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PROGRAM FOR PROMOTION OF CERTIFIED COCOA IN VIETNAM (ECO-COCOA)

ANNUAL REPORT

January – December 2012

Eco-Cocoa Program Team, 2012

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EXECUTIVE SUMMARY

Capitalizing on the results achieved since 2009, the program has attained significant results towards achievements of the program objectives in 2012. The key activities implemented during the year include maintaining the operation of certified cocoa farmer clubs, instalment and operation of ICS, organizing refreshed training for farmer clubs leaders, motivating local farmers to join certified cocoa production and documenting experience for upscaling.

By end of 2012, the program has attained substantial results towards achieving the program goal of improving the living standards of cocoa growing populations. Findings from a recent study on the cost effectiveness of cocoa intercropping with coconuts show that incomes from UTZ certified and organic in conversion cocoa plantations are significantly higher than those from conventional ones. However, for improving the performance of the local value chains (from farmer to cocoa bean buyers), greater efforts should be made to improve cocoa productivity cost effectiveness in order to bring about higher margins for cocoa farmers.

For ensuring the local certified cocoa value chains to be sustainable, a larger number of farmers is needed in order to reduce transaction costs. For that purpose the program has successfully motivated a significant number of local farmers to produce certified cocoa. By the end of 2012, there are some 1600 UTZ certified cocoa famers in two provinces, with about 370% increase compared to 2011 (340). This is a very good indication that after two years (2010-2011) local farmers gradually perceive the benefits of certified cocoa and as a result more and more farmers decide to produce it. Up to present, the program has achieved 40% of the target regarding the number of farmers but 93% of the program target regarding the number of farmer clubs which signifies that farmer clubs are smaller than initially assumed. With these results, it is strongly believed that the program target of 4000 farmers producing certified cocoa will be achieved by end of 2014. More importantly, local businesses as lead companies are now very active in development of local certified cocoa value chains, a good indication of value chain sustainability. At present, the program has worked with 4 private companies in Ben Tre Province who have taken the lead in local certified cocoa value chain development.

Capacities of local partner staff, certificate holder staff and farmer club leaders in development of certified cocoa production systems have significantly been improved. They are now confident to promote certified cocoa production in localities. Instalment and operation of internal control system (ICS) has been properly done and, as a result, cocoa production systems in both provinces have been UTZ certified. However, the traceability system must still be strengthened to ensure that buying documentations at fermentation units and certificate holders are properly done according to standard requirements to avoid mingling certified beans with conventional ones.

Furthermore, certified cocoa quality also needs to be improved because, compared with conventional beans, the quality of certified cocoa beans is not different. This reflects the reality that certification does not always ensure good quality of cocoa beans. Although the cocoa market principles usually emphasize “better price for better quality”, this is not always the case for local cocoa markets because of fierce competition. Due to supply shortage, bean buyers can offer the same price for low quality beans as good quality ones. As a result, fermentors tend to buy and ferment without eliminating damaged and young pods which eventually affect the flavour of fermented beans. Therefore, the program will focus its resources on the quality aspects by developing mechanisms to ensure that fermentors will not buy low quality beans, and also the fermentors will be supported with standardised

fermentation boxes and drying meshes along with technical guidelines on standard fermentation procedures.

In addition, markets for certified cocoa are secured as Cargill has pledged to buy all certified cocoa with premium of 120 USD per ton and this buying company's strategy is that by 2020 they will only buy certified cocoa beans. Therefore, with the program support, local farmers and businesses have prepared themselves in response to these market requirements. However, with the premium policy of 120 USD per ton, local farmers and businesses should still work together to reduce the costs of ICS, increase cost effectiveness of certified cocoa production and negotiate with buyers to work with certification bodies to reduce certification fees.

In 2012 the program has faced a number of challenges in planned expansion of certified cocoa production in a sustainable manner. Fishpond latrines are still a major challenge for local cocoa farmers to meet the requirements of certification standards. In 2012, thanks to the financial support from Happel Foundation, 300 poor farmers have been enabled to benefit from certified cocoa production. It is expected that in 2013 the funding from Happel Foundation will enable some additional 500 farmers.

Moreover, development of the Cho Gao Cooperative in Tien Giang Province to become a producer cooperative still requires greater efforts from key stakeholders including Rabobank, DOST, HELVETAS and farmers themselves. The low number of farmers producing certified cocoa in Tien Giang, compared with that of Ben Tre Province (400 vs 1200), is partially due to this. For producing certified cocoa in Tien Giang Province, farmers need to comply with the requirements of certification standards while they also must fulfil the conditions of cooperative membership. For enabling farmers to overcome this dual challenge, it is essential that HELVETAS and Rabobank (and RIAS) discuss the mechanism for collaboration with due consideration of limited program budgets, the current contexts of cooperative development, and the minimum budgets for RIAS technical support. For the time being, the program sets aside a grant of 20,000 USD as working capital for the cooperative with an adjusted implementation strategy that in Tien Giang the program will focus on cooperative development and support cooperative members to produce high quality cocoa (not certified cocoa) in order to reduce costs.

In general, the program has made good progress in 2012. For capitalizing on the achieved results and overcoming the challenges, the implementation tactics in 2013 are different from the previous years. In Ben Tre the program will provide financial and technical support to 4 private companies to take the lead in local certified cocoa value chains. They are responsible for all certified cocoa production related activities, including selection and training of farmers, instalment and operation of ICS while the program mainly provides initial financial support for capacity building. In Tien Giang, the program will focus on the development of the Cho Gao Cooperative as a producer cooperative enabling them in production of quality cocoa beans. Moreover, the program will not carry out any research on either cocoa farming techniques or pest management but rather focus its efforts on consolidating the results and strengthening on-farm demonstration to introduce and motivate farmers to apply the available sustainable cocoa farming techniques. As the number of farmer clubs in the two provinces is rather high, the program will work with certificate holders to increase the number of farmers in each club rather than the number of farmer club in order to reduce transaction costs for ICS and farmer training.

1. Introduction

HELVETAS Swiss Intercooperation, formerly called the Swiss Association for International Cooperation, started a five-year programme to develop Organic and Fair-Trade Cocoa in Vietnam in 2009. The program aims to increase the living standards of the rural population in the southern regions via improved social, economic and environmental conditions related to agriculture. The program is coordinated by HELVETAS and implemented by three project partners: the Nong Lam University (NLU), Ben Tre Province's Agricultural Extension Center (PEAC) and Tien Giang Province's Department of Science and Technology (DOST). The primary target groups are the small-scale cocoa farmers in the two selected provinces, Ben Tre and Tien Giang. For achieving the development objective, the program is designed to achieve 4 outcomes, namely: (1) development of sustainable certified cocoa production systems; (2) strengthening processing and quality management of certified cocoa; (3) development of certified cocoa value chain and markets; and (5) setting up effectively and sustainably internal control systems for different standards (see details in Annex 1).

The program has made substantial progress towards the achievement of its objectives (see the details in Annex 1). Until recently, there is a positive signal for income increase resulted from certified cocoa production. According to a recent study on the cost effectiveness of cocoa intercropping with coconuts, incomes from UTZ certified and organic in conversion cocoa plantations are significantly higher than those from conventional ones. This can be justified in the sense that once applying UTZ standards local farmers have done better pruning and fertilization (see Annex 2).

In term of the number of farmers participating in certified cocoa production, the program has attained 40% of the set target of 4000 farmers in the two provinces. For organic cocoa under the local context, a recent assessment emphasizes that coconut contributes a largest share to household income and cocoa only 5% and thus needs organic production of both cocoa and coconut. Also, organic cocoa and coconut should only be promoted in the area when animal manure is sufficient (see the details in Annex 2).

