

**PROJECT: STDF/PG/381**

**“COCOASAFE”: CAPACITY BUILDING AND KNOWLEDGE  
SHARING IN SPS IN COCOA IN MALAYSIA**

**FINAL REPORT**

**MALAYSIAN COCOA BOARD (MCB)  
APRIL 2016**



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## PROJECT INFORMATION

<b>Title:</b> COCOASAFE™: CAPACITY BUILDING AND KNOWLEDGE SHARING IN SPS IN COCOA IN MALAYSIA
<b>Implementing Agency:</b> MALAYSIAN COCOA BOARD (MCB)
<b>Partners:</b> <ul style="list-style-type: none"><li>• INTERNATIONAL COCOA ORGANIZATION (ICCO);</li><li>• CENTRE FOR AGRICULTURE AND BIOSCIENCES INTERNATIONAL (CABI); and</li><li>• STANDARDS AND TRADE DEVELOPMENT FACILITY (STDF).</li></ul>
<b>Start Date:</b> 27 NOVEMBER 2013
<b>End Date:</b> 30 APRIL 2016 (EXTENDED FOR 6 MONTHS FROM ORIGINAL END DATE IS OCTOBER 2015)
<b>Beneficiary:</b> COCOA FARMERS AND OTHER WORKERS INVOLVED IN COCOA PRODUCTION, AND THEIR COMMUNITIES IN MALAYSIA.
<b>Budget:</b> Project value: US\$240,450 STDF contribution: US\$174,510

## LIST OF ABBREVIATIONS

CABI	: Centre for Agriculture and Biosciences International
CPB	: Cocoa pod borer
DWPE	: Detention without physical examination
EC	: European Commission
EU	: European Union
FDA	: Food and Drug Administration
FFA	: Free Fatty Acid
FFS	: Farmer Field School
GAP	: Good Agricultural Practices
GNI	: Gross National Income
ICCO	: International Cocoa Organization
ICCRI	: Indonesian Coffee and Cocoa Research Institute
LOD	: Limit of detection
MCB	: Malaysian Cocoa Board
MDG	: Millennium Development Goals
MRLs	: Maximum residue levels
NPIA	: National project implementing agency
OTA	: Ochratoxin A – a toxin produced by fungal pathogens
PAHs	: Polycyclic aromatic hydrocarbons
PEA	: Project executing agency
PNG-CCIL	: Papua New Guinea Cocoa and Coconut Institute Limited
PSB	: Project supervisory body
PSC	: Project steering committee
SEA	: Southeast Asia
SMC	: Standard Malaysian Cocoa
SPS	: Sanitary and Phytosanitary
STDF	: Standards and Trade Development Facility
TOF	: Training of Facilitators
TOMF	: Training of Master Facilitators
VSD	: Vascular streak dieback

## 1. EXECUTIVE SUMMARY

Smallholder farmers, who mostly form farmer groups or clusters, produce most of the cocoa in Malaysia. Productivity in these systems is generally low, yielding average to good quality cocoa beans. Best practice mechanisms are also rarely applied in smallholder cocoa production. Malaysia's cocoa production has declined from 247,000 tonnes in 1990 to 16,000 in 2010 due to declining prices internationally, higher labour costs, loss of production due to pests and diseases, and a switch in relative competitiveness to other crops (particularly oil palm and rubber). The area under cocoa cultivation is now estimated at 20,000 ha. Malaysia's cocoa beans have not yet been rejected from international markets, especially Europe and Japan, due to food safety issues but we still need to take early precaution by raising awareness of cocoa stakeholders especially farmers, agro-dealers and exporters on the importance of good agricultural practices (GAP), Sanitary and Phytosanitary (SPS) standards and measures, and safe use of pesticides.

On top of cultural and regulatory concerns, pest and disease continue to be a major challenge for Malaysia's cocoa production systems. The cocoa pod borer (CPB), Phytophthora pod rot and vascular streak dieback (VSD) are the biggest threats to cocoa production in the country, necessitating the widespread use of pesticides to effect control. Measures are therefore needed to minimise the levels of pesticide residues in cocoa products, particularly as cocoa-producing countries face potential trade barriers due to increasing numbers of legislative and regulatory measures on SPS standards on food safety enacted by cocoa-consuming countries. Developing capacity in conforming to SPS and imposed maximum contaminant levels is now a priority in many developing countries, especially in the context of accessing high value markets in the developed world. Standards set by Codex Alimentarius on Maximum Residue Limits for pesticides can be used as a reference for international trade to regulate pesticide residues on imported produce.

Another major food safety concern in cocoa is the contamination with fungal toxins (mycotoxins) during post-harvest processing and storage of beans. Aflatoxins and ochratoxin A (OTA) are of particular concern due to their high occurrence and toxicity. Heavy metal contamination (uptake by plants such as lead, cadmium and aluminum) and polycyclic aromatic hydrocarbons (PAHs) also pose safety concern among cocoa consuming countries. The decline in quality or introduction of contaminants can occur at several stages of the supply chain, from natural sources, on-farm practices, or during storage, processing and manufacturing. All stakeholders in the chain, including those involved in production and those involved post-harvest, therefore need to be aware of the regulations and standards of food safety that cocoa must comply with to allow access to final markets. This project targets key intervention points in the chain to minimize the risk of introduction of these contaminants and defects.

The overall development goal of this project is to ensure that the production and trade of cocoa meet food safety and international SPS standards. Promotion of best practices at all stages of the cocoa value chain from production to export will result in the production of high quality cocoa that complies with international regulations and legislation on pesticide residues and other harmful substances. The intermediate objective is to increase awareness of SPS issues among supply chain stakeholders through innovative knowledge dissemination.

The achievements of the project include the development and distribution of training manuals (for both TOMF and TOF) and information posters in two languages – English and the local language; training of researchers, extension and agricultural officers, farmer leaders, agro-dealers as Master Facilitators (MF) and Facilitators (total of 196 participants) on GAP, SPS, pesticide issues and regulations in Malaysia and the latest regulations set by EU and Japan on maximum contaminant levels for pesticide residue, heavy metal, PAHs and OTA; and the filming and the production of videos to disseminate information on best practices on cocoa production, harvesting, grading and export procedures. All activity logs and outputs, training materials and presentation, information and communication materials / resources (e.g. posters, videos) have been lodged onto a national CocoaSafe website (<http://www.koko.gov.my/cocoasafe/>), hosted and maintained by MCB.

An impact evaluation study was also carried out to assess the efficacy of the activities implemented. The baseline survey was conducted with the participants of the TOF at the start of the project, while the impact survey carried out 18 months after, with the same group of respondents.

The impact study on the project showed the monthly income from cocoa beans selling is RM969.20 per month with production of 120.71 kg per month and majority farmers attending the TOF program are in the range of 51 to 60 years old. Study also indicated that squirrels and rats to be the main threat to cocoa farmers that caused major losses to their yields in the cocoa farms. Majority percentage of major problems identified in 1st baseline survey has decreased compared to the 2nd baseline survey after 18 months project implemented as this proved that the TOF program attended by the respondents / participants of TOF has successfully adopted and practiced the lessons their learned in the TOF program. Besides that, there is an improvement in the post- harvesting techniques where 80% respondents to harvest only fully mature, ripe and non-diseased pod and adopted fermentation method taught in TOF program. However, there are 38% respondents preferred to sell their cocoa beans in wet to a middle processor. This situation happened as they can receive cash and need not to wait for few days for the cocoa to dry before selling. In terms of storage, 90% respondents have good knowledge on the correct way to store their cocoa beans.

The impact study also showed that almost 50% of the respondents ever received formal training on safe use of pesticides but only 18% respondents received training on GAP and pesticide residues and most of the training received are in the last 5 years. There are only 18.18% of the respondents aware on that new regulations introduced in EU and Japan.

Pre- and post- results showed that there was an improvement in post-harvest processing of cocoa pods with 2% more TOF participants reporting to harvest only fully matured, ripe and non-diseased pods; and 10.8% more using secateurs to make a clean cut to the stalk and reduce mechanical damage to tree.

Chemical analyses carried out in July 2015 on samples of cocoa beans (collected in June 2015) produced by farmers who participated in the TOF sessions showed that the beans were produced in compliance with international SPS standards. This suggested that the farmers understood the importance of SPS standards compliance, which will allow trade of their beans to strict markets e.g. Europe and Japan. Besides that, the cocoa farmers' income is improved after attending TOF program based on their selling beans records as most of the beans have good quality beans (SMC 1).

Key lessons learned:

- **CocoaSafe websites.** The individual websites created by CABI (overall project website) and MCB (Malaysia's project website) will need to be hosted and maintained beyond the project lifecycle to ensure continuity and use by cocoa stakeholders. Low website traffic was also a key concern for all the CocoaSafe project websites. It was suggested that the websites should be integrated with social media tools (e.g. Facebook, Instagram) to complement and generate higher traffic.
- **Information and communication materials.** The various printed / multimedia materials (e.g. posters and videos) can be compiled into a single toolkit for future use (e.g. teaching, training, awareness raising initiatives).
- **TOF modules.** Some of the modules, particularly the practical activities, were effective at engaging and educating participants. The modules can be adapted and integrated into MCB's cocoa training courses e.g. the Advance Course of Cocoa Technologies in Technologies Transfer Program.

It is recommended that the project should extend its capacity building scope to farmer field schools (FFS) in order to nurture confidence among lead farmers to carry out trainings on-the-ground using the modules taught in the TOFs. MCB piloted the first CocoaSafe FFS at Pos Yom, Perak, with the aim of building farmer capacity to make well-informed crop management decisions through increased knowledge and understanding of the agro-ecosystem. The post-project impact evaluation should also include conducting internationally certified chemical analysis on cocoa beans to assess if trained farmers have adopted the lessons learned.

## 2. BACKGROUND

Cocoa production in Malaysia has declined from 247,000 tonnes in 1990 to 16,000 in 2010 due to declining global prices, higher labour costs, loss of production due to pests and diseases, and a switch in relative competitiveness to other crops (particularly oil palm and rubber). The estimate area under cocoa cultivation is currently at just over 20,000 ha, of which 95% is on smallholdings. Malaysia now aims to address this decline and enhance production in the country. Under the National Commodity Policy 2011-2020, the government aims to increase cocoa cultivation area to 30,000 Ha in 2015, and to 40,000 Ha in 2020.

Smallholder farmers, who mostly form farmer groups or clusters, produce most of the cocoa in Malaysia. Productivity in these systems is generally low, yielding average to good quality cocoa beans. Best practice mechanisms are also rarely applied in smallholder cocoa production. Compounding farm production issues, input suppliers in Malaysia, mostly agro-dealers selling inputs for a general range of crops depending on the locality, may have been trained by chemical suppliers in general Sanitary and Phytosanitary (SPS) issues that are not necessarily specific to cocoa. Agro-dealers outlets are therefore excellent intervention points for improving knowledge and training capabilities to improve best practices in SPS, relating to pesticide use in particular.

Biotic production constraints include cocoa pod borer (CPB) and vascular streak dieback (VSD). CPB has had a devastating impact on cocoa production in Malaysia in 1990, which led to a decrease in production from 247,000 MT to 200,000 by 1993 and was one reason for the virtual disappearance of cocoa from Peninsular Malaysia during the 1990s. VSD was first reported in the 1960s in Papua New Guinea, causing severe losses in yields, but was eventually brought under control by the development of resistant germplasm. In recent years, VSD has re-emerged as a major problem for farmers and phytosanitary authorities, adding a further challenge to the sustainability of cocoa production in the country. It is now present in all cocoa-producing countries in Asia and the Pacific and is also a major problem in the commercial plantations in West Malaysia and Sabah. Phytophthora pod rot is another key disease affecting cocoa production in Malaysia.

As cocoa pests and diseases continue to be a major challenge for production, the use of pesticides (fungicides, herbicides, insecticides) remains the most effective short-term means of controlling them. Measures are therefore needed to minimize levels of harmful substances in cocoa products resulting from pesticide use, especially when cocoa-producing countries are faced with potential trade barriers due to increasing numbers of legislative and regulatory measures on SPS standards on food safety, enacted by cocoa-consuming countries. Contaminants are of great concern for both importing countries and exporting parties, as ever more stringent limits are applied. Developing capacity in conforming to SPS and imposed maximum contaminant levels is now a priority in many developing countries, especially in the context of accessing high value markets in the developed world.

Standards set by Codex Alimentarius can be used to regulate pesticide residues and as a reference for international trade (a database containing Codex Maximum Residue Limits for Pesticides, and for a commodity or a group of commodities). Key markets the European Union (EU), USA and Japan define their own maximum residue levels (MRLs) and limits of tolerance. Since 1 September 2008, Regulation (EC) No 396/2005 of the European Parliament and of the Council on MRLs determined that any foodstuff, including cocoa as an imported commodity, containing pesticide residues above MRLs is considered illegal in the EU and can be detained at entry. Consignments of cocoa bean and cocoa products entering the EU are routinely checked for chemical residues by national authorities. MRLs for cocoa are in most cases set at the limit of detection (LOD) of the analytical method or at a default level of 0.01 mg/kg. In 2007, a shipment of cocoa butter from Indonesia was refused entry into the Netherlands as the levels of methyl bromide residues exceeded a set EC MRL.

Access to Japanese markets is also a concern for SEA cocoa exporting countries, with legislation on MRLs in effect since May 2006. Since the 'positive list system' was introduced, several consignments of cocoa beans have been denied entry due to exceeding MRLs. This system also placed a MRL of 0.01 ppm as a uniform limit, unless a higher level is published.

In the USA, the Food and Drug Administration (FDA) enforces pesticide level tolerances on all foods (tolerances developed with the Environmental Protection Agency). Tolerances for cocoa beans have been set and exceeding these can result in detention without physical examination (DWPE) of future lots, delaying importation significantly.

Japanese and US MRLs for cocoa beans are largely similar: fungicide chlorothalonil (0.05 ppm), the pesticide synergist Piperonyl butoxide (8 ppm), residues from methyl bromide (50 ppm) and Sulfuryl fluoride (0.2 ppm) fumigation and herbicides paraquat (0.05 ppm) and glyphosate (0.2 ppm). The EC MRLs for fermented cocoa beans vary from these values, by up to two-fold in those for which MRLs are available. Generally, where no MRL is published, each importing market adopts a default level of 0.01 ppm.

In addition to pesticides, another major food safety concern in cocoa is contamination with fungal toxins (mycotoxins) during post-harvest processing and storage of beans. Among the mycotoxins, aflatoxins and



ochratoxin A (OTA) are of special concern due to their high occurrence and toxicity. Contamination can occur at many critical points in the cocoa production chain. European food safety legislation on mycotoxin levels is becoming ever stricter. The presence of mycotoxins can be viewed as a failure in pest management, and as such is avoidable through good practice.

Other food safety concern is the infestation of cocoa shipments with insect pests. The presence of live insects in cocoa entering the US market led the FDA to introduce a legislation imposing automatic detentions on shipments from Brazil, Indonesia and Malaysia without physical inspection. The introduction of such legislation had a negative impact for export from the said countries – the additional time required to fumigate and pass FDA inspection at US ports increased significantly the costs and decreased the competitiveness of Indonesia cocoa bean exports. According to World Bank, the automatic detention imposed additional cost of US\$ 200 per tonne, representing approximately 16% of the unit import price of Indonesian cocoa beans in 2005. After a series of bilateral discussions between Indonesia and the US, the FDA lifted the automatic detention of cocoa. Despite this, on 7 March 2012, FDA issued a related Import Alert NO 34-01, enforcing DWPE of cocoa beans from Brazil and Indonesia due to presence of live insects” ([http://www.accessdata.fda.gov/cms\\_ia/importalert\\_106.html](http://www.accessdata.fda.gov/cms_ia/importalert_106.html)).

Heavy metal contamination can come from the environment, industrial activities or from food processing. Sources include agrochemicals such as fertilizers, exposure to leaded gasoline (from drying cocoa along the roadside), as well as from natural sources (e.g. volcanic soils). There is a tendency for heavy metals from anthropogenic activities to be more soluble in water and therefore have a higher availability for uptake by plants (of particular note are lead, cadmium and aluminum). Australian legislation already requires that chocolate and other food preparations containing cocoa undergo screening for cadmium. Maximum levels are set by European Commission Regulation (EC) 1881/2006, which is likely to be amended soon because of concerns among EC member countries about cadmium levels in chocolate and cocoa products.

Contamination by polycyclic aromatic hydrocarbons (PAHs), many of which are carcinogenic, can result from inefficient or poorly maintained diesel dryers used to dry cocoa beans. Another concern is contact of cocoa beans with jute bags contaminated with mineral hydrocarbon batching oil, which is also carcinogenic.

Poor post-harvest handling can compromise quality as well as safety. The quality of raw cocoa beans and cocoa butter depends on their free fatty acid (FFA) content, where high FFA content indicates serious quality defect and reduces then technical and economic value. FFA content is affected by many factors including humidity, infestation and oxygen. Thus, poor storage management may result in high FFA levels.

The decline in quality or introduction of contaminants can occur at several stages of the supply chain, from natural sources, on-farm practices, or during storage, processing and manufacturing. All stakeholders in the value chain, including both those involved in production and those involved post-harvest, therefore need to be aware of the regulations and standards of food safety that cocoa must comply with to allow access to final markets. This project aims to target key intervention points in the chain to minimise the risk of introduction of these contaminants and defects.

### **Important dates of the CoCoasafe project in Malaysia**

Project approved by STDF Working Group	OCT 2013	
Project implementation	From: NOV 2013	To: OCT 2015
Project extension	From: OCT 2015	To: APRIL 2016

The extension of the project was needed to complete the analyses of the responses to the questionnaires (baseline and impact). Additional time was also required to finalize the edits and production work on the videos and posters.

### **3. PROJECT GOAL**

Improving national income is crucial for development in Malaysia which is classed as an upper middle income country (2010 per capita GNI of \$3976-12275) and although it has seen cocoa cultivation plummet in the last 20 years, the country has maintained an active cocoa processing industry which forms a significant part of national income and hence must be protected and grown. Emphasis will be placed on the opportunities that the market provides for obtaining income from cocoa; specifically the higher prices that may be gained by developing a reputation for quality cocoa, which the market increasingly demands. Failure to comply with laws such as those imposed by cocoa importing countries can seriously impact on the country, leading in turn to reduced funding for poverty alleviation programmes, as well as feeding down through the supply chain to impact directly on the livelihoods of cocoa smallholder farmers. By contrast, improving economic growth also enhances a country's ability to invest in social programmes aimed at reducing poverty, especially in the rural areas where cocoa is grown, again relating to the project countries abilities to achieve MDGs e.g. eradicating extreme poverty and hunger, improved access to food (food security), education and health facilities, achieving universal education, and improving maternal and child health.

The overall development goal of this project is to ensure the production and trade of cocoa that meets food safety and international SPS standards. Promotion of best practice at all stages of the cocoa value chain from production to export will result in production of good quality cocoa that complies with international regulations and legislation on pesticide residues and other harmful substances. As with other foodstuff, consumers of cocoa and cocoa products all over the world are becoming increasingly concerned about the use of potentially harmful chemicals in cocoa production and processing. Many countries have enacted legislative and regulatory measures and established sanitary and phytosanitary standards; compliance of imported cocoa and cocoa products to these standards is required for continued access to their high value markets.

At the production stage, the project aims to improve plant health by building the capacity of producers to manage pests through strategies such as improved pesticide application and GAP. Promoting improved, safer storage conditions will also strengthen storage and processing practices. Although this project focuses on cocoa, the same skills and practices are applicable and transferrable to other crops.

The project will also address human health concerns. Training will focus on worker safety, the use of personal safety equipment, and alternatives to dangerous chemical applications. Health benefits will be an indirect outcome of the project, since chemical applications will be more targeted, reducing contamination of soil and water. Such reductions would also minimize pesticides levels in food crops and so improve the health of farming families and communities. A further indirect environmental benefit might be the positive effect of more targeted and reduced pesticide application on pollinators. Improved agricultural and post-harvest storage practices will provide consumers greater assurance in ensuring reduced levels of pesticide residues and other contaminants (such as aflatoxins from fungal growth caused by inappropriate storage conditions).

## **4. PROJECT IMPLEMENTATION AND MANAGEMENT**

### **4.1 Implementing organization**

#### **a. Project Supervisory Body (PSB)**

The International Cocoa Organization (ICCO) will be the Project Supervisory Body (PSB) with overall responsibility for the project. In this capacity, it will ensure that the project is properly implemented by the National Project Implement Agencies (NPIA) and adequately coordinated by the Project Executing Agency (PEA). This includes accountability to the STDF and other donors regarding technical, administrative and financial management of the project.

The PSB will receive regular progress reports from the PEA and after review, will submit a consolidated report to STDF and other donors.

#### **b. Project Executing Agency (PEA)**

CAB International (CABI) is a global, intergovernmental, not-for-profit organization, owned and run by its 46 member countries. CABI operates through a network of centres including one in SE Asia (Malaysia). With over 150 person-years of experience in cocoa, CABI has worked in both participating countries on various projects involving technical implementation, project management and project financial management. Specifically, CABI works on improving production and reducing pest constraints, SPS and improving market access and capacity building for stakeholders through the cocoa value chain.

CABI is concerned with enhancing the effectiveness of agriculture, with commodity crops a priority theme, and as such the proposed project is of direct relevance to the organization. CABI has worked to improve livelihoods, natural resource management and sustainable agriculture throughout the world while conducting research into commodity crops, good agricultural practices and integrated pest and crop management (IPM/ICM). CABI has a strong track record in Farmer Field School approaches, community mobilization, and participatory research methods together with building capacity more broadly with a wide range of stakeholders. CABI is very experienced in project management and executing research and training programmes.

In addition to specific expertise relating to cocoa pests and diseases, pesticide usage and other contaminants, CABI has a strong track record globally in SPS capacity building. In Africa, STDF financed a project to develop a 'Centre of Phytosanitary Excellence', based in Kenya. CABI managed the project to establish the Centre, in partnership with KEPHIS and the University of Nairobi, with oversight from the IPPC and the Netherlands Plant Protection Service. The Centre has two main units, for training and pest risk analysis respectively.

#### **c. National Project Implementing Agencies (NPIAs)**

The NPIA for Malaysia is the Malaysian Cocoa Board (MCB). Its main objective is to develop the cocoa industry in Malaysia to be well integrated and competitive in the global market. Emphasis is given to increasing productivity and efficiency in cocoa bean production. Within MCB, there are six divisions that oversee the entire cocoa supply chain, from farmers to collectors, processors, manufacturers and exporters. Three of the six divisions of MCB will be actively involved in this project: the Cocoa Upstream Technology Division, the Regulatory and Quality Control Division and the Extension and Transfer of Technology Division.

### **4.2 Project Management**

#### **a. Project Supervisory Body: ICCO**

As the PSB, ICCO will ensure that the project is properly implemented by the NPIAs and adequately coordinated by the PEA. This includes accountability to the STDF and other donors regarding technical, administrative and financial management of the project. The PSB will receive regular progress report from the PEA and after review, will submit a consolidated report to STDF and other donors.

## **b. Project Executing Agency: CABI**

CABI, as Project Executing Agency (PEA), will be responsible for the coordination of project implementation by individual NPIAs. CABI will appoint a project manager who will provide strategic guidance, technical advice, and where necessary, backstopping to ensure smooth implementation of the project and efficient use of resources in the participating countries. A regional manager based at the CABI Southeast and East Asia Centre in Malaysia will provide additional scientific, administrative and logistical support, including day-to-day liaison with the NPIAs. CABI's project staff have been trained under the PRINCE2 system of project management which is the accredited project management system used for UK Government-funded projects.

## **c. Project Implementation: National Project Implementing Agencies (NPIAs)**

The NPIA in each of the participating countries will be responsible for day-to-day implementation of all project activities and for providing regular reports to the PEA and PSB. Each NPIA will appoint a national co-ordinator to be responsible for implementation and management of the project on a national level.

## **d. Project Steering Committee: PSC**

The PSC will be responsible for the overall coordination, monitoring, supervision and evaluation of the project. The PSC will provide strategic direction to each partner agency and be a source of backstopping.

Members of the PSC will include:

- a) One representative of the PSB
- b) The project manager on behalf of the PEA.
- c) National project coordinator from the NPIA of each participating country
- d) FAO expert on SPS and food safety standards (FAO Regional Office, Bangkok).
- e) Expert on plant health representing STDF Working Group

Key stakeholders representing farmers, government bodies and private sector will also be considered for forming part of the Steering Committee. Effective communication is essential between all partners on the PSC, and between the project partners at institutional and the individual level. Work plans and budgets will be finalized and detailed at the project inception workshop. The PSC will formally meet during the inception and end of project workshops, and have a mid-term review meeting at month 12-13, which will be held to coincide with training events (in Indonesia) to save on travel costs such that the NPIA from Malaysia and head of the PEA (CABI) will be travelling to the project country for the primary purpose of supervision of training events (Activities 1.3-1.5).

## **4.3 Project Reporting**

The PEA will prepare the first report after the project inception workshop. In addition, it will collate the six-monthly progress reports prepared by the NPIAs and consolidate them into a single report. As the PSB, ICCO will submit all reports to STDF. Six-monthly reports from the NPIAs will allow effective monitoring and will alert the PSC, the PEA and the PSB to potential problems. Performance indicators for the coming period will be set, before sending the consolidated report to STDF with comments by the PSB. Further financial disbursements will depend on receipt and agreement of the progress reports. The PSB will study the six-monthly progress report and compare it with the Annual Work Plans to verify that the project is being implemented correctly. Budgets and financial statements will be attached to each progress report.

### **a. Monitoring and evaluation, including performance indicators**

The inception workshop will be important to establish monitoring procedures (including reporting and accounting) and for all partners to receive training in harmonising these procedures. Detailed monitoring of the project's finances will utilise the detailed project budget. Project progress will be monitored against plans described in the work plan and logframe.

Measurable indicators to be monitored (capturing quantitative information, gender disaggregated, where applicable) include number and type of training materials created and compiled; number of master facilitators trained; and numbers of farmer group leaders, agro-dealers trained as facilitators. All facilitators

trained will be provided with training and publicity materials, and will be required to monitor and record their distribution of materials so that this can be quantified.

Monitoring of the key indicator 'change in trainee's knowledge following project interventions' will be measured through feedback questionnaires, and during the survey at the end of the project. The effect of increased knowledge and capabilities in this field will also be measured as changes in production and income, which will be captured through agro-dealers being asked for sales records for comparison with those at their TOMF training, anecdotal and quantitative measures of costs versus benefits what has been spent by stakeholders against the income achieved. Co-operative leaders will be able to capture data from their members, measuring production, sales and income of peers, associates and customers as compared to recent months, growing seasons or years.

These indicators will provide the basis for evaluating the achievement of outcomes and the contribution that these will have towards outcomes and longer-term impact. Impact will be measured on a wider scale through interviews with cocoa stakeholders at levels of the value chain downstream of those directly addressed by the project. This will include exporters, importers, processors and agro-dealers. Findings will be collated and evaluated in a project completion evaluation report. This will compare planned activities and outcomes with actual achievements and milestones accomplished.

Formal evaluation will be done through progress reports and by a project evaluation carried out by and external body or by the PSB and STDF at month 23 in order to evaluate the project's achievement of goals and objectives as described in the proposal and logframe documents. A project completion evaluation report will be submitted at the end of the project.

## 5. PROJECT OBJECTIVE, OUTPUTS & ACTIVITIES

### 5.1. Project Objective:

**Overall objective:** To produce and trade cocoa that meets food safety and international SPS standards.

**Intermediate objective:** To increase awareness of SPS issues among supply chain stakeholders through innovative knowledge dissemination.

#### Expected results:

- Improved capacity of SPS and GAP knowledge among project stakeholders.
- Effective knowledge sharing and flow between key organizations, project stakeholders, regional and international SPS authorities and beyond in Malaysia.

### 5.2. Project Outputs:

#### Component I: Enhancing the Capacity of Cocoa Stakeholders in Malaysia to Improve the Quality and Safety of Cocoa

Improved capacity of relevant cocoa stakeholders along the cocoa supply chain (from farm to export point) in Malaysia to provide training on SPS and GAP practices in-line with international standards.

Activity	Description	Date implemented
Activity 1.1	Development of locally adapted curricula for training of trainers	March 2014
Activity 1.2	Train agricultural officers / researchers / extension officers as Master Facilitators	April 2014
Activity 1.3	Training of Facilitators: farm group / cooperative leaders	June and August 2014
Activity 1.4	Training of Facilitators: local extension staff	June and August 2014
Activity 1.5	Training of Facilitators: agro-dealers	August 2014
Activity 1.8	Baseline surveys	June and August 2014
	Impact surveys to assess project impact on farmers and agro-dealers	January 2016

### **5.2.1. Output 1: Training modules and curricula on GAP/SPS/safety produced [Activity 1.1]**

A manual for the TOMF and TOF trainings targeted at extension officers, cocoa farmers, processors and agro-dealers was developed. The syllabus includes a comprehensive curriculum looking at best practices in GAP, pesticide, mycotoxins, polycyclic aromatic hydrocarbons (PAHs), heavy metals, food safety, traceability, worker safety and SPS standards. The manual is divided into four parts: theory, practical, pest data sheets, and record forms. The initial version was prepared in English and field-tested during the TOMF session held in Teluk Intan, Perak, Malaysia (8-17 April 2014). The finalized version was translated into Bahasa Malaysia for use in the TOF sessions. Both the English and Malay versions of the manual were published by MCB: 50 copies were published in the English, and 500 copies were published in the Malay language. The manuals have been distributed and used in TOMFs and TOFs in Malaysia. (see Annex 9.2a).

### **5.2.2. Output 2: A core group of agricultural officers (research and extension staff) trained as Master Facilitators to train stakeholders as Facilitators [Activity 1.2]**

A total of 27 Master Facilitators were trained during the TOMF that was held from 8 to 17 April 2014 at the Cocoa Research and Development Centre, Hilir Perak, Perak. The participants were from Peninsular Malaysia, Sabah and Sarawak and composed of 5 scientists and 14 extension officers from MCB, and 8 extension officers from the Department of Agriculture.

The resource persons for the TOMF were from CABI UK, CABI SEA, MCB and CropLife Malaysia. During the practical exercises, participants were divided into groups for more effective learning.

Each participant was subjected to a test on their knowledge of GAP including integrated pest management (IPM), safe use of pesticides and international SPS regulations pre- and post-TOMF. A majority of the trained "MFs" scored above 80% on their post-TOMF test. This suggested that the MFs were able to comprehend the course content, and could proceed to give the TOF sessions.

Refer to Annex 9.2b for the TOMF syllabus, and the list of participants and resource persons.

### **5.2.3. Output 3: Lead farmers, local extension staff and agro-dealers trained as Facilitators, and are capable to train their peers and associates in SPS, GAP and safety issues, and best practices [Activity 1.3 – 1.5]**

A total of 152 participants consisted of 109 lead farmers, and 43 local extension staff from MCB Cocoa were involved in the TOF sessions for lead farmers and local extension staff. The TOFs were carried out in four states and focused on SPS, Good Agriculture Practices (GAP), safety, production and postharvest practices. More details are as follow:

- Sabah (16-20 June 2014): 22 farmers and 12 MCB extension staff
- Sarawak (11-15 August 2014): 30 farmers and 16 MCB extension staff
- Perak (22-26 June 2014): 27 farmers and 10 MCB extension staff
- Pahang (16-20 June 2014): 30 farmers and 5 MCB extension staff

Meanwhile, 17 agro-dealers participated in the TOF for agro-dealers, aimed at building reliable and informed sources of knowledge for farmers in appropriate pesticide use, at the Cocoa Research and Development Center Kota Samarahan, Sarawak (22-26 August 2014). The 17 agro-dealers were from three regions: Sabah (3 persons), Peninsular Malaysia (7 persons) and Sarawak (7 persons). The training of agro-dealers covered issues on SPS, GAP and pesticides (e.g. pesticide regulations in Malaysia, pesticide classification and formulation, pesticide labeling and registration, registered pesticides for cocoa in Malaysia, and pesticides and human health).

The pre- and post-evaluation on the TOF course by the lead farmers, local extension staffs and agro-dealers showed increased understanding on GAP, including integrated pest management (IPM), safe use of pesticides and international SPS regulations after undergoing training. Many participants managed to score above 75% in their post-TOF evaluation.

Refer to Annex 9.2c for the TOF syllabus, and the list of participants and resource persons.

#### **5.2.4. Output 4: Baseline survey and impact study on farmers and agro-dealers [Activity 1.8]**

Two surveys were carried out: the first, after the completion of the TOFs, while the second, 18 months after the TOFs. 96 respondents answered the questionnaire: Peninsular Malaysia (45), Sabah (21) and Sarawak (30). The detailed results are provided in Annex 9.2d.

##### **A) Farmers**

Highlights from the baseline survey:

###### **a) Respondent profile**

- Majority of the TOF were within the age range of 51 to 60 years.
- Highest education level attained by the majority is secondary or high school level.
- 56% of the participants noted that their children would help out in the farm during school holidays.
- 60% of the participants' children would take over the farm from their aged parents.
- Average age of the cocoa trees is 6.45 years.
- Monthly cocoa beans production is 120.71 kg
- Monthly income from the sale of cocoa beans is RM969.20 per month.

###### **b) Knowledge levels**

- Knowledge on pest and disease management was satisfactory - farmers could identify problems, causal factors and cultural practices to address issues.
- Knowledge on fermentation process was low - 34% of the participants do not ferment cocoa beans.
- Awareness of regulations concerning chemical residues in cocoa beans and cocoa products was moderately satisfactory.
- Most of the information on GAP and food safety was provided by agricultural extension.

###### **c) Farm sanitation**

- The majority of the respondents (98%) remove diseased/black pods. The remaining 2% do nothing and leave diseased/black pods on trees.
- Of those who remove diseased/black pods, 51% will burn the affected pods, while 38.5% will bury the affected pods.

Highlights of the impact analyses:

###### **i) Cocoa harvesting and processing**

- An additional 9.2% harvested only fully mature, ripe and non-diseased pods. There was a 1.1% reduction in respondents who harvested both mature and immature, along with diseased pods.
- There was a 10.8% increase in respondents who used a sharp tool i.e. secateurs to harvest pods.
- An additional 20.2% chose gather and store harvested pods for about 7 days (max) before breaking. Conversely, there was a decline of 4.3% who stored pods for more than 7 days before breaking (thereby, reducing the amount of pods that may go moldy or beans that may germinate).
- There was a 7.2% increase of participants who harvested and stored pods for 3 days before breaking.
- There was an increase of 17.4% who preferred to break the pods immediately after harvesting.
- 38% respondents preferred to sell wet cocoa beans to a middle processor for cash, rather than to dry cocoa beans before selling.

###### **ii) Cocoa bean fermentation and drying**

- A one-fold increase of respondents turned the beans every day for 5 days to increase aeration and flavor development of the cocoa heaps.
- The majority used a mix of cocoa beans harvested from day 1 and day 2.
- There was an increase of respondents who laid out fermented cocoa beans to dry on plastic sheets and directly on cemented floor. There were fewer respondents who used tarpaulin and/or bamboo racks/drying tables to dry their beans after fermentation.

###### **iii) Storage of cocoa beans**

The impact survey also indicated that knowledge on cocoa beans storage among the respondents are satisfaction as almost 90% knew the correct way to store their cocoa beans.

#### iv) Perceived threats (pests and diseases)

After 18 months attended the TOF program, the impact survey was carried out on the same respondents and the results is given in Annex 9.2d. The results showed that 76% and 51% of the respondents chose squirrels and rats to be the main threat to cocoa farmers that caused major losses to their yields in the cocoa farms. This is followed by cocoa diseases such as cocoa black pod disease and VSD with 55% and 50%. There is only 40% of the respondents thought the CPB still the major problems in cocoa farms as compared to 58% in the 1st baseline survey. Majority percentage of major problems identified in 1st baseline survey has decreased compared to the 2nd baseline survey as this proved that the TOF program attended by the respondents / participants of TOF has successfully adopted and practiced the lessons their learned in the TOF program.

#### v) Pest and disease management

Meanwhile, majority respondents (49%) preferred to apply the insecticide or fungicide is within 2 weeks interval as this have recommended by the chemical company in their label on the bottle. However, there are still some respondents preferred to select 1-month interval in applying the insecticide or fungicide as this could used the biological control which doesn't need frequent spraying.

#### B) Agro-dealers

Only 24% of the agro-dealers who participated in the "TOF for Agro-dealer" session responded to the questionnaires. The respondents were chemical retailers, chemical dealers or co-operative member. Those who did not participate in the survey cited their reluctance to share information relating to pesticides or other agricultural inputs in their selling list. Participants of the TOF were mostly managers or executives who did not have full clearance to share information. The owners of chemical companies were unable to attend the full duration (10 days).

The project team went to personally meet and interview the agro-dealers to collect information for the impact survey. Only 11 respondents responded to the survey: Peninsular Malaysia (3), Sabah (5) and Sarawak (3).

#### Summary of the baseline and impact survey responses:

##### a) Respondent profile

- The respondents were in the age range of 30 to 60 years.
- The highest education level attained is tertiary education level. Majority has secondary education level.
- Most hold managerial position and were able to make and execute decisions.
- Their organizations / companies are officially registered with Ministry of Agriculture Malaysia

##### b) Agro-chemicals sold

- Agro-chemicals stocked are sourced from foreign and local manufacturers.
- Insecticides and herbicides were the top selling products.
- Breakdown of the agro-chemicals sold for cocoa (past 2 years) as follows:
  - **Herbicides:** Touch-up (Glyphosate 41%), Glyphosate (Ammonium 33.6%), Basta 15 (Glutosurate ammonium 13.5%), Ammo Alpha (Glyphosate monoammonium 33.6%), Punch (Glyphosate 41%), Roundup (Glyphosate isopropylammonium 41%) and Ammo Supre (Glyphosate monoammonium), Trast 15 (Glufosinate-ammonium 13.5%)
  - **Insecticides:** Safari (Cypermethrin & Chlopyrifos), Cybersing 550 (Cypermethrin 5.5%), Contest 50EC (cypermethrin 5.5%), Shieldmate 2.8 (Deltamethrin 2.8%), Contest 50EC (Cypermethrin 5.5%), Nurelle 505 (Chlorpyrifos 45.9% & Cypermethrin 4.6%) and Heytar cyper (Cypermethrin 5.5%), Starfos 505 (Chlorpyrifos 45.9% & cypermethrin 4.6%), Regent 505C (Fipronil) and FC Delta (Deltamethrin)
  - **Fungicides:** Halexyl (Metalaxyle), Copcide (Copper oxychloride 84%), Benocide 50wp (benomyl 50%), AGR dua 25wp (Metalaxyl 25%), Disan 45 (Mamcozeb) and Copper oxy (Metallic copper 50%), Headlines 42 SC (carbendazim 42%) and Thiram 80 (Thiram 80%)
  - **Nematicides:** Pofer 3g (carbofuran 3%), Anfluron (Carbofuran) and Malathion 84%.
  - **Rodenticides:** Arakus, Matikus and Warfarin.
- Customers did not lodge any complaints of fake agro-chemicals for cocoa in the last 2 years. The agro-dealers reaffirmed that they do not supply adulterated chemicals to their customers.



