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KOSOVO NEW OPPORTUNITIES FOR AGRICULTURE PROGRAM FISCAL YEAR 2013 ANNUAL REPORT

OCTOBER 2013

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The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

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ACRONYMS AND ABBREVIATIONS

ADDIE	Analysis, Design, Development, Implementation, and Evaluation
AES	Agricultural Extension Service
AFAS	Association for Finance and Accounting Services
AFS	American Farm School
AI	Artificial Insemination
ARDP	Agricultural Rehabilitation and Development Project
AVUK	Kosovo Veterinary Agency
B2B	Business to Business
CC	Collection Center
COP	Chief of Party
DCA	Development Credit Agency
DCOP	Deputy Chief of Party
EPPO	European and Mediterranean Plant Protection Organization
ET	Embryo Transfer
EAU	Economic Analysis Unit
EU	European Union
EYE	Encouraging Young Entrepreneurs
FERA	Food, Environmental, and Research Agency
FTE	Full-Time Equivalent
FY	Financial Year
GEM	Gender Empowerment Matrix
GHP	Good Hygiene Practice
GMP	Good Manufacturing Practice
GoK	Government of Kosovo
Ha	Hectare
HACCP	Hazard Analysis and Critical Control Points
IADK	Initiative for Agriculture Development in Kosovo
IIF	Innovation and Incentive Fund

IPM	Integrated Pest Management
KFVA	Kosovo Food and Veterinary Agency
KAMP	Kosovo Milk Producers Association
KDPA	Kosovo Dairy Producers Association
MAFRD	Ministry of Agriculture, Forests and Rural Development
MAP	Medicinal and Aromatic Plants
MFI	Microfinance Institution
NGO	Nongovernmental Organization
NOA	New Opportunities for Agriculture
PCB	Pro Credit Bank
PePeKo	<i>Peme e Perime te Kosoves</i> , or Fruits and Vegetables of Kosovo
PERSUAP	Pesticide Evaluation Report and Safe Use Action Plan
PMP	Performance Monitoring Plan
RFA	Request for Approval
RFQ	Request for Quotation
RTK	Radio Television of Kosovo
SMME	Small, medium and Micro-Enterprise
STTA	Short-Term Technical Advisor
SUP	Safe Use Practices
TRMS	Transparent Raw Milk Sampling
UNECE	United Nations Economic Commission for Europe
UPOV	International Union for the Protection of New Varieties of Plants
US	United States
USAID	United States Agency for International Development
VAT	Value-Added Tax
VC	Value Chain

EXECUTIVE SUMMARY

This report highlights progress towards stated work plan benchmarks for the period July through September 2013 in addition to the work under these benchmarks for the previous 3 quarters. As such, this report presents the annual achievements for the project for FY 13 of the project.

This annual report continues to follow the format of the annual work plan precisely. The report does not restate the strategy and objective by value chain or a description of the activities to be undertaken. Under each value chain and under the project level objective, the report lists the stated benchmarks only. Each of these benchmarks highlights the progress made for FY 13 of the project with Q4 performance highlighted. All benchmarks are listed for completeness as they appear in the project work plan.

Q4 highlighted in this annual report covered the summer season and the harvest period for most of the NOA value chains. The difficult planting conditions highlighted in the Q3 report were reflected in the harvests of particularly field vegetables where open field conditions slowed growth, reduced initial plant populations for crops like peppers and cabbage and reduced yields. The less predictable harvests were problematic for process contractors and relationships between growers and processing companies were strained. Prices rose for crops produced under open field conditions – gherkins, peppers and cabbage as a result, somewhat offsetting reduced yields. Farmers that managed to get good early plantings established made excellent returns as a result of the strong market. Despite the difficult season for open season vegetables, this year was marked significantly, by the formation of the fruit and vegetable processors association - PePeKo - which has begun to push for industry enhancements.

Soft fruit– principally strawberries and raspberries have impacted the market very well this year. As a new opportunity in agriculture, this market presence is stimulating interest from existing growers in expansion, new growers into the business and opportunities to leverage funding from municipalities to support this expansion. This has set an excellent foundation for the growth of the soft fruit sector in the last year of the project.

The work initiated during 2013, to bring together public and private funding to establish fruit and vegetable pack houses in three regions in Kosovo has almost reached its conclusion – a little later than anticipated however. Construction of the three pack houses are well advanced and will be likely be fully commissioned by the end of November. Enthusiasm remains high, despite a serious delay in support payments from the GoK during Q4. This has been resolved but resulted in collection centers that will be completed after the current season ends.

Value chains that were introduced to the project during this year have performed extremely well. The national dairy associations have shown strong commitment and in conjunction with support from NOA in terms of STTA and technical staff support, managed to effect a change in the VAT structure for small farmers – not only in dairy but across all agriculture, which will serve as a basis for formalization of the sector and enhanced competitiveness of the industry. Cultivated medicinal and aromatic plants expanded faster than projected with many more inbound marketing visits, resulting in new markets and new contracts for production.

NOA retained its full staff compliment during the course of the year with zero staff turnover – providing effective customer support throughout the year. NOA utilized the services of graduate interns to advantage in assisting with internal activities but critically as job placement interns with processors, collection centers and input suppliers. The firms hosting these interns (on a cost share basis) have indicated satisfaction with the work done and a number will keep these individuals on full time on their own from the new year.

Work with the Ministry of Agriculture has been particularly rewarding and following the departure of the project’s full time ministry adviser, we have managed to engineer a national extension program approach and methodology which is receiving now support from the World Bank ARDP program, introduce a flat rate VAT system for all small farmers, and participate fully in both the annual grant and subvention program development as well as the development of the strategic plan for 2014 -2020.

NOA FY 2013 – Results

Project results, as reported through the project PMP for the 2013 work plan year, showed some excellent performance at both the AO and IR levels. Headline indicators for the project are sales generated, broken down into export and domestic sales; as well as jobs created, presented as full time equivalents (FTE).

