farmland. Within 15 years his farmland has expanded to a total of 6 hectares, 3 of which are currently planted out with promising, young cacao trees. Since joining ECOM and Swisscontact’s Farmer Field School (FFS) in October 2014, his production has increased significantly. According to his records from December 2016, he is now able to produce more than 6 tons of cocoa beans per year, which amounts to an annual income of IDR 186 million (USD 14,307).

One of the most important aspects of FFS is teaching farmers that fertilizer and pesticides are not the only methods for pest and disease control. “The risk of Vascular-Streak Dieback disease has decreased since applying what I learned at the FFS. Apparently the secret is to prune around 20 cm from the affected area, which is a solution I was not aware of before the FFS,” explains I Putu.

Establishing Sustainable Communities
Thanks to his knowledge and leadership training at the FFS, I Putu has become a supervisor for his local ‘Jaya Makmur’ farmer group and he also supervises 120 other farmers spread across 4 different farmer groups. The Jaya Makmur group now wants to expand and establish a cooperative so that the smallholder farmers in our area can improve their access to markets to generate income. “For example, we have a nursery that currently grows cacao seedlings for members’ needs only, but there is a potential market because many farmers are now motivated to rehabilitate their farms,” I Putu exclaims.

He also hopes that the farmers in his area will be supported in attaining certification to enhance productivity and competitiveness in the market. “Through ECOM’s subsidiary company – TMQ, farmers get a fair deal. I once received a premium of IDR 200 per kg of beans I sold to TMQ because they exceeded TMQ’s standards. When all farmers can reach the same standard, there is no doubt we will be able to restore the glory of cocoa in this area,” I Putu concludes.

“After receiving training, I can help other families and share my sustainable farming knowledge with them to create a fertile community for cocoa farming”

I Putu Kariana (37) has been able to get to where he is today by mirroring the success of other cocoa farmers. He has become a model cocoa farmer and inspiration for the younger generation who are now choosing to stay in rural areas and support their local community, rather than moving to larger cities in search of work.
A Young Farmer Leading the Future of the Cocoa Sector

Muhammad Iqbal (26) spends most of his days at the District Cocoa Clinic (DCC) Bireuen where the Perkebunan Kakao Bireuen Cooperative (KPKB) is stationed. He completed his first GAP trainings in 2010 and was supposed to finish his tertiary studies in 2015. After postponing his studies to support his family through cocoa farming, he has recently resumed his tertiary studies on agri-business and sustainable farming.

He started with just 400 cacao trees and 56 coconut trees that he used as shade trees. While he may not have a lot of land, in his opinion, land size does not determine high yields and quality, rather, it is how the trees are maintained. He proves that cocoa farming is not just for the older generations and has become an example of what professional cocoa farming can achieve.

Stepping into the Unknown
In 2010, Iqbal joined with Swisscontact through the Aceh Cocoa Economy Improvement Program (PBA) and participated in the first batch of Training of Trainers (ToT) held in his village of Juli Meeu Teungoh, Bireuen. After the training, he committed to rehabilitating his ageing cacao trees that were first planted in 1992 by his parents. “At that time, my fellow farmers responded negatively to what I was doing because they had no clue about these agricultural practices yet. I was convinced that it would work and my farm would improve,” elaborates Iqbal.

His annual production before the PEKA intervention was just 350 kg per year. Since then, he has more than doubled his production to 910 kg per year as per the December 2016 records. Now, many fellow farmers come to his farm for budwood so they can side-graft the planting material onto their cacao trees to improve their own production. Furthermore, he also produces seedlings on request and sells them with various prices ranging from IDR 3,000 to IDR 7,000 per polybag.

Leadership and Cooperation
Iqbal’s involvement with Swisscontact was continued through SCP after the completion of PBA in 2012. He then became a facilitator in SCP’s outreach project held in Bireuen. In 2013, Iqbal was selected to become a member of the Internal Management System (IMS) in the UTZ certification program. Two years later, Iqbal became the manager of Perkebunan Kakao Bireuen Cooperative (KPKB), which was established in May 2015.