### **c) Other products sold and services provided**

All respondents of agro-dealers supplied spraying equipment and fertilizers in their shop. Besides supplying the spraying equipment and fertilizers, 82% respondents also selling seeds but only 18% selling other agriculture equipment (Figure 8, Annex 9.2d).

Figure 9 in Annex 9.2d indicated there are few agro-dealers took an initiative to assist farmers to market their products by providing space for them to show and sell their products besides, acting as a middle-man in selling farmers' product. Some of agro-dealers also gave credit to their farmers in terms of agriculture inputs to ensure the farmers have good returns from their planting.

### **d) Sources of information, training received and dissemination of information**

- Information on safe use of pesticides was mainly from chemical manufacturers.
- Respondents reported that there was a lack of information on GAP disseminated. Only 18% received information on GAP from chemical importers (see Figure 11, Annex 9.2d). The respondents reported having to search through Internet to obtain information.
- Information on food safety was far less disseminated. Sources ranged from chemical importers, manufacturers, print media and television (see Figure 12, Annex 9.2d).
- Chemical retailers, importers and manufacturers who provided information on safe use of pesticides, GAP and food safety were:
  - Bayer Co (M) Sdn. Bhd., Syngenta, ACM, Farm, G-Planter Sdn. Bhd., Agrosiences (M) Sdn. Bhd., Zagro chemicals Sdn. Bhd., Bayer Crop Science & Crop Protection and Hextar chemicals.
- Print media that shared information on safe use of pesticides, GAP and food safety are:
  - Agro-Worlds and the Planters.
  - Only 50% of the respondents regularly received posters/flyers for distribution to farmers.
- Almost 50% of the respondents received formal training on safe use of pesticides but only 18% respondents received training on GAP and pesticide residues (Figure 13, Annex 9.2d). Most of the trainings received were within the last 5 years.
- Formal training on safe use of pesticides, pesticides residues and toxins except GAP and PAH were provided by the chemical suppliers and manufacturer (i.e. Dow Agrosiences (M) Sdn. Bhd. And G-Planter Sdn. Bhd.), Ministry of Agriculture, MCB, Pesticides Board and manufacturers.
- Only 36.36% respondents indicated that their company only provided information on safe use of chemicals such as pesticides to their customers (without training), and less than 10% respondents reported that their companies provided trainings on top of disseminating information materials (see Figure 14, Annex 9.2d).
- The approaches used to disseminate the information were:
  - Leaflets (27.3 %)
  - Visits and discussion with clients (technical assistance to farmers) (18.2%)
  - Demonstration plots (9%)
  - Field days (9%)
  - Face to face with the customer during their visit to the shop (9%)
- There was still very low percentage of chemical suppliers or agro-dealers who would provide advice to cocoa farmers on how to control pests and diseases.

### **e) Awareness of regulations**

- Most of the respondents of agro-dealers were unsure if their employers were aware of new regulations introduced in Europe and Japan concerning the levels of chemical residues, levels of heavy metals and mycotoxins permitted in cocoa beans.
- Only 18.18% of the respondents were aware of the new regulations introduced in Europe and Japan (see Figures 15 and 16, Annex 9.2d).

### **f) Customer profile**

- Majority were cocoa farmers, food and perennial crops farmers, farmer's cooperatives, local institutions involved in agriculture e.g. Department of Agriculture (DOA), Malaysia Agricultural Research and Development Institute (MARDI), Malaysia Cocoa Board (MCB), Federal Land Development Authority (FELDA), Malaysian Palm Oil Board (MPOB) and Malaysian Rubber Board (MRB).
- Problems reported by cocoa farmers include:
  - Pests and diseases problem was still the major concern (refer to Figure 7 in Annex 9.2d)
  - Low cocoa price

- Ineffective pesticides (could be due to improper chemical application and poor understanding of the instructions printed on the chemical's label)

## **Component II: Knowledge Exchange Platform for Project Stakeholder Groups and Awareness Raising Beyond Direct Project Interventions**

Enhanced cooperation among relevant stakeholders in Malaysia to address food safety requirements and international standards on SPS.

<b>Activity</b>	<b>Description</b>	<b>Date implemented</b>
Activity 2.1	Analysis of website user accessibility / requirements	August 2014
Activity 2.2	Design, creation of website / knowledge exchange platform	October 2014
Activity 2.3	Updating maintenance and monitoring of website / knowledge exchange platform	June and August 2014
Activity 2.4	Best practices and lessons learned from training activities shared via the knowledge platform	June and August 2014
Activity 2.5	Production of printed materials for dissemination (TOMF Manual = 200 units)	August 2014
	Production of printed materials for dissemination (TOF Manual = 500 units)	June and August 2014
	Production of printed materials for dissemination (3 posters = 100 each) in Bahasa Melayu version	September 2015
	Production of printed materials for dissemination (3 posters = 10 each) in English version	January 2016
Activity 2.6	Production of multimedia videos for distribution and online	February 2015

### **5.2.5. Output 5: CocoaSafe project website developed to share knowledge and information on activities carried out in Malaysia developed [Activity 2.1-2.2]**

MCB developed a website for the CocoaSafe project to share knowledge and information on activities carried out in Malaysia. The Malaysia's CocoaSafe's website is hosted by MCB and can be accessed at: <http://www.koko.gov.my/cocoasafe> (Figure 17, Annex 9.3).

The website contains:

- Reports of activities carried out during TOMF and TOFs sessions
- Resource materials (e.g. training manuals, presentation slides, posters, videos)
- Photo gallery

### **5.2.6. Output 6: Two videos on best practices on cocoa production, harvesting, grading and export procedures in Malaysia produced [Activity 2.6]**

Two videos on best practices in cocoa safety in Malaysia (Video 1: The fermentation technique in cocoa and Video 2: Quality cocoa beans – beans grading and storage) have been produced, as agreed during the Indonesian CocoaSafe project inception meeting in Jember, Indonesia.

Filming took place in Ranau and Tawau in Sabah. The crew involved in the production of the videos was the participants of the TOFs participants and Master Facilitators. The videos showcase best practices on cocoa production, postharvest processing, and grading and export procedures (taught in the TOFs). The videos, about 6 to 8 minutes, took 3 months to produce.

The final versions have been uploaded to <http://www.koko.gov.my/cocoasafe> to be shared with all the cocoa stakeholders (Figure 18, Annex 9.4).

### **5.2.7. Output 7: Three posters on cocoa post-harvest best practices to improve safety and quality of cocoa beans in Malaysia produced [Activity 2.5]**

Three posters (in both English and Bahasa Malaysia) on best practices in cocoa safety for Malaysia were produced to address information needs of cocoa stakeholders. The contents were decided upon at the 2<sup>nd</sup> Project Steering Committee Meeting held at ICCRI, Jember, Indonesia. The poster titles are:

- **Poster 1:** Pods harvesting, storage and breaking procedure (English) / Prosedur penuaian, penyimpanan dan pembelahan buah koko (Bahasa) (Figure 17, Annex 9.5a),
- **Poster 2:** Procedure of shallow box fermentation (English) / Prosedur fermentasi kotak cetek (Bahasa) (Figure 18, Annex 9.5b), and
- **Poster 3:** Procedure of storing dry cocoa beans (English) / Prosedur penyimpanan biji koko kering (Bahasa) (Figure 19, Annex 9.5c).

Online copies are accessible at: <http://www.koko.gov.my/cocoasafe/resources/posters.html>.

A total of 300 posters (100 each) have been printed and disseminated to various cocoa stakeholders (i.e. farmers, co-cooperatives, and agro-dealers) in Malaysia during the TOFs and FFS.

## 6. FINANCIAL OVERVIEW

MCB has been given a budget of US\$ 174,510.00 from STDF, and agreed to provide both in-cash and in-kind contribution of US\$37,170.00. MCB received a total of USD157,575.76 from CABI up-to-February 2016. The total expenditure at project completion in February 2016 was US\$178,924.81 (STDF allocation) with a cost over-run of US\$4,414.81 (2.5%). MCB spent US\$39,610.00 in-cash and in-kind to ensure that the project is implemented successfully.

	STDF	In kind / Other*	Total
Total project budget (US\$)	174,510.00	37,170.00	211,680.00
Total amount received to date (US\$)	157,575.76	37,170.00	194,745.76
Total expenditure to date (US\$)	175,256.79	39,610.00	214,866.79
Unspent funds (US\$)	(746.79)	(2,440.00)	(3,186.79)

\* The amount included MCB contribution in cash and in kind.

The detailed financial report is given in Annex 9.6.

## 7. OVERALL PROJECT RESULTS AND LESSONS LEARNED

### A) Overall project results

Overall results of the projects can be summarized as follow:

- Results of laboratory analysis bean samples obtained from farmers who attended TOF indicated that the cocoa beans produced complied with international SPS standards (Table 22, Annex 9.7).
- The farmers were able to understand the importance of compliance with the international SPS standards, as it will allow their beans to be traded to other countries such as Europe and Japan. The farmers trained as facilitators has scored 80% in their evaluation on GAP, including integrated pest management (IPM), safe use of pesticides and international SPS regulations.
- The Malaysian CocoaSafe website was able to raise awareness and increase knowledge on SPS among the cocoa stakeholders. In it envisaged that in the long term, the information uploaded could be used as a reference site to improve the cocoa value chain.

The cocoa farmers' income is improved after attending TOF based on their selling beans records as most of the beans have good quality beans (SMC 1) (Table 23, Annex 9.7).

- Awareness raising and improvement of knowledge levels as reported by survey respondents
  - **Cocoa farmers:** CocoaSafe has imparted to them good lessons on how to manage their cocoa planting sustainably and produce beans that comply with international SPS standards through the various hands-on "discovery learning" modules (e.g. Farmers Field School (FFS), Agro-Ecosystem analysis (AESA), Crop husbandry (CH) and Managing cocoa diseases and pests (CDP), Rational Pesticide use (RPU) and Cocoa quality (CQ)).

- **Agro-dealers:** The participants noted that they have improved their knowledge on SPS and GAP through the TOF, and would be using the lessons gained to provide better information to their customers e.g. farmers.
- **Exporters:** Cocoa beans that comply with legislations and regulations related to SPS, GAP and food safety would be able to gain access to strict markets e.g. Europe and Japan.
- **Government officers:** Agriculture extension officers and plant quarantine officers from Department of Agriculture and MCB have improved their knowledge on SPS and importance of GAP. The theory and practical modules from the training can be adapted and integrated into the MCB's Advance Course of Cocoa Technologies (with the aim to increase cocoa farmers' productivity and quality).

## **B) Lesson Learned**

Table below summarizes the lessons learned from the implementation activities.

<b>Components &amp; Activities</b>	<b>Problem/Success</b>	<b>Impact</b>	<b>Recommendation(s)</b>
<b>Component 1: Enhanced Capacity of Stakeholders to Improve Quality of Cocoa and meet SPS Standards</b>			
<b>Activity 1.1.</b> Development of locally adapted curricula for training of trainers.	1. The syllabus provided by CABI is very comprehensive, featuring best practices in the African context.	1. Practices may not be locally appropriate e.g. fermentation and grading system.	1. To include examples from Southeast Asia (e.g. Malaysia, Indonesia and PNG) on post harvest best practises (fermentation and drying methods) and beans quality grading system used in each country.
	2. The level of the manual has been designed for users with at least a primary six education.	2. Less educated farmers, and older farmers encountered problems understanding the contents of the manual.	2. Manual to include more pictures or graphics to visualize best practices in crop management, crop protection and post harvesting.
<b>Activity 1.2.</b> Train agricultural officers (research and extension staff) as master trainer (i.e. Master Facilitator).	1. Changed fixed mindset among the master trainers.	1. Deeper understanding of chemical use / handling procedures through hands-on modules.	1. The modules will be adopted into MCB's extension training program for farmers in Malaysia.
	2. Quarantine officers from Department of Agriculture were able to: i) understand the cocoa farmers's problems with cocoa production, and ii) comprehend the modules on SPS.	2. Cocoa beans compliant with residue regulations and SPS practice.	2. MCB will create a network among the cocoa stakeholders such as Department of Malaysian Quarantine Inspection Services under the Ministry of Agriculture and Agro-Based Industry Malaysia to share information/updates regarding SPS issued by consuming and producing countries.
<b>Activity 1.3.</b> Training of facilitators: farm group/cooperative leaders.	1. Participants who were literate but had no formal education had difficulty understanding the content of the presentation slides in the classroom.	1. Less focus and interest on classroom teaching materials.	1. Focus more on hands-on practical modules for skills training.

	2. Comprehensive topics conducted within limited time.	2. Some practical modules had to be skipped during the TOF.	2. Extend the training from 10 days to 14 days.
<b>Activity 1.4.</b> Training of facilitators: Local extension staff.	Inexperienced and/or new extension agents trained.	The training built confidence among extension agents to train farmers.	All new extension staff in MCB will need to attend the TOMF course to be held at least once a year.
<b>Activity 1.5.</b> Training of facilitators: Agro-dealers.	The training provided updated information to agro-dealers about national policy on chemical use / food safety e.g. registration procedures for new pesticides with the National Pesticide Board and the various trainings / monitoring schemes by National Pesticide Board to ensure proper use of pesticides on the right commodities.	The agro-dealers attended the TOF training are aware of important to sell the registered and branded pesticides to their customer.	Disseminate updated / latest information on new regulation set by the National Pesticide Board or government via CocoaSafe's website, pamphlets, posters and brochures.
<b>Activity 1.6.</b> Training of facilitators: Storage/Processing.	Not relevant.	Not relevant.	Not relevant.
<b>Activity 1.7.</b> Training in best practices postharvest: Traders and Processors.	Not relevant.	Not relevant.	Not relevant.
<b>Activity 1.8.</b> Baseline and Impact surveys	1. Poor response from agro-dealers for both the baseline and impact survey questionnaires, as most do not have clearance position to release confidential information	1. Limited information collected from the agro-dealers, particularly on the sales volume of agriculture inputs (e.g. pesticides and fungicides).	1. Conducted face-to-face interview with the company owner.
	2. Successfully identified major pests and diseases faced by the farmers	2. Farmers can implement informed farming practices.	2. The baseline and impact survey will be conducted every 1 or 2 years.
<b>Component 2: Website/ Knowledge Exchange Platform and Awareness Raising</b>			
<b>Activity 2.1.</b> Analysis of website user accessibility/requirement	Majority of the TOF farmer participants have limited internet access due to poor network coverage in their area.	Information uploaded onto CocoaSafe webpages not assessible.	Use print media (e.g. posters or pamphlets) to disseminate information to farmers and farmers gathering centers.
<b>Activity 2.2.</b> Design, creation of website/knowledge exchange platform.	Low traffic to the English medium webpage(s).	Many farmers in Malaysia expressed preference for a Bahasa Malaysia, as the knowledge of English is fairly limited.	Create a Bahasa Malaysia version / interface.

<b>Activity 2.3.</b> Updating, maintenance and monitoring of website/ knowledge exchange platform.	No forum platform to discuss and/or share knowledge on SPS and cocoa safety issues in Malaysia and other countries.	Cocoa stakeholders (e.g. farmers and agro-dealers) are able to discuss pest and disease management issues and latest SPS compliant control methods.	Create a forum platform in the Malaysias Cocosafe website to enable cocoa stakeholders in Malaysia and also other countries to discuss and share views and knowledge on SPS and cocoa.
<b>Activity 2.4.</b> Best practices and lesson learned from training activities shared via the knowledge platform.	Information about training activities, presentation slides, training materials and images of TOMF / TOF sessions, and videos on best practices shared through the website.	Sharing of knowledge and experiences gained during trainings between cocoa farmers stakeholders in Malaysia where different region may have different SPS/quality issues.	The knowledge sharing will be extended to farmers who have not received training from group leaders (i.e. TOF participants).
<b>Activity 2.5.</b> Production of printed materials for dissemination.	Farmers had difficulty understanding contents in English and Bahasa Malaysia.	Key message(s) from printed media have limited accessibility, use and comprehension by target group(s).	The contents should be published in other local language(s) (e.g. Mandarin).
<b>Activity 2.6.</b> Production of multimedia videos for distribution and online.	The production of two short videos on the best practices on post harvest activities have attracted farmers to practice the methods in their farm.	More cocoa beans produced are compliance to Malaysia quality grading and free from contamination of pesticide residue and heavy metals.	More production of videos on planting to harvesting related to SPS approach taught in TOF training to be done.
<b>Activity 2.7.</b> Awareness raising in PNG through website and availability/ distribution of publicity materials, need assessment study in PNG.	Not relevant.	Not relevant.	Not relevant.
<b>Component 3: Coordination, Management and Evaluation of the Project.</b>			
<b>Activity 3.1.</b> Project Coordination	Goof collaboration and coordinating work by CABI SEA to ensure that all planned activities are carried out according to schedule.	Project objectives met.	MCB are happy to collaborate with CABI SEA on future projects.
<b>Activity 3.1.</b> Project Inception Workshop/Meeting	CABI has successfully organised the project inception meeting in November 2013.	1. Sharing of project achievement between NPIAs (MCB and ICCRI) enable NPIA to understand knowledge gained on SPS/ quality cocoa from farmers of other countries.	Involved International body such as FAO and cocoa processing industries from Europe and Japan to attend the inception meeting to convince them on the initiative taken by producing countries such as Malaysia, Indonesia and PNG are serious in handling the SPS issues on cocoa safety.
		2. Comments given by ICCO and CABI further improve the activities carried out in Cocosafe project.	

<b>Activity 3.1.</b> End Project Workshop/ Meeting	MCB and CABI SEA hosted the end of project meeting in February 2016 in Kota Kinabalu, Sabah.	Reviewed project activities and outputs, lessons learned and if project activities that been met.	To consider proposing the Phase Two of the CocoaSafe Project focusing on i) chemical analysis on beans produced by the TOF farmers, and ii) sustaining Cocoasafe activities through FFS.
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## 8. RECOMMENDATIONS

### 8.1. Specific recommendations to the project

- **CocoaSafe websites.** The individual websites created by CABI (overall project website) and MCB (Malaysia's project website) will need to be hosted and maintained beyond the project lifecycle to ensure continuity and use by cocoa stakeholders. Low website traffic was also a key concern for all the CocoaSafe project websites. It was suggested that the websites should be integrated with social media tools (e.g. Facebook, Instagram) to complement and generate higher traffic.
- **Information and communication materials.** The various printed / multimedia materials (e.g. posters and videos) can be compiled into a single toolkit for future use (e.g. teaching, training, awareness raising initiatives).
- **TOF modules.** Some of the modules, particularly the practical activities, were effective at engaging and educating participants. The modules can be adapted and integrated into MCB's cocoa training courses e.g. the Advance Course of Cocoa Technologies in Technologies Transfer Program.

### 8.2. Broader recommendations

- It is recommended that the project should extend its capacity building scope to farmer field schools (FFS) in order to nurture confidence among lead farmers to carry out trainings on-the-ground using the modules taught in the TOFs. MCB piloted the first CocoaSafe FFS at Pos Yom, Perak, with the aim of building farmer capacity to make well-informed crop management decisions through increased knowledge and understanding of the agro-ecosystem.
- The post-project impact evaluation should also include conducting internationally certified chemical analysis on cocoa beans to assess if trained farmers have adopted the lessons learned.

## 9. ANNEXES

### 9.1. Logical Framework

	<b>Project description</b>	<b>Measurable indicators</b>	<b>Sources of verification</b>	<b>Assumptions and risks</b>
<b>Overall objectives (goals)</b>	To produce and trade cocoa that meets food safety and international SPS standards	Reduction of rejections of imports of cocoa produced in Indonesia, Malaysia and PNG by consuming countries.  New markets accessed for cocoa from Indonesia, Malaysia and PNG.	Statistics and data from importing countries showing sourcing from project countries. Source, number and reason of rejected cocoa produce consignments.  Data from government authorities on new markets for cocoa exports.	Importing countries propose food sanitary regulations based on standardized and realistic measuring methods.  Importing countries introduce international food safety standards based on scientific and verifiable foundations.
<b>Immediate objectives (purpose)</b>	Food safety and SPS practices along the cocoa supply chain in Indonesia, Malaysia and PNG are improved.	Increase in volumes of cocoa that complies with International SPS standards of food safety.	Data on exports from government authorities (SPS authorities, trade and economic ministries, etc), including percentage of cocoa exports that complies with international regulations.	Government policy related to cocoa production does not change during or immediately after the project period  <b>Risks</b> Security risks or political situations may change during the project period. This is thought to be unlikely as the project countries are well known to implementers and project work will be implemented by local partners with whom we have good working relations.
<b>Expected results</b>	1. Improved capacity of SPS and GAO knowledge amongst project stakeholders.	1. Laboratory analysis from SPS and health authorities demonstrating compliance with international SPS standards.	1. Training reports, quality control reports and cross reference checks between origin and buyer, surveys carried out during TOMF and TOF sessions. Evaluation survey following training activities. Measures of increased quality captured through e.g. case studies, most significant change.	Cooperation of authorities with project activities and permission to carry out project interventions.  Relevant stakeholders can access the network (use of a low bandwidth alternative would encourage this).



	<p>2. Effective knowledge sharing and flow between key organizations, project stakeholders, regional and international SPS authorities and beyond in Indonesia, Malaysia and Papua New Guinea.</p>	<p>2. 80% of facilitators trained are successful in evaluation on GAP, including integrated pest management (IPM), safe use of pesticides and international SPS regulations.</p> <p>3. Reduction in the use of agrochemicals by cocoa farmers and improvement of cocoa farmers' income.</p> <p>4. Number and type of users accessing the website, periodical exchange of information among participating countries.</p>	<p>2. Cost-benefit analysis of application of SPS and GAP systems by farmers. Cost of production of cocoa producers, agro-dealer sales figures and customer breakdown, export volume from project participants. Collected by surveying project participants and report in project reporting.</p> <p>3. Project website online and available, with links to and from other sites e.g. ICCO, CABI, ICCRI, MCB &amp; PNG-CCIL, ASEAN Cocoa Club. Website usage metrics, online surveys of SPS awareness. Usage metrics for platform: number of users, number of documents uploaded, number comments/shares, number of queries/answer, feedback from users.</p>	<p>Group participants' inherent attitude towards the project: they must be convinced that it is worthwhile and be keen to become and stay involved.</p> <p>Security issues in the project countries. Where any concerns are present, locations to be targeted by project interventions will be reviewed and alternatives considered.</p> <p>International external factors that could affect the results of the project. E.g. relative favour of oil palm over cocoa.</p>
<b>Activities</b>	<p><b>Outcome Component I:</b> Improved capacity of relevant cocoa stakeholders along the cocoa supply chain (from farm to export point) in Indonesia, Malaysia and PNG to provide training on SPS and GAP practices in-line with international standards.</p>	<p>1. Master Facilitator (20) and facilitators (500) trained during the project cycle, up-to-date training curricula developed according to international SPS standards; number of training material distributed to stakeholders.</p> <p>Summary Cost: <b>US\$ 491,302</b></p>	<p>1. Training reports, feedback questionnaires available via knowledge exchange platform surveys and reports, evaluation report.</p>	<p>Financing from all sources is made available on a timely basis in line with proposed activities.</p> <p>Acquisition of additional financing of training of facilitators from actors such as provincial governments can be made.</p>

	<p><b>Outcome Component II:</b> Enhanced cooperation among relevant stakeholders in Indonesia, Malaysia and PNG to address food safety requirements and international standards on SPS.</p>	<p>2. Knowledge Exchange Platform set up and running by month 4. Uploading of training material, awareness raising information and dedicated access for project member countries by the end of year one.</p> <p>Summary Cost: <b>US\$ 191,815</b></p> <p>The estimated total cost of the project is <b>US\$ 824,359</b></p>	<p>2. Report of user requirements, feedback questionnaires. Website usage metrics, articles, publications and presentations. Regular monitoring of knowledge exchange platform usage data.</p> <p>3. Monitoring documentation, as presented in six-monthly and end of project reports. Reports and publicity from inception and end of project workshops.</p>	<p>Training venues and facilities are available.</p> <p>Stakeholder involvement and participant compliance are active throughout.</p> <p>Successful and timely development of materials, adequate publishing and dissemination resources.</p>
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## 9.2. Project Outputs

### Component I: Enhancing the Capacity of Cocoa Stakeholders in Malaysia to Improve the Quality and Safety of Cocoa

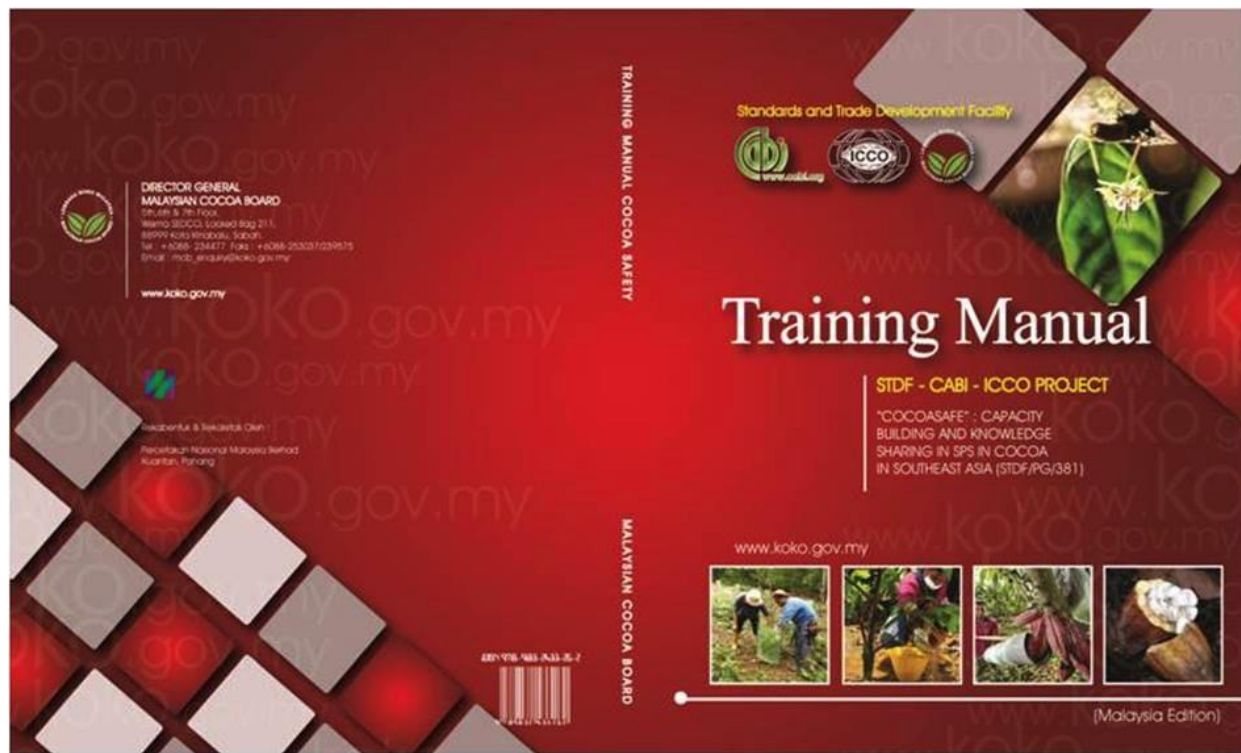
#### 9.2.1. Output 1: Training modules and curricula on GAP/SPS/safety produced

##### i. Table of Training curriculum designed for use in the Coccoasafe training program.

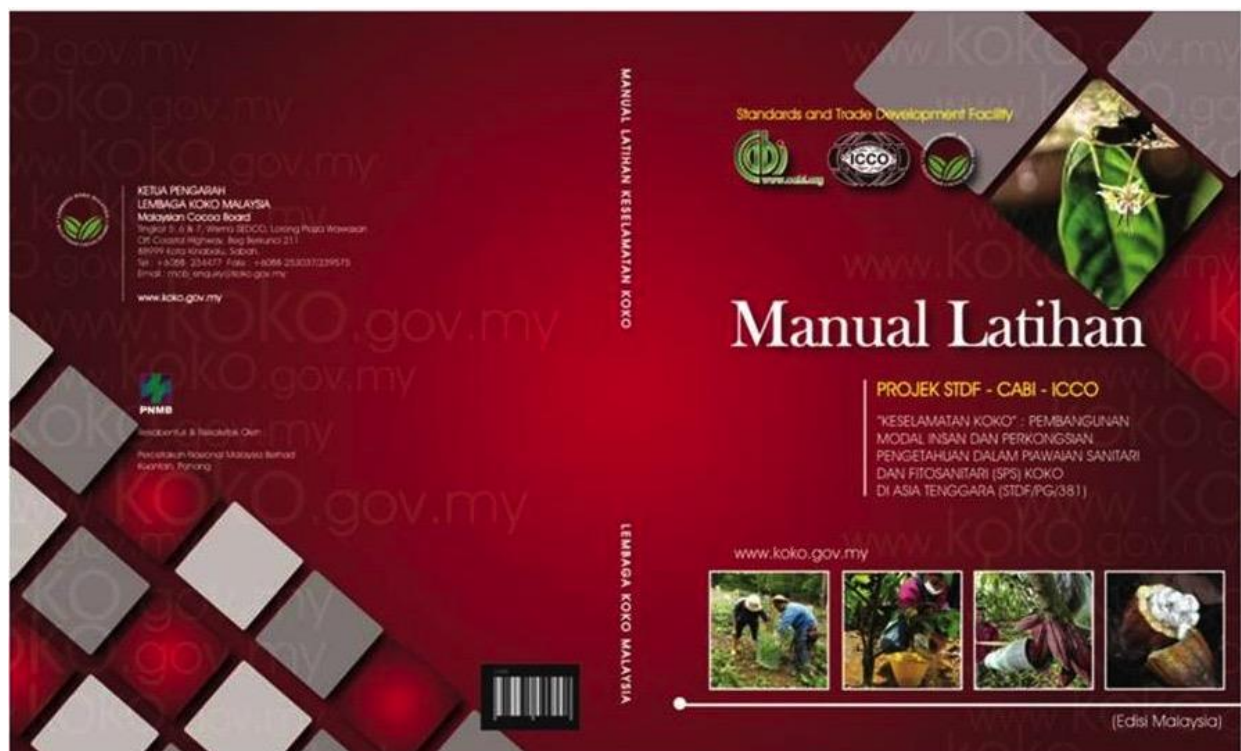
Part 1: THEORY	Part 2 : PRACTICAL
<p><b>1.0 General Aspects of TOMF</b></p> <p>1.1 Background information of TOMF course</p> <p>1.2 Survey of participants' background</p> <p>1.3 Participatory introduction of participants</p> <p>1.4 Group formation and group responsibilities</p> <p>1.5 Roles and responsibilities of master facilitators, facilitators and the target groups (Farmers, Agro-Dealers &amp; Processors)</p> <p>1.6 Curriculum of TOMF, TOF and Farmer Schools (FS)</p> <p><b>2.0 General Introduction on Cocoa</b></p> <p>2.1 The cocoa commodity</p> <p>2.2 Cocoa production</p> <p>2.3 Constraints to cocoa production</p> <p>2.4 Constraints to export cocoa beans</p> <p>2.5 Regulations on food safety and SPS</p> <p><b>3.0 Food Safety and HACCP</b></p> <p>3.1 Crop management</p> <p>3.2 Crop nutrition &amp; water</p> <p>3.3 Crop protection</p> <p>3.4 Workers/farmers safety – PPE for spraying pesticides</p> <p>3.5 Cocoa harvesting, pod storage and pod breaking 37</p> <p>3.6 Post-harvest handling</p> <p>3.7 Waste management</p> <p>3.8 Farm record keeping/ traceability</p> <p>3.9 GAP training &amp; self check/self audit</p> <p><b>4.0 Steps to Plan, Organise and Conduct Training of Facilitators</b></p> <p>4.1 Preparatory meetings with related agencies</p> <p>4.2 Plan and prepare relevant curriculum (including needed training materials)</p> <p>4.3 Plan and prepare operational/logistical requirements</p> <p>4.4 Organise and conduct the tof course</p> <p>4.5 Discuss and plan tof follow-up activities and the conduct of FS</p>	<p><b>DISCOVERY LEARNING EXERCISES</b></p> <p><b>Module 1: Starting Farmers Field School (SFFS)</b></p> <p>SFFS-1: Cocoa cropping calendar – Crop cycle</p> <p>SFFS-2: Cocoa ecosystem</p> <p>SFFS-3: Cocoa food web</p> <p>SFFS-4: Ballot box test</p> <p>SFFS-5: Getting to know each other</p> <p><b>Module 2: Agro-Ecosystem Analysis (AESA)</b></p> <p>AESA-1: Agro-Ecosystem Analysis</p> <p>AESA-2: Identifying and collecting healthy ripe pods, diseased, CPB infested pods and rodent damaged pods in the field</p> <p><b>Module 3: Crop Husbandry (CH)</b></p> <p>CH-1: Pruning and canopy/height control</p> <p>CH-2: The role of shade and spacing in determining the architecture of cocoa trees and yield</p> <p>CH-3: Role play on the Importance of soil fertility for cocoa production</p> <p>CH-4: The effect of fertilizers on young cocoa plants</p> <p>CH-5: The effects of fertilizers on mature cocoa trees</p> <p><b>Module 4: Managing Cocoa Diseases And Pests (CDP)</b></p> <p>CDP-1: Impact of humidity and the role of diseased pods in spreading black pod</p> <p>CDP-2: Cocoa disease infection study</p> <p>CDP-3: Role of soil in the spread of black pod disease</p> <p>CDP-4: Black pod disease zoo in the field</p> <p>CDP-5: Insect Zoo 1 – Symptom development</p> <p>CDP-6: Insect Zoo 2 - Symptom development</p> <p>CDP-7: Insect Zoo – Predation exercise</p> <p>CDP-8: Insect Zoo – Life cycle development</p> <p>CDP-9: Determining Mirid damage threshold for essential insecticide application</p>

	<p><b>Module 5 : Rational Pesticide Use (RPU)</b>  RPU-1: Deciding to apply pesticides on cocoa  RPU-2: Understanding pesticides regulations  RPU-3: Calibration and performance sprayers  RPU-4: Improved spraying practices for Mirid control  RPU-5: Pesticides specificity  RPU-6: Spray dye exercise  RPU-7: Botanical pesticides screening  RPU-8: Pesticides resistance role-play</p> <p><b>Module 6: Cocoa quality (CQ)</b>  CQ-1: Impact of pod maturity on fermentation and cocoa quality  CQ-2: Drying cocoa on a raised, covered platform  CQ-3: Alternative fermentation method  CQ-4: Drying cocoa beans using an improved solar dryer  CQ-5: Grading on the cocoa beans</p>
<p><b>Part 3: PEST DATA SHEETS (PDS)</b></p>	<p><b>Part 4: FARM RECORDING FORMS</b></p>
<ul style="list-style-type: none"> <li>• CPB - Cocoa Pod Borer (<i>Conopomorpha cramerella</i> Snellen)</li> <li>• Mirids/ Capsids (<i>Helopeltis theivora</i> (Tea Mosquito))</li> <li>• Stem Borer (<i>Zeuzera coffeae</i>) (Lepidoptera)</li> <li>• Termites</li> <li>• White Grub (<i>Phyllophaga</i> Species)</li> <li>• VSD – Vascular Streak Dieback (<i>Ceratobasidium theobromae</i>)(Formerly <i>Oncobasidium theobromae</i> P.H.B. Talbot &amp; Keane)</li> <li>• Black Pod (<i>Phytophthora palmivora</i> (E J Butler))</li> <li>• Pink Disease <i>Erythricium salmonicolor</i> (Berk. &amp; Broome) Burds. (Formerly <i>Corticium salmonicolor</i> Berk. &amp; Broome)</li> <li>• Blight Horse Hair Blight (<i>Marasmius crinis-equi</i>)</li> <li>• White Thread Blight (<i>Marasmiellus scandens</i>)</li> <li>• Storage Insect Pests</li> </ul>	<ul style="list-style-type: none"> <li>• Farm plan</li> <li>• Risk assessment record</li> <li>• Planting material record</li> <li>• Chemical inventory</li> <li>• Spray record</li> <li>• Postharvest/ storage chemical record</li> <li>• Chemical Authorisation Form</li> <li>• Fertiliser And Soil Additives Record</li> <li>• Harvesting And Packing Record</li> <li>• Job Responsibility And Training Record</li> <li>• Cleaning And Pest Control Plan</li> <li>• Corrective Action Report</li> <li>• Personal Hygiene Instructions</li> <li>• Self- Assessment Checklist</li> </ul>

ii. Front cover of training manual (English version)





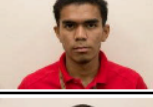
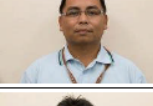






iii. Front cover of training manual (Bahasa Melayu version)





**9.2.2. Output 2: A core group of agricultural officers (research and extension officers) trained as Master Facilitators to train stakeholders as Facilitators**

**i. List of participants for the TOMF program in Cocoa Research and Development Center, Hilir Perak, Malaysian Cocoa Board from 7 to 17 April 2014.**