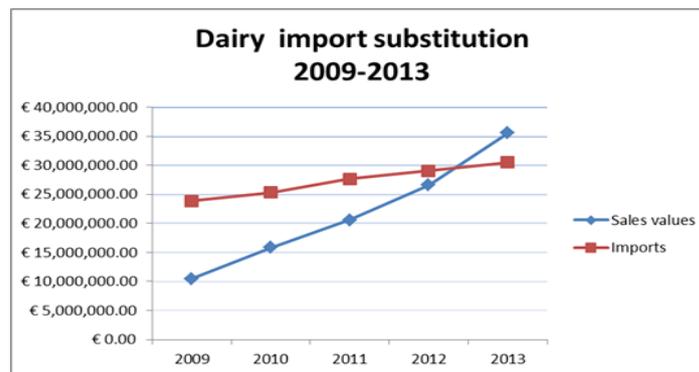
Sales generated provide the strongest indicator of project performance. The total sales generated by NOA-supported value chains during FY13 were \$41,963,698. The inclusion of three new value chains to the project during the work plan year accounted for 63% of the total sales reported, including milk sales of \$26.6M (additional over previous year and predominantly local sales), MAP sales of \$2.5M (all export), and field vegetables which generated \$2.3M. The project sales performance is highlighted in the table below, disaggregating the original value chains and the new introductions to the project during this work plan year.

	FY13 Targets	FY13 Actual	Original NOA VC's	New VC
Total Sales (\$ mill)	10	41.96	10.56	31.4
Linkage sales (\$ mill)	2.5	3.2	2.95	0.25
Export sales value (\$ mill)	3.0	10.28	5.82	4.46
Domestic sales value (\$ mill)	7.0	31.68	5.42	26.26

From the above table, it is evident that the project has exceeded PMP sales targets by a factor of three when considering all value chains. If the original value chains are isolated, sales targets for FY13 have been exceeded by 5%. Export sales growth has been much better than anticipated with targets exceeded by 94% considering only original value chains or by a factor of three when considering all project value chains. Domestic sales of the original NOA VC products fell short of the anticipated \$7M, having achieved 78% of target. Although only reported at the IR level, linkage sales performed extremely well exceeding target by 28%, indicating strong performance in formalizing the relationships between farmers and markets – either for fresh or processed product. Of the project value chains, gherkins – essentially a new technology to Kosovo farmers, generated \$1.4M in sales.

The local fresh market accounted for \$0.82M and the process market accounted for the balance of \$0.58M. Notably, client processor, Etlinger exported \$0.1M of processed product (gherkins and peppers) to Austria. The strawberry value chain performed very strongly, with the tremendous extension in harvest season enabling \$0.94M in sales and providing excellent incentive to growers. Raspberry production came into its own this year with all project introductions producing long season commercial yields. Like strawberry, sales in excess of \$1M have provided strong commercial incentive to industry expansion.

New value chain, dairy generated a first for Kosovo. For the first time, local sales exceeded imports, and highlights the strong performance of the sector. This trend in performance is illustrated in the figure below.



Medicinal and aromatic plants generated \$2.4 M in sales including for the first time, significant production from NOA targeted cultivated production - mainly chamomile, marshmallow and peppermint. All MAP products have been marketed into Europe. Strong performance from the field vegetable sector, despite some difficult weather conditions, added to overall sales with \$2.4M generated, with 58% local and 42% export sales.

This strong sales performance supported additional job creation as measured by reported FTE numbers. The project target was 1,500 new full time equivalent jobs and results indicate 1,984 FTE were generated during the reporting period. Although client firms continue to attempt to optimize labor costs, new employment is being created to meet the demands of strong sales growth.

At the IR level, key indicators include IR 1 (Products and Farmers Linked to Markets) and IR 2 (agricultural products diversified). Production contracts and programming production remains a key focus of the project. During this year, 310 contracts were signed between producers and collection centers or processors. The bulk of these were generated by field vegetable and lettuce value chains. This represents 124% of target for the year and highlights a critical move towards contracting production pre-season. This is an absolute requirement of commercial production and processing.

Reported under IR2, technology is driving productivity across project value chains. The target for new technology introduction this year was 5 separate innovations. The project achieved 26 new technology introductions. This highlights the considerable demand for innovation particularly from producers as well as the untapped potential of new technologies available. This performance brings to 143, the number of new technologies introduced since project inception. Without adoption, there is no derived utility of the technologies. Adoption early in the project was significantly below projection.

This year saw for the first time, adoption targets being achieved, indicating improved producer confidence and significantly improved momentum. Of note however, is that fact that area of crop under new technologies is significantly ahead of target. The target for project to date was 85 hectares

under new technologies. FY13 indicators show that there is now 313 Ha under new technologies. This is providing a critical mass of demonstration effect and in many value chains we are beginning to see strong interest in commercial adoption in the absence now of anything but equity and debt financing.

Training, also reported under IR 2, is clearly an essential ingredient to adoption. For the first time since project inception, training targets have been exceeded, bringing the total individuals trained to 2,362 since project inception.

IR3 highlights progress in food safety certifications particularly. 6 firms received critical GlobalGAP certification during the year, providing clear “proof of concept” for the implementation of the field level certification. Progress too, towards HACCP implementation in the fruit and vegetable processing sector is being made.

IR4 highlights improvements in access to finance with the key indicator being the performance of the DCA credit guarantee facility. Six banks are using this to offer improved and increased numbers of agricultural loans and at the time of report compilation, \$9 million in agricultural loans had been issued against this guarantee facility. Early indications are that modest interest rate reduction is being seen across the sector. In addition to the DCA facilitated agricultural lending, one bank has, again using the DCA as a catalyst, developed a new specific agricultural credit card facility which is due for launch early in FY14.

IR5 highlights improved coordination in the agricultural sector, with eighteen round tables being conducted during the year in order to facilitate this. Of note is the solid work in stimulating a new and highly cost effective agricultural extension service that has multi donor support and looks to provide an immediate channel of information flow to up to 10,000 individual farmers starting in the new program year.

