



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

**DCI-ASIE/2013/335-321 (Europe Aid/133-872/L/ACT/AF)**

### **7<sup>TH</sup> QUARTERLY PROGRESS REPORT, 01 JULY - 30 SEPTEMBER 2015**



Mid-Term Evaluation team during visit to the new Kishmish Khana in Qala e Zaghan Village.



**AFGHANISTAN  
NATIONAL  
HORTICULTURE  
DEVELOPMENT  
ORGANIZATION**

In consortium with



This programme is funded by the European Union

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**A. Key acronyms:**

<b>AAIDO</b>	<b>Afghan Almond Industry Development Organization</b>
<b>ANHDO</b>	<b>Afghan National Horticulture Development Organization</b>
<b>ANNGO</b>	<b>Afghan National Nursery Grower Organization</b>
<b>BoD</b>	<b>Board of Directors</b>
<b>CC</b>	<b>Coordination Committee</b>
<b>CGG</b>	<b>Citrus Growers Group</b>
<b>CGA</b>	<b>Citrus Growers Association</b>
<b>CHAMP</b>	<b>Commercial Horticulture and Agricultural Marketing Program</b>
<b>CPN</b>	<b>Certified Production Nursery</b>
<b>CPG</b>	<b>Citrus Promotion Group</b>
<b>CTV</b>	<b>Citrus Tristeza Virus</b>
<b>FFS</b>	<b>Farmer Field School</b>
<b>FH</b>	<b>PHDC Field Horticulturist</b>
<b>FM</b>	<b>SO1 Field Manager</b>
<b>GA</b>	<b>General Assembly</b>
<b>IDEA-NEW</b>	<b>Incentives Driving Economic Alternatives for North, East, and West</b>
<b>MAIL</b>	<b>Ministry of Agriculture, Irrigation and Livestock</b>
<b>MSN</b>	<b>Mother Stock Nursery</b>
<b>NC</b>	<b>National Collection</b>
<b>NGA</b>	<b>Nursery Growers Association</b>
<b>NHLP</b>	<b>National Horticulture and Livestock Program</b>
<b>NNGA</b>	<b>Nangarhar Nursery Growers Association</b>
<b>NVAC</b>	<b>Nangarhar Valley Agricultural Company (ex-NVDA)</b>
<b>NVDA</b>	<b>Nangarhar Valley Development Association</b>
<b>PBTL</b>	<b>Plant Bio Technology Laboratory (Badam Bagh)</b>
<b>PHDP II</b>	<b>Perennial Horticulture Development Program</b>
<b>PHDC</b>	<b>Perennial Horticulture Development Center</b>
<b>PPP</b>	<b>Public Private Partnership project agreement</b>
<b>RI</b>	<b>Relief International</b>
<b>SAGAL</b>	<b>Strengthening Afghan Governance and Livelihoods</b>
<b>SO</b>	<b>Specific Objective</b>
<b>TA</b>	<b>Technical Assistance</b>
<b>TL</b>	<b>Team Leader</b>
<b>ToT</b>	<b>Training of Trainers</b>
<b>VC</b>	<b>Value Chain</b>



## **B. List of Annexes:**

- ANNEX-A: HPS Organization Chart
- ANNEX-B: ANNGO GAP Analysis
- ANNEX-C: SO1 Nursery Specialist - Ornamentals Intl Consultant (Cosimo Frati) REPORT #2
- ANNEX-D: ANNGO/SO1 IPM Operational Plan
- ANNEX-E: SO2 Gibberellin effect on flower thinning & berry sizing of White and Red Roucha Grapes
- ANNEX-F: SO3 Grapes & Raisin Promotion Group (GRPG) 1<sup>st</sup> & 2<sup>nd</sup> Meeting Minutes
- ANNEX-G: SO3 Post-Harvest & QC Specialist - Int'l Consultant (Federico Valori) REPORT#4
- ANNEX-H: Photograph Archive (Quarterly Update)
- ANNEX-I: HPS Mid-term Evaluation Report (Astrid Wuseni), 30Sep15



## 1. Executive Summary of the Quarterly Activities:

SO1 continues to provide technical support to ANNGO, in close coordination with PHDP/II. Twenty five (25) SO1 Field Managers (seconded to ANNGO and positioned in the NGAs) continue to support the NGAs in the implementation of the certification scheme. This includes the provision of technical trainings and other support to MSNs and production nurseries. From the 23–25 August, ANNGO and HPS/SO1 jointly conducted a three (3) day Quarterly Technical Training for the twenty five (25) FMs in Herat PHDC. In addition to the HPS/SO1 FMs, one FM from HVP/SO1, and three TLO staff also participated. ANNGO presented stool bed management, mother stock improvement and bud wood distribution topics while SO1 focused on IPM. Training costs were covered by the HPS budget as per the request of ANNGO.

ANNGO and PBTL have jointly agreed an IPM Operational Plan. SO1 Plant Protection Specialist has started inspections to address white grape worms and Nematodes that are causing problems in CPNs, MSNs, and the NCs, and has started to develop IPM technical leaflets for distribution to nurserymen. The FMs started collecting infected material for the Plant Protection Specialist (and PBTL) to identify symptoms and recommend further treatments. From the 19 August to the 3 September the SO1 Nursery Expert - Ornamentals Int'l Consultant (Cosimo Frati) undertook a mission in Afghanistan to support the development of ornamental standards. HPS has requested ANNGO jointly support them in reviewing the proposed Baboor Garden pilot project budget in anticipation of the signing of the MoU.

Following an EUD request and in cooperation with PHDP TA, a workshop was held on the 15 and 17 August, with the participation of HPS, ANNGO, PBTL, NHLP (WB funded) and HVP (AFD funded). The aim of the workshop was to perform a GAP Analysis on ANNGO's anticipated results (under a new EU grant contract application) and establish the programmatic synergies and budgetary complementarity between other projects operating under the same framework; namely HPS, NHLP and HVP. The resulting GAP Analysis also constituted the basis of a HPS/SO1 log frame (and SO1 sub-budget) revision in late August which will be presented in the anticipated SC meeting in November for review and final approval.

Description of the National Collection and the adaptive research activities continued in the PHDCs (under the MAIL Directorate of Research authority and PHDP/II TA supervision) with the continuous support of the SO2 team. The Apricot Register was published by PHDP/II, including 72 accessions, and distributed in September. Completion of the registers for Pomegranate, Plum and Cherry in the NC remain the priority of SO2 team in coordination with the EU/MAIL transition project staff. Work includes the preparation of introductory texts, finalization of variety lists and data quality control. These three (3) registers (Pomegranate, Cherry and Plum) are currently anticipated to be published by spring 2016. Two papers on "The Afghanistan Almond Germplasm", detailing the work on breeding new strains of almonds and "Implications of investigating pollination and cross compatibility in the almond varieties of Afghanistan" which includes work started by PHDP in 2008 and successor projects up to HPS were finalized for publication in *Advances in Horticultural Science*, the University of Florence in-house publication.

Pollen obtained from two new varieties of almond from the 2008 crossing programme were used to pollinate almonds in the Badam Bagh demonstration orchard as part of the first "backcrossing" programme. A successful additional backcross was made from an unselected offspring of a 2012 cross that showed positive tree characters, and some seeds will be available for sowing in 2016. As only a small number of seeds were obtained, similar backcrosses will be made with the same parental line in 2016. Lines from this backcross to Afghan type should provide the first indication of the potential for discovering later flowering, more productive Afghan types by 2018-9. The backcross programme will continue each year with the use of breeding lines where the flowering date and plant habit conform to the requirements of the breeding programme. The target nut quality is that of the parent to which the backcross is made.

The new set of apricot breeding lines (2013 crossing) planted in March 2015 as a continuation of the plots for apricot breeding lines from the 2011/2012 crossing programme have continued to grow satisfactorily and were assessed for tree characters this quarter. Two (out of 72 lines) were found weak, and were removed. Apricot progenies from the 2011/2012 crosses continued to make very good growth in the assessment plots. Most of the lines have grown out of the juvenile type of branch and are showing strong formation of flower bud for 2016. Much of the fruit bud is on the upper branches, due the influence of juvenility on the earlier formed lower branches. All lines are in excellent condition for assessment in 2016, at which time trees that do not have minimum quality and quantity standards can be removed.