Currently, Iqbal dedicates most of his time to IMS activities and managing the cooperative’s business units. He also acts as the quality controller, earning him an additional IDR 75 per kg. In 2016, with support from JeBe Koko, Iqbal received Good Business Practices (GBP) training on IMS, traceability and certification. Bean trade has become one of the main sources of income for the KPKB and Iqbal himself. As a manager he is entitled to receive 13% from the profits of annual bean sales made by the cooperative. He expects to receive around IDR 15 – 20 million (USD 1,126 – 1,500) from the total trade in 2016. KPKB’s high quality cocoa beans caught the attention of PT Pipiltin based in Jakarta, so now there is a special contract where Pipiltin pays a price premium of about 60% per kg of single origin beans. This year, Iqbal has been able to earn IDR 14.8 million from selling 315.5 kg of his high quality beans, which is not including regular bean sales or his additional income from his nursery, quality control and role as manager.

Thanks to his understanding of the complexity of growing cocoa, Iqbal was invited to travel to Jakarta on the 22nd of November 2016. There, he was awarded 3rd place for the best quality cocoa beans at a national competition in honor of the 4th Indonesian Cocoa Day.

“I AM NOW ABLE TO PAY MY SISTER’S AND MY OWN UNIVERSITY TUITION FEES AND SUPPORT MY ENTIRE FAMILY”
In most parts of the world cocoa farming is often linked with poverty and mal-nutrition. Muhajar (56) and his family is one of more than 48,000 smallholder cocoa farmer households in the Sustainable Cocoa Production Program that have received training in Good Nutritional Practices (GNP). Now, Muhajar and his wife, Halimah (53), educate others in their village to improve the community’s diet.

Mars and Swisscontact are aware that improving the production of cocoa farms is not the only way to improve livelihoods. As part of their collaboration, SCPP introduced nutrition education in the district of Luwu Utara, South Sulawesi. Farmers also received practical training for establishing home vegetable gardens and were given seeds to start their projects. Halimah attended two full training days in August 2015 with strong enthusiasm. She is now aware of the appropriate food preparation and storage methods that prevent loss of vitamins and minerals.

**Planting the Seeds of Growth**

Muhajar and Halimah established a home garden where they grow numerous nutrient-rich vegetables such as leafy mustard, spinach, water spinach and cucumber. Halimah maintains the garden organically by only using homemade fertilizer that Muhajar makes from the organic material that litters his cocoa farm. Just 20 days after GNP training, she was able to harvest and enjoy her organically produced nutritious spinach (Amaranth) and sell the surplus to a local shop.

“When I first came in, the shop supervisor welcomed me and my spinach and even said that I can be his regular supplier because organic vegetables are rare in our area,” says Halimah.

Selling her organically grown vegetables is satisfying and motivates her to produce more vegetables and regularly maintain the supply from her garden. Halimah has supplied the local shop several times since beginning her vegetable garden and is even fulfilling demands from direct buyers in the area. “Currently we are expanding to plant more vegetables since the demand is higher than we expected,” added Muhajar.

**Overcoming Mal-nutrition as a Community**

Halimah and Muhajar motivate their neighbors to begin home vegetable gardening to not only have an additional source of income, but also improve their diets. Muhajar offers his self-made fertilizer to new vegetable growers for free and advises farmer families that they cannot always be dependent on local traders because price and availability is unstable. Muhajar knows that people will hesitate to buy expensive vegetables, which could lead to poor nutrition and stunted growth in children. Halimah shares her nutrition knowledge with others in the village and she is always very happy when she notices that other families, especially mothers and children, are starting to consume more vegetables.

Muhajar’s farmers group has established communal fishponds to ensure a steady supply of protein, which is often a neglected nutrient in the community’s diet. They started with just three fishponds and they have now doubled the number to six. There are also fishponds that belong to individuals. “The group members take the lessons learned from our communal ponds and then implement their knowledge on their own fishponds,” explained Muhajar. Although the group has not commercially sold the fish, harvest time is regular and is enough to support their own dietary needs. Even the local government has heard of the community’s initiative and wants to work together with Mars and Swisscontact to tackle the poor nutritional status of cocoa farmer households.

“Vegetable gardens can be a promising business! Not only can we supply our own needs, we can also offer our surplus vegetables to local shops and profit from our garden.”
Mangngoy started out by planting 700 cacao trees on his one-hectare farm without having any prior knowledge of cocoa cultivation. At first his trees produced a very good harvest, however, his success did not last long enough due to the impact of climate change that resulted in weather anomalies and the proliferation of pests and diseases.