FY13 Executive Summary by Project Objective

OBJECTIVE 1: PRODUCTS AND FARMERS LINKED TO MARKETS

Objective 1 is critical to the expansion of a sustainable value chain intervention. Without adequate and sustained connectivity between farmers and the markets, there will be insufficient confidence on the buy and on the produce and sell sides of the chain to invest the necessary physical and human resources. Linkages have been developed using business to business (B2B) meetings, field days at which farmers and buyers attend, public campaigns, inbound and outbound marketing visits and direct one to one meetings designed to foster stronger market linkages. The introduction of a stronger aggregation function through collection centers and pack house developments has contributed significantly to improving linkages between farmers and the market. A notable achievement during this year was the finalizing of grants from the Government of Kosovo to 3 private firms, cost sharing the construction of modern collection and packing centers in Gjilan, Xerxe and Peja. Contract production provided a strong initial incentive to produce to market requirements in terms of volume and quality. This was especially well developed in the vegetable value chains – notably for gherkins, peppers, cabbage and in the dairy sector.

Fruit Value Chain Highlights

Apples: This value chain is well established in Kosovo, but specific market linkages, based on contract are not well developed. There is a reluctance of the market to adjust its tradition of bulk ungraded product sourced from local suppliers. NOA continues to work to modify this practice. 1250

mt of product was sold to the local market this year through contracts emanating from an early season B2B meeting. Contracts used improved grading standards to describe requirements and set the foundation for contracting future harvests. Work early in the FY13 year saw the establishment of a small training center capable of demonstrating the opportunity to grade and wash apples for improved marketability. Some 600 Mt of product were sold during the year, meeting improved grading standards,

Table Grapes: Early in the work plan year, a B2B meeting attracting 68 growers established stronger linkages between market and producer, but like apples, table grapes has a long tradition of sales on the open market, without contract or attention to international grading norms. This tradition continues. NOA developed a revised standards brochure which will enable the first harvests of new varieties during 2014 to be graded appropriately and establish new trading norms for the new cultivars introduced by the program. Of note this season was the export of 45,000 kg of table grapes to Germany. Despite the old variety, market and logistics proved effective and demonstrate that once new more market ready cultivars come on stream, that an export potential does exist.

Strawberries: Work with this value chain has emphasized the introduction of new cultivars that specifically extend the harvest season of the crop. This has had an incredible effect on the market with sales extending for the first time right up into late October. NOA emphasized street sale promotions in order to highlight this new opportunity for consumers, with good success. 2 street promotions featuring strawberries realized more than €25,000 in sales but more importantly, at least 15,000 individual sales transactions. These buyers were directed to the supermarkets as sources for future purchases and for the first time in Kosovo 4 supermarkets began to present strawberries and other berries in dedicated cold display units for extended shelf life. Additionally and because of the extended harvest season, the project was able to catalyze the first exports of strawberries to Albania late in the season – realizing excellent prices - for sales totaling 2mt by the end of Q4, and further establishing the presence of Kosovo strawberries in this market. The tradition of farmers selling on the roadside continues, and local demand for product continues to outstrip current supply. Total sales for this value chain, supported by vastly improved market linkages were just under €700,000.

Raspberries: Work with this value chain has, like with strawberries, focused on the introduction of new cultivars that increase yields and extends the season. There has been notable success this season as initial plantings have come into full production. Street promotions with high levels of publicity were used to raise consumer awareness of the new product with excellent results. At least 14,000 individual transactions were generated with street sales exceeding €24,000. Joint and individual B2B meetings promoted sustainable linkages and 6 supermarkets continued to sell raspberries in dedicated cold chest units throughout the season – the first time that the product has been seen on supermarket shelves in Kosovo. The excellent yield and fruit quality of the Polka variety guaranteed a place in the regional frozen market. Total sales of raspberry through all market linkages exceeded €800,000 – 79% sold into the Serbian frozen market, 9% into the Italian market as frozen product and 12% on the local market through supermarket and street sales.

Blueberries: Work with this new value chain has focused on the establishment blueberry plantings, and there have been no commercial harvest project to date. The limited flowering seen during the year was removed to stimulate improved vegetative production for an increased commercial harvest during 2014. There has been no reason to look at market linkages for this value chain during the year and activity under this objective is set for the FY14 work plan year.

Vegetable Value Chain Highlights

Lettuce: The objective of the work with this value chain was to create an awareness of and a demand for prepackaged lettuce suitable for immediate home use. New varieties of lettuce suited to the processing and packaging for this use were introduced by the project in addition to specific support to a processing center enabling packaging to improve shelf life up to 10 days. Early in the work plan year, a high profile promotion took place which highlighted the new introductions to potential hotel and restaurant as well as supermarket clients. 200 individuals were trained in various aspects lettuce production and marketing during FY13, with the intention of improving production to meet market demand. As a result of NOA facilitation, 18 new buyers of lettuce were linked to the principal processor of packaged lettuce – Agroserra in Mitrovica. €108,000 in linkage sales resulted and as a result, 10 out grower farmers in addition to the aggregator were linked to markets. In addition to the linkages created for pre-packaged ready to serve lettuce, NOA worked to support growers in improving productivity of head lettuce production. As a result of improved market linkages and awareness of local production capacities by the trade, an aggressive target of 5 million lettuce heads was achieved. This realized €1 million in sales for this value chain.

Gherkins: This value chain has proved to be the flag ship for contract linked production. NOA has supported 3 gherkin collection centers during FY 13 to enable them to receive, classify and ship to processors, gherkins of process quality – graded by length. 2 round table events early in the work plan year galvanized production around processor demand and generated 1,135 Mt of supply contracts between 9 processors and 4 collection centers. Despite the fact the 2 processors reneged on their contract obligations due to financial or forward contract issues, total sales exceeded 846,000 kg realizing more than €230,000 in value through 64 individual processor collection center supply contracts. This represents a 234% increase over the results in FY12 and sets the gherkin value chain as the linkage leader amongst the new opportunities in farm to market linkage developments. Despite problems on both sides of the contracts, the processor market is determined to continue to program production and contract off-take to specification in the future.