Under SO3, we facilitated the established a new Grape Growers Group including 68 farmers (155 jeribs of vineyards) in Baba Quchqar Village, Mirbacha Kot District, Kabul Province. Conducted PH trainings (based on the FFS model) and distributed fruit processing inputs to enhance their capacities to produce



higher quality produce. For the 2015 grape season we facilitated market linkages with improved packaging between our fresh grape beneficiaries and Parwan Grape Value Chain Association to export 34.5MT fresh grapes to Pakistan.

The Grape and Raisin Promotion Group (GRPG) has been established including sixteen (16) members from Qara Bagh, Bagram and Mahmood Raqi districts of Kabul, Parwan and Kapisa Provinces grape and raisin producers. Two meetings were conducted during the reporting period on GRPG mandate, responsibilities, type of operation/organization, and to develop future action plans. Both meetings attracted the participation of the DAIL district level representatives.

Capacity building trainings involving raisin producer groups' members on green and golden raisin drying technics (alkaline and sulfur application) were conducted in coordination with DAIL and other NGOs. The trainings were attended by 136 participants in total including 22 CARD F beneficiaries (raisin producers), 2 MAIL staff from the Horticulture Dept. and four DAIL district staff. The trainings took place in (a) Dasht-er-Rubat Village where a traditional Kishmish Khana constructed by another organization exists and (b) Qala e Zaghan Village where we have supported the pilot construction of one improved Kishmish Khana. We monitored the performance of both Kishmish Khanas; the traditional one had a drying cycle of 20 days, while the improved Kishmish Khana, assisted by the use of alkaline (potassium carbonate), sped up the drying cycle to achieve two complete cycles within the season. This is a considerable improvement compared to traditional ones, where the second drying cycle happens in winter resulting in the degradation of the Green Raisin quality. A demonstration of the enhanced hygiene and sanitation characteristics of the red raisin sun drying cycle was conducted in Bagram. This was done by fencing six jeribs of land to limit animal access and enhance produce quality. 8,400 Kg of fresh grapes were used to produce 2,1MT of red raisins for a typical three cycles per season. We demonstrated the use of alkaline and managed to reduce the cycle down to eight days (from 20) allowing seven cycles per season; i.e. 2.5MT/jerib per season.

A new Apple Grower Group was established with 82 farmers. In close coordination with DAIL, two apple cold storage structures are being constructed to prolong fresh fruit shelf life in Qala-e-Zahra and Shamalzai villages of Paghman District. Each structure will have 8.4MT capacity. A new Dry Apricot Processor Group was established including 13 processors in Paghman District (17 jeribs of orchards). A mobile sulfur house was provided to demonstrate sulphur application to reduce the length of the drying cycle, and enhance hygiene and quality of the produced dry apricots. Capacity building for the sulfur application was conducted for ten participants including the DAIL Paghman Director. Conducted three days' training in Qala-e-Chanar village of Farza District for 20 women involved in fruit processing. Participants learned to produce and store jam from dry and fresh prunes and apples as well as making tomato paste, all administered by female trainers. Two DAIL female staff also participated. The SO3 Quality Control Specialist - Int'l Consultant (Federico Valori) conducted a mission in Afghanistan to support laboratory related activities. The PH Manual revision is in progress and anticipated, by the next harvesting season in May 2016, Grape, Plum, Apples, Dried Apricots and Almonds. Procured six (6) QC ELISA kits from Italy to establish a private QC lab and be able to conduct further capacity building to private QC lab technicians. Local procurement for other consumables is in progress.

In the eastern Afghanistan region; establishment of the NVDA citrus modern nursery was completed; solar panels were installed to power the pump and grow bags filled and placed in the nursery. The existing seedlings were not sufficient for this nursery, so we have purchased more seeds for NVDA to establish a seedbed under a tunnel which will be ready for transplanting next spring. The HPS/SO4 Project Manager participated in another Nangarhar live TV program on citrus orchard pest management. There was a question and answer session where many farmers rang in to ask questions on citrus pest problems. The SO4 program manager addressed audience's questions, and at the same time delivered a range of important citrus related messages to the wide TV audience in the east.

The team has undertaken an extensive review of the Citrus Growers Group (CGG), including visits and interviews with fifteen (15) to assess their capacity. It is essential to screen the growers groups to ascertain their potential to participate in commercial citrus production and their ability to adopt best practices. This aims to strengthen the core of the CGG before we initiate long term support on institutional capacity building and aid them gradually to evolve into a Citrus Growers Association (CGA) through a participatory and self-driven approach.

Preliminary Citrus Value Chain analysis indicated that the marketable new citrus varieties production levels required for the packing house (10,000MT per season) will not be met before 2022. We are planning to abort the establishment of the packing house as premature and focus on the establishment of citrus commercial orchards instead since this is considered the citrus industry highest priority currently.





## 2. Project Implementation Progress and Analysis:

During the reporting period, implementation momentum was maintained as per action plan. Moreover, supporting activities took place to enable the implementation team to perform its activities successfully:

### **Staff Recruitment**

The SO2 Pomology Laboratory Assistant (Ahmad Munir) resigned on 31 August. The HR process to replace him was completed and the new SO2 Pomology Laboratory Assistant (Rafiullah) has signed his contract with a starting date on the 1 October.

All required national staff indicated in the budget have been recruited. The HPS Organization Chart at the end of the reporting period is presented as **Annex-A**.

### **Consultants Mobilization**

During the reporting period, we continued with the international consultants' mobilization plan we prepared in close coordination with PHDP TA.

The following consultants were mobilized in this quarter and/or currently anticipated to be mobilized in the next:

Int'l Consultant Mobilization	Name	Mission Duration	WDs	Status
SO3 Post-Harvest & Quality Control	Federico Valori	25JUL15 to 24AUG15	27	Completed
SO1 Nursery Expert - Ornamentals	Cosimo Frati	14AUG15 to 03SEP15	19	Completed
SO2 Horticultural Research Special	Gregory Cullen	29SEP15 to 28OCT15	26	<i>Arrived</i>
SO4 Citrus Value Chain Expert	Gerrit Booyens	05OCT15 to 03DEC15	52	<i>Anticipated</i>

Regarding the mobilization of National Consultants:

Nat'l Consultant Mobilization	Name	Mission Duration	WDs	Status
n/a currently				

### **Coordination**

Close coordination between ANHDO, RI and PHDP TA from the initial stages of the project, ensured a good team spirit. Key decisions have been taken jointly with all relevant actors and extra care was taken to avoid surprises and maintain the crucial level of trust and cooperation that has been successfully established within the implementing partners and different key stakeholders.

The following Coordination Committee meetings have been conducted as per requirements:

a	15 <sup>th</sup> Coordination Committee meeting	Sunday 02 <sup>nd</sup> August 2015
b	16 <sup>th</sup> Coordination Committee meeting	Tuesday 01 <sup>st</sup> September 2015

During July there was no Coordination Committee meeting since it was Ramadan and many HPS staff was on annual leave.

Moreover, the next (4<sup>th</sup>) Steering Committee meeting is anticipated to take place in November 10, 2015.

### **Quarterly Narrative Progress Report Matrix**

Based on the activities that took place during the reporting period the seventh (7<sup>th</sup>) Quarterly Narrative Progress Report Matrix presented below summarizes the main related progress information per Specific Objective and Indicator.



<b>PROGRESS REPORT MATRIX</b> <b>#7 Quarterly Report</b> <b>(01 July to 30 September 2015)</b>		Progress Achieved by 30Jun15	Quarterly Narrative Progress	Progress Achieved in current reporting period	Overall Progress Achieved	Overall Progress (to date)
Overall Objective: 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.		34%		4%		39%
Specific Objective One: 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.		30.1%		2.2%		32.3%
SO1 R-1	All large scale and small scale nursery producers join in building up ANNGO as an independent organization driving forward progress in the fruit tree and general nursery production.	39.7%		2.5%		42.2%
1.1.1	ANNGO review its by-laws and adjusts its membership criteria to become a fully inclusive organization open to all nursery growers in Afghanistan that follows the regulatory system	100%	<b>Completed</b>	0%	Supported ANNGO to review its bylaw (Legal Advisor - Nat'l Consultant). The <b>new revised ANNGO bylaw was endorsed in the ANNGO GA</b> in early Feb-15.	100%
1.1.2	ANNGO incorporates support functions to local NGAs currently run by two NGO consortia	49%	Recruited and seconded X25 FMs to ANNGO. During the reported period, HPS/SO1 provided no. <b>6 new Motorbikes and covered their operational expences</b> (fuel & maintenance monthly costs)	6%	<b>Recruited X25 FMs and seconded them to ANNGO.</b> Provided to date <b>no. 9 new Motorbikes and covered O&amp;M monthly expences.</b>	55%
1.1.3	ANNGO provide services to local Nursery Growers Associations (NGAs). 26 NGAs and 800 active members assisted.	40%	Support ANNGO to provide the NGA members with continuous technical assistance and capacity building to implement the certification scheme through the FMs located in the 25 NGAs. During 23-25Aug15, conducted jointly with ANNGO the <b>regular (quarterly) Technical Capacity Building in Herat PHDC</b> . The CPNs increased to no. 593, with the <b>FMs registering an additional no. 47</b> . Registration increased in anticipation of the grafting season to permit access to MSNs.	8%	Support ANNGO to provide the NGAs (and their MSNs/CPNs members) with <b>continuous technical assistance and capacity building to implement the certification scheme</b> through the FMs located in the 25 NGAs. <b>No. 4 Quarterly Training to date.</b>	48%
1.1.4	ANNGO membership and service fees are raised gradually to move towards self sustainability within ten years	0%	The broader ANNGO institutional building, governance and long term sustainability issues were discussed with ANNGO in the GAP Analysis workshop ( <b>Annex-B</b> ). ANNGO requested the provision of support (TA) for further developing these issues.	0%	HPS/SO1 log frame was revised in Aug15 (to be reviewed and endorsed by the SC in Nov15) to provide ANNGO with enhanced TA under a revised Result 1.	0%
1.1.5	ANNGO develops other paid services and sources of funding for activities in order to move towards sustainability.	0%	On 28Sep15, we discussed with ANNGO the possibility for HPS/SO1 to support them establish an ANNGO commercial MSN to produce and sell to the NGAs the mother stock material.	0%	ANNGO proceeded with the provision of a small number of services (under a fee) last year. However, currently there is not an established list of services, their description and a standard expected fee.	0%





1.1.6	ANNGO develops market planning and promotional efforts	34%	During 26-30Jul15, the SO1 Marketing Officer visited Khulm, Samangan, Mazar and Baghlan Provinces to <b>collect information (prices, production quantity, sales volume) of almond and pistachio</b> . This information is part of the marketing research of the Northern provinces and will indicate how dry fruit and nuts marketing influences saplings' requests.	3%	Supported ANNGO with a <b>nationwide radio broadcast marketing campaign in spring 2015</b> . As per ANNGO request the <b>ANNGO Annual (2015) Catalogue was printed (4,000 copies)</b> with HPS support.	37%
1.1.7	ANNGO participate to and promotes business interaction among its members, including outsourcing between large and small nurseries.	24%	TBD - ANNGO responsibility	0%	<i>ANNGO responsibility - Indicator to be removed from the log frame in the anticipated logframe revision.</i>	24%
1.1.8	One study is organized for 6 ANNGO technical staff and visits to events and workshops for ANNGO officials	82%	n/a	0%	SO1 Nursery Expert participated in the ANNGO initiated Study Tour to India (09-20AUG14). <b>No.1 participant in Study Tours.</b>	82%
1.1.9	ANNGO periodically review the performance of its members (including number of saplings produced and sold, payment of memberships fees, etc.)	40%	TBD - ANNGO responsibility	0%	<i>ANNGO responsibility - Indicator to be removed from the log frame in the anticipated logframe revision.</i>	40%
1.1.10	ANNGO promotes the development of ornamentals and forestry trees within the NGAs members	28%	During 19Aug to 03Sep15 the Nursery Expert - Ornamentals Int'l Consultant conducted a mission in Afghanistan to support the <b>development of ornamental standards</b> . His mission report is presented in <b>Annex-C</b> . HPS asked to ANNGO to jointly finally review the proposed Baboor Garden pilot project budget in anticipation of the MoU signature.	8%	Mobilized a Nursery Expert - Ornamentals (Int'l Consultant) to <b>provide ANNGO recommendations for the promotion of the ornamentals industry</b> Also. No. 2 pilot ornamentals projects are under project development stage.	36%
<b>SO1: R-2</b>	<b>The technical level of the fruit tree nursery industry in Afghanistan is raised to standards appropriate to the development of a modern orchard industry</b>	<b>26.5%</b>		<b>2.2%</b>		<b>28.7</b>
1.2.1	80% of nursery associations have provision for access to registered mother stock nurseries that meet current ANNGO standards for trueness to type, freedom from disease and vigor of scion or cutting materials (capacity for 7,000,000 plants per year by 2017)	36%	In cooperation with ANNGO and PBTL, the Plant Protection Specialist started inspections to address the white grape worm and Nematodes existing in CPNs, MSNs, and the NCs. SO1 started to develop IPM technical leaflets for distribution to nurserymen. The <b>jointly agreed IPM plan</b> is presented in <b>Annex-D</b> .	3%	SO1 Plant Protection Expert supports ANNGO to devise the necessary IPM strategy and develop capacities and tools to address the pests and diseases in the CPNs, MSNs, and the NCs.	39%
1.2.2	80% of nursery association members are able to produce, lift, label and pack fruit trees to the standards set by ANNGO	33%	TBD - ANNGO responsibility	0%	<i>ANNGO responsibility - Indicator to be removed from the log frame in the anticipated logframe revision.</i>	33%
1.2.3	Production capacity of certified planting materials is increased of 30 % per year with the further planting of mother stock trees and increase in production areas	32%	ANNGO has requested HPS/SO1 to support with <b>Nursery Inputs the citrus producing NGA members in eastern Afghanistan</b> . The inputs refer to plastic bags for the production of certified citrus saplings. HPS/SO1 is positive but the NGAs will need to provide their production plans for the next 3 years before the requested quantities become clear, an MoU agreement is signed and procurement commences. The plastic bags are required by Feb-16.	4%	ANNGO achieved a sales figure of 1,146,637 (+23%) in MY2014/15 with an anticipated MY2015/16 maximum production capacity (based on 4 million certified buds sales for the 2014 grafting season) which could result in the successful meeting of the target of up to 2.5 million certified saplings in MY2015/16 (more than +200%).	36%



1.2.4	Nursery growers increasingly use modern clonal rootstocks across a range of species (600,000 annually by 2017, of which 400,000 apple rootstocks and 200,000 citrus rootstocks, tolerant to CTV)	26%	<b>Clonal rootstocks produced with tissue culture technique during the reporting period: 546</b> of various rootstock types (GF677, Pyrold dwarf, Gisela 5, etc.)	2%	SO1 Micro propagation technician (in PBDP) has produced <b>Clonal rootstocks produced with tissue culture technique to date: 8,801</b> of various rootstock types (GF677, Pyrold dwarf, Gisela 5, etc.)	28%
1.2.5	In partnership with ANHDO, AAIDO and other stakeholders, ANNGO perform periodical screening of the varieties/clones introduced in the MSNs in order to focus on the marketable varieties. At least 65 MSNs are ANNGO registered and function by 2017. At least 20 new marketable varieties are introduced in the MSNs by 2017 and the list of recommended varieties (at least 25) is issued jointly by ANNGO, ANHDO and AAIDO.	32%	ANNGO/SO1 team joint field visits to review MSNs and CPNs in Imam Qutaiba NGA (22Jul15), Aybak NGA (23Jul15), Khulm NGA (24Jul15), Ummul Belad NGA (25Jul15), Paghman NGA (08Aug15), Bagram NGA (09&15Aug15) and Shakardara and Sayed Khil NGAs (10Aug15). In Bagram MSN, off type grapes sapling were identified in the MSN and ANNGO will recommend further actions to the MSN owner.	4%	Currently, there are <b>58 Mother Stock Nurseries (MSNs) established</b> with a capacity of approximately 11,251 mother trees.	36%
1.2.6	ANNGO facilitate for its associated, the access to specialized services such as budding, pruning, monitoring of pest and diseases, input supply, etc. ANNGO will extend its services to third parties (public and private). At least 4 type of services are provided by ANNGO to 800 beneficiaries.	0%	TBD - ANNGO responsibility (same 1.1.5)	0%	ANNGO responsibility - Indicator to be removed from the log frame in the anticipated logframe revision.	0%
<b>SO1: R-3</b>	<b>The planting material registration and certification system increases its operations to meet increased demand</b>	<b>24.0%</b>		<b>2.0%</b>		<b>26.0%</b>
1.3.1	At least 30 qualified inspectors Field Officer and Field Managers, are inspecting and monitoring standards in a timely manner	37%	Continued to support ANNGO with the <b>provision of one Intern</b> that currently receives "on the job training" from the ANNGO Inspectors with the intention that they will eventually become an ANNGO Inspector in the future.	6%	Support ANNGO with <b>1XIntern</b> who will eventually become another ANNGO Inspector. 25XFM's could also potentially evolve to Inspector status if ANNGO wishes so in the future.	43%
1.3.2	Increased numbers of planting materials that meet the required standards, issued with certificates/labels (indicatively, 1,500,000 certified saplings in 2014; 2,500,000 in 2015; 3,500,000 in 2016; 5,000,000 in 2017)	35%	<b>same as 1.2.3</b>	0%	Indicator to be removed from the log frame in the anticipated logframe revision.	35%
1.3.3	Three ANNGO regional offices established (Mazar-e-Sharif, Herat, Jalalabad).	0%	ANNGO is <b>not</b> interested in establishing regional offices.	0%	Indicator to be removed from the log frame in the anticipated logframe revision.	0%
<b>Specific Objective Two: Adaptive research and technical development programmes are successfully providing the technical solutions to increase orchard and vineyard productivity and value to the consumer at household, and national level</b>		<b>35.2%</b>		<b>5.9%</b>		<b>41.1%</b>
<b>SO-2: R-1</b>	<b>Obj.2: Result 1: Adaptive research and technical development programmes are successfully providing the technical solutions to increase orchard and vineyard productivity and value to the consumer at household, and national level</b>	<b>38.2%</b>		<b>5.8%</b>		<b>44.0%</b>