NO.	IMAGE	SALUTATION	NAME	IDENTIFICATION CARD	POSITION	DIVISION	INST.	ADDRESS
1		Mr.	Abdul Hamid bin Komian	590102-08-5117	Agriculture Officer	Plant Biosecurity	DOA	Unit Biosekuriti Tumbuhan , 38600 Chenderung Balai, PERAK
2		Ms.	Lucia @ Ratna Limpak	590731-12-5302	Assistant Agriculture Officer	Enforcement & Crop Protection Section	DOA	Seksyen Penguatkuasaan & Perlindungan Tanaman, Ibu Pejabat Jabatan Pertanian Sabah, Aras 1, Wisma Pertanian Sabah, Jln. Tasik Luyang, Off Jln Maktab Gaya, Beg Berkunci No.
3		Dr	Rozita Osman	720402-07-5140	Research Officer	Cocoa Upstream Technology	MCB	Cocoa Research & Development Centre Jengka Malaysian Cocoa Board Jalan Jengka 23, P.O. Box 34, 28000 Temerloh, Pahang
4		Ms.	Nazmiah Binti Mohd Duin	810617-12-5204	Research officer	Technology Transfer and Expansion	MCB	Regional Office, Tenom Malaysian Cocoa Board W.D.T 120, Lot 3, Datuk Hj. Yasin Road, 89908 Tenom, Sabah
5		Mr.	Blasius @ Yus Bin Duasa	590307-12-5389	Agriculture Officer		DOA	Jabatan Pertanian Daerah, Peti Surat No. 15, 89307 RANAU
6		Mr.	Gulahis Gandihan	560515-12-5415	Assistant Enforcement Agriculture Officer		DOA	Jabatan Pertanian Daerah, Peti Surat No. 42, 89100 KOTA MARUDU
7		Mr.	Hj. Jupri Demabella	650529-12-5335	Senior Assistant Agriculture Officer		DOA	Jabatan Pertanian Daerah, Peti Surat No. 71, 91007 TAWAU
8		Mr.	Rayner Tiam	841031-12-5567	Agriculture Officer	Plant Biosecurity	DOA	Plant Biosecurity Division, Department of Agriculture, 2nd Floor, Wisma Tani, Jln Sultan Salahuddin, 50632 Kuala Lumpur
9		Mr.	Roslan Bin Jaafar	640426-10-7637	Assistant Agriculture Officer		DOA	Pusat Pembangunan Komoditi (Federal) Pusat pembangunan Komoditi Teluk Bahru 36400 Hutan Melintang
10		Mr.	Hermes Joseph		Assistant Agriculture Officer		DOA	Stesen Penyelidikan Pertanian Bukit Quoin (ARS), Peti Surat No. 324, 91007 TAWAU
11		Mr.	Raize Shah Hussain	680908-02-5403	Assistant Economic Affairs Officer	Technology Transfer and Expansion	MCB	Cocoa Research & Development Centre Jengka Malaysian Cocoa Board Jalan Jengka 23, P.O. Box 34, 28000 Temerloh, Pahang

NO.	IMAGE	SALUTATION	NAME	IDENTIFICATION CARD	POSITION	DIVISION	INST.	ADDRESS
12		Mr.	Mohamad Azahar Nordin	620615-06-5001	Economic Affairs Assistant	Technology Transfer and Expansion	MCB	Cocoa Research & Development Centre Jengka Malaysian Cocoa Board Jalan Jengka 23, P.O. Box 34, 28000 Temerloh, Pahang
13		Mr.	Mohamad Jaafar Bin Hussin	671110-02-5057	Assistant Research Officer	Cocoa Upstream Technology	MCB	Cocoa Research & Development Centre Jengka Malaysian Cocoa Board Jalan Jengka 23, P.O. Box 34, 28000 Temerloh, Pahang
14		Mr.	Mohd Mustafa Munim Bin Motolani	850426-08-5437	Regional Officer West Malaysia	Technology Transfer and Expansion	MCB	Cocoa Research & Development Centre Hilir Perak Malaysian Cocoa Board, P.O. Box 30, Sg. Dulang Road, 36307 Sg. Sumun, Perak
15		Mr.	Mohamed Helmi Bin Shari	851004-14-6361	Research Officer	Cocoa Upstream Technology	MCB	Cocoa Research & Development Centre Hilir Perak Malaysian Cocoa Board, P.O. Box 30, Sg. Dulang Road, 36307 Sg. Sumun, Perak
16		Mr.	Muhamad Aizad Bin Johari	891102-02-5631	Economic Affairs Assistant	Regulatory & Quality Control	MCB	Cocoa Research & Development Centre Hilir Perak Malaysian Cocoa Board, P.O. Box 30, Sg. Dulang Road, 36307 Sg. Sumun, Perak
17		Mr.	Pengarah Anak Lau	670123-13-5507	Assist. Economic Affairs Officer	Technology Transfer and Expansion	MCB	Cocoa Research & Development Centre, Kuching Malaysian Cocoa Board Lot 248, Block 14, Daerah Muara Tuang, Daerah Muara Tuang, Bahagian
18		Mr.	Mazalan Ali	670731-13-5893	Economic Affairs Assistant	Technology Transfer and Expansion	MCB	Cocoa Research & Development Centre, Kuching Malaysian Cocoa Board Lot 248, Block 14, Daerah Muara Tuang, Daerah Muara Tuang, Bahagian
19		Mr.	Mohammad Rizman bin Niger Mahidin	861006-33-5747	Economic Affairs Officer	Regulatory & Quality Control	MCB	Cocoa Research & Development Centre, Kuching Malaysian Cocoa Board Lot 248, Block 14, Daerah Muara Tuang, Daerah Muara Tuang, Bahagian
20		Mr.	Edwin Mujin	820924-12-5545	Assist. Research Officer	Technology Transfer and Expansion	MCB	Cocoa Research & Development Centre, Tawau Malaysian Cocoa Board, Mile 10, Apas Road P. O. Box 60237, 91012 Tawau, Sabah
21		Mr.	Stephen Milin	710302-12-5033	Assist. Research Officer	Cocoa Upstream Technology	MCB	Cocoa Research & Development Centre, Tawau Malaysian Cocoa Board, Mile 10, Apas Road P. O. Box 60237, 91012 Tawau, Sabah
22		Mr.	Mohd. Yusof Ishak	690922-12-5389	Economic Affairs Assistant	Regulatory & Quality Control	MCB	Cocoa Research & Development Centre, Tawau Malaysian Cocoa Board, Mile 10, Apas Road P. O. Box 60237, 91012 Tawau, Sabah
23		Mr.	Paulus Lasiun	710311-12-5027	Assistant Research Officer	Cocoa Upstream Technology	MCB	Cocoa Research & Development Centre, Malaysian Cocoa Board KM 27, Simpang Jalan Tingkeyu/Kunak W.D.T 175, 91207 Kunak, Sabah
24		Mr.	Jinus Juis	860410-49-6011	Economic Affairs Officer	Technology Transfer and Expansion	MCB	MALAYSIAN COCOA BOARD 5th & 6th Floor, Wisma SEDCO Locked Bag 211 88999 Kota Kinabalu, Sabah
25		Mr.	Leonardo Regino	720129-12-5513	Assistant Economic Affairs Officer	Technology Transfer and Expansion	MCB	MALAYSIAN COCOA BOARD 5th & 6th Floor, Wisma SEDCO Locked Bag 211 88999 Kota Kinabalu, Sabah

NO.	IMAGE	SALUTATION	NAME	IDENTIFICATION CARD	POSITION	DIVISION	INST.	ADDRESS
26		Mr.	Mohd. Zamri Bin Abdul Ghani	611110-11-5363	Economic Affairs Officer	Regulatory & Quality Control	MCB	Malaysian Cocoa Board Cocoa Innovative and Technology Centre Lot 12621,, Kawasan Perindustrian Nilai 71800 Nilai
27		Mr.	Pairin @ Cyprian Bin Valentine	780916-12-5533	Research Assistant	Technology Transfer and Expansion	MCB	Regional Office, Tenom Malaysian Cocoa Board W.D.T 120, Lot 3, Datuk Hj. Yasin Road, 89908 Tenom, Sabah

ii. **The list of resource persons in the TOMF program.**

No.	Name	Position	Inst.
1	Dr. Jayne Crozier	Plant Pathologist	CABI
2	Mr. Jeremy Ngim C.K.	Scientist	CABI
3	Dr. Soetikno S. Sastroutomo	Scientist	CABI
4	Dr. Lee Choon Hui	Director General	MCB
5	Mdm. Khairul Bariah Bt. Sulaiman	Research Officer	MCB
6	Mr. Mohamed Helmi Bin Shari	Research Officer	MCB
7	Mr. Mohammad Rizman bin Niger Mahidin	Economics Affair Officer	MCB
8	Dr. Rozita Osman	Research Officer	MCB
9	Mr. Chooi Lam Khong	Executive director	CropLife (M)
10	Mr. Foong Chee Kong,	Technical General Manager	Rubberex
11	Mr. Lai Song Yip	Manager	Company Jun Chong Sdn. Bhd.
12	Mr. Teng Yeew Thai	Manager	Samurai Agritech System

iii. **Syllabus of the TOMF program.**

**Classroom theory activities**

Activities	Group / person(s) in-charge
<ul style="list-style-type: none"> <li>Participatory introduction of participants</li> <li>Survey of participants' background</li> <li>Course Pre-evaluation</li> <li>Background information on CocoaSafe Project</li> <li>Why TOMF ?</li> <li>Group formation and responsibilities</li> <li>Roles and responsibilities of Master Facilitators, Facilitators and Farmers</li> <li>TOMF and TOF curriculum</li> </ul>	<ul style="list-style-type: none"> <li>Dr. Soetikno S. Sastruotomo</li> <li>Mr. Jeremy Ngim</li> </ul>






<ul style="list-style-type: none"> <li>• Production and constraints to cocoa production in Malaysia</li> <li>• Constraints to export cocoa beans and regulations on food safety and SPS</li> </ul>	<ul style="list-style-type: none"> <li>• Dr. Lee Choon Hui</li> <li>• Dr. Jayne Crozier</li> </ul>
<ul style="list-style-type: none"> <li>• Food safety &amp; HACCP</li> <li>• Major disease of cocoa and its management</li> </ul>	<ul style="list-style-type: none"> <li>• Mr. Jeremy Ngim</li> <li>• Dr. Jayne Crozier</li> </ul>
<ul style="list-style-type: none"> <li>• Cocoa farm maintenance (shade) management and cocoa pruning: relation to disease management</li> <li>• Cocoa nursery management</li> </ul>	<ul style="list-style-type: none"> <li>• Dr. Rozita Osman</li> <li>• Dr. Rozita Osman</li> </ul>
<ul style="list-style-type: none"> <li>• Roles of soil types and heavy metals in cocoa production</li> <li>• Applying fertilizers to cocoa trees</li> </ul>	<ul style="list-style-type: none"> <li>• Mr. Mohamed Helmi</li> <li>• Mr. Mohamed Helmi</li> </ul>
<ul style="list-style-type: none"> <li>• Major insect pests of cocoa and its management</li> <li>• Cocoa farm sanitation</li> </ul>	<ul style="list-style-type: none"> <li>• Dr. Jayne Crozier</li> <li>• Dr. Rozita Osman</li> </ul>
<ul style="list-style-type: none"> <li>• Ballot Box Test (BBT) – purpose &amp; design</li> <li>• Discuss/plan BBT examples</li> </ul>	<ul style="list-style-type: none"> <li>• Dr. Soetikno S. Sastruotomo</li> <li>• Mr. Jeremy Ngim</li> <li>• Dr. Jayne Crozier</li> </ul>
<ul style="list-style-type: none"> <li>• Weed management</li> </ul>	<ul style="list-style-type: none"> <li>• Mr. Jeremy Ngim</li> </ul>
<ul style="list-style-type: none"> <li>• Recording forms for Food Safety.</li> </ul>	<ul style="list-style-type: none"> <li>• Mr. Jeremy Ngim</li> </ul>
<ul style="list-style-type: none"> <li>• The plant science industry</li> </ul>	<ul style="list-style-type: none"> <li>• Mr. Chooi Lam Khong, CropLife</li> </ul>
<ul style="list-style-type: none"> <li>• GAP (Good Agriculture Practices)</li> </ul>	<ul style="list-style-type: none"> <li>• Mr. Chooi Lam Khong, CropLife</li> </ul>
<ul style="list-style-type: none"> <li>• Responsible Use (5 golden rules, SDS)</li> </ul>	<ul style="list-style-type: none"> <li>• Mr. Chooi Lam Khong, CropLife</li> </ul>
<ul style="list-style-type: none"> <li>• PAT (Pesticide Application Technology)</li> </ul>	<ul style="list-style-type: none"> <li>• Mr. Chooi Lam Khong, CropLife</li> </ul>
<ul style="list-style-type: none"> <li>• Appropriate use of PPE – Nitrile Gloves</li> </ul>	<ul style="list-style-type: none"> <li>• Mr. Foong Chee Kong, Technical GM, Rubberex</li> </ul>
<ul style="list-style-type: none"> <li>• Safe &amp; effective use of knapsack sprayers</li> </ul>	<ul style="list-style-type: none"> <li>• Mr. Lai Song Yip, Jun Chong Sdn. Bhd.</li> </ul>
<ul style="list-style-type: none"> <li>• Safe &amp; effective use of CDA sprayers</li> </ul>	<ul style="list-style-type: none"> <li>• Mr. Teng Yeew Thai, Samurai Agritech System</li> </ul>
<ul style="list-style-type: none"> <li>• Harvesting, pod storage and breaking</li> </ul>	<ul style="list-style-type: none"> <li>• Mrs. Khairul Bariah</li> </ul>
<ul style="list-style-type: none"> <li>• Fermentation</li> </ul>	<ul style="list-style-type: none"> <li>• Mrs. Khairul Bariah</li> </ul>
<ul style="list-style-type: none"> <li>• Drying</li> </ul>	<ul style="list-style-type: none"> <li>• Mrs. Khairul Bariah</li> </ul>
<ul style="list-style-type: none"> <li>• Grading and quality checks</li> </ul>	<ul style="list-style-type: none"> <li>• Mr. Mohammad Rizman</li> </ul>
<ul style="list-style-type: none"> <li>• Pesticides used in cocoa</li> </ul>	<ul style="list-style-type: none"> <li>• Mr. Jeremy Ngim</li> </ul>

### **Field practical activities**

<b>Activities</b>	<b>Group / person(s) in-charge</b>
<ul style="list-style-type: none"> <li>• Cocoa cropping calendar (SFSS-1)</li> <li>• Cocoa Ecosystem (SFFS-2)</li> <li>• Food Web (SFFS- 3)</li> <li>• Identifying and collecting healthy ripe pods, diseased, CPB infested and rodent damaged pods in the field (AESA-2)</li> </ul>	<ul style="list-style-type: none"> <li>• Dr. Soetikno S. Sastruotomo</li> <li>• Mr. Jeremy Ngim</li> <li>• Dr. Jayne Crozier</li> </ul>
<ul style="list-style-type: none"> <li>• Disease infection study (CDP-2)</li> <li>• Look for/collect CPB adults (underneath branches), larvae (in pods) and pupae (on fallen leaves). Some to be taken back for exercise on Insect Zoo (CDP-6)</li> </ul>	<ul style="list-style-type: none"> <li>• Mr. Jeremy Ngim</li> <li>• Dr. Jayne Crozier</li> </ul>
<ul style="list-style-type: none"> <li>• Setting up insect zoos</li> <li>• Breeding out CPB pupae and adults from field-collected pupae and larvae respectively</li> </ul>	<ul style="list-style-type: none"> <li>• Mr. Jeremy Ngim</li> <li>• Dr. Jayne Crozier</li> </ul>

<ul style="list-style-type: none"> <li>• Agro-ecosystem analysis (AESA-1)</li> </ul>	<ul style="list-style-type: none"> <li>• Dr. Soetikno S. S.</li> <li>• Mr. Jeremy Ngim</li> <li>• Dr. Jayne Crozier</li> </ul>
<ul style="list-style-type: none"> <li>• Check insect zoos (pupa and adult emergence)</li> <li>• Observing predation (CDP-7)</li> </ul>	<ul style="list-style-type: none"> <li>• Dr. Soetikno S. S.</li> <li>• Mr. Jeremy Ngim</li> <li>• Dr. Jayne Crozier</li> </ul>
<ul style="list-style-type: none"> <li>• Fertilizer application on cocoa (CH-5)</li> </ul>	<ul style="list-style-type: none"> <li>• Dr. Soetikno S. S.</li> <li>• Mr. Jeremy Ngim</li> <li>• Mr. Mohamed Helmi</li> </ul>
<ul style="list-style-type: none"> <li>• Check predation and presentation</li> <li>• Check insect zoos and presentation</li> <li>• Check disease infection study and presentation</li> </ul>	<ul style="list-style-type: none"> <li>• Mr. Jeremy Ngim</li> </ul>
<ul style="list-style-type: none"> <li>• AESA completion and presentation</li> </ul>	<ul style="list-style-type: none"> <li>• Mr. Jeremy Ngim</li> </ul>
<ul style="list-style-type: none"> <li>• Cocoa Environment &amp; Food Web – Completion and presentation</li> </ul>	<ul style="list-style-type: none"> <li>• Mr. Jeremy Ngim</li> </ul>
<ul style="list-style-type: none"> <li>• Pruning and canopy height control (CH-1)</li> <li>• Shading and humidity</li> </ul>	<ul style="list-style-type: none"> <li>• D. Rozita Osman</li> <li>• Mr. Jeremy Ngim</li> </ul>
<ul style="list-style-type: none"> <li>• Different drying techniques (CQ-2)</li> <li>• Grading and storage techniques</li> </ul>	<ul style="list-style-type: none"> <li>• Mrs. Khairul Bariah</li> <li>• Mr. Jeremy Ngim</li> <li>• Mr. Mohammad Rizman</li> </ul>
<ul style="list-style-type: none"> <li>• Shading and humidity – Completion and presentation</li> </ul>	<ul style="list-style-type: none"> <li>• D. Rozita Osman</li> <li>• Mr. Jeremy Ngim</li> </ul>
<ul style="list-style-type: none"> <li>• Canopy and height control – Completion and presentation</li> </ul>	<ul style="list-style-type: none"> <li>• Mr. Jeremy Ngim</li> </ul>
<ul style="list-style-type: none"> <li>• Different drying techniques – Completion and presentation</li> </ul>	<ul style="list-style-type: none"> <li>• Mrs. Khairul Bariah</li> <li>• Mr. Jeremy Ngim</li> </ul>
<ul style="list-style-type: none"> <li>• Fermentation techniques (CQI)</li> </ul>	<ul style="list-style-type: none"> <li>• Mrs. Khairul Bariah</li> <li>• Mr. Jeremy Ngim</li> </ul>
<ul style="list-style-type: none"> <li>• Cocoa sanitation</li> </ul>	<ul style="list-style-type: none"> <li>• D. Rozita Osman</li> </ul>

iv. **Program book**

Standards and Trade Development Facility		
  		
<p><b>STDF - CABI - ICCO PROJECT :</b></p> <p><b>“CocoaSafe”: Capacity Building and Knowledge Sharing in SPS in Cocoa in Southeast Asia (STDF/PG/381)</b></p> <p><i>Officiated by</i></p> <p><b>The Honorable Datuk Amar Douglas Uggah Embas</b>  <b>Minister of Plantation Industries &amp; Commodities, Malaysia</b></p> <p><b>TRAINING OF MASTER FACILITATORS (TOMF)</b></p> <p><b>7th-17th April 2014</b></p> <p><b>Cocoa Research and Development Center Hilir Perak,</b>  <b>Malaysian Cocoa Board</b></p>		
<b>Day 2: 8<sup>th</sup> April, 2014 (Tuesday)</b>		
Time	Activities	Group/person(s) in-charge
08:00-08:15	• Recall activities of previous day	Group of day
08:15-09:00 09:00-10:00	• Food safety & HACCP • Major <b>disease</b> of cocoa and its management	• Mr. Jeremy Ngim • Dr. Jayne Crozier
10:00-10:30	<i>Coffee/Tea Break</i>	
10:30-11:30 11:30-12:30	• Cocoa farm maintenance (shade management and cocoa pruning : relation to disease management) • Cocoa nursery management	• Dr. Rozita Osman  • Dr. Rozita Osman
12:30-13:30	<i>Lunch</i>	
13:30-15:30 <b>(Field)</b>	• Cocoa cropping calendar (SFSS-1) • Cocoa Ecosystem (SFSS-2) • Food Web (SFSS-3) • Identifying and collecting healthy ripe pods, diseased, CPB infested and rodent damaged pods in the field (AESA-2)	All groups /Dr. Soetikno / Mr. Jeremy/ Dr. Jayne
15:30-16:00	<i>Coffee/Tea Break</i>	
16:00-17:00	Sorting the collected specimens	All groups
17:00	End of day	
<b>6<sup>th</sup> April, 2014 (Sunday)</b>		
Time	Activities	Group/person(s) in-charge
18:00-19:00	Pre-registration at Grand Court Hotel	• MCB
19:30-22:00	Official dinner of TOMF at Grand Court Hotel	• MCB
<b>Day 1: 7<sup>th</sup> April, 2014 (Monday)</b>		
Time	Activities	Group/person(s) in-charge
07:45-09:00	Registration at CRDC Hilir Perak	• MCB
09:00-10:00	<b>OPENING SESSION</b> • Welcome Address by Director General of Malaysian Cocoa Board (MCB) • Opening Address by Minister of Plantation Industries & Commodities	• Emcee: MCB • Dr. Lee Choon Hui  • YB Datuk Amar Douglas Uggah Embas
10:00-10:30	<i>Coffee/Tea Break</i>	
10:30-12:30	• Participatory introduction of participants • Survey of participants' background • Course Pre-evaluation • Background information on Cocoa Safe Project • Why TOMF course • Group formation and responsibilities • Roles and responsibilities of Master Facilitators, Facilitators and Farmers • Curriculum of TOMF course and TOF course	• Dr. Soetikno S. Sastruotomo / Mr. Jeremy Ngim
12:30-13:30	<i>Lunch</i>	
13:30-14:30	• Production and constraints to cocoa production in Malaysia	• Dr. Lee Choon Hui
14:30-15:30	• Constraints to export cocoa beans and regulations on food safety and SPS	• Dr. Jayne Crozier
15:30-16:00	<i>Coffee/Tea Break</i>	
16:00-17:00	• Discussion/planning activities for next day	• Dr. Soetikno S. Sastruotomo / Mr. Jeremy Ngim
16:00	• End of day	
<b>Day 3: 9<sup>th</sup> April, 2014 (Wednesday)</b>		
Time	Activities	Group/person(s) in-charge
08:00-08:15	• Recall activities of previous day	Group of day
08:15-09:00 09:00-10:00	• Roles of soil types and heavy metals in cocoa production • Applying fertilizers to cocoa trees	• Mr. Mohamed Helmi  • Mr. Mohamed Helmi
10:00-10:30	<i>Coffee/Tea Break</i>	
10:30-11:30 11:30-12:30	• Major <b>insect pests</b> of cocoa and its management • Cocoa farm sanitation	• Dr. Jayne Crozier  • Dr. Rozita Osman
12:30-13:30	<i>Lunch</i>	
13:30-15:30 <b>(Field)</b>	• <b>Disease infection study (CDP-2)</b> • Look for/collect CPB adults (underneath branches), larvae (in pods) and pupae (on fallen leaves). Some to be taken back for exercise on Insect Zoo (CDP-6)	• All groups/ Dr. Jayne • Dr. Jayne & Mr. Jeremy
15:30-16:00	<i>Coffee/Tea Break</i>	
16:00-16:30	• To set up Insect zoos Breeding out CPB pupae and adults from field-collected pupae and larvae respectively	• Dr. Jayne & Mr. Jeremy
16:30-17:00	Discussion/planning activities of next day	• Dr. Soetikno/ Mr. Jeremy
17:00	End of day	

<b>Day 4: 10<sup>th</sup> April, 2014 (Thursday)</b>		
Time	Activities	Group/person(s) in-charge
08:00-08:15	• Recall activities of previous day	Group of day
08:15-10:00	• Ballot Box Test (BBT) – purpose & design • Discuss/plan BBT examples	• Dr. Soetikno/ Mr. Jeremy/ Dr. Jayne
10:00-10:30	<i>Coffee/Tea Break</i>	
10:30-11:30	• Weed management (optional)	• Mr. Jeremy
11:30-12:30	• Recording forms for Food Safety.	• Mr. Jeremy
12:30-13:30	<i>Lunch</i>	
13:30-14:30 (Field)	• Agro-ecosystem analysis (AESA-1)	• All groups/ Mr. Jeremy/ Dr. Soetikno/ Dr. Jayne
14:30-15:30	• Check insect zoos (pupa and adult emergence) • Observing predation (CDP-7)	• All groups/ Mr. Jeremy/ Dr. Jayne/ Dr. Soetikno
15:30-15:45	<i>Coffee/Tea Break</i>	
15:45-16:30	• Fertilizer application on cocoa (CH-5)	• All groups/ Mr. Jeremy/ Mr. M. Helmi/ Dr. Soetikno
16:30-16:45	Recall activities of the day	Group of day
16:45-17:00	Discussion/planning activities of next day	• Dr. Soetikno/ Mr. Jeremy
17:00	End of day	

<b>Day 5: 11th April, 2014 (Friday)</b>		
Time	Activities	Group/person(s) in-charge
08:00-08:15	Recall activities of previous day	Group of day
08:15-08:45	Introduction	Mr. Chooi Lam Khong, CropLife
08:45-09:30	The plant science industry	Mr. Chooi Lam Khong, CropLife
09:30-10:00	<i>Coffee/Tea Break</i>	
10:00-10:45	GAP (Good Agriculture Practices)	Mr. Chooi Lam Khong, CropLife
10:45-11:15	Responsible Use (5 golden rules, SDS)	Mr. Chooi Lam Khong, CropLife
11:15-12:00	PAT (Pesticide Application Technology)	Mr. Chooi Lam Khong, CropLife
12:00-14:00	<i>Lunch (Friday prayers)</i>	
14:00-14:30	Appropriate use of PPE – Nitrile Gloves	Mr. Foong Chee Kong, Technical GM, Rubberex
14:30-15:00	Safe & effective use of knapsack sprayers	Mr. Lai Song Yip or representative, Syt Jun Chong Sendirian Bhd
15:00-15:30	Safe & effective use of CDA sprayers	Mr. Teng Yeew Thai, Samuraj Agritech System
15:30-16:00	<i>Coffee/Tea Break</i>	
16:00-16:30	Recall activities of the day	Group of day
16:30-17:00	Discussion/planning activities of next day	Dr. Soetikno / Mr. Jeremy
17:00	End of day	

<b>Day 8: 14th April, 2014 (Monday)</b>		
Time	Activities	Group/person(s) in-charge
08:00-08:15	• Recall activities of previous day	• Group of day
08:15-09:15	• Harvesting, pod storage and breaking	• Mrs. Khairul Bariah
09:15-10:15	• Fermentation	• Mrs. Khairul Bariah
10:15-10:30	<i>Coffee/Tea break</i>	
10:30-11:30	• Drying	• Mrs. Khairul Bariah
11:30-12:30	• Grading and quality checks	• Mr. Mohammad Rizman
12:30-13:30	<i>Lunch</i>	
13:30-15:00 (Field)	• Check predation and presentation • Check insect zoos and presentation • Check disease infection study and presentation	• All groups / Mr. Jeremy
15:00-16:15	• AESA completion and presentation	• All groups / Mr. Jeremy
16:15-16:30	<i>Coffee/Tea break</i>	
16:30-16:45	Recall activities of the day	• Group of day
16:45-17:00	Discussion/planning activities of next day	• Mr. Jeremy
17:00	End of day	

<b>Day 9: 15th April, 2014 (Tuesday)</b>		
Time	Activities	Group/person(s) in-charge
08:00-08:15	• Recall activities of previous day	• Group of the day
08:15-10:00	• Cocoa Environment & Food Web – Completion and presentation	• Mr. Jeremy
10:00-10:30	<i>Coffee/Tea Break</i>	
10:30-12:30	• Pesticides used in cocoa	• Mr. Jeremy
12:30-13:30	<i>Lunch</i>	
13:30-15:00 (Field)	• Pruning and canopy height control (CH-1) • Shading and humidity	• Dr. Rozita/ Mr. Jeremy • Dr. Rozita/ Mr. Jeremy
15:00-15:15	<i>Coffee/Tea Break</i>	
15:15-16:30	• Different drying techniques (CQ-2) • Grading and storage techniques	• Mrs. Khairul Bariah/ Mr. Jeremy • Mr. Mohammad Rizman/ Mr. Jeremy
16:30-16:45	Recall activities of the day	• Group of day
16:45-17:00	Discussion/planning activities of next day	• Mr. Jeremy
17:00	End of day	

Day 10: 16th April, 2014 (Wednesday)			Day 11: 17th April, 2014 (Thursday)		
Time	Activities	Group/person(s) in-charge	Time	Activities	Group/person(s) in-charge
08:00-08:15	• Recall activities of previous day	• Group of the day	08:00-08:15	• Recall activities of previous day	• Group of the day
08:15-09:30	• Shading and humidity – Completion and presentation	• Dr. Rozita/ Mr. Jeremy	08:15-10:00	• Fermentation – Completion and presentation	• All groups/ Mrs. Khairul Bariah/ Mr. Jeremy
09:30-09:45	<i>Coffee/Tea Break</i>		10:00-10:30	<i>Coffee/Tea Break</i>	
09:45-11:15	• Canopy and height control – Completion and presentation	• All groups/ Mr. Jeremy	10:30-12:30	• Grading and storage – Completion and presentation	• All groups/ Mr. Mohammad Rizman/ Mr. Jeremy
11:15-12:30	• Different drying techniques – Completion and presentation	• Mrs. Khairul Bariah / Mr. Jeremy	12:30-13:30	<i>Lunch</i>	
12:30-13:30	<i>Lunch</i>		13:30-15:00	• TOMF Review • What next? • CoursePost-Evaluation	• Dr. Soetikno
13:30-15:00 (Field)	• Fermentation techniques (CQI)	• Mrs. Khairul Bariah/ Mr. Jeremy	15:00-16:00	<b>Closing Session and Certificate Presentation</b> • Closing Remarks by CABI SEA • Official Closing by MCB • Certificate presentation • Address by Representative of Participants	• MC: MCB  • Mr. Jeremy Ngim • Dr. Lee Choon Hui, DG-MCB
15:00-15:15	<i>Coffee/Tea Break</i>		16:00-16:30	<i>Coffee/Tea Break</i>	
15:00-16:30	• Cocoa sanitation	• Dr. Rozita	16:30	End of TOMF	
16:30-16:45	Recall activities of the day	• Group of day			
16:45-17:00	Discussion/planning activities of next day	• Mr. Jeremy			
17:00	End of day				

v. **The pre- and post-evaluation on the TOMF program.**

Evaluation	Pre	Post
Minimum score	22/40	32/40
Maximum score	33/40	40/40
Number of master facilitators who scored full marks (40)	0	11
Number of master facilitators scored 31 – 39	9	16
Number of master facilitators scored below 30	18	0

vi. **Group photo of the TOMF's participants with their trainers, VIPs from MCB, Ministry of Plantation, Industries and Commodities (MPIC) and CABI Malaysia.**



vii. Pictures of TOMF activities



9.2.3. Output 3: Lead farmers, local extension staffs and agro-dealers trained as Facilitators, and are capable to train their peers and associates in issues and best practice relating to topics of SPS, GAP and safety, and best practices.

i. Locations and dates for conducting the Training of Facilitators (TOF) program



ii. List of participants in the TOF program conducted at four different locations in Malaysia from June to August 2014.

TOF program at CRDC Jengka, Pahang

No.	Salutation	Participant Name	Identification Card	Position	Address
1	Mr.	Shuwardi Bin Kariman	530916-01-5711	Farmer Leader	Batu Pahat, Johor
2	Mr.	Ramlah Binti Kuhi	570524-06-5310	Farmer	Kuala Lipis, Pahang
3	Mr.	Yok Sepong A/L Yok Litim	480624-06-5159	Farmer	Raub, Pahang
4	Mr.	Mahat Bin Doll	430709-04-5135	Farmer Leader	Melaka
5	Mr.	Feb Delly A/K Uda	850213-10-5991	Farmer	Raub, Pahang
6	Mr.	Yok Pak Bin Yok Dok	731031-06-5165	Farmer	Lipis, Pahang
7	Mr.	Yok Sot Bin Tahir	571110-06-5569	Farmer	Raub, Pahang
8	Mr.	Abd RAZak Bin Abd Majid	560806-06-5205	Farmer	Kuala Lipis, Pahang
9	Mr.	Bahaudin Bin Latib	640628-06-6183	Farmer	Kuala Lipis, Pahang
10	Mr.	Lor Shem @ Choe Yee Wah	400911-06-5087	Farmer	Jerantut
11	Mr.	Apam Bin Pak Adoi	520505-06-5109	Farmer	Lipis, Pahang
12	Mr.	Achom Bin Luji	490823-06-5011	Farmer	Raub, Pahang
13	Mr.	Jaharan Bin Malek	510314-05-5267	Farmer Leader	Negeri Sembilan
14	Mr.	Mohd Haniff Bin Jamal	830404-01-5667	Farmer	Muar, Johor
15	Mr.	Zulkifli Bin Sulaiman	601116-05-5323	Farmer	Lipis, Pahang
16	Mr.	Haji Borhan Bin Mohamed	510129-01-5773	Farmer Leader	Batu Pahat, Johor

17	Mr.	Loh Jek Lan	700724-06-5166	Farmer	Jerantut
18	Mr.	Chee Kam Fong	770710-06-5812	Farmer	Jerantut
19	Mr.	Wong Poo Chan	680414-06-5210	Farmer	Jerantut
20	Mr.	Ho Chooi Meng	580607-02-5487	Farmer Leader	Jerantut
21	Mr.	Rominah Gosi	691005-06-5248	Farmer	Bera, Pahang
22	Mr.	Zairina Binti Shamsuddin	940924-10-5436	Farmer	Bera, Pahang
23	Mr.	Eber Bin A. Majid	460303-04-5087	Farmer	Muar, Johor
24	Mr.	Abdul Rahman Bin Wahas	450825-01-5353	Farmer Leader	Batu Pahat, Johor
25	Mr.	Gon Say Ho	630108-06-5305	Farmer	Jerantut
26	Ms.	Teo Chun Hon	750718-06-5317	Farmer Leader	Jerantut, Pahang
27	Mr.	Ismail Bin Abdullah	550110-06-5005	Farmer	Kuala Lipis, Pahang
28	Mr.	Koh Ah Kow	491120-04-5043	Farmer Leader	Raub, Pahang
29	Mr.	Chan Hin Mum		Farmer	
30	Mr.	Hassan Bin Hamzah	540722-01-5659	Farmer Leader	Batu Pahat, Johor
31	Mr.	Nurhafizan Binti Mat Zeni	901110-06-5752	Research Assistant	CRDCJengka
32	Mr.	Mohd Firdaus Bin Zomhari	860216-33-5791	Research Assistant	CRDCJengka
33	Mr.	Mohd Anuar Bin Arifin	800227-06-5331	Research Assistant	CRDCJengka
34	Mr.	Ahmad Firdaus Bin Ismail	820909-06-5433	Research Assistant	CRDCJengka
35	Mr.	Hasbullah Bin Nasip	860628-33-5325	Research Assistant	CRDCJengka

#### TOF program at Kundasang, Sabah

No.	Salutation	Participant Name	Identification Card	Position	Address
1	Mr.	Hj. Dipungang Tagak	650727-12-5061	Research Assistant	CRDC Tawau
2	Mr.	R. Khalid Irwan	841014-12-5637	Research Assistant	LKM Ranau Unit
3	Mr.	Rezer Sikit	861104-49-6245	Research Assistant	Headquater LKM
4	Mr.	Jaya Suria Sedek	840801-12-5113	Research Assistant	LKM Tenom Unit
5	Mr.	Eddmas Nizam Sanin	810320-12-5043	Research Assistant	LKM Ranau Unit
6	Mr.	Mohd. Dahrin Mohd. Gambar	780623-12-5513	Research Assistant	LKM Ranau Unit
7	Mr.	Matius Piri	770729-12-5707	Research Assistant	LKM Tenom Unit
8	Mr.	Jugah Kotos	740419-12-5683	Research Assistant	LKM Ranau Unit
9	Mr.	Azmi Mautar	810302-12-5787	Research Assistant	LKM Ranau Unit
10	Mr.	Ahmad Hj. Ghaffar	750620-12-5115	Research Assistant	CRDC Tawau
11	Mr.	Abdul Manan Miasin	690904-12-5529	Assistant Economic Affairs	Headquater LKM
12	Mr.	Juhilan Diamin	821121-12-5327	Research Assistant	LKM Tenom Unit



13	Mr.	Lokinsim Tumpangon	590702-12-5565	Leader Farmer	Kg. Kebayau, Kota Belud
14	Mr.	Amion Bin Majjudul	600221-12-5245	Leader Farmer	Kg. Indarason Darat, Matunggong
15	Mr.	Erisus Enggal	691216-12-5829	Leader Farmer	Kg. Kelangsat, Sipitang
16	Mr.	Josoh Lopoh	500610-12-5099	Leader Farmer	Kg. Tombongon. Menggatal, Kota Kinabalu
17	Mr.	June Muanoh	700119-12-5423	Leader Farmer	Kg. Kuamut, Kinabatang
18	Mr.	Rum Bin Angkaus	631011-12-5601	Leader Farmer	Kg. Sosopon, Tenom
19	Mr.	Jonis Radani	700626-12-5233	Leader Farmer	Kg. Poring, Ranau
20	Mr.	Seminding Jeymi	520720-12-5033	Leader Farmer	Kg. Babagon, Penampang, Kota Kinabalu
21	Mr.	Pollon Saminggau	540714-12-5209	Leader Farmer	Kg. Goshen, Kota Marudu
22	Mr.	Baru Lukas	581228-12-5255	Leader Farmer	Kg. Baru Jumpa, tenom
23	Mr.	Ginik Lunsin	670726-12-5121	Leader Farmer	Kg. Kiau, Kota Belud
24	Mr.	Nujarin Angadong	730908-12-5175	Leader Farmer	Kg. Togis, Ranau
25	Mr.	Ongkok Bin Ampasok	550720-12-5175	Leader Farmer	Kg. Biah, Keningau
26	Mr.	Asman Mahid	650712-12-5421	Leader Farmer	Kg. Pisak-Pisak, Pulau Sebatik, Tawau
27	Mr.	Waith Kaitam	590126-12-5291	Leader Farmer	Kg. Kemborongoh, Ranau
28	Mr.	Sait Jaafar	630206-12-5527	Leader Farmer	Kg. Sungai Tongkang, Pulau Sebatik, Tawau
29	Mr.	Majinus Kotos	651226-12-5463	Leader Farmer	Kg. Sedul, Ranau
30	Mr.	Bidi Bin Bongkok	490601-12-5015	Leader Farmer	Kg. Tambiau, Ranau
31	Mr.	Clarence Sipin	650816-12-5581	Leader Farmer	Kg. Damulai Baru, Tambunan
32	Mr.	Awang Kecil@Awang Bin Omar	590314-12-5387	Leader Farmer	Kg. Sinar Baru, Kinabatangan
33	Mr.	Francis Sinit	641005-12-5049	Leader Farmer	Kg. RBT, Sook, Keningau
34	Mr.	Hillary Arajai	770512-12-6127	Leader Farmer	Kg. Batu-Batu, Tenom
35	Mr.	Hasbullah Bin Nasip	860628-33-5325	Research Assistant	LKM Ranau Unit