Asparagus: Like, blueberries, this new opportunity has yet to show commercial harvest and as such, linkage work has not started in earnest. It is anticipated that the harvest will take place in the spring of 2014, with an anticipated 10Mt harvest. Local and export market linkages are beginning to be developed as the harvest certainty materializes.

MAP: The MAP sector (including saffron) has shown some remarkable market linkage successes during FY13. Attendance by Kosovar production leaders of both saffron and cultivated MAP products at the Biofach trade fair in Germany, early in the work plan year, was instrumental in raising awareness of the new opportunities for cultivated product from Kosovo. The program had energetically worked to expand cultivated production as well as processing with energy efficient drying systems during 2013, and the market responded by expressing strong interest in the new cultivated products. 10 different in-bound market linkage visits took place during the peak harvest season and 12 new sales contracts were signed. These contracts specified multi season requirements with in some cases open ended supply volumes. Product quality was such that competition for Kosovo cultivated product pushed up the price point particularly for chamomile. A total of €380,000 in cultivated MAP sales was realized during FY13, lower than the project target of €500,000 but a strong performance nonetheless.

Saffron proved more difficult due to the price perception of growers and the fact the product has a long shelf life. Growers held out for a price which appears to be at least 3 times the market price.

Quality is excellent however as borne out by analyses in Europe and in the US. A high profile B2B launched the 2013 saffron year with excellent media coverage and resulted in 6 new local markets for the product. This resulted in consistent sales at a high price but low volumes. One out bound trade investigation visit was made to Switzerland with some 25 market opportunities – especially diaspora owned firms showing promise. Pricing was however still lower than currently expected by farmers. Work late in Q4 highlighted a demand in Belgium which shows promise. Additionally a personal relationship between a grower and a French buyer resulted in a 600gm commission sale into France (price still to be determined) .

Field Vegetables: This value chain showed excellent results from market linkages during FY13. Early in the work plan year, NOA staff facilitated meetings between 402 farmers and aggregators to prepare for the production season. 513 production contracts were signed. Peppers and cabbage were the key crops contracted and processors were eager to test the new programming opportunities presented by the meetings.

Following this, an inbound B2B event was hosted in Pristina where 18 diaspora owned businesses from Switzerland, Germany and Scandinavia met with 19 local businesses offering fresh and processed fruit and vegetables to the European market. As a result, 24 new market contracts were signed with 11 local firms for supply of product during the 2013 harvest season. Of particular interest was the opportunities developed for at least 2 new varieties of peppers for the fresh and process markets. A total of 10,200Mt of field vegetables resulted from interventions in this sector, and despite problems with contract enforcement on both sides of the agreements, farmer to market linkage will continue to be a key ingredient in the success of the field vegetable value chain.

Livestock Value Chain Highlights

Dairy: The product in this value chain is raw milk and its linkage to markets received support as a result of 2 direct approaches during FY13. Dairy processors were encouraged by an innovative internship job placement scheme to create new positions supporting farmer extension and contract management activities. These positions had not been in place previously and were very successfully introduced. 3 dairies have agreed to make these positions permanent as a result of improved farmer relationships and the ability to give regular advice on milk quality to contract growers. These relationships were enhanced by the effective implementation of the innovative transparent raw milk sampling program which saw for the first time the automatic transmission of milk quality results to producer by SMS. The producers have as a result, improved confidence in their linkages to the market, feel that they will always be paid according to contract agreements and now have improved confidence to invest in their production systems. Local milk sales increased by 36% year on year against an import sales growth of just 6% and a market growth an impressive 18%. This clearly shows that farm to market linkages in this value chain are realizing their potential.

OBJECTIVE 2: AGRICULTURAL PRODUCTS DIVERSIFIED AND INCREASED

The second critical element of NOA intervention is the diversification of new products and the increase in realized sales of these products. Diversification has been achieved with the introduction of new varieties and production methods to enhance seasonality of production. Increased production and hence marketability of product has been achieved through training in improved practices leading to increased productivity, as measured by higher yields and improved unit cost of production.

Apples: The project saw the need to introduce a sustainable nursery production system for apple production in Kosovo. During this year, 30,000 bench grafted apple plants were imported from Italy and granted to a nursery association of 4 independent nurseries – Fidankos. The plants were of the highest quality – to EPPO standard. In addition, 6,000 apple rootstock plants were introduced into the nursery system to ensure that the possibility of high quality sapling production was generated. Plants have grown very well, despite a slow start due to unusually wet spring weather. Field days and B2B events raised the profile of this production and it is hoped that early in FY14, at least 10 Ha of high quality cost effective plantings will be made. This will help to stimulate a change in thinking amongst growers as to the possibility of purchasing locally, the highest quality apple planting materials.

Table Grapes: Emphasis this year has been on improving diversity by introducing new varieties of table grape – not by importing plants, but this year by grafting over wine grapes with table grape cultivars. 11 cultivars were introduced, through the importation of 88,000 scions which were used to graft over 30,173 vines over 8.1 Hectares. The grafting – a commercial first in Kosovo - aimed to replace some vigorous wine grapes with more marketable table grape varieties. Grafting was well implemented with a respectable 60+% graft take in the field. Carried out by local grafting teams, trained by the project, this grafting method is set to become a standard practice as vine growers modify their production patterns in the future. Both these new grafts and the plant introductions made during 2012 will come into harvest during 2014. Increasing table grape yield has continuously focused attention on the canopy management of the crop. This has involved training of farmers in pruning, and trellis patterns. Commercial adoption of modified T trellising systems has been seen on 12 Ha of table grape plantings this year and strong interest is being felt from growers to expand this practice.