2.1.1	Cross pollination programmes in almonds, apricots and plums have identified suitable pollinators and combinations for each of the major varieties (30 in almond, 15 in apricot and 3 in plum)	34%	In cooperation with the EU/MAIL transition project staff, data collection for the trials and evaluation of results were on-going. <b>Scientific paper prepared</b> for publication in Advances in Horticultural Science. A lot of exist trials' data under analysis to conclude with the trial reports.	12%	Cross pollination programmes are on-going. Specific almond trials discontinued as frequent losses occurred due to frosts in NCs. Most apricots can be pollinated with a number of self-fertile varieties, apricot trial activities completed. Plum trials continue.	46%
2.1.2	Suitable combinations of imported and local varieties of different species for cross pollination. Sufficient information to be obtained on at least 10 varieties of Almond, Apricot and Plum	44%	<b>Data collection for the trials and evaluation of results were on-going.</b> A lot of existing trial data under analysis to conclude with the trial reports.	2%	A further 15 almond combinations including with new bred varieties were found to be viable in the breeding programmes in 2015, totaling 48.	46%
2.1.3	Information on self and cross pollination characters is disseminated to nursery growers (through the ANNGO catalogue) and orchard growers through to other horticultural projects (NHLP, CHAMP, AREP, AGRED, etc.). It will also be shared with MoAIL (ARIA, Directorate of Horticulture) and other horticultural research and education entities. An estimated number of 7,000 orchard growers and six Agricultural Universities will be the recipient of this information.	24%	<b>ANNGO catalogue 2014/15 was published (4,000 copies)</b> and distributed to nursery growers and relevant other stakeholders by ANNGO. Two papers on <b>"The Afghanistan Almond Germplasm"</b> , detailing the work on breeding new strains of almonds and <b>"Implications of investigating pollination and cross compatibility in the almond varieties of Afghanistan"</b> describing work started by PHDP in 2008 and successor projects up to HPS were finalized for publication in Advances in Horticultural Science, the University of Florence in-house publication.	26%	Number of nursery and orchard growers receiving information on self and cross pollination characters through the ANNGO catalogue: <b>4,000 to date</b>	50%
2.1.4	Adaptive research into fruit characteristics, identify opportunities and constraints for the harvesting, packing, storing, shipping and processing of the different varieties and their consequent marketing potential. An estimated number of 900 accessions of 12 main species of the National Collection will be characterized for approximately 30 characters per species. The description will be published in the NC Register in collaboration with PHDP II.	26%	The <b>Apricot Register was published (72 accessions)</b> by PHDP II. Completion of the registers for Pomegranate, Plum and Cherry in the NC remained the priority of SO2 team in synergy with the EU/MAIL transition project staff for 2015. The SO2 team conducted field trips to the PHDCs and trained Field Horticulturists and interns on fruit characterization protocols.	4%	Publication of Almonds Register (56 accessions) in 2014 and Apricot (72 accessions) in 2015 by PHDP II. <b>127 accessions of two main species of the National Collection characterized.</b>	30%
2.1.5	Repeatable protocols and procedures for the monitoring and quality control of varieties of fruit in the national collections are developed in the pomology laboratories of the PHDCs. Maturity and shelf life indexes are identified for and estimated number of 60 varieties of the major species	28%	PH and maturity index trials <b>protocols for citrus, and pomegranate developed. Cherry, Grape &amp; Apple maturity trials for five varieties each</b> completed for 2015. Physiochemical characters were recorded and will be compared with the 2014 results. <b>SO2 team trained EU/MAIL transition project staff</b> on the revised protocols. Pomegranate and citrus maturity trials (five varieties each) initiated.	8%	<b>Specialized protocols and detailed work plans</b> for the new PH and maturity index trials for grape, apple, citrus, pomegranate and cherry varieties have been prepared. Annual repetitions will allow the collection of sufficient sample size and enhance the statistical accuracy. <b>Cherry, Grape &amp; Apple maturity trials (5 varieties each) completed for 2015.</b>	36%
2.1.6	Engage university students as horticulture-interns; and provide employment opportunities for fresh graduates. An estimate number of 200 students and fresh graduates will be involved field and laboratory research activities, of which an estimated 40% will be female.	36%	Interns are mobilized periodically in the PHDCs (by HPS as per Field Horticulturists' request) to conduct seasonal activities (four in July, two in August). Currently, EU/MAIL Transition project is mainly mobilizing most of the Interns required for the Adaptive Research activities in the PHDCs. <b>Six part time interns mobilized.</b>	0%	<b>No. 45 undergraduate and fresh graduates involved</b> in field and laboratory research activities to date with HPS/SO2 funding.	36%
2.1.7	Promote professional post graduate training programs (potentially leading to a Master Degree) focused on the ongoing "adaptive- research". 60 person/day of post-graduate training will be provided.	0%	Continuing from the work initiated under PHDP II, the <b>Orchard Management Manual</b> document in English has been completed and it is ready for translation into Dari and Pashtu. Publication costs will be supported by HPS.	0%	Currently considered unrealistic - Indicator to be removed from the log frame in the anticipated logframe revision.	0%



2.1.8	One study is organized for 5 member of the research team.	100%	<b>Completed</b>	0%	Conducted <b>two (2) Study Tours to Italy: Rome, Faenza and Florence four (4) participants and Bolzano and Trento for two (2) participants</b>	100%
2.1.9	One (1) manual of pomology laboratory protocol and procedures issued	52%	Continuous revisions and additions are taking place as per research activities requirements with the support of the SO2 Horticultural Research Special (Gregory Cullen) and SO3 Post Harvest & Quality Control Specialist (Federico Valori) Int'l Consultants.	0%	In coordination with PHDPIL; the publication cost for the pomology lab manual is anticipated to be covered by PHDPIL. Continues revisions and additions are taking place as per research activities requirements.	52%
<b>SO-2: R-2</b>	<b>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.</b>	<b>32.3%</b>		<b>6.0%</b>		<b>38.3%</b>
2.2.1	Field testing of (10-5) breeding lines of almond from crosses made in 2008 and open pollinated lines from 2009 and 2010 with release of superior varieties in 2017 and 2018	32%	SO2 team in cooperation with ARIA / EU-MAIL transition project staff collected the seeds of those accession that were crossed with foreign types for drying and storing until the time for stratification and sowing in the field for the breeding purposes. <b>900 seeds of almond from the cross pollination trials stored.</b>	6%	<b>8 almond breeding lines have been multiplied for field testing.</b> Budded saplings will be available for distribution to Mother Stock Nurseries from 2017. These eight lines are also included as potential parents for the crossing programme for new releases.	38%
2.2.2	Initial evaluation of 200 lines from targeted crosses made in 2012, 2013 to impart late flowering, self fertility and higher productivity into Sattarbai almond types, with a concurrent shorter term programme to improve productivity with some improvement in later flowering. Further 5000 lines expected to be planted out 2017	32%	<b>Evaluation of 44 lines from 2012</b> crosses provided 6 lines for backcrossing in 2016.	6%	Selected 2013 crosses will flower in 2016 for back cross programme. 2014 crosses grown strongly in nursery for transplanting into assessment plots in Dec15 after a selection procedure. After 2016, breeding will continue only with advanced hybrid material from previous crosses.	38%
2.2.3	Initial evaluation of 1200 lines from crosses made in 2012 and 2013 in apricots to introduce early season production, early maturity of plant and adaptation to warmer areas of the unique Afghan Amiri types	23%	For the first season 42 (of 280) lines apricot breeding lines produced a small number of fruits. Some eight (8) lines set ten or more which allowed for a reasonably comprehensive fruit quality assessment. Preliminary <b>evaluation of early ripening line (1210-06)</b> showed that it is more than a week earlier than either of its parents, and had extremely sweet fruit. Although there were only two fruit on this small tree, the uniqueness of its qualities suggested that it should immediately be thought of as a possible new variety for release.	6%	From 280 lines of the 2011 and 2012 crosses, six lines have been selected for backcrossing and two lines selected for multiplication for field testing ahead of possible release. Further selection (2011/2012 crosses) in 2016, together with the first selections from the 2013 crosses.	29%
2.2.4	Facilitate the recruitment of talented fresh graduates. 3 interns and 2 Research assistant to be recruited	42%	Interns are seasonally mobilized according to activities schedule.	6%	<b>Two Research Assistants have been recruited</b> and Interns are seasonally mobilized according to activities schedule.	48%
<b>Specific Objective three: 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</b>		<b>37.3%</b>		<b>4.9%</b>		<b>42.5%</b>
<b>SO-3: R-1</b>	<b>Grape &amp; raisin value chain improved with enhanced harvest and post harvest systems for exports and home market</b>	<b>55.4%</b>		<b>8.2%</b>		<b>63.6%</b>



3.1.1	Number of producers & vineyard area involved	90%	Established <b>one new Grape Growers Group including 68 farmers (155 jeribs of vineyards)</b> in Baba Quchqar Village, Mirbacha Kot District, Kabul Province. <b>Distribution of harvesting inputs completed</b> for all producers involved.	10%	Five Grape Growers Groups and three Raisin Producers Groups including <b>373 producers and 1,034 jeribs of vineyard involved</b> . Conducted PH trainings (FFS) and distributed harvesting tools to enhance their capacities for higher quality produce.	100%
3.1.2	Number of traders & processors involved, quantity of product processed	44%	Conducted <b>capacity building on green and golden raisin drying technics</b> for the raisin producer groups' members attended by 136 participants. Supported the <b>construction of one improved Kishmish Khana</b> and the pilot application of alkaline (Green) and sulfur (Golden) raisin production.	6%	2014 MY; (a) Grape Grower Groups: Kishmishi grapes counts for 88% of vineyard area and 81% of the production volume. The beneficiaries sold all their production (1,316 MT) (b) The Raisin Processor Groups: 301MT raisins produced out of which 300MT of Red and just 1 ton of Green raisins.	50%
3.1.3	Existing producer organizations surveyed and further organizational development facilitated	40%	Promoted the <b>establishment of the Grape and Raisin Promotion Group (GRPG)</b> including sixteen (16) of the Grape Growers Groups and Raisin Producers Groups representatives. <b>Two meetings conducted</b> addressing GRPG mandate, responsibilities, type of operation/organization, and future action plan. issues. Minutes are presented as <b>Annex-F</b> .	10%	<b>Grape and Raisin Promotion Group (GRPG) established</b> including sixteen (16) of the Grape Growers Groups and Raisin Producers Groups representatives. <b>Two (2) meetings conducted to date</b> .	50%
3.1.4	Domestic and exports initiatives supported and quantities traded with innovative & rational packages. Possibility of development of a brand name studied	39%	Regarding the Red Raisin 2014MY; in midsummer 2015 we facilitated the <b>export of 15MT of Red Raisins to Portugal (EU)</b> . For the 2015MY; we facilitated market linkages with improved packaging with Parwan Grape Value Chain Association to <b>export 34.5MT fresh grapes to Pakistan</b> .	12%	2014 MY; we facilitated market linkages with improved packaging for (a) 32.55MT fresh grapes and 225MT red raisin for domestic market, <b>Total 2014 MY quantity traded: 272MT. Total quantity traded with improved packaging to date: 307MT</b>	51%
3.1.5	Value chain analyzed and described in details.	64%	Collection of production volumes, quality and sales achieved in 2015MY is ongoing.	3%	A Grapes and Raisins Value Chain analysis conducted in mid 2014 by the SO3 Raisin Processing & Marketing Nat'l Consultant Further follow up analysis is anticipated in the future.	67%
<b>SO3: R-2</b>	<b>Almond Industry value chain supported and enhanced</b>	<b>17.6%</b>		<b>0.8%</b>		<b>18.4%</b>
3.2.1	Survey of production and marketing levels and trends published by AAIDO including specifications of products and values	17%	<b>Monthly market survey of Almonds and other dried fruits and nuts continues</b> jointly with the Kabul Dried Fruit Exporters and Processors Association in three dried fruits retails and wholesale markets in Mandavi, District #1, Kabul involving 217 shops.	4%	Initiated basic coordination with AAIDO; however, they currently lack the operational capacity to act as a credible partner.	21%
3.2.2	Almond value chain is analyzed and described, including improved production systems and, introduction of new varieties, and improved packages.	53%	n/a	0%	An Almond (and Prune) Value Chain analysis conducted in early 2015 by the SO3 Horticulture Value Chain Specialist - Nat'l Consultant. Further follow up analysis anticipated in future.	53%
3.2.3	AAIDO demonstrates ability to progress sales with the newly developing food retail outlets in Afghanistan and abroad	6%	n/a	0%	Conducted Kabul Hotels' assessment having food retail outlets to explore opportunities for future partners.	6%





3.2.4	Others a similar nuts value chain like pine nuts, walnuts, pistachios are analyzed and described.	12%	n/a	0%	ANHDO already implemented a Pistachio value chain in Herat (funded by the Italian Cooperation) and we are considering continuing our work there.	12%
3.2.5	AAIDO provides a forum for the industry and publishes a long term strategy	0%	n/a	0%	Initiated basic coordination with AAIDO; however, they currently lack the operational capacity to act as a credible partner.	0%
<b>SO3: R-3</b>	<b>Pilot fresh fruit value chains for local fresh fruit marketing established and improved to raise standards and compete with imports</b>	<b>39.0%</b>		<b>6.3%</b>		<b>45.3%</b>
3.3.1	Quantity of fresh fruit of two species marketed with better packages by ANHDO in partnership with private sector traders, to: 1) market fresh fruit, 2) to the Kabul supermarket 3) best fruit retailers	36%	<b>Established (1X) Apple Grower Group including 82 farmers.</b>	12%	One Sweet Cherry and one Apple Grower Groups including 118 fresh fruit producers. 30MT <b>Sweet Cherries</b> harvested in 2015; <b>6,5MT (Grade-A) exported with improved packaging to Dubai/India and 200Kg marketed through Finest Super Market.</b>	48%
3.3.2	Quality parameters identified and described	48%	<b>Identified the harvesting parameters for apple varieties.</b>	4%	<b>Identified harvesting parameters for cherry and apple varieties.</b> Conducted a <b>FFS capacity building (1 month) for the sweet cherry farmers</b> to address PH issues including grading (color), shorting (size) and other packaging and storage (maintain the stems) issues.	52%
3.3.3	Value chains improved and described in details including harvest, transport, suitable pre-packaging and cool chain distribution	38%	In close coordination with DAIL, we are currently <b>constructing apple cold storage structures (no. 2)</b> aiming to prolong fresh fruit shelf life in Qala-e-Zahra and Shamalzai villages of Paghman District. Each structure will have 8.4MT capacity.	6%	A Sweet Cherry (and Apricot fresh & dried) Value Chain analysis conducted in spring 2015 by the SO3 Horticulture Value Chain Nat'l Consultant. Further follow up analysis anticipated in future.	44%
3.3.4	Marketing initiative analysis & value added	34%	Last consignment of sweet cherry to India left Kabul on 24Aug15 after the cherries were stored for 40 days in cold storage by Samsor ban Co. Ltd. We are in the process of collecting the data from Samsor Ban for the economic analysis.	3%		37%
<b>SO3: R-4</b>	<b>Standards of quality for fresh, dried and processed fruit are raised and capability of quality control structures enhanced</b>	<b>37.3%</b>		<b>4.3%</b>		<b>41.5%</b>
3.4.1	Survey of existing public and private quality control laboratories completed	64%	There has only been a minor development in this activity since the initial 2014 survey. <b>Initial coordination with ACCI</b> where HPS could provide technical assistance to ACCI and its members.	3%	<b>Preliminary extended survey</b> (SO3 Quality Control - Int'l Consultant Federico) of the existing public and private QC labs in summer 2014. <b>Reexamining at least on a semester basis</b> to monitor developments.	67%
3.4.2	Capacity building actions undertaken for existing quality control laboratories	53%	<b>Procured six (6) QC ELISA kits</b> from Italy to establish a private QC lab and be able to conduct further capacity building to private QC lab technicians. Local procurement of other consumable and reagents is in progress.	12%	<b>Procured one ELISA kit for Tabasom QC laboratory.</b> Supporting ARFVEPA to enhance its capacities and obtain ISO 9001. <b>Procured six (6) QC ELISA kits</b> to establish QC laboratory capacity to monitor Mycotoxin (Aflatoxin & Ochratoxin).	65%





3.4.3	Survey of exiting package facilities and type of packaging available completed	31%	n/a	0%	Assessed a number of existing Kabul packaging facilities during discussions with different traders/exporters and also Afghan packaging manufactures as well as the Pakistani imported ones to examine the available packaging.	31%
3.4.4	Survey of existing storage and cold chain facilities completed.	31%	n/a	0%	Preliminary assessment of the existing storage and cold chain facilities in the areas we are working. Further follow up survey may be needed.	31%
3.4.5	Training programme and 3 study tours for 7 lab. Technicians (public and private) are implemented	20%	n/a	0%	Facilitated a study tour to Italy (Apr-14) for two Tabasom lab technicians. Facilitated a study tour to Russia (Jun-15) for 1 Ahmad Tamim Co.Ltd to participate in Moscow Food Exhibition, SO3 Marketing Officer participated in the ANNGO Study Tour to India (Aug-14) to develop an understanding of the fresh and dry fruit markets in India.	20%
3.4.6	Capability of pomology laboratory at the 6 PHDCs enhanced	35%	From the 19Aug to 03Sep15 the SO3 Quality Control Int'l Consultant (Federico Valori) conducted a mission in Afghanistan to support the laboratory activities. His mission report is presented in <b>Annex-G</b> .	6%	SO3 Quality Control Specialist - Int'l reviews the pomology laboratory procedures and provides the Pomology Lab technicians with mentoring and capacity building activities. Procurement of necessary lab equipment and consumables occurs as per need and EU/MAIL transition project requests.	41%
3.4.7	Harvesting index, fruit processing and drying parameters and methods are defined based on work at PHDC pomology laboratories and related drying and processing laboratory facilities	30%	PH Manual revision is in progress and anticipated to include before the 2016 harvesting season (May 2016) for the follow additional species: Fresh fruit: Grape, Plum, Apples, Apricots and Dried Fruit: Apricots and Almonds.	3%	Harvesting (maturity) index trials are on-going (see indicator 2.1.5). The development of the drying parameters and methods (manual) is on-going. The definition of <b>processing and drying quality parameters for raisin and prune developed</b> (Post-harvest Manual, late 2014).	33%
3.4.8	Partnership with a selected group of private entrepreneurs is established and processing systems are improved	34%	Established <b>one new Dry Apricot Processor Group including 13 processors</b> in Paghman District (17 jeribs of orchards). <b>Establishment of one mobile sulfur house</b> to demonstrate Sulphur application for reducing the drying cycle, enhance hygiene and quality of the produced dry apricots. <b>Capacity building for the sulfur application</b> conducted (03-04Aug15) for ten participants including DAIL Paghman Director. Conducted <b>three day fruit processing and hygienic training for 20 women</b> involved in prune processing in Qala-e-Chanar village of Farza District. The participants learned to produce and store jam from dry and fresh prune and apple as well as making tomato paste by female trainers. Two DAIL female staff also participated. Pilot demonstration of <b>enhanced hygiene and sanitation of the red raisin sun drying cycle</b> by fencing six jeribs in Bagram.	10%	Established one Prune Processor Group including 60 processors in Farza District (62 jeribs orchards) in 2014. Established one Dry Apricot Processor Group including 13 processors in Paghman District (17 jeribs orchards). <b>73 dried fruit processors and 20 female dried prune processors involved. Conducted PH trainings (FFS) and distributed fruit processing inputs to enhance their capacities to produce higher quality produce.</b>	44%



Specific Objective Four: A soundly based and profitable citrus industry in eastern Afghanistan is developed		34.1%		4.3%		38.4%
SO4: R-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	36.8%		3.0%		39.8%
4.1.1	Citrus value chain is analyzed and described, including improved production systems and, introduction of new varieties, and improved packages. No. 25 new varieties and rootstock introduced. One value chain analysis performed.	50%	70 citrus growers visited the citrus NC in PHDC-JAL (from the ones surveyed in winter 2014) and we had the opportunity to present to them recommended citrus varieties and best agricultural practices.	2%	An initial <b>Citrus Value Chain study</b> was conducted in spring 2015 (1,036 citrus growers assessed in winter 2014) by the SO4 Citrus Value Chain Specialist - Int'l Consultant. Further field assessment is anticipated in winter 2015 with a follow up analysis.	52%
4.1.2	Increased planting of citrus orchards of commercial size ( 1500 ha of orchards planted by 2017)	27%	Support (TA) a land owner to <b>establish ten new Jeribs (2ha) orchard with a lemon variety</b> . We coordinated with NHLP to support him with the establishment costs and he visited us in PHDC-JAL to help him select the variety.	3%	Establishment of new commercial size orchards with new recommended varieties is limited by certified citrus sapling production for such varieties. With existing production rates; it is <b>not realistic to expect that more than 500ha established</b> by 2016. In 2014, we facilitated the establishment of a <b>20ha citrus (private) commercial orchard</b> in NVDA leased land.	30%
4.1.3	Increased capacity of citrus nurseries (no. of certified saplings produced and sold. Indicatively 300,000 by 2017.	40%	The <b>establishment of the NVDA citrus modern nursery structure is completed</b> . Existing seedlings are not enough to fill the nursery capacity, so we provided more seeds for NVDA to establish a seedbed under a tunnel which will be ready for transplanting in spring 2016. Response time of the NVDA staff remain low.	6%	Nursery growers can't meet increased demand for citrus certified saplings. In spring 2014, citrus NGAs sold 26,250 certified saplings (6% total). Currently, <b>potential consolidated volume of appr. 250,000</b> certified sapling for the next two planting seasons. <b>Supported NVDA to establish a pilot modern citrus nursery.</b>	46%
4.1.4	Increased biotechnology laboratory capacity for continued monitoring of disease status in orchards and nurseries (main focus CTV) in orchards and nurseries (4 sampling campaigns, 10,000 tests by 2017 )	30%	Assist HVP (SO4/R1) and the PBTL to conduct the field related activities for the CTV strain and rootstock tolerance / resistance to provide the industry with clear strategic decision making tools (the CTV study report).	4%	<b>ANHDO HVP project (AFD funded)</b> conducts a detailed study on "CTV strain and rootstock tolerance / resistance" in cooperation with PBTL and Italian Universities. HPS/SO4 team supports field activities with managerial and technical assistance.	34%
4.1.5	Increased number of citrus varieties released to ANNGO NGAs (25 new varieties).	37%	n/a	0%	During spring 2014, <b>facilitated the distribution of 500 citrus mother trees from the NC in PHDC-JAL to different citrus MSNs</b> including NVDA citrus MSN. This MSN was provided with the highly recommended new citrus varieties and some of non-commercial varieties were replaced. The MSNs of Kunar, Laghman and Nangarhar requests for replacing non-commercial varieties have also met.	37%



SO4: R2	The citrus value chains and market-links are developed in order to meet international exports-standards.	30.2%		6.6%		36.8%
4.2.1	No. 10 of best marketable varieties selected and multiplied to meet market demand	44%	Currently, we are <b>considering decreasing the referred number (to 5-6 varieties)</b> in order to end up with a mix of early-late varieties covering an extended production plan to prolong the harvesting period and the availability of Afghan citrus in future.	12%	Proposed to citrus nursery growers (ANNGO NGAs) a <b>list of eleven (11) recommended citrus varieties</b> for further propagation under the ANNGO certification scheme.	56%
4.2.2	Packing, storage and market linkages developed. Estimated potential tons of marketable production; 50 T. in 2014, 100 in 2015, 200 in 2016, 400 in 2017 and 7500 tons by 2020 with continuing increase of new orchard area.	18%	In cooperation with HVP, we visited Mahan Ferdos lemon juice factory in Kabul and persuaded them to try sour orange juice instead of lemon. They already talked to their wholesale customers in Kabul about the sour orange juice and the customer shown a big interest on the sour orange juice since it is a local product. We maintain a regular contact with this juice factory and <b>market linkages are becoming established</b> with the citrus producers.	3%	Limitations in the increase of the new commercial orchard area with certified saplings means this is an <b>unrealistic target</b> . MAIL is constructing a 5,000MT cooling storage facility in the NVDA anticipated to be completed by 2017. In spring 2015, facilitated a B2B meeting with "Mahan Ferdos Co" lemon juicing company and X5 CGG members concluded with a contract to <b>procure min. 5MT large size lemons at a premium price</b> .	21%
4.2.3	Market awareness developed for the new varieties in domestic market (3 test marketing campaigns with 10 varieties & 2 awareness campaigns)	37%	HPS/SO4 Project Manager participated in another <b>Nangarhar TV live program on citrus orchard pest management</b> . There was a question and answer session where many farmers were asking regarding citrus pest problems. Simple problems were addressed live whereas for the more complex ones we had the opportunity to invite them to visit us in the PHDC-JAL.	6%	<b>Citrus Information Center (approx. 1,000 visitors)</b> during the sapling selling season in 2015, regular articles in agriculture magazines, participation in agriculture documentaries and shows on regional and national TV. Promotional <b>Brochure (2,000 copies) distributed</b> to citrus growers for the new recommended citrus varieties.	43%
4.2.4	Consolidation and support of the current Citrus Promotion Group with long term organizational arrangements (development of statute, no. of meetings, list of activities undertaken) leading to the establishment of a Citrus Growers Association	27%	The team was <b>conducting an extensive review of the Citrus Growers Group (CGG) members</b> including interviews and field visits to their established orchards in order to assess in depth their capacities, current needs and future intentions.	6%	Currently, CPG is not foreseen as the appropriate forum to emerge as the Citrus Growers Association (CGA). We have established (spring 2015) the Citrus Grower Group (CGG) with 15 citrus growers/traders that we anticipate to expand and evolve to a CGA. CGG'll participate in next CPG.	33%
4.2.5	Development of storage, grading, packaging & quality control facilities starts in the area (capacity of approximately 500 tons/ day)	25%	In cooperation with the PHDC-JAL staff, physiochemical analysis and maturity of index trials were on-going in the Pomology Laboratory for citrus and pomegranate fruits. In order to ensure fruit availability for the test, HPS has hired a night guard for the PHDC-JAL farm.	6%	SO4 Post Harvest Facility Engineer Int'l Consultant (Syed Shehzad Masud) conducted a mission in Jalalabad in spring 2015 where he <b>identified the suitable location for the establishment of a Citrus Packing House inside the NVDA's Olive Oil Factory</b> . He has since working on designs and BoQs for the works/machinery and cost estimates.	31%
SO4: R-3	Private & public stakeholders strengthen their partnership around the agreed strategy for the Citrus industry.	35.2%		3.4%		38.6%



4.3.1	A permanent coordination between stakeholders is assured	28%	There were no Citrus Promotion Group (CPG) meetings during this quarter. The next CPG meeting is anticipated to take place in November.	0%	<b>CPG is active (quarterly) attracting the participation of all citrus stakeholders</b> including GoA officials (DAIL, PHDC-JAL FH), NVDA, ANHDO, ANNGO (and NGAs), PBTL, other development projects (NHLP) etc. Established the Citrus Grower Group (CGG) that will start to actively participate in the CPG meetings.	28%
4.3.2	Capacity building undertaken for private and public stakeholders	39%	n/a	0%	In cooperation with the PHDC-JAL, we provide capacity building activities to private & public stakeholders, other citrus development projects (e.g. NHLP) and all Agricultural Faculties and educational institutes in eastern Afghanistan (including support to master students for their thesis).	39%
4.3.3	No 1 Study tours organized for 10 stakeholders	100%	<b>Completed</b>	0%	Conducted (a) Study tour (12-18JUN 14) for four (4) participants (incl. PBTL) to investigate research developments and the CTV serotypes in Pakistan, and (b) Study tour to Pakistan (07-12MAR15) for five (5) participants (incl. NVDA) to investigate established citrus processing facilities as well as visit metal factories that fabricate relevant machinery.	100%
4.3.4	Participation to regional and international events is organized for 6 stakeholders.	0%	n/a	0%		0%
4.3.5	No. 6 short and focused training events are organized	9%	In Sep-15, we supported EU/MAIL transition project stationed in Kandahar PHDC with <b>three days of training on pomegranate fruit characterization and commercial evaluation</b> before they could go ahead with the characterization of pomegranate fruits required for the Pomegranate Register	17%	In cooperation with PHDC-JAL, (a) In Apr-14, three day field training visits by Laghman University Agriculture Faculty undergraduates in PHDC-JAL. (b) On 05MAY15, capacity building activity for thirty (30) Nangarhar University Ag-Faculty undergraduate students on grafting (T-budding, top-grafting) and citrus orchard layout.	26%



## **HPS Mid-term Evaluation**

The Mid-term Evaluation of the program was conducted during the reporting period including a mission to Afghanistan (23-Aug to 02-Sep) of the Senior Evaluator – Int'l Consultant (Astrid Wuseni). Ms Wuseni submitted her final report on 30-Sep-15 and a hard copy of the report was sent to nineteen (19) recipients. The soft copy of the report is presented as **Annex-H**.

## **Photograph Archive**

Photos with quarterly implementation activities are presented as **Annex-I**.

### **3. Strengths, Successes & New Opportunities:**

A great degree of coordination between the implementing partners (ANHDO, RI) and PHDP TA team was maintained ensuring that all relevant actors remained aligned to the Action Plan. A high team spirit is remained by careful balancing a “healthy” internal competition between the different SO teams to ensure sufficient motivation. We are confident that we have already achieved a good level of implementation capacity and productivity rate.

During the reporting period, the following successes were achieved:

- ✓ **SO1:** Maintained a very good level of coordination and cooperation with ANNGO, the three (3) day Quarterly Technical Training for the twenty five (25) FMs in Herat PHDC and the agreed IPM Operational Plan jointly with ANNGO and PBTL provided a solid bases to address the IPM problems existing in the NCs, MSNs and CPNs through the continues technical support and advice provided by the FMs to MSNs and CPNs.
- ✓ **SO1:** The workshop (15&17Aug15) with the participation of HPS, ANNGO, PBTL, NHLP (WB funded) and HVP (AFD funded) that was conducted for the ANNGO's GAP Analysis was crucial for a deep understanding of the synergic arrangements (and budgetary complementarity) between HPS, NHLP and HVP.
- ✓ **SO2:** Description of the National Collection and the adaptive research activities continued in the PHDCs (under the MAIL Directorate of Research authority and PHDP II TA supervision) with the continuous support of the SO2 team. We engaged in close coordination/cooperation with EU/MAIL transition project. The technical experience and capacity of the HPS/SO2 team should be considered as a valuable tool for the ARIA, EU/MAIL Transition project staff that can safeguard that the adaptive research activities will maintain a high scientific level in the coming year/s.
- ✓ **SO2:** Two (2) very important publications accomplished during the reporting period, namely the “Apricot Register” as well as the “Afghan Orchard Management Manual” drafting in English is completed with translations to local language progressing. Also, two (2) research papers on “The Afghanistan Almond Germplasm”, detailing the work on breeding new strains of almonds and “Implications of investigating pollination and cross compatibility in the almond varieties of Afghanistan” describing work started by PHDP in 2008 and successor projects up to HPS were finalized for publication in Advances in Horticultural Science, the University of Florence in-house publication. The above publications may be a “single handed” achievement of HPS/SO2 but the involvement of SO2 team (among others) was crucial.
- ✓ **SO3:** The pilot construction of one (1) improved design Kishmish Khana this year as well as the capacity building trainings on alkaline (Green Raisin) and sulfur (Golden Raisin) application with production trials was successful resulting into the selling of first 4MT of Green Raisins produced at 105Afs/Kg. The problematic second cycle of the traditional Kishmish Khana design was addressed with chemical treatments and the cost of construction (\$5,000) of the new design is considered very competitive to the traditional Kishmish Khana design costs (>\$10,000) of other development projects.
- ✓ **SO3:** The marketing initiative for the pilot export to Portugal (EU) of one container (15 MT) of red raisins produced by our beneficiary groups and treated and packaged in cooperation by Gold Star Sharq Co. through a Polish export agent was concluded successfully in July.
- ✓ **SO4:** Maintained our position as the main focal point on technical issues in the citrus industry in eastern Afghanistan. The HPS/SO4 Project Manager participated in another Nangarhar TV live program on citrus orchards pest management. There was a question and answer session where many farmers asked regarding citrus pest problems. He had the opportunity to address audience's





questions while at the same time deliver an extended range of very important citrus related messages to a much wider TV audience in the east.