**TOF program at CRDC Hilir Perak, Perak**

No.	Participant Name	Identification Card	Position	Address
1	Mat Rayu @ Mohd Nor Kamil B Yusoff	790707-03-5565	Research Assistant	LKM Machang Unit, Kelantan
2	Arrahman Bin Mohd Sa'ai	601205-08-5233	Research Assistant	CRDC Hilir Perak
3	Mohd Azmi Bin Mukhtar	810914-03-5491	Research Assistant	LKM Machang Unit, Kelantan
4	Mohamed Abqari Bin Mat Yusoff	881124-03-5823	Research Assistant	LKM Machang Unit, Kelantan
5	Mohd Noor Bin Abu Bakar	600219-08-5803	Economic Affair Asst.	CRDC Hilir Perak
6	Faizal Bin Mohd Nor	810608-08-6397	Asst. Research Officer	CRDC Hilir Perak
7	Mohd Nor Bin A. Ghani	650518-01-5069	Economic Affair Asst.	CRDC Hilir Perak
8	Mohd Fadzli Bin Bahari	811224-06-5161	Research Assistant	LKM Machang Unit, Kelantan
9	Khairul Azhar Bin Yahya	870801-08-5729	Research Assistant	CRDC Hilir Perak
10	Mazlan Bin Mohd Ghazali	820625-08-6021	Research Assistant	CRDC Hilir Perak
11	Abd Halim Bin Yahya	440801-08-5569	Farmer	Sg Siput, perak
12	Mohamed Mokhlas bin Ismail	440101-08-5621	Farmer	Kg. Sg. Pergam
13	Ali Omar b. Othman	461220-08-5731	Farmer	Taiping, Perak
14	Mohd Fauzi Bin Ismail	680621-03-5065	Farmer	Gua Musang
15	Hadu Bin Long	580212-08-5135	Farmer	Kg. Bersah
16	Amat Aini Bin Mungjat	480405-10-5659	Farmer	Sekinchan, Selangor
17	Mohd Daip Bin Yar @ Hj Omar	610421-10-6339	Farmer	Tanjung Karang
18	Adi a/l Usop	700320-08-6251	Farmer	Kg. Choh, Ulu Kinta
19	Mohd Asri bin Ismail	840417-03-6079	Farmer	Gua Musang
20	Ramli Bin Che Din	540210-02-5749	Farmer	Perlis
21	Zulkefli Mohd Ibrahim	701012-03-5051	Farmer	Gua Musang
22	Roslan Bin Yunus	600927-10-5289	Farmer	Sg Burung, Selangor
23	Mat Ghani Bin Musa	700818-03-5371	Farmer	Gua Musang
24	Harun bin Idris	491108-02-5701	Farmer	Kubang Pasu, Kedah
25	Azman Hussin	720326-03-5891	Farmer	Gua Musang
26	Suhaidi Apandi bin Mohamed	760324-03-5245	Farmer	Gua Musang
27	Che Agi Bin Majid @ Mat Yazia	740707-03-6191	Farmer	Gua Musang
28	Zed Hazaruddin Hashim	850603-03-5597	Farmer	Gua Musang
29	Mastor Bin Muni	601129-10-5799	Farmer	Sg Burung, Selangor
30	Ab Aziz Bin Muhammad	800110-03-5832	Farmer	Gua Musang
31	Mohd Khairul Bin Mahasan	800712-03-5187	Farmer	Gua Musang
32	Muhsin Maliki	891220-03-6139	Farmer	Gua Musang
33	Zanudin Mat Adam	601112-03-5499	Farmer	Gua Musang
34	Rosli bin Deraman	630517-03-5799	Farmer	Gua Musang
35	Mohamad Nazri Bin Abd Rashid	600106-08-6463	Farmer	Grik, Perak
36	Marzuki Bin Muhammad	730120-03-5369	Farmer	Gua Musang
37	Anshar bin asdi	810304-14-5511	Farmer	Gua Musang

**TOF program at CRDC Kota Samarahan, Sarawak**

No.	Salutation	Participant Name	Identification Card	Position	Address
1	Mr.	Janda Anak Jelian	720615-13-6319	Farmer Leader	Bintulu
2	Mr.	Selanjat Anak Usah	710624-13-5015	Farmer Leader	Bintulu
3	Mr.	Landa Anak Biew	620221-13-5679	Farmer Leader	Serian
4	Mr.	Saping Anak Ngaho	570605-13-5421	Farmer Leader	Serian
5	Mr.	Sandoi Anak Jangga	540119-13-5349	Farmer Leader	Serian
6	Mr.	Sylvester Bong	710930-13-5187	Farmer Leader	Serian
7	Mr.	John Estri @ Anak Juanan	620902-13-5375	Farmer Leader	Padawan
8	Mr.	Kayad Anak Sengeh	500517-13-5049	Farmer Leader	Padawan
9	Mr.	Tinggom Anak Aon	661208-13-5579	Farmer Leader	Sri Aman
10	Mr.	Lim Ah Seng	600419-13-5633	Farmer Leader	Sri Aman
11	Mr.	Jeli Anak Lebat	630901-13-5217	Farmer Leader	Simunjan
12	Mr.	Mac Anyan Anak Jalong	480110-13-5199	Farmer Leader	Simunjan
13	Mr.	Utum A/L Imu	611128-13-5223	Farmer Leader	Lubok Antu
14	Mr.	Agong Anak Impongan	690804-13-5375	Farmer Leader	Pakan
15	Mr.	Julin Anak Attan	691024-13-5475	Farmer Leader	Pakan
16	Mr.	Bengkeng Anak Dakak	470725-13-5161	Farmer Leader	Asajaya
17	Mr.	Lasah Anak Achai	530227-13-5847	Farmer Leader	Sebuyau
18	Mr.	Upo Apoi	701019-13-5717	Farmer Leader	Belaga
19	Mr.	Neh Liwan	601005-13-5371	Farmer Leader	Belaga
20	Mr.	Derik Anak Wat	670522-13-5395	Farmer Leader	Engkilili
21	Mr.	Igu @ Iguh Anak Nuli	560905-13-5117	Farmer Leader	Bintangor
22	Mr.	Bendidict Ego Anak Manggi	450101-13-5149	Farmer Leader	Bintangor
23	Mr.	Layang Anak Rekan	520828-13-5095	Farmer Leader	Betong
24	Mr.	Mawan Anak Keling	690627-13-5373	Farmer Leader	Betong
25	Mr.	Kadir Anak Indam	601125-13-5755	Farmer Leader	Saratok
26	Mr.	Roland Anak Lajen	750930-13-5247	Farmer Leader	Serian
27	Mr.	Bright Anak Klchen	620201-13-5719	Farmer Leader	Sri Aman
28	Mr.	Hendry Anak Renop	621011-13-5229	Farmer Leader	Padawan
29	Mr.	Tan Too Choon	550402-13-5239	Farmer Leader	Simunjan
30	Mr.	Lohor Bin Jabar	640901-13-5347	Farmer Leader	Sebuyau
31	Ms.	Winoryantie Sulaiman		Research officer	CRDC Kota Samarahan
32	Mr.	Gorong Ak Bilon		Research Assistant	CRDC Kota Samarahan
33	Mr.	Mohd Felani Wahi		Research Assistant	CRDC Kota Samarahan
34	Mr.	Mohd Fadly Wahi		Research Assistant	CRDC Kota Samarahan
35	Mr.	Mathew Ak Muda		Research Assistant	CRDC Kota Samarahan
36	Mr.	Randy Rayyan Bit bin Abdullah		Research Assistant	CRDC Kota Samarahan
37	Mr.	Nick Aaron Ak Stephen Nees		Research Assistant	CRDC Kota Samarahan

38	Mr.	Jamal bin Umar		Research Assistant	CRDC Kota Samarahan
39	Mr.	Nobil Thomas Ak Rejon		Research Assistant	CRDC Kota Samarahan
40	Ms.	Maryani Bt. Abd. Wahap		Research officer	CRDC Kota Samarahan
41	Mr.	Felix Boniface		Research Assistant	CRDC Kota Samarahan
42	Mr.	Mohd. Asrul Bin Zulkifli		Research Assistant	CRDC Kota Samarahan
43	Mr.	Mohd Felani Wahi		Research Assistant	CRDC Kota Samarahan
44	Mr.	Akmal Kushayrie Bin Edwin		Research Assistant	CRDC Kota Samarahan
45	Mr.	Randy Rayyan Bit bin Abdullah		Research Assistant	CRDC Kota Samarahan
46	Mr.	Timothy Anak Fencencius		Research Assistant	CRDC Kota Samarahan

iii. **The list of Master facilitators involved in the TOF program.**

Location	Master Facilitators	CABI (supervision)
CRDC Jengka, Pahang	<ul style="list-style-type: none"> <li>• Mr. Raize Shah Hussain (Leader)</li> <li>• Mr. Mohamad Azahar Nordin</li> <li>• Mr. Mohamad Jaafar Bin Hussin</li> <li>• Dr. Rozita Osman</li> </ul>	Mr. Jeremy Ngim
Kundasang, Sabah	<ul style="list-style-type: none"> <li>• Ms. Nazmiah Mohd. Duin (Leader)</li> <li>• Mr. Edwin Mujin</li> <li>• Mr. Mohd. Yusuf Ishak</li> <li>• Mr. Leonardo Regino</li> </ul>	Dr. Soetikno S. S.
CRDC Hilir Perak	<ul style="list-style-type: none"> <li>• Mr. Mohd Mustafa Munim Bin Motolani (Leader)</li> <li>• Mr. Mohamed Helmi Bin Shari</li> <li>• Ms. Khairul Bariah Sulaiman</li> <li>• Mr. Muhamad Aizad Bin Johari</li> </ul>	Mr. Jeremy Ngim
CRDC Kota Samarahan	<ul style="list-style-type: none"> <li>• Mr. Pengarah Anak Lau (Leader)</li> <li>• Mr. Mazalan Ali</li> <li>• Mr. Mohammad Rizman bin Niger Mahidin</li> </ul>	Dr. Soetikno S. S.

iv. The syllabus for the TOF program.

TOF program for cocoa farmers and extension agents in CRDC Jengka, Pahang

Theories conducted in classroom	Practical conducted in field
<ul style="list-style-type: none"> <li>• Participatory introduction of participants</li> <li>• Survey of participants' background</li> <li>• Background information on Cocoa Safe Project</li> <li>• The function of TOF course</li> <li>• Group formation and responsibilities</li> <li>• Roles and responsibilities of Facilitators and Farmers</li> <li>• Curriculum of TOF course</li> <li>• Food safety &amp; HACCP</li> <li>• Production and constraints to cocoa production in Malaysia</li> <li>• Constraints to export cocoa beans and regulations on food safety and SPS</li> <li>• Major <b>disease</b> of cocoa and its management</li> <li>• Major <b>insect pests</b> of cocoa and its management</li> <li>• Cocoa farm maintenance (shade) management and cocoa pruning: relation to disease management</li> <li>• Roles of soil types and heavy metals in cocoa production</li> <li>• Safe &amp; effective use of knapsack sprayers</li> <li>• Applying fertilizers to cocoa trees</li> <li>• Harvesting, pod storage and breaking</li> <li>• Fermentation and drying</li> <li>• Grading and Quality checks</li> </ul>	<ul style="list-style-type: none"> <li>• SFFS-1: Cocoa cropping calendar</li> <li>• SFFS-2: Cocoa ecosystem</li> <li>• SFFS-3: Cocoa food web</li> <li>• AESA-1: Agro-ecosystem analysis</li> <li>• AESA-2: Identifying and collecting healthy ripe pods, diseased, CPB infested and rodent damaged pods in the field</li> <li>• CH-1: Pruning and canopy height control</li> <li>• CH-5: Fertilizer application on cocoa</li> <li>• CDP-2: Disease infection study</li> <li>• CDP-6: Insect zoo – CPB symptom development</li> <li>• CDP-7: Observing predation</li> </ul>

**TOF program for cocoa farmers and extension agents in Kundasang, Sabah**

Theories conducted in classroom	Practical conducted in field
<ul style="list-style-type: none"> <li>• Participatory introduction of participants</li> <li>• Survey of participants' background</li> <li>• Background information on Cocoa Safe Project</li> <li>• The function of TOF course</li> <li>• Group formation and responsibilities</li> <li>• Roles and responsibilities of Facilitators and Farmers</li> <li>• Curriculum of TOF course</li> <li>• Food safety &amp; HACCP</li> <li>• Production and constraints to cocoa production in Malaysia</li> <li>• Constraints to export cocoa beans and regulations on food safety and SPS</li> <li>• Major <b>disease</b> of cocoa and its management</li> <li>• Major <b>insect pests</b> of cocoa and its management</li> <li>• Cocoa farm maintenance (shade) management and cocoa pruning: relation to disease management</li> <li>• Applying fertilizers to cocoa trees</li> <li>• GAP</li> <li>• Responsible Use (5 golden rules, SDS)</li> <li>• Safe &amp; effective use of pesticides in cocoa farm</li> <li>• Harvesting, pod storage and breaking</li> <li>• Fermentation and drying</li> <li>• Grading and Quality checks</li> <li>• Pesticides used in cocoa</li> </ul>	<ul style="list-style-type: none"> <li>• SFFS-1: Cocoa cropping calendar</li> <li>• SFFS-2: Cocoa Ecosystem</li> <li>• AESA-1: Agro-ecosystem analysis</li> <li>• AESA-2: Identifying and collecting healthy ripe pods, diseased, CPB infested and rodent damaged pods in the field</li> <li>• CH-1: Pruning and canopy height control</li> <li>• CH-5: Fertilizer application on cocoa</li> <li>• CDP-2: Disease infection study</li> <li>• CDP-6: Insect zoo – CPB symptom development</li> <li>• CDP-7: Observing predation</li> <li>• RPU-6: Spray dye exercise</li> <li>• CQ-1: Fermentation and Cocoa Quality</li> <li>• CQ: Grading of dry cocoa beans</li> </ul>

**TOF program for cocoa farmers and extension agents in CRDC Hilir Perak, Perak.**

Theories conducted in classroom	Practical conducted in field
<ul style="list-style-type: none"> <li>• Participatory introduction of participants</li> <li>• Survey of participants' background</li> <li>• Background information on Cocoa Safe Project</li> <li>• The function of TOF course</li> <li>• Group formation and responsibilities</li> <li>• Roles and responsibilities of Facilitators and Farmers</li> <li>• Curriculum of TOF course</li> <li>• Food safety &amp; HACCP</li> <li>• Production and constraints to cocoa production in Malaysia</li> <li>• Constraints to export cocoa beans and regulations on food safety and SPS</li> <li>• Major <b>disease</b> of cocoa and its management</li> <li>• Major <b>insect pests</b> of cocoa and its management</li> <li>• Cocoa farm maintenance (shade) management and cocoa pruning: relation to disease management</li> <li>• Roles of soil types and heavy metals in cocoa production</li> <li>• Applying fertilizers to cocoa trees</li> <li>• GAP</li> <li>• Responsible Use (5 golden rules, SDS)</li> <li>• Safe &amp; effective use of pesticides in cocoa farm</li> <li>• Harvesting, pod storage and breaking</li> <li>• Fermentation and drying</li> <li>• Grading and Quality checks</li> <li>• Pesticides used in cocoa</li> </ul>	<ul style="list-style-type: none"> <li>• SFFS-1: Cocoa cropping calendar</li> <li>• AESA-1: Agro-ecosystem analysis</li> <li>• AESA-2: Identifying and collecting healthy ripe pods, diseased, CPB infested and rodent damaged pods in the field</li> <li>• CH-1: Pruning and canopy height control</li> <li>• CDP-2: Disease infection study</li> <li>• CDP-6: Insect zoo – CPB symptom development</li> <li>• RPU-6: Spray dye exercise</li> <li>• CQ-1: Fermentation and Cocoa Quality</li> <li>• CQ: Grading of dry cocoa beans</li> </ul>

**TOF program for cocoa farmers and extension agents in CRDC Kota Samarahan, Sarawak.**

Theories conducted in classroom	Practical conducted in field
<ul style="list-style-type: none"> <li>• Participatory introduction of participants</li> <li>• Survey of participants' background</li> <li>• Background information on Cocoa Safe Project</li> <li>• The function of TOF course</li> <li>• Group formation and responsibilities</li> <li>• Roles and responsibilities of Facilitators and Farmers</li> <li>• Curriculum of TOF course</li> <li>• Food safety &amp; HACCP</li> <li>• Production and constraints to cocoa production in Malaysia</li> <li>• Constraints to export cocoa beans and regulations on food safety and SPS</li> <li>• Major <b>disease</b> of cocoa and its management</li> <li>• Major <b>insect pests</b> of cocoa and its management</li> <li>• Cocoa farm maintenance (shade) management and cocoa pruning: relation to disease management</li> <li>• Cocoa farm sanitation</li> <li>• Applying fertilizers to cocoa trees</li> <li>• GAP</li> <li>• Responsible Use (5 golden rules, SDS)</li> <li>• Safe &amp; effective use of pesticides in cocoa farm</li> <li>• Harvesting, pod storage and breaking</li> <li>• Fermentation and drying</li> <li>• Grading and Quality checks</li> <li>• The plant science industry</li> <li>• Pesticides used in cocoa</li> </ul>	<ul style="list-style-type: none"> <li>• SFFS-1: Cocoa cropping calendar</li> <li>• SFFS-2: Cocoa Ecosystem</li> <li>• SFFS-4: Ballot box test</li> <li>• AESA-1: Agro-ecosystem analysis</li> <li>• AESA-2: Identifying and collecting healthy ripe pods, diseased, CPB infested and rodent damaged pods in the field</li> <li>• CH-1: Pruning and canopy height control</li> <li>• CDP-2: Disease infection study</li> <li>• RPU-6: Spray dye exercise</li> <li>• CQ-1: Fermentation and Cocoa Quality</li> <li>• CQ: Grading of dry cocoa beans</li> </ul>



**TOF program for agro-dealers in CRDC Kota Samarahan, Sarawak.**

<b>Theories conducted in classroom</b>	<b>Practical conducted in field</b>
<ul style="list-style-type: none"> <li>• Participatory introduction of participants</li> <li>• Survey of participants' background</li> <li>• Background information on Cocoa Safe Project</li> <li>• The function of TOF course</li> <li>• Group formation and responsibilities</li> <li>• Roles and responsibilities of Facilitators and agro-dealers</li> <li>• Curriculum of TOF course</li> <li>• Food safety &amp; HACCP</li> <li>• Production and constraints to cocoa production in Malaysia</li> <li>• Constraints to export cocoa beans and regulations on food safety and SPS</li> <li>• Major pests and disease of cocoa and its management</li> <li>• Roles of soil types and heavy metals in cocoa production</li> <li>• GAP</li> <li>• Cocoa farm sanitation</li> <li>• Pesticides in cocoa farm</li> <li>• Pesticide Regulations in Malaysia</li> <li>• Pesticide Classification &amp; Formulation</li> <li>• Safe and effective use of knapsack sprayers</li> <li>• Pesticide Storage</li> <li>• Pesticide Application Technology – PAT</li> <li>• Pesticide Labelling &amp; Registration</li> <li>• Registered pesticides for cocoa in Malaysia</li> <li>• Pesticides &amp; Human Health</li> <li>• Harvesting, pod storage and breaking, fermentation and drying cocoa beans</li> <li>• Grading and Quality checks</li> <li>• Packaging, transporting &amp; Shipping practices</li> </ul>	<ul style="list-style-type: none"> <li>• RPU-2: Understanding pesticides regulations</li> <li>• RPU-3: Calibration and performance sprayers</li> <li>• RPU-6: Spray dye exercise</li> <li>• CQ-1: Fermentation and Cocoa Quality</li> <li>• CQ-5: Grading of dry cocoa beans</li> </ul>

v. **The pre and post-evaluation on the TOF program.**

**TOF program for cocoa farmers and extension agents in CRDC Jengka, Pahang.**

<b>Evaluation</b>	<b>Pre</b>	<b>Post</b>
Minimum score	9/40	20/40
Maximum score	34/40	40/40
Number of facilitators scored full marks (40)	0	5
Number of facilitators scored 31 – 39	27	24
Number of facilitators scored below 30	8	6

**TOF program for cocoa farmers and extension agents in Kundasang, Sabah.**

<b>Evaluation</b>	<b>Pre</b>	<b>Post</b>
Minimum score	12/40	32/40
Maximum score	34/40	40/40
Number of facilitators scored full marks (40)	0	1
Number of facilitators scored 31 – 39	32	33
Number of facilitators scored below 30	2	0

**TOF program for cocoa farmers and extension agents in CRDC Hilir Perak, Perak.**

<b>Evaluation</b>	<b>Pre</b>	<b>Post</b>
Minimum score	14/40	21/40
Maximum score	31/40	40/40
Number of facilitators scored full marks (40)	0	1
Number of facilitators scored 31 – 39	31	27
Number of facilitators scored below 30	6	9

**TOF program for cocoa farmers and extension agents in CRDC Kota Samarahan, Sarawak**

<b>Evaluation</b>	<b>Pre</b>	<b>Post</b>
Minimum score	6/40	23/40
Maximum score	35/40	39/40
Number of facilitators scored full marks (40)	0	0
Number of facilitators scored 31 – 39	37	37
Number of facilitators scored below 30	9	9

**TOF program for agro-dealers in CRDC Kota Samarahan, Sarawak.**

<b>Evaluation</b>	<b>Pre</b>	<b>Post</b>
Minimum score	18/40	25/40
Maximum score	33/40	35/40
Number of facilitators scored full marks (40)	0	0
Number of facilitators scored 31 – 39	11	13
Number of facilitators scored below 30	6	4

vi. Group photos of the TOF's participants with their trainers and VIPs.

TOF program for cocoa farmers and extension agents in CRDC Jengka, Pahang



TOF program for cocoa farmers and extension agents in Kundasang, Sabah



**TOF program for cocoa farmers and extension agents in CRDC Hilir Perak, Perak**



**TOF program for cocoa farmers and extension agents in CRDC Kota Samarahan, Sarawak**



**TOF program for agro-dealers in CRDC Kota Samarahan, Sarawak**



**vii. Pictures of TOF activities.**

**TOF program for cocoa farmers and extension agents in CRDC Jengka, Pahang**





**TOF program for cocoa farmers and extension agents in Kundasang, Sabah**





**TOF program for cocoa farmers and extension agents in CRDC Hilir Perak, Perak**





**TOF program for cocoa farmers and extension agents in CRDC Kota Samarahan, Sarawak**







**TOF program for agro-dealers in CRDC Kota Samarahan, Sarawak**





#### 9.2.4. Output 4: Baseline survey and impact study on farmers and agro-dealers

##### i. Baseline Information On Farmers

**Table 1a.** Distribution of cocoa farmers attending TOF training in Malaysia

State	Participants of TOF	
	No.	Percentage
Kedah	1	1.0
Kelantan	13	13.5
Pahang	20	20.8
Perak	6	6.3
Perlis	1	1.0
Sabah	21	21.9
Sarawak	30	31.3
Selangor	4	4.2
<b>Total</b>	<b>96</b>	<b>100</b>

**Table 1b.** Age distribution of cocoa farmers attending TOF training in Malaysia

Age group	Participants of TOF	
	No.	Percentage
Less than 20 years old	1	1.0
21 – 30 years old	4	4.2
31 – 40 years old	11	11.5
41 – 50 years old	30	31.3
51 – 60 years old	33	34.4
Above 60 years old	17	17.7
<b>Total</b>	<b>96</b>	<b>100</b>

**Table 2.** Gender distribution among participants attending TOF training in Malaysia

Gender	Participants of TOF	
	No.	Percentage
Male	85	88.5
Female	11	11.5
<b>Total</b>	<b>96</b>	<b>100.0</b>

**Table 3.** Level of education among participants attending TOF training in Malaysia

Education level	Participants of TOF	
	No.	Percentage
None	5	5.2
Primary	30	31.3
Secondary	57	59.4
Tertiary	4	4.2
<b>Total</b>	<b>96</b>	<b>100.0</b>

**Table 4.** Participant's children (s) help in the farm during school holidays (not the schooling weekend)  
(This is a form of children above 10 years old to gain experience how their parents do work in the fields)

Children help in the farm during school holidays (not the schooling weekend)	Participants of TOF	
	No.	Percentage
None	42	43.8
One	37	38.5
Two or more	17	17.7
<b>Total</b>	<b>96</b>	<b>100.0</b>

**Table 5.** Participant's children\* willing to take over the farm

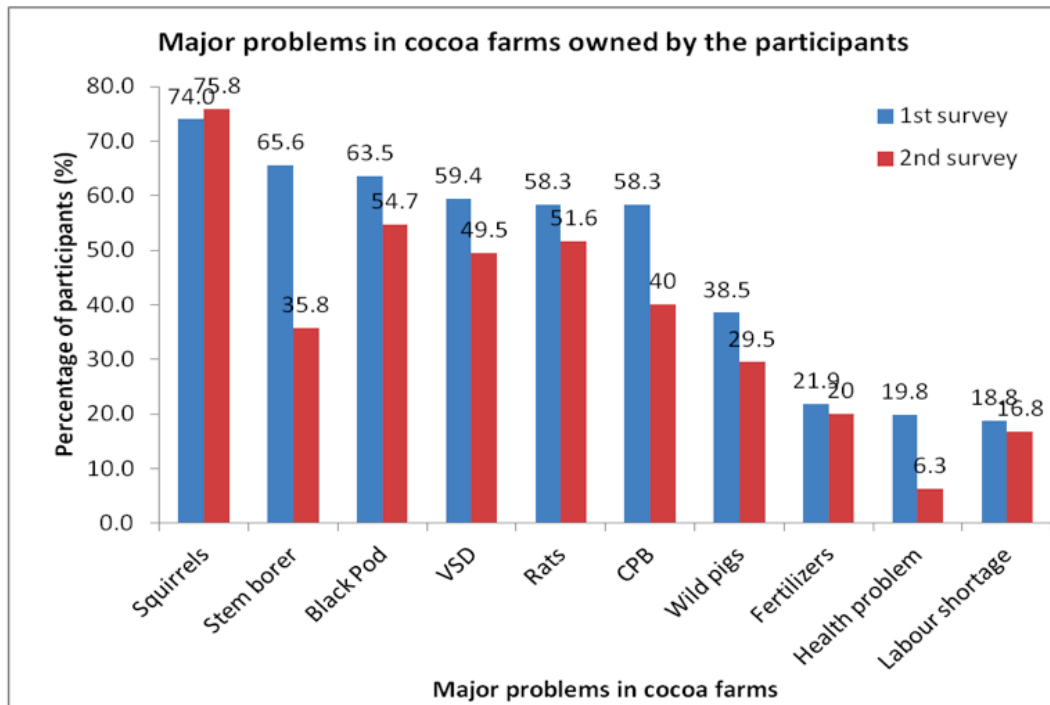
Children willing to take over the farm	Participants of TOF	
	No.	Percentage
No sure	14	14.6
No	24	25.0
Yes	58	60.4
<b>Total</b>	<b>96</b>	<b>100.0</b>

\* Refer to children above 18 years old.

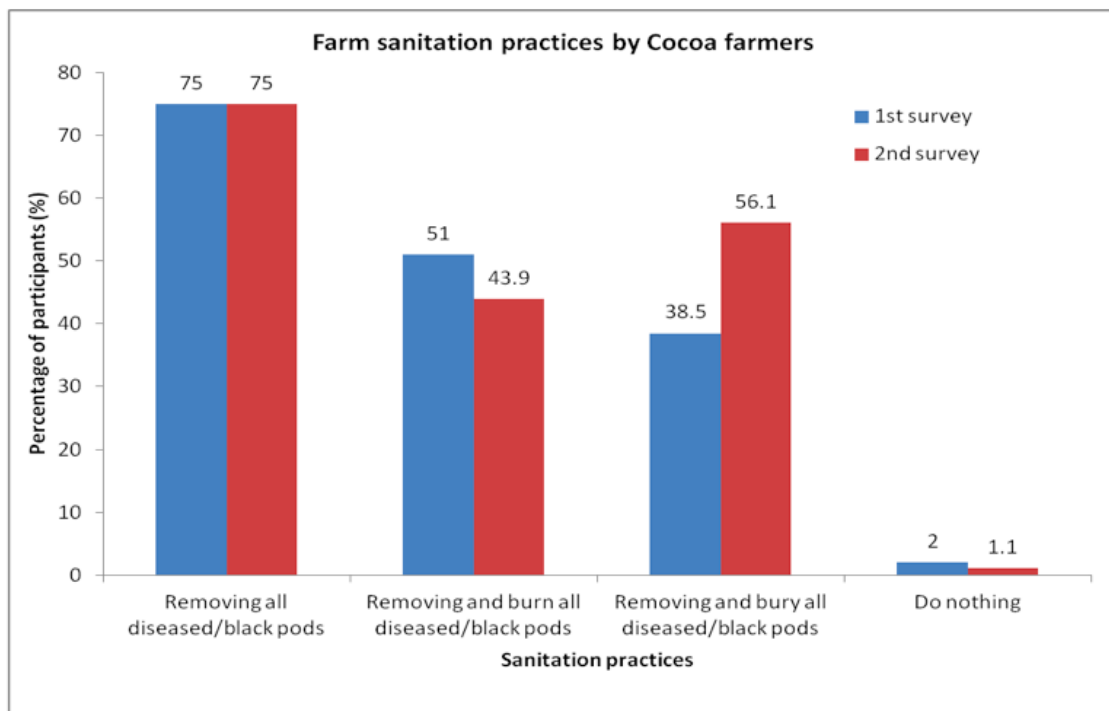
**Table 6.** Total cocoa tree stands in participant's farm

Total cocoa tree stands	Participants of TOF	
	No.	Percentage
No response	13	13.5
1-100	6	6.3
101-200	8	8.3
201-500	16	16.7
501-1000	28	29.2
1001-2000	15	15.6
>2000	10	10.4
<b>Total</b>	<b>96</b>	<b>100</b>

ii. **Knowledge On Crop Management**



**Figure 1.** Major problems in cocoa farms owned by the participants in 1<sup>st</sup> survey and 2<sup>nd</sup> survey

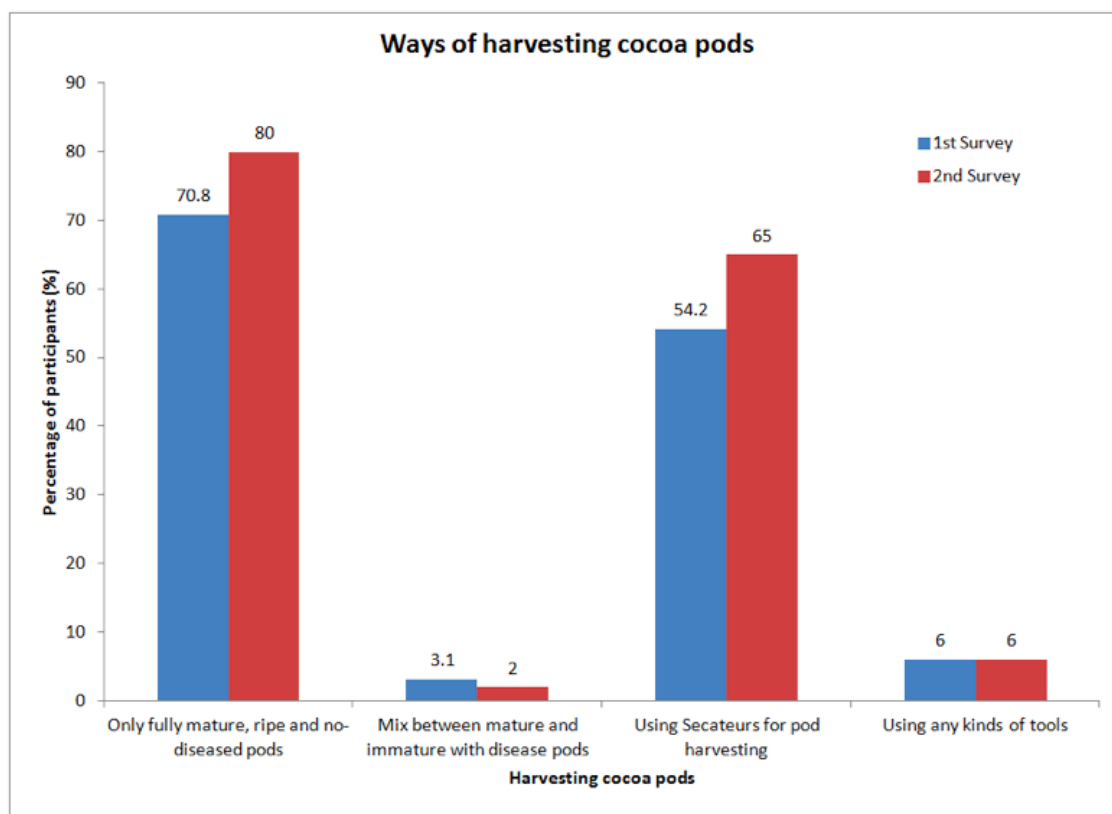


**Figure 2.** Farm sanitation practices by farmers of TOF participants against cocoa pest and diseases

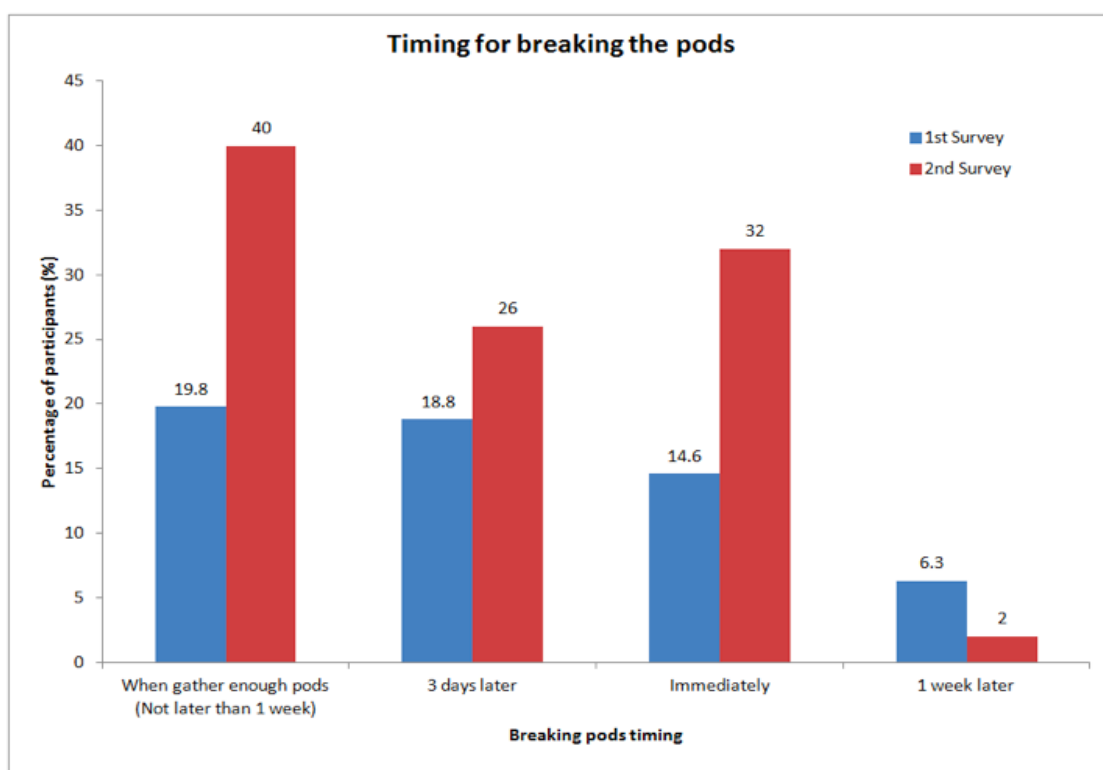
**Table 7.** Time interval in applying chemical / biological control in participant's farm in the impact survey

Chemical / biological control interval	Participants of TOF responded to the question	
	No.	Percentage
Within or less than 1 week	15	20.83
Within 2 weeks	35	48.62
Within 3 weeks	2	2.78
Within 1 month	16	22.22
Within 40 days	1	1.38
Within 2 months	2	2.78
Within 3 months	1	1.39
<b>Total</b>	<b>72</b>	<b>100.00</b>

iii. **Cocoa Harvesting, Drying & Fermentation**



**Figure 3.** Ways of harvesting cocoa pods by farmers of TOF participants



**Figure 4.** The timing for breaking the cocoa pods by farmers of TOF participants

**Table 8.** Beans collection by participating farmers in the impact survey

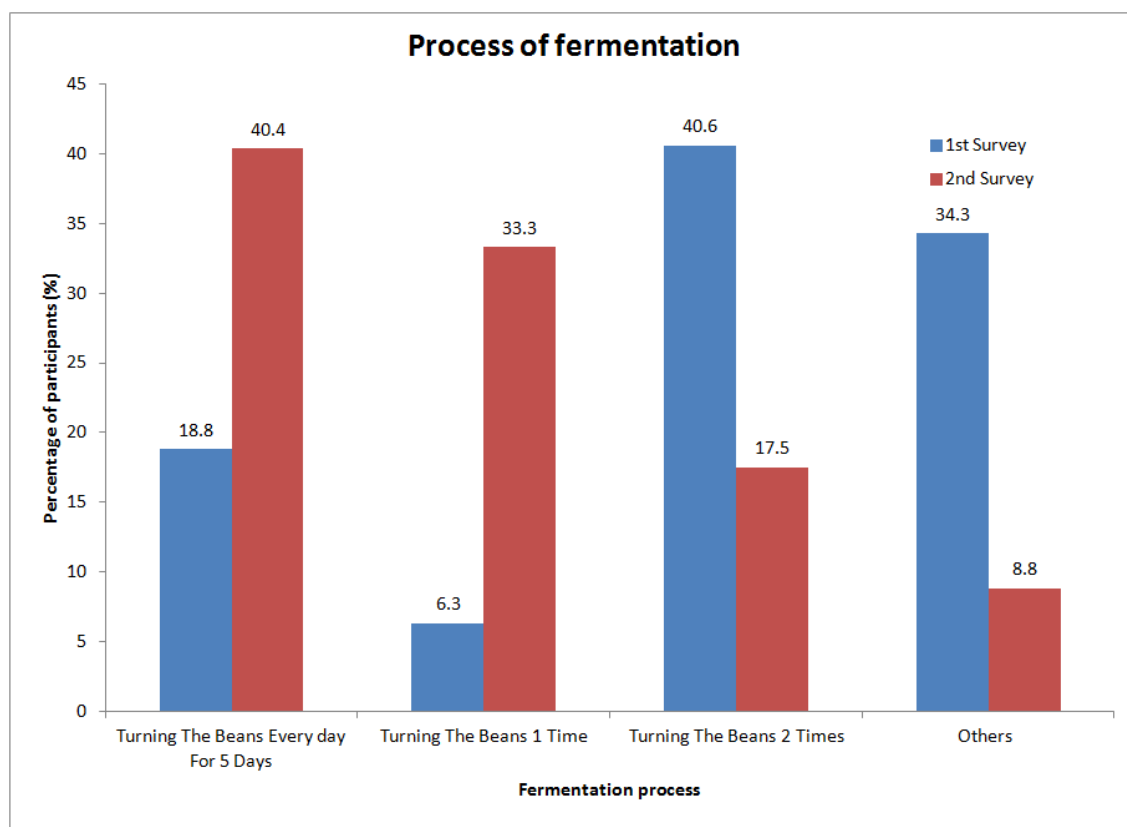
Beans collection	Participants of TOF responded to the question	
	No.	Percentage
Include germinated beans	0	0.0
Include diseased-pod beans	8	16.0
Only good beans	42	84.0
<b>Total</b>	<b>50</b>	<b>100</b>

**Table 9.** Cocoa beans fermented by farmers of TOF participants in the impact survey

Fermentation	Participants of TOF responded to the question	
	No.	Percentage
Yes	59	62.1
No (sold as wet beans to a middle processor)	36	37.9
<b>Total</b>	<b>95</b>	<b>100</b>

**Table 10.** Fermentation method used by farmers of TOF participants in the impact survey

Fermentation method	Participants of TOF responded to the question	
	No.	Percentage
Using Small Heap Fermentation	13	16.9
Using Basket Fermentation	39	50.6
Using Box Fermentation	25	32.5
<b>Total</b>	<b>77</b>	<b>100</b>

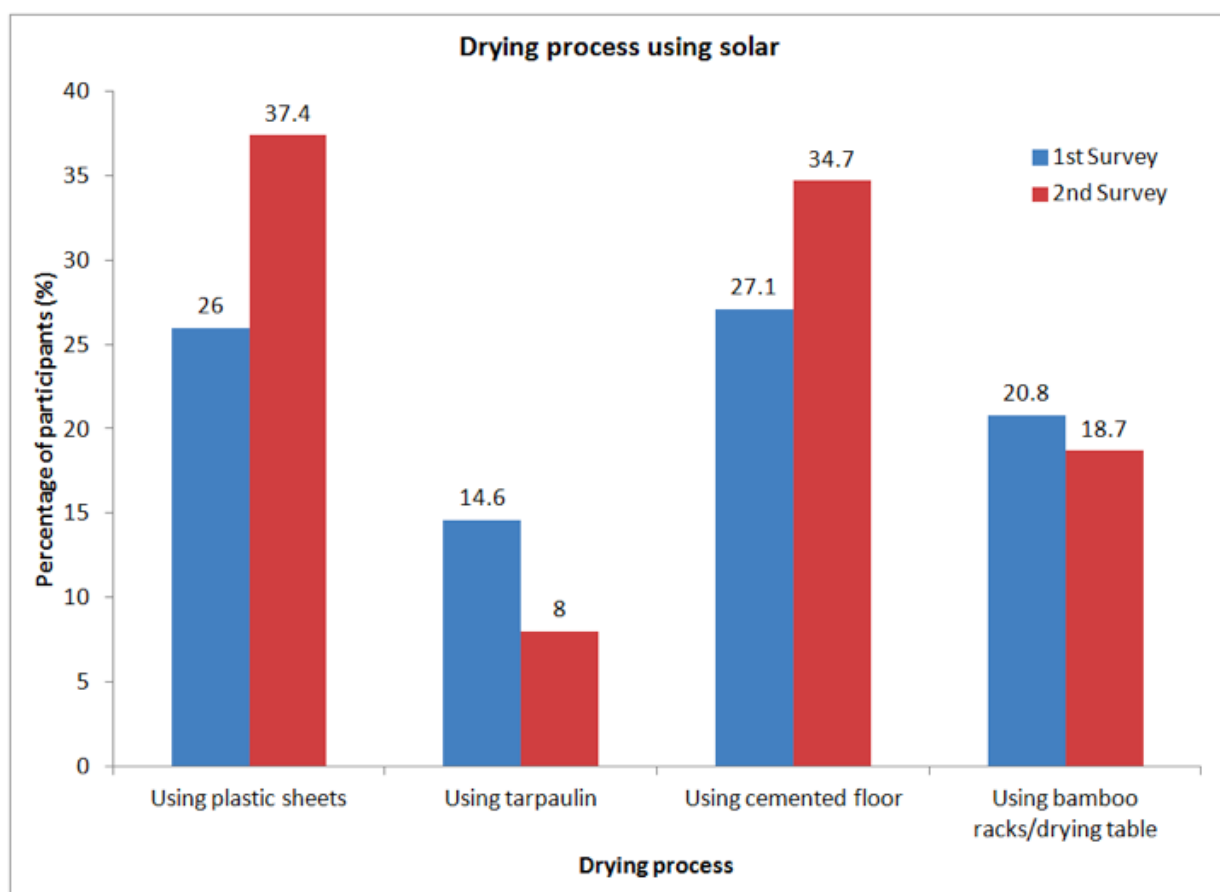


**Figure 5.** Bean-turning during fermentation by farmers of TOF (participants)

**Table 11.** Beans mixing approaches used by participating farmers in the impact survey

Mixing harvested beans	Participants of TOF responded to the question	
	No.	Percentage
Mixing Beans harvested from Day 1 and Day 2	22	84.6
Mixing Beans harvested from Day1, Day2 and Day 3	2	7.7
Mixing Beans harvested more than 3 Day	2	7.7
<b>Total</b>	<b>26</b>	<b>100</b>





**Figure 6.** Drying process using solar by participating farmers

iv. **Storage Of Cocoa Beans**

**Table 12.** Beans storage approaches used by farmers of TOF participants in 2<sup>nd</sup> baseline survey

Beans storage	Participants of TOF responded to the question	
	Frequency	Percentage
Store beans in sacks in house	46	48.4
Store beans as loose in house	13	13.7
Store beans as loose beans in warehouse	4	4.2
<b>Total</b>	<b>95</b>	<b>100</b>

**Table 13.** Beans storage along-side other products in 2<sup>nd</sup> baseline survey

Store other products along-side the cocoa beans	Participants of TOF responded to the question	
	Frequency	Percentage
Not store other products along-side the cocoa beans	61	93.8
Along-side banana	1	1.5
Along-side pepper	2	3.1
Along-side rice	1	1.5
<b>Total</b>	<b>65</b>	<b>100</b>

v. **Use Of Chemicals & Pesticides**

**Table 14.** Chemical used on the farm as reported in the impact survey

Chemicals used on the farm	Participants of TOF responded to the question	
	Frequency	Percentage
Yes	88	92.6
No	7	7.4
<b>Total</b>	<b>95</b>	<b>100</b>

**Table 15.** Types of chemical used on the farm as reported in the impact survey

Type of Chemicals used	Participants of TOF responded to the question	
	Frequency	Percentage
Used Brand	76	84.4
Used No Brand	14	15.6
<b>Total</b>	<b>90</b>	<b>100</b>

**Table 15.** Organizations responsible in supplying chemicals as reported in the impact survey

Responsible for supplying the chemicals	Participants of TOF responded to the question	
	Frequency	Percentage
Department of Agriculture Malaysia	18	28.6
Farmers (self) purchase / chemical retailer	12	19.0
Malaysian Cocoa Board	30	47.6
South Kelantan Development Authority (KESEDAR)	3	4.8
<b>Total</b>	<b>63</b>	<b>100</b>

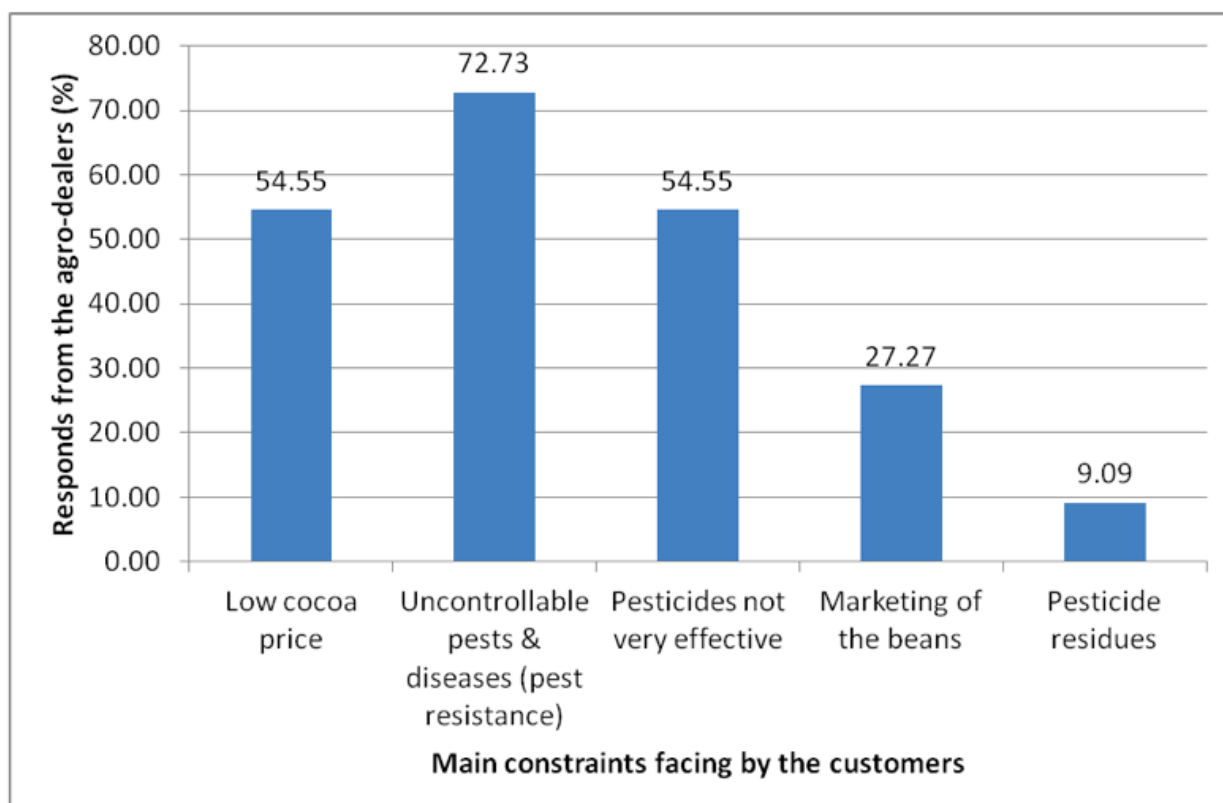
**Table 16.** Equipment used in applying the chemicals as reported in the impact survey

Equipment used in applying the chemicals	Participants of TOF responded to the question	
	Frequency	Percentage
Knapsack Sprayer	69	75.0
Mist Blower	6	6.5
Battery operated Sprayer	10	10.9
Other	7	7.6
<b>Total</b>	<b>92</b>	<b>100</b>

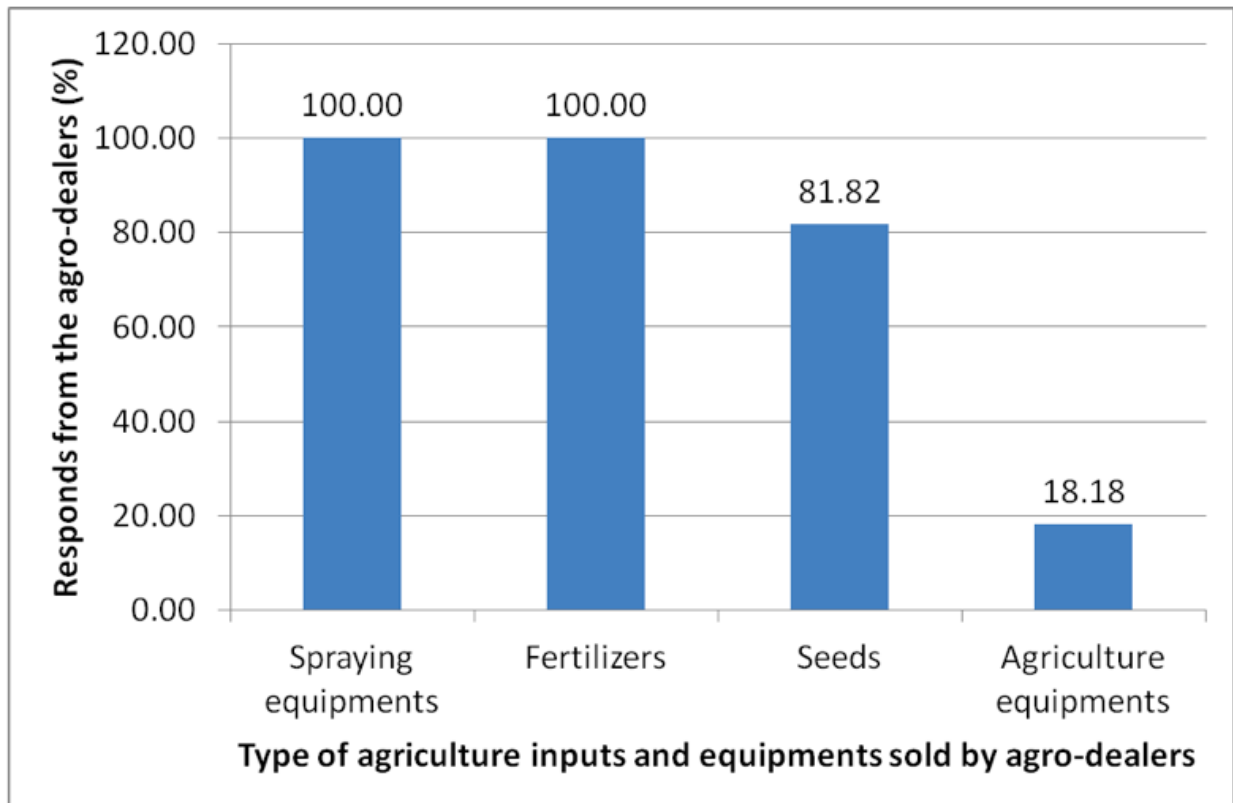
**Table 17.** Protective clothing or equipment worn during chemical application, reported in the impact survey

Equipment used when applying the chemical	Participants of TOF responded to the question	
	Frequency	Percentage
Hat	84	88.4
Gloves	77	81.1
Rubber Boots	93	97.9
Over Trousers	70	73.7
Apron	11	11.6
Coat	18	18.9
Eye Goggles	48	50.5
Mask	63	66.3
Full Face Mask	12	12.6

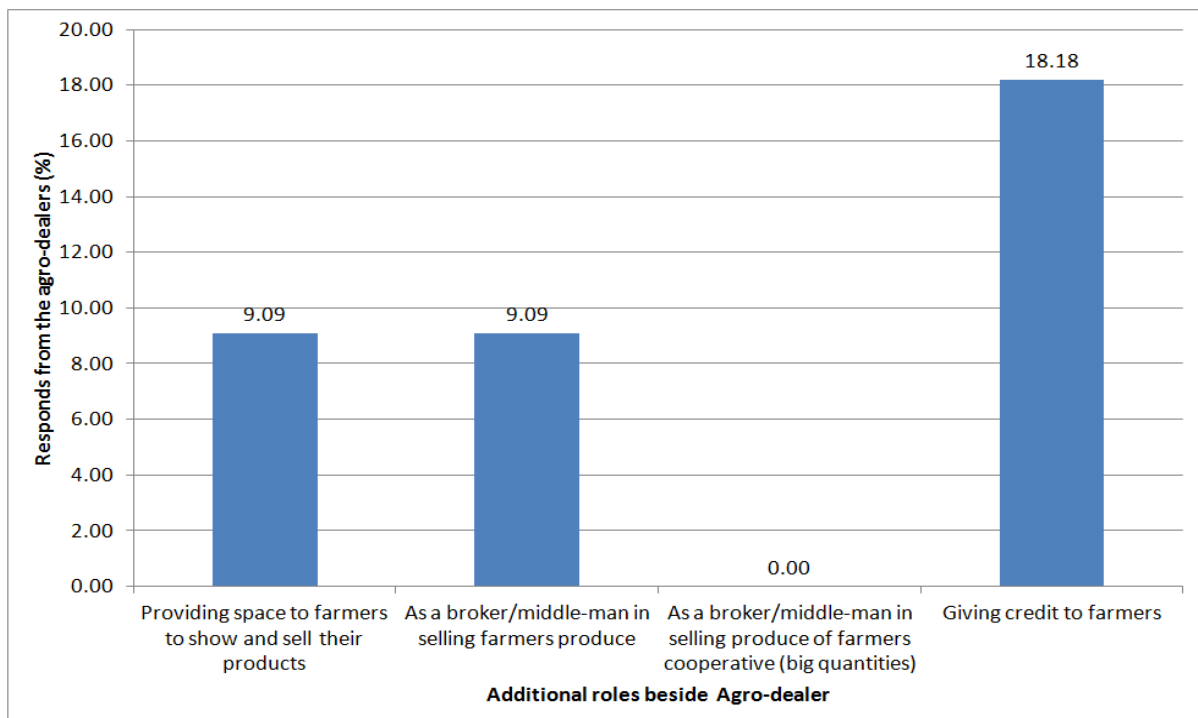
vi. **Baseline Information On Agro-Dealers**



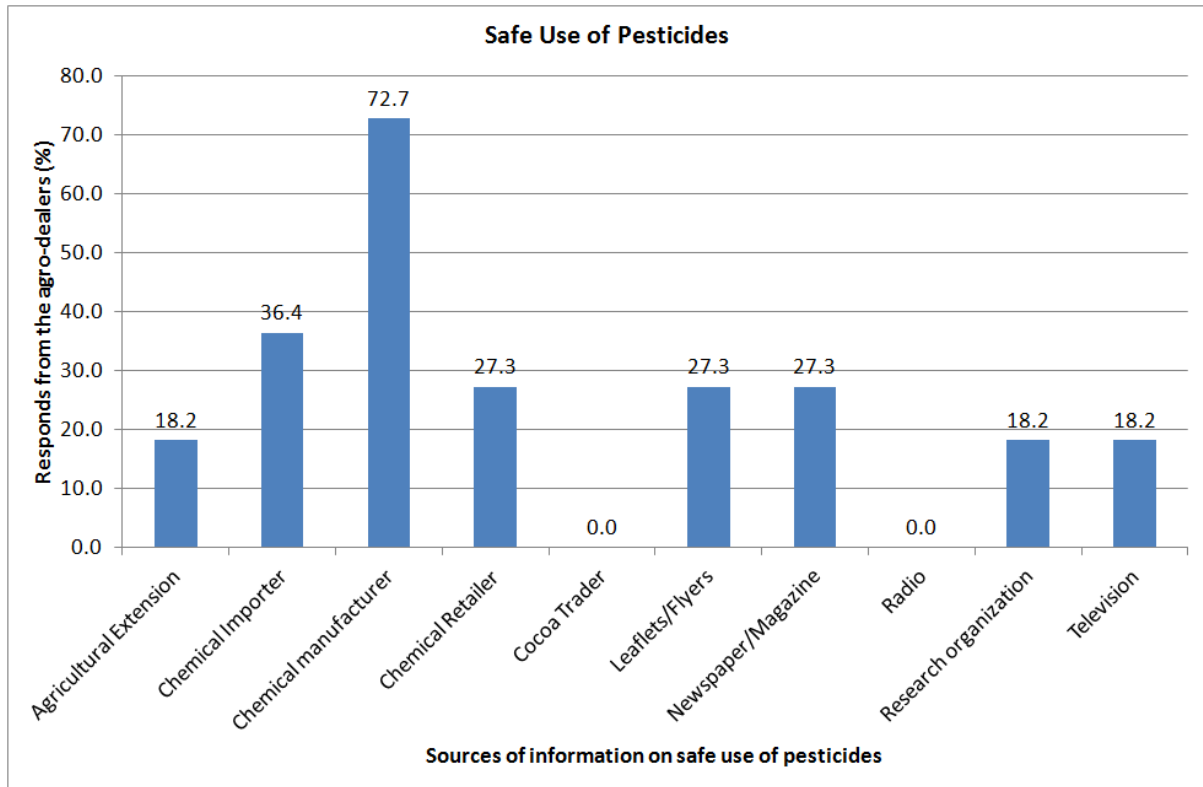
**Figure 7.** Main constraints faced by agro-dealer's customers in cocoa production.



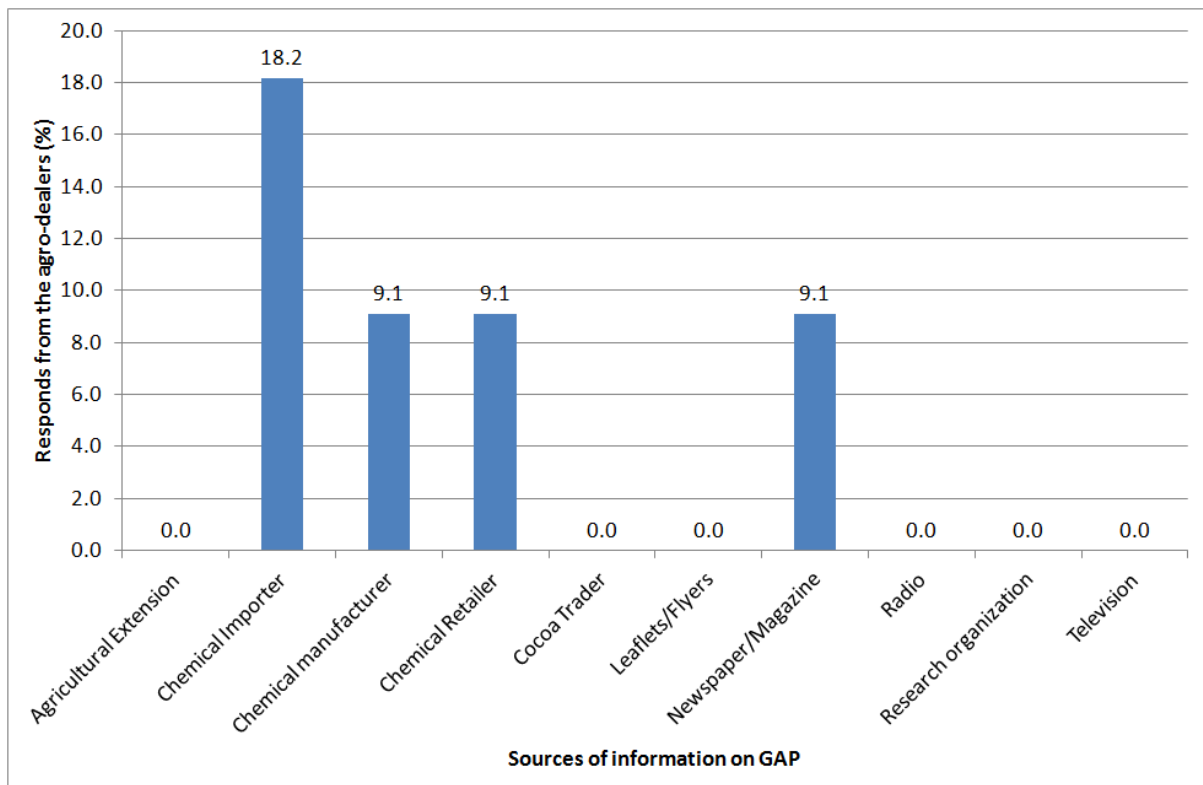
**Figure 8.** Types of agricultural inputs and equipment sold by the agro-dealers besides pesticides.



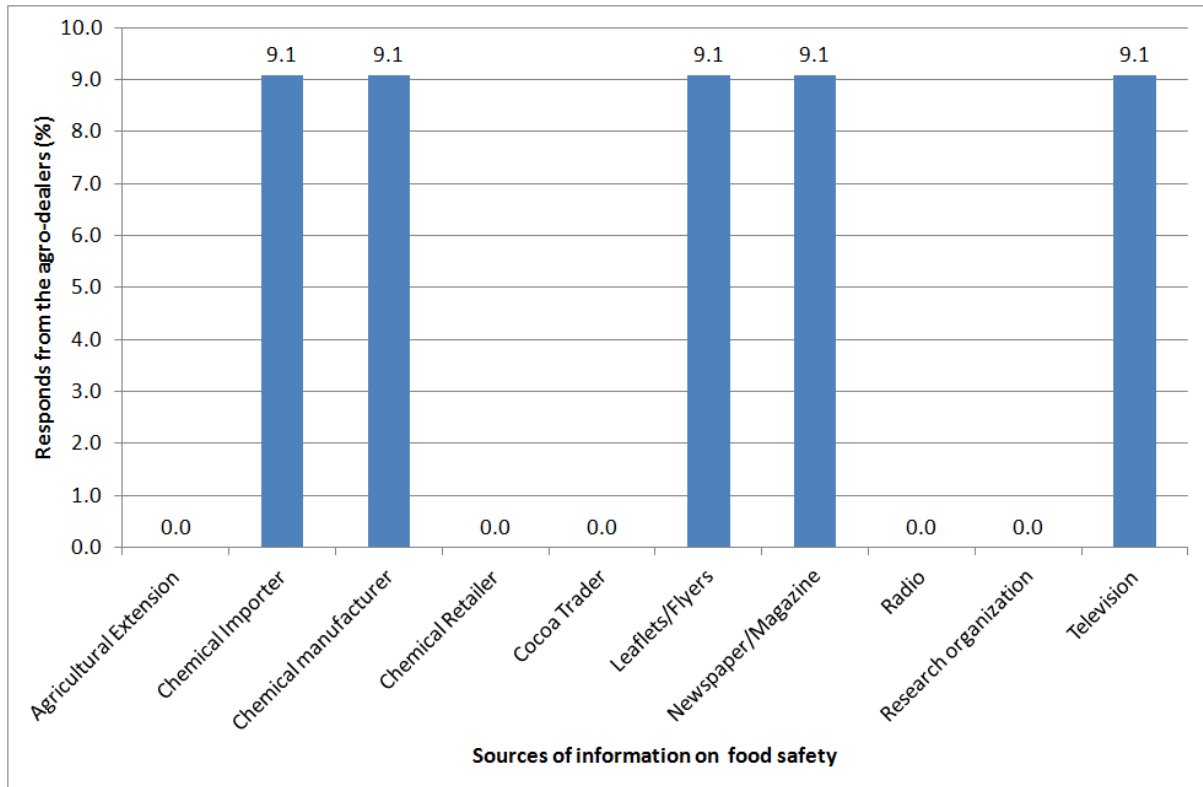
**Figure 9.** Additional roles of the agro-dealers.



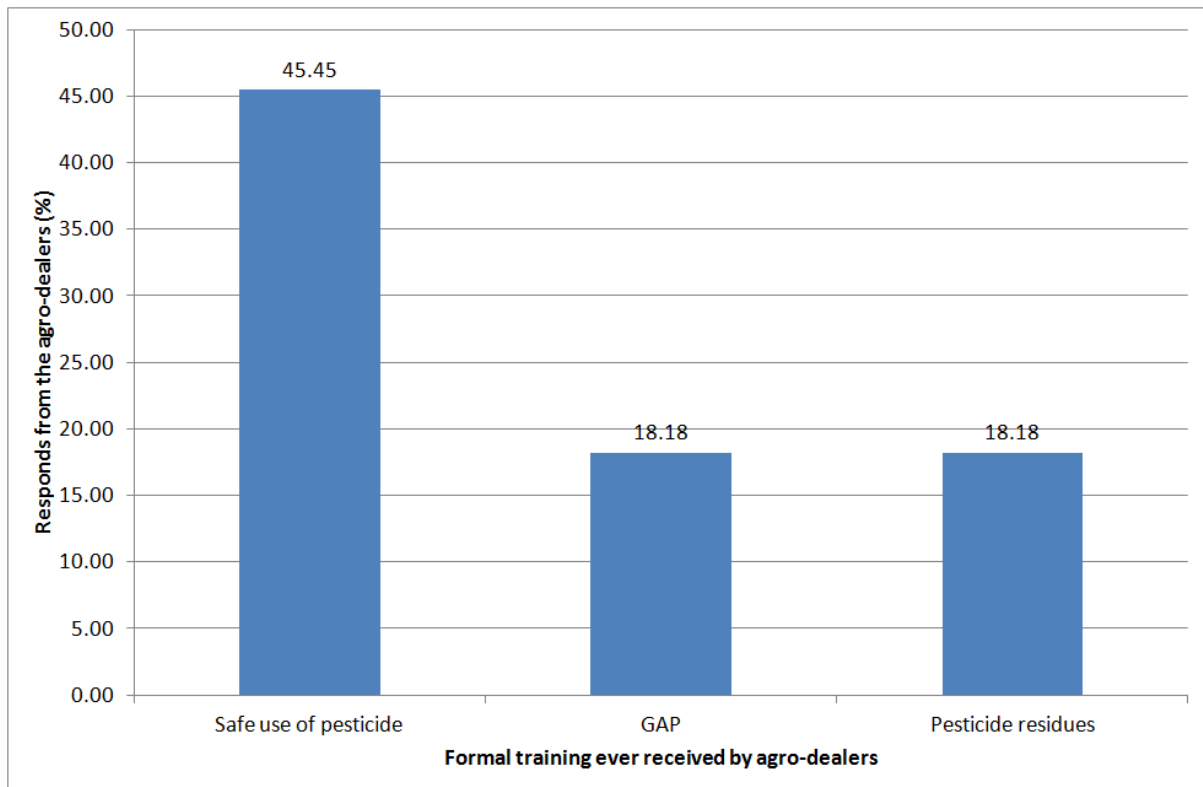
**Figure 10.** Sources of information on safe use of pesticides.



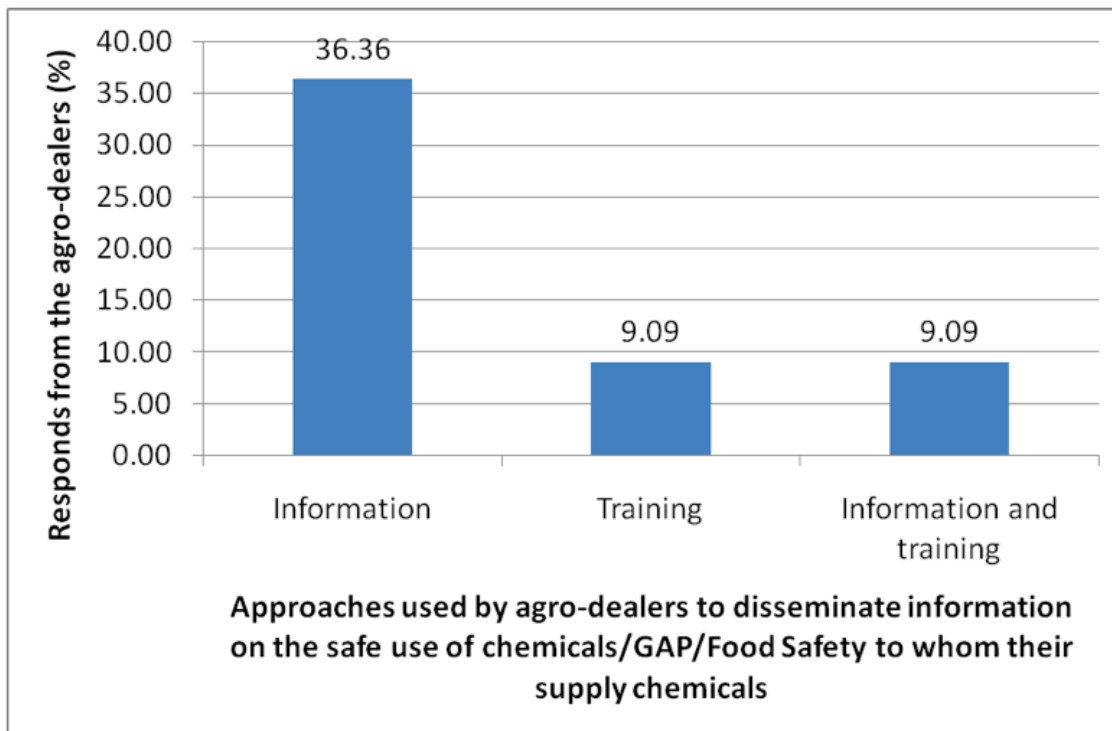
**Figure 11.** Sources of information on GAP.



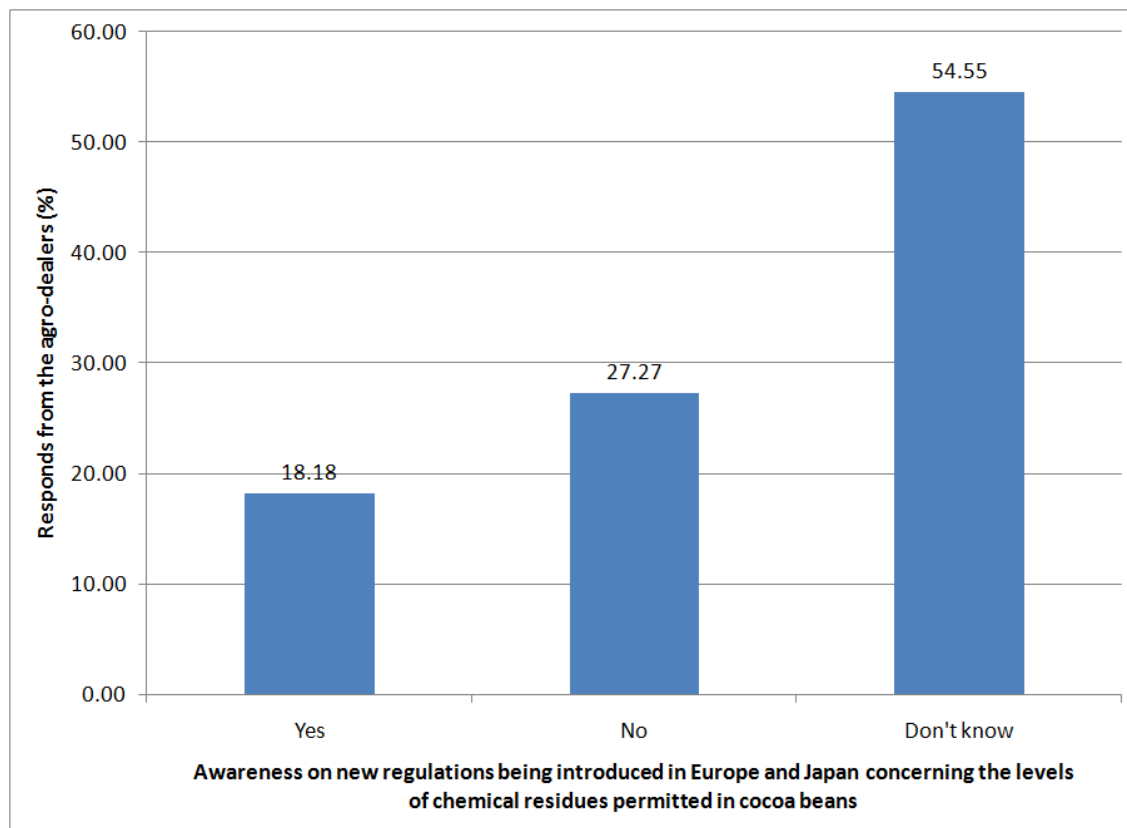
**Figure 12.** Sources of information on food safety.



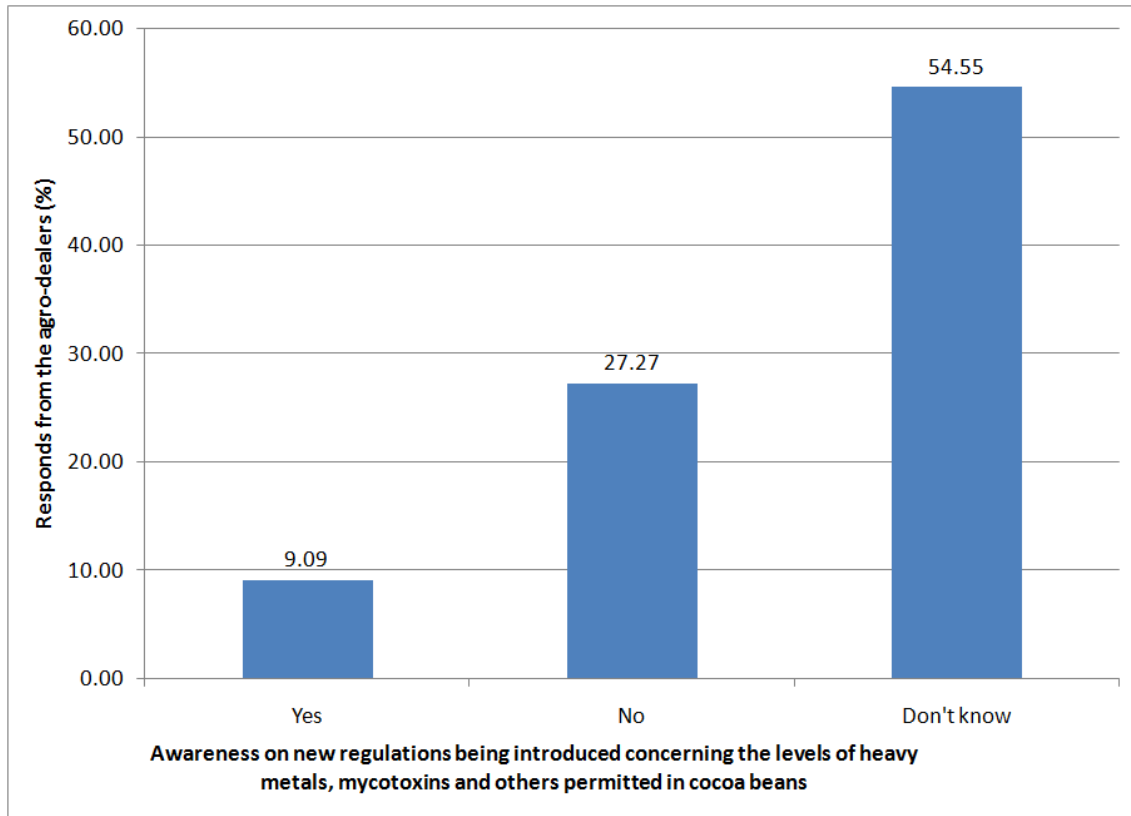
**Figure 13.** Types of formal training received by agro-dealers.



**Figure 14.** Approches used by agro-dealers to disseminate information on safe use of chemicals / GAP / food safety to customers.



**Figure 15.** Agro-dealer's responses on the awareness on new regulations introduced in Europe and Japan concerning the levels of chemical residues permitted in cocoa beans.



**Figure 16.** Agro-dealer’s responses on the awareness on new regulations concerning the levels of heavy metals, mycotoxins and others permitted in cocoa beans.



9.2.5. Output 5: CocoaSafe project website been developed to share knowledge and information on activities carried out in Malaysia



**Figure 17.** The Malaysian Cocoasafe website featuring information on activities in Malaysia, and on SPS and GAP as a knowledge sharing platform for cocoa stakeholders.

9.2.6. Output 6: Two videos on best practice on cocoa production, harvesting, grading and export procedures in Malaysia produced



**Figure 18.** Two videos on best practices in cocoa safety in Malaysia (Video 1: The fermentation technique in cocoa and Video 2: Quality cocoa beans-beans grading and storage)

9.2.7. Output 7: Three posters on cocoa post-harvest best practices to improve safety and quality of cocoa beans in Malaysia produced



Figure 19a. Pods harvesting, storage and breaking procedure (English) /



Figure 19b. Prosedur penuaian, penyimpanan dan pembelahan buah koko (Bahasa)



Figure 20a. Procedure of shallow box fermentation (English)



Figure 20b. Prosedur fermentasi kotak cetek (Bahasa)

## DRY COCOA BEANS STORAGE PRACTICES

### 1 QUALITY CONTROL PRACTICES BEFORE PACKAGING

After the process of drying is complete, cocoa beans shall be removed cocoa waste (Flat beans, bean cluster, double beans, broken beans, cocoa placenta and etc.) Cocoa beans also shall be removed from insect damaged beans and foreign matters. (Rocks, nails, plastics any others particles instead of cocoa waste)



Quality control practices before packaging by removing the cocoa waste and foreign matters

Cocoa waste and foreign matters to be removed

### 3 THE STORAGE OF DRY COCOA BEANS

**THE CHARACTERISTICS OF PROPER DRY COCOA BEANS STORAGE.**

- Moisture and humidity level are not too high (Moisture contents should be checked periodically).
- Free from pests and rodents infestation.
- Free from contamination with other commodities. (With pepper, rubber, etc.)
- The best cocoa beans packaging practices is packed using the jute bags/gunny sacks.
- The packed dry cocoa beans shall be placed on wooden pallets.
- Adequate lighting inside the storage (Not too dark).

Example: Improper storage of dry cocoa beans



Good storage of dry cocoa beans

### 2 THE PACKAGING OF DRY COCOA BEANS

Cocoa beans shall be packed in bags which are clean, sufficiently strong and properly sewn or sealed. The bags shall be made of non-toxic materials.

The cocoa beans packed shall be stored to avoid contamination by physical and chemical hazards, as well as pests.

Stored dry cocoa beans are protected from rodents, birds and other animals. Reused packaging material (gunny sacks), shall free from material and any form (fertilizer and chemical) source which are hazardous to health.

**THE PACKAGING STANDARD OF DRY COCOA BEANS AS/ACCORDING TO MALAYSIAN STANDARD MS 293: 2005**

Cocoa beans shall be packed in new gunny bags which are clean, sufficiently strong and properly sewn and sealed. The bags liners shall be made of non-toxic materials.

Only non-toxic ink or paint shall be used for marking and shall not be allowed to come into contact with the beans.

### 4 THE TECHNIQUES OF DRY COCOA STORAGE

**PLACING AND ARRANGING THE PACKED DRY COCOA BEANS**

- Storage criteria are Cross arrangement, 2X3.
- Wooden grating is used as pallet for storing the bags.
- Gap between the pallet and cement floor at least 7cm (To avoid cement moisture absorbed and allowing an air space).
- Distance/Space from store wall to the cocoa bags on the pallet at least 50cm-60cm. These are the necessities for proper and easy handling in the store.

STANDARDS AND TRADE DEVELOPMENT FACILITY (STDF).

LEMBAGA KOKO MALAYSIA  
Tingkat 5 & 7, Wisma SDOCO,  
Plaza Wawasan, off Coastal Highway,  
Beg Berkunci 211, 88999 Kinabalu, Sabah  
Tel: 088-255320 Fax: 088-239575/253037



LEMBAGA KOKO MALAYSIA  
WWW.KOKO.GOV.MY  
mcb\_enquiry@koko.gov.my  
www.facebook.com/UKM.gov

Figure 21a. Procedure of storing dry cocoa beans (English)

## Prosedur Penstoran Biji Koko Kering

### 1 Kawalan Kualiti Sebelum Menyimpan Koko

Kawal kualiti sebelum pembungkusan dengan mengasingkan sampah dan benda asing



Pengasingan sampah dan berasing

Biji koko yang telah dikeringkan dengan sempurna perlu disiangkan daripada benda asing (seperti batu, ranting kayu dsb.), sampah (biji leper, serpihan biji, serpihan kulit, empulur kering dan muslaj kering), biji pecah, biji berkembur, biji melekat. Proses pengasingan atau penyisihan ini dijalankan secara manual atau mekanikal bagi mendapatkan biji penuh yang sedia untuk dibungkus dan disimpan.

### 3 Penyimpanan Biji Koko Kering

**Ciri-ciri penyimpanan yang baik**

- Biji dan pemekutaran yang baik (tidak terlalu lembab)
- Bebas daripada serangga perosak, kulat dan lain-lain
- **JARAK** berbilang dengan komoditi lain seperti lada, gajah dan lain-lain
- Sebaik-baiknya disimpan di dalam guni jut
- Diletakkan di atas para-para kayu (pallet kayu)
- Pencahayaan yang sesuai (tidak terlampau gelap)



Rajah 1

**Ciri-ciri penyimpanan yang tidak baik**



Contoh 1



Contoh 2

### 2 Pembungkusan Biji Koko Kering Mengikut Standard MS 1784: Part 4, 2005

Biji koko perlu dibungkus dengan menggunakan beg / guni yang bersih, berkeadaan baik, kuat dan dijahit dengan sempurna. Beg tersebut hendaklah dibuat daripada bahan yang tidak toksik.

Biji koko yang dibungkus hendaklah disimpan di dalam stor yang sesuai bagi mengelakkan kontaminasi secara fizikal dan bahaya kimia dan juga serangan serangga.

Biji koko yang disimpan haruslah dilindungi daripada ancaman/serangan haiwan rodensia, burung dan haiwan lain.

Guni yang diguna semula hendaklah bebas daripada sebarang benda/unsur (baja, kimia) yang boleh memudaratkan kesihatan.

### 4 Teknik Penyimpanan Biji koko Kering

**Penyusunan guni dalam stor/tempat penyimpanan**

- Penyusunan guni dalam stor adalah secara susunan silang (cross-arrangement, 2x3), atau diusun barisan di atas satu sama lain.
- Penyusunan dibuat di atas kekisi kayu (wooden grating) seperti Rajah 1.
- Jarak antara kekisi kayu dan lantai simen hendaklah sekurang-kurangnya 7cm. Ini adalah perlu untuk edaran udara dan untuk mengelakkan dari kelembapan simen.
- Jarak di antara dinding dan susunan guni adalah 50 cm ke 60 cm. Ini adalah perlu untuk memudahkan pengendalian dalam stor.

Standards and Trade Development Facility



Lembaga Koko Malaysia

Figure 21b. Prosedur penyimpanan biji koko kering (Bahasa)

### 9.3. Financial Report

Financial Reporting (cont.): **01 NOVEMBER 2013 - 31 OCTOBER 2014**

Quarterly Expenditure Statement

Item of Expenditure	Approved Budget		Actual expenditures incurred							Cumulative unspent balance to-date
	Total project budget	Current project year budget	Cumulative expenditures from previous period	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Current project year total	Cumulative expenditures to-date	
	A	B	C	D	E	F	G	H=D+E+F+G	I=C+H	J=A-I
Materials & Supplies	1,470	525.00	-		87.67	333.94		421.61	421.61	1,048.39
Personnel	20,055	9,345.00	-		1,825.40	1,754.00	1,670.94	5,250.34	5,250.34	14,804.66
Duty Travel	8,610	2,520.00	-	2,153.03	1,093.00			3,246.03	3,246.03	5,363.97
Dissemination and Training	143,325	104,475.00	-	4,485.02	7,515.45	53,530.95	29,656.81	95,188.23	95,188.23	48,136.77
Operational Costs	1,050	525.00	-			153.03		153.03	153.03	896.97
<b>Grand Total</b>	<b>174,510</b>	<b>117,390</b>	<b>-</b>	<b>6,638.05</b>	<b>10,521.52</b>	<b>55,771.92</b>	<b>31,327.75</b>	<b>104,259.24</b>	<b>104,259.24</b>	<b>70,250.76</b>

**EXPENDITURE OF COCOASAFE PROJECT IN MALAYSIA [1st Quarter(Nov 2013 – Jan 2014)]**

NO	CAT	ITEM OF EXPENDITURE	DATE	SUPPLIER	DESCRIPTION	AMOUNT (RM)	AMOUNT (USD)	
1	VI	DUTY TRAVEL	23.12.2013	MALAYSIAN AIRLINE SYSTEM BERHAD	AIR TICKET FOR DECEMBER 2013 TO STEERING COMMITTEE MEETING IN KL (ALBERT LING SHENG CHANG)	1,740.00	527.27	
2	VI	DUTY TRAVEL	23.12.2013	MALAYSIAN AIRLINE SYSTEM BERHAD	AIR TICKET FOR DECEMBER 2013 TO STEERING COMMITTEE MEETING IN KL (HAYA RAMBA)	3,625.00	1,098.48	
3	VI	DUTY TRAVEL	23.12.2013	MALAYSIAN AIRLINE SYSTEM BERHAD	AIR TICKET FOR DECEMBER 2013 TO STEERING COMMITTEE MEETING IN KL (DR. RAMLE KASIN)	1,740.00	527.27	
				<b>SUBTOTAL FOR EXPENDITURE (PERSONNEL)</b>			<b>7,105.00</b>	<b>2,153.03</b>
4	VII	DISSEMINATION AND TRAINING	31.12.2013	DR LEE CHOON HUI	DAILY SUBSISTANCE ALLOWANCE (DSA) DECEMBER 2013	2,677.00	811.21	
5	VII	DISSEMINATION AND TRAINING	22.01.2014	MALAYSIAN AIRLINE SYSTEM BERHAD	AIR TICKET FOR JANUARY 2014 TO DISCUSS WITH SUBCOMMITTEE (ALBERT LING SHENG CHANG)	810.00	245.45	
6	VII	DISSEMINATION AND TRAINING	28.01.2014	ALBERT LING SHENG CHANG	DAILY SUBSISTANCE ALLOWANCE (DSA) DECEMBER 2013	948.50	287.42	
7	VII	DISSEMINATION AND TRAINING	28.01.2014	DR. RAMLE KASIN	DAILY SUBSISTANCE ALLOWANCE (DSA) DECEMBER 2013	3,517.17	1,065.81	
8	VII	DISSEMINATION AND TRAINING	28.01.2014	HAYA RAMBA	DAILY SUBSISTANCE ALLOWANCE (DSA) DECEMBER 2013	4,008.20	1,214.61	
9	VII	DISSEMINATION AND TRAINING	27.11.2013	BOULEVARD HOTEL	ACCOMMODATION FOR M'SIAN REPRESENTATIVES TO ATTEND PROJECT INCEPTION WORKSHOP IN KL	2,839.68	860.51	
				<b>SUBTOTAL FOR EXPENDITURE (DISSEMINATION AND TRAINING)</b>			<b>14,800.55</b>	<b>4,485.02</b>
				<b>GRAND TOTAL</b>			<b>21,905.55</b>	<b>6,638.05</b>

**EXPENDITURE OF COCOASAFE PROJECT IN MALAYSIA [2nd Quarter(Feb 2014 – Apr 2014)]**

NO		ITEM OF EXPENDITURE	DATE	SUPPLIER	DECRPTION	AMOUNT (RM)	AMOUNT (USD)
1	III	MATERIALS & SUPPLIES	11.04.2014	DR ALIAS AWANG	MATERIALS FOR TOMF TRAINING -CB000572	35.00	11.67
2	III	MATERIALS & SUPPLIES	14.03.2014	PUSTAKA CHIEW (H.M) SDN BHD	MATERIALS FOR TOMF TRAINING	228.00	76.00
<b>SUBTOTAL FOR EXPENDITURE (MATERIALS &amp; SUPPLIES)</b>						<b>263.00</b>	<b>87.67</b>
3	IV	PERSONNEL	31.03.2014	ABD RAZAK OSMAN	PROJECT STAFF REMUNERATION MARCH 2014	525.00	175.00
4	IV	PERSONNEL	31.03.2014	AMINUDDIN	PROJECT STAFF REMUNERATION MARCH 2014	332.50	110.83
5	IV	PERSONNEL	31.03.2014	DULLAH HARUN	PROJECT STAFF REMUNERATION MARCH 2014	165.00	55.00
6	IV	PERSONNEL	31.03.2014	RAFIZI PERANG	PROJECT STAFF REMUNERATION MARCH 2014	295.00	98.33
7	IV	PERSONNEL	31.03.2014	RAZI ALANG	PROJECT STAFF REMUNERATION MARCH 2014	262.50	87.50
8	IV	PERSONNEL	31.03.2014	TAUPEK	PROJECT STAFF REMUNERATION MARCH 2014	402.50	134.17
9	IV	PERSONNEL	30.04.2014	ABD RAZAK OSMAN	PROJECT STAFF REMUNERATION APRIL 2014	525.00	175.00
10	IV	PERSONNEL	30.04.2014	AMINUDDIN	PROJECT STAFF REMUNERATION APRIL 2014	350.00	116.67
11	IV	PERSONNEL	30.04.2014	FAKHRI	PROJECT STAFF REMUNERATION APRIL 2014	522.50	174.17
12	IV	PERSONNEL	30.04.2014	MOHD. ADZLY OTHMAN	PROJECT STAFF REMUNERATION APRIL 2014	422.50	140.83
13	IV	PERSONNEL	30.04.2014	MUSILIM YAI	PROJECT STAFF REMUNERATION APRIL 2014	65.00	21.67
14	IV	PERSONNEL	30.04.2014	RAFIZI PERANG	PROJECT STAFF REMUNERATION APRIL 2014	586.50	195.50
15	IV	PERSONNEL	30.04.2014	RAZI ALANG	PROJECT STAFF REMUNERATION APRIL 2014	528.00	176.00
16	IV	PERSONNEL	30.04.2014	TAUPEK	PROJECT STAFF REMUNERATION APRIL 2014	494.20	164.73
<b>SUBTOTAL FOR EXPENDITURE (PERSONNEL)</b>						<b>5,476.20</b>	<b>1,825.40</b>
17	VI	DUTY TRAVEL	03.03.2014	MALAYSIAN AIRLINE SYSTEM BERHAD	AIR TICKET FOR MARCH 2014 TO STEERING COMMITTEE MEETING IN KL (HAYA RAMBA)	1,043.00	347.67
18	VI	DUTY TRAVEL	04.03.2014	MALAYSIAN AIRLINE SYSTEM BERHAD	AIR TICKET FOR MARCH 2014 TO STEERING COMMITTEE MEETING IN KL (ALBERT LING SHENG CHANG)	1,118.00	372.67
19	VI	DUTY TRAVEL	11.03.2014	MALAYSIAN AIRLINE SYSTEM BERHAD	AIR TICKET FOR MARCH 2014 TO STEERING COMMITTEE MEETING IN KL (DR. RAMLE KASIN)	1,118.00	372.67
<b>SUBTOTAL FOR EXPENDITURE (PERSONNEL)</b>						<b>3,279.00</b>	<b>1,093.00</b>



20	VII	DISSEMINATION AND TRAINING	05.02.2014	MALAYSIAN AIRLINE SYSTEM BERHAD	AIR TICKET FOR FEBRUARY 2014 TO VISIT TOMF TRAINING CENTER IN PERAK (ALBERT LING SHENG CHANG)	1,118.00	372.67
21	VII	DISSEMINATION AND TRAINING	26.02.2014	ALBERT LING SHENG CHANG	DAILY SUBSISTANCE ALLOWANCE (DSA) JANUARY 2014	314.50	104.83
22	VII	DISSEMINATION AND TRAINING	12.03.2014	ALBERT LING SHENG CHANG	DAILY SUBSISTANCE ALLOWANCE (DSA) FEBRUARY 2014	621.50	188.33
23	VII	DISSEMINATION AND TRAINING	16.03.2014	MALAYSIAN AIRLINE SYSTEM BERHAD	AIR TICKET FOR MARCH 2014 TO DISCUSS WITH SUBCOMMITTEE (HAYA RAMBA)	1,414.00	428.48
24	VII	DISSEMINATION AND TRAINING	31.03.2014	DR LEE CHOON HUI	DAILY SUBSISTANCE ALLOWANCE (DSA) MARCH 2014	936.00	283.64
25	VII	DISSEMINATION AND TRAINING	04.04.2014	MALAYSIAN AIRLINE SYSTEM BERHAD	AIR TICKET FOR APRIL 2014 TO ATTEND THE TOMF AND OPENING (ALBERT LING SHENG CHANG)	1,118.00	338.79
26	VII	DISSEMINATION AND TRAINING	04.04.2014	MALAYSIAN AIRLINE SYSTEM BERHAD	AIR TICKET FOR APRIL 2014 TO ATTEND THE TOMF AND OPENING (DR. RAMLE KASIN)	1,118.00	338.79
27	VII	DISSEMINATION AND TRAINING	16.04.2014	MALAYSIAN AIRLINE SYSTEM BERHAD	AIR TICKET FOR APRIL 2014 TO ATTEND TOMF AND CLOSING (ALBERT LING SHENG CHANG)	1,118.00	338.79
28	VII	DISSEMINATION AND TRAINING	22.04.2014	ULTRA SCIENTIFIC SDN BHD	MATERIALS FOR TOF TRAINING	618.00	187.27
29	VII	DISSEMINATION AND TRAINING	23.04.2014	DR. RAMLE KASIN	DAILY SUBSISTANCE ALLOWANCE (DSA) MARCH 2014	1,482.00	449.09
30	VII	DISSEMINATION AND TRAINING	23.04.2014	HAYA RAMBA	DAILY SUBSISTANCE ALLOWANCE (DSA) MARCH 2014	3,827.35	1,159.80
31	VII	DISSEMINATION AND TRAINING	23.04.2014	IFIX COMPUTER	MATERIALS FOR TOMF TRAINING	1,600.00	484.85
32	VII	DISSEMINATION AND TRAINING	30.04.2014	DR LEE CHOON HUI	DAILY SUBSISTANCE ALLOWANCE (DSA) APRIL 2014	1,787.40	541.64
33	VII	DISSEMINATION AND TRAINING	01.04.2014	AIRASIA	AIR TICKET FOR SABAH AND SARAWAK PARTICIPANTS TO ATTEND TOMF IN HILIR PERAK (7 TO 17 APRIL 2014)	7,585.00	2,298.48
				<b>SUBTOTAL FOR EXPENDITURE (DISSEMINATION AND TRAINING)</b>		<b>24,657.75</b>	<b>7,515.45</b>
				<b>GRAND TOTAL</b>		<b>33,675.95</b>	<b>10,521.52</b>

**EXPENDITURE OF COCOASAFE PROJECT IN MALAYSIA [3rd Quarter(May 2014 – July 2014)]**

NO		ITEM OF EXPENDITURE	DATE	SUPPLIER	DECRPTION	AMOUNT (RM)	AMOUNT (USD)
1	III	MATERIALS & SUPPLIES	22.07.2014	PERTAMA STATIONERY	MATERIALS FOR TOF TRAINING JENKA	234.50	71.06
2	III	MATERIALS & SUPPLIES	22.07.2014	PIX PRINT CENTRE	MATERIALS FOR TOF TRAINING JENKA	217.50	65.91
3	III	MATERIALS & SUPPLIES	22.07.2014	PPK TEMERLOH	MATERIALS FOR TOF TRAINING JENKA	650.00	196.97
				<b>SUBTOTAL FOR EXPENDITURE (MATERIALS &amp; SUPPLIES)</b>		<b>1,102.00</b>	<b>333.94</b>
4	IV	PERSONNEL	30.06.2014	ABD RAZAK OSMAN	PROJECT STAFF REMUNERATION JUNE 2014	677.50	205.30
5	IV	PERSONNEL	30.06.2014	AMINUDDIN	PROJECT STAFF REMUNERATION JUNE 2014	642.50	194.70
6	IV	PERSONNEL	30.06.2014	FAKHRI	PROJECT STAFF REMUNERATION JUNE 2014	402.50	121.97
7	IV	PERSONNEL	30.06.2014	MOHD. ADZLY OTHMAN	PROJECT STAFF REMUNERATION JUNE 2014	332.50	100.76
8	IV	PERSONNEL	30.06.2014	MUSILIM YAI	PROJECT STAFF REMUNERATION JUNE 2014	360.00	109.09
9	IV	PERSONNEL	30.06.2014	RAFIZI PERANG	PROJECT STAFF REMUNERATION JUNE 2014	653.70	198.09
10	IV	PERSONNEL	30.06.2014	RAZI ALANG	PROJECT STAFF REMUNERATION JUNE 2014	370.00	112.12
11	IV	PERSONNEL	30.06.2014	TAUPEK	PROJECT STAFF REMUNERATION JUNE 2014	332.50	100.76
12	IV	PERSONNEL	10.07.2014	KHAIRUL AZHAR BIN YAHYA	PROJECT STAFF REMUNERATION JUNE 2014	80.00	24.24
13	IV	PERSONNEL	16.07.2014	MOHD NOOR BIN ABU BAKAR	PROJECT STAFF REMUNERATION JUNE 2014	274.00	83.03
14	IV	PERSONNEL	31.07.2014	DANIEL ANAK COSIT	PROJECT STAFF REMUNERATION JULY 2014	628.00	190.30
15	IV	PERSONNEL	31.07.2014	MUHD. EMU BIN SHIBLI	PROJECT STAFF REMUNERATION JULY 2014	120.00	36.36
16	IV	PERSONNEL	31.07.2014	NAEIMI BIN RAMLI	PROJECT STAFF REMUNERATION JULY 2014	495.00	150.00
17	IV	PERSONNEL	31.07.2014	PADIL BIN ABET	PROJECT STAFF REMUNERATION JULY 2014	215.00	65.15
18	IV	PERSONNEL	31.07.2014	ZAINUDIN BIN AHMAD	PROJECT STAFF REMUNERATION JULY 2014	205.00	62.12
				<b>SUBTOTAL FOR EXPENDITURE (PERSONNEL)</b>		<b>5,788.20</b>	<b>1,754.00</b>

19		DISSEMINATION AND TRAINING	06.04.2014	ALBERT LING SHENG CHANG	ADVANCED PROJECT APRIL 2014 (FOOD ALLOWANCE FOR TOMF PARTICIPANTS, HONORARIUM FOR FACILITATORS AND DRIVER ALLOWANCE)	10,700.00	3,242.42
20	VII	DISSEMINATION AND TRAINING	05.05.2014	CHEN FOONG SHENG SDN BHD	MATERIALS FOR TOMF TRAINING - INBOIS-03259 (TRAINING BAG)	4,030.00	1,221.21
21	VII	DISSEMINATION AND TRAINING	05.05.2014	GRAND COURT HOTEL SDN BHD	ACCOMODATION AND DINNER TOMF	24,534.80	7,434.79
22	VII	DISSEMINATION AND TRAINING	19.05.2014	CHEN FOONG SHENG SDN BHD	MATERIALS FOR TOF TRAINING TOMF (TRAINING BAG)	18,600.00	5,636.36
23	VII	DISSEMINATION AND TRAINING	06.05.2014	KHAIRUL BARIAH BT SULAIMAN	ADVANCED PROJECT APRIL 2014 - TOMF	10,627.32	3,220.40
24	VII	DISSEMINATION AND TRAINING	08.05.2014	ALBERT LING SHENG CHANG	DAILY SUBSISTANCE ALLOWANCE (DSA) MARCH - APRIL 2014	499.50	151.36
25	VII	DISSEMINATION AND TRAINING	15.05.2014	KOKO BISTRO	CHOCOLATE SOUVENIR	952.00	288.48
26	VII	DISSEMINATION AND TRAINING	19.05.2014	MALAYSIAN AIRLINE SYSTEM BERHAD	AIR TICKET FOR MAY 2014 TO VISIT TOF TRAINING CENTER (HAYA RAMBA)	968.00	293.33
27	VII	DISSEMINATION AND TRAINING	19.05.2014	MALAYSIAN AIRLINE SYSTEM BERHAD	AIR TICKET FOR MAY 2014 TO VISIT TOF TRAINING CENTER (DR. RAMLE KASIN)	1,118.00	338.79
28	VII	DISSEMINATION AND TRAINING	20.05.2014	MALAYSIAN AIRLINE SYSTEM BERHAD	AIR TICKET FOR APRIL 2014 TO ATTEND TOMF AND CLOSING (ALBERT LING SHENG CHANG)	1,178.00	356.97
29	VII	DISSEMINATION AND TRAINING	26.05.2014	ALBERT LING SHENG CHANG	ADVANCED PROJECT MAY 2014 - TOMF	3,100.00	939.39
30	VII	DISSEMINATION AND TRAINING	31.05.2014	PERCETAKAN NASIONAL MALAYSIA BERHAD	TRAINING MATERIALS FOR TOF	13,400.00	4,060.61
31	VII	DISSEMINATION AND TRAINING	05.06.2014	TABUNG COKLAT LKM SARAWAK	CHOCOLATE SOUVENIR FOR TOF SARAWAK	300.00	90.91
32	VII	DISSEMINATION AND TRAINING	16.06.2014	CENTER MANAGER	MATERIALS FOR TOF TRAINING - JUNE 2014	60.00	18.18
33	VII	DISSEMINATION AND TRAINING	17.06.2014	ALBERT LING SHENG CHANG	DAILY SUBSISTANCE ALLOWANCE (DSA) MAY 2014	580.00	175.76
34	VII	DISSEMINATION AND TRAINING	23.06.2014	DR. RAMLE KASIN	DAILY SUBSISTANCE ALLOWANCE (DSA) MAY 2014	2,786.00	844.24
35	VII	DISSEMINATION AND TRAINING	23.06.2014	HAYA RAMBA	DAILY SUBSISTANCE ALLOWANCE (DSA) MAY 2014	3,697.10	1,120.33

36	VII	DISSEMINATION AND TRAINING	26.06.2014	RAIZE SHAH BIN HUSSAIN	ADVANCED PROJECT JUNE 2014 - TOF JENGA	3,024.90	916.64
37	VII	DISSEMINATION AND TRAINING	26.06.2014	ROZITA BINTI OSMAN	ADVANCED PROJECT JUNE 2014 - TOF JENGA	2,728.40	826.79
38	VII	DISSEMINATION AND TRAINING	30.06.2014	DR LEE CHOON HUI	DAILY SUBSISTANCE ALLOWANCE (DSA) JUNE 2014	2,690.00	815.15
39	VII	DISSEMINATION AND TRAINING	04.07.2014	GRAND COURT HOTEL SDN BHD	ACCOMODATION TOF HILIR PERAK	12,826.30	3,886.76
40	VII	DISSEMINATION AND TRAINING	07.07.2014	ALBERT LING SHENG CHANG	ADVANCED PROJECT APRIL 2014 - TOMF	10,700.00	3,242.42
41	VII	DISSEMINATION AND TRAINING	09.07.2014	ALBERT LING SHENG CHANG	DAILY SUBSISTANCE ALLOWANCE (DSA) MAY 2014	238.00	72.12
42	VII	DISSEMINATION AND TRAINING	09.07.2014	SELAMAT BIN AMAT	FOOD CATERING FOR TOF HILIR PERAK	3,570.00	1,081.82
43	VII	DISSEMINATION AND TRAINING	10.07.2014	MOHD MUSTAFA MUNIM BIN MOTOLANI	ADVANCED PROJECT JUNE 2014 - TOF HILIR PERAK	6,533.32	1,979.79
44	VII	DISSEMINATION AND TRAINING	10.07.2014	SITI KHADIJAH	ADVANCED PROJECT JUNE 2014 - TOF HILIR PERAK	3,887.00	1,177.88
45	VII	DISSEMINATION AND TRAINING	17.07.2014	DR ALIAS AWANG	MATERIALS FOR TOF TRAINING HILIR PERAK	36.00	10.91
46	VII	DISSEMINATION AND TRAINING	18.07.2014	HOTEL PERKASA MT. KINABALU	ACCOMODATION TOF SABAH	25,590.00	7,754.55
47	VII	DISSEMINATION AND TRAINING	20.07.2014	MALAYSIAN AIRLINE SYSTEM BERHAD	AIR TICKET FOR JULY 2014 TO DISSEMINATE THE COCOASAFE TRAINING AT FARMER'S AREA (HAYA RAMBA)	2,318.00	702.42
48	VII	DISSEMINATION AND TRAINING	20.07.2014	MALAYSIAN AIRLINE SYSTEM BERHAD	AIR TICKET FOR JULY 2014 TO DISSEMINATE THE COCOASAFE TRAINING AT FARMER'S AREA (DR. RAMLE KASIN)	1,118.00	338.79
49	VII	DISSEMINATION AND TRAINING	21.07.2014	HASLIZAN ANAS	ADVANCED PROJECT JUNE 2014 - TOF SABAH	428.20	129.76
50	VII	DISSEMINATION AND TRAINING	21.07.2014	JAYA SURIA SEDEK	ADVANCED PROJECT JUNE 2014 - TOF SABAH	302.30	91.61
51	VII	DISSEMINATION AND TRAINING	21.07.2014	JUHILAN BIN DIAMIN	ADVANCED PROJECT JUNE 2014 - TOF SABAH	736.00	223.03
52	VII	DISSEMINATION AND TRAINING	21.07.2014	PAIRIN CYPRIAN VALENTINE	ADVANCED PROJECT JUNE 2014 - TOF SABAH	1,960.00	593.94

53	VII	DISSEMINATION AND TRAINING	22.07.2014	MALAYSIAN AIRLINE SYSTEM BERHAD	AIR TICKET FOR JULY 2014 TO DISSEMINATE THE COCOASAFE TRAINING AT FARMER'S AREA (ALBERT LING SHENG CHANG)	835.00	253.03
				<b>SUBTOTAL FOR EXPENDITURE (DISSEMINATION AND TRAINING)</b>		<b>176,652.14</b>	<b>53,530.95</b>
54	VIII	OPERATIONAL COSTS	09.06.2014	AIRASIA	AIR TICKET FOR JUNE 2014 TO DISCUSS THE PREPARATION OF TOF IN SARAWAK (ALBERT LING SHENG CHANG)	505.00	153.03
				<b>SUBTOTAL FOR EXPENDITURE (OPERATIONAL COSTS)</b>		<b>505.00</b>	<b>153.03</b>
				<b>GRAND TOTAL</b>		<b>184,047.34</b>	<b>55,771.92</b>

**EXPENDITURE OF COCOASAFE PROJECT IN MALAYSIA [4th Quarter(August 2014 – October 2014)]**

NO		ITEM OF EXPENDITURE	DATE	SUPPLIER	DECRPTION	AMOUNT (RM)	AMOUNT (USD)
1	IV	PERSONNEL	21.08.2014	RANDY MORTHY BIT	ADVANCED PROJECT AUGUST 2014 - TOF SARAWAK	410.00	124.24
2	IV	PERSONNEL	25.08.2014	MUHAMAD AIZAD BIN JOHARI	PROJECT STAFF REMUNERATION JUNE 2014	350.00	106.06
3	IV	PERSONNEL	25.08.2014	NAZMIAH BTE MOHD DUIN	PROJECT STAFF REMUNERATION JUNE 2014	2,150.00	651.52
4	IV	PERSONNEL	25.08.2014	PAULUS LASIUAN	PROJECT STAFF REMUNERATION JUNE 2014	950.00	287.88
5	IV	PERSONNEL	26.08.2014	MOHD YUSOF BIN ISHAK	PROJECT STAFF REMUNERATION JUNE 2014	300.00	90.91
6	IV	PERSONNEL	31.08.2014	DANIEL ANAK COSIT	PROJECT STAFF REMUNERATION AUGUST 2014	727.50	220.45
7	IV	PERSONNEL	31.08.2014	MUHD. EMU BIN SHIBLI	PROJECT STAFF REMUNERATION AUGUST 2014	155.00	46.97
8	IV	PERSONNEL	31.08.2014	NAEIMI BIN RAMLI	PROJECT STAFF REMUNERATION AUGUST 2014	163.00	49.39
9	IV	PERSONNEL	31.08.2014	PADIL BIN ABET	PROJECT STAFF REMUNERATION AUGUST 2014	115.00	34.85
10	IV	PERSONNEL	31.08.2014	ZAINUDIN BIN AHMAD	PROJECT STAFF REMUNERATION AUGUST 2014	193.60	58.67
				<b>SUBTOTAL FOR EXPENDITURE (PERSONNEL)</b>		<b>5,514.10</b>	<b>1,670.94</b>
11	VII	DISSEMINATION AND TRAINING	07. 08.2014	MALAYSIAN AIRLINE SYSTEM BERHAD	AIR TICKET FOR FACILITATOR FROM CABI TO ATTEND THE TOF SARAWAK (DR. SOETIKNO AND MR. JEREMY)	1,080.00	327.27
12	VII	DISSEMINATION AND TRAINING	07.08.2014	VIAVESTEL LINES	MATERIALS FOR TOF TRAINING SARAWAK	11,170.00	3,384.85
13	VII	DISSEMINATION AND TRAINING	10.08.2014	MALAYSIAN AIRLINE SYSTEM BERHAD	AIR TICKET FOR AUGUST 2014 TO ATTEND THE TOF (ALBERT LING SHENG CHANG)	732.00	221.82
14	VII	DISSEMINATION AND TRAINING	14.08.2014	SMART DESIGN PRINTIN	BANNER PRINTING FOR TOF SARAWAK IN THE FIELDS	200.00	60.61
15	VII	DISSEMINATION AND TRAINING	15.08.2014	CENTER MANAGER	MATERIALS FOR TOF TRAINING - AUGUST 2014	30.00	9.09
16	VII	DISSEMINATION AND TRAINING	15.08.2014	DR. RAMLE KASIN	DAILY SUBSISTANCE ALLOWANCE (DSA) JULY 2014	1,053.00	319.09
17	VII	DISSEMINATION AND TRAINING	15.08.2014	HAYA RAMBA	DAILY SUBSISTANCE ALLOWANCE (DSA) JULY 2014	5,275.50	1,598.64

18	VII	DISSEMINATION AND TRAINING	18.08.2014	MALAYSIAN AIRLINE SYSTEM BERHAD	AIR TICKET FOR AUGUST 2014 TO DISCUSS THE OUTCOME OF THE TRAINING (ALBERT LING SHENG CHANG)	1,118.00	338.79
19	VII	DISSEMINATION AND TRAINING	18.08.2014	MALAYSIAN AIRLINE SYSTEM BERHAD	AIR TICKET FOR AUGUST 2014 TO DISCUSS THE OUTCOME OF THE TRAINING (DR. RAMLE KASIN)	1,118.00	338.79
20	VII	DISSEMINATION AND TRAINING	20.08.2014	NICK AARON ANAK STEPHEN NEES	ADVANCED PROJECT AUGUST 2014 - TOF (FOOD ALLOWANCE, WORK ALLOWANCE, TRANSPORTATION FOR FARMERS FROM TEBEDU)	960.00	290.91
21	VII	DISSEMINATION AND TRAINING	21.08.2014	JAMAL BIN UMAR	ADVANCED PROJECT AUGUST 2014 - TOF (FOOD ALLOWANCE, WORK ALLOWANCE, TRANSPORTATION FOR FARMERS FROM BINTULU)	940.00	284.85
22	VII	DISSEMINATION AND TRAINING	21.08.2014	MATHEW ANAK MUDA	ADVANCED PROJECT AUGUST 2014 - TOF (FOOD ALLOWANCE, WORK ALLOWANCE, TRANSPORTATION FOR FARMERS FROM SRI AMAN & SIMUNJAN)	1,630.00	493.94
23	VII	DISSEMINATION AND TRAINING	25.08.2014	GORONG BILON	ADVANCED PROJECT AUGUST 2014 - TOF (FOOD ALLOWANCE, WORK ALLOWANCE, TRANSPORTATION AND INSURANCES FOR FARMERS FROM BELAGA)	978.00	296.36
24	VII	DISSEMINATION AND TRAINING	25.08.2014	JINUS JUIS	ADVANCED PROJECT JUNE 2014 - TOF SABAH	1,255.85	380.56
25	VII	DISSEMINATION AND TRAINING	25.08.2014	MARYANI BINTI ABDUL	ADVANCED PROJECT AUGUST 2014 - TOF (FOOD ALLOWANCE AND MATERIALS FOR TOF)	2,471.00	748.79
26	VII	DISSEMINATION AND TRAINING	25.08.2014	MOHD FELANI BIN WAHID	ADVANCED PROJECT AUGUST 2014 - TOF (FOOD ALLOWANCE, WORK ALLOWANCE, TRANSPORTATION AND INSURANCES FOR FARMERS FROM SERIAN)	1,223.00	370.61
27	VII	DISSEMINATION AND TRAINING	25.08.2014	SMART DESIGN PRINTIN	BANNER PRINTING FOR TOF SARAWAK FOR FARMERS	330.00	100.00
28	VII	DISSEMINATION AND TRAINING	25.08.2014	SMART DESIGN PRINTIN	BANNER PRINTING FOR TOF SARAWAK FOR AGRO-DEALER	440.00	133.33
29	VII	DISSEMINATION AND TRAINING	26.08.2014	ALBERT LING SHENG CHANG	DAILY SUBSISTANCE ALLOWANCE (DSA) JULY 2014	64.50	19.55