Strawberries: NOA has continued to work at extending the production season targeting the Albion variety. The day neutral variety has shown very good results and yields have continued well into the autumn period, yielding strongly and producing yields as high as 25Mt per ha. The almost €700,000 sales value can be attributed to this introduction. Additionally, the project has demonstrated, in partnership with 2 advanced producers, the opportunity to extend the season even further, by growing the crop under high tunnels. 0.2 ha were established under a partnership agreement. This has particularly shown promise in moving first harvest by up to 25 days earlier, realizing higher prices. In order to continue to extend advice to growers regarding production practice, 4 strawberry field days were organized during the season, with total attendance of 180 producers, input suppliers and market intermediaries. The first ever soft fruit round table helped to synergize participants in the sector and strong interest was shown in the establishment of a soft fruit national association. The reluctance to purchase high quality planting runners by growers remains a significant impediment to sustained high productivity. 2 nurseries sold to farmers 110,000 first class runners this season and it is hoped that the high productivity of this planting material will maintain the momentum in future seasons.

Raspberries: This year saw the project expanding planted area to the Polka variety by an additional 5.5 Ha in an effort to ensure that the critical mass required for self-sustained growth was reached. In conjunction with this effort which saw expansion in central (Podujevo Municipality) and southern (Strpce Municipality) Kosovo, the project supported farmer field school activity as well as appropriate workshops. Our international STTA raspberry technical expert, Mr. Rick Dale, made two trips during the season to fully explain to new and established growers, all aspects of production. Farmer field schools were attended by 70 growers and the 3 workshops conducted were attended by 104 participants. New technologies to Kosovo – vacuum tensiometers for irrigation scheduling and venture fertigation methods were successfully introduced. The project supported a study tour to visit Hargreaves plant nursery and certification processes in the UK as well as study tour to Poland to tour

both raspberry and blueberry production facilities. This visit, in conjunction with Hargreaves UK, was instrumental in establishing contacts with the Polish plant breeding institute and set the stage for FY4 targets of nursery establishment. Crop yields have been excellent and this, in combination with the critical mass of plantings has begun to stimulate interest in commercial uptake of raspberry planting.

Blueberries: 5 hectares of blueberry plantation, planting 3 commercial varieties, was established during the year with production centered in Junik municipality. This growing area is set to become the production and marketing center of blueberry production and marketing. Additionally, 5 experimental varieties were introduced into the commercial planting area. In order to keep farmers up to date with the methods of production, 8 farmer field schools were conducted which were attended by 25 farmers and advisors/input suppliers. The study tour to Poland, highlighted above showed growers the latest techniques in production.

Vegetable Value Chain Highlights

Lettuce: The project set an aggressive target of 5 million lettuce heads produced and sold during this program year. This target was achieved, increasing area under production by 6 times the hectareage planted the previous year. The strong marketing effort made enabled the crop to be sold in both raw and processed form. The market for pre-cut packaged lettuce was the single most important driver of this result, with NOA client Agro Serra commissioning its salad packaging line. For the first time the market saw pre packed, triple rinsed and cooled product. The response has been excellent, setting the stage for at least a threefold expansion during FY14. In support of this expansion in crop area, 4 agricultural graduates have specialized in providing advice to lettuce growers. Additionally and in response to a successful study tour to Holland in the previous year, 2 planting and harvesting machines have been fabricated locally. These units are highly cost effective and improve both planting and harvesting efficiencies.

Gherkins: As a result of strong farm to market linkage formation, 1135mt of gherkins were contracted for production (over the target of 700mt). This resulted from increased awareness by processors of the availability of product from Kosovo producers as well as the benefits of pre contracting production. This area would be produced by at least 20 hectares of production. New contracts were signed for the first time with mainly minority producers from the Klllokot and Mogilla area. Yields off the introduced varieties have been excellent under proper management with per hectare yields over 60mt being experienced with some growers. The use of the vertical netting in support of the product has been a key technology in achieving this yield. Additionally, the production system allows more efficient harvesting and much cleaner product. As processors request small fruit sizes, only this system will allow its production.

Asparagus: This year saw the establishment of an additional 7 hectares of asparagus. The seeds were imported by the project and subcontracted to two nurseries for crown production. The nurseries performed very well, one even importing additional seed independently when local flooding disrupted part of its contracted production. 5 growers established this crop in Istog, Kamenica, Vushtri and Pristina Municipalities. 4 agronomists – graduates from the agriculture faculty were trained in production practice and are now fully familiarized with asparagus production process up to harvest. STTA Robert Morris conducted field training during June 2103 for 11 growers and 20 additional stakeholders. Growth of the crop is excellent and a good commercial harvest is expected in spring 2014.

Medicinal and Aromatic Plants (MAP): The target for expanded production of cultivated MAP's was 25 hectares this season. A total of 61.5 hectares was cultivated, 61% of which was chamomile, 26% was oregano, sage and parsley and the balance made up of mint, marshmallow and melissa. Chamomile was planted in larger blocks by NOA client APS and new Map cultivator in Istog – Driardi. Crop growth was good despite some dry weather at planting which reduced plant stand. Yields were acceptable to growers and margins have encouraged additional plantings for FY14. In order to cope with especially the chamomile harvest, the project cost shared the installation of 2 new dryers, designed specifically to reduce energy use and produce a cleaner final crop. A local engineering firm cooperated with a Serbian supplier of equipment to design and install dryers that reduced energy requirement by 50%. The key to this efficiency was the installation of effective heat recovery mechanisms – a first for Kosovo.

Field Vegetables: The focus of product diversification this year was on establishing new pepper varieties for the commercial processor market and to expand the knowledge on using modular seedling techniques. 4 hectares of peppers were established using modular seedling techniques with excellent results in terms of seedling vigor and uniformity of establishment. 14 Ha of *feferoni* chili peppers were planted (against a target of 10ha) as a commercial demonstration of this variety. Seed germination was poor however and the effective establishment was reduced to 7Ha. 50 growers participated in this commercial demonstration and processors have expressed universal interest in contracting this variety for the following season. Cultivation of the H6 pepper destined for the dry powder market was successful with increased volumes available to NOA processor/exporter client Ananas Impex in Podujeva. 37% of new pepper variety producers were women who effectively leveraged Municipality support in Fushe Kosova where the Mayor promised irrigation support and essential equipment to the participating women's groups.