- ✓ **SO4:** Completed the establishment of the NVDA citrus modern nursery and purchased some more seeds for NVDA to establish a seedbed under a tunnel which will be ready for transplanting next spring.

During the reporting period, the following new opportunities started to arise:

- **SO1:** Following the Nursery Expert – Ornamentals Int'l Consultant (Cosimo Frati) mission to support ANNGO to enter into the newly born ornamental plants sector; the SO1 logframe was revised to enhance the provision of TA and other support to ANNGO in this economically promising sector.
- **SO1:** ANNGO is exploring the possibility of establishing a commercial MSN to produce and sell to the NGAs mother stock material. They began discussing the possibility of HPS/SO1 support for this initiative.
- **SO2:** We have discussed with the EU/MAIL transition project the possibility of purchasing, under the HPS project budget, two (2) Reefer Containers with on board generators for the Kabul and Jalalabad PHDCs. This would provide the much needed cooling storage capacity to conduct PH (and other) trials.
- **SO3:** Initial coordination with ACCI (Afghanistan Chamber of Commerce and Industries) for ANHDO to establish QC services for their members. This coincides with the arrival of the ELISA kits. Planning will begin for the first capacity building activities for QC laboratory technicians in the coming quarter.
- **SO3:** Initial success of the improved design Kishmish Khana, fences area for red raising drying and the dry apricot Sulphur mobile room performance demonstrated to processors. These improved processing systems could attract further interest to establish more such units during the next season/s.
- **SO4:** The timing of ANNGO's request for SO1 to support with Nursery Inputs the citrus producing NGA members in eastern Afghanistan regarding plastic bags for the production of certified citrus saplings coincides with the time we are considering to abort the construction of the NVDA packing house, as it is premature. We are considering instead proceeding with supporting the establishment of commercial orchards of the recommended varieties. This could evolve to a cross cutting synergic benefit for both SO1 and SO4 where SO1 could support the citrus nurseries to improve their certified saplings' quantities and qualities where SO4 could directly utilize the produced quantities by establishing commercial orchards and provide the orchard owners with the necessary technical support to ensure that the saplings will grow into healthy and productive trees.
- **SO4:** Mahan Ferdos Co. (lemon juice processing company) in Kabul which agreed with five (5) CGG members to purchase a minimum of 5MT large fresh lemons for juice processing has become very interested to explore Sour Orange juice processing opportunity in the future. This could have a huge livelihood impact to the sour orange growers to sell their sour orange fruits at a reasonable price, especially after the collapse of the fresh sour orange price last season.

#### 4. Problems/Challenges Found in Project Implementation and Suitable Solutions:

**CU:** Following the donor advance payment in February 2014 when the USD/EUR exchange rate recorded at the time at 1.345; the further donor pre-financing payment in May 2015 was recorded at a level of 1.1135 which corresponds to a 17% drop. Further drops could be expected in 2015 with the currency exchange market considering the possibility of EUR and USD reaching parity by the end of 2015. This trend is expected to negatively affect the financial capacity of the project to address provision of inputs to beneficiaries since during the time the project budget was developed, in late 2013, all calculations were based on an USD/EUR exchange rate level of 1.35. Financial operations were not negatively affected during 2014. Also, an amount of approx. USD 1,300,000 that was left by 31<sup>st</sup> December 2014 (as advance payment balance) has been utilized in 2015 at a favorable rate (1.345 USD/EUR); hence the anticipated negative impact in 2015 could be considered as limited. However, starting this quarter expenses are being recorded using the newly received funds in May (@ 1.1135); this will have a considerable negative impact to project's activities (increasing reporting unit cost rates) starting late 2015. We anticipate that budget realignment is necessary by end of 2015 including the necessary unit cost rates' upgrades to sufficiently resolve the referred issue.





**SO1:** Taking into consideration the developments in this quarter regarding the possibility of ANNGO to receive a new EU grant contract and the necessity for HPS/SO1 to revise its initial implementation plan as derived from the program logframe; it was made apparent to the team that we had to continue with an overall slow implementation speed in anticipation of the outcome of the ANNGO / EUD negotiations. This was necessary since in case of EUD finally decided to deny further funding to ANNGO; HPS/SO1 then would have been used as the contingency bridge to support the NGAs and maintain the application of the certification scheme until a more permanent solution could be found. We anticipate that by mid November (and the SC meeting) both ANNGO would potentially have received the new grant and HPS/SO1 will have its newly revised endorsed which then will mean that SO1 could speed up implementation accordingly.

**SO2:** Coordination and cooperation with EU/MAIL transition project has been established satisfactorily and has shown considerable progress over the current quarter regarding the ANHDO (and SO2 team specifically) role in the Adaptive Research activities. However, the priorities in respect of which (and to what extent) the PHDCs' resources are used at a certain time to serve a certain research objective create unnecessary problems in the SO2 planned research activities. Specifically, maturity and shelf life indexes trials of 60 marketable varieties of the major species which is a priority for HPS and a cross cutting issue between SO2/SO3 require periodically refrigeration capacity for temporary storage of the fresh fruits to conduct the necessary tests. Such refrigeration capacity is limited within the PHDCs, and especially the Kabul and Jalalabad ones. We have been in coordination with EU/MAIL transition project staff to discuss the possibility of HPS purchasing and establishing in Kabul and Jalalabad PHDCs refer containers with on board generator to meet this refrigeration demand. The response from both the managerial and technical staff has been very positive. The referred procurement is anticipated after the SC meeting endorsement in November.

**SO3:** Project activities include coordination and cooperation with AAIDO; however, we continued (for another quarter) to face difficulties in obtaining the latest info regarding almond production and trade from them. It has been decided (in coordination with PHDP TA) that the best way forward in regards to the final decision for a potential inclusion (or exclusion) of AAIDO as a project partner is to re-examine AAIDO's organization capacity and sustainability in autumn 2015. We have already identified alternative suitable partner/s (Samangan Dry Fruits & Nuts Association and Kunduz Almond and Dried Fruit Cooperatives in the north as well as the Kabul Dried Fruit Exporters and Processors Association "KDFEPA" in Kabul) in anticipation of a potential decision to finally replace or temporarily freeze partnership prospects with AAIDO. The issue will be discussed in the anticipated after the SC meeting endorsement in November.

**SO4:** In coordination with PHDP TA and based on the findings of the Study Tour to Pakistan last spring where it was made obvious that a sustainable packing house would need a seasonal volume of 10,000MT of exportable quality of citrus; the initial plans regarding the establishment of such an NVDA packing house do not seem relevant for the time been and this activity has to be aborted. On the other hand, the main priority in the citrus industry currently remains the establishment of commercial citrus orchards using recommended varieties. Such efforts have been (and continue to be) supported by NHLP since HPS did not have any budgeted means to support this. Unfortunately, field findings indicate that NHLP established orchards (even the ones by the recommended varieties) are not commercial but gardens and the growth rate of the planted trees is considerable small due to poor orchard management practices. We are currently considering the option of utilizing budget resources initially reserved for the packing house establishment towards the establishment of commercial citrus orchards of recommended varieties. This would be another point of discussion in the anticipated SC meeting in November.

## 5. Conclusion: Lessons Learned and Recommendations

Generally, HPS project activities maintained (and in some cases improved considerably) the good implementation momentum achieved during the previous reporting period. We have successfully been able to initiate most of the activities that didn't start within 2014. Minor obstacles like the final role of AAIDO in the project still remain unsolved but these constraints cannot undermine the potential future project success when there are viable alternatives and sufficient time to explore them. The HPS Mid-term Evaluation was overall successful and provided us with invaluable feedback as to which should be our current priorities for improvement. On the managerial level it recommended a drastic revision of the logframe (using OVIs) something that we already had under way with the SO1 revision. We anticipate the whole revision exercise (including a budget realignment) to be completed before the anticipated SC in mid November for the final necessary endorsements.



Moreover, the evaluator criticized the project reports “too bulky”, and “unstructured (no table of content)” making adequate comprehension difficult. The current report is presented under a revised structure aiming to address her findings.

***Disclaimer:***

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