Learning About the Complexity of Climate
Rising global temperatures and increases in moisture and carbon dioxide emissions resulted in the proliferation of destructive pests and diseases that impact cocoa farms in his area. “Cocoa pod borers, black pod and vascular streak dieback damaged most of my farm which led to low crop growth and quality,” Mangngoy explained.

In 2013, Nestlé and Swisscontact’s Farmer Field School (FFS) began operating in the area. Together with other local farmers, he received training in Good Agricultural Practices (GAP), Integrated Pest Management (IPM) and responsible use of agri-inputs such as fertilizer. When farmers are taught to apply the fertilizers correctly, increase the organic material in the soil and at the same time plant the suggested shade trees, their total carbon footprint can be decreased significantly.

Equipped with the knowledge and necessary skills, Mangngoy was able to tackle the problems on his farm and increase his production from 1.2 to 2 ton/ hectare/ year. According to his 2015 records, he has earned approximately IDR 69 million (USD 5,307) in one year from bean sales to BT Cocoa.

A Champion for Climate Action
Mangngoy doesn’t stop there. He also joined a Training of Trainers session in Good Environmental Practices held by Swisscontact and Nestlé so that he can teach other farmers about ways to reduce GHG emissions from their farms. He knows that many farmers are still skeptical about the impact of climate change on their productivity, but Mangngoy has seen it with his own eyes. He has experienced how weather anomalies cause delayed harvest season, decreasing his harvest to only 800 kg in 2016. This year, he noticed how the weather patterns have changed, but remains optimistic and continues to make his farm more environmentally friendly. "To utilize agricultural waste, I have managed to build composting pits where natural waste in the farm is buried to enrich the soil. The use of fertilizers can be reduced. I have also slowly been phasing out non-natural fertilizer and will eventually try and only use the natural fertilizer I made myself," Mangngoy explains.

“The Availability of Good Environmental Practices Training will Lead to Sustainable Farming and ultimately a Sustainable Source of Income for Cocoa Farmers in Indonesia”
After attending Farmer Field School, Petrus applied Good Environmental Practices (GEP) to his entire farm. As a result, he has noticed fewer pests and diseases and his cacao trees look healthier. According to his yield notes from January until December 2016, he has been able to produce 1,208 kg of cocoa beans.

**Sustainable Ecosystems and Zero Waste**

The ability to intercrop several commodities is one of the advantages of growing cacao. As recommended to him, Petrus has been intercropping his cacao farm with tall coconut and gliricidia trees that provide shade for his cacao plants. Low-level crops such as pineapple, sweet potato and taro provide quick yields that can help support his family’s daily food needs. In addition, he also farms pigs and goats. The decision to mix livestock and crop farming means he can apply a zero waste system, reduce the cost of labor for weed control, and have access to meat and milk. Cocoa pod husks contain fiber, protein, fat, and also organic acids that make it suitable for livestock feed. Manure from the livestock can be utilized as ingredients for organic fertilizer and thereby can reduce the cost of agri-inputs.

Petrus also sells cacao tree byproducts for additional income. Besides selling dried cacao beans, he also sells budwood and cacao tree seedlings. “Cocoa is such a profitable crop, especially with its alternative business opportunities that generate more income for my family.” Thanks to his top-grafting skills, Petrus has been able to establish his own cocoa nursery business. His top-grafted superior seedlings have been marketed to farmers not only in Flores Timur where he lives, but also to those from neighboring districts. The nursery earns him an additional IDR 7.5 million (USD 560) a year. From all of his business units above, Petrus earned IDR 43,850,000 (USD 3,300) in 2016.

**Sustainable Production for the Future of the Industry**

Petrus has earned IDR 35.3 million (USD 2,600) from selling his beans to the local cooperative, KSU Jantan, where he is assigned as one of the key members. As a lead farmer, Petrus helps to facilitate trainings on Good Agricultural Practices (GAP) and Good Environmental Practices (GEP) for 37 fellow farmers under the Tali Tulun Farmer Group. KSU Jantan also produces their own processed cocoa products, namely cocoa butter and cocoa powder. The cooperative understands the importance of sustainability and Petrus would like to see further cooperation between the MCA-Indonesia funded GP-SCPP and KSU Jantan. Petrus intends to pass his sustainable cultivation knowledge onto his children. “My son has shown interest in continuing my farm, he even has a degree in agriculture from a local university. In the mean time, I will continue to improve my farm and make it more sustainable.” GEP training is one of the first steps to becoming a certified farmer. Swisscontact’s private sector partners are exploring options to introduce premiums for certified cocoa produced in Flores. This will reward farmers like Petrus for his hard work and diligence in sustaining ecosystems and offer incentive for other farmers to follow in his footsteps.

“MY UNDERSTANDING ABOUT AGRO-ECOSYSTEMS AND AWARENESS ABOUT ENVIRONMENTALLY FRIENDLY PRACTICES HAS IMPROVED. I CAN NOW MAKE MY OWN COMPOST AND NURTURE MY TREES WITH SELF-MADE ORGANIC FERTILIZER”
Fertilizer is essential to improve cacao tree growth and yield. When the recommended practices are followed (including adding enough organic material), it contributes to the sustainability of cocoa farms by improving the soil condition and increasing the carbon stock in the soil, which reduces the amount of greenhouse gases (GHG) emitted. However, smallholder farmers often have limited access to finance that would allow them to purchase agri-input supplies and follow proper fertilizing practices.

**Fertilizer Voucher Scheme**
Koka Jaya was established in November 2013 and it now has 208 members (UTZ certified and conventional farmers) spread across 62 villages in Pidie Jaya. Its capital is sourced from members’ savings, creditor funding and profit sharing from its business services. Just three years after its establishment, Koka Jaya has been able to accumulate IDR 434 million (USD 32,600) in capital. The cooperative manages profitable activities such as supplying cacao seedlings, compost, certified budwood, and also facilitates cocoa bean sales (conventional and UTZ certified) for members and non-members. Koka Jaya already proved itself to be credit worthy when the cooperative repaid its first loan from Rabobank as agreed and received another loan at the end of 2016. The loans from Rabobank are used as working capital for the cooperatives’ cocoa bean trade business.

Encouraged by SCPP, Koka Jaya launched its agri-input provision funding in May 2016, starting by only allocating vouchers to members who actively sell cacao beans to the cooperative. The scheme is essentially an in-kind loan to farmers in need. To realize this, the cooperative teamed up with reliable agri-input traders in the area where the fertilizer vouchers would be redeemed. To ensure repayment, Koka Jaya entitled cacao bean buying units that are linked with the cooperative. The farmers have the option to pay back in installments over six months, meaning that as they sell their cocoa, the buying units set aside a small amount of the payment to then be passed on to Koka Jaya. The farmers can also opt to pay back the entire loan amount in full at the end of six months. All parties including the farmer recipients, buying units and the chairman of the farmer groups whose members receive the loan are responsible for ensuring repayment.

**Proven Results**
On November 2016, as stipulated in the agreement, seven members from the “Reuleut Farmer Group,” who were granted the first round of funding in May 2016, have been able to fully repay the total IDR 6 million (USD 450) worth of fertilizer vouchers. The repayment from Reuleut has been distributed back to four other cooperative members from the same farmer group. Meanwhile, the other two farmer groups who received the funding in June and August 2016 have been showing their commitment by paying installments each time they conduct transactions. They are expected to complete repayment in December 2016 and February 2017. In total, Koka Jaya has disbursed IDR 27.2 million (USD 2,000) to offer fertilizer vouchers to 29 farmers. The cooperative receives minimal profit share from the vouchers, which means the total amount of money repaid to Koka Jaya should be IDR 28.4 million (USD 2,180) by February 2017.

In the future, Koka Jaya plans to provide agri-input supplies to a wider range of farmers by becoming a sub-distributor themselves through cooperation with the Cooperative and Trading Agency of the Pidie Jaya District Government. Thereby, Koka Jaya can increase their profit margin to sustain their scheme. Admittedly, this is such a promising business model that it would be replicated to other agri-inputs such as cacao seedlings and by other cocoa farmer cooperatives in all SCPP areas once they have enough capital to begin implementing it.