Livestock Value Chain Highlights

Dairy: Emphasis under objective 2 in the dairy value chain focused on the development of new products as well as improving knowledge of practitioners in the field. CNFA farmer to farmer volunteer Mr. Steve Morgan worked with NOA client Sharri Dairy to introduce Gouda and Feta cheese production technologies. In order to stimulate improved fermented cheese products, NOA sponsored a dairy short course training for the first time at the American Farm school in Thessaloniki in Greece. The course was over 8 days and was attended by 9 students. The hands-on training was the first time participants learned how to produce Gouda, Mozzarella and Greek-style chesses, such as graviera and provolone with seasonings.

OBJECTIVE 3: FOOD QUALITY AND SAFETY IMPROVED

The project has focused its energies under this objective in 5 main areas:

1. HACCP training and implementation for processors in the fruit and vegetable and dairy sectors.
2. GlobalGAP training and implementation for field level certifications of individual producers
3. Organic certification of producers of Saffron
4. Food safety skills development and application in processing firms and regulators.
5. IPM trainings

HACCP training and implementation is a lengthy and costly process, requiring the implementers to put up significant capital to modify infrastructure in accordance with HACCP principles. The project has worked with 3 implementers during this year, 2 fruit and vegetable processors (Abi & Elif and

Agro Serra) and one dairy processor (Eurolona). Eurolona received its final certification during the reporting period and both fruit and vegetable processors are in the process of developing their facilities to comply.

GlobalGAP, like HACCP is an onerous certification but one that will become more and more important as export markets open up to Kosovo product. NOA has worked with 8 producers this year to obtain this important certification, with 6 receiving full CEREAS (German) certification. These certificates were awarded across the apple, strawberry, raspberry and lettuce value chains. These certificates are in effect a proof of concept for producers highlighting the possibility of small growers being awarded this certification.

NOA has worked to develop organic certification for growers of saffron. The product can generate specific market presence with this type of certification. During the course of the reporting period, 4 growers completed their applications for organic certification and are awaiting final outcome early in the FY14 period.

Food safety in processing facilities is a critical issue. Farmer to Farmer volunteers (4 assignments) worked with individual processors to assess their food safety levels and recommended critical areas for improvement in all cases. In response to initial findings, NOA developed a structured internship work placement program designed to deliver cost effective food safety and food technology skills to the processing firms. 6 firms were targeted for this support and 5 took full advantage of the skills offered by the interns. One firm has already created a full time position for the intern supplied under the agreement and 4 have indicated their intention to take them on in the forthcoming season. Additionally during the reporting period, cases of Aflatoxin were noted in imported grain destined for the animal feed industry – mainly for dairy animals. NAO supported the training of the AVUK laboratory to take full use of its equipment range to enable testing of feed and milk products for Aflatoxin. This reduced the time taken to produce results and engendered consumer confidence. In support of food safety skills development, NAO supported the first private sector training of laboratory technicians involved in the food industry. Trepharm Shpk, successfully offered its laboratory and technicians to train private sector laboratory workers.

IPM continues to be a critical focal point and IPM trainings occurred across all value chains. Local specialists were utilized to emphasize the application of NOA PERSUAP requirements. IPM training was especially well received by the apple sector, where over 110 apple growers received multiple exposures to effective IPM crop management.

OBJECTIVE 4: INCREASED AFFORDABLE AND ACCESSIBLE CREDIT

Improving access to finance is more than assisting farmers to apply for loans. This intervention requires that financial institutions see a reduction – perceived and real - of the risk of engagement in this sector. This can only come about as a result of real productivity progress at the field level, enhanced data supporting these improvements in productivity and all this in combination with improved confidence in the market for the off take. NOA continues to work with these enhancements. As a result, one bank is in the process of developing a new credit product to be launched in the New Year. This product will provide input supply credit through approved dealers (those with developed extension services for example) and will be launched in the New Year. The DCA facility continues to drive an interest in agribusiness lending by the banks. Current status reports indicate that \$9 million in agricultural lending has been made as a result of DCA support. NOA technical experts continue to provide training to all banks loan officers on improving their abilities to make commercial agricultural

loans. NOA has supported the banks with improved gross margin models for agricultural crops. This, in conjunction with the 15 models held current by the MAFRD economic analysis unit, continue to empower bank loan staff with better information.

OBJECTIVE 5: IMPROVED COORDINATION WITHIN THE AGRICULTURAL SECTOR

This cross cutting activity has emphasized the development of improved focus within the teams of the ministry of agriculture with a view to strengthening developments in the national extension services and the strategy for financial support to the sector. The NOA COP took over the liaison role when the full time advisor finished his assignment at the end of FY 13. Excellent results have been achieved with the development of the model of and the initiation of the national extension service. NOA developed a model which took Municipal (potentially to be central government) extension workers and provided them with the tools to reach thousands of farmers in the areas of influence. The model works with lead farmers across 5 disciplines in each municipality. At the time of report compilation, 371 lead farmers from 25 municipalities had been selected by their peers at community level to represent them in channeling information from the extension service.

Additionally, the establishment of 3 publically supported commercial pack houses has been effectively achieved this year. NOA supported initial designs the previous year and NOA COP was actively involved in supporting the MAFRD administration in making selections of awardees. The challenge here remains to keep the motivation high through the implementing teams despite budget delays and other bureaucratic hurdles. In support of improving coordination, NOA facilitated 18 round table events with donors, government officials, private sector and civil society groups to ensure improved synergy in development applications.

GENDER EMPOWERMENT

NOA reenergized its approach to gender empowerment during this year. The year started with the project supporting the first ever woman farmer of the year awarded, attended by 212 women farmers. This event highlighted the role of women in agriculture. The project emphasized the inclusion of women specifically as lead farmers with the result that 36 women were recognized as lead farmers in the saffron, strawberry, raspberry apple and field vegetable value chains. These women continue to play an important role in catalyzing improved productivity and technology adoption among both men and women farmers. More than 600 women participated in NOA training across all value chains during the year. In support of improving the empowerment of women, NOA developed a modified gender empowerment matrix for PMP inclusion early in the year. A base line survey indicates that of the 5 domains measured, leadership remains the weakest and serves to direct the project to emphasize this during the last year of the program. Specific woman farmer trainings were in the fields of dairy herd management, access to finance and entrepreneurship.

SCIENCE AND TECHNOLOGY

During the year, NOA began to allocate resources to science and technology in agriculture.

NOA supported the design and implementation of an automated short message service based information delivery system for small scale dairy farmers. The farmers required improved access to public sector milk quality analysis for their milk deliveries to processors. An independent and transparent system of sample collection was to be developed, with lab results delivered automatically to milk producers through their mobile phones. This system would increase confidence in the

independence and timeliness of analysis and the resulting quality linked payments by the processors. As a result, farmers would be more ready to invest their own resources in upgrading their dairy production capability's working in a particular field or addressing certain issues

USAID successfully completed the development of this service. Raw milk quality data is now being transmitted by SMS to 1,700 producers on a regular basis and both producers and processors are confident that this system will continue to provide the platform for improved milk quality in Kosovo. Demand for this service is increasing dramatically and it is estimated that 2,000 producers will be benefiting within the next quarter. As a result of the successful establishment of this transparent method of distribution of milk quality information, the Government of Kosovo designed a grant to milk quality scheme that uses the established information platform as the source of validation. Additionally, and in the service of the livestock sector, USAID supported the Kosovo government Food and Veterinary Agency to develop capacities to evaluate animal feed and dairy products for the presence of the toxin aflatoxin. The laboratory had the necessary equipment but lacked the technical capacity to utilize this equipment to full advantage. Additionally, and in conjunction with Iowa State University, USAID has introduced embryo transfer technology as a means to securing the best dairy genetics at the best possible cost. The first crop of embryo transfer calves are expected late in 2013.

This development has highlighted the benefits of the introduction of science and technology into agriculture. Farmers are utilizing the services and are prepared to pay for them. This adds value to their membership of the major dairy associations and opens the door to the introduction of further linkages through IT systems – feed management, herd health and reproductive cycle predictions as well direct linkages through IT platforms between the dairy processors and their producers. This will no doubt continue to impact the induction of new graduates, qualified in IT and other techniques, into the agribusiness sector

MICROENTERPRISE

NOA is supporting micro-enterprises in Kosovo through an agricultural value chain program, and facilitating increased credit to micro-enterprises. Interventions are aimed at improving the agriculture value chains of new high value crops, medicinal and aromatic plants (MAP) sector, open field and greenhouse value chains and dairy sector in both product quantities and quality to make Kosovar companies competitive in both domestic and regional markets. Domestic value-added production will be supported to enable local microenterprises to expand production to reduce food imports. The balance of trade deficit for agricultural products will be reduced as domestic production will increasingly substitute for imported goods. Food quality and safety will be addressed by working with local micro organizations to certify products according to international standards, supporting national information campaigns and developing product testing capacity. FY13 resources will be used to support the development of microenterprises by providing targeted trainings and introduction of new technologies that will enable farmers, producers, processors, current or future entrepreneurs to gain experience in different agriculture value chains. Grants and subcontracts will be made available to boost microenterprise development.

The majority of NOA support in agriculture goes to microenterprises. Only the larger processors and aggregators fall into the category of medium enterprises. Grants and technical support to medium enterprises is dedicated to improving performance at the microenterprise level though improved productivity for producers. All sales of fresh produce emanate from micro enterprises. Total sales during FY 13 derived from microenterprises amounted to \$10 million of which \$4.5 million was exported. Of the total impact on the creation of full time equivalent jobs, 794 were directly created at

the microenterprise level. Microenterprises benefited significantly this year by becoming increasingly associated with the aggregation function provided by collection centers. All delivery contracts signed were between micro enterprises and aggregators – 310 contracts during FY13. This association with the aggregators has increased confidence of the micro enterprise producers to invest in their own production processes.

1.0 VALUE CHAINS

1.1 FRUIT VALUE CHAINS

APPLES

TOP 10 Performance indicators

1. Fruit post-harvest hygiene process adopted by 2 new commercial farmers
2. 420,000 kg apples sold according to improved grading, cleaning and packing methods
3. 1,250 kg apples sold up to the end of Q4 through improved market linkages
4. 4 Kosovo nurseries produce apple planting material to international European and Mediterranean Plant Protection Organization (EPPO) standard for the first time, using bench grafts imported from Italy
5. 30,000 superior quality plants will be available to the industry in Q1 FY4 from local suppliers
6. 34 new FTE jobs created by expansion of the apple sector
7. New disease free apple rootstock and scion bud wood now available to the nursery industry for future production of high quality planting materials
8. 4 nurseries unite to form an association—FidanKos—and produce uniformly high quality planting materials
9. More than 90 growers across all value chains benefited from GlobalGAP trainings
10. 68 apples producers trained in IPM applications

OBJECTIVE 1: PRODUCTS AND FARMERS LINKED WITH MARKETS

BENCHMARKS

- **At least 1 apple packaging training unit established and functional**

There is a lack of knowledge of, and infrastructure for, the proper washing, sorting, grading and sizing of apples at the farm level. To improve the situation, during Q1, the program supported the establishment of one prototype apple packaging facility for the training of commercial growers, packers and shippers in postharvest packaging. The packaging training unit was established at the farm of Kosove Blakaj, an apple grower from Kovraga, near Istog. The unit improved fruit hygiene and increased shelf life of stored apples for up to 45 days. In addition to improving the packed quality, the process introduced increased the crops sales value prior to delivery to local markets on average by €0.12 /kg. A month following this training, a second apple producer, “Dielloni” from Viti, applied the same practices in his production. During Q4, the same cleaning, sorting and packaging practices were also used by “Heron&Adea” during their harvest.



Apple cleaning, sorting and packaging unit in Kovraga.

- **SmartFresh introduced for at least 2 apple storage units**

Sourcing of SmartFresh remained problematic throughout the year. The international supplier was reluctant to enter a market the size of Kosovo and the project was unable to meet this objective. The Kosovo New Opportunities for Agriculture Project (NOA) continued to seek opportunities to encourage the international supplier to enter the market, which would allow introduction of the

product, used to retard ripening and reduce spoilage, prior to the end of the work plan, but without results. NOA program is now looking for opportunities to purchase SmartFresh from the US and demonstrate it as part of next year's work plan.

- **At least 2 postharvest trainings organized**

NOA organized the first apple postharvest cleaning, sorting and packaging training during Q1 (October 2012) at the packing unit training facility in the village of Kovraga, outside Istog. The training focused on harvesting, post-harvesting and technical details of storage. The training drew fifty-six (56) participants, all of whom are involved locally in the apple value chain. In addition to this, during Q2, fifty (50) agriculture extension agents from all of Kosovo's municipalities (including 34 participants from the Ministry of Agriculture, Forests and Rural Development [MAFRD]) participated during a training organized by NOA on post-harvest handling, storage and marketing of fruit crops. During Q1, Q2 and Q3 growers used the training facility to continue to promote improved packaging, resulting in a total of 420 tons of apples sold using improved grading and sorting methods. Besides last year's trainings activities, a number of field trainings for individual producers were also held before, during and after harvesting of their products.

- **Business to Business (B2B) event organized**

To facilitate linkages between buyers and sellers within Kosovo, during the Annual Work Plan 2013 our program organized a number of B2B meetings with local growers, processors, traders and supermarkets. Major fruit and vegetable producers, processors and traders shared information on what it will take to successfully meet local, regional and international markets demands. The NOA program initiated and provided technical advice during this event and facilitated contracts among the above-mentioned actors.

- **At least 15 new contracts signed with (grower-processor-traders)**

In order to improve their sourcing of raw fruit, a number of meetings between processing companies and apple producers and associations were initiated and organized by the NOA program. Seven official agreements and contracts were signed with apple producers and associations for marketing of up to a maximum of 600 tons. Meanwhile, based on the degree of trust established between the parties, expectations are that in coming months the number of contracts will grow. In addition to these signed contracts, NOA has visited a number of other players in the sector who have expressed readiness to sign contracts or develop joint grower supply/sale initiatives. NOA will expand these efforts in the beginning of Q1 FY4, when producers should have a better idea of yields as the peak of selling approaches.

- **1 international Short-Term Technical Advisor (STTA) engaged for 10 days**

NOA has identified several apple producers as potential actors that can have a positive impact on the apple value chain especially with respect to post-harvest and storage opportunities. Permanent technical advice related to harvest and postharvest issues was delivered to these producers by NOA program technical staff and different food processing STTAs. Besides visits to an apple packer and shipper during a study tour to Italy, our producers were supported by Richardo Due, a nursery owner based in Italy, who visited the local association and growers at his own cost.

- **At least 80 young farmers trained on cleaning, sorting and packaging**

In cooperation with Kosove Blakaj, an apple grower from near Istog, the NOA program established an apple cleaning and packaging training unit during Q1 (as described above). As per a memorandum of understanding signed with the producer, NOA can use these facilities for training purposes whenever needed. Training on post-harvest handling facilitated by Mike Kimes, CTO of the NOA program, drew 56 producers during Q1. The training included demonstrations of proper cleaning/sorting/packaging and storage techniques.

- **At least 200 tons graded apples sold in the local market**

In addition to the 50 metric tons sold during Q1, 370 tons in Q2 and 230 tons during Q3, during Q4, 600 tons of produced apples were contracted for sale to the local market. However, the market remains skeptical regarding the advantages of higher priced, cleaned and graded produce, and we expect it will be some time before market adjustments will be made. Total volume of apple sales through improved market linkages for FY13 amounted to 1,250 mt.

OBJECTIVE 2: AGRICULTURE PRODUCTS DIVERSIFIED AND INCREASED

BENCHMARKS

- **At least 30,000 bench-grafted apple saplings imported through 2 nurseries**

The NOA program imported from Italy, through a local vendor, 30,000 apple bench grafts sufficient to establish at least 12 hectares of orchards. Upon import, the bench grafts were verified and then distributed to the selected members of nursery association “Fidankos” based in Decan. NOA’s technical experts verified the quality of the imported bench grafts and supported and supervised production activities carried out throughout the production season both directly and through a local expert engaged by the program.

- **At least 2 local nurseries received bench grafts to be maintained for one season**

The 30,000 imported bench grafts were distributed to selected nurseries, where they were to be further feathered for one season; nurseries are members of nursery association “Fidankos” from Decan. NOA set up criteria for the selected nurseries, with priority given to certified and registered nurseries that demonstrated experience in propagation and which have the necessary infrastructure in place, and proper irrigation and fertilization capacity.

The imported bench grafts were certified according to EPPO standards. To ensure that the final product remains at the level of EPPO, technical assistance was provided by experienced and knowledgeable international and local experts, who trained and guided local producers in following the highest production standards.

The following lists the industry-agreed benefits of this activity:

- The sector has been supplied with high-quality and disease-free planting material that can enter into first commercial production just one season after planting.
- The sector (growers) has had the opportunity to use planting material that is of high quality and meets the highest phytosanitary standards.
- Local nurseries have become sufficiently skilled to propagate planting material that meets EPPO standards.
- The total area to be planted with high quality apple orchards will increase by at least 12 hectares. The first commercial cropping is expected in October 2014.

Growth of the plants has been excellent, but the unusual weather conditions at the start of the season resulted in less feathered growth than anticipated. Nevertheless, the plants are still in an ideal condition to be planted out into commercial orchards once leaf drop has taken place and their quality is beyond question. This will be the first time that this quality of apple plant will be available from local nurseries in Kosovo and will hopefully set the stage for a change in thinking by the Government of Kosovo (GoK) and growers as to the importance of the source and quality of planting material used.

- **At least 2 field days organized for interested stakeholders**

The industry remains very interested in the growth of high quality planting materials emanating from local nurseries as a result of the introduction of the bench graft materials. Continued visits to the

nursery sites are being recorded and demand appears to be considerable for the new material. The planned field days with interested growers has not taken place as yet due to the slower-than-anticipated feathering of the plants. Prior to uprooting, both nurