



EUROPEAN UNION

“Support to the Development of Agriculture Private Sector: Perennial Horticulture” (HPS) Project

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12TH QUARTERLY PROGRESS REPORT,

01 OCTOBER - 31 DECEMBER 2016



One of the HPS SO1 beneficiaries, Shamrzan nursery company, during the visit of University of Florence (IT) experts



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**AFGHANISTAN
NATIONAL
HORTICULTURE
DEVELOPMENT
ORGANIZATION**

In consortium with



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A. Key acronyms:

AAIDO	Afghan Almond Industry Development Organization
ANHDO	Afghan National Horticulture Development Organization
ANNGO	Afghan National Nursery Grower Organization
BoD	Board of Directors
CC	Coordination Committee
CGG	Citrus Growers Group
CGA	Citrus Growers Association
CPN	Certified Production Nursery
CPG	Citrus Promotion Group
CTV	Citrus Tristeza Virus
FH	PHDC Field Horticulturist
FM	SO1 Field Manager
GA	General Assembly
MAIL	Ministry of Agriculture, Irrigation and Livestock
MSN	Mother Stock Nursery
NC	National Collection
NGA	Nursery Growers Association
NHLP	National Horticulture and Livestock Program
NNGA	Nangarhar Nursery Growers Association
NVAC	Nangarhar Valley Agricultural Company (ex-NVDA)
NVDA	Nangarhar Valley Development Association
PBTL	Plant Bio Technology Laboratory (Badam Bagh)
PHDPII	Perennial Horticulture Development Program
PHDC	Perennial Horticulture Development Center
PPP	Public Private Partnership project agreement
RI	Relief International
SO	Specific Objective
TA	Technical Assistance
TL	Team Leader
ToT	Training of Trainers
VC	Value Chain



B. List of Annexes:

1. Specific Objective 1:

- SO 1.1 Business Development Expert Report
- SO 1.2 Institutional Ornamental Expert report
- SO 1.3 Technical Ornamental Expert Report
- SO 1.4 ANNGO Governance and Organizational Development Report
- SO 1.6 Visibility Actions Report
- SO 1.5 Capacity Building Training in Jalalabad 25 - 28 Dec 2016

2. Specific Objective 2:

- SO 2.1 Horticultural Research Specialist Report

3. Specific Objective 3

- SO 3.1 MoU with Gold Star Sharq Lt
- SO 3.2 GRPG 6th meeting minute
- SO 3.3 Cold storage handover note
- SO 3.4 MOU with Safi Bradaran Ltd

4. Specific Objective 4

- SO 4.1 Container grown citrus saplings broacher
- SO 4.2 Taste Test Report 2016
- SO 4.3 Appreciation letter from Kunar University
- SO 4.4 Visibility Report
- SO 4.5 Citrus commercial orchard list of applicants
- SO 4.6 Visitors Record Sheet From-Oct-Dec-2016

5. General

- 5.1 6th Horticultural Cluster steering Committee MoM
- 5.2 Assessment on the updated status of the HPS program as 17th September 2016.
- 5.3 HVP mid term review report





1. Executive Summary of the Quarterly Activities:

ANHDO is an Afghan non-governmental, non-profit organization registered with the Ministry of Economy and established with World Bank support in 2009 but support ceased already 2010. At that stage, the EU Delegation regarded further support of ANHDO worthwhile and, included it into the work plan of PHDP II for the provision of capacity building support. Since then, ANHDO has developed into an important institution for horticulture development by comprising among others, skilled and experienced Afghan professionals in the horticulture sector. It is operating in consortium with Relief International (RI) and in collaboration with ANNGO (Afghanistan National Nursery Growers' Organization) and with the Ministry of Agriculture, Irrigation and Livestock (MAIL) based on separate Memoranda of Understanding. Hence, to date, ANHDO is a corner stone of the long-term strategy for the development of the horticulture sector in Afghanistan.

ANHDO is implementing the HPS project (in parallel with HVP), planned as successive support to some actions formerly implemented by the PHDP II or to organizations formerly assisted by the PHDP II. Hence, the HPS design has the advantage of building on the experience and outcomes in horticulture development made by the PHDP and PHDP II projects. The HPS overall objective is to ***“Contribute to the uplifting of horticulture (yields, quality standards, market value) and enhancement of capabilities of the private sector, through specific pilot actions in target areas.*”**

The program has four components, which are stated in project documents as Specific Objectives and target the following areas and institutions:

- i) **SO 1:** *The Afghan private sector nursery industry and its associated organizations and institutions meet the demand, nation-wide, of Afghan farmers for certified perennial planting material for increased planting of modern orchards.*
- ii) **SO 2:** *Adaptive research and technical development programmes are successfully providing the technical solutions to increase orchard productivity and value to the consumer at household and national level,*
- iii) **SO 3:** *Pilot demonstration of enhanced harvest & post-harvest management systems and market driven value chain development for pomegranate and apricot crops within target areas and target groups,*
- iv) **SO 4:** *A soundly based and profitable citrus industry in eastern Afghanistan is developed*

During the reporting period the HPS program went through a number of significant events, both technical and institutional, which could be resumed as follows:

- 1) The new HPS team leader joined the program on the 17th of September and successfully completed the handing over procedures at the beginning of October. As part of the handing over notes, the new TL has also performed a comprehensive assessment on the updated status of the program. (Please see ANNEX. 5.2).
- 2) The HPS has arranged and participated to the 6th Horticultural cluster Steering committee. The SC was delayed two times due to the fact that, a) the TL was not appointed yet and b) the chairman of the SC was not in the country. The results of the SC are reported on the SC MoM (please see ANNEX 5.1)
- 3) As per plan, the international experts to support SO1, SO2 and SO3 have successfully performed



their inputs. For the international expert TA provision complete results, please see ANNEXES SO 1.1, SO 1.2, SO 1.3, SO 1.4, SO 2.1

- 4) The HPS management team have promoted and implemented a Project manager capacity building strategy, intended to improve the PM capability to timely comply to their daily tasks, improve their ability to react to the implementation challenges and finally to improve their reporting skills. This process is still on going, and will be completed in February on the occasion on the foreseen training on M&E and reporting that will be provided by an USAID founded program.
- 5) The HVP program (the top-up program of HPS, financed by AFD) went through its mid-term evaluation assessment, which, by proxy has involved also the HPS implementation status. The overall results of the evaluation are reported in ANNEX 5.3
- 6) A new SO2 PM was recruited in coordination with ARIA. The handing over procedure was successfully completed in November)
- 7) The collaboration with EU-MoAIL transition program was strengthened in order to improve the performances of the SO2 component and address the issues related to the management of the National collection and the pomology laboratories.
- 8) During December the HPS management team have promoted and implemented the 2017 planning strategy that was successfully completed the 17th of December with the organization of a public-private multi stakeholders planning workshop. The four SOs teams have proposed the plan for 2017, which were discussed, amended and finally approved by the assembly. As result of that process, the HPS management team have sorted out that there is room for a program no-cost extension. The discussion on this issue will be finalized in January 2017.
- 9) The HPS management team has decided to restructure the reporting system in order to comply with the EU standards.
- 10) The management team has performed a strong reform in the fund management harmonizing the accounting system between HPS and HVP (as per mid term evaluation mission recommendations)

As result of the above-mentioned points, the HPS management team considers the program activities and progress performed during reporting period, as very positive.

The results of the ANHDO institutional reform, carried on the base of an agreed roadmap proposed by the donors (EU and AFD), gave a strong impulse to the consortium performances. The PMs showed an improved ownership in managing and performing their tasks.

The key issues to be addressed for the next reporting period will be:

- 1) The consolidation of the 2017 WP
- 2) The No-cost addendum request
- 3) The ANHDO compliance to the institutional roadmap (including the organization of the GA.)
- 4) The project institutional relationship with the relevant stakeholders, and in particular MAIL ARIA, MAIL SPDC, and EU-MAIL transition project.

The detailed technical aspects of the implementation are discussed SO-wise in the next session.





2. Project Implementation Progress and Analysis:

Due to the dimension and complexity of the program, the project implementation progress is discussed sub-objective wise.

The HPS report is structured according to the EU official guidelines and template.