Up to now there are 93 farmers clubs established in the two provinces (29 in Tien Giang and 64 in Ben Tre), constituting 93% of the program target regarding the number of farmer clubs, of which 26 clubs (9 in Ben Tre and 17 in Tien Giang) established before 2012 have been properly operated. The remaining 67 newly established ones need to be regularly monitored and coached. Moreover, markets with premium for organic cocoa and coconuts are not stable yet. The program will need to strengthen the linkages between local farmers, their certificate holders and cocoa buyers.

For sustainable development of organic cocoa and coconut production systems, the program has decided to stop its support for compost making as done since 2009. The program only considers supporting market premium of 650 VND per kg of fresh pods. This premium support will also end as soon as there are buyers for organic cocoa. For this purpose, the program is now preparing all required certification documents to be sent to a certification body, probably ACT Thailand for organic certification. For organic coconut, the program has discussed with a coconut processing unit in Ben Tre which has committed to buying all organic coconuts produced in the program areas.

For quality improvement, the program has focused on the quality aspects by developing mechanisms to ensure that fermentors will not buy damaged and young pods for fermentation, and also the fermentors will be supported with standardised fermentation boxes and drying meshes long with technical guidelines on standard fermentation procedures. The program will introduce a quality-related pricing system by development of grades and prices related to grades.

Instalment and operation of ICS has been properly done. As a result, the UTZ-based cocoa production systems in both provinces have been certified. However, the ICS needs to be improved, particularly the traceability issues. It is understood that it takes time for local farmers to get used to complying with all introduced standards. Most of the certified cocoa households have not managed their wastes in a proper manner. More importantly, the traceability system must be strengthened to ensure that buying documentations at fermentation units and certificate holders be properly done according to standard requirements to avoid mingling certified beans with conventional ones.

As a whole, it is very likely that the program will achieve its set target of 4000 farmers within the planned phase. In fact, with the current performance in Ben Tre Province, there is a high possibility for this province to achieve the target of 2000 farmers. However, it may be hard for Tien Giang province to achieve this target with the current organizational structure. Unlike the extension system in Ben Tre province where they have staff from provincial to commune levels, DOST in Tien Giang does not have that advantages. The experience over the past years shows that in the first years mobilising local farmers to produce certified cocoa and coaching them to comply with certification standards needs a larger number of competent staff and these staff need to pay frequent visits to participating farmers. Therefore, the involvement of extension center in Tien Giang in implementation of project activities, especially in motivating farmers to join certified cocoa production and management of certified farmer clubs. For this purpose, HELVETAS needs to discuss with DOST about administrative procedures for the provincial extension to be involved.

2. Activities implemented during 2012

2.1 Development of sustainable certified cocoa production system (Outcome 1)

Research activities and on-farm demonstration

In 2012 the program has further collaborated with Nong Lam University to conduct on-farm research on using black ants to manage cocoa mirids. Although this research has been done over the past years, there has not been any concrete technical guide on this aspect, and cocoa mirid is still the most important pest in conversion cocoa plantations. Because the effectiveness of using black and weavers ants is not the same and rather contextual for all farms applying this pest management techniques, demonstrations on using ants are still needed.

For promoting wider use of black ants to control cocoa mirids, 10 key organic farmers in Tien Giang interested in pest biological control were enabled to visit a cocoa plantation in Ben Tre using this method successfully and were trained by a cocoa expert from Nong Lam University. After the visit, 5 organic in conversion farmers have been selected to use black ants to control cocoa mirids. The preliminary results are very encouraging. On the demonstration farms, new pods are healthy without any damage by cocoa mirids.

Pic: Black ants and waver ants on cocoa trees

For the farms with significant populations of weaver ants, it is recommended that farmers do not kill existing weaver ants in order to raise black ants (both species cannot co-habitat), but rather maintain and increase current weaver ant populations. One of the methods is to grow custard apple trees along the edges of cocoa plantations. By end of 2012, more than 20 farmers use black ants to effectively manage cocoa mirids. Since it is strongly believed that black ants are effective against cocoa mirids, no further research is needed. Instead, to introduce and convince local farmers to apply this pest management approach will be in focus.

For promoting sustainable certified cocoa under the local context, it is important to ensure balanced nutrient management in cocoa-coconut farming systems. Therefore, complementary and competitive effects between cocoa and coconut trees in term of nutrients should be studied. Accordingly, the program has collaborated with Nong Lam University to conduct an assessment in this regard.

As a whole, much needed farming techniques for sustainable cocoa development in the context of the Mekong Delta are available. However, the greater efforts will still be made to introduce and make local cocoa farmers applying these techniques on their farms. For doing so, the program will focus on on-farm demonstrations rather than in-door training.

Ginger on organic in conversion cocoa plantations

For diversification on organic plantations, the program has started to introduce organic ginger since 2011. Nine farmers have planted organic ginger since April 2012 that is growing rather well, each of them. having some 80 to 120 ginger plants.

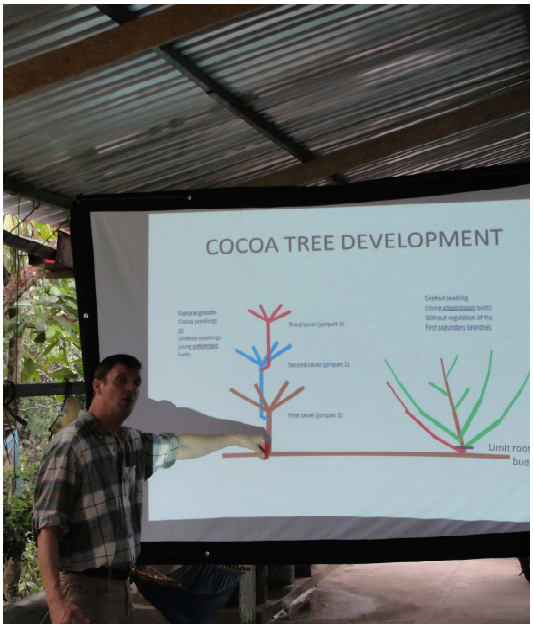
Conventionally, farmers grow ginger in fertilizer or animal feed bags. However, for promoting ginger within organic cocoa-coconut plantations, the demonstration farmers grow ginger directly in the soils. Results indicate that organic ginger is feasible within the organic cocoa-coconut intercropping systems. However, due to limited space for ginger and insecure markets for organic ginger, this crop will not contribute much to household income.

Pic: organic ginger on cocoa farm

Training activities

Key training activities implemented during 2012 are presented in Table 1.

Along with the training on certification standards and ICS which will be explained in a later section, the trainings focused on pruning which constitutes an important step for yield improvement in the local context because local cocoa farmers have not pruned their cocoa trees as recommended.



Pic: TOT training on pruning

Along with this key training, every month, majority of 1600 UTZ certified farmers attend their club's regular meetings to share information and experience on certified cocoa production techniques.

However, the training quality by farmer club leaders is questionable although many farmer club leaders have been trained on adult teaching methods. Therefore, more discussion is needed with local partners to find out whether the low training quality was caused by weak teaching skills or low motivation. As approaches need to take this into account.

Table 1. Number of farmer club leaders and local staff trained in 2012

Training workshops	Participants		Total
	Farmer club leaders	***Local staff***	
Training on second year UTZ requirements	93	10	**103**
Training on pruning and nutrient management	26	10	**36**
Training on Organic ICS	12	16	**28**
Training on quality management (fermentation)	93	10	**103**
Total	**224**	**46**	**270**

As discussed earlier, the most important task for all local value chain actors from now on is to increase cocoa productivity and improve cocoa quality. Therefore, the training focus from 2013 onwards will be motivating local fermentors to produce high quality beans, convince local cocoa farmers to apply proper pruning and nutrient management, and the third year requirements of UTZ certification standards. The training for farmers should be mainly conducted at demonstration sites in order to make the training activities for interesting and understandable.

