STDF Standards and Trade Development Facility

PROJECT: STDF/PG/335

STRENGTHENING THE PHYTOSANITARY CAPACITY OF THE FLORICULTURE SECTOR IN UGANDA

FINAL REPORT

30TH JUNE 2015

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PROJECT INFORMATION

Title

Strengthening the Phytosanitary Capacity of the Floriculture Sector in Uganda

Implementing Agency

Department of Crop Protection (DCP), Ministry of Agriculture Animal Industry and Fisheries (MAAIF)

Partners

Uganda Flower Exporters Association (UFEA)
Floriculture industry in Uganda (Flower Farms)
Makerere University, Uganda
Kenya Plant Health Inspectorate Service (KEPHIS)
Centre of Phytosanitary Excellence (COPE) based at KEPHIS
Netherlands Plant Protection Service (NPPS) – the Food and Consumer Product Safety Authority The Netherlands
International Plant Protection Convention (IPPC)
International Centre of Insect Physiology and Ecology (ICIPE)
CABI

Start Date

1 October 2012

End Date

30th March 2015

Beneficiary

Uganda

Budget

Project value: US$ 427,017

STDF contribution: US$ 383,495

LIST OF ABBREVIATIONS

COPE	Centre of Phytosanitary Excellence
DCP	Department of Crop Protection
ICIPE	International Centre of Insect Physiology and Ecology
IPPC	International Plant Protection Convention
ISPMs	International Standards for Phytosanitary Measures
KEPHIS	Kenya Plant Health Inspectorate Service
MAAIF	Ministry of Agriculture Animal Industry and Fisheries
MOU	Memorandum of Understanding
MTIC	Ministry of Trade Industry & Cooperatives
NPPS	Netherlands Plant Protection Service
PMT	Project Management Team
PRA	Pest Risk Analysis
QMS	Quality Management System
SOP	Standard Operating Procedure
STDF	Standards and Trade Development Facility
TMEA	TradeMark East Africa
TOR	Terms of Reference
TTT	Technical Task Team
UFEA	Uganda Flower Exporters Association
URA	Uganda Revenue Authority

1. EXECUTIVE SUMMARY

Uganda's flower industry started in 1992 with three farms. By 2012 it had grown to be one of the country's leading export earners offering employment to thousands of individuals. However, the sector was not achieving its full growth potential as a result of increased interception of its flower exports to the European Union (EU). The EU was importing 80% of Uganda's flowers and so a critical market. Interceptions were as a result of non-compliance to International Standards for Phytosanitary Measures (ISPMs) and the presence of pests regulated in the EU, particularly *Spodoptera littoralis* and *Helicoverpa armigera.* The Department of Crop Protection (DCP), of the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) (Uganda's National Plant Protection Organization (NPPO)) had inadequate capacity to address this problem. DCP and the industry needed technical skills and infrastructure for improved pest management from the production stage to export exit point. In addition, the DCP needed to have in place inspection and export certification procedures that met international standards.

In 2010, DCP requested the Standards and Trade Development Facility (STDF) for assistance. STDF granted the Ugandan government USD 383,495 to implement the project "Strengthening the Phytosanitary Capacity of the Floriculture Sector in Uganda" while the Ugandan government provided USD 43,522 as in-kind contribution. The goal of this project was to improve and maintain market access to the EU for Ugandan flowers by enabling DCP and the private sector to comply with international standards and requirements of the European Market. DCP led in implementing the project working closely with the Uganda Flower Exporters Association (UFEA). The International Plant Protection Convention (IPPC), Netherlands Plant Protection Service (NPPS), Kenya Plant Health Inspectorate Service (KEPHIS on behalf of the Centre of Phytosanitary Excellence (COPE), CABI, and private consultants provided technical expertise. CABI managed the project which ran from October 2012 to March 2015.

Through this project DCP's capacity was built to a level that enables it to implement phytosanitary inspections and certification of flower consignment in line with international standards and requirements of the EU market. This was achieved through study tours, practical training for staff on how to conduct inspections and issue phytosanitary certificates, development of documentation and operating procedures. Inspectors were provided with twelve new standard operating procedures (SOP) compiled into an operating manual. A quality management systems (QMS) manual was developed outlining DCP's operations in line with the newly adopted Plant Protection and Health Act 2015. Mechanisms for cooperation between DCP and the flower industry were fostered through joint trainings and dialogue meetings which led to these stakeholders entering into a partnership agreement. The agreement defined agreed roles and responsibilities of each party, and how they would communicate and sustain collaboration. They also instituted and began to implement a traceability system and a self-regulating process for the flower farms that included disincentives for non-compliance. A technical task team (TTT) comprised of DCP inspectors and farm scouts was put in place and carried out joint activities such as auditing implementation of agreed measures. In order to know the status of pests on farm and generate a pest database, a phytosanitary survey and monitoring

system was developed and both DCP and farm staff were given relevant training for its implementation which included a detailed simulated survey. Some equipment and tools were provided to enable DCP to carry out first line and detailed diagnostics at the exit point and at a national laboratory respectively.

At the onset of the project, the EU instituted a 100% inspection rate for Ugandan flowers, due to the level of interceptions made. This increased the impetus for project implementation and all stakeholders made efforts to comply with agreed measures to reduce interceptions. DCP and UFEA observed a decreasing number of interceptions from 34 in 2013 to none recorded by the end of the project. They attributed this success to measures they instituted and implemented together with the flower farms. The NPPS concluded, during an internal end of project evaluation carried out in March 2015, that the awareness and capacity built during the project period was adequate for these institutions to meet requirements of the export certification process and that of the EU market. Farms reported to have benefitted from prompt technical advice, improved interactions with DCP and the capacity built amongst its staff to conduct scouting and monitoring activities.

DCP, UFEA, flower farms and other stakeholders drew lessons and made recommendations based on experiences they had during project implementation. They concluded that the Project Management Team (PMT) instituted by DCP at the onset of the project had ensured that implementation and ownership of results remained with stakeholders. The PMT brought stakeholders together twice a year to give guidance, monitor implementation and solve issues. PMT members were motivated to build a strong Public-Private Partnership (PPP) as a result of a study tour to the Kenyan floriculture sector conducted by COPE in 2013. They also appreciated STDF's flexibility in project implementation which enabled a no-cost project extension to complete project activities.

During the final project seminar held in March 2015, participants made recommendations on how project achievements would be sustained and improved after the project ended. They included how the whole of the horticulture sector could benefit from systems built and lessons learned through the project. These constituted changes in institutional structures and investments in both staff and resources. Key amongst these was for the government to put in place an enabling institutional structure for DCP in line with IPPC requirements as the current set up was limiting; DCP and UFEA to mobilize adequate resources for implementing Phytosanitary work; MAAIF to enhance in-country agricultural diagnostic capacity and allocate adequate staff to DCP; DCP to further build a surveillance database; and the horticulture sector to form an association like UFEA to enable collaboration and regulation of its farmers. The State Minister for Agriculture assured the two sectors that MAAIF would provide support that was needed from the government. Both DCP and UFEA were positive that the project had put in place key pillars that would enable the sector to meet international requirements of the floriculture export market.

The project was completed within budget. Lessons learned, particularly on building a strong PPP, should be shared with floriculture and horticulture sectors in other African countries.

2. BACKGROUND

The project titled “Strengthening the Phytosanitary Capacity of the Floriculture Sector in Uganda” commenced in October 2012 with funding from STDF. The project was implemented in Uganda by various stakeholders, with DCP of the MAAIF taking the lead in liaison with UFEA. Technical expertise to support the project was sourced from the IPPC secretariat, NPPS, KEPHIS on behalf of COPE, and private consultants. Project funding was initially for a period of 24 months starting 1st of October 2012 and ending on 30th September 2014. CABI was contracted by the STDF to provide overall project management.

Over 70% of Uganda’s rural population are dependent on agriculture for their livelihoods. Agriculture is a key pillar of Uganda’s economy contributing 26% of its GDP and accounting for 43% of its export earnings (DCP, 2014). The floriculture industry in Uganda has 14 flower growers on 170 hectares and on average realizes an export value of about $40 million/year for roses and plants for planting (UFEA, 2014), mainly to EU countries. The total investment in the sector by 2014 was $100 million with a potential to grow at a rate of 14% per year if provided with the right incentives (UFEA, 2014). The flower industry is labour intensive and hence has great potential to generate employment. It is amongst the largest export earners in Uganda and is growing at a rate higher than that of the overall economy. Since 1995, the export volumes have increased from 1,150 metric tonnes to 7,500 metric tonnes in 2015 and the revenue has grown steadily. Export sales for 2014 were at $38.7 million, up from a figure of $21 million for 2002 (UFEA, 2014). The sector therefore has a huge potential to contribute to the country’s national economy, generate employment, stimulate infrastructural growth and improve livelihoods.

However, the presence of regulated pests in Ugandan flower exports to the EU resulted in interceptions for non-compliance and presence of quarantine pests, *Spodoptera littoralis* and *Helicoverpa armigera* being the most important ones. Interceptions and subsequent losses reduced the income of the flower farms slowing down expansion of the industry and opportunities for employment and generating revenue for the country. At the time of project conception, Uganda had inadequate capacity in the public sector to address pest management in the areas of systems, staff, facilities and resources for implementing phytosanitary measures. DCP’s export certification system focused mainly on phytosanitary inspections at the exit point whereas a comprehensive system would encompass the whole flower production chain including places of production, packing and transport to exit point.

DCP was aware of these challenges following a number of assessments and consultations with international and local stakeholders including the NPPS. It therefore requested for funding from the STDF in 2010 to build its capacity and that of the private sector to comply with the IPPC and ISPMs for better pest control along the production chain, inspection and export certification. After some revisions, the STDF Working Group approved the project in March 2012 and a contract was signed with CABI in September of the same year. STDF granted a project no-cost extension up to March 2015. DCP requested for the extension

because some project activities had not been completed by the planned project end date as a result of delays experienced in delivery of contracted services.

3. PROJECT GOAL

The overall goal of this project was to improve market access to the EU for Ugandan flowers. This would be achieved by strengthening capacity of the public and private sectors to comply with phytosanitary requirements of the importing countries. Consequently, this would result in reduced interception of Ugandan flowers in the EU and the related losses. A strengthened floriculture sector would continue to contribute to the national economy and livelihoods of its employees.

4. PROJECT IMPLEMENTATION AND MANAGEMENT

One of the outputs envisaged from this project was to build strong collaboration between the public and private sector. Therefore, the structure for project implementation was designed to facilitate joint decision making. In November 2012 DCP instituted a Project Management Team (PMT) comprised of 7 staff from MAAIF, UFEA, flower farms, Makerere University, the Ministry of Trade Industry & Cooperatives (MTIC) and CABI. The team agreed on its own Terms of Reference (TOR) and the responsibilities of DCP and UFEA.

The PMT monitored and oversaw overall project progress and implementation based on indicators and milestones stipulated in the project document. At each meeting, of which at least two were held in a year, PMT reviewed outputs and milestones in the project logframe and advised on how best these would be achieved or modified to meet intended outputs. It reviewed and approved bi-annual workplans, TORs for and products delivered, from commissioned work, as well as decided how best to address arising issues. See various PMT minutes appended to this report, Document No. 2, 15, 18, 19, 20, 39, 40, & 41.

DCP was responsible for overall project implementation which included convening and leading meetings and workshops, following up on day to day implementation of activities, monitoring quality of outputs and accounting for project expenditures. CABI was responsible for project administration, providing technical support and ensuring quality of outputs.

UFEA ensured that flower farms were fully engaged in project activities by mobilizing them to participate in meetings, make in-kind contributions and implement interventions agreed to enhance compliance.

During the second year of implementation, UFEA and DCP formed a technical task team (TTT) comprised mainly of farm production managers and DCP inspectors. This team was responsible for undertaking compliance audits from time to time jointly with UFEA staff. Through UFEA, a monthly meeting for flower owners was instituted for them to discuss and agree on compliance measures and get feedback from the TTT. The managers also visited each other's farms for joint learning and self-auditing. The NPPS, KEPHIS (through COPE), and a private consultant provided technical support and conducted various training activities.

Overall UFEA and DCP worked effectively as a team in implementing project activities. See Document No 1 & 2 - Inception Report & Minutes of the Inaugural PMT Meeting respectively.

5. PROJECT OBJECTIVE, OUTPUTS & ACTIVITIES

5.1 Project Objective:

The immediate objective was to improve compliance with international phytosanitary standards by flower producers and exporters in Uganda. Compliance would lead to reduced interceptions of cut flowers in the EU due to presence of quarantine pests. This in turn would reduce production costs, increase profits, encourage growth and result in a stronger sector.

5.1.1 Output 1: Enhanced Capacity of DCP to Implement Phytosanitary Measures

The first output was to develop DCP's capacity to implement phytosanitary inspections and certification of flower export consignments in line with international standards of export certification systems and requirements of the EU market. This was done through training workshops, study tours, staff deployment, production of reference materials, development of documentation and operating procedures, and a computer based format for the export certification system. Technical areas that were covered are explained below.

Recruitment by MAAIF of new DCP staff members, Activity 1.2
DCP retained 5 staff at the airport as had been agreed as a condition for funding. However, not all of them were available consistently during the project period. Staffing remained a key challenge for DCP at the Entebbe airport as well as at other exit points in the country mainly as a result of staff leaving for other engagements.

Inception, study tour and hands on training for inspectors, Activities 1.1, 1.4, 1.5
At the project inception stage, IPPC and NPPS staff conducted an inception workshop where they trained 30 DCP, UFEA and flower farm staff on ISPMs 4, 6, 7, 8, 12, 13, 20 and 23. Areas covered included the requirements, roles and responsibilities of an NPPO; phytosanitary certification and issuing of certificates; notification of non-compliance; phytosanitary import regulation; and guidelines for inspection. Staffs were also given initial training on the EU phytosanitary requirements (Council Directive 2000/29/EC). Subsequently, more detail was covered during other training workshops, mentioned later in this report. Refer to documents 3, 29, 30 & 32 - Report of the General Project Initiation Workshop, TOT Training Report, Scouts Training Report & Scouts Training Materials, respectively.

During a 5-day study tour to Kenya, 11 staff from DCP, flower companies and UFEA were given practical exposure and training on how various ISPMs and the Council Directive 2000/29/EC were implemented by KEPHIS and the flower industry. KEPHIS (through the COPE) designed and conducted the tour. Areas

covered in detail were: (i) Responsibilities of KEPHIS as NPPO - inspection for phytosanitary certification & issuance of paper phytosanitary certificates, issuance of notifications and compliance; (ii) Practical procedures of phytosanitary certification system for export; (iii) Practical phytosanitary inspections for exports; (iv) Procedures for handling received notifications of non-compliance; (v) Illustration of a specific survey; (vi) Illustration of scouting for specified pest(s) by a flower company and role of the NPPO in collecting and using scouting data;(vii) Use of central databases and; (viii) application of diagnostic support services to phytosanitary certification. Refer to documents 4 & 5 – Study Tour Report by COPE/KEPHIS, Study Tour report by DCP & UFEA respectively.

COPE also conducted a two week hands-on practical oriented training in Kenya for 9 DCP inspectors. Trainees were exposed to various phytosanitary systems in KEPHIS field offices, diagnostic laboratories, airport inspection unit, and farms specializing on cut flowers and plants for planting. The training covered: (i) Inspection procedures of the export certification system; (ii) Auditing processes; (iii) Pest and disease detection; (iv) Handling of documents and phytosanitary certificates; (v) Quarantine pest detection and; (vi) First line diagnostics. At the airport inspection unit and pack-houses, trainees were taken through practical aspects of pest detection including sampling and how the electronic certification system works. At the KEPHIS laboratory they were shown how the diagnostic laboratory and its services are linked to KEPHIS' regulatory work. The focus was on fungal, bacterial, insect and nematode pest identification. Refer to documents 13 & 14 – COPE's Report on Detailed Inspector Training May 2013, DCP's Report on Detailed Inspector Training May 2013, respectively.

Through these activities, participants identified specific areas that needed to be addressed to enhance the phytosanitary system in Uganda. They drew up lists of priority SOPs, equipment and software needed for laboratories, documentation templates for inspectors, data bases to be developed. They appreciated that success in Kenya was to a great extent attributed to good collaboration between the NPPO and the private sector. They resolved to foster the same in Uganda.

Standard Operating Procedures and reference documents, Activities 1.3 & 1.6
DCP and UFEA consolidated and prioritised recommendations drawn by their staff and designed specific activities to address them. These were presented to and approved by the PMT in line with project funding. DCP staff drafted 12 Standard Operating Procedures (SOPs) with technical support from NPPS, CABI and a consultant. The SOPs covered the following areas: export inspection, sampling, pest reporting and scouting, certification of biocontainment facilities, handling notifications, certification of heat treatment facilities, diagnosis of plant pests, Pest Risk Analysis (PRAs), surveillance monitoring of Spodoptera and Helicoverpa in cut flowers, certification of live cut flowers and, inspection of fields growing plants for export. The SOPS were compiled into an Operational Manual and availed to inspectors for implementation. See Documents 12, 16 & 36 – SOPs training by NPPS for Uganda Stakeholders September 2013, NPPS mission report SOP workshop September 2013, and Operational Procedure Manual for Phytosanitary Inspection and Certification in that order.

In addition, DCP developed a Quality Management System (QMS) Manual that outlined how it would conduct its business including administration and delivery of its mandate. The QMS manual is document No 37.

Computer-based format of the export certification system & central database, Activities 1.7 and 3.7
Activities 1.7 and 3.7 were intended to put in place computer based export certification and pest surveillance systems that would constitute a simple operational database with phytosanitary data and information on quarantine pest populations. NPPS was sub-contracted to review the existing infrastructure to support development of these systems as well as whether there were other on-going initiatives that DCP could collaborate with. NPPS recommended that since DCP did not have adequate structures and funding to put up its own electronic systems at the time, it would be best to collaborate with TradeMark East Africa (TMEA) and the Uganda Revenue Authority (URA) that were putting in place an infrastructure for both paper and electronic certification system. The NPPS report provided technical insights of various models that could be used to accommodate DCP's data. The cost of implementing the proposed models was beyond the scope of the project. By the time of project closure discussions between DCP, TMEA and URA were at an advanced stage. DCP has also deployed one of its staff to be in charge of capturing data and a database. See document 17 - NPPS Mission Report Computer Based Format & Central Data Base Act 1.7 & 3.7, April 2014.

Challenges
Activities in this result area were conducted as designed in the project documents. Some reallocation of funds was approved by STDF to facilitate write shops for development of the SOPs. Expected outputs from activities 1.7 and 3.7 were not fully accomplished because the infrastructure required was inadequate and the project was not designed to put them in place.

5.1.2 Output 2: Inspection & Export Certification System Streamlined and Adopted

The project was designed with an appreciation that the public and private sector needed to work together in order to realize the desired level of phytosanitary compliance, as had been proved in other countries. This second output was intended to build mechanisms for cooperation between DCP and the flower sector mainly through consultative meetings engaging the flower farms; setting up a small office/laboratory at the airport; and providing technical assistance to DCP and UFEA on implementation of phytosanitary procedures developed under output 1.

Partnership between DCP, UFEA and the Flower Producers, Activity 2.1
In 2014, the inspection of flowers from Uganda in the EU was increased to 100% due to increased presence of quarantine pests, particularly *Spodoptera littoralis.* This gave added impetus to both DCP and UFEA to work together to meet the EU requirements. UFEA mobilized the flower industry to attend consultative meetings convened by DCP to agree on measures that they needed to implement on their farms as proposed by the EU, PMT and the NPPS. DCP and

UFEA senior staff met on a weekly basis to review progress. The proposed measures were well received by the farms, most of whom implemented them.

Managers and farm owners met on a monthly basis to share lessons, and visited each other's farms as part of auditing implementation of agreed measures. They agreed on penalties each would have to pay for non-compliance. The funds generated would constitute a partnership fund to support their joint activities. The initial funds that were raised from this arrangement were used to facilitate farm visits by DCP. Non-compliance included failure to attend the joint meetings or getting a notification from the EU. In order to be able to know from which farm a pest had been found the partners put in place a traceability system whereby all farms registered with DCP. Each farm provided information including official business name, who owned the company and contacts, locations of their farms, hectares under production and number of green houses, crops and varieties grown, sources and origin of planting material, scouting reports and staff capacity, and chemicals/inputs used on the farm. They also agreed that any farm that received a notification would be stopped from consolidating their consignments with other farms. Consolidation enables farms to share charges for airfreighting flowers to the EU, without which a company has to pay for freight charges on its own, which is highly prohibitive. These measures proved to be a good incentive for farms to implement agreed measures.

Both DCP and the flower industry were happy that their intensive interactions had resulted in reduced interceptions and were keen to have a partnership arrangement that would ensure this type of collaboration continued in a sustainable way. They formed a TTT comprised of inspectors and farm production managers. The team was tasked with auditing measures implemented on the farms. They also developed a communication strategy which spelled out what information will be shared, by whom, when and how. Further, DCP and UFEA entered into a Partnership Agreement through a Memorandum of Understanding (MOU) as a sign of their commitment to continue working together. The MoU stipulates how they will interact with each other, their roles and responsivities, a Terms of Reference (TOR) for the TTT, funding and sustainability. The MOU was signed by flower producers and officially launched by the Minister for Agriculture during the final project seminar in March 2015. See documents 45 and 46 - DCP Final Seminar Report, Proceedings of Final Seminar respectively.

Establishment of a small laboratory at the airport and technical assistance, Activity 2.2 & 2.3

UFEA provided a small room at a storage building belonging to Fresh Handling Limited near the airport. The room was equipped with a computer and some sampling kits to enable basic diagnostic work to be carried out. However, the room was too small to accommodate installations that would have enabled the intended work to be done. Most of the equipment intended for the airport mini-lab was therefore delivered to the main government agriculture laboratory at Namalere.

The NPPS, CABI and an independent consultant affiliated to ICIPE provided technical assistance to both DCP and UFEA during the implementation of agreed measures. This was done through sharing ideas and experiences from other countries, reviewing and providing inputs into technical documents.

Some of the funds allocated for this output were used to conduct an internal project evaluation in March 2015. The evaluation was conducted by NPPS through a consultative process with flower farms, UFEA and DCP. It was conducted to document the achievements made through the project against what was expected, challenges and lessons learned in executing the project, as well as those anticipated as a result of institutional changes at the ministry, sustainability measures that had been put in place and those that needed to be considered in the near future. The evaluation was commissioned by the PMT even though it was not initially in the project document. PMT felt this was a good process for self–review and consolidating ideas for the way forward once the project came to an end. Refer to documents 43, 44 - DCP UFEA Partnership MoU, Evaluation Report by NPPS March 2015, respectively.

5.1.3 Output 3: Operational Phytosanitary Survey and Monitoring System

Data on pest distribution and abundance is a key component of an effective phytosanitary system. Prior to the project such data did not exist, nor was there a systematic and consistent way for monitoring. The third output was therefore to build the NPPO's capacity to undertake specific surveys in order to collect data and generate information on pests of concern. This was done through a series of activities starting with designing a survey and monitoring system (Activity 3.1), establishing a team that would lead the surveys (Activity 3.2), training DCP and UFEA staff on how to train scouts (Activity 3.3), training scouts (Activity 3.4), providing DCP with some survey equipment and tools (Activity 3.5), carrying out surveys and monitoring (Activity 3.6), and developing a database (Activity 3.7). Great emphasis was placed on fostering collaboration, data sharing and communication between the private and public sectors.

Specific survey & monitoring system and task team, Activities 3.1, 3.2
The specific survey and monitoring system was designed through a consultative process involving DCP, UFEA, flower farms, NPPS and CABI, facilitated by an independent consultant. The agreed system describes responsibilities of the NPPO, private sector and other experts in the surveillance process, resources needed including staff skills, documentation and tools required, TORs for a surveillance task team, and policies and institutional arrangements that would enable the NPPO to fulfil its responsibility. Refer to document 25 - Proposed Survey & Monitoring Systems and Task Force 2014.

Training of scout trainers (TOT) and scouts training, Activities 3.3, 3.4
In December 2014, 24 staff from UFEA and DCP were trained in a nine day workshop on how to train scouts (TOTs). Trainees comprised of 5 DCP staff and 19 flower farm staff who were either production managers or scout team leaders in the existing 14 farms. These individuals were also members of the TTT. Most trainees, except those from farms producing plants for planting, did not have a good understanding of scouting protocols including knowledge and use of tools for pest identification, data collection and analysis. Neither were they familiar, except for DCP staff, with the requirements of the 2000/29/EC directive on measures for mitigating harmful organisms along the production and certification chain. Even in cases where some farms collected data it was not always

transferred to soft copy or summarized for sharing. Hence the training was designed to first of all teach the TOTs these technical aspects themselves before they could train scouts. The training also covered the methods they would use to train scouts on the same. Rosebud flower farm provided training facilities and allowed trainees to conduct practical sessions in their greenhouses.

The training covered three areas:

1. Identification, biology, host range, control strategies, mitigation, practical aspects of the following pests and crops (5 training days)
    a. *Helicoverpa armigera* (on cut flowers and plants for planting)
    b. *Spodoptera littoralis* spp. (on cut flowers and plants for planting)
    c. *Liriomyza* spp (on cut flowers and plants for planting)
    d. *Bemisia tabaci* (on plants for planting)
    e. *Thaumatotibia leucotreta* (on cut flowers and capsicum)
2. Awareness of EU regulations covering documentation and pest management (Plant health, 2000/29/EC in relation to phytosanitary measures of the five pests) (1 day)
3. Scouting principles and practices (3 days)
    a. Scouting techniques
    b. Data collection, recording, analyzing, and utilization for making predictions and other decisions for the 5 above named pests
    c. Roles, responsibility and partnerships - including roles of public sector (DCP specialists as auditors), and those of the private sector, such as the scouts in the flower farms
    d. Mobilization of interest and support among flower producers

Refer to documents 26, 29 & 32 – Curriculum Scouts Trainers TOT, Training Report TOT, Training Materials TOT and Scouts Training respectively

Soon after the TOT, 8 of the trained trainers conducted a training for 24 senior field supervisors and scouts. The selected trainers were from flower farms and were supported by 5 DCP staff, 2 UFEA officials and the independent consultant. The training focused on pest detection, identification, sampling, appropriate use of scouting equipment, data collection, analysis, and reporting for pest prediction. At the end of the workshop scouts made recommendations on tools their employers needed to provide in order for them do their work effectively. Subsequently some companies managed to procure these items. Ungarose Company co-funded the training by providing facilities and allowing practical work to be done in their greenhouses. Farm owners agreed that farms would in future share data generated from scouting activities with DCP thereby enhancing private-public partnership and contributing to surveillance. UFEA requested for a TOT manual that trainers would refer to in future. See document 27, 30, 34, 35 – Curriculum Scouts Training, Training Report Scouts, Scouts Training Manual, Consolidated Reference Materials for Scouts Training, respectively.

Surveillance equipment and implementation of specific surveys, Activities 3.5, 3.6

Having a surveillance system agreed upon and staff trained on pest identification and sampling, the next step for DCP was to carry out some surveys, and use new information collected. The PMT decided the most prudent manner of

utilizing limited funds provided in the project was to simulate a pest survey to build staff confidence since such surveys had not been carried out before. 6 DCP and 1 UFEA staff that had undergone scouts training were nominated to form a surveillance team. They were taken through a step by step survey process designed in a 6 six day training programme. DCP and the independent consultant choose to simulate a detection survey for *Liriomyza* on Chrysanthemums.

During the first two days, the trainees re-familiarized themselves with ISPM No 6 (Guidelines for Surveillance), European Union council directive 2000/29/EC, the surveillance protocol they had designed under Activity 3.1, pest identification, and sampling methods they had learned under Activities 3.3 & 3.4. On the third day they developed a pest survey SOP for *Liriomyza* on *Chrysanthemum,* two work instructions as per ISPM No. 6, and a detailed plan to conduct the survey. During the next three days they conducted surveys in three farms, capturing data and collecting samples under the supervision of the consultant. On the final day, the inspectors were taken through the identification process at Namalere laboratory, they fed the data into simple excel worksheets, and then a simple descriptive analysis was demonstrated. They interpreted the data and discussed with DCP what the next cause of action would be with regard to complying with directive 2000/29/EC for this pest.

The *Liriomyza* species collected at the farms was identified as *L. sativae* which was not documented before the survey. It was agreed DCP would get a confirmation from an entomologist a process that was ongoing by end of the project. At the end of the training the survey team was able to make recommendations on how best they could be facilitated to undertake comprehensive surveys for this and other pests of importance. They understood much better how surveys contributed to the phytosanitary certification process and thereby market requirement. Refer to documents 28, 31 – Curriculum Pest Surveillance Training, and Training Report on Pest Surveillance respectively.

Challenges

A few challenges were experienced in getting the survey and monitoring system in place and implemented. There were delays in securing time from the NPPS to design the system in the period earmarked in the project document. Eventually CABI sub-contracted an independent consultant that had good experience in the subject matter and had worked at KEPHIS and was affiliated to ICIPE. In order to have consistency in the trainings listed above, the three training curricula and training activities were designed and delivered by the same consultant. Through courtesy of the consultant, ICIPE's training and technology transfer unit donated some reference handbooks on Integrated Pest Management for use by scouts. Demonstration of pheromones and lures as tools for monitoring was not adequately covered as envisaged because service providers engaged in Uganda were not able to meet required specifications for targeted pests. The farms decided to consolidate some funds and import these tools from abroad. In other cases the farms came up with other tools that seemed to work just as well.

Some of the trainees selected for scouts training had little knowledge of the subject matter which necessitated longer training sessions including use of interpreters. It was clear that DCP and the industry needed to set aside funds for survey work which has not been the case in the past. Through the trainings

listed above scouts and inspectors are in a better position to know and request for necessary resources. The delay in delivering this output necessitated a project no-cost extension to March 2015. Despite these challenges, this set of activities was considered by DCP and UFEA staff as very successful in demonstrating how having pest data and information contributes to having an effective phytosanitary system.

5.1.4 Output 4: Improved Awareness at National Level on Importance of a Well-Functioning Plant Health System

Stakeholders in the floriculture and horticulture industry met during a final project seminar held on 26th March 2015 in Entebbe. DCP and UFEA convened the meeting to share achievements and lessons learned during the two and half years of project implementation. The meeting was attended by representatives from both the public and private sector and presided over by the State Minister for Agriculture Honourable Vincent Ssempijja. Participants deliberated on issues that were hampering growth of Uganda's agriculture export business and made several recommendations on how they could address these, building on what the project had initiated. The recommendations included having adequate staff capacity in the ministry to address phytosanitary certification process in an efficient manner, instituting an NPPO that has a structure and is allocated adequate resources to address phytosanitary issues as stipulated by the IPPC, fostering private-public partnerships that share costs and responsibilities in order to meet market requirements, and providing a conducive policy and infrastructure environment that helps to reduce the cost of production.

The government of Uganda, through the Minister, conveyed acknowledgement to institutions that had played a role in funding and implementing the project and especially the STDF, NPPS, KEPHIS, DCP, UFEA and CABI. He informed participants that the Ministry would seek to address the issues raised for the betterment of Uganda's income and livelihoods of its citizens. Refer to documents 45 and 46 - DCP Final Seminar Report, Proceedings of Final Seminar, respectively.

6. FINANCIAL OVERVIEW

Overall the project expenditure is within budget with a total under-spend of USD 25,183. The under-spend includes USD 16,600 contingency that was provided in the budget but which was not requested while the rest were savings. For example activity 3.1 and 3.2 were carried out by one consultant in one mission thereby saving USD 4,500 that was meant for expert fees under activity 3.2; USD 1000 allocated for local travel in activity 2.1 was not spent as travel was costed to activity 3.2; less days were spent by DCP and UFEA on activity 3.6 hence USD 1591 saving realized and; the development of survey database required no further funds during the extension period leaving a balance of USD 3000.

Overall no activity had a significant over-spend on direct costs even though there were some over-spend against specific activity budget lines. However, CABI incurred a substantial staff time over-spend amounting to USD 9,181. This

was a result of intensive follow-up of commissioned work, review of and input into deliverables submitted by service provides which was not envisaged. One of the challenges in project implementation as mentioned in progress reports was the delays in getting outputs from service providers and the subsequent high level of review and inputs by CABI to ensure that TORs were met and comprehensive reports submitted.

7. OVERALL PROJECT RESULTS AND LESSONS LEARNED

The overall objective of the project was to improve market access to the EU and other high end markets for Ugandan Flowers. This would be done by building the capacity of responsible government institutions and the private sector to observe phytosanitary requirements of importing countries. Compliance was expected to reduce interception of flowers from Uganda hence building the confidence of importers. At the onset of the project, Ugandan flowers were subjected to a 100% inspection rate at the EU due to increased number of interceptions. This emergency situation required urgent and consistent measures to prevent possible cancellation of flower imports to the EU. DCP and UFEA through the project made great effort to mitigate this situation. By the time of project closure, March 2015, an internal evaluation concluded that measures carried out in the sector had positively contributed to strengthening phytosanitary guarantee at production level. In addition, DCP and the flower industry had gained capacity to address requirements of the export certification process to a level of international standards and of the EU market. A trend of reduced notifications was realized with 34 in 2013, 18 in 2014 and none by June 2015. Ugandan stakeholders were confident that if they sustained these measures the 100% inspection rate could be removed by the end of 2015.

Over the project period DCP and UFEA met regularly, deliberated and agreed on measures they needed to take as a team to meet Council Directive 2000/29/EC requirements. As a result of this dialogue and joint planning both institutions gained a common understanding of challenges in the industry, what needed to be done to address them, how and by whom, as well as opportunities for co-funding. Their joint TTT undertook regular audits for compliance at the farms which generated a process for monitoring and learning. Both sectors acknowledged that strong cooperation between the public and private sector was necessary for best results. At the end of the project DCP and the industry signed a partnership agreement demonstrating their commitment to work together to grow the industry.

Through training, technical tours and interactions with project partners, DCP identified procedures required for a functional export certification system that focused on the whole flower production chain as opposed to just exit point inspection. DCP staff developed 12 SOPs which were consolidated into an operational manual for inspectors. Further DCP drafted a Quality Management Systems Manual that it would use to ensure good services and compliance with the recently approved Plant Protection and Health Act 2015. During the internal project evaluation conducted in March 2015, DCP and UFEA staff reported they had gained adequate skills and knowledge to implement the agreed procedures. The evaluator concluded they had good awareness and understanding of the EU directive, could conduct necessary inspections along the production chain, carry

out scouting activities and generate surveillance information through surveys. Inspectors had new and comprehensive reference materials.

Flower farms benefited by realizing reduced interceptions. Through the good relations built between UFEA and DCP, the farms got prompt advice on measures they needed to implement. In addition they were able to constitute a team that would continue to carry out training of scouts in pest identification and data collection contributing to sustainability of the outcomes. Some of the trainers from the farms were selected to join the TTT that was carrying out farm audits.

Through interactions with technical experts hired by the project and training of their staff, the industry had already begun to mitigate a possible threat posed by the false codling moth. The moth had been reported on pepper but not yet on flowers. The NPPS expert informed the industry that the EU was already considering it for regulation. By addressing the presence of the month in good time, the industry has been able to prevent new losses that could result from interceptions. The traceability process instituted by DCP helped exporters know from what farm the product for which a notification had been issued had originated. The notified farm was thereafter closely monitored by the technical team for compliance to agreed mitigation measures and penalties instituted through UFEA for non-compliance. This proved to be an effective self-regulation mechanism.

Project partners drew and shared lessons gained during project implementation. As a result of the study tours to Kenya, DCP and UFEA staff were able to identify and prioritize the capacity and interactions they needed to build in Uganda. For example, they learned that the success of the flower industry in Kenya was a result of close collaboration between the private and public sector. They heard from KEPHIS staff that active participation of the flower industry in the certification process had helped to increase compliance to market requirements and phytosanitary measures. This motivated them to work towards a similar set up in Uganda which was partly achieved as described above. During the final project seminar the flower industry demonstrated to the horticulture industry the benefits of working closely with the public sector. They also reiterated the importance of having an association such as UFEA which would enable the horticulture industry work as a team and be easily regulated.

Having a project management team was very important in ensuring that project progress was monitored, issues arising were addressed promptly and stakeholders were engaged in the decision making process. This helped to build a continued sense of ownership amongst partners which in turn made it easier for them to work as a team. The PMT helped to translate the technical project activities into workable tasks and agreed on who amongst them would take the lead in specific activities for ease of follow up. This ensured that responsibility was well distributed between DCP, UFEA and other partners.

Lastly the PMT members noted that it is critical to be flexible in project implementation. For example it was important that the project was able, with authorization from the STDF, to hire an independent consultant to prevent further delays, when the planned providers were not available at the time their technical expertise was needed.

Engaging trainers with hands-on experience ensures that the training provided is not purely theoretical and the trainees can relate it with their daily work.

8. RECOMMENDATIONS

8.1. Specific recommendations to the project

Project partners made recommendations on how results and benefits produced through the project could be enhanced and sustained. These include further investments and necessary changes in institutional structure:

I. Provide the legal framework for the DCP to operate fully as the NPPO in line with IPPC requirements. This would give the necessary autonomy it requires to carry out its functions including addressing management, staffing and resource mobilization
II. Mobilize/allocate adequate funds at both DCP and UFEA to carry out phytosanitary work as current allocations were not adequate. One possibility would be cost recovery at DCP by charging for services such as inspections
III. Build a surveillance database for timely risk assessments
IV. Continue to pursue e-certification in order to improve efficiency and quality of certification process and the certificates
V. Enhance diagnostic capacity at national level. Most farms were seeking diagnosis abroad which increased costs of production
VI. Improve capacity and facilities for carrying out inspections and first line diagnosis at the airport. DCP and UFEA to liaise with flower companies to provide a facility for inspection on-farm and explore means of securing the consignments en route to the airport. On farm inspections would be a good way of mitigating pests in good time
VII. Explore ways of getting adequate and skilled staff. For example some of the technical staff at the farms could be trained and certified to undertake pest scouting and surveillance with supervision from the NPPO. The high staff turnover could be prevented by facilitating them adequately to conduct their duties, training, mentoring and offering competitive terms. In the case of diagnosis, it was proposed that DCP explores collaboration with the National Agricultural Research Organization.
VIII. Put in place a system for confirming species of moths collected by the flower farms in order to enhance pest information
IX. Document pest monitoring activities being undertaken at the farms and draw up a bench mark that could be used by the horticulture sector and others
X. DCP needs to develop other SOPs including one on implementing the QMS it has developed

8.2. Broader recommendations

Lessons learned particularly on how to build private-public sector partnerships could benefit other countries hence important to share at relevant fora.

Without the strong collaboration between DCP and UFEA the project would not have achieved its objectives.

Results that will be generated from surveillance should be shared with IPPC and IAPSC as well as any relevant policy changes such as the recent adoption of the Plant Protection and Health Act 2015.

In terms of project design and implementation the model of having a partner led advisory team is necessary to ensure ownership of project activities and results as demonstrated in this project.

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9. ANNEXES

9.1. Logical Framework

	Project description	Measurable indicators	Sources of verification	Assumptions and risks
Overall objectives (goals)	Improve market access to the EU and other high end markets for Ugandan flowers.	Number of labourers employed by the floriculture sector remains stable or increases. Trade volume of the sector stays at least the same or improves. Total revenue from the sector remains the same or improves.	Export and financial data from FHL and/or UFEA. Survey among flower farms on number of labourers employed.	Growers are willing to cooperate and implement scouting under DCP supervision. Demand for flower cuttings and the sweetheart roses in EU (or other markets) does not decrease. The appearance of unexpected organisms that are on the EU quarantine list and difficult to control by the growers.
Immediate objective	Improved compliance with international phytosanitary standards for production and export of flowers for the European market.	Reduction of number of interception of cut flowers in the EU.	Notification reports from the NPPS EUROPHYT data base.	New pests can be controlled using the established capacity
Expected result 1	DCP's staff capacity developed in order to bring the implementation of phytosanitary inspections and certification of flower export consignments in line with international standards of export certification systems and the requirements of the EU market.	. Staff confidence in the way they deal with their phytosanitary activities and follow procedures. Implementation of phytosanitary measures according to agreed Standard Operating Procedures.	Notification reports from the NPPS, EUROPHYT data base. Procedures documented. Progress reports. On-the-job assessments. Reference material and manuals.	Staff motivated to participate in training and to change the procedures and implement the changes.

	Project description	Measurable indicators	Sources of verification	Assumptions and risks
		Improved reference material and manuals.		
Activity 1.1	**General Project Initiation Workshop.** Two day awareness creation and technical introduction / training workshop for participants representing key stakeholders (DCP staff, relevant policy makers, inspectors, UFEA representative(s), crop protection specialists / scouts / quality controllers from flower companies), with inputs from specialized consultants on: (i) responsibilities of a NPPO, (ii) functions and new developments of an export certification system (iii) EU phytosanitary import requirements, import procedures, notification systems of non-compliance, and its developments, (iv) difference between general surveillance and specific phytosanitary surveys and role in phytosanitary system. Participants: Approximately 20 Duration: 2 days Organised by: Experts from DCP, in concert with UFEA and CABI Africa, Technical inputs: Two experts, from IPPC and NPPS Location: Entebbe	Number of participants from different stakeholders in the floriculture sector. At least 20 relevant persons trained. Proceedings of workshop written.	List of participants. Report of workshop and proceedings. Proceedings published. Workshop pre and post evaluation.	Representatives of different stakeholders are willing to participate actively.
Activity 1.2	**Recruitment by MAAIF of about five new DCP staff members**1[1] to be deployed by DCP for activities as required implementing and sustaining the improved phytosanitary measures of this project.	Number of new full time staff (Five) available to implement phytosanitary measures.	MAAIF staff records.	No funds available to employ new staff. Applicants have the needed qualifications.

[1] Recently four new DCP staff members were recruited who have been employed at the airport as inspectors in addition to the two old staff.

	Project description	Measurable indicators	Sources of verification	Assumptions and risks
				New staff is motivated to be involved in various phytosanitary activities.
Activity 1.3	**Review and update of DCP's procedures, documentation and reference materials related to export certification system with technical assistance from NPPS.** This would include recommendations and improvements in procedures, arrangements related to relevant NPPO responsibilities and functions to be implemented in export certification system (in line with ISPM No.7). Develop a functional export certification system that will shift its focus away from end point inspection, to inspections of the whole flower chain, including production sites in the greenhouses and handling facilities of the companies all the way to dispatch after issuance of phytosanitary certificates. Streamline phytosanitary export inspection procedures and the issuance of Phytosanitary Certificates at Entebbe Airport Enhance cooperation between phytosanitary inspectors, export companies and Fresh Handling Ltd. and set-up simple inspection facilities at the airport. Streamline auditing by DCP of relevant activities done by employees of the	Agreement on new operational procedures and updates of manuals and reference material. Advice on relevant staff capacity development.	Records / reports on various project activities. Report of NPPS expert. Outline of updated operational procedures.	Willingness of staff and other stakeholders to change phytosanitary procedures related to flower export. Inspectors and other DCP staff are willing and capable to work according to the new operational procedures.

	Project description	Measurable indicators	Sources of verification	Assumptions and risks
	companies and other relevant activities in the flower chain. Advise on phytosanitary operational manuals in the whole export certification system, including auditing procedures by DCP and other supportive documentation and additional staff capacity building. By: NPPS advisor, DCP staff and other relevant stakeholders. Duration: 7 days Location: Uganda			
Activity 1.4	**Study tour to Kenya supported by NPPS specialists** for DCP inspectors and other DCP staff involved in implementing phytosanitary measures and representatives from flower companies and UFEA, to visit and study practical aspects of the implementation of the various phytosanitary measures in Kenya related to the phytosanitary requirements of the importing country (the Netherlands). Issues to be included are: (i) responsibilities of KEPHIS as NPPO and compared with NPPS, (ii) procedures of export certification system, (iii) phytosanitary export inspections, (iv) procedures for the notification of non-compliance, (v) specific surveillance by the NPPO, (vi) scouting by companies and role of the NPPO, (vii) use of central databases, and (viii) role diagnostic support services. Participants: Participants: 10: five to six from MAAIF (DCP), UFEA and one or two	Number of participants and representation of different stakeholders. Report on lessons learned for application in Uganda and an action plan.	List of participants. Study tour report. Study tour evaluation.	Delegates are willing to participate and are motivated to increase relevant knowledge and skills. Participants share experiences and views on possible improvements / changes of the Ugandan phytosanitary system.

	Project description	Measurable indicators	Sources of verification	Assumptions and risks
	growers Duration: 7 days Organised by: DCP and CABI Africa in concert with NPPS, KEPHIS, ICIPE, and Kenyan flower growers. Location: Kenya.			
Activity 1.5	**Specialized and detailed hands-on training for inspectors and other phytosanitary staff of DCP** inspection procedures of the export certification system, auditing processes, pest and disease detection, handling of documents and phytosanitary certificates, quarantine pest detection, first line diagnostics etc.. Participants: 10: DCP inspectors and other phytosanitary staff of DCP Duration: 2 weeks Organized by: DCP in concert with CABI Africa and KEPHIS / ICIPE Implemented by: KEPHIS (through COPE) and ICIPE. Location: Kenya	Number of relevant participants (ten) trained. Training programme. Participants' improved knowledge and skills related to their phytosanitary tasks.	List of participants. Educational materials. Course evaluation. Participants' report. On-the-job assessments of participants.	Participants are willing to learn actively and are motivated to increase relevant knowledge and skills.
Activity 1.6	**Development and improvement of the existing operational manual for phytosanitary inspection and compilation of other reference materials**. Based on advice of NPPS technical expert (activity 1.3) and observations of study tour (activity 1.4), manuals should include a list of quarantine organisms. Pilot testing and adjustment. Make operational manual and other materials available for airport inspectors.	Operational manual up-dated and practical enough to be used by inspector. Hard copies of new manual available at inspection site at the airport.	New operational manual available at airport for inspectors. Inspectors understand the manual and use it for their Inspections as hardcopies are available for use.	Changes in the operational manual are an improvement for inspectors. Inspectors are willing and capable to work according to the new operational manuals.

	Project description	Measurable indicators	Sources of verification	Assumptions and risks
	By: DCP staff. Location: Uganda			
Activity 1.7	**Development of a computer-based format of the export certification system** for document storage and retrieval (in line with ISPM guidelines). Technical assistance and procurement of equipment. By: Relevant specialist from NPPS, KEPHIS or other in concert with DCP staff. Duration: 5 days Location: Entebbe	Computer-based system is in operation and is used by staff.	Report of technical advice. Observations on available equipment and operation of system and storage and easy retrieval of various documents.	Phytosanitary staff is willing to change their working habits and to use the computer-based system.
Expected result 2	A streamlined inspection and export certification system based on public-private partnership is designed and adopted	An implementation plan for the phytosanitary inspections indicating clear responsibilities of the partners (DCP, UFEA, FLH and growers) is adopted and reflected in the operating procedures of all the partners.	Quality of Phytosanitary Certificates. Notification reports from the NPPS. Operating procedures of all partners	Staff of the relevant stakeholders are willing to implement new procedures.
Activity 2.1	**Dialogue and agreement on (i) improved institutionalized inspection arrangements and requirements between DCP and flower companies and (ii) a communication strategy on phytosanitary issues**, in order to perform all phytosanitary inspection and certification activities on export consignments of floricultural produce to European markets. Based on activity 1.3, issues like inspection facilities and tools, timing of inspection requests, auditing by DCP of relevant work done by employees of companies and other operational matters should receive attention.	Number of meetings. Number of participating stakeholders in meetings. Feasible decisions and action plans on strategies and communication.	Minutes of meetings with relevant information.	Companies and other stakeholders willing to participate actively. Stakeholders are willing to implement changes in existing procedures.

	Project description	Measurable indicators	Sources of verification	Assumptions and risks
	By: DCP staff, UFEA, flower companies and FHL			
Activity 2.2	**Procurement of small equipment and tools for export inspectors and set up of a small office and laboratory at the airport** (preferably at premises of FHL) for export inspection and first-line diagnosis and certification purposes. Basic tools, equipment and reference material to plant inspectors and some additional simple equipment for supportive diagnostics in entomology. By: DCP staff in concert with CABI Africa, FHL, and UFEA / growers	Small laboratory at airport with tools, equipment in working condition. Phytosanitary inspections and issue of certificates follow described procedures.	Procedures. Records on inspected flowers and the results.	No room made available for simple laboratory facilities at the airport. Timely delivery. Inspectors are willing and capable to use new facilities and tools.
Activity 2.3	**Technical assistance on practical aspects of implementation of phytosanitary measures.** Advice on all kinds of practical aspects arising when implementing newly developed procedures and documentation for the phytosanitary measures. By: DCP staff, NPPS expert in concert with UFEA, growers and FHL Duration: 5 days NPPS expert	All new phytosanitary procedures are properly implemented.	Report of expert. Diminished number of notifications.	Staff is willing to implement new procedures. Inspection facilities available at airport. Stakeholders agree on arrangements.
Expected result 3	Specific phytosanitary survey and monitoring systems are effectively operational	Survey and monitoring system is developed and implemented by DCP and at company level by scouts under supervision of DCP.	Report on the developed survey and monitoring system. Reports, including results, its communication of the survey and monitoring system. Number of visits to flower	Flower growers are willing to cooperate and provide enough trained staff for scouting activities. DCP provides enough staff time to implement the system.

	Project description	Measurable indicators	Sources of verification	Assumptions and risks
			farms by DCP staff. Reports of company scouts.	The developed system is practical and easy to implement.
Activity 3.1	**Development and design of specific phytosanitary survey and monitoring system** (objectives, sampling procedures, etc., as per ISPM No. 6) by DCP in cooperation with a NPPS expert. By: DCP staff and NPPS expert Duration: 5 days NPPS technical expert Location: Uganda	Survey and monitoring system is developed.	Expert's report on the survey and monitoring system and its details.	DCP staff is willing to cooperate and assist NPPS expert.
Activity 3.2	**Creation of a small task force on the development of a specific phytosanitary survey and monitoring and technical assistance on the set-up of such a system in concert with the private sector.** UFEA will form a taskforce together with DCP and other stakeholders, meanwhile receiving expert advice from a NPPS advisor on specific phytosanitary survey systems and role of private sector. Communication with growers through UFEA on survey design, system of data and information collection and cooperation between crop scouts working in the flower companies and DCP staff. By: UFEA, together with DCP, NARO and other stakeholders in concert with CABI Africa. Advise: NPPS specialist for 3 days (same as 3.1) Location: Uganda	Number of meetings. Number of participating stakeholders in meetings of task force. Feasible decisions and action plans on strategies to implement phytosanitary surveys and monitoring..	Expert's report on the survey and monitoring system and its details on cooperation between public and private sector.	Companies and other stakeholders willing to participate actively. Stakeholders are willing to cooperate, participate and play their roles in phytosanitary survey and monitoring system.

	Project description	Measurable indicators	Sources of verification	Assumptions and risks
Activity 3.3	**Specialized and practical training on quarantine pest surveillance systems (training of trainers)**; including mobilization of interest among flower producers. Technical topics should include field recognition of different quarantine flower pests (first line diagnostics), scouting techniques, design and systematic data analysis techniques, ways to implement, reporting, including roles of public sector (DCP) specialists as auditors and those of the private sector, such as the scouts in the flower farms. Participants: 10 participants: five flower farms scouts, crop protection specialists, quality controllers and five staff members of DCP Duration: 5 days By: Expert from NPPS (same as under 3.1 and 3.2) and additionally an ICIPE and KEPHIS trainer. Location: Entebbe	Number of relevant participants from both the private and public sector. Training programme. Improved knowledge and skills related survey and monitoring systems and practical aspects of its implementation.	List of participants. Educational materials. Course evaluation. Report participants. On-the-job assessments.	Participants are willing to learn and are motivated to increase relevant knowledge and skills. Flower growers / DCP provide enough staff time for training.
Activity 3.4	**Develop curriculum for specific phytosanitary survey and monitoring training and implement training.** To be developed by the task force in concert with the trainees of the specialized training of quarantine pest surveys (activity 3.3). The training will be implemented for crop protection specialists and scouts of companies who did not attend the training under 3.3. By: trained DCP staff and company scouts (under training 3.3) supervised by expert from ICIPE and KEPHIS.	Course curriculum. Number of relevant participants from the private sector. Training programme. General improved knowledge and skills related to survey and monitoring systems and particularly scouting for quarantine pests and its implementation.	Curriculum and course programme and educational materials. List of participants. Course evaluation. Reports by participants. On-the-job assessments. Report by ICIPE and KEPHIS experts.	Participants of activity 3.3 and members of the task force are willing to cooperate and invest time in curriculum development. Participants are willing to learn and are motivated to increase relevant knowledge and skills. Flower growers provide enough staff and staff time for training.

	Project description	Measurable indicators	Sources of verification	Assumptions and risks
	For: About 20 company scouts or other company crop protection specialists. Duration training: 5 days Location: Uganda			
Activity 3.5	**Procurement of surveillance equipment** (pheromone traps, sticky traps, etc.). By: DCP and CABI Africa in consultation with the NPPS expert (of activity 3.1), trainers (of activity 3.3) and taskforce (activity 3.2).	Equipment available and in working condition.	Observations in the greenhouses on the installation and use.	Timely delivery.
Activity 3.6	**Implementation of specific surveys and analysis of survey results and communication of outcomes** to export growers, international phytosanitary organization (e.g. IPPC and IAPSC) and NPPS. By: DCP, company scouts with support of KEPHIS / ICIPE Location: Uganda	Developed survey and monitoring system is implemented and analyzed by DCP staff.	Survey and monitoring reports on its implementation. Reports of company scouts. Supervision reports by DCP. Progress reports. Reporting to IPPC, IAPSC and NPPS.	Flower growers are willing to cooperate. Flower growers / DCP provide enough staff time. DCP provides logistic facilities. Company scouts and DCP staff involved in survey and monitoring willing to cooperate and make the necessary efforts for its implementation.
Activity 3.7	**Technical assistance on the development and maintenance of a central database with phytosanitary data and information on quarantine pest populations and their developments in the greenhouses.** Together with an IT expert, an electronic pest surveillance system, e.g. like Mobiprise has to be set up and pilot implementation has to start as cooperation between DCP, UFEA and a	A simple, practical and operational database developed. Data and information are loaded in database and shared between relevant stakeholders.	Data and information in database. Data checked by stakeholders. An effective database	Staff, both from public and private sector, willing to change their working to habits and to use the electronic system. Network / internet options /services available sufficient for

	Project description	Measurable indicators	Sources of verification	Assumptions and risks
	couple of flower farms. Such a database could be basis and a prelude for an electronic export certification system, such as CLIENT. By: DCP, growers and UFEA Duration: 5 expert days Location: Uganda			
Expected result 4	Improved awareness at national levels of inspection and certification systems in the horticulture sector as a whole (outside the flower industry) and recommendations on expansions of the results to other horticulture sub-sectors are made.	Implementation of concluding workshop and its proceedings.	Final report of project, its results and options to use it in other sectors of horticulture. Seminar report. List of attendants	Limited project results that are not translatable to other horticultural sectors.
Activity 4.1	**Organization of a final seminar** by DCP and UFEA at the end of the project. Inputs from main stakeholder and those involved in the project. The seminar should also cover a component geared at dissemination of the results to stakeholders in other sectors of export horticulture. Additionally the seminar should aim at awareness raising towards decision makers and/or politicians on the importance of the flower industry and significance and benefits of a well-functioning plant health system. Finally the workshop should include lessons learnt that can be used for implementation of phytosanitary issues in the National SPS Plan. Participants: 40 participants Duration: 1 day phytosanitary inspections of By: DCP, UFEA, CABI Africa and others involved in the project, like ICIPE or	Number of seminar participants from different stakeholders in the floriculture sector and other relevant representatives. Inputs in seminar by various stakeholders.	List of participants. Seminar report.	No tangible project results. Representatives of different stakeholders willing to participate actively. Some representatives of different stakeholders willing to provide inputs.

	Project description	Measurable indicators	Sources of verification	Assumptions and risks
	KEPHIS Location: Entebbe / Kampala			
Activity 4.2	**Compile proceedings of the seminar and publish.** Publish project results related to the implementation of all the relevant phytosanitary measures related to export of floriculture produce. By: DCP with assistance from UFEA and CABI Africa.	Seminar proceedings and other specific results written.	Seminar proceedings and other specific results published.	No motivations to publish as the project results were disappointing.

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9.2. Financial Report

STDF 335: Final Project Financial Report - STDF Contribution

Activity		Specifications	Units	STDF budget	Cumulative to Aug 2014	Sept 2014 to March 2015	Cumulative expenditure to date	Report variance
General local project coordination DCP and UFEA		3 days / month	days	13,500.00	10,800	2,700	13,500	-
	CABI PMC meeting preparation & attenda	For 6 meetings	days	36,012.43	30,612	5,400	36,012	-
	DSA CABI project manager	6x: 3 days DSA	DSA	2,700.00	1,097	1,463	2,560	140
	Tickets CABI project manager	6x airfare economy	tickets	4,954.06	3,154	1,800	4,954	-
PMC Meetings (6x)								-
	DSA PMC members	6x 2 days DSA	DSA	3,600.00	1,360	2,240	3,600	- 0
	Local travel cost PMC members	6x 6 Local travel costs	tickets	1,800.00	398	1,430	1,829	- 29
	Salaries Ugandans	Local salary costs 6 persons	days					-
	Secretarial support DCP/UFEA	6x 5 days	days	2,152.19	1,402	807	2,209	- 57
	Professional support DCP/UFEA	6x 5 days	days	3,258.09	2,508	500	3,008	250
	Meeting room	6x rent	rent	900.00	600	493	1,093	- 193
	Tel., fax, photocopies	Tel., fax, photocopies	Lump sum	2,100.00	1,268	832	2,100	0
	Lunches and coffee breaks	(6 + 1) members x 12	lunch/coffee	2,346.22	1,506	840	2,346	-
Activity 1.1 General project initiation workshop								
	Travel costs participants	20 x local travel costs	tickets	1,048.00	1,048	-	1,048	-
	Salaries Ugandans	Local salary costs 20 persons	days			-	-	-
	Meeting room	Rent	rent	300.00	300	-	300	-
	Secretarial support DCP/UFEA	10 days	days	500.00	500	-	500	-
	Professional support DCP/UFEA	15 days	days	1,500.00	1,500	-	1,500	-
	Tel., fax, photocopies	Tel., fax, photocopies	Lump sum	602.00	602	-	602	-
	Lunches and coffee breaks	25 part. x 2 days	lunch/coffee	1,000.00	1,000	-	1,000	-
	CABI DSA	2 days DSA	DSA	256.21	256	-	256	-
	CABI travel cost	1 x airfare economy	tickets			-	-	-
	2 External facilitators: 2 experts from abroad (IPPC & NL)			-	-	-	-	-
	Ext. Fac. Preparation, travel, participation	2 x 6 days fees (average)	days	8,110.69	8,111	-	8,111	-
	External Fac. Travel cost	2 x airfare economy (average)	tickets	4,045.68	4,046	-	4,046	-
	External Fac. DSA	2 x 2 days DSA	DSA	255.66	256	-	256	-
	External Fac. Visa	Visa 2x	Visa	53.60	54	-	54	-
Activity 1.3 Review & update DCP's procedures					-			
	Expert fees	10 days fees	days	12,500.00	12,500	-	12,500	-
	Expert DSA	7 days	days	1,050.00	1,050	-	1,050	-
	Expert travel cost (+ 1 visa)	1 airfare economy & 1 x visa	ticket	1,500.00	1,500	-	1,500	-
	Transport for visits	Fuel	Lump sum	200.00	-	102	102	98
	Tel., fax, photocopies	Tel., fax, photocopies	Lump sum	100.00	-	-	-	100
	Salaries Ugandans	Local salary costs 3 staff	days		-	-	-	-
Activity 1.4 Study tour Kenya & support NL expert								
	Costs participants	10 x 7 days DSA	DSA	14,200.56	14,201	-	14,201	-
	Tickets: Entebbe - NBI, v.v.	10x airfare economy	tickets	5,000.00	5,000	-	5,000	-
	Ticket NL expert AMS-NBI-vv	1x airfare economy + 1 x visa co	ticket	-	-	-	-	-
	Local transport cost in Kenya	Transport abroad 7 days	days	1,039.82	1,040	-	1,040	-
	Salaries Ugandans	Local salary costs 10 persons	days	-	-	-	-	-
	Costs institutions abroad	5 days fees Kenya	days	4,225.52	4,226	-	4,226	-
	Fees NL expert in Kenya	7 days fees NL expert	days	-	-	-	-	-
	DSA NL expert in Kenya	1 x 7 days DSA	days	-	-	-	-	-
	Secretarial support preparation	10 days	days	-	-	-	-	-
	Professional support preparation	10 days	days	-	-	-	-	-
	Tel., fax, photocopies	Tel., fax, photocopies	Lump sum	-	-	-	-	-
Activity 1.5 Specialised phytosanitary training Kenya								
	Registration	10 participants	fee	400.00	400	-	400	-
	Tuition fee two week course/participant	10 participants	fee	8,143.00	8,143	-	8,143	0
	Lectures and inputs by ICIPE experts	4 days fees	fee	2,106.00	2,106	-	2,106	0
	Full board KEPHIS for 12 days	10 participants	board	8,000.00	8,000	-	8,000	- 0
	Daily allowance for 12 days	10 days x 12 participants	DSA	5,830.23	5,830	-	5,830	-
	Tickets Entebbe - NBI, v.v.	10x airfare economy	tickets	4,105.36	4,105	-	4,105	-
	Salaries Ugandans	Local salary costs 10 persons	days	-	-	-	-	-
	Secretarial support preparation	5 days	days	250.00	250	-	250	-
	Professional support preparation	5 days	days	500.00	500	-	500	-
	Tel., fax, photocopies	Tel., fax, photocopies	Lump sum	81.33	81	-	81	-
Activity 1.6 Development operational manual								
	DCP staff	Local staff time, 20 days	days					
	Tel., fax, photocopies	Tel., fax, photocopies	Lump sum	100.00	98	-	98	2
Activity 1.7 Development computer export system								
	8 days expert fees	8 days fees	days	12,000.00	12,000	-	12,000	-
	Expert ticket Europe - Uganda - vv	1x airfare economy	ticket	2,161.84	2,162	-	2,162	-
	Expert DSA Entebbe	5 days DSA	DSA	750.00	750	-	750	-
	Visa	1x Visa	visa	38.69	39	-	39	-
	Equipment, computer, internet etc	List of equipment	List	3,000.00	3,000	-	3,000	-
	Salaries Ugandans	Local staff time	days	-	-	-	-	-
	Transport	local transport	Lump sum	-	-	-	-	-
	Secretarial support preparation	5 days	days	250.00	-	250	250	-
	Professional support preparation	10 days	days	1,000.00	-	1,000	1,000	-

Activity 2.1 Dialogue on improvements								
	DCP, UFEA, Fresh Handling, growers	Local staff time, 25 days	days		-	-	-	-
	Local travel costs	20 x local travel	tickets	1,000.00	-		-	1,000
	Secretarial support preparation	10 days	days	500.00	-	500	500	-
	Professional support preparation	20 days	days	2,000.00	13	1,987	2,000	0
Activity 2.2 Procurement airport laboratory								
	Laboratory room	Rent 18 months	month	1,800.00	-	2,070	2,070	- 270
	Simple tools and equipment		list	8,000.00	7,763	237	8,000	- 0
	Additional equipment Entomology Lab	Entomology lab	list	3,500.00	3,500	-	3,500	-
	Secretarial support preparation	5 days	days	250.00	125	125	250	-
	Professional support preparation	10 days	days	1,000.00	500	500	1,000	-
	Salaries Ugandans	Local staff time	days		-	-	-	-
Activity 2.3 Technical assistance on practical asp		1 NL expert 5 days + 2 days travel + 1 day preparation						
	Expert fees	8 days	days	12,000.00	-	12,000	12,000	-
	Expert DSA	5 days	days	750.00	-	450	450	300
	Expert travel cost (+ 1 visa)	1 airfare economy + 1 x visa	ticket	1,500.00	-	1,500	1,500	-
	Transport for visits	Fuel	Lump sum	200.00	-		-	200
	Tel., fax, photocopies	Tel., fax, photocopies	Lump sum	100.00	-	89	89	11
	Salaries Ugandans	Local staff time (five staff)	days		-	-	-	-
Activity 3.1 Development phytosanitary survey		1 expert for 5 days + 2 days travel + 1 day preparation						
	Expert fees	8 days	days	9,903.22	9,903	-	9,903	-
	Expert travel cost	1x airfare economy	tickets	1,500.00	1,500	-	1,500	-
	Expert DSA	5 days	DSA	450.00	450	-	450	-
	Visa	1x visa	Visa		-	-	-	-
	Transport for visits	Fuel	Lump sum		-	-	-	-
	Tel., fax, photocopies	Tel., fax, photocopies	Lump sum	100.00	-	96	96	4
	Salaries Ugandans	Local staff time (3 staff)	days		-	-	-	-
Activity 3.2 Taskforce phytosanitary survey		1 expert for 3 days						
	Expert fees	3 days fees	days	4,500.00	-	-	-	4,500
	Expert DSA	3 days DSA	DSA	450.00	-		-	450
	DCP, UFEA, growers	Local staff time, 25 days	days		-	-	-	-
	Local travel costs	20 days	tickets	1,000.00	465	571	1,036	- 36
	Secretarial support preparation	10 days	days	500.00	-	500	500	-
	Professional support preparation	20 days	days	2,000.00	-	2,000	2,000	-
Activity 3.3 Quarantine pest surveillance training								
	Local travel cost	10x local travel trainees	tickets	500.00	-	76	76	424
	Salaries Ugandans	Local salary costs 10 persons	days		-	-	-	-
	Fees experts NL	Expert fees NL	days	12,000.00	-	11,390	11,390	610
	Fees experts ICIPE & KEPHIS	8 days expert fees & 4 travel &	days	6,000.00	-	5,890	5,890	110
	DSA Experts	13 days DSA expert	DSA	1,950.00	-	1,950	1,950	-
	Visa NL expert	1x Visa	visa	75.00	-	-	-	75
	Average air fares experts	3x airfare economy	tickets	2,550.00	-	1,932	1,932	619
	Training venue	Rent training hall	rent		-	-	-	-
	Secretarial support preparation/impl	10 days	days	500.00	-	500	500	-
	Professional support preparation/impl	15 days	days	1,500.00	-	1,500	1,500	-
	Tel., fax, photocopies	Tel., fax, photocopies	Lump sum	250.00	-	178	178	72
Activity 3.4 Develop training curriculum & implementation								
	Local travel cost	20x local travel trainees	tickets	1,000.00	-	1,000	1,000	-
	Local salaries Ugandans	Local staff times	days		-	-	-	-
	Local salaries development curriculum	Local salary costs 20 persons	days		-	-	-	-
	Training venue	Rent training hall	rent		-	-		
	Professional support preparation/impl	3 local trainers each 10 days	days	3,000.00	-	3,000	3,000	-
	Secretarial support preparation/impl	10 days	days	500.00	-	500	500	-
	KEPHIS / ICIPE expert fees	Fees, 7 days	days	3,500.00	-	2,640	2,640	860
	Expert DSA	DSA 5 days	days	750.00	-	750	750	-
	1 X air-fare expert NBI - Entebbe - vv	1 economy ticket	tickets	500.00	-	406	406	94
Activity 3.5 Procurement surveillance equipment								
	Surveillance and monitoring equipment		List	3,500.00	-	3,860	3,860	- 360
	Secretarial support preparation	5 days	days	250.00	-	250	250	-
	Professional support preparation	10 days	days	1,000.00	-	1,000	1,000	-
	Salaries Ugandans	Local Salary costs	days		-	-	-	-
Activity 3.6 Implementation of surveys and analysis								
	Salaries Ugandans	Local staff costs	days		-	-	-	-
	Transport	Local transport	Lump sum	500.00	-	300	300	200
	Secretarial support implementation	10 days	days	650.00	-	500	500	150
	Professional support implementation	30 days	days	6,400.00	-	4,810	4,810	1,591
	Fees expert KEPHIS / ICIPE	5 days + 2 days travel	days	14,000.00	-	14,164	14,164	164
	Expert DSA	5 days	days	750.00	-	750	750	-
	Expert airfare NBI-Entebbe-vv	1x airfare economy	ticket	900.00	-	500	500	-
Activity 3.7 TA & development survey database								
	Fees expert	6 days fees	days	8,000.00	5,000	-	5,000	3,000
	Ticket airfare	1x airfare economy	ticket	1,000.00	-	695	695	305
	DSA expert	5 days DSA	DSA	750.00	450	-	450	300
	Visa	1x Visa	visa	75.00	-	-	-	75
	Equipment, computer, internet etc	Local salary costs	List	3,500.00	3,500	-	3,500	-
	Salaries Ugandans	Local staff costs	days		-	-	-	-
	Transport	Local transport	Lump sum	250.00	-	-	-	250
	Secretarial support	5 days	days	250.00	-	250	250	-

	Professional support	10 days	days	1,000.00	-	833	833	167
	Tel., fax, photocopies	Tel., fax, photocopies	Lump sum	250.00	-	-	-	250
Activity 4.1 Final seminar								
	Local travel costs participants	40x local travel costs	tickets	2,000.00	-	2,333	2,333	- 333
	Salaries Ugandans	Local staff costs	days		-	-	-	-
	Meeting room	Rent	rent	200.00	-	200	200	-
	Secretarial support	5 days	days	250.00	-	250	250	-
	Professional support	10 days	days	1,000.00	-	1,000	1,000	-
	Tel., fax, photocopies	Tel., fax, photocopies	Lump sum	500.00	-	488	488	12
	Lunches + coffee breaks	45 participants	lunch/coffee	900.00	-	965	965	- 65
	CABI and Kenyan expert	2 (1 CABI staff & 1 Kenyan expert)			-	-	-	-
	Fees Kenyan expert	3 days fees (average)	days	3,000.00	-	2,966	2,966	34
	DSA CABI and Kenyan experts	2 days DSA	DSA	600.00	-	256	256	344
	Tickets CABI and Kenyan experts	2x airfare economy	tickets	1,000.00	-	618	618	382
Activity 4.2 Proceedings final workshop & (online) brochures on results								
	Salaries Ugandans	Local staff costs	days		-	-	-	-
	Editorial support	5 days fees	days	3,750.00	-	3,750	3,750	-
	Secretarial support	5 days	days	250.00	-	250	250	-
	Professional support	10 days	days	1,000.00	-	1,000	1,000	-
	Tel., fax, photocopies	Tel., fax, photocopies	Lump sum	550.00	-	550	550	-
					-	-	-	-
	CABI Technical support			10,800.00	-	19,981	19,981	- 9,181
						-	-	
SUBTOTAL				**335,530.40**	**192,526.86**	**136,711.65**	**329,239**	**6,291.89**
Contingencies: 5%				**16,601.50**				**16,602**
TOTAL				**352,131.90**	**192,526.86**	**136,711.65**	**329,238.52**	**22,893.39**
Overhead	**CABI Implementation**	**10.00%**		**35,213.19**	**19,252.69**	**13,671.17**	**32,923.86**	**2,289.34**
				387,345.09	**211,779.55**	**150,382.82**	**362,162.37**	**25,182.72**
	Prepared by	**Diana Nyamu**	**Signature**			**Date**	29/06/2015	
	Reviewed by	**Florence Chege**	**Signature**			**Date**	29/06/2015	

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Activity		Specifications	Units	No	cost/unit	Uganda budget	Uganda Co financing to date	Cofinancing Variance
General local project coordination DCP and UFE/		3 days / month	days	72	150			-
	CABI PMC meeting preparation & attenda	For 6 meetings	days	50	600			-
	DSA CABI project manager	6x: 3 days DSA	DSA	18	150			-
	tickets CABI project manager	6x airfare economy	tickets	6	500			-
								-
PMC Meetings (6x)								-
	DSA PMC members	6x 2 days DSA	DSA	72	50			-
	Local travel cost PMC members	m	tickets	36	50			-
	Salaries Ugandans	Local salary costs 6 perso	days	72	50	3600	3,600	-
	Secretarial support DCP/UFEA	6x 5 days	days	30	50			-
	Professional support DCP/UFEA	6x 5 days	days	30	100			-
	Meeting room	6x rent	rent	6	150			-
	Tel., fax, photocopies	Tel., fax, photocopies	Lump sum	6	350			-
	Lunches and coffee breaks	(6 + 1) members x 12	lunch/coffe	84	20			-
								-
Activity 1.1 General Project initiation workshop								-
	Travel costs participants	20 x local travel costs	tickets	20	50			-
	Salaries Ugandans	Local salary costs 20 pers	days	40	50	2000	2,000	-
	Meeting room	Rent	rent	1	300			-
	Secretarial support DCP/UFEA	10 days	days	10	50			-
	Professional support DCP/UFEA	15 days	days	15	100			-
	Tel., fax, photocopies	Tel., fax, photocopies	Lump sum	1	650			-
	Lunches and coffee breaks	25 part. x 2 days	lunch/coffe	50	20			-
	CABI DSA	2 days DSA	DSA	2	150			-
	CABI travel cost	1 x airfare economy	tickets	1	500			-
	2 External facilitators: 2 experts from abroad (IPPC & NL)							-
	Ext. Fac. Preparation, travel, participation	2 x 6 days fees (average)	days	12	1250			-
	External Fac. Travel cost	2 x airfare economy (avers	tickets	2	2500			-
	External Fac. DSA	2 x 2 days DSA	DSA	4	150			-
	External Fac. Visa	Visa 2x	Visa	2	75			-
								-
Activity 1.3 Review & update DCP's procedures								-
	Expert fees	10 days fees	days	10	1250			-
	Expert DSA	7 days	days	7	150			-
	Expert travel cost (+ 1 visa)	1 airfare economy & 1 x vi	ticket	1	1500			-
	Transport for visits	Fuel	Lump sum	1	200			-
	Tel., fax, photocopies	Tel., fax, photocopies	Lump sum	1	100			-
	Salaries Ugandans	Local salary costs 3 staff	days	21	50	1050	1,050	-
								-
Activity 1.4 Study tour Kenya & support NL expert								-
	Costs participants	10 x 7 days DSA	DSA	70	300			-
	Tickets: Entebbe - NBI, v.v.	10x airfare economy	tickets	10	500			-
	Ticket NL expert AMS-NBI-vv	1x airfare economy + 1 x v	ticket	1	1500			-
	Local transport cost in Kenya	Transport abroad 7 days	days	7	150			-
	Salaries Ugandans	Local salary costs 10 pers	days	70	50	3500	3,500	-
	Costs institutions abroad	5 days fees Kenya	days	5	1000			-
	Fees NL expert in Kenya	7 days fees NL expert	days	7	1500			-
	DSA NL expert in Kenya	1 x 7 days DSA	days	7	300			-
	Secretarial support preparation	10 days	days	10	50			-
	Professional support preparation	10 days	days	10	100			-
	Tel., fax, photocopies	Tel., fax, photocopies	Lump sum	1	400			-
								-
Activity 1.5 Specialised phytosanitary training Kenya								-
	Registration	10 participants	fee	10	40			-
	Tuition fee two week course/participant	10 participants	fee	10	600			-
	Lectures and inputs by ICIPE experts	4 days fees	fee	4	500			-
	Full board KEPHIS for 12 days	10 participants	board	10	800			-
	Daily allowance for 12 days	10 days x 12 participants	DSA	120	50			-
	Tickets Entebbe - NBI, v.v.	10x airfare economy	tickets	10	500			-
	Salaries Ugandans	Local salary costs 10 pers	days	100	50	5000	5,000	-
	Secretarial support preparation	5 days	days	5	50			-
	Professional support preparation	5 days	days	5	100			-
	Tel., fax, photocopies	Tel., fax, photocopies	Lump sum	1	150			-
								-
Activity 1.6 Development operational manual								-
	DCP staff	Local staff time, 20 days	days	20	50	1000	1,000	-
	Tel., fax, photocopies	Tel., fax, photocopies	Lump sum	1	100			-
								-
Activity 1.7 Development computer export system								-
	8 days expert fees	8 days fees	days	8	1500			-
	Expert ticket Europe - Uganda - vv	1x airfare economy	ticket	1	1500			-
	Expert DSA Entebbe	5 days DSA	DSA	5	150			-

	Visa	1x Visa	visa	1	75			-
	Equipment, computer, internet etc	List of equipment	List	1	3000			-
	Salaries Ugandans	Local staff time	days	25	50	1250	1,250	-
	Transport	local transport	Lump sum	1	250			-
	Secretarial support preparation	5 days	days	5	50			-
	Professional support preparation	10 days	days	10	100			-
Activity 2.1 Dialogue on improvements								-
	DCP, UFEA, Fresh Handling, growers	Local staff time, 25 days	days	25	50	1250	1,250	-
	Local travel costs	20 x local travel	tickets	20	50			-
	Secretarial support preparation	10 days	days	10	50			-
	Professional support preparation	20 days	days	20	100			-
Activity 2.2 Procurement airport laboratory								-
	Laboratory room	Rent 18 months	month	18	200	1800	1,800	-
	Simple tools and equipment		list	1	8000			-
	Additional equipment Entomology Lab	Entomology lab	list	1	3500			-
	Secretarial support preparation	5 days	days	5	50			-
	Professional support preparation	10 days	days	10	100			-
	Salaries Ugandans	Local staff time	days	20	50	1000	1,000	-
Activity 2.3 Technical assistance on practical asp		1 NL expert 5 days + 2 days travel + 1 day preparation						-
	Expert fees	8 days	days	8	1500			-
	Expert DSA	5 days	days	5	150			-
	Expert travel cost (+ 1 visa)	1 airfare economy + 1 x vi	ticket	1	1500			-
	Transport for visits	Fuel	Lump sum	1	200			-
	Tel., fax, photocopies	Tel., fax, photocopies	Lump sum	1	100			-
	Salaries Ugandans	Local staff time (five staff)	days	25	50	1250	1,250	-
Activity 3.1 Development phytosanitary survey		1 expert for 5 days + 2 days travel + 1 day preparation						-
	Expert fees	8 days	days	8	1500			-
	Expert travel cost	1x airfare economy	tickets	1	1500			-
	Expert DSA	5 days	DSA	5	150			-
	Visa	1x visa	Visa	1	75			-
	Transport for visits	Fuel	Lump sum	1	200			-
	Tel., fax, photocopies	Tel., fax, photocopies	Lump sum	1	100			-
	Salaries Ugandans	Local staff time (3 staff)	days	20	50	1000	1,000	-
Activity 3.2 Taskforce phytosanitary survey		1 expert for 3 days						-
	Expert fees	3 days fees	days	3	1500			-
	Expert DSA	3 days DSA	DSA	3	150			-
	DCP, UFEA, growers	Local staff time, 25 days	days	25	50	1250	1,250	-
	Local travel costs	20 days	tickets	20	50			-
	Secretarial support preparation	10 days	days	10	50			-
	Professional support preparation	20 days	days	20	100			-
Activity 3.3 Quarantine pest surveillance training								-
	Local travel cost	10x local travel trainees	tickets	10	50			-
	Salaries Ugandans	Local salary costs 10 pers	days	50	50	2500	2,500	-
	Fees experts NL	Expert fees NL	days	8	1500			-
	Fees experts ICIPE & KEPHIS	8 days expert fees & 4 trav	days	12	500			-
	DSA Experts	13 days DSA expert	DSA	13	150			-
	Visa NL expert	1x Visa	visa	1	75			-
	Average air fares experts	3x airfare economy	tickets	3	850			-
	Training venue	Rent training hall	rent	5	100	500	500	-
	Secretarial support preparation/impl	10 days	days	10	50			-
	Professional support preparation/impl	15 days	days	15	100			-
	Tel., fax, photocopies	Tel., fax, photocopies	Lump sum	1	250			-
Activity 3.4 Develop training curriculum & implementation								-
	Local travel cost	20x local travel trainees	tickets	20	50			-
	Local salaries Ugandans	Local staff times	days	100	50	5000	5,000	-
	Local salaries development curriculum	Local salary costs 20 pers	days	20	50	1000	1,000	-
	Training venue	Rent training hall	rent	5	100	500	500	-
	Professional support preparation/impl	3 local trainers each 10 da	days	30	100			-
	Secretarial support preparation/impl	10 days	days	10	50			-
	KEPHIS / ICIPE expert fees	Fees, 7 days	days	7	500			-
	Expert DSA	DSA 5 days	days	5	150			-
	1 X air-fare expert NBI - Entebbe - vv	1 economy ticket	tickets	1	500			-
Activity 3.5 Procurement surveillance equipment								-
	Surveillance and monitoring equipment		List	1	3500			-
	Secretarial support preparation	5 days	days	5	50			-
	Professional support preparation	10 days	days	10	100			-
	Salaries Ugandans	Local Salary costs	days	15	50	750	750	-
Activity 3.6 Implementation of surveys and analysis								-
	Salaries Ugandans	Local staff costs	days	30	50	1500	1,500	-
	Transport	Local transport	Lump sum	1	500			-
	Secretarial support implementation	10 days	days	10	50			-
	Professional support implementation	30 days	days	30	100			-

	Fees expert KEPHIS / ICIPE	5 days + 2 days travel	days	7	500			-
	Expert DSA	5 days	days	5	150			-
	Expert airfare NBI-Entebbe-vv	1x airfare economy	ticket	1	500			-
Activity 3.7 TA & development survey database								-
	Fees expert	8 days fees	days	8	1000			-
	Ticket airfare	1x airfare economy	ticket	1	1000			-
	DSA expert	5 days DSA	DSA	5	150			-
	Visa	1x Visa	visa	1	75			-
	Equipment, computer, internet etc	Local salary costs	List	1	3500			-
	Salaries Ugandans	Local staff costs	days	30	50	1500	1,500	-
	Transport	Local transport	Lump sum	1	250			-
	Secretarial support	5 days	days	5	50			-
	Professional support	10 days	days	10	100			-
	Tel., fax, photocopies	Tel., fax, photocopies	Lump sum	1	250			-
Activity 4.1 Final seminar								-
	Local travel costs participants	40x local travel costs	tickets	40	50			-
	Salaries Ugandans	Local staff costs	days	40	50	2000	2,000	-
	Meeting room	Rent	rent	1	200			-
	Secretarial support	5 days	days	5	50			-
	Professional support	10 days	days	10	100			-
	Tel., fax, photocopies	Tel., fax, photocopies	Lump sum	1	500			-
	Lunches + coffee breaks	45 participants	lunch/coffe	45	20			-
	CABI and Kenyan expert	2 (1 CABI staff & 1 Kenyan expert)						-
	Fees Kenyan expert	3 days fees (average)	days	3	1000			-
	DSA CABI and Kenyan experts	2 days DSA	DSA	4	150			-
	Tickets CABI and Kenyan experts	2x airfare economy	tickets	2	500			-
Activity 4.2 Proceedings final workshop & (online) brochures on results								-
	Salaries Ugandans	Local staff costs	days	25	50	1250	1,250	-
	Editorial support	5 days fees	days	5	750			-
	Secretarial support	5 days	days	5	50			-
	Professional support	10 days	days	10	100			-
	Tel., fax, photocopies	Tel., fax, photocopies	Lump sum	1	550			-
								-
								-
SUBTOTAL						**41,450**	**41,450**	-
								-
Contingencies: 5%						**2,073**	**2,073**	-
								-
TOTAL						**43,522.50**	**43,522.50**	-
	Prepared by	**Diana Nyamu**						
	Reviewed by	**Florence Chege**						

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9.3. Contact List

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CABI	As above	As Above	C.Africa@cabi.org	Florence Chege	f.chege@cabi.org

9.4. [Other Documents]

No	Document Produced	Report into which document was submitted to STDF	Date the document was initially submitted to STDF
1	Inception Report		11th March 2013
2	Minutes Inaugural PMT meeting	Inception report, as Annex 1	11th March 2013
3	Report of General Project Initiation Workshop	Inception report, as Annex 11	11th March 2013
4	Study Tour Report by COPE KEPHIS	1st Progress report	4th June 2013
5	Study Tour Report by DCP & UFEA	1st Progress report	4th June 2013
6	Minutes of DCP Meeting with Flower Producers July 2013	2nd Progress report	19th Dec 2013
7	Minutes of Flower Producers Meeting with Input Task Force	2nd Progress report	19th Dec 2013
8	Biological Control Agents – Concept Note Working Document	2nd Progress report	19th Dec 2013
9	Minutes of Farm Owners Visit to Mairye Estates Xclusive and Oasis Nurseries	2nd Progress report	19th Dec 2013
10	Mairye Estates – Spodoptera Management	2nd Progress report	19th Dec 2013
11	Registration of Flower Farms for Traceability	2nd Progress report	19th Dec 2013
12	SOPS Training by NPPS for Uganda Stakeholders, September 2013	2nd Progress report	19th Dec 2013
13	COPE's Report on Detailed Inspector Training, May 2013	2nd Progress report	19th Dec 2013
14	DCP's Report on Detailed Inspector Training, May 2013	2nd Progress report	19th Dec 2013
15	Minutes of the 2nd PMT Meeting, April 2013	2nd Progress report	19th Dec 2013
16	NPPS Mission Report SOP Workshop, September 2013	3rd Progress report	16th May 2014
17	NPPS Mission Report Computer Based Format & Central Data Base Act 1.7 & 3.7, April 2014	3rd Progress report	16th May 2014
18	Minutes of the 3rd PMT Meeting, January 2014	3rd Progress report	16th May 2014
19	Minutes of the 4th PMT Meeting, April 2014	3rd Progress report	16th May 2014
20	Minutes of the 5th PMT Meeting, 18th July 2014	4th Progress report	26th Sept 2014
21	DCP-UFEA Farm Inspection Schedule June-July 2014	4th Progress report	26th Sept 2014
22	Confidential DCP, UFEA, Farm Owners Visit to Ugarose Aurum Roses 24th April 2014	4th Progress report	26th Sept 2014
23	Confidential DCP, UFEA, Fiduga Ltd 8th May 2014	4th Progress report	26th Sept 2014
24	Confidential DCP, UFEA, Joint Weekly Updates to EU on Actions of Compliance	4th Progress report	26th Sept 2014
25	Proposed Survey & Monitoring Systems and Task Force 2014	4th Progress report	26th Sept 2014
26	Curriculum Scouts Trainers TOT	Final report	
27	Curriculum Scouts Training	Final report	
28	Curriculum Pest Surveillance Training	Final report	
29	Training Report – TOTs	Final report	
30	Training Report – Scouts	Final report	
31	Training Report – Pest Surveillance	Final report	
32	Training Materials – TOT and Scouts Training	Final report	
33	Training Materials – Pest Surveillance Training	Final report	
34	Scouts Training Manual	Final report	
35	Consolidated Reference Materials for Scouts Training	Final report	
36	Operational Procedure Manual for Phytosanitary Inspection and Certification (SOPS Manual)	Final report	
37	Quality Management System Manual for the NPPO (QMS Manual)	Final report	

38	Communication Strategy – Public Private Sector	Final report	
39	Minutes of 6th PMT Meeting, 17th Feb 2015	Final report	
40	Minutes of 7th PMT Meeting, 12th March 2015	Final report	
41	Minutes of 8th PMT Meeting, 27th March 2015	Final report	
42	Minutes of the Task team, 1st April 2015	Final report	
43	DCP UFEA Partnership MoU	Final report	
44	Evaluation Report by NPPS March 2015	Final report	
45	DCP Final Seminar Report	Final report	
46	Proceedings of Final Seminar	Final report	