30	VII	DISSEMINATION AND TRAINING	27.08.2014	JILAN AK LAGIH	ADVANCED PROJECT AUGUST 2014 - TOF (FOOD ALLOWANCE, WORK ALLOWANCE AND TRANSPORTATION FOR FARMERS FROM BETONG)	1,840.00	557.58
31	VII	DISSEMINATION AND TRAINING	27.08.2014	MAZALAN BIN ALI	ADVANCED PROJECT AUGUST 2014 - TOF FOR PRACTICAL MATERIALS	924.60	280.18
32	VII	DISSEMINATION AND TRAINING	27.08.2014	MOHD ASRUL BIN ZULKIFLI	ADVANCED PROJECT AUGUST 2014 - TOF (FOOD ALLOWANCE, WORK ALLOWANCE, TRANSPORTATION AND INSURANCE FOR FARMERS FROM PADAWAN)	885.00	268.18
33	VII	DISSEMINATION AND TRAINING	27.08.2014	PENGARAH AK LAU	ADVANCED PROJECT AUGUST 2014 - TOF (ACCOMMODATION, FOOD ALLOWANCE, WORK ALLOWANCE AND PRATICAL TOOLS)	21,261.70	6,442.94
34	VII	DISSEMINATION AND TRAINING	31.08.2014	DR LEE CHOON HUI	DAILY SUBSISTANCE ALLOWANCE (DSA) AUGUST 2014	1,637.00	496.06
35	VII	DISSEMINATION AND TRAINING	31.08.2014	SYARIKAT SARI TANGKAS	FOOD SUPPLIED FOR TOF TRAINING	13,310.00	4,033.33
36	VII	DISSEMINATION AND TRAINING	09.09.2014	EFFENDY HASSIM 88	FOOD SUPPLIED FOR TOF TRAINING	1,410.00	427.27
37	VII	DISSEMINATION AND TRAINING	09.09.2014	MALAYSIAN AIRLINE SYSTEM BERHAD	AIR TICKET FOR SEPTEMBER 2014 TO VISIT FARMERS WHO ATTENDED TOF (HAYA RAMBA)	3,227.00	977.88
38	VII	DISSEMINATION AND TRAINING	17.09.2014	WINORYANTIE SULAIMAN	ADVANCED PROJECT AUGUST 2014 - TOF	5,250.00	1,590.91
39	VII	DISSEMINATION AND TRAINING	18.09.2014	AIRASIA	AIR TICKET FOR SEPTEMBER 2014 TO STEERING COMMITTEE MEETING IN JEMBER (ALBERT LING SHENG CHANG)	1,432.00	433.94
40	VII	DISSEMINATION AND TRAINING	18.09.2014	AIRASIA	AIR TICKET FOR SEPTEMBER 2014 TO STEERING COMMITTEE MEETING IN JEMBER (DR. RAMLE KASIN)	1,432.00	433.94
41	VII	DISSEMINATION AND TRAINING	23.09.2014	ALBERT LING SHENG CHANG	DAILY SUBSISTANCE ALLOWANCE (DSA) AUGUST 2014	1,358.60	411.70
42	VII	DISSEMINATION AND TRAINING	23.09.2014	MALAYSIAN AIRLINE SYSTEM BERHAD	AIR TICKET FOR SEPTEMBER 2014 TO STEERING COMMITTEE MEETING IN JEMBER (ALBERT LING SHENG CHANG)	1,118.00	338.79
43	VII	DISSEMINATION AND TRAINING	23.09.2014	MALAYSIAN AIRLINE SYSTEM BERHAD	AIR TICKET FOR SEPTEMBER 2014 TO STEERING COMMITTEE MEETING IN JEMBER (DR. RAMLE KASIN)	1,118.00	338.79



44	VII	DISSEMINATION AND TRAINING	3.09.2014	KOKO BISTRO	CHOCOLATE SOUVENIR	180.00	54.55
45	VII	DISSEMINATION AND TRAINING	08.10.2014	KOKO BISTRO	CHOCOLATE SOUVENIR	2,456.00	744.24
46	VII	DISSEMINATION AND TRAINING	10.10.2014	ALBERT LING SHENG CHANG	DAILY SUBSISTANCE ALLOWANCE (DSA) SEPTEMBER 2014	2,499.97	757.57
47	VII	DISSEMINATION AND TRAINING	10.10.2014	DR. RAMLE KASIN	DAILY SUBSISTANCE ALLOWANCE (DSA) SEPTEMBER 2014	2,199.97	666.66
48	VII	DISSEMINATION AND TRAINING	10.10.2014	HAYA RAMBA	DAILY SUBSISTANCE ALLOWANCE (DSA) SEPTEMBER 2014	2,258.79	684.48
				<b>SUBTOTAL FOR EXPENDITURE (DISSEMINATION AND TRAINING)</b>		<b>97,867.48</b>	<b>29,656.81</b>
				<b>GRAND TOTAL</b>		<b>103,381.58</b>	<b>31,327.75</b>

Financial Reporting (cont.): **01 November 2014 - 31 October 2015 (2<sup>nd</sup> Year)**

Quarterly Expenditure Statement

Item of Expenditure	Approved Budget		Actual expenditures incurred							Cumulative unspent balance to-date
	Total project budget	Current project year budget	Cumulative expenditures from previous period	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Current project year total	Cumulative expenditures to-date	
	A	B	C	D	E	F	G	H=D+E+F+G	I=C+H	J=A-I
Materials & Supplies	1,470	945	421.61			1,624.24		1,624.24	2,045.85	(575.85)
Personnel	20,055	10,710	5,250.34	890.52	3,364.33	9,121.96		13,376.81	18,627.15	1,427.85
Duty Travel	8,610	6,090	3,246.03	2,326.06	1,585.15	1,714.27	-	5,625.48	8,871.51	(261.51)
Dissemination and Training	143,325	38,850	95,188.23	10,576.03	5,719.06	14,293.06	11,961.48	42,549.64	137,737.87	5,587.13
Operational Costs	1,050	525	153.03					-	153.03	896.97
<b>Grand Total</b>	<b>174,510</b>	<b>57,120</b>	<b>104,259.24</b>	<b>13,792.61</b>	<b>10,668.54</b>	<b>26,753.53</b>	<b>11,961.48</b>	<b>63,176.16</b>	<b>167,435.40</b>	<b>7,074.60</b>

**EXPENDITURE OF COCOASAFE PROJECT IN MALAYSIA [1st Quarter (Nov 2014-Jan 2015)]**

NO	CA T	ITEM OF EXPENDITURE	DATE	SUPPLIER	DECRPTION	AMOUNT (RM)	AMOUNT (USD)
1	IV	PERSONNEL	15.01.2015	MOHD ADZLY OTHMAN	PROJECT STAFF REMUNERATION DECEMBER 2014	429.16	130.05
2	IV	PERSONNEL	15.01.2015	MOHD RAFIZI BIN PERANG	PROJECT STAFF REMUNERATION DECEMBER 2014	623.18	188.84
3	IV	PERSONNEL	15.01.2015	MOHD SHOFI BIN SABARUDIN	PROJECT STAFF REMUNERATION DECEMBER 2014	798.36	241.93
4	IV	PERSONNEL	15.01.2015	MUHAMAD KAMARIZAL BIN EMBONG @ MUHAMAD	PROJECT STAFF REMUNERATION DECEMBER 2014	237.50	71.97
5	IV	PERSONNEL	15.01.2015	SHAHRIK BIN SAPIGUN	PROJECT STAFF REMUNERATION DECEMBER 2014	615.50	186.52
6	IV	PERSONNEL	19.01.2015	JAUDIN BIN AWANG IBRAHIM	PROJECT STAFF REMUNERATION NOVEMBER 2014	205.00	62.12
7	IV	PERSONNEL	20.01.2015	MOHAMAD RAZI BIN ALANG	PROJECT STAFF REMUNERATION DECEMBER 2014	30.00	9.09
				<b>SUBTOTAL FOR EXPENDITURE (PERSONNEL)</b>		<b>2,938.70</b>	<b>890.52</b>
8	VI	DUTY TRAVEL	05.11.2014	MALAYSIAN AIRLINE SYSTEM BERHAD	AIR TICKET FOR OCTOBER 2014 TO STEERING COMMITTEE MEETING IN KUALA LUMPUR (ALBERT LING SHENG CHANG)	1,118.00	338.79
9	VI	DUTY TRAVEL	04.12.2014	MALAYSIAN AIRLINE SYSTEM BERHAD	AIR TICKET FOR NOVEMBER 2014 TO COLLECT THE QUESTIONAIRES (ALBERT LING SHENG CHANG)	810.00	245.45
10	VI	DUTY TRAVEL	15.01.2015	MALAYSIAN AIRLINE SYSTEM BERHAD	AIR TICKET FOR DECEMBER 2014 TO DISCUSS ON NEXT PHASE OF COCOASAFE ACTIVITIES (ALBERT LING SHENG CHANG)	1,118.00	338.79
11	VI	DUTY TRAVEL	02.02.2015	MALAYSIAN AIRLINE SYSTEM BERHAD	AIR TICKET FOR JANUARY 2015 TO ARRANGE THE FARMERS FIELD SCHOOL (ALBERT LING SHENG CHANG)	1,118.00	338.79
12	VI	DUTY TRAVEL	31.12.2014	MALAYSIAN AIRLINE SYSTEM BERHAD	AIR TICKET FOR NOVEMBER 2014 TO PRODUCE MULTIMEDIA VIDEO ON COOCASAFE ACTIVITIES (MOHD YUSOF ISHAK)	924.00	280.00

13	VI	DUTY TRAVEL	31.01.2015	MALAYSIAN AIRLINE SYSTEM BERHAD	AIR TICKET FOR JANUARY 2015 TO PRODUCE MULTIMEDIA VIDEO ON COOCASAFE ACTIVITIES (MOHD YUSOF ISHAK)	930.00	281.82
14	VI	DUTY TRAVEL	31.12.2014	MALAYSIAN AIRLINE SYSTEM BERHAD	AIR TICKET FOR NOVEMBER 2014 TO PRODUCE MULTIMEDIA VIDEO ON COOCASAFE ACTIVITIES (MUN YUN FATT)	440.00	133.33
17	VI	DUTY TRAVEL	15.01.2015	MALAYSIAN AIRLINE SYSTEM BERHAD	AIR TICKET FOR DECEMBER 2014 TO DISCUSS ON NEXT PHASE OF COCOASAFE ACTIVITIES (HAYA RAMBA)	1,218.00	369.09
<b>SUBTOTAL FOR EXPENDITURE (DUTY TRAVEL)</b>						<b>7,676.00</b>	<b>2,326.06</b>
19	VII	DISSEMINATION AND TRAINING	05.11.2014	HAYA RAMBA	DAILY SUBSISTANCE ALLOWANCE (DSA) OCTOBER 2014	2,258.79	684.48
20	VII	DISSEMINATION AND TRAINING	04.12.2014	HAYA RAMBA	DAILY SUBSISTANCE ALLOWANCE (DSA) NOVEMBER 2014	2,144.33	649.80
21	VII	DISSEMINATION AND TRAINING	15.01.2015	HAYA RAMBA	DAILY SUBSISTANCE ALLOWANCE (DSA) DECEMBER 2014	847.50	256.82
22	VII	DISSEMINATION AND TRAINING	02.02.2015	HAYA RAMBA	DAILY SUBSISTANCE ALLOWANCE (DSA) JANUARY 2015	4,120.00	1,248.48
23	VII	DISSEMINATION AND TRAINING	09.01.2015	DATUK LEE CHOON HUI	DAILY SUBSISTANCE ALLOWANCE (DSA) NOVEMBER 2014	2,222.00	673.33
24	VII	DISSEMINATION AND TRAINING	13.01.2015	PHILIP @ RAMLEE BIN KASIN	DAILY SUBSISTANCE ALLOWANCE (DSA) OCTOBER 2014	1,802.28	546.15
25	VII	DISSEMINATION AND TRAINING	19.01.2015	DATUK LEE CHOON HUI	DAILY SUBSISTANCE ALLOWANCE (DSA) DECEMBER 2014	2,410.00	730.30
26	VII	DISSEMINATION AND TRAINING	12.11.2014	MOHD YUSOF ISHAK	DAILY SUBSISTANCE ALLOWANCE (DSA) OCTOBER 2014	406.00	123.03
27	VII	DISSEMINATION AND TRAINING	04.12.2014	ALBERT LING SHENG CHANG	DAILY SUBSISTANCE ALLOWANCE (DSA) OCTOBER 2014	1,330.20	403.09
28	VII	DISSEMINATION AND TRAINING	04.12.2014	ALBERT LING SHENG CHANG	DAILY SUBSISTANCE ALLOWANCE (DSA) NOVEMBER 2014	930.40	281.94
29	VII	DISSEMINATION AND TRAINING	15.01.2015	ALBERT LING SHENG CHANG	DAILY SUBSISTANCE ALLOWANCE (DSA) DECEMBER 2014	368.20	111.58
30	VII	DISSEMINATION AND TRAINING	02.02.2015	ALBERT LING SHENG CHANG	DAILY SUBSISTANCE ALLOWANCE (DSA) JANUARY 2015	1,051.20	318.55
31	VII	DISSEMINATION AND TRAINING	31.12.2014	MUN YUN FATT	DAILY SUBSISTANCE ALLOWANCE (DSA) NOVEMBER 2014	100.00	30.30

32	VII	DISSEMINATION AND TRAINING	03.11.2014	STEADY PRO EQUIPMENT SDN BHD	EQUIPMENTS FOR VIDEO SHOOTING ON COCOASAFE ACTIVITIES	13,480.00	4,084.85
33	VII	DISSEMINATION AND TRAINING	20.11.2014	AGRI HORTICULTURAL TRADING SDN BHD	RESEARCH MATERIALS USED IN VIDEO SHOOTING ON COCOASAFE ACTIVITIES	278.00	84.24
34	VII	DISSEMINATION AND TRAINING	04.12.2014	LKM UNIT RANAU	RESEARCH MATERIALS USED IN VIDEO SHOOTING ON COCOASAFE ACTIVITIES	14.00	4.24
35	VII	DISSEMINATION AND TRAINING	11.12.2014	MOHD YUSOF ISHAK	ADVANCE PROJECT FOR NOVEMBER 2014	973.00	294.85
36	VII	DISSEMINATION AND TRAINING	31.12.2014	ABDUL AZIZ BIN ABDULLAH	RESEARCH MATERIALS USED IN VIDEO SHOOTING ON COCOASAFE ACTIVITIES	165.00	50.00
				<b>SUBTOTAL FOR EXPENDITURE (DISSEMINATION AND TRAINING)</b>		<b>34,900.90</b>	<b>10,576.03</b>
				<b>GRAND TOTAL</b>		<b>45,515.60</b>	<b>13,792.61</b>

**EXPENDITURE OF COCOASAFE PROJECT IN MALAYSIA [2nd Quarter (Feb 2015 – Apr 2015)]**

NO	CAT	ITEM OF EXPENDITURE	DATE	SUPPLIER	DECRPTION	AMOUNT (RM)	AMOUNT (USD)
1	IV	PERSONNEL	05.02.2015	AHMAD RAFIZI BIN PERANG	PROJECT STAFF REMUNERATION JANUARY 2015	227.50	68.94
2	IV	PERSONNEL	05.02.2015	SHAHRI BIN SAPIGUN	PROJECT STAFF REMUNERATION JANUARY 2015	337.50	102.27
3	IV	PERSONNEL	06.02.2015	MOHD SHOFI BIN SABARUDIN	PROJECT STAFF REMUNERATION JANUARY 2015	496.00	150.30
4	IV	PERSONNEL	06.02.2015	MOHD ADZLY OTHMAN	PROJECT STAFF REMUNERATION FEBRUARY 2015	105.00	31.82
5	IV	PERSONNEL	06.02.2015	MOHAMAD RAZI BIN ALANG	PROJECT STAFF REMUNERATION JANUARY 2015	497.90	150.88
6	IV	PERSONNEL	06.02.2015	MOHD ADZLY OTHMAN	PROJECT STAFF REMUNERATION JANUARY 2015	333.00	100.91
7	IV	PERSONNEL	10.02.2015	MUHAMAD KAMARIZAL BIN EMBONG @ MUHAMAD	PROJECT STAFF REMUNERATION JANUARY 2015	367.50	111.36
8	IV	PERSONNEL	16.02.2015	MOHD FAKHRI BIN MOHD AMIN	PROJECT STAFF REMUNERATION JANUARY 2015	700.00	212.12
9	IV	PERSONNEL	16.02.2015	AMINNUDIN BIN KAYAT	PROJECT STAFF REMUNERATION JANUARY 2015	612.50	185.61
10	IV	PERSONNEL	16.02.2015	RUSMAN BIN ARIFIN	PROJECT STAFF REMUNERATION JANUARY 2015	332.50	100.76
11	IV	PERSONNEL	16.02.2015	AHMAD TAUPEK BIN YAHAYA	PROJECT STAFF REMUNERATION JANUARY 2015	822.50	249.24
12	IV	PERSONNEL	16.02.2015	ABDUL RAZAK BIN OSMAN	PROJECT STAFF REMUNERATION JANUARY 2015	1,125.00	340.91
13	IV	PERSONNEL	18.02.2015	MUHAMAD EMU BIN SHIBLI	PROJECT STAFF REMUNERATION JANUARY 2015	345.00	104.55
14	IV	PERSONNEL	18.02.2015	NAEIMI BIN RAMLI	PROJECT STAFF REMUNERATION JANUARY 2015	200.00	60.61
15	IV	PERSONNEL	18.02.2015	PADIL BIN ABET	PROJECT STAFF REMUNERATION JANUARY 2015	225.00	68.18
16	IV	PERSONNEL	26.02.2015	ZAINUDIN BIN AHMAD	PROJECT STAFF REMUNERATION JANUARY 2015	85.00	25.76

17	IV	PERSONNEL	03..03.2015	RUSMAN BIN ARIFIN	PROJECT STAFF REMUNERATION FEBRUARY 2015	227.50	68.94
18	IV	PERSONNEL	04.03.2015	MOHAMAD RAZI BIN ALANG	PROJECT STAFF REMUNERATION FEBRUARY 2015	122.50	37.12
19	IV	PERSONNEL	04.03.2015	SHAHRIR BIN SAPIGUN	PROJECT STAFF REMUNERATION FEBRUARY 2015	319.70	96.88
20	IV	PERSONNEL	04.03.2015	MOHD SHOFI BIN SABARUDIN	PROJECT STAFF REMUNERATION FEBRUARY 2015	387.20	117.33
21	IV	PERSONNEL	04.03.2015	MUHAMAD KAMARIZAL BIN EMBONG @ MUHAMAD	PROJECT STAFF REMUNERATION FEBRUARY 2015	508.50	154.09
22	IV	PERSONNEL	05.03.2015	ABDUL RAZAK BIN OSMAN	PROJECT STAFF REMUNERATION FEBRUARY 2015	507.50	153.79
23	IV	PERSONNEL	05.03.2015	AMINNUDIN BIN KAYAT	PROJECT STAFF REMUNERATION FEBRUARY 2015	280.00	84.85
24	IV	PERSONNEL	06.03.2015	PADIL BIN ABET	PROJECT STAFF REMUNERATION FEBRUARY 2015	85.00	25.76
25	IV	PERSONNEL	06.03.2015	DANIEL ANAK COSIT	PROJECT STAFF REMUNERATION JANUARY 2015	365.00	110.61
26	IV	PERSONNEL	06.03.2015	AHMAD RAFIZI BIN PERANG	PROJECT STAFF REMUNERATION FEBRUARY 2015	579.50	175.61
27	IV	PERSONNEL	09.03.2015	AHMAD TAUPEK BIN YAHAYA	PROJECT STAFF REMUNERATION FEBRUARY 2015	490.00	148.48
28	IV	PERSONNEL	20.03.2015	MOHD FAKHRI BIN MOHD AMIN	PROJECT STAFF REMUNERATION FEBRUARY 2015	175.00	53.03
29	IV	PERSONNEL	24.03.2015	ZAINUDIN BIN AHMAD	PROJECT STAFF REMUNERATION FEBRUARY 2015	243.00	73.64
				<b>SUBTOTAL FOR EXPENDITURE (PERSONNEL)</b>		<b>11,102.30</b>	<b>3,364.33</b>
30	VI	DUTY TRAVEL	02.02.2015	MALAYSIAN AIRLINE SYSTEM BERHAD	AIR TICKET FOR FEBRUARY 2015 TO PRODUCE MULTIMEDIA VIDEO ON COOCASAFE ACTIVITIES (MOHD YUSOF ISHAK)	468.00	141.82
31	VI	DUTY TRAVEL	24.02.2015	MALAYSIAN AIRLINE SYSTEM BERHAD	AIR TICKET FOR FEBRUARY 2015 TO PRODUCE MULTIMEDIA VIDEO ON COOCASAFE ACTIVITIES (MOHD YUSOF ISHAK)	462.00	140.00
32	VI	DUTY TRAVEL	20.02.2015	MALAYSIAN AIRLINE SYSTEM BERHAD	AIR TICKET FOR FEBRUARY 2015 TO OBSERVE FARMER TRAINING IN THEIR PLOT (IN-SITU TRAINING) (HAYA RAMBA)	4,301.00	1,303.33
				<b>SUBTOTAL FOR EXPENDITURE (DUTY TRAVEL)</b>		<b>5,231.00</b>	<b>1,585.15</b>

34	VII	DISSEMINATION AND TRAINING	02.02.2015	KUMPULAN MH SDN BHD	ACCOMODATION DURING VISITING TO TOF PARTICIPANT'S PLOT IN FEBRUARY	472.00	143.03
35	VII	DISSEMINATION AND TRAINING	09.02.2015	MOHD YUSOF BIN ISHAK	DAILY SUBSISTANCE ALLOWANCE (DSA) JANURAY 2015	980.00	296.97
36	VII	DISSEMINATION AND TRAINING	25.02.2015	ALBERT LING SHENG CHANG	DAILY SUBSISTANCE ALLOWANCE (DSA) JANURAY 2015	126.00	38.18
37	VII	DISSEMINATION AND TRAINING	04.03.2015	MOHD ADZLY OTHMAN	MATERIALS USED IN TOF PARTICIPANT'S PLOT	420.00	127.27
38	VII	DISSEMINATION AND TRAINING	06.03.2015	IFIX COMPUTER	DATA STORAGE OF COCOA SAFE MATERIALS FOR DISSEMINATE TO TOF FARMERS	3,699.00	1,120.91
39	VII	DISSEMINATION AND TRAINING	11.03.2015	ABDUL HALIM BIN ABU SEMAN	FOOD AND BEVERAGE FOR FARMER TRAINING IN THEIR PLOT (IN-SITU TRAINING)	2,990.00	906.06
40	VII	DISSEMINATION AND TRAINING	11.03.2015	BEADS BY PINK VELVET	MATERIALS FOR FARMER TRAINING IN THEIR PLOT (IN-SITU TRAINING)	4,050.00	1,227.27
41	VII	DISSEMINATION AND TRAINING	12.03.2015	ALIAS BIN AWANG	MATERIALS USED IN TOF PARTICIPANT'S PLOT	38.40	11.64
42	VII	DISSEMINATION AND TRAINING	23.03.2015	KUMPULAN MH SDN BHD	ACCOMODATION DURING VISITING TO TOF PARTICIPANT'S PLOT IN MARCH 2015	3,116.00	944.24
43	VII	DISSEMINATION AND TRAINING	28.02.2015	ALBERT LING SHENG CHANG	DAILY SUBSISTANCE ALLOWANCE (DSA) FEBRUARY 2015	382.50	115.91
44	VII	DISSEMINATION AND TRAINING	28.02.2015	HAYA RAMBA	DAILY SUBSISTANCE ALLOWANCE (DSA) FEBRUARY 2015	2,599.00	787.58
				<b>SUBTOTAL FOR EXPENDITURE (DISSEMINATION AND TRAINING)</b>		<b>18,872.90</b>	<b>5,719.06</b>
				<b>GRAND TOTAL</b>		<b>35,206.20</b>	<b>10,668.55</b>



**EXPENDITURE OF COCOASAFE PROJECT IN MALAYSIA [3rd Quarter (May 2015 – Jul 2015)]**

NO	CAT	ITEM OF EXPENDITURE	DATE	SUPPLIER	DECRPTION	AMOUNT (RM)	AMOUNT (USD)
1	III	MATERIALS & SUPPLIES	01.04.2015	PERCETAKAN NASIONAL	TRAINING MANUAL FOR COCOASAFE PROJECT (ENGLISH VERSION)	5,360.00	1,624.24
				<b>SUBTOTAL FOR EXPENDITURE (MATERIALS &amp; SUPPLIES)</b>		<b>5,360.00</b>	<b>1,624.24</b>
2	IV	PERSONNEL	30.06.2015	ABDUL MANAN MIASIN	PROJECT STAFF REMUNERATION JUNE 2015	573.30	173.73
3	IV	PERSONNEL	08.07.2015	ABDUL RAZAK BIN OSMAN	PROJECT STAFF REMUNERATION JUNE 2015	1,330.00	403.03
4	IV	PERSONNEL	30.06.2015	AHMAD BIN HJ ABD GHAFFAR	PROJECT STAFF REMUNERATION JUNE 2015	647.50	196.21
5	IV	PERSONNEL	13.07.2015	AHMAD RAFIZI BIN PERANG	PROJECT STAFF REMUNERATION JULY 2015	538.50	163.18
6	IV	PERSONNEL	18.05.2015	AHMAD RAFIZI BIN PERANG	PROJECT STAFF REMUNERATION APRIL 2015	1,055.00	319.70
7	IV	PERSONNEL	19.06.2015	AHMAD RAFIZI BIN PERANG	PROJECT STAFF REMUNERATION MAY 2015	398.00	120.61
8	IV	PERSONNEL	12.06.2015	AHMAD TAUPEK BIN YAHAYA	PROJECT STAFF REMUNERATION MAY 2015	332.50	100.76
9	IV	PERSONNEL	13.07.2015	AHMAD TAUPEK BIN YAHAYA	PROJECT STAFF REMUNERATION JUNE 2015	883.00	267.58
10	IV	PERSONNEL	08.07.2015	AMINNUDIN BIN KAYAT	PROJECT STAFF REMUNERATION JUNE 2015	588.60	178.36
11	IV	PERSONNEL	12.06.2015	AMINNUDIN BIN KAYAT	PROJECT STAFF REMUNERATION MAY 2015	455.50	138.03
12	IV	PERSONNEL	18.05.2015	AMINNUDIN BIN KAYAT	PROJECT STAFF REMUNERATION APRIL 2015	87.50	26.52
13	IV	PERSONNEL	13.07.2015	DANIEL ANAK COSIT	PROJECT STAFF REMUNERATION MAY 2015	792.70	240.21
14	IV	PERSONNEL	30.06.2015	DIPUNGANG BIN TAGAK	PROJECT STAFF REMUNERATION JUNE 2015	824.00	249.70
15	IV	PERSONNEL	30.06.2015	EDDMAS NIZAM @ MOHD NIZAM BIN SANIN	PROJECT STAFF REMUNERATION JUNE 2015	72.50	21.97

16	IV	PERSONNEL	18.05.2015	FAIZAL AZLAN BIN YASSIN @ MOHD YASIN	PROJECT STAFF REMUNERATION APRIL 2015	1,092.50	331.06
17	IV	PERSONNEL	30.06.2015	FELIX ANAK BONIFACE	PROJECT STAFF REMUNERATION JUNE 2015	1,209.65	366.56
18	IV	PERSONNEL	30.06.2015	GORONG ANAK BILON	PROJECT STAFF REMUNERATION JUNE 2015	481.80	146.00
19	IV	PERSONNEL	30.06.2015	HANAFI HALIK	PROJECT STAFF REMUNERATION JUNE 2015	327.50	99.24
20	IV	PERSONNEL	30.06.2015	IZZURUL HISYAM ABDUL HAMID	PROJECT STAFF REMUNERATION JUNE 2015	137.50	41.67
21	IV	PERSONNEL	30.06.2015	MARTIN OMAT	PROJECT STAFF REMUNERATION JUNE 2015	578.50	175.30
22	IV	PERSONNEL	15.05.2015	MAZLAN BIN MOHD GHAZALI	PROJECT STAFF REMUNERATION APRIL 2015	1,158.02	350.92
23	IV	PERSONNEL	08.07.2015	MAZLAN MOHD GHAZALI	PROJECT STAFF REMUNERATION JUNE 2015	1,175.00	356.06
24	IV	PERSONNEL	22.07.2015	MOHAMAD KAMARIZAL BIN EMBONG @ MUHAMMAD	PROJECT STAFF REMUNERATION JULY 2015	420.00	127.27
25	IV	PERSONNEL	06.07.2015	MOHAMAD RAZI BIN ALANG	PROJECT STAFF REMUNERATION JUNE 2015	370.00	112.12
26	IV	PERSONNEL	09.06.2015	MOHAMAD RAZI BIN ALANG	PROJECT STAFF REMUNERATION MAY 2015	157.50	47.73
27	IV	PERSONNEL	18.05.2015	MOHAMAD RAZI BIN ALANG	PROJECT STAFF REMUNERATION APRIL 2015	709.50	215.00
28	IV	PERSONNEL	06.07.2015	MOHD ADZLY BIN OTHMAN	PROJECT STAFF REMUNERATION JUNE 2015	512.50	155.30
29	IV	PERSONNEL	11.06.2015	MOHD ADZLY BIN OTHMAN	PROJECT STAFF REMUNERATION MAY 2015	455.60	138.06
30	IV	PERSONNEL	18.05.2015	MOHD ADZLY BIN OTHMAN	PROJECT STAFF REMUNERATION APRIL 2015	608.00	184.24
31	IV	PERSONNEL	30.06.2015	MOHD ASRUL BIN ZULKIFLI	PROJECT STAFF REMUNERATION JUNE 2015	195.45	59.23
32	IV	PERSONNEL	30.06.2015	MOHD FELANI BIN WAHI	PROJECT STAFF REMUNERATION JUNE 2015	1,380.30	418.27
33	IV	PERSONNEL	11.06.2015	MOHD SHOFI BIN SABARUDIN	PROJECT STAFF REMUNERATION MAY 2015	391.00	118.48
34	IV	PERSONNEL	13.07.2015	MOHD SHOFI BIN SABARUDIN	PROJECT STAFF REMUNERATION JUNE 2015	406.15	123.08

35	IV	PERSONNEL	18.05.2015	MOHD SHOFI BIN SABARUDIN	PROJECT STAFF REMUNERATION APRIL 2015	826.90	250.58
36	IV	PERSONNEL	13.07.2015	MUHAMAD EMU BIN SHIBLI	PROJECT STAFF REMUNERATION MAY 2015	355.00	107.58
37	IV	PERSONNEL	09.06.2015	MUHAMAD KAMARIZAL BIN EMBONG @ MUHAMMAD	PROJECT STAFF REMUNERATION MAY 2015	362.50	109.85
38	IV	PERSONNEL	13.07.2015	NAEIMI BIN RAMLI	PROJECT STAFF REMUNERATION MAY 2015	475.00	143.94
39	IV	PERSONNEL	30.06.2015	NICK AARON ANAK STEPHEN NEES	PROJECT STAFF REMUNERATION JUNE 2015	700.00	212.12
40	IV	PERSONNEL	30.06.2015	NOBIL THOMAS ANAK REJON	PROJECT STAFF REMUNERATION JUNE 2015	496.00	150.30
41	IV	PERSONNEL	13.07.2015	PADIL BIN ABET	PROJECT STAFF REMUNERATION MAY 2015	254.00	76.97
42	IV	PERSONNEL	13.07.2015	PADILI BIN ABET	PROJECT STAFF REMUNERATION JUNE 2015	295.00	89.39
43	IV	PERSONNEL	30.06.2015	RAMLAN BIN HARUN	PROJECT STAFF REMUNERATION JUNE 2015	1,035.00	313.64
44	IV	PERSONNEL	30.06.2015	REZER SEKIT	PROJECT STAFF REMUNERATION JUNE 2015	458.30	138.88
45	IV	PERSONNEL	14.04.2015	RUSMAN BIN ARIFFIN	PROJECT STAFF REMUNERATION MARCH 2015	262.50	79.55
46	IV	PERSONNEL	08.07.2015	RUSMAN RAZAK BIN OSMAN	PROJECT STAFF REMUNERATION JUNE 2015	560.00	169.70
47	IV	PERSONNEL	12.06.2015	RUSMAN RAZAK BIN OSMAN	PROJECT STAFF REMUNERATION MAY 2015	437.50	132.58
48	IV	PERSONNEL	03.07.2015	SAIPOL SOFRI BIN CHE AHMAD	PROJECT STAFF REMUNERATION JUNE 2015	140.00	42.42
49	IV	PERSONNEL	10.06.2015	SAIPOL SOFRI BIN CHE AHMAD	PROJECT STAFF REMUNERATION MAY 2015	327.50	99.24
50	IV	PERSONNEL	22.05.2015	SAIPOL SOFRI BIN CHE AHMAD	PROJECT STAFF REMUNERATION APRIL 2015	70.00	21.21
51	IV	PERSONNEL	09.06.2015	SHHRIR BIN SAPIGUN	PROJECT STAFF REMUNERATION MAY 2015	708.00	214.55
52	IV	PERSONNEL	18.05.2015	SHHRIR BIN SAPIGUN	PROJECT STAFF REMUNERATION APRIL 2015	333.90	101.18
53	IV	PERSONNEL	22.07.2015	SHHRIR BIN SAPIGUN	PROJECT STAFF REMUNERATION JUNE 2015	227.30	68.88
54	IV	PERSONNEL	30.06.2015	STERN DANZRE ANAK SINOI	PROJECT STAFF REMUNERATION JUNE 2015	181.00	54.85

55	IV	PERSONNEL	12.06.2015	SUHaida BINTI SALLEH	PROJECT STAFF REMUNERATION MAY 2015	452.00	136.97
56	IV	PERSONNEL	18.06.2015	ZAINUDIN BIN AHMAD	PROJECT STAFF REMUNERATION MAY 2015	800.00	242.42
				<b>SUBTOTAL FOR EXPENDITURE (PERSONNEL)</b>		<b>30,102.47</b>	<b>9,121.96</b>
57	VI	DUTY TRAVEL	06.04.2015	MALAYSIAN AIRLINES SYSTEM SDN BHD	AIR TICKET FOR MARCH 2015 TO MONITOR FARMER'S PLOT	4,472.00	1,355.15
58	VI	DUTY TRAVEL	17.06.2015	MALAYSIAN AIRLINES SYSTEM SDN BHD	AIR TICKET FOR MAYE 2015 TO MONITOR FARMER'S PLOT	1,185.10	359.12
				<b>SUBTOTAL FOR EXPENDITURE (DUTY TRAVEL)</b>		<b>5,657.10</b>	<b>1,714.27</b>
59	VII	DISSEMINATION AND TRAINING	02.07.2015	ABDUL HALIM BIN ABU SEMAN	FOOD AND BEVERAGE FOR FARMER TRAINING IN THEIR PLOT (IN-SITU TRAINING)	7,775.00	2,356.06
60	VII	DISSEMINATION AND TRAINING	12.05.2015	ABDUL HALIM BIN ABU SEMAN	FOOD AND BEVERAGE FOR FARMER TRAINING IN THEIR PLOT (IN-SITU TRAINING)	1,740.00	527.27
61	VII	DISSEMINATION AND TRAINING	15.05.2015	ABDUL HALIM BIN ABU SEMAN	FOOD AND BEVERAGE FOR FARMER TRAINING IN THEIR PLOT (IN-SITU TRAINING)	1,800.00	545.45
62	VII	DISSEMINATION AND TRAINING	31.05.2015	ABDUL MANAN MIASIN	DAILY SUBSISTANCE ALLOWANCE (DSA) MAY 2015	556.90	168.76
63	VII	DISSEMINATION AND TRAINING	31.07.2015	ABDUL MANAN MIASIN	DAILY SUBSISTANCE ALLOWANCE (DSA) JULY 2015	146.10	44.27
64	VII	DISSEMINATION AND TRAINING	31.05.2015	AHMAD BIN HJ ABD GHAFAR	DAILY SUBSISTANCE ALLOWANCE (DSA) MAY 2015	630.00	190.91
65	VII	DISSEMINATION AND TRAINING	31.07.2015	AHMAD BIN HJ ABD GHAFAR	DAILY SUBSISTANCE ALLOWANCE (DSA) JULY 2015	624.48	189.24
66	VII	DISSEMINATION AND TRAINING	23.06.2015	ALBERT LING SHENG CHANG	DAILY SUBSISTANCE ALLOWANCE (DSA) MAY 2015	198.10	60.03
67	VII	DISSEMINATION AND TRAINING	31.05.2015	DIPUNGANG BIN TAGAK	DAILY SUBSISTANCE ALLOWANCE (DSA) MAY 2015	427.50	129.55
68	VII	DISSEMINATION AND TRAINING	31.07.2015	DIPUNGANG BIN TAGAK	DAILY SUBSISTANCE ALLOWANCE (DSA) JULY 2015	440.00	133.33
69	VII	DISSEMINATION AND TRAINING	08.07.2015	DR ALIAS AWANG	DAILY SUBSISTANCE ALLOWANCE (DSA) JUNE 2015	677.50	205.30
70	VII	DISSEMINATION AND TRAINING	31.07.2015	DZULKIFLI BIN JULJALAHA	DAILY SUBSISTANCE ALLOWANCE (DSA) JULY 2015	110.00	33.33
71	VII	DISSEMINATION AND TRAINING	25.06.2015	FAIZAL MOHD. NOR	DAILY SUBSISTANCE ALLOWANCE (DSA) MAY 2015	2,700.00	818.18
72	VII	DISSEMINATION AND TRAINING	14.04.2015	FARIDAH BINTI MUSA	DAILY SUBSISTANCE ALLOWANCE (DSA) MARCH 2015	728.00	220.61
73	VII	DISSEMINATION AND TRAINING	31.05.2015	FELIX ANAK BONIFACE	DAILY SUBSISTANCE ALLOWANCE (DSA) MAY 2015	177.50	53.79