Mobilizing local cocoa farmer converting to certified cocoa production

By the end of 2012, 400 households (375 cooperative members) in Tien Giang and 1200 in Ben Tre have participated in certified cocoa production. The total number of farmers in both provinces is 1600, about 40% of the target of 4000 farmers until 2014. The low number of farmers producing certified cocoa in Tien Giang, compared with that of Ben Tre Province (400 vs 1200) is partially due to the fact that for producing certified cocoa in Tien Giang Province, farmers need to comply with the requirements of certification standards while they also must fulfil the conditions of cooperative memberships. For enabling farmers to overcome this dual challenge, a possible solution is that in Tien Giang the program will focus on cooperative development and support cooperative members to produce high quality cocoa (not certified cocoa) in order to reduce the costs.

Table 2. Number of registered and certified farmers in Tien Giang and Ben Tre Provinces in 2012

Province	Total number of farmers registered by June 2012	Total number of farmers registered by December 2012	Number of certified farmers
Tien Giang	752	400	255
Ben Tre	616	1200	86
Total	**1368**	**1600**	**341**

Among 1600 certified farmers in two provinces, 232 farmers are interested in and practised organic cocoa & coconut farming techniques (180 in Tien Giang and 52 in Ben Tre). With this organic production scale and insecure markets for organic cocoa it is not cost effective to set up an effective organic cocoa production systems under local contexts. Therefore, from 2013 onwards, the program decides not to provide financial support for organic cocoa production expansion. Rather, the program will support the current organic cocoa farmers with compost making and biological control which are also required in UTZ certified cocoa production. In other words, the program continues to promote farmers to apply these two sustainable farming techniques: using black ants to control cocoa mirids and using compost to maintain and improve soil fertility. .

2.2 Processing and quality management for certified cocoa strengthened (Outcome 2)

Although cocoa quality issues have been raised in several relevant workshops and Vietnam Cocoa Coordination Committee (VCC), Vietnam cocoa quality has not been improved, even becomes alarming. To solve this problem a more effective collaboration between policy makers and buying companies is needed. Awareness raising on quality issues has not worked as expected because there are still buyers willing to buy low quality beans with a reasonable price and the prices for high and low quality beans are not significantly different.

Therefore, the program will focus on the quality aspects by developing mechanisms to ensure that fermentors will not buy damaged and young pods for fermentation. For that purpose, the program provides the fermentors with standardised fermentation boxes, drying meshes. At the same time, the program will pilot cocoa quality management at the cooperative and Phu Binh Company using pricing mechanism in collaboration with Ritter Sports (via Nong Lam Company) and with GrandPlace.

Pic: Damaged beans are being processed still

2.3 Value chain facilitation and market access improved (Outcome 3)

The certified cocoa value chains in Tien Giang and Ben Tre are not being identical, the intervention strategy of the program in each area is slightly different.

In Tien Giang Province

The Cho Gao Cocoa Cooperative as a certificate holder plays an indispensable role in sustainable certified cocoa development in the province. However, since its establishment in December 2007, the cooperative has not effectively operated as expected. The revenue has been on steady decline, mainly due to the way the cooperative has been managed. Before 2011, each year the cooperative bought 90-100 tons of dried fermented beans with the total revenue of 8-9 billion VND with marginal cost benefit ratio of 20-30%. In 2011, the cooperative could buy only 50 tons of dried fermented beans with marginal cost benefit ration of only around 3%.

Therefore, the program has collaborated with provincial partners to develop the current cooperative into a producer cooperative, a cooperative model being practised in developed countries for decades and introduced to Vietnam recently (a successful dairy cooperative in Soc Trang Province and a coffee cooperative in Lam Dong Province). As a result, by the end of May 2012, the cooperative general assembly meeting was held and all of the members agreed to restructure the cooperative into a producer cooperative. Accordingly, members who are not cocoa farmers will no longer be included. At present, 375 local farmers have agreed to become cooperative members against 155 cooperative members in June 2012.

For improving the financial management of the cooperative, the program hired a professional audit company to audit all financial records, books and vouchers in order to better understand the current financial management system, available working capital and bad debts. The auditing results reveal that the financial management of the cooperative is very weak. Many financial vouchers were not approved or convincingly justified.

Recently, cooperative experts from Rabo International Advisory Services (RIAS) have visited the program area and the cooperative. After discussing and reviewing the current buying network of the cooperative, RIAS has advised the cooperative as well as the program to change that buying network as described in Annex 4. Under this new mechanism, current fermentors will become service providers for the cooperative with the agreed price of 4000 VND per quality dried fermented beans. The rationale for the proposed buying mechanism is that this is the only way to develop the current cooperative into a strong and sustainable

producer cooperative buying reducing the power of individual fermentors and strengthening the economic relationships and “spiritual link” between the cooperative and its members.

Three biggest challenges are farmer habits, working capital of the cooperative and conflict of interest with fermentors. Farmers have been selling their fresh pods to nearby fermentors or their club leaders on the principle of “cash and carry”: they are paid once they sell their pods. Under the new buying mechanism of the cooperative, the cooperative will pay farmers every fortnight basis. Although this policy has been successfully applied by the dairy cooperative, it takes time for cocoa farmers to get used to this buying mechanism. Moreover, after the restructuring, the working capital of the cooperative is now very limited, 6000 USD. The third challenge is that the cooperative needs to compete with local fermentors who are not the members of the cooperative. With the zero loss policy, the cooperative may pay cocoa farmers at lower price than the local market. This may work if the cooperative is able to provide input services (eg. fertiliser) for its members, which again requires a larger working capital. Therefore, in this transitional period, preferential credits from provincial authorities such as Provincial Cooperative Alliance or international donors such as Rabobank are of crucial importance.

Recently, with significant technical support from RIAS, the cooperative has prepared a business development plan, describing a roadmap to develop in the next 5 years. Basically, this provides guidance for cooperative managers to understand what services the cooperative should provide, the cash flow and income. With the business plan, Rabobank has pledged to provide USD 50,000 as grant and USD 50,000 as credit for the cooperative to increase its working capital under the condition that HELVETAS will reserve a budget of 117,000 Euro for RIAS technical support in a two year period to ensure that the cooperative is developed into a producer cooperative (see Annex 5). However, given limited budget of the cocoa program, HELVETAS and RIAS are still under discussion in order to make the collaboration feasible.

In Ben Tre Province

The development of certified cocoa value chains in Ben Tre defers from Tien Giang as the certificate holders (lead companies) in Ben Tre are private companies. At present, the program has collaborated with 4 private companies in Ben Tre. The companies are responsible for developing their value chains including motivating local farmers to produce certified cocoa and installation and operation of ICS. The program only acts as value chain facilitator to provide technical support (ToT training) for farmer group leaders and their ICS staff. Also, the program provides financial supports to these companies using result based approaches, meaning that they will receive financial support from the program based on the number of certified farmers participating in the value chains in which they are the lead companies. For self-reliance and sustainability, the support from the program will reduce over the time as follows:

Year	2012	2013	2014
Financial support for certification fees and ICS	100%	75%	25%

The financial support to the lead companies is calculated as presented in Annex 6.

2.4 Internal control systems for different standard compliance set up and run effectively and sustainably (Outcome 4)

As required by UTZ standards, the program has adapted the second year requirements of UTZ standards and uses these to train ICS staff and farmer club leaders. The second year

standards will be applied for both already certified farmers and newly registered farmers. Also, a training workshop on organic ICS was facilitated by an international organic expert. As a result, the organic standards for cocoa and coconut were revised as presented in Annex 2.

After the training, requirements of the second year UTZ standards have been adapted and introduced to local cocoa farmers. The recent internal inspection reveals that 402 farmers in Tien Giang and 1200 farmers in Ben Tre have met all of the second year's requirements of UTZ standards. Moreover, all forms and standards for organic cocoa and coconuts have been revised and used for strengthening organic cocoa and coconut in Tien Giang and initiate organic production in Mo Cay Nam District, Ben Tre Province. A recent assessment study shows that coconut contributes a large share of household incomes and thus it would be more financially viable for local cocoa organic production systems if both cocoa-coconuts are certified if there are lucrative markets. At present, the standards for organic cocoa-coconut cultivation is revised and applied, a manual for organic cocoa-coconut intercropping is developed and documents for organic certification are prepared to be sent to ACT.

However, the ICS still needs to be further improved. Buying documentations and traceability needs to be improved by enhancin the performance of ICS staff via more frequent visits to certified cocoa fermentation units and certified farms to double check buying activities. For technical sustainability and financial viability, certificate holders should develop ICS based on farmer club leaders for mutual benefits and minimize the ICS associated costs.

In addition, farmers still need to be monitored and coached in order to fully comply with introduced standards. Certified farmers do not manage wastes according to the requirements of UTZ standards. After being certified, few farmers return to their "business as usual" behaviour of throwing household wastes on places near or within cocoa plantations which is not allowed by the standards. For overcoming this, unannounced visits by certification body, Cafe Control are crucial, though at certain costs, and at the same time the UTZ certified buying company, Cargill, needs to regularly check buying documents from their suppliers to ensure effective traceability.

For proper management of database for certified farmers, the program has hired a consultant to design a web based database. The design of the database is at the final stage and will be used for data management from 2013. The information on the database will enable not only ICS staff but also managers at different level to monitor and being updated with the information of farmers producing certified cocoa.

2.5 Economic cost effectiveness for farmers producing certified cocoa

As discussed earlier, the ultimate goal of the program is to improve the living standards of cocoa growing populations. According to a recent study on cost effectiveness of cocoa intercropping with coconuts, incomes from UTZ certified and organic in conversion cocoa plantations are significantly higher than those from conventional ones. This can be justified in the sense that once applying UTZ standards local farmers have done better pruning and fertilization (See Annex 3).

A recent field assessment has gathered production data from 24 UTZ farmers, 16 organic farmers and 14 conventional cocoa farmers. Input use, cost and return per one hectare basis were computed for these three cultivation practices. As described in Table 3, fertilizer use, number of irrigation and labor use are much higher for UTZ farmers as compared to that of conventional farmers. The amount of organic fertilizer was recorded to be very high for the

organic farmers (about 12.7 tons/ha), more than 5 times higher than the amount of organic fertilizer used by the UTZ and conventional farmers.

Table 3. Average input use and cocoa yield per hectare with different cultivation practices.

Items	Cocoa cultivation practices		
	UTZ	Organic	Conventional
Number of cocoa trees (trees/ha)	448	538	457
Number of fertilizer application (times)	2.4	0.3	1.3
Total amount of chemical fertilizer (kg/ha)	406	0	296
Total amount of organic fertilizer (tons/ha)	2.2	12,7	2,5
Number of irrigation (times)	7.2	5.4	1.3
Total labor used (Manday/ha)	101	110	94
Yield (kg/ha)	3,350	3,100	2,500

Yields recorded by the farmers under survey revealed that UTZ farmers obtained an average yield of about 3,350 kg/ha fresh pod which is about 8% higher than the average yield of organic farmers and about 34% higher than the average yield of the conventional farmers.

At the initial shifting from conventional to organic cultivation practice, cocoa yield had been reduced by 10% to 20%. However, after two years practising organic cultivation, the organic matters have been activated and the soil has been improved. Organic cocoa farmers have seen yield increased up to 24% compared to conventional production. The faster yield increase in organic production was made possible thanks to the hard working and rich experience of the organic cocoa farmers. Only those hardworking cocoa farmers have volunteered to convert to organic production.

It was reported that among the three cultivation practices, the labor input is highest for organic cocoa farming. The opportunity cost for family labor of about 80.000 VND/manday was used to compute the cost for family labor in cocoa farming. The computed cost for labor is accounted for about 55%, 65%, and 59% of the total production cost for UTZ, organic and conventional cocoa farm, respectively as indicated in Table 4.

Table 4. Crop budget for one hectare of mature cocoa with different cultivation practices.

Items	Yield levels groups		
	UTZ	Organic	Conventional
Cost for chemical fertilizer (‘000 VND/ha)	5,101	0	3,948
Cost for organic fertilizer (‘000 VND/ha)	1,079	4,463	1,261
Cost for pesticides (‘000 VND/ha)	86	0	25
Cost for irrigation (‘000 VND/ha)	325	244	56
Total family labor used (Manday/ha)	101	115	94
Total variable cost (‘000 VND/ha)*	6,591	4,707	5,290
Yield (kg/ha)	3,350	3,100	2,500
Price of fresh pods (VND/kg)**	5,000	5,450	4,800
Total revenue (‘000 VND/ha)	16,750	16,895	12,000
Income (‘000 VND/ha)	10,159	12,188	6,710
Income per family labor (‘000 VND/manday)	101	106	71

The total variable cost for organic farmers is lower than the UTZ and conventional farmers. With lower variable cost and a higher premium price of 650 VND/kg for fresh organic cocoa

pod, the income per hectare of organic farming is still higher than that of the UTZ farmer even when organic farm achieved a lower yield.

With higher yield and higher price, the income per hectare of cocoa with UTZ and organic cocoa cultivation practices are significantly higher than that with the conventional practice. On the average, the income from conventional practice is only about 66% and 55% of the income from UTZ and organic cocoa cultivation practices, respectively.

For organic cocoa under the local context, a recent assessment emphasizes that coconut contributes a largest share to household income and cocoa only 5% and thus the program needs organic production of both cocoa and coconut as shown in Table 4.

Table 5. Percentage distribution of income by sources (%)

Income sources	Ben Tre	Tien Giang	Sample mean
Income from crop production	56.6	62.2	59.5
Rice	3.0	4.1	3.6
Other annual crops	0.3	0.5	0.4
Coconut	47.4	53.2	50.4
Cocoa	4.6	4.2	4.4
Other perennial crops	1.3	0.3	0.8
Income from animal production	19.5	22.5	21.1
Cattle	1.4	0.5	0.9
Pig	17.3	19.8	18.6
Poultry	0.2	2.2	1.3
Fish	0.7	0.0	0.4
Off-farm income	4.1	1.0	2.5
Non-farm income	19.8	14.1	16.8
Total household income (mill VND)	117.7	112.3	115.0

3. Program Management

4. Financial Management

5. Challenges and Recommendations

- ***Fish pond latrines:*** Fishpond latrines still constitute a major obstacle for local cocoa farmers to convert to certified cocoa production. As mentioned in previous reports, unlike farmers in other cocoa growing areas like Central Highlands and the south-eastern region, farmers in the Mekong Delta are facing “an additional constraint” in converting to certified cocoa because many of them are still using fish pond latrines which are not allowed by either UTZ or organic certifications. In other words, besides fulfilling the requirements as farmers in other areas do, farmers in the Mekong Delta may need an extra investment of 3-5 million VND for proper latrine construction. In order to reduce the financial burden for local cocoa farmers converting to certified cocoa. With the support of the Happel Foundation, a credit and savings program for livestock development and proper latrine construction is being implemented. However, this credit scheme does not work as expected. Local cocoa farmers do not want to borrow money for latrine

construction because additional margins from certified cocoa are not sufficient to cover the costs for latrine construction. Alternatively, the program decided to provide grants to the households interested in certified cocoa. It is calculated that on average construction of a latrine under the local context costs around 200 USD of which, the program granted 50 USD per household which works more effectively. By end of 2012, 300 local farmers have constructed latrines and thus are able to meet the certification requirements. Capitalizing on the experience so far gained, the program will expect Happel to continue its funding to support some 500 farmers more in 2013.

- ***Cost effectiveness and financial viability of ICS operation*:** Although the two certificate holders, the cooperative in Tien Giang and a private company in Ben Tre have been UTZ certified, the performance of ICS still needs to be further improved, particularly traceability systems. More importantly, the certificate holders have to work out the way to run a low cost ICS without compromising its effective performance. Therefore, in the first years of being certified, announced inspection by certification body is necessary to ensure all regular ICS activities as required. In addition, collaboration from UTZ certified cocoa buyers is also important because it is essential that the buyers check buying documents of their suppliers on a regular basis. Moreover, the company ICS should be based on farmer club leaders in the long-run for bilateral benefits. At present, the costs of running ICS is high compared with the margins from certified cocoa. Therefore, for financial viability of the systems, certificate holders need to reduce ICS associated costs and at the same time, increase the economies of scales.

- ***Shortage of working capital for Cho Gao Cocoa Cooperative:*** although encouraging results in relation to development of Cho Gao cooperative into a producer cooperative have been obtained, the cooperative still faces a number big challenges. For operating as a producer cooperative, the cooperative needs a large working capital for input service and directly buying fresh pods from its members. For the time being, the program has granted 20,000 USD as working capital for cooperative. At the same, as the cooperative is still at very early stage of development, technical support from international and national institutions are very crucial. Therefore, it is very important that HELVETAS and Rabobank (and RIAS) work out a way to collaborate in provision of technical and financial support for the cooperative.

6. Prioritised activities for 2013

In principle, for capitalizing on the results and facing the challenges, the implementation tactics in 2013 differ from the previous years. In Ben Tre financial and technical support to 4 private companies will be provided to take in local certified cocoa value chains. They are responsible for all certified cocoa production related activities, including selection and training of farmers, instalment and operation of ICS while the program mainly provides initial financial support for capacity building. In Tien Giang, the program will focus on development of the Cho Gao Cooperative as a producer cooperative and thus emphasize the production of quality cocoa beans. Moreover, the program will not carry out any research on either cocoa farming techniques or pest management but rather focus on consolidating results and strengthening on-farm demonstration to introduce and motivate farmers to apply available sustainable cocoa farming techniques. In addition, as the numbers of farmer clubs in the two provinces are rather high, the program will work with certificate holders to increase the number of farmers in each club rather than the number of farmer club in order to reduce transaction costs for ICS and farmer training.

With these guiding principles, the key activities to be implemented in 2013 are described in the following paragraphs.

6.1. Outcome 1: Sustainable certified cocoa production system developed

- *Monitoring and evaluation of certified cocoa production:* The program will continue its efforts in monitoring and evaluation of certified cocoa farms in terms of social, environmental and economic benefits by regular and ad-hoc visits to registered farm for checking and collecting relevant information.

- *On farm demonstration activities:* based on the research findings in collaboration with NLU and other institutions over the past few years in the areas of using biological methods to manage the cocoa mirids; compost making and cultivation of organic ginger and practical experience on sustainable cocoa farming techniques, in 2013 the program will focus its efforts on documenting the results and disseminating them to local farmers via on-farm demonstration activities along with technical manuals and guidelines. The demonstration activities are implemented with due consideration of Mars' cocoa doctor concepts.

- *Lessons learnt workshops:* For effective promotion of certified cocoa production, particularly organic cocoa, the program will organize workshops to draw lessons on this aspect.

- *Farmer organization:* with the current 93 farmer clubs (1600 farmers) the program will in collaboration with provincial partners and certificate holders to expand memberships per club rather than establish new farmers in order to reduce management costs. Moreover, based on the assessment findings in collaboration with Oxfam Novib, the program will pilot establishment of a few collaborative groups in Ben Tre Province. More importantly, the program will work with Rabobank Foundation and RIAS to find a most workable partnership to strengthen the development of Cho Gao Cooperative, taking into due consideration the program limited budget, the current context of the cooperative development and much needed budget for RIAS technical support.

- *Farmer training:* via farmer club regular meetings, the conversion farmers will be trained and coached on certification standards and corresponding farming techniques to ensure that they are able to produce cocoa in accordance to the requirements of certified cocoa production. These farmer training activities will be conducted using on-farm demonstration plots and the concepts of cocoa doctors promoted by Mars.

- *Cross visits:* The program will organize cross-visits for the conversion farmers for information and experience sharing among program farmers in the two provinces. It is also planned that local partner staff will be enabled to visit other cocoa production areas such as those in the Central Highlands to gain experience from CDC and VCC.

6.2. *Outcome 2: Processing and quality management of certified cocoa strengthened*

- *Cocoa quality management*: As discussed above, certified cocoa quality has not been better than conventional one unless greater efforts should be made. Accordingly, on the one hand the program will collaborate with buying companies to pilot pro-quality buying policies "better price for better quality" and one the other hand work with certificate holders to standardise fermentation facilities and procedures.

- *Equipment support:* For standardization of fermentation standards and procedures, the program will make use of the outcomes from the quality working groups within the framework of the PPP, and accordingly, the program may consider supporting some fermentation and drying facilities for demonstration purposes if needed.

- *Ripe fresh pod harvest and purchase workshops:* the program will facilitate workshops on fresh pod buying polices to ensure that all fermentors will on the one hand apply fair buying policies while on the other hand agree to purchase ripe fresh pods to ensure consistent quality of fermented dry beans. At the same time, workshops will be held at the club levels to train and motivate farmers to harvest right pods.

- *Buyer agreement on bean quality:* The program will collaborate with all cocoa development stakeholders in Vietnam to organize a workshop on bean quality to ensure a more competitive local market for dried fermented cocoa beans.

6.3. *Outcome 3: Value chain facilitation and market access improved*

- *Strengthen existing and newly established farmers clubs:* The program with local partners will produce IEC materials and distribute them to value actors to ensure that they fully understand the benefits and requirements of certified cocoa production and are convinced to convert to certified cocoa production.

- *Organising workshop in certified cocoa in Vietnam:* by end of 2012 at beginning 2013, once the program farmers (in fact the cooperative and the company) are certified as second year UTZ certified cocoa producers, the program will organize a workshop on certified cocoa production with the participation of local authorities, cocoa farmers and other certified cocoa practitioners in order to share the lessons learnt and plan for the forthcoming years.

- *Participating in international trade fairs*: The project will support the participation of relevant Vietnamese stakeholders to attend international trade fairs and conferences on certified cocoa for information sharing and neworking purposes.

- *Supporting "Vietnam Certified Cocoa" website*: There are now at least 5 UTZ certified producers in Vietnam and this figure is expected to increase over time. Therefore, the program may collaborate with them to establish a Vietnamese website on certified cocoa for information sharing and marketing purposes.

- *Participating in Vietnam Cocoa Development Committee*: as usual, the program will send representatives to attend regular meetings of the Vietnam Cocoa Coordination Committee, the main body discussing national plans and policies for the development of cocoa sector in Vietnam for keeping the Committee up-to-date with development in certified cocoa production and perhaps more importantly lobbying for the inclusion of certified cocoa in the national development plans.

- *Markets for certified cocoa and coconuts:* The program will prepare all required documents and send them to ACT for certification. Moreover, the program will strengthen buying networks for certified cocoa in the localities (pricing policy and traceability). At the same time, the program will discuss with a local coconut processing company to buy all locally produced coconuts..

6.4. Outcome 4: Internal control systems for different standard compliance set up and run effectively and sustainably

- *Improve the set-up and operation of internal control systems for the certificate holders:* Based on the practical experience gained in 2012, the program will strengthen the traceability of certified cocoa buying from fermentors to certificate holders and work with certificate holders to develop low cost farmer based ICS to ensure financial viability of local certified cocoa production systems.

- *Building capacity of organic production of cocoa and coconuts*: Along with maintaining organic production in Tiên Giang, a organic cocoa and coconut production in Ben Tre will be set up and expanded. Based on the experience in 2012, the program will expand organic cocoa and coconut production without financial support for compost making as done in 2009 and 2010 to ensure the sustainability of the systems.

- *Support the certificate holders and certified cocoa farmer clubs to comply with the standards:* The project shall continue to provide technical and financial support for the farmer organisations to run ICS in the first years such as farming logbooks and other much needed facilities as indicated in Annex 6.

- *Support external certification*: The program will support technically and also financially the certificate holders and their cocoa clubs to obtain certificates according to the chosen standards (UTZ, Fair Trade and/or organic), taking into account the cost-effectiveness of present certified cocoa production as shown in Annex 6.

7. Annexes

7.1 Annex 1: Overview of program progress against the set objectives and outcomes

7.2 Annex 2: Executive summary of consultancy report on economic cost effectiveness of cocoa intercropped with coconut in Tien Giang and Ben Tre

7.3 Annex 3: Revised organic standards for cocoa and coconuts

7.4 Annex 4: Proposed new buying mechanism for Cho Gao Cooperative

Annex 1: Overview of the program progress against the set objectives and outcomes by end of 2012

Outcome	Indicators and Targets	Target Realization by end 2012	Likelihoods/approaches to achieve the set target
Goal: living standard of rural population in the southern provinces is improved	- Incomes from cocoa and coconut for participating households are significantly increase, some 25 % compared to conventional production - Health problems reduced thanks to proper use of pesticides, better protective gear and waste management	- At present, incomes from UTZ certified and organic in conversion are significantly higher compared to conventional ones. However, incomes from cocoa contributes a small share to the total household incomes (5%) - No systematic information on health improvement has been recorded but farmers have been trained on safe use of pesticides and are encouraged not to use fishpond latrines. Logically speaking, these improvements in sanitation and behaviour changes will significantly contribute to environmental and health conditions for local communities.	- The target of 25% increase in household income from certified cocoa compared with conventional cocoa will be attainable. However, as income from cocoa contributes a small proportion of the total house incomes, improved incomes from certified cocoa production will not significant improve the living standards of the households; therefore, if incomes from coconuts are stable, the ultimate goal of improving living standards can be realised.
Objective: Certified cocoa value chain sustainably established and effectively run	- More and more farmers, 50% increase per year are participating in certified cocoa production - The market for certified cocoa is stable with lucrative premium - Capacity of farmers groups and certificate holders are meeting the requirements of certified cocoa production - Farmer groups and a producer cooperative for certified cocoa farmers is established and effectively operated	- Be end of 2012, there are 1600 certified farmers, 40% of the target (370% increase: 341 in 2011 vs 1600 in 2012) - Currently, the market premium for UTZ certified cocoa is attractive for local cocoa farmers and big international cocoa buyers are committed to buying all UTZ certified cocoa - The market for locally produced organic cocoa is not yet established. - 93 certified cocoa farmer clubs (93% of the target; 210 % increase: 30 in 2011 vs 93 in 2012) are established and contractual relationships with certificate holders have made. However these relationships still need to be improved.	- With current momentum and experience gained, the target of 4000 certified farmers are achievable by 2012 - For certified organic cocoa value chains to be sustainable, special attention should be paid to development of organic coconut markets because coconut contributes a largest share to total household incomes. Moreover, markets for organic coconuts should also be established. - Based on the cooperative business plan jointly developed by RIAS, the current cooperative should become a cocoa and coconut cooperative.

Outcome 1: Sustainable certified cocoa production established	- 4000 local cocoa farmers producing certified cocoa (UTZ, organic and fair-trade), 2000 in each province - Sustainable cocoa farming techniques are developed according to UTZ and organic standards - Participating farmers are able to apply the sustainable cocoa farming techniques and standard requirements effectively - Incomes of certified cocoa plantation are 25% higher than conventional ones on average	- At present, 400 households in Tien Giang (255 already certified in 2011) and 1200 in Ben Tre (86 farmers already certified in 2011). The total number of farmers in both provinces are 1600, about 40% of the target of 4000 farmers. - All fundamental sustainable cocoa farming techniques (nutrient management, pruning and pest management) are developed by local research institutions. The questions is just how to introduce and make farmers to apply these techniques in a cost effective manner. - All farmers participating in certified cocoa production since 2010 and 2011 understand and able to practise sustainable farming techniques and comply with standard requirements. As result, they were all certified as UTZ producers. However, greater efforts need to be made to increase local cocoa productivity. - According to a recent survey by Nong Lam University, on average the incomes of conventional cocoa production is about 66% and 55% of that from UTZ and organic cocoa production respectively. Although this finding may be controversial because this is not totally reflecting the reality; however, this is a positive signal for higher incomes from certified cocoa promoted by HELVETAS	- It is very likely that the set target of 4000 farmers participating in certified cocoa production. In 2011 there were only 255 and 86 farmers certified in Tien Giang and Ben Tre respectively. In 2012 the figures increase by 57% and 1760% in Tien Giang and Ben Tre respectively. This significant increase in the number of farmers involved in certified cocoa production is attributed to experience in promoting certified cocoa production in local context and gradually tangible results from certified cocoa production - However, it may be hard to achieve this target in Tien Giang with the current capacity of the cooperative as a certificate holder. Therefore, the program will work with Rabobank Foundation and RIAS to find a most workable partnership to strengthen the development of Cho Gao Cooperative, taking into due consideration the program limited budget, the current context of the cooperative development and much needed budget for RIAS technical support. - 25% increase in households from certified cocoa (compared with conventional one) on average is attainable in the next two years. However, as cocoa contributes a small share to total household incomes and thus special attention should be given to coconut

Outcome 2: Cocoa processing and quality management is strengthened	- All fermentation units (fermentors, fermentation boxes and drying meshes) are standardized with quality of buying fresh pods - Fermented dried certified cocoa beans meet the requirements of cocoa buyers and processors - Certificates are obtained	- Although certificates for UTZ standards have been obtained, not all fermentors participating in the local certified cocoa value chain are using standardised fermentation facilities such as fermentation boxes and drying meshes - Generally speaking, cocoa quality is going down over the past two years and that is also the case for cocoa in Tien Giang and Ben Tre Provinces. In the program areas, fermentors usually buy cocoa pods without eliminating damaged and young pods, which inevitably adversely affect the cocoa flavour	- Technically speaking the program can help fermentors with standardised fermentation facilities such as fermentation boxes and drying meshes. - However, due to fierce competition among local collectors/fermenters, awareness raising about cocoa quality is essential but not sufficient. There needs an agreed mechanism under which fermentors must buy fresh cocoa pods without using damaged and immature pods for fermentation. - At the same there needs pro-quality buying policies from cocoa buyers on 2 aspects: significantly higher price for better quality
Outcome 3: Certified cocoa value chains are sustainably and effectively developed	- Incomes from certified cocoa production are about 25% higher compared to conventional production thanks to higher yield and premium - 100 farmers groups, 40 farmers per club are established and effectively operated, ensuring effective standard compliance and traceability	- See explanation in outcome 1 - Up to now there are 93 farmers clubs established in the two provinces (29 in Tien Giang and 64 in Ben Tre), constituting 93% of the target. Of which 26 clubs (9 in Ben Tre and 17 in Tien Gaing) established before 2012 have been properly operated. The remaining 64 newly established farmers clubs need to be regularly monitored and coached. - In Ben Tre, the program are currently working with 4 private companies. These companies are very proactive in promoting certified cocoa production in localities - In Tien Giang, the cooperative has successfully been restructured into a producer cooperative with substantial increase in memberships from 178 in May 2012 and 357 by end of 2012 (almost 100% increase)	- It is strongly believed that the certified cocoa value chains in Ben Tre will be sustainable as the private companies as certificate holders are pro-active for and committed to developing certified cocoa production. From 2013 onwards in Ben Tre the program will only play facilitation roles to support the development of local certified value chains - In Tien Giang, although encouraging results have been attained unless the technical and fiscal capacities of the cooperative will be further improved, the sustainability of local certified cocoa value chain is very challenging. It is very likely that in Tien Giang, the focus of the program in 2013 will be on the sustainable development of the cooperative and cocoa quality but not on certified cocoa.

Outcome 4: Internal control system for different standard compliance set up and run effectively and sustainably	- Cooperatives and private companies are able to establish and run ICS for their certified cocoa production - Certificates are granted for the certificate holders - Part of premium for certified cocoa is reserved for the certificate holders to cover the costs of ICS operation and certification fees	- At present, the 4 private companies in Ben Tre and the cooperative in Tien Giang as certificate holders are able to run ICS for UTZ certified cocoa production, and their capacities for organic ICS is being improved - The cooperative and a private company in Ben Tre have been granted with UTZ certificates for 12 months. The other three private companies are now preparing documents for external certification. - Currently 100 USD out of 120 USD premium per ton is paid to farmers, and remaining 20 USD is kept for ICS operation	- By the time the program phases out, the certificate holders will have sufficient technical capacities to install and operate ICS for their own certified cocoa production systems. - Buying documentations and traceability needs to be improved by improving the performance of ICS staff via more frequent visits to certified cocoa fermentation units and certified farms to double check buying activities - For technical sustainability and financial viability, the certificate holders should develop ICS based on farmer club leaders for mutual benefits and minimize the ICS associated costs

Annex 2: Executive summary of report on economic cost effectiveness of cocoa intercropping with coconuts in Tien Giang and Ben Tre Provinces

This mission was carried out to assess economic effectiveness of cocoa intercropped with coconut in Tien Giang and Ben Tre provinces and analyze the margin distribution among local value chain actors (farmer, fermentor and certificate holder). Field assessment was done in 4 communes in Ben Tre province and 5 communes in Tien Giang province. These are the projects' communes where HELVETAS project's activities are being implemented.

In each commune under survey, the team has conducted a farmer group discussion and interview with the cocoa club to gathered information on the general cocoa development situation in the commune, the development of the UTZ or organic cocoa club, and the yield level for the farmer groups with high, medium, and low yield and the expected percentage of cocoa farmers belonging to these three farmer groups. For each of the high, medium, and low yield groups, two representing cocoa farmers were selected for individual household interview to gather more detail information on household income and cost and return of the local cocoa-coconut system. A total of 54 farmers (20 farmers from high yield group, 18 from medium and 16 from low yield group) were interviewed during the field assessment. To explore the margin distribution among local value chain actors (farmer and fermentors), the team had also interviewed one cocoa fermentor in each commune under survey.

The field assessment revealed that most cocoa farmers in Ben Tre and Tien Giang province are small farmers having an average cocoa-coconut cultivating area of about 0.6 ha per household. Income from crop production contributes the largest share of the total income of the surveyed household. Coconut is the most important crop contributing the largest share (57.9%) to the total household income. Cocoa is considered as the second most important crop however, on the average, cocoa contributes only a relatively small share (4.4%) of the total income of the surveyed households.

The field assessment found that for quite a large number of cocoa farmers, the adoption of cocoa into their farming system did not help much in improving their household's income. Very low income from cocoa cultivation was recorded for those farmers belonging to the farmers' group with poor yield performance, which accounts for about 45% of the cocoa farmers in two province. The income per family labor computed for farmers with medium and low yield performance are much lower than the local wage rate.

The average yield recorded during the field assessment is far below the expected potential cocoa yield and much lower than yield expectations from researchers, extionsionist, and policy makers. The average cocoa yield estimated from farmers group discussion is about 222 kg/ha of fermented dry beans for Ben Tre province and 203 kg/ha for Tien Giang province. This very low yield situation is critical and threatens the achievement of the cocoa development program in Tien Giang and Ben Tre province as well as the national cocoa program. High yield variation among farmer groups indicates that there is high potential for improving cocoa yield of farmers with medium and poor yield performance.

With the adoption of UTZ and organic cocoa cultivation practices, the income of the farmers improved significantly. The income from conventional practice is only about 65% and 55% of that with the UTZ and organic cocoa cultivation practices, respectively. Until now, the price premium of 650 VND/kg for fresh organic cocoa pod is being supported by the HELVETAS program. The project needs to continue with its support to help farmers better link to the target market.

Findings from the field assessment show that the UTZ farming techniques help farmers improve yield and income from their cocoa-coconut integrated system significantly. On the average, the cost for a yield increase of 1 kg of fresh cocoa pods is about 4,300 VND/kg. The increase in income from cocoa alone when farmers shift from conventional to UTZ practice is not very high but the net income increased significantly when computing for both

cocoa and coconut as an integrated system. The marginal benefit cost ration computed for the cocoa crop alone is relatively small (1.34) but much higher (2.18) when computed for both cocoa-coconut as a whole system.

Field assessment revealed that local collectors/fermentors are operating in a relatively competitive environment. The computed unit margin is about 1,872 VND/kg of dry beans, about 3.4% of the selling price for the dry fermented cocoa beans. Compared to the farmers' average margin of 11.3%, the fermentors' margin of 3.4% seems to be reasonable.

Farmers benefit could mainly be improved through improving cocoa yield with the cost effective measures. For improving the yield and the financial viability of the cocoa farmers belonging to the low yield group, the UTZ cocoa cultivation practice and fair trade is therefore a viable option. The field survey revealed that there is a need for a better understanding of the complementary and competitive effects in the integrated cocoa-coconut system for finding measures to improve the cocoa yield and the efficiency of the cocoa-coconut integrated system of local farmers.

Based on the findings from the field assessment, the team has proposed the following recommendations:

Project level recommendations

- The project activities (UTZ) should be scaled up to other farmers' groups, particularly those with low cocoa yield. The lessons learned and experiences in promoting UTZ and organic cocoa cultivation practices should also be scaling up to other cocoa areas in Vietnam.
- The project should promote organic cocoa development mainly in areas with sufficient compost from animal production and green matters for organic fertilizer to ensure sufficient supply.
- The organic cocoa initiatives in the project sites also require further assistance with marketing support, particularly in strengthening the direct linkage between farmers and buyers.
- Instead of promoting just organic cocoa alone, HELVETAS project should promote both organic coconut scheme together with organic cocoa to provide more incentive for the farmers to adopt sustainable organic cocoa-coconut system.
- The project needs to support research on the complementary and the competitive effects between cocoa and coconut trees in order to provide technical guideline and recommendation on the optimal level of fertilizer use for the cocoa crop in an integrated cocoa-coconut system.

Government and policy maker recommendations

- The provincial cocoa program in Ben Tre and Tien Giang should focus more on supporting farmers to improve cocoa yield, quality and income besides its effort in area expansion.
- MARD needs to reassess its national cocoa program and revise the programs objectives to reflect the reality. The national cocoa program also needs to increase funding for technology transfer and supporting for scaling up the certification schemes including UTZ and organic cocoa to other cocoa cultivating regions such as the Southeast Region and the Central Highland toward improving productivity, quality and efficiency of cocoa.

Annex 3: Revised organic standards for cocoa and coconut in Tien Giang and Ben Tre Provinces

General

1. Farmer member must inform the project of all agricultural lands farming by himself/herself or rented out to other person whether the land has or not legal title.

2. All fields being used to grow cacao must be fully under organic management

3. Organic fields must be clearly separated from conventional fields with a minimum distance of 1 meter (buffer zone)

4. If adjacent farms spread prohibited substance, the organic field must have a buffer crop to prevent drifts by planting a crop higher than conventional crop. If water comes into one's organic fields from conventional fields, plants should be grown to stop and slow the water and prevent chemicals from entering the organic field (such as reeds or water hyacinth). Buffer crops are not organic crops. Cacao must not be grown as a buffer crop.

5. Farmer members with organic land production areas that are steep or hilly must grow on contour lines, or take measures to prevent erosion such as making terraces or planting cover crops.

6. If the farmer grows permanent inter-crop (e.g. coconut) or cash crops (e.g. vegetables) on the organic fields, these crops must be grown organically.

7. It is prohibited to switch fields back and forth between organic and non-organic production.

Conversion Period

8. Cacao as perennial crop has a minimum of 36 months as conversion period. Only cacao pods harvested after conversion period can be sold as organic product.

9. The date that the farmer signs up to join the organic project will be counted as the first day of conversion

10. Cacao must not grow in non-organic fields.

Biodiversity Reserve Area

11. On the farm, a minimum of 7% of the land area must be set aside to maintain biodiversity. This area may be may be used in a number of ways such as vegetable garden, orchard, or forest.

Soil Management

12. Chicken or other animal manures from factory farm are prohibited to be used in organic farming. Animal manure must be aged before applying into organic fields. Organic farm with intensive livestocks must treat the animal manures before releasing.

13. Urban compost is prohibited. Night soil is prohibited. Open toilet in the farm is not allowed.

14. Pelleted chicken manure, brand name organic fertilizer and other commercial inputs are prohibited, whether bought or received as free samples, unless they have prior approval from the project

15. Organic fertilizers must be used in an integrated manner, e.g. animal manure, compost and green manure.

Seeds and Stock

16. GMO seeds and stock are prohibited in organic fields.

17. Cacao seeds and seedlings must come be certified organic farm. Ideally, they should come from one's own farm. Exception is allowed in case of new members who cannot find certified organic seed or for seedlings but the farmer member must notify the project staff.

18. In all cases do not use cacao seedlings or planting material that has been treated with fungicides and prohibited inputs.

19. For other crops aside from cacao,when organic seed / planting material cannot be found, then treated seed may be used but only after being washed with plain water. For the following year the farmer should either save his or her own seed, or exchange seeds with other farmers in the organic project.

Clearing and Burning

20. Burning of cacao stock and branches and other plant residues are prohibited except with a serious disease outbreak, but even in this case, permission from the project must be received prior to burning

21. Clearing of public forest for organic farming is prohibited. Forest should be grown to preserve natural resources.

Pest Management

22. Farm equipment used for conventional farming shall not be used for organic farming unless it is properly cleaned before. Sprayer that is used to spray chemical pesticides must not be used to spray herbal formulas in organic fields.

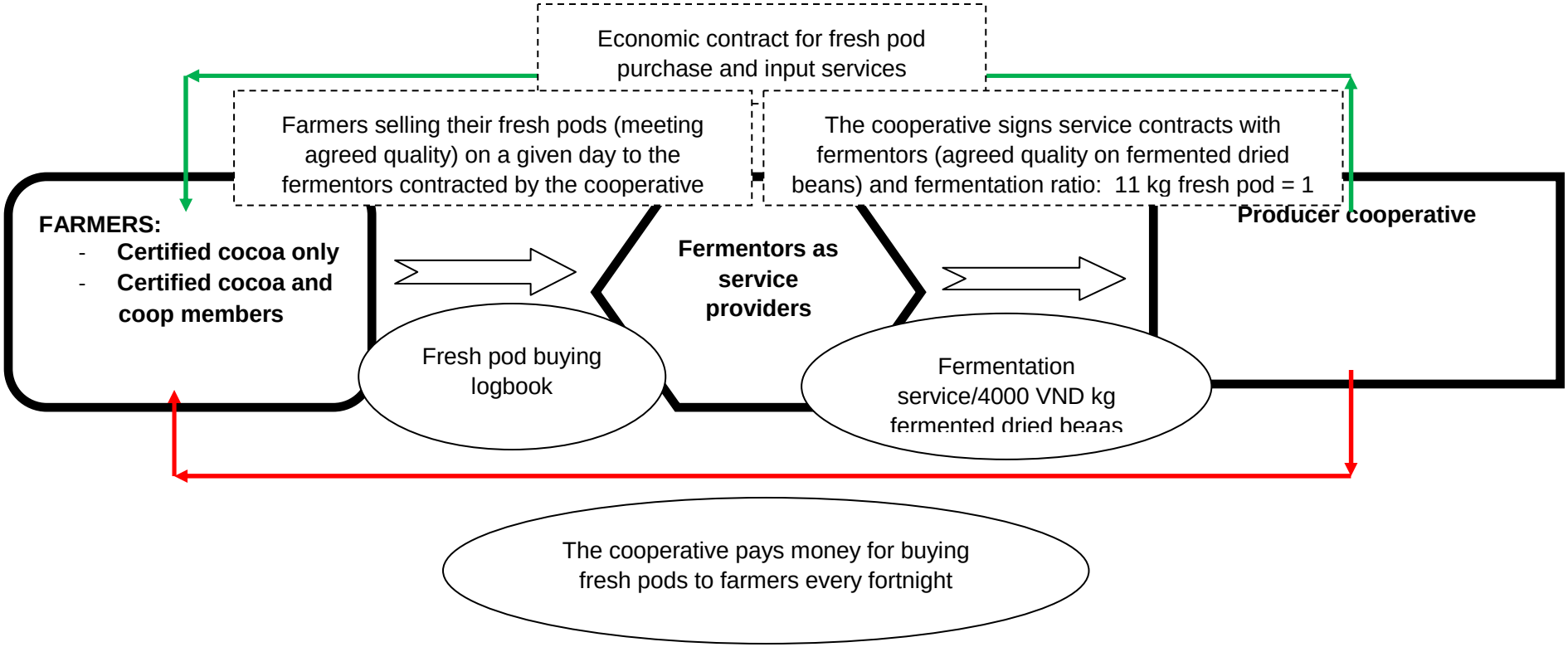
23. Use of chemical fertilizer, insecticides, herbicides, and hormones is prohibited under all circumstances in organic fields

24. Uses of botanical pesticides are allowed.

25. Prohibited inputs shall not be kept on the organic farm. Organic and chemical inputs storage areas shall be clearly separate.

Post Harvest Handling

26. Only bags and containers supplied by the organic project may used for transporting and storing organic product.

27. Farmer must maintain records of sources of all farm inputs used on organic field. These records must be kept with the farmer and be able to be inspected.

Annex 4: Proposed new buying mechanism for Cho Gao Cooperative