2.1 Specific Objective 1. *“The Afghan private sector nursery industry and its associated organizations and institutions meet the demand, nation-wide, of Afghan farmers for certified perennial plant material for increased planting of modern orchards and vineyards”.*

2.1.1 SO1 Implementation summary

During the reporting period, SO1 project including its team has focused on procuring and distribution of PBT tools, organizing technical capacity building training to 25 field managers, organizing ornamental Agfair in Herat province, supported ANNGO to take part in National Agfair, monitor and inspection done from distributed plastic bags in eastern NGAs and IPM inspection has been performed with Laghman, Kunar and Nangarhar NGAs of Oct – December 2016. And the 2017 plan has been revised and shared with senior management team.

As per the foreseen action plan the SO1 team has completed the following activities:

The SO1 Governance & Organizational Development Specialist (Yama Torabi - 45WDs) and the SO1 Business Development Expert (Gerard Bruijl - 45WDs) have been worked on ANNGO governance structure and Job description of key staff of board members to improve ANNGO internal governance capacity and develop ANNGO board members job description.

The SO1 Governance & Organizational Development Specialist (Yama Torabi) organized 3 days' workshop for 13 people including HPS/SO1 staff, ANNGO board members and ANNGO technical staff in order to work on ANNGO vision and mission in long term objective and strategy.

The SO1 Business development expert (Gerard Bruijl) organized 4 days workshop to 5 ANNGO technical staff and 2 board members to work on ANNGO sustainability and membership fees procedure. **(For Report & Workshop Pictures Please Refer to ANNEX SO1.1)**

During the month of October, SO1 team have supported and provided ANNGO booth to take part and show its ornamental plants against its customers, local farmers and other stakeholders. At the same time SO1 team have supported ANNGO to organize ornamental Agfair in Herat Province (support provided to 15 people including ANNGO board members, SO1 team and 8 other from Agriculture companies). The event was organized to show the ornamental productions and propagation methodology and techniques. **(For National Agfair and Ornamental Agfair Please Refer to ANNEX SO 1.2)**

So1 team has thus supported ANNGO to participate in Kabul Agfair to stimulate saplings sales against its customers, orchard growers, government departments, local farmers and other stakeholders. The booth cost was covered by HPS/SO1 project

Another huge effort was made in the process to review The manual of procedures of ANNGO. The document was discussed and completed through 6 days workshop, which was organized by Seed certification department. In this workshop HPS/SO1/SO4 and ANNGO team participated. The manual of procedure is submitted to MAIL minister being approved.



Technical Capacity Building Training has been organized to 28 related field managers including 25 SO1 Field managers, 2 HVP field managers and one from Hariva NGA, The training took place in Nangarhar province (JAL PHDC) from 25 till 28 Dec 2016. During the training ornamental historic, ornamental production and propagation, commercial fruit trees varieties; rootstock propagation and IPM portion have been delivered to the participants. Field managers' annual evaluation performances have been reviewed and completed as well

During the reporting period the SO1 team has also supported the PBTL providing laboratory equipment/consumables during the month of Oct The procured tools and equipment will help PBTL to test virus index and produce rootstock through tissue culture techniques and methods for Kabul Perennial Horticulture Development Center (PHDC).

HPS/SO1 Lab technician assisted PBTL to produce 380 various clonal rootstock types (GF677, Pyrold dwarf, Gisela 5, etc.) the rootstocks have been transferred into Kabul PHDC. In the meantime HPS/SO1 mobilized two (2) Interns for ANNGO to receive "on the job training", with PBTL office.

HPS/SO1 Technical team inspected and monitored certified citrus saplings of eastern NGAs whether the members considered and implemented the distributed plastic bags criteria, so it was observed that all members implemented the main criteria. The next plastic distribution will be take place in Feb 2017. The plastic bags will support and help NGA members to produce certified citrus saplings for better commercial orchards in the field.

During the reporting period, 2 Int'l Consultants (Ferrini & Alberto Giutoli) visited Shamrizan Agriculture Company, Kabul mayor, Kabul governor, Agriculture Research Institute Directorate and local grape garden in Kabul. They visited ornamental companies and other governmental departments in order to work on ornamental standards in Afghanistan.

Problems:

During the reporting period SO1 team faced with insecure situation of some province like Zabul, Helmand, Ghazni, Kunduz, Takhar and Baghlan. The insecure situation has stopped the team to go IPM monitoring and visit Mother stock nurseries and certified nurseries closely in the field.

The SO1 team considers the implementation activity of the reporting period as: satisfactory, because the above implemented activities had positive results on NGA members' daily work and activities as well as on project related field managers' capacity level. PBTL also praised SO1 project for distributing such kind of useful Lab tools. And NGA members also appreciated the project activities done in the field.

Therefore the SO1 team suggests the following:

- a) SO1 team with close coordination of ANNGO agree to invite Agriculture companies staff and NGA board members in field managers technical capacity building training as trainers. This will help field managers to learn new knowledge and technology in terms of nursery and ornamental industry.

For the next reporting period the SO1 team will focus on the following activities:

- Printing and distributing of 5000 IPM brochures/Leaflets on Damping off and Agro chemical combination and application for pest and Disease control.
- Support ANNGO to print 4,000 catalogues to introduce commercial fruit trees varieties.
- Support ANNGO to print 2,000 volume (1000 Dari/1000 Pashto version) train manual.
- Support ANNGO to print 100 volume of Manual of the procedure.



- Procure and distribution of 3500 Kg standard plastic bags to Laghman, Nangarhar and Kunar NGAs to produce certified citrus saplings.
- Support ANNGO to broadcast national radio announcement to stimulate ornamental plants and certified saplings sale inside the country.
- Support ANNGO to provide booth to take part in national Agfair in Kabul province.
- Support ANNGO to hire an international consultant to work on ANNGO certification scheme.
- Support ANNGO to establish an ornamental pilot project in Kabul province.
- Support ANNGO to provide and distribute banners for NGAs better sale and saplings market.
- Support ANNGO to organize ornamental Agfair.
- Provide and publishing project panel to show project activities.

2.1.2 SO1 Results and Activities implementation status

Result 1: Support ANNGO to develop as an independent and self-sustainable organization driving forward progress in the fruit tree and ornamental nursery production.

IND-1.1 The ANNGO key institutional functions as the umbrella organization of the private nursery sector are continued and consolidated as a result of HPS support. Status: ongoing

IND-1.2 ANNGO conducts a program of internal institutional capacity building and improves self-governance capacities with support from HPS. Status: ongoing

Act 1.2.1 Support (TA) ANNGO to conduct regular capacity building of ANNGO board members on key institutional development and governance topics to improve ANNGO's self-governance capacities. The SO1 Governance & Organizational Development Specialist (Yama Torabi - 45WDs) and the SO1 Business Development Expert (Gerard Bruijl - 45WDs) have been worked on ANNGO governance structure and Job description of key staff of board members to improve ANNGO internal governance capacity and develop ANNGO board members job description. Total is 4 mission, 2/4 mission is completed. One mission has been done during the reporting period.

Act 1.2.2 Support (TA) ANNGO to develop its Vision, Mission and long-term Objectives (to be endorsed by ANNGO General Assembly).Total is 4 mission, 2/4 mission is completed. One mission has been done during the reporting period. The SO1 Governance & Organizational Development Specialist (Yama Torabi) organized 3 days' workshop for 13 people including HPS/SO1 staff, ANNGO board members and ANNGO technical staff in order to work on ANNGO vision and mission in long term objective and strategy.

Act 1.2.3 Support (TA) ANNGO to review and revise the ANNGO Organizational Structure Plan. Total is 4 mission, 2/4 mission is completed. One mission has been done during the reporting period.



IND- 1.3 ANNGO – with HPS support - develops a long term strategy and the business plan aiming to reach a 65% self-financing level within the next 10 years. Status: ongoing

Act 1.3.1 Support (TA) ANNGO to develop a prioritized list of Development Goals and a timeline including but not limited to:

Total is 4 mission, 2/4 mission is completed. One mission has been done during the reporting period. The SO1 Business development expert (Gerad) organized 4 days workshop to 5 ANNGO technical staff and 2 board members to work on ANNGO sustainability and membership fees procedure.

Act 1.3.2 Support (TA) ANNGO to review and revise its business plan aiming to reach 65% self-financing level within the next 10 years.

Total is 4 mission, 2/4 mission is completed. One mission has been done during the reporting period.

IND- 1.4 ANNGO promotes the development of ornamentals and forestry trees within its NGAs members as a result of HPS support. Status: ongoing

Act 1.4.3 Support ANNGO to take part in six (6) national Agfair events to promote the development of ornamentals within its NGAs members.

From total 6 national Agfair 3/6 events have been completed and one has been done during the reporting period. During the month of October supported and provided ANNGO booth to take part and show its ornamental plants against its customers, local famers and other stakeholders, meanwhile supported ANNGO to organize ornamental Agfair in Herat Province to 15 people including ANNGO board members, SO1 team and 8 other from Agriculture companies. The event was organized to show the ornamental productions and propagation methodology and techniques.

IND- 1.5 ANNGO conduct awareness campaigns –with HPS support - for the horticulture industry on the advantages of planting certified trees and vines and promote sales of certified saplings among its members.

Act 1.5.3 Support ANNGO to take part in three (3) national Agfair events to promote the advantages of planting certified trees and vines and stimulate sales of certified saplings among its members. 3/3 National Agfair have been done. One Agfiar has been conducted during the reporting period. Supported ANNGO to participate in Kabul Afgair to stimulate saplings sales against its customers, orchard growers, government departments, local farmers and other stakeholders. The booth cost was covered by HPS/SO1 project.

Act 1.5.5 Support ANNGO to publish the Manual of Procedures for ANNGO regulatory system (attachment to seed & planting material regulations).

The Manual of the procedure review has been completed and submitted to Agriculture Minister for final version. The manual of procedures review is completed through 6 days workshop, which was organized by Seed certification department. In this workshop HPS/SO1/SO4 and



ANNGO team participated. The manual of procedure is submitted to MAIL minister being approved.

Result 2: The technical level of the fruit tree nursery industry in Afghanistan is raised to standards appropriate to the development of a modern orchard industry.

IND- 2.1 ANNGO incorporates - with HPS support - technical support functions to local nursery grower associations previously run by the two NGO consortia. Status: ongoing

Act 2.1.1 Recruit and second to ANNGO 25 Field Managers located in its NGA members to support the NGAs with the application of the certification scheme rules and improve the technical skills & practices among the nursery growers.

SO1 is continuing support the 25 field managers.

Act 2.1.2 Support ANNGO to conduct 12 regular (quarterly) technical capacity building activities for FM, interns and other technical staff supporting the NGAs and the local nursery growers.

9/12 capacity building training organized to field managers, 1 training has been conducted during the reporting period. A Technical Capacity Building Training has been organized to 28 related field managers including 25 SO1 Field managers, 2 HVP field managers and one from Hariva NGA, The training took place in Nangarhar province (JAL PHDC) from 25 till 28 Dec 2016. During the training ornamental historic, ornamental production and propagation, commercial fruit trees varieties; rootstock propagation and IPM portion have been delivered to the participants. Field managers' annual evaluation performances have been reviewed and completed as well.

Act 2.1.3 Support ANNGO to conduct regular (yearly) Virus indexing testing for mother stock nurseries and potential mother stock material with sample testing at Plant Biotechnology Laboratory. PBTL tools/equipment have been procured during the reporting period. Supported and provided laboratory equipment/consumables to PBTL during the month of Oct 16 and handed over to PBTL office. The procured tools and equipment will help PBTL to test virus index and produce rootstock through tissue culture techniques and methods for Kabul Perennial Horticulture Development Center (PHDC).

IND-2.2 ANNGO members continue - with HPS support - to produce, lift, label and pack fruit trees to standards set by ANNGO (cross cutting activity with SO4 citrus). Status: ongoing

Act 2.2.1 HPS/SO1 Technical team inspected and monitored certified citrus saplings of eastern NGAs whether the members considered and implemented the distributed plastic bags criteria, so it was observed that all members implemented the main criteria. The next plastic distribution will be take place in Feb 2017. The plastic bags will support and help NGA members to produce certified citrus saplings for better commercial orchards in the field.

IND-2.3 ANNGO introduces enhanced pests & diseases monitoring and control within its NGAs members, MSNs and CPNs, as a result of HPS support. Status: ongoing



Act 2.3.1 Support ANNGO (TA) to develop a IPM strategy and work plan to introduce enhanced pests & diseases monitoring and control within its NGAs members, MSNs and CPNs.

IPM strategy plan shared with ANNGO and IPM expert monitored Laghman, Kunar and Nangarhar NGAs during the reporting period.

IND-2.4 Recruit and second to ANNGO X1 Micro-propagation Lab Technician (located in the PBTL) to ensure a commercial provision of clonal rootstock produced with tissue culture technique . At least 20,000 of various rootstock types (GF677, Pyrold dwarf, Gisela 5, etc.) produced by 2017. Status: ongoing (lab technician hired and working)

Act 2.4.1 ANNGO gradually develops - with HPS support - the necessary technical human capacity and knowhow to increase the clonal rootstock commercial production in cooperation with NHLP.

12,206/20,000 clonal rootstock produced. 380 clonal rootstock have been produced during the reporting period. 2 interns continue assisting with PBTL office.

HPS/SO1 Lab technician assisted PBTL to produce 380 various clonal rootstock types (GF677, Pyrold dwarf, Gisela 5, etc.) the rootstocks have been transferred into Kabul PHDC. In the meantime HPS/SO1 mobilized two (2) Interns for ANNGO to receive "on the job training", with PBTL office.

Result 3: The technical level of ornamentals nurseries in Afghanistan is raised to standards appropriate to the development of a modern ornamental nursery industry.

IND-3.1 ANNGO develops a set of phyto-sanitary standards for the ornamental plants with HPS support. Status: ongoing

Act 3.1.2 during the reporting period, 2 Int'l Consultants (Ferrini & Alberto Giutoni) visited Shamrizan Agriculture Company, Kabul mayor, Kabul governor, Agriculture Research Institute Directorate and local grape garden in Kabul. They visited ornamental companies and other governmental departments in order to work on ornamental standards in Afghanistan.

IND-3.2 ANNGO develops own technical capacities and skills in order to provide technical services for its members in the ornamental sector with HPS support. Status: ongoing

IND- 3.3 ANNGO provides its interested nursery growers members with technical capacity building on the new ANNGO ornamental standards with HPS support Status: ongoing

2.1.3 Problem and Delayed Activities:

Result 2: The technical level of the fruit tree nursery industry in Afghanistan is raised to standards appropriate to the development of a modern orchard industry.

Act 2.3.1 due to insecure situation of some provinces like (Ghazni, Zabul, Helmand, Kundoz and Baghlan) the SO1 team is not able to support ANNGO to introduce enhanced pests & diseases monitoring and control within its NGAs members, MSNs and CPNs.



Solution way: SO1 team agrees to support the mentioned provinces indirectly to collect the need assessment data from related field manager. Moreover SO1 team will continue direct support to start monitoring to cover the mentioned provinces upon resecure of the situation.

Result 3: The technical level of ornamentals nurseries in Afghanistan is raised to standards appropriate to the development of a modern ornamental nursery industry.

Act 3.2.1 The Italy study tour, which was supposed to conduct in August 2016, has been delayed, because Italy Embassy has not issued the visa. This event will take place in spring 2017.

Act 3.3.2 Publishing two brochure for promoting ornamental nursery production has been delayed. This activity is going to be completed after Italy study tour.

Act 3.3.3 Conducting technical capacity building training for 5 NGA members has been delayed. This activity is also linked with Italy study tour.

2.1.4 Beneficiaries/affiliated entities and other Co

1. In terms of the relationship with the beneficiaries: during the reporting period, the SO1 team organized meetings with ANNGO technical team and board members, Ornamental companies, Baboor Garden department, PBTL, NGA members and board members.

2. SO1 team participated in the sectorial meetings of provincial DAILs and introduced quarterly activities and implementation in the field. The DAILs have praised and appreciated the project activities in the field and were keen to observe project implementation.

3. During the reporting period, SO1 team continued relationship and cooperated with SO3 in preparing apricot shot hole brochure and assisted SO4 in preparing citrus Psylla brochure.

4. SO1 team built linkages and synergy with Italy Embassy, Florence University of Italy and Baboor Garden department.

2.1.5 Visibility

During the reporting period, the following EU visibility distributed in the action:

- 2,500 IPM brochures
- 1,500 Ornamental brochures
- 2 booths for ANNGO visibility during national Agfair

2.2 Specific Objective 2.

Adaptive research and technical development programs are successfully providing the technical solutions to increase orchard and vineyard productivity and value to the consumer at household and national level.

2.2.1 SO2 Implementation summary

During the reporting period, the SO2 team has focused on the construction of new room for the Lab and set up all equipment of pomology laboratory. The main activities which were focused on fruit quality, maturity index, and shelf life parameters of 49 commercial and highly marketable fruit varieties). Collection of missing characters for the cherry register from the National Collection of cherry located in



Kabul and Herat PHDCs. Also entered the data into databases which were tested in the pomology Laboratory in 2016.

Conduct Pomology Laboratory training on fruit characterization and maturity indices for the 30 participants of PHDC staff and ARIA at Herat PHDCs. The training continued for three days.

The chilling requirement of a fruit is the minimum period of cold weather after which a fruit bearing tree will blossom. Collect the cuttings from five almond accessions, four apricot accessions and five new possible apricot varieties gained from the breeding program as well as the eight new almond varieties in three targeted periods.

Breeding programmes for improved apricot and almond varieties based on the best combinations of Afghan and imported germplasm have produced varieties for production testing and as a basis for further long term development. Supervision of field preparation, holes, transplantation, selection and discarded the weak and unwanted breeding lines, at the same while the field map of almond and apricot have been updated.

As per the foreseen action plan the SO2 team has completed the following activities:

Result 1:

- Repair new room for Pomology Laboratory in ARIA building.
- Set up all equipment of pomology laboratory in new Laboratory room.
- Conduct Pomology Laboratory training all 6 PHDCs and ARIA staff.
- Data entry of Pomology characters of Apple rootstock trial
- Data of maturity indices of 2016 work in pomology laboratory.
- Data entry of quality parameters of 2016 work in pomology laboratory.
- Test physical and chemical characters of Apple samples from SO3 cold storages.
- Search for the missing characters for the cherry register.
- Prepared Dari, Pashto and English text of the cherry register.
- Review Dari, Pashto and English text of the cherry register.
- Collect the cuttings of almond and apricot in three targeted periods on 12 Dec 2016, 24 Dec 2016 & 10 Jan 2017
- Daily observation from the cut branches of almond and apricot and recording its status.
- Collect the treated Shindukhani grapes from all the nine treatments.
- Analyses of the collected samples of the shindukhani grapes in the Pomology Lab.
- Entering of the collected data collected from the field and Lab in the main data sheet.

Result 2:

- Supervised preparation of the field/ holes for the almond breeding lines.
- Discard the weak and unwanted almond breeding lines.
- Labeling the almond seedlings gained from the crossing programme of 2015.
- Transplanting of the almond breeding lines to the main breeding plot.
- Screening and updating the map of apricot breeding plot.
- Labeled and bend ribbon on all the 40 selected apricot breeding lines.
- Marked all the 243 rejected apricot lines.



- Pulled out all the 243 rejected apricot breeding lines.

The SO2 team considers the implementation activity of the reporting period as: satisfactory

Therefore the SO2 team suggests the following recommendations:

- SO2 team will conduct close coordination meetings with ARIA/EU MAIL transition project.

For the next reporting period the SO2 team will focus on the following activities:

- Finalizing the 2017 plan of HPS and coordinating the plan with EU/MAIL transition project.
- Daily observation and collecting the remaining cuttings for the chilling requirement trial.
- Gathering the missing data for the cherry register.
- Updating of the protocols for all the SO2 ongoing research trial.
- Preparation of the needed materials for the research trials and breeding programme.
- Hiring fresh graduate students as short term interns for the research and breeding programme.
- Conduct theoretical and practical trainings to the new hired inters.
- Selecting, bending ribbon, labeling and bagging of the almond and apricot trees for the crossing programme.
- Conduct cross and self-pollination trials on almond and apricot.
- Conduct self-pollination trial on plum National Collection of Kabul or Herat PHDC.
- Support ARIA/EU MAIL transition project for characterization of the tree and flower and leave of the five major species like apple, cherry, peach, plum and apricot.

2.2.2 Results and Activities:

Result 1: The available Afghanistan fruit tree germplasm is fully described as regards Distinctness and Uniformity, and it's Value in Cultivation and Use is established for market leading varieties, to the benefit of orchard growers in Afghanistan.

IND-1.1: Enhanced ARIA's technical capacities to manage the PHDCs (including Pomology Laboratories) and continue the Adaptive Research activities with HPS support.

- In this reporting period no activity has been conducted in IND-1.1:

IND-1.2: Six main fruit species (Plums, Pomegranate, Cherry, Peach, Apricot, and Apple) characterized by ARIA, with HPS support.

Act- 1.2.2: Support ARIA / EU-MAIL transition project staff to conduct Pomology Laboratory activities in relation to fruit characterization.

1. The pomology Laboratory is used for the characterization of National Collection in determination of fruit maturity. The old room for the Lab was not suitable and did not have fair condition for a Lab, thus it's shifted to the new room in the first floor of ARIA building. Therefore the SO2 financially support for repairmen of the new room for Lab activities which include new cabinet, Lab instruments and air ventilator. And set up all equipment of pomology laboratory.
2. Conduct Pomology Laboratory training on fruit characterization and maturity indices for the 30 participants of PHDC staff and ARIA at Herat PHDCs. The training continued for three days.



- The data of apple rootstock trial which were collected in 2016 have been entered to the main database.

IND-1.4: Maturity and shelf life indexes are identified for 60 commercial and highly marketable varieties of major fruit species, in regards to SO3 activities.

Act-1.4.2: Perform Pomology Laboratory work on intrinsic fruit quality parameters of 60 commercial and highly marketable fruit varieties.

- Collected data for the quality parameters of 40 varieties which were tested in the pomology Lab in 2016 have been entered to the database.

Act-1.4.3: Perform Pomology Laboratory work on maturity index, and shelf life parameters of 60 commercial and highly marketable fruit varieties.

- Collected data for the maturity indices of 28 varieties which were tested in the pomology Lab in 2016 have been entered to the database.
- SO3 has built local underground cold storages, and SO2 is helping them with characterization of apple fruit samples stored in the cold storages.

Act- 1.2.4: Support ARIA / EU-MAIL transition project staff to publish the Registers of National Collection for 4 main species (Plums, Cherry, Peach, and Apple).

SO2 and EU/MAIL transition project has plan to publish the cherry register book the existed 26 varieties in 2017, thus the missing characters for the cherry register from the National Collection of cherry located in Kabul and Herat PHDCs has been collected. The collected data should be analyzed for further process. The first draft text for the register has been prepared but needs more revisions.

IND-1.3: Technical information (at least 25 best fruit and nut varieties) is delivered to nursery/fruit growers for the development of a modern Afghan high value perennial horticulture.

1.3.1: Identify suitable pollinizers and combinations for compatible varieties of 3 major fruit species. Sufficient information to be obtained on at least 10 varieties of almond, apricot and plum

- Collect the cuttings from five almond accessions, four apricot accessions and five new possible apricot varieties gained from the breeding programme as well as the eight new almond varieties in three targeted periods on 12 Dec 2016, 24 Dec 2016 & 10 Jan 2017 and SO2 team observes the branches daily and recording it's status.

Chilling hours requirements- various varieties in Kabul 2016-2017					
species		Flowering from 12 Dec cutting	Flowering from 24 Dec cutting	Flowering from 10 Jan cutting	Flowering from 20 Jan cutting
Apricot:					
	Goldkist-267	12-Dec	24-Dec		
	Goldcot- 265	12-Dec	24-Dec		
	Tomcot-212	12-Dec	24-Dec		
	Apache	12-Dec	24-Dec		
	AP1202-01	12-Dec	24-Dec		
	AP1204-14	12-Dec	24-Dec		



	AP1204-18	12-Dec	24-Dec		
	AP1205-16	12-Dec	24-Dec		
	AP1205-19	12-Dec	24-Dec		
Almond:					
	Sattarbai Mumtaz 1001	12-Dec	24-Dec		
	Sattarbai Doum 1002	12-Dec	24-Dec		
	Sattarbai Guldar 2006	12-Dec	24-Dec		
	Lauranne 6309	12-Dec	24-Dec		
	Karmel	12-Dec	24-Dec		
New almond varieties:					
	801-42 (608)				
	807-6 (604)				
	801-19 (601)				
	802-13 (602)				
	810-29 (605)				
	802-36 (603)				
	831-29 (606)				
	902-22 (607)				

2. Collect the treated Shindukhani grapes from all the nine treatments; we analyzed the collected samples in the Pomology Lab and the collected data has been entered to the main data sheet.

Result 2: Breeding programme for improved apricot and almond varieties based on the best combinations of Afghan and imported germplasm have produced varieties for production testing and as a basis for further long term development.

Act-2.1.1: Continuation of the breeding program initiated under PHDP, by conducting field testing of 8 selected breeding lines of almond from crosses of Afghan germplasm made in 2008-9 with a potential release of 6-8 new superior Afghan type varieties to nursery growers by 2017-8.

The seeds that were collected from the crossing programme in 2015 were sown in early winter 2015-2016. So before transplanting SO2 supervised preparation of the field/ holes for the almond breeding lines. Discard the weak and unwanted almond breeding lines from the field as well as the labeled the almond seedlings. Finally we transplanted the almond breeding lines to the main breeding plot.

Act-2.2.1: Continuation of the focused breeding program initiated under PHDP for inclusion of stable production characteristics into the unique range of Afghan apricot germplasm by the use of selected foreign varieties. Field testing of 450 lines from targeted crosses between the unique Afghan Amiri types and foreign varieties made since 2012-3 with an anticipated 15 crosses and back crosses in 2016 and 25



crosses and back crosses in 2017; resulting to planting 500 new lines by 2018 with an anticipated evaluation process leading to the release to nursery growers of a number of superior varieties by 2025.

From the observation of the 2016 SO2 selected 40 apricot breeding lines from a total of 283 lines. The 40 selected apricot breeding lines were labeled and bend ribbon, the 243 rejected apricot lines pulled out and the field map is updated.

Problem and Delayed Activities:

Result 1: The available Afghanistan fruit tree germplasm is fully described as regards Distinctness and Uniformity, and it's Value in Cultivation and Use is established for market leading varieties, to the benefit of orchard growers in Afghanistan.

Act-1.2.4: Support ARIA / EU-MAIL transition project staff to publish the Registers of National Collection for 4 main species (Plums, Cherry, Peach, and Apple).

During the reporting period the work on cherry register has been delayed, because Mr. Shirshah Stanikzai the Curator of the National Collections have been resigned from his position and joined another organization. As well as Mr. Yaqubi SO2 Manager left his job and joined with MAIL as Panjshir Agriculture Director.

Solution way: Now Mr. Rahmatullah Atifi joined as SO2 PM and based on his job responsibility he will follow up the register. And the position of Curator of National Collection under EU/MAIL transition project will be hired.

2.2.3 Beneficiaries/affiliated entities and other Co:

1. Conducting coordination meetings with ARIA EU MAIL transition project, ANNGO project for better management on research activities.
2. Coordination with the six Technical Group on the six main species like cherry, apricot, grape, almond, apple and pomegranate.

2.2.4. Visibility:

During the reporting period, the following visibility distributed in the action:

- **Distribute the orchard management manual**
- **Cherry brochure has been distributed during the fall AgFair.**
- **During the past AgFair SO2 team distributed brochures on the eight new almond varieties.**
- **Distribute brochure on apricot self-pollination result.**

2.3 SO3 Pilot demonstration of enhanced post-harvest management systems and market driven value chain development for key perennial horticulture crops within target areas and target groups

2.3.1. SO3 Implementation summary

During this reporting period by supporting exporter through provision of standard packages for 12.6 MT Red Raisin which has been exported by Gold star Sharq company to Portugal for more details refer to **SO3-ANNEX1**, Besides the 6th GRPG meeting was conducted on 21DEC16 including 17 participants in



Dashte Robot village of Bagram District, Parwan Province. The meeting minute is presented as **SO3-ANNEX 2**.

A 3 days marketing and institutional capacity building workshop has been conducted in Aybak city of samangan province for 100 almond producers, leadership of samangan dry fruit seller association and Bahar-e-Kunduz almond producers cooperative, retailers, whole sellers, traders and government officials of both provinces dated 25-27th Dec 2016, for more details refer to **SO3-ANNEX 3**.

To prolong apple shelflife and supply fresh apple in the off season period as per market demand No. 2 Apple under Ground Cold Storage structures has been completed and handed over to the owners, each with the capacity of 12 MT in Paghman District, Kabul Province, the Handover notes are attached as **SO3-ANNEX 4**, No. 35MTapples exported to regional (India) markets by providing the trader (Safi Bradaran co ltd.) with improved packaging support. The MOU is attached as **SO3-ANNEX 5**.

SO3 facilitated exposure visit for 100 beneficiaries from target groups to attend the Kabul Agfair, to exchange the experience and knowledge among them selves and possible marketing linkage with input supplier traders and others stakeholders.

Recommendations and Suggestions

- b) It is recommended that GRPG leadership must strengthen their coordination with various stakeholders and government officials for further linkage to fill the existed gaps in grape and raisin production.
- c) It is recommended that beside the post-harvest activities the focus should be on pre-harvest practices as well. (Almond and apple) to reduce the post-harvest loses.
- d) As seems the construction of underground cold storage is using by single farmer, it is recommending to construct a big size and modern on the ground storage with precooling facilities to trader instead. (The decision will be made after CBA result).

In the next reporting period SO3 team will focus on the following activities:

Marketing initiatives in regional markets (i.e. India, Central Asia, and Russia) and international high value markets (i.e. EU and USA) with traceability, enhanced product quality improved packaging for Raisins and dried fruits, GRPG Operational Manual will be finalize, as well as the 7th GRPG meeting will be facilitated, besides more focus would be on preparation and publication of brochures Bee Pollination, Grape IPM, Apple Post-harvest, also minimum quality standards (parameters), Quality Control laboratory manual and Pomology laboratory protocols will be finalize by int'l consultant and published, furthermore an exposure will be arranged for the raisin producers and DAIL representatives to visit the TABASOM Raisin processing factory in cooperation with CARD-F aimed to improve technical capacity of producers on good quality raisin production in future.

Problems and solution:

As per the ANHDO/HPS Log frame assumption (*AAIDO is willing to undertake its role at an almond industry level and possess the necessary operational capacity to be considered as a reliable project partner*) SO3 Shared the developed production and marketing survey formats with AAIDO for finalization as single share formats (Questionnaire) to be used by both organizations in future, unfortunately the AAIDO Representative didn't respond to the Emails, the follow up(Reminder) emails will be send to AAIDO, otherwise the issue will be raised in steering committee meeting for the possible solution.

Security concerns of Kunduz province are a barrier to do the planned activities as per project timeline so hereby we recommending hiring a ToT to fill the gap there.



2.3.2 Results and Activities

Result 1 – "Grape & raisin value chain improved with enhanced harvest and post-harvest systems for exports and home market."

IND-1.3 At least 500MT of grape and raisin marketed with improved packaging by ANHDO in partnership with growers & traders. **374.2MT/500MT (12.6MT in the reporting period)**

IND-1.4 Producer organizations supported with organizational development to establish a Grape & Raising Promotion Group (GRPG) forum.

Result 2 - "Almond Industry value chain supported and enhanced"

IND-2.1 Enhanced harvest and post-harvest capacities adopted by at least 200 almond producers over an approx. 100ha orchard area in northern Afghanistan. **(200/200 Almond producers)-(229ha/100ha orchard area).**

Result 3 - "Pilot fresh fruit (sweet cherry and apples) value chains established and improved with enhanced harvest and post-harvest systems to raise standards for exports and home market."

IND-3.2 No. 10 apple cold storage structures constructed to demonstrate prolonged shelf life and seek out of season marketability benefits. **4/10 (2 in the reporting period).**

IND-3.3 At least 150MT of fresh fruits marketed with improved packaging by ANHDO in partnership with private sector traders. **53.48/150 (35MT in the reporting period).**

R1

Act-1.3.2: Marketing initiatives in regional markets (i.e. India, Pakistan, Central Asia, Russia) and international high value markets (i.e. EU and USA) with traceability, enhanced product quality improved packaging (250MT in total).

During the reporting period ANHDO/HPS/SO3 supported Gold star sharq company through provision of standard package for 12.6 MT red raisin to Portugal aimed to introduce and encourage the afghan exporters to export afghan products to new and international markets, the provided packaging materials are consisting of (2100 corogated carton, 2100 liner bags, 2100 labels and 42 roll tapes).

Act-1.4.2: Facilitate the quarterly (at least no.10) GRPG meetings.

The 6th GRPG meeting was conducted on 21DEC16 in Dashte Robat village of Bagram District, Parwan Province, with total 17 participants including (GRPG leadership, members, DAIL and private sector representatives), the main discussed issues were"

- Review of the previous meeting.
- Discuss on possible exposure visit for Raisin processing company.
- Discuss on establishment of Red raisin safe site demo plots.
- Further required capacity building training.

The Meeting minute is presented as **SO3-ANNEX 2.**

R2

Act-2.1.4: Conduct capacity building Workshops (no 2) on institutional building and marketing issues for at least 100 participants in total.

A 3 days marketing and institutional capacity building workshop has been conducted in Aybak city of samangan province for 100 almond producers, leadership of samangan dry fruit seller association and Bahar e Kunduz almond producers cooperative, retailers, whole sellers, traders and government officials



of both provinces, from 25-27th Dec 2016. Aimed to improve their marketing and institutional capacity. for more details refer to **SO3-ANNEX 3**.

R3

Act-3.2.1: *Design and establish apple cold storage structures (no. 10) aiming to prolong fresh fruit shelf life. (80MT capacity annually).*

To prolong apple shelflife and supply fresh apple in the off season period and as per market demands, No. 2 Apple under Ground Cold Storage structures has been completed and handed over to the owners, each with the capacity of 12 MT in Paghman District, Kabul Province, the Handover note and MOUs are attached as **SO3-ANNEX 4**

Act-3.3.2: *Marketing initiatives in regional markets (i.e. India, Pakistan, Central Asia, and Russia) and international high value markets (i.e. EU and USA) with traceability, and improved (80MT).*

During the reporting period ANHDO/HPS/SO3 supported Safi Bradaran Company Ltd through provision of standard package for 35 MT apple to Regional market (India) aimed to introduce and encourage the afghan exporters to export afghan products to new and regional markets, the provided packaging materials are consisting of (3500 two piece courroged cartons each with 10 kg capacity, 3500 courroged sheets, 7000 apple trays).

2.3.3 Beneficiaries/affiliated entities and other Co

All planned activities have been done in close cooperation of government officials, villages, CDCs and target group leaders, good relations built with project stakeholders (GRPG leadership, ACCI, DAILs, DoEs, associations, cooperatives and Aid agencies whom are implementing the similar project in target areas.

To strengthen coordination and cooperation among ANHDO Sub Objectives (SOs), SO2 has been involved in stored apples shelf life characterization in different stages and the results have been shared with project staff and owners of cold storage on the regular basis.

2.3.4. Visibility

For project visibility a number of 3500pcs corrugated cartons provided with ANHDO, EU and MAIL logos. Facilitate the visit of producer groups from target provinces of Kabul, Parwan and Kapisa, to visit the booths and exchange the experience and ideas among themselves during Ag-Fair.

Participated in Kabul Ag-Fair.

Specific Objective 4: A soundly based and profitable citrus industry in Eastern Afghanistan is developed

2.4.1 Implementation summary

During the reporting period 4th Quarter 2016, the SO4 team has focused its activity on orchard applicant assessment and establishment of commercial orchards (Act-1.2.1 & Act-1.2.2), Nursery Growers capacity building (Act-1.3.2), Development of information brochures and video material (Act-2.1.1), CTV Support (Act-1.3.4), Citrus Promotion Group (CPG) capacity building and implementation of CPG defined



initiatives (Act-3.1.2), a Citrus Fruit taste test: (Act-2.1.4) and in cooperation with the PHDC-JAL capacity building Workshops on citrus related issues for Agricultural Institutes & Universities (Act 2.1.5)

Due to the postponement of the international citrus value chain consultant's mission in October 2016 the activities on the Citrus Database Survey and Citrus Promotion Group meeting was pushed forward into the first quarter 2017.

The performance to date of SO4 was assessed and the 2017 plan has been revised and shared with senior management team.

Critical results and problems encountered include:

The establishment of commercial orchards: (Act-1.2.1 & Act-1.2.2)

Although an orchard of one hectare was successfully established in the Ghosta District in Nangarhar the achievement of the total of seventy (70) Ha is being compromised by inadequate planting material and the suitability of the applicants' land. The SO4 focus is by necessity shifting to supporting the Nursery Growers to produce enough and appropriate quality saplings, and identifying suitable land. Unsuccessful applications included 25 growers with a combined potential citrus area of 32 Ha. Summary of assessments attached as Annexure A.

Nursery Growers capacity building (Act-1.3.2)

Several capacity building initiatives were initiated above and beyond the indicators as stated in the action plan. This renewed and accelerated focus stems from the availability of saplings remaining to be the single biggest inhibitor to the establishment of commercial orchards. This CPG driven initiative is a significant milestone as the Citrus Promotion Group implemented its first multi-stakeholder operational function, attempting to find a collective solution to a common industry problem.

The initiatives included:

Assessment of nursery best management practices in collaboration with a multi-stakeholder team nominated by the CPG and a SO4 Sapling Procurement drive to select best available saplings from selected nursery growers related to Act 1.2.2.

Demonstration and training to encourage the move towards container grown saplings, as opposed to the traditional field grown saplings.

Development of information brochures and video material (Act-1.3.2)

A brochure on container grown saplings was produced and used in support of the nursery grower capacity building activities. Two documentary videos were produced. The video on citrus Phytophthora Gummosis Disease was published in the reporting period and a video on Citrus Leaf Miner pest was produced and will be ready for publication and broadcast early January 2017. An audience in excess of 93 000 were reached with 25 000 confirmed readers and 926 reactions, shares and or comments. The documented reach is further augmented through videos often being used as training aids by extension officers and the farmer field schools.

The impact of using social media as a training and capacity building tool was demonstrated by the SO4 Team' produced video on citrus Phytophthora Gummosis Disease. The video was published on Facebook and YouTube on 5 November 2016. It reached a total audience of 93800 users. More significantly though is the fact that 25 000 users engaged with the posting by clicking through to the related ANHDO site and 960 users commented, shared or reacted to the posting.

During the reporting period the SO4 Team, in conjunction with the PHDC also produced a video on the "Citrus Leaf Miner" due for publication early January 2017.

The impact of the Facebook page stretches farther than the publication itself. The videos are being used as training aids in farmer field schools and support extension officers in their farmer support activities.



The SO4 team has completed the following activities:

Act-1.2.1: Assessment of 2nd call of interest for the establishment of commercial orchards. It is clear from the assessment results that the selection processes have not yielded the appropriate candidates or suitable land.

Act-2.1.3 Promote citrus industry best technical practices to a broader audience through radio broadcast, TV shows and documentaries. Phytophthora Citrus Gummosis disease documentary produced, published and broadcasted; Citrus Leaf Miner Documentary Produced(targeted for publication and broadcast January 2017); Container grown sapling brochure produced.

Act-2.1.4 Citrus Fruit taste test: -The Taste test of high marketable value citrus varieties were carried out in the citrus National Collection of PHDC Jalalabad on 13 December 2016 to identify and promote high potential marketable citrus varieties. Test results attached as Annexure B)

Act-2.1.5 In cooperation with the PHDC-JAL, capacity building Workshops on citrus related issues were presented to Kunar and Laghman Universities Agricultural faculties for 268 students

A certificate of appreciation was received from Kunar University and is attached as Annexure C

Although the SO4 team have achieved many success in auxiliary activities the implementation activity of the reporting period unsatisfactory due to the critical success factor “The establishment of 70 Ha commercial citrus orchards” being compromised by the lack of appropriate saplings and applicants with suitable land.

Therefore the SO4 team suggests the following:

Recommendation 1: Enhanced focus on and support of citrus nursery growers to produce requisite quantity and quality saplings.

Recommendation 2: Aggressive follow up on “NVDA Land Access Policy Review” and establishment of Community Private Public Partnership initiated in August 2016 and defined in the proposal to the Minister of Agriculture Irrigation and Livestock, to provide at least 25 year access to private sector growers and unlock the potential of available but inaccessible land.

For the next reporting period the SO4 team will focus on the following activities:

- a) Finalisation of the Afghanistan National Citrus Strategy
- b) Capacity building of the Citrus Growers Association and Citrus Promotion Group
- c) Pursuing the proposal “The CPPP between citrus growers and Grower associations, the NVDA, and private investors as cornerstone for the establishment of a commercial citrus industry in Afghanistan.

2.4.2 Results and Activities

Result 1 – The newly reborn citrus industry in the eastern region of Afghanistan reaches significant levels of production and quality standards and provides increased regional economic opportunities

IND 1.1.: In cooperation with HVP, Citrus value chain is analyzed, focusing on current industry commercial production capacity and its potential; Citrus VC final report

Act-1.1.1 Conduct annual field surveys of growers, nurseries, traders, etc. to collect relevant data. Approx. 1,000 interviews conducted as a baseline and at least 250 interviews as sampled updates annually. Status: Ongoing. Next annual update scheduled for 1st Quarter 2017



This programme is funded by the European Union

Act-1.1.2 Review annually the collected data and provide stakeholders with updated industry information through the CPG meetings. Status: Baseline completed; Ongoing update; integration with NHLP database outstanding due to awaiting of NHLP input.

Act-1.1.3 One (final) value chain analysis is published by 2017. Status: First draft completed and published; Ongoing update. Final report targeted for September 2017

Indicator 1.2.: Commercial size citrus orchards (at least no. 12) established with certified saplings of marketable varieties (70 ha planted by 2017).

Act-1.2.1 Conduct 3 calls of interest to select commercially oriented farmers (and influential industry stakeholders like NVDA) committed to comply with a set of minimum Afghan citrus industry standards. Status: On target with 2 / 3 calls completed. Final call scheduled for February 2017

Act-1.2.2 Support the establishment of commercial size (min. 1 ha each) citrus orchards leading to a consolidated 70 ha new orchards planted by 2017. Status: 1 Ha established. Progress on this activity inhibited by lack of sufficient appropriate citrus saplings and suitability of land and applicants. During the reporting period follow up visits and assessments were conducted. Thirty four (34) applications were received of which only one could be accepted. Twelve applications are pending due to selection criteria being resolved by land owners and Twenty one applicants had to be rejected due to unsuitability of land due to waterlogging or marshland, unavailability of water, and adverse security locations. (Comprehensive assessment schedule attached as Annexure A)

Act-1.2.3 Conduct (no. 3) capacity building Workshops on citrus orchard management, including related beneficiaries and NVDA, CGG members etc. for at least 200 participants in total. Status: During the reporting period Integrated Pest Management workshop was conducted.

IND1.3 ANNGO and its citrus related NGAs members met the Afghan citrus industry needs for certified citrus saplings, with HPS support. (200,000 certified saplings produced annually by 2017).

Act-1.3.1 Compile a shortlist including the highly recommended marketable citrus varieties (no 10) for further propagation to meet market demand. Status: Completed

Act-1.3.2 Conduct (no. 1) capacity building Workshop on citrus nursery management including ANNGO and its citrus related NGAs' members (among others) for at least 50 participants in total. Status: Completed. Enhanced focus on nursery growers and the CPG initiated nursery assessment resulted in additional effort on this activity during the reporting period and will demand more attention in the future.

Act-1.3.3 In cooperation with SO1; support (TA) the operation of the NVDA pilot modern nursery and provide NVDA staff with daily mentoring on citrus nursery management best practices. Status: Completed

Act-1.3.4 Assist HVP (SO4/R1) and the PBTL to conduct; the study on "CTV strain and rootstock tolerance / resistance" to provide the industry with clear strategic decision making tools (the CTV study report). Status: Ongoing. In this quarter PBTL conducted a sample collection campaign and they have collected 136 samples from three different locations.

Result 2. The citrus value chains and market-links are developed in order to gradually move towards citrus import substitution while at the same time adopt basic quality standards that could lead to future international exports.



Indicator 2.1 Awareness campaigns promoted best industry practices covering the broader citrus industry related stakeholders.

Act-2.1.1 Distribution of brochures, (no 4,000) to promote (3 awareness campaigns) the highly recommended marketable citrus varieties among citrus producers. Status: Completed and published one brochure during the reporting period on “Container Grown Saplings” (attached as Annexure D)

Act-2.1.2 Establish an Information Booth during planting seasons (3 awareness campaigns) to promote certified sapling sales of the recommended varieties and the application of best orchard management practices among citrus producers (no 1,500 reached). Status: On target. 2/3 completed. Final booth scheduled for Q1 2017.

Act-2.1.3 Promote citrus industry best technical practices to a broader audience through radio broadcast, TV shows and documentaries. (20 radio & TV broadcast) Status: On target.

During the reporting period a video was produced, published and broadcasted on Phytophthora Citrus Gummosis.

- Phytophthora gummosis is one of the most destructive citrus disease in our nurseries and orchards; particularly when the rootstock of a citrus plant is Volkamer or Rough Lemon.
- Due to the potential threat of CTV the nursery growers are not allowed to use the conventional rootstock of sour orange which is resistant to phytophthora gummosis. They thus have to use rootstocks other than sour orange. The nursery growers are mostly using Rough Lemon as rootstock, which is very susceptible to citrus gummosis fungus. Many of the nursery saplings are suffering from this problem. To create awareness on the diagnosis and treatment of this disease we have produced a comprehensive educational video clip on this disease. The video reached 93,800 people via the ANHDO Citrus East Facebook page.
- Although the 93800 reach could be inflated due to Facebook “Boosting” it is remarkable to note that this video received 25 000 post clicks and was reacted and commented on and shared by 926 users. The video clip is being used by extension officers as a training module in their field visits.
- The video clip is available on YouTube;
- Facebook: <https://www.facebook.com/khateez.citrus/videos/1793010680940832/>
- YouTube: <https://youtu.be/WU6kLxFWIsc>

A comprehensive schedule of results of the media campaign is attached as Annexure F.

Act-2.1.4 In cooperation with PHDC-JAL, conduct (no. 3) fruit taste campaigns to develop market awareness for the recommended (at least 5) varieties in domestic market including at least 20 citrus traders/wholesalers. Status: On target with one test successfully conducted during this reporting period on 13 December 2016. Taste test results attached as Annexure B.

Act-2.1.5 In cooperation with the PHDC-JAL, conduct (no. 8) capacity building Workshops on citrus related issues for Agricultural Institutes & Universities for at least 400 undergraduates in total. Status: On target with two workshops presented in reporting period.

Total of 199 Students participated: Kunar (130 students on 18 Oct 2016), and Laghman (69 students on 07Nov2016) university agriculture faculty have been trained in the following subject matter;

- Current status of the Afghan citrus industry
- Citrus variety selection
- Citrus nursery best practices
- Citrus orchards best practices
- Citrus orchard layout and design



- Citrus saplings planting techniques

Due to the support of ANHDO to the universities, Kunar University honored us with an appreciation letter on the convocation event (see Annexure C).

IND2.2 Citrus Grower Group established and supported with long term organizational arrangements potentially leading to the establishment of a Citrus Growers Association.

Act-2.2.1 Promote the establishment of a Citrus Growers Group including as founding members the citrus growers (no 15) committed to comply with best practices. Status: Ongoing. Significant progress made in grower participation in general citrus industry affairs.

Act-2.2.2 Facilitate market linkages (at least no. 3) between CGG members and fresh fruit wholesalers / processors. CGG produced citrus (40 MT) meeting domestic market demand annually by 2017. Status Ongoing. Market wholesaler and intermediary questionnaire and pricing survey developed in reporting period for update of value chain study.

Act-2.2.3 Conduct capacity building Workshops (no 8) on institutional building issues including CGG members (and others) for at least 30 participants in total aiming to potentially evolve into a Citrus Growers Association. Status: Workshop scheduled for the reporting period is scheduled for February 2017 due to the postponed arrival of the Citrus Value Chain Consultant.

IND2.3 Citrus fruit QC capacity established to meet the industry's QC monitoring needs. (QC citrus protocols and lab instruments established) Status: Completed

Act-2.3.1 Set the minimum citrus fruit Quality Control parameters to meet domestic market requirements allowing for potential regional exports. Status: Completed

Act-2.3.2 Develop QC laboratory protocols for conducting QC trials. Status: Completed

Act-2.3.3 Purchase the necessary QC laboratory instruments and equipment to conduct QC laboratory tests. Status: Completed

Act-2.3.4 Provide training to CGG on provided QC laboratory instruments and equipment's usage. (This activity does not appear in the logframe yet) Status: Completed. 23 Oct 2016 Maturity indexing training was delivered by ANHDO SO4 post-harvest quality control expert to 40 NHLP technicians (field officers) in PHDC-JAL pomology lab.

Result 3. Private & public stakeholders strengthen their partnership around the agreed strategy for the Citrus industry

IND3.1 Permanent coordination between private & public stakeholders is assured by consolidation and support of the Citrus Promotion Group (CPG). Status: Ongoing 10/11 to date. (2017 Target 16). CPG meeting scheduled for this reporting period scheduled for January due to postponement of international consultant mission. The total target should be met with ease due to the accelerated CPG activity in preparing the National Afghanistan Citrus Strategy.

Act-3.1.1 Facilitate the (at least) quarterly CPG meetings. Status: Ongoing

Act-3.1.2 Promote CPG's long term institutional arrangements to expand and include a representative share from the wider citrus industry stakeholders. Status: Ongoing. Draft operational manual published. Translation in progress for review and comments by stakeholders. Completion: Target May 2017.



IND3.2 Private & public stakeholders engaged to develop and agree upon a long term Afghan Citrus strategy, with HPS support. Status: On target

Act-3.2.1 Review the Afghan Citrus Strategy framework under the CPG structure to include the best industry practices possible under the current Afghan context. Status: Ongoing and In Progress. Final strategy document Targeted for September 2017.

Act-3.2.2 Conduct a 4 days' long Conference for the development of the draft Afghan Citrus strategy including core CPG members and relevant GoA officials for at least 15 participants in total. Status: Targeted for September 2017

Act-3.2.3 Lobby and promote the GoA review process potentially leading to the final endorsement of the Afghan Citrus strategy by end 2017. (Afghan Citrus strategy final draft).Status: Ongoing. Final Strategy Targeted for September 2017.

IND3.3 Project staff and stakeholders participated in two study tours and one international trade event to become familiar with regional/international citrus industry standards, practices and market requirements.

Act-3.3.1 Study tours (no 2) organized for 10 stakeholders. Status: Completed

Act-3.3.2 Participation to regional and international event/s is organized for 6 stakeholders. Status: Targeted May 2017.

Problem and Delayed Activities

Act-1.2.2 Support the establishment of commercial size (min. 1 ha each) citrus orchards leading to a consolidated 70 ha new orchards planted by 2017

The single most important activity in jeopardy is the establishment of the 70 Ha Commercial orchards. Unavailability of appropriate saplings and suitable applicants and land are the key contributors.

Saplings quality and availability:

Majority of the citrus saplings produced by the nursery growers are not matching the minimum quality standards. Sapling Production forecasts were not met with less than 25% of forecasted volume achieved. Comprehensive nursery audit report compiled by SO4 in conjunction with CPG sub committee. The report and proposed corrective action included in CPG Minutes attached to this report as Annexure F

Land suitability: many of the applications we have received didn't have suitable land for citrus growing due to waterlogging and the land being situated in marshland.

Grower suitability: During the interviews we have found some applicants who were not suitable, they were either not ready to comply with the set criteria or they were not able to invest until fruit bearing (year 5-7 in case of citrus). In Eastern Provinces it is common practice to establish orchards with the support of projects and get benefit of the project input. In most cases the decision to establish orchards is dominated by projects which eventually don't work because the major cost to be incurred by the grower takes place between orchard establishment and fruit bearing. Few growers have invested in this period which resulted in early failure of the orchards.

Nursery Growers capacity building (Act-1.3.2)



During the CPG meeting held in September 2016. Several damaging practices have been identified to be submitted to the CPG meeting in January for corrective action by all stakeholders. The stakeholders included the NHLP, ANNGO, NGA, PBTL, PHDC, DAIL and ANHDO SO4. Ten Nurseries were assessed. Assessments and findings are included as annexure G to this report. The SO4 Team spent considerable effort during the reporting period to counsel affected parties to correct the prevailing practices

The issues to be addressed following the assessments include:

- Enhancing grower awareness with regard to sapling uniformity and the benefits of procuring container grown as opposed to field grown saplings.
- Finalising Eureka lemon certified budwood source orchards;
- Developing sanctions and penalties for the following transgressions:
 - Abuse/misuse of ANNGO labels
 - Selling graft failure/ungrafted or over aged rootstock
 - Non compliance to graft height and or planting density
- Enhanced coordination between PHDC, SO4 and NGA on
 - Motherstock availability and performance of varieties
 - Plant and Seed Certification Authority and new certification system (A two week seed certification workshop was scheduled for January 2017)
- NHLP report on performance of varieties and source nurseries for orchards established for small growers.

2.4.3 Beneficiaries/affiliated entities and other Co

- 2.1 During the reporting period continuous coordination and communication activities took place between SO4, MAIL & DAIL, PHDC, PBTL, NHLP, the seed certification authority, Nursery growers, NGAs and ANNGO and most important the citrus growers, processors, traders and wholesale market intermediaries. The Citrus Promotion Group's working sub committee on nursery evaluation played a significant role to guide all stakeholders and affiliates in a positive direction.
- 2.2 The relationship between SO4 and the relevant state authorities are healthy and continuously strengthening. Very positive feedback was received from the ministry and academic institutions and the tools developed by SO4 are widely used by officials and extension officers. SO4 is widely regarded as the center of citrus excellence and source of reliable citrus knowledge and information.
- 2.3 Relationships with the principal beneficiaries and target group, the growers and grower associations are encouraging. The most encouraging notion is that a sense of trust has developed which surpasses prior citrus development projects where the focus was on "managing the project score board" rather than ensuring real tangible benefit to be transferred to the beneficiary grower community. Evidence of this developing relationship is the active participation by growers and their representatives without any personal short-term benefit and the "strengthening of their collective voice".
- 2.4 Although a healthy relationship exists with the NHLP, evidence of inter-action competitiveness with regard to e.g. access to saplings disturbs the relationship and leads to action, which in the long term will damage the industry. The CPG is currently addressing this very sensitive issue.



2.5 The potentially adversarial relationship between SO4 and ANNGO and the NGA due to the underperformance of nursery growers developed into a partnership to address the issues faced by the nursery grower fraternity. A programme to enhance their capacity is being developed and the new SO4 action plan will include stronger tangible support to the nursery growers and support organizations.

2.4.4. Visibility

A Facebook page <https://www.facebook.com/khateez.citrus> was created by the SO4 Project Manager during December 2015. To date 13 (Thirteen) training videos were produced by the team supported by important technical advice on best practices and an active technical assistance on wide ranging citrus and other agricultural requests for information were published. The results and impact of the facebook page illustrated the potential of social media.

During the reporting period October to December 2017 two videos and nine text items were published. This resulted in 524529 Facebook users being reached, 124035 users who post clicked and as many as 14441 Shares, Comments and questions emanating from the posts. It is evident that particularly the videos are being used as training material by extension officers in the field.

It is important to note that the videos' production is a collaborative effort between SO4 and the PHDC-JAL and is done mostly in the free time of the producers. The production cost of the videos are also borne by the team members.

A summary of the Facebook page results is outlined below:

Results	Reach			Engagement	
	Total	Organic	Paid	Post Clicks	Reaction Comments and Shares
Page results in Reporting period October to December 2016	524529	127808	396768	124035	14441
Page results December 2016 to January 2017	3174622	710532	2464140	452907	130164



3. Conclusion: Lessons Learned and Recommendations

3.1 Conclusions

Overall, HPS implementation status and activities could be considered satisfactory.

During the reporting period the program received a new impulse, and the implementation moved significantly towards the work plan.

In the next reporting period there would be the critical activity of the 2017 planning and the decision on the option to request a no-cost addendum.

Moreover ANHDO will have a crucial extraordinary General assembly, were the management team hope to consolidate the institutional development work done so far.

If the GA will go according the agreed roadmap suggested by the donors, we could consider that the consortium will benefit a lot from that and could concentrate all the effort on the implementation phase.

Another positive point is that the ANHDO management team has established a program for the PM improvement regarding reporting and M&E skills.

The relationship among the consortium members are good and profitable, during the reporting period the RI regional management has visited the country and had the occasion to meet the ANHDO management in order to agreed an the future actions.

3.2 Recommendations

For the next quarter the following issue should have the maximum priority:

- a) 2017 planning consolidation
- b) HPS annual narrative and financial report
- c) HPS next payment request
- d) Evaluation of the no-cost addendum
- e) Consolidation of the plan for the international expert mobilization.

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