74	VII	DISSEMINATION AND TRAINING	31.05.2015	GORONG ANAK BILON	DAILY SUBSISTANCE ALLOWANCE (DSA) MAY 2015	385.00	116.67
75	VII	DISSEMINATION AND TRAINING	31.07.2015	GORONG ANAK BILON	DAILY SUBSISTANCE ALLOWANCE (DSA) JULY 2015	330.00	100.00
76	VII	DISSEMINATION AND TRAINING	31.05.2015	HANAFI HALIK	DAILY SUBSISTANCE ALLOWANCE (DSA) MAY 2015	1,337.50	405.30
77	VII	DISSEMINATION AND TRAINING	31.07.2015	HANAFI HALIK	DAILY SUBSISTANCE ALLOWANCE (DSA) JULY 2015	655.00	198.48
78	VII	DISSEMINATION AND TRAINING	08.07.2015	INDAH SEGAR ENTERPRISE	MATERIAL FOR FARMER TRAINING IN THEIR PLOT (IN-SITU TRAINING)	5,347.25	1,620.38
79	VII	DISSEMINATION AND TRAINING	31.05.2015	IZZURUL HISYAM ABDUL HAMID	DAILY SUBSISTANCE ALLOWANCE (DSA) MAY 2015	192.50	58.33
80	VII	DISSEMINATION AND TRAINING	31.05.2015	JAMAL BIN UMAR	DAILY SUBSISTANCE ALLOWANCE (DSA) MAY 2015	1,092.50	331.06
81	VII	DISSEMINATION AND TRAINING	31.07.2015	JAMAL BIN UMAR	DAILY SUBSISTANCE ALLOWANCE (DSA) JULY 2015	700.00	212.12
82	VII	DISSEMINATION AND TRAINING	12.06.2015	KHAIRUL BARIAH BINTI SULAIMAN	DAILY SUBSISTANCE ALLOWANCE (DSA) MAY 2015	419.50	127.12
83	VII	DISSEMINATION AND TRAINING	19.06.2015	KUMPULAN MH SDN BHD	ACCOMODATION DURING VISITING TO TOF PARTICIPANT'S PLOT IN MAY	3,240.00	981.82
84	VII	DISSEMINATION AND TRAINING	31.05.2015	MARTIN OMAT	DAILY SUBSISTANCE ALLOWANCE (DSA) MAY 2015	193.00	58.48
85	VII	DISSEMINATION AND TRAINING	21.05.2015	MAZLAN BIN MOHD GHAZALI	DAILY SUBSISTANCE ALLOWANCE (DSA) APRIL 2015	316.00	95.76
86	VII	DISSEMINATION AND TRAINING	09.06.2015	MOHAMED HELMI BIN SHARI	DAILY SUBSISTANCE ALLOWANCE (DSA) APRIL 2015	2,169.50	657.42
87	VII	DISSEMINATION AND TRAINING	18.06.2015	MOHAMED HELMI BIN SHARI	DAILY SUBSISTANCE ALLOWANCE (DSA) MAY 2015	328.00	99.39
88	VII	DISSEMINATION AND TRAINING	31.05.2015	MOHD ASRUL BIN ZULKIFLI	DAILY SUBSISTANCE ALLOWANCE (DSA) MAY 2015	111.70	33.85
89	VII	DISSEMINATION AND TRAINING	31.07.2015	MOHD ASRUL BIN ZULKIFLI	DAILY SUBSISTANCE ALLOWANCE (DSA) JULY 2015	195.00	59.09
90	VII	DISSEMINATION AND TRAINING	31.05.2015	MOHD FELANI BIN WAHI	DAILY SUBSISTANCE ALLOWANCE (DSA) MAY 2015	653.00	197.88
91	VII	DISSEMINATION AND TRAINING	02.06.2015	MOHD MUSTAFA MUNIM BIN MOTOLANI	DAILY SUBSISTANCE ALLOWANCE (DSA) MAY 2015	1,170.00	354.55
92	VII	DISSEMINATION AND TRAINING	15.04.2015	MOHD MUSTAFA MUNIM BIN MOTOLANI	DAILY SUBSISTANCE ALLOWANCE (DSA) MARCH 2015	1,467.10	444.58

93	VII	DISSEMINATION AND TRAINING	08.04.2015	NEW GENERATION FORCE (M) SDN BHD	MATERIALS USED IN TOF PARTICIPANT'S PLOT	1,858.00	563.03
94	VII	DISSEMINATION AND TRAINING	31.05.2015	NICK AARON ANAK STEPHEN NEES	DAILY SUBSISTANCE ALLOWANCE (DSA) MAY 2015	1,120.00	339.39
95	VII	DISSEMINATION AND TRAINING	31.07.2015	NICK AARON ANAK STEPHEN NEES	DAILY SUBSISTANCE ALLOWANCE (DSA) JULY 2015	754.60	228.67
96	VII	DISSEMINATION AND TRAINING	31.05.2015	NOBIL THOMAS ANAK REJON	DAILY SUBSISTANCE ALLOWANCE (DSA) MAY 2015	582.00	176.36
97	VII	DISSEMINATION AND TRAINING	31.07.2015	NOBIL THOMAS ANAK REJON	DAILY SUBSISTANCE ALLOWANCE (DSA) JULY 2015	220.00	66.67
98	VII	DISSEMINATION AND TRAINING	31.05.2015	RAMLAN BIN HARUN	DAILY SUBSISTANCE ALLOWANCE (DSA) MAY 2015	687.50	208.33
99	VII	DISSEMINATION AND TRAINING	31.07.2015	RAMLAN BIN HARUN	DAILY SUBSISTANCE ALLOWANCE (DSA) JULY 2015	353.50	107.12
100	VII	DISSEMINATION AND TRAINING	31.05.2015	RANDY RAYYAN BIT BIN ABDULLAH	DAILY SUBSISTANCE ALLOWANCE (DSA) MAY 2015	440.00	133.33
101	VII	DISSEMINATION AND TRAINING	31.07.2015	RANDY RAYYAN BIT BIN ABDULLAH	DAILY SUBSISTANCE ALLOWANCE (DSA) JULY 2015	220.00	66.67
102	VII	DISSEMINATION AND TRAINING	31.05.2015	REZER SEKIT	DAILY SUBSISTANCE ALLOWANCE (DSA) MAY 2015	579.06	175.47
103	VII	DISSEMINATION AND TRAINING	31.05.2015	STERN DANZRE ANAK SINOI	DAILY SUBSISTANCE ALLOWANCE (DSA) MAY 2015	116.50	35.30
104	VII	DISSEMINATION AND TRAINING	31.07.2015	STERN DANZRE ANAK SINOI	DAILY SUBSISTANCE ALLOWANCE (DSA) JULY 2015	240.30	72.82
105	VII	DISSEMINATION AND TRAINING	14.04.2015	TEE YEI KHENG	DAILY SUBSISTANCE ALLOWANCE (DSA) MARCH 2015	542.00	164.24
106	VII	DISSEMINATION AND TRAINING	31.07.2015	TIMOTHY FENCENCIUS	DAILY SUBSISTANCE ALLOWANCE (DSA) JULY 2015	192.50	58.33
107	VII	DISSEMINATION AND TRAINING	31.05.2015	ZAMHOERI BIN SARBIN	DAILY SUBSISTANCE ALLOWANCE (DSA) MAY 2015	227.50	68.94
				<b>SUBTOTAL FOR EXPENDITURE (DISSEMINATION AND TRAINING)</b>		<b>47,167.09</b>	<b>14,293.06</b>
				<b>GRAND TOTAL</b>		<b>88,286.66</b>	<b>26,753.53</b>

**EXPENDITURE OF COCOASAFE PROJECT IN MALAYSIA [4th Quarter (Aug 2015 – Oct 2015)]**

NO	CAT	ITEM OF EXPENDITURE	DATE	SUPPLIER	DECRPTION	AMOUNT (RM)	AMOUNT (USD)
1	VII	DISSEMINATION AND TRAINING	12.08.2015	ABDUL RAZAK BIN OSMAN	DAILY SUBSISTANCE ALLOWANCE (DSA) JULY 2015	350.00	106.06
2	VII	DISSEMINATION AND TRAINING	12.08.2015	AHMAD TAUPEK BIN YAHAYA	DAILY SUBSISTANCE ALLOWANCE (DSA) JULY 2015	324.50	98.33
3	VII	DISSEMINATION AND TRAINING	04.08.2015	ALBERT LING SHENG CHANG	DAILY SUBSISTANCE ALLOWANCE (DSA) JUNE 2015	241.00	73.03
4	VII	DISSEMINATION AND TRAINING	18.08.2015	ALBERT LING SHENG CHANG	DAILY SUBSISTANCE ALLOWANCE (DSA) JULY 2015	958.40	290.42
5	VII	DISSEMINATION AND TRAINING	12.08.2015	AMINNUDIN BIN KAYAT	DAILY SUBSISTANCE ALLOWANCE (DSA) JULY 2015	245.00	74.24
6	VII	DISSEMINATION AND TRAINING	19.08.2015	DANIEL ANAK COSIT	DAILY SUBSISTANCE ALLOWANCE (DSA) JULY 2015	969.00	293.64
7	VII	DISSEMINATION AND TRAINING	10.08.5015	LADANG SINARAN PELANGI SDN BHD	MATERIAL FOR FARMER TRAINING IN THEIR PLOT (IN-SITU TRAINING)	27,000.00	8,181.82
8	VII	DISSEMINATION AND TRAINING	12.08.2015	RUSMAN RAZAK BIN OSMAN	DAILY SUBSISTANCE ALLOWANCE (DSA) JULY 2015	175.00	53.03
9	VII	DISSEMINATION AND TRAINING	17.08.2015	ZAINUDIN BIN AHMAD	DAILY SUBSISTANCE ALLOWANCE (DSA) JULY 2015	440.00	133.33
10	VII	DISSEMINATION AND TRAINING	12.08.2015	ZEE PALACE HOTEL SDN BHD	ACCOMODATION DURING VISITING TO TOF PARTICIPANT'S PLOT IN JULY	4,000.00	1,212.12
11	VII	DISSEMINATION AND TRAINING	03.09.2015	PERCETAKAN NASIONAL	PRODUCTION OF PRINTED MATERIALS (300 POSTERS) FOR DISSEMINATION	4,770.00	1,445.45
				<b>SUBTOTAL FOR EXPENDITURE (DISSEMINATION AND TRAINING)</b>		<b>39,472.90</b>	<b>11,961.48</b>
				<b>GRAND TOTAL</b>		<b>39,472.90</b>	<b>11,961.48</b>

Financial Reporting (cont.): **01 November 2015 - 31 January 2016**

Quarterly Expenditure Statement

Item of Expenditure	Approved Budget		Actual expenditures incurred							Cumulative unspent balance to-date
	Total project budget	Current project year budget	Cumulative expenditures from previous period	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Current project year total	Cumulative expenditures to-date	
	A	B	C	D	E	F	G	H=D+E+F+G	I=C+H	J=A-I
Materials & Supplies	1,470		2,045.85	-				-	2,045.85	(575.85)
Personnel	20,055		18,627.15	1,424.85				1,424.85	20,052.00	3.00
Duty Travel	8,610		8,871.51	-				-	8,871.51	(261.51)
Dissemination and Training	143,325		137,737.87	5,515.28				5,515.28	143,253.15	71.85
Operational Costs	1,050		153.03	881.26				881.26	1,034.29	15.71
<b>Grand Total</b>	<b>174,510</b>		<b>167,435.40</b>	<b>7,821.39</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>7,821.39</b>	<b>175,256.79</b>	<b>(746.79)</b>

**EXPENDITURE OF COCOASAFE PROJECT IN MALAYSIA [1st Quarter (Nov 2015 – Jan 2016)]**



NO	CAT	ITEM OF EXPENDITURE	DATE	SUPPLIER	DECIPTION	AMOUNT (RM)	AMOUNT (USD)
1	IV	PERSONNEL	31.01.2016	MOHD FADZLI BIN BAHARI	PROJECT STAFF REMUNERATION JANUARY 2016	744.91	225.73
2	IV	PERSONNEL	31.01.2016	MOHD NOOR BIN ABU BAKAR	PROJECT STAFF REMUNERATION JANUARY 2016	578.00	175.15
3	IV	PERSONNEL	31.01.2016	MOHD NOR B. A. GHANI	PROJECT STAFF REMUNERATION JANUARY 2016	120.00	36.36
4	IV	PERSONNEL	31.01.2016	ARRAHMAN BIN MOHD SA'AI	PROJECT STAFF REMUNERATION JANUARY 2016	180.00	54.55
5	IV	PERSONNEL	31.01.2016	MAZLAN BIN MOHD GHAZALI	PROJECT STAFF REMUNERATION JANUARY 2016	460.00	139.39
6	IV	PERSONNEL	31.01.2016	MAZALAN HAJI ALI	PROJECT STAFF REMUNERATION JANUARY 2016	555.00	168.18
7	IV	PERSONNEL	31.01.2016	GORONG ANAK BILON	PROJECT STAFF REMUNERATION JANUARY 2016	220.00	66.67
8	IV	PERSONNEL	31.01.2016	MOHD FELANI BIN WAHI	PROJECT STAFF REMUNERATION JANUARY 2016	400.00	121.21
9	IV	PERSONNEL	31.01.2016	MOHD FADLY BIN WAHI	PROJECT STAFF REMUNERATION JANUARY 2016	582.50	176.52
10	IV	PERSONNEL	31.01.2016	MOHD ASRUL BIN ZULKIFLI	PROJECT STAFF REMUNERATION JANUARY 2016	327.50	99.24
11	IV	PERSONNEL	31.01.2016	HANAFI HALIK	PROJECT STAFF REMUNERATION JANUARY 2016	255.00	77.27
12	IV	PERSONNEL	31.01.2016	NURHAFIZAN MAT ZENI	PROJECT STAFF REMUNERATION JANUARY 2016	279.10	84.58
				<b>SUBTOTAL FOR EXPENDITURE (PERSONNEL)</b>		<b>4,702.01</b>	<b>1,424.85</b>
13	VII	DISSEMINATION AND TRAINING	30.11.2015	JUGAH KOTOS @ GEORGE	DAILY SUBSISTANCE ALLOWANCE (DSA) NOVEMBER 2015 - IMPACT STUDY ON 2ND BASELINE SURVEY	1,073.50	325.30
14	VII	DISSEMINATION AND TRAINING	30.11.2015	MOHD. DAHRIN MOHD. GAMBAR	DAILY SUBSISTANCE ALLOWANCE (DSA) NOVEMBER 2015 - IMPACT STUDY ON 2ND BASELINE SURVEY	317.50	96.21

15	VII	DISSEMINATION AND TRAINING	30.11.2015	MOHD. SHAHRIN MISUN	DAILY SUBSISTANCE ALLOWANCE (DSA) NOVEMBER 2015 - IMPACT STUDY ON 2ND BASELINE SURVEY	220.00	66.67
16	VII	DISSEMINATION AND TRAINING	30.11.2015	RAMLAN HARUN	DAILY SUBSISTANCE ALLOWANCE (DSA) NOVEMBER 2015 - IMPACT STUDY ON 2ND BASELINE SURVEY	982.50	297.73
17	VII	DISSEMINATION AND TRAINING	30.11.2015	AHMAD HJ ABD. GHAFAR	DAILY SUBSISTANCE ALLOWANCE (DSA) NOVEMBER 2015 - IMPACT STUDY ON 2ND BASELINE SURVEY	667.50	202.27
18	VII	DISSEMINATION AND TRAINING	30.11.2015	DZULKIFLI JULJALAH	DAILY SUBSISTANCE ALLOWANCE (DSA) NOVEMBER 2015 - IMPACT STUDY ON 2ND BASELINE SURVEY	110.00	33.33
19	VII	DISSEMINATION AND TRAINING	30.11.2015	MAZALAN HAJI ALI	DAILY SUBSISTANCE ALLOWANCE (DSA) NOVEMBER 2015 - IMPACT STUDY ON 2ND BASELINE SURVEY	785.20	237.94
20	VII	DISSEMINATION AND TRAINING	30.11.2015	FELIX ANAK BONIFACE	DAILY SUBSISTANCE ALLOWANCE (DSA) NOVEMBER 2015 - IMPACT STUDY ON 2ND BASELINE SURVEY	308.00	93.33
21	VII	DISSEMINATION AND TRAINING	30.11.2015	GORONG ANAK BILON	DAILY SUBSISTANCE ALLOWANCE (DSA) NOVEMBER 2015 - IMPACT STUDY ON 2ND BASELINE SURVEY	225.50	68.33
22	VII	DISSEMINATION AND TRAINING	30.11.2015	JILAN ANAK LAGIH	DAILY SUBSISTANCE ALLOWANCE (DSA) NOVEMBER 2015 - IMPACT STUDY ON 2ND BASELINE SURVEY	1,042.00	315.76
23	VII	DISSEMINATION AND TRAINING	30.11.2015	MOHD ASRUL BIN ZULKIFLI	DAILY SUBSISTANCE ALLOWANCE (DSA) NOVEMBER 2015 - IMPACT STUDY ON 2ND BASELINE SURVEY	188.00	56.97
24	VII	DISSEMINATION AND TRAINING	30.11.2015	NOBIL THOMAS ANAK REJON	DAILY SUBSISTANCE ALLOWANCE (DSA) NOVEMBER 2015 - IMPACT STUDY ON 2ND BASELINE SURVEY	578.42	175.28
25	VII	DISSEMINATION AND TRAINING	30.11.2015	HANAFI HALIK	DAILY SUBSISTANCE ALLOWANCE (DSA) NOVEMBER 2015 - IMPACT STUDY ON 2ND BASELINE SURVEY	140.00	42.42
26	VII	DISSEMINATION AND TRAINING	30.11.2015	RANDY RAYYAN BIT BIN ABDULLAH	DAILY SUBSISTANCE ALLOWANCE (DSA) NOVEMBER 2015 - IMPACT STUDY ON 2ND BASELINE SURVEY	302.50	91.67

27	VII	DISSEMINATION AND TRAINING	30.11.2015	NICK AARON ANAK STEPHEN NEES	DAILY SUBSISTANCE ALLOWANCE (DSA) NOVEMBER 2015 - IMPACT STUDY ON 2ND BASELINE SURVEY	1,152.10	349.12
28	VII	DISSEMINATION AND TRAINING	30.11.2015	JAMAL BIN UMAR	DAILY SUBSISTANCE ALLOWANCE (DSA) NOVEMBER 2015 - IMPACT STUDY ON 2ND BASELINE SURVEY	1,087.30	329.48
29	VII	DISSEMINATION AND TRAINING	30.11.2015	TIMOTHY FENCENCIUS	DAILY SUBSISTANCE ALLOWANCE (DSA) NOVEMBER 2015 - IMPACT STUDY ON 2ND BASELINE SURVEY	302.50	91.67
30	VII	DISSEMINATION AND TRAINING	31.01.2016	REZER SEKIT	DAILY SUBSISTANCE ALLOWANCE (DSA) JANUARY 2016 - IMPACT STUDY ON 2ND BASELINE SURVEY	321.90	97.55
31	VII	DISSEMINATION AND TRAINING	31.01.2016	JUHILAN DIAMIN	DAILY SUBSISTANCE ALLOWANCE (DSA) JANUARY 2016 - IMPACT STUDY ON 2ND BASELINE SURVEY	192.50	58.33
32	VII	DISSEMINATION AND TRAINING	31.01.2016	MOHD. SHAHRIN MISUN	DAILY SUBSISTANCE ALLOWANCE (DSA) JANUARY 2016 - IMPACT STUDY ON 2ND BASELINE SURVEY	192.50	58.33
33	VII	DISSEMINATION AND TRAINING	31.01.2016	JOHANATAN MAJINUS	DAILY SUBSISTANCE ALLOWANCE (DSA) JANUARY 2016 - IMPACT STUDY ON 2ND BASELINE SURVEY	192.50	58.33
34	VII	DISSEMINATION AND TRAINING	31.01.2016	DIPUNGANG TAGAK	DAILY SUBSISTANCE ALLOWANCE (DSA) JANUARY 2016 - IMPACT STUDY ON 2ND BASELINE SURVEY	175.00	53.03
35	VII	DISSEMINATION AND TRAINING	31.01.2016	RAMLAN HARUN	DAILY SUBSISTANCE ALLOWANCE (DSA) JANUARY 2016 - IMPACT STUDY ON 2ND BASELINE SURVEY	355.00	107.58
36	VII	DISSEMINATION AND TRAINING	31.01.2016	AHMAD HJ ABD. GHAFFAR	DAILY SUBSISTANCE ALLOWANCE (DSA) JANUARY 2016 - IMPACT STUDY ON 2ND BASELINE SURVEY	55.00	16.67
37	VII	DISSEMINATION AND TRAINING	31.01.2016	MOHAMAD AZAHAR NORDIN	DAILY SUBSISTANCE ALLOWANCE (DSA) JANUARY 2016 - IMPACT STUDY ON 2ND BASELINE SURVEY	771.10	233.67
38	VII	DISSEMINATION AND TRAINING	31.01.2016	MOHD ANUAR ARIFIN	DAILY SUBSISTANCE ALLOWANCE (DSA) JANUARY 2016 - IMPACT STUDY ON 2ND BASELINE SURVEY	348.10	105.48
39	VII	DISSEMINATION AND TRAINING	31.01.2016	AHMAD FIRDAUS ISMAIL	DAILY SUBSISTANCE ALLOWANCE (DSA) JANUARY 2016 - IMPACT STUDY ON 2ND BASELINE SURVEY	468.10	141.85

40	VII	DISSEMINATION AND TRAINING	31.01.2016	MOHD FIRDAUS ZOMHARI	DAILY SUBSISTANCE ALLOWANCE (DSA) JANUARY 2016 - IMPACT STUDY ON 2ND BASELINE SURVEY	268.10	81.24
41	VII	DISSEMINATION AND TRAINING	31.01.2016	NURHAFIZAN MAT ZENI	DAILY SUBSISTANCE ALLOWANCE (DSA) JANUARY 2016 - IMPACT STUDY ON 2ND BASELINE SURVEY	279.10	84.58
42	VII	DISSEMINATION AND TRAINING	31.01.2016	SAFIZAL SUHAIMI	DAILY SUBSISTANCE ALLOWANCE (DSA) JANUARY 2016 - IMPACT STUDY ON 2ND BASELINE SURVEY	676.10	204.88
43	VII	DISSEMINATION AND TRAINING	31.01.2016	MOHD FADZLI BIN BAHARI	DAILY SUBSISTANCE ALLOWANCE (DSA) JANUARY 2016 - IMPACT STUDY ON 2ND BASELINE SURVEY	744.91	225.73
44	VII	DISSEMINATION AND TRAINING	31.01.2016	MOHD NOOR BIN ABU BAKAR	DAILY SUBSISTANCE ALLOWANCE (DSA) JANUARY 2016 - IMPACT STUDY ON 2ND BASELINE SURVEY	578.00	175.15
45	VII	DISSEMINATION AND TRAINING	31.01.2016	MOHD NOR B. A. GHANI	DAILY SUBSISTANCE ALLOWANCE (DSA) JANUARY 2016 - IMPACT STUDY ON 2ND BASELINE SURVEY	120.00	36.36
46	VII	DISSEMINATION AND TRAINING	31.01.2016	ARRAHMAN BIN MOHD SA'AI	DAILY SUBSISTANCE ALLOWANCE (DSA) JANUARY 2016 - IMPACT STUDY ON 2ND BASELINE SURVEY	180.00	54.55
47	VII	DISSEMINATION AND TRAINING	31.01.2016	MAZLAN BIN MOHD GHAZALI	DAILY SUBSISTANCE ALLOWANCE (DSA) JANUARY 2016 - IMPACT STUDY ON 2ND BASELINE SURVEY	460.00	139.39
48	VII	DISSEMINATION AND TRAINING	31.01.2016	MAZALAN HAJI ALI	DAILY SUBSISTANCE ALLOWANCE (DSA) JANUARY 2016 - IMPACT STUDY ON 2ND BASELINE SURVEY	555.00	168.18
49	VII	DISSEMINATION AND TRAINING	31.01.2016	GORONG ANAK BILON	DAILY SUBSISTANCE ALLOWANCE (DSA) JANUARY 2016 - IMPACT STUDY ON 2ND BASELINE SURVEY	220.00	66.67
50	VII	DISSEMINATION AND TRAINING	31.01.2016	MOHD FELANI BIN WAHI	DAILY SUBSISTANCE ALLOWANCE (DSA) JANUARY 2016 - IMPACT STUDY ON 2ND BASELINE SURVEY	400.00	121.21
51	VII	DISSEMINATION AND TRAINING	31.01.2016	MOHD FADLY BIN WAHI	DAILY SUBSISTANCE ALLOWANCE (DSA) JANUARY 2016 - IMPACT STUDY ON 2ND BASELINE SURVEY	582.50	176.52

52	VII	DISSEMINATION AND TRAINING	31.01.2016	MOHD ASRUL BIN ZULKIFLI	DAILY SUBSISTANCE ALLOWANCE (DSA) JANUARY 2016 - IMPACT STUDY ON 2ND BASELINE SURVEY	327.50	99.24
53	VII	DISSEMINATION AND TRAINING	31.01.2016	HANAFI HALIK	DAILY SUBSISTANCE ALLOWANCE (DSA) JANUARY 2016 - IMPACT STUDY ON 2ND BASELINE SURVEY	255.00	77.27
				<b>SUBTOTAL FOR EXPENDITURE (DISSEMINATION AND TRAINING)</b>		<b>18,200.43</b>	<b>5,515.28</b>
54	VIII	OPERATIONAL COSTS	36.01.2016	CITY GRAPHIC DESIGN SDN BHD	TARPAULIN BACKDROP FOR END PROJECT MEETING IN LE MERIDIEN KOTA KINABALU SABAH FROM 02 TO 04 FEBRUARY 2016	212.00	64.24
55	VIII	OPERATIONAL COSTS	27.01.2016	CITY LINK	COURIER SERVICE FOR END PROJECT MEETING MATERIAL	90.00	27.27
56	VIII	OPERATIONAL COSTS	04.02.2016	CITY GRAPHIC DESIGN SDN BHD	TOF AND TOMF POSTERS TO BE EXHIBIT DURING END PROJECT MEETING IN LE MERIDIEN KOTA KINABALU SABAH FROM 02 TO 04 FEBRUARY 2016	150.00	45.45
57	VIII	OPERATIONAL COSTS	02.02.2016	MICRON TM SDN BHD	SCANDISK SWITCH 8GB FLASH DRIVE TO STORE END PROJECT MEETING DOCUMENTS	300.00	90.91
58	VIII	OPERATIONAL COSTS	29.01.2016	LR MASTER CORPORATION	TAGS FOR END PROJECT MEETING BAGS	75.00	22.73
59	VIII	OPERATIONAL COSTS	27.01.2016	SYARIKAT RHINO	END PROJECT MEETING BAGS	750.00	227.27
60	VIII	OPERATIONAL COSTS	27.01.2016	PARKSON WAWASAN PLAZA, KK	STATIONARIES	33.80	10.24
61	VIII	OPERATIONAL COSTS	27.01.2016	MING KIANG SDN BHD	STATIONARIES	106.85	32.38
62	VIII	OPERATIONAL COSTS	03.02.2016	MING KIANG SDN BHD	STATIONARIES	92.70	28.09
63	VIII	OPERATIONAL COSTS	29.01.2016	SAGA PHARMACY SDN BHD	MEDICINE (1ST AID KIT) STANDBY FOR FARMERS FIELD VISIT	24.50	7.42
64	VIII	OPERATIONAL COSTS	03.02.2016	RANAU COLOUR INKJET	BANNER FOR FARMERS FIELD VISIT IN RANAU	190.00	57.58
65	VIII	OPERATIONAL COSTS	04.02.2016	RANAU CATERING	FOODS FOR FARMERS FIELD VISIT IN RANAU	687.50	208.33
66	VIII	OPERATIONAL COSTS	03.02.2016	KEDAI RUNCT TAMBIAU	RUBBISH BAG USED DURING FARMERS FIELD VISIT IN RANAU	15.80	4.79
67	VIII	OPERATIONAL COSTS	04.02.2016	COCOA FARMERS	COCOA PODS FOR EXHIBITION AND PRIMARY PROCESSING	180.00	54.55

				<b>SUBTOTAL FOR EXPENDITURE (OPERATIONAL COSTS)</b>	<b>2,908.15</b>	<b>881.26</b>
				<b>GRAND TOTAL</b>	<b>25,810.59</b>	<b>7,821.39</b>

#### 9.4. Project impact on bean quality and yield performance collected from TOF farmers

**Table 22.** Chemical analysis on pesticides residue and heavy metals from TOF farmers' beans.

Location	Sample code	Heavy metal mg/kg (ppm)			Pesticides residue mg/kg (ppm)	Polyaromatic hydrocarbon (PAH) mg/kg (ppm)	Ochratoxin A (OTA) ng/g (ppb)
		Plumbum (Pb)	Cadmium (Cd)	Arsenic (As)			
Kota Samarahan, Sarawak	CS 1	0.03	0.05	0.04	Metalaxyl (0.02)	n.d	n.d
	CS 18	0.08	0.04	n.d	Metalaxyl (0.05)	n.d	n.d
	CS 24	0.03	0.02	0.02	Metalaxyl (0.02)	n.d	n.d
	CS 27	0.04	0.01	n.d	Metalaxyl (0.06)	n.d	n.d
	CS 30	0.03	0.05	n.d	Metalaxyl (0.01)	n.d	n.d
	CS 10				Chlorpyrifos (0.02)	n.d	n.d
Jengka, Pahang	CS 83	0.14	0.05	0.03	Cypermethrin I (0.02) Cypermethrin II,III,IV (0.01)	n.d	n.d
	CS 84	0.05	0.03	n.d	Metalaxyl (0.05)	n.d	n.d
	CS 99	0.07	0.05	n.d	n.d	n.d	n.d
Tenom, Sabah	CS 38/SBH/15	0.04	0.03	n.d	n.d	n.d	n.d
	CS 47/SBH/15	0.03	0.04	n.d	n.d	n.d	n.d
	CS 50/SBH/15	0.23	0.04	n.d	n.d	n.d	n.d
	CS 42/SBH/15	0.06	0.01	n.d	n.d	n.d	n.d
Hili Perak, Perak	CS 56	0.13	0.08	0.02	n.d	n.d	n.d
	CS 57	0.18	0.14	0.04	n.d	n.d	n.d
	CS 60	0.14	0.09	n.d	n.d	n.d	n.d
	CS 64	0.09	0.05	n.d	n.d	n.d	n.d

**Table 23.** Comparison between farmers' yield performance and income before and after attending TOF training.

Farmer name	Location	Area (Ha)	2014		2015	
			KG	RM	KG	RM
<b>REGION: SARAWAK</b>						
Janda Anak Jelian	Rh. Bana, Sg. Selezu, Sebauh, Bintulu	1	1,045.40	7,317.80	934.10	7,184.02
Layang anak Rekan	Rh. Giri, Jambu Kerampak, Uku Layar, Betong	1	459.90	3,609.35	352.30	2,551.75
Supol anak Gerigu	Rh. Engkin, Brayang, Roban, 9530 Saratok	1	308.90	2,472.57	166.50	1,132.90
Lim Ah Seng	Kpg. Gua, 95600, Sri Aman	1	194.20	1,536.26	966.90	7,285.94
Husin Ngo	Uma Nyaving, Penempatan Semula bakun, Belaga	1	910.80	6,375.60	717.90	4,971.40
Neh Liwan	Uma Nyaving, Penempatan Semula bakun, Belaga	1	1,085.10	7,595.70	1,201.30	9,351.19
Benedict Ego anak Manggi	Rh. Benedict Ego, Bintangor	1	809.60	5,202.20	672.48	5,073.45
<b>Total</b>		<b>7</b>	<b>4,813.90</b>	<b>34,109.48</b>	<b>5,011.48</b>	<b>37,550.65</b>
<b>REGION: SABAH</b>						
June Muanoh	Kg. Kuamut, Kinabatang	1	1.50	9.30	91.70	945.91
Ongkok Bin Ampasok	Kg. Biah, Keningau	1	160.80	1,376.15	399.95	1,136.38
Lokinsim Tumpangon	Kg. Kebayau, Kota Belud	1	5.00	45.50	103.25	891.58
Pollon Saminggau	Kg. Goshen, Kota Marudu	3	1,022.48	8,370.95	1,227.50	9,171.55
Josoh Lopoh	Kg. Tombongon. Menggatal, Kota Kinabalu	1	130.00	3,573.40	55.40	420.96
Awang Kecil@Awang Bin Omar	Kg. Sinar Baru, Kinabatangan	1	289.50	2,285.15	171.00	1,785.40
Hillary Arajai	Kg. Batu-Batu, Tenom	1	183.75	1,390.93	258.85	1,508.98
Francis Sinit	Kg. RBT, Sook, Keningau	1	869.60	7,484.64	692.05	5,405.23
Amion Bin Majjudul	Kg. Indarason Darat, Matunggong	1	175.50	1,531.65	493.50	3,906.85
<b>Total</b>		<b>11</b>	<b>2,838.13</b>	<b>26,067.66</b>	<b>3,493.20</b>	<b>25,172.84</b>
<b>REGION: PENINSULA MALAYSIA</b>						
Roslan Bin Yunus	Sg Burung, Selangor	0.4	20.00	140.00	104.05	724.20
Mastor Bin Muni	Sg Burung, Selangor	0.76	209.00	1,432.06	362.50	2,463.69
Mohamed Mokhlas bin Ismail	Kg. Sg. Pergam	0.6	3.80	26.60	77.20	543.10
Abd Halim Bin Yahya	Sg Siput, perak	0.45	129.90	958.79	175.00	1,280.21
Ali Omar b. Othman	Taiping, Perak	2	24.00	168.00	113.00	829.80
Mohamad Nazri Bin Abd Rashid	Grik, Perak	2.9	531.20	4,059.72	401.00	3,165.94
<b>Total</b>		<b>7.11</b>	<b>917.90</b>	<b>6,785.17</b>	<b>1,232.75</b>	<b>9,006.94</b>



## 9.5. Contact List (beneficiaries and implementing agencies)

No.	Beneficiaries Agencies	No.	Implementing Agencies
a.	<b>Plant Biosecurity Division,</b> Department of Agriculture, 2nd Floor, Wisma Tani, Jln Sultan Salahuddin, 50632 Kuala Lumpur Tel: +603 20301400 Fax: +603 26913550 (Contact person: Mr. Rayner Tiam)	a.	<b>Malaysian Cocoa Board</b> 5 <sup>th</sup> – 7 <sup>th</sup> Floor, Wisma SEDCO, Locked Bag 211, 88999 Kota Kinabalu, Sabah Tel: +6088 234471/2/3/7 Fax: +6088 239575 (Contact person: Mr. Albert Ling Sheng Chang)
b.	<b>Plant Biosecurity Unit,</b> Department of Agriculture, 36600 Chenderung Balai, Perak Tel: +605 6512655/589 Fax: - (Contact person: Mr. Abdul Hamid bin Kornian)	b.	<b>Cocoa Research &amp; Development Centre (Hilir Perak)</b> Malaysian Cocoa Board P.O. Box 30, Sg. Dulang Road, 36307 Sg. Sumun, Perak. Tel: +605 6488176/224/178 Fax: +605 6489151 (Contact person: Dr. Alias Bin Awang)
c.	<b>Agricultural Research Station (ARS),</b> Department of Agriculture Quoin Hill, P.O. Box No. 324, 91007 Tawau, Sabah Tel: +6089 7578212/3 Fax: +6089 775887 (Contact person: Mr. Hermes Joseph)	c.	<b>Cocoa Research &amp; Development Centre (Jengka)</b> Malaysian Cocoa Board Jalan Jengka 23, P.O. Box 34, 28000 Temerloh, Pahang. Tel: +609 4852953 Fax: +609 4852955 (Contact person: Dr. Rozita Osman)
d.	<b>Enforcement &amp; Crop Protection Section,</b> Headquarter Department of Agriculture Sabah, Level 1, Wisma Pertanian Sabah, Jalan Tasik Luyang, Off Jalan Maktab Gaya, Locked Bag No. 2050, 88632 Kota Kinabalu, Sabah Tel: +6088 750712 Fax: +6088 239046/283287 (Contact person: Mrs. Lucia @ Ratna Limpak)	d.	<b>Cocoa Innovative and Technology Centre</b> Malaysian Cocoa Board Lot 12621, Kawasan Perindustrian Nilai 71800 Nilai, Negeri Sembilan Darul Khusus. Tel: +606-7999001/4 Fax: +606-7941910 (Contact person: Dr. Sabariah Samsudin)
e.	<b>Department of Agriculture District,</b> Locked Bag No.15, 89307 Ranau, Sabah Tel: +6088 875337 Fax: +6088 875312 (Contact person: Mr. Blasius @ Yus Bin Duasa)	e.	<b>Cocoa Research &amp; Development Centre Kota Samarahan</b> Malaysian Cocoa Board Lot 248, Block 14, Daerah Muara Tuang, Daerah Muara Tuang, Bahagian Samarahan, Locked Bag 3131, 93450, Kuching, Sarawak. Tel: +6082 465912/4 Fax: +6082 465911 (Contact person: Mr. Pengarah Anak Lau)
f.	<b>Department of Agriculture District,</b> Locked Bag No.42, 89100 Kota Marudu, Sabah Tel: +6088 661334 Fax: +6088 661382 (Contact person: Mr. Gulahis Gandihan)	f.	<b>Transfer of Technology Regional Office Ranau</b> Malaysian Cocoa Board WDT 76, Jalan Lingkudan 89309 Ranau, Sabah Tel: +6088 876297 Fax: +6088 876985 (Contact person: Mr. Affendy Ting)

## 9.6. List of documents produced during the project

No.	Title	Type of resource	Corresponding project outputs
1	1 <sup>st</sup> STDF Project Progress Report on “Cocoasafe”: Capacity Building and Knowledge Sharing In SPS In Cocoa In South East Asia - 23 May 2014.	Mission reports	Output of activities 1.1 and 1.2.
2	2 <sup>nd</sup> STDF Project Progress Report on “Cocoasafe”: Capacity Building and Knowledge Sharing In SPS In Cocoa In South East Asia – 30 October 2014.	Mission reports	Output of activities 1.3 to 1.5.
3	3 <sup>rd</sup> STDF Project Progress Report on “Cocoasafe”: Capacity Building and Knowledge Sharing In SPS In Cocoa In South East Asia – 08 April 2015.	Mission reports	Output of activities 1.7, 2.1 to 2.2 and 2.6.
4	4 <sup>th</sup> STDF Project Progress Report on “Cocoasafe”: Capacity Building and Knowledge Sharing In SPS In Cocoa In South East Asia – 18 September 2015.	Mission reports	Output of activities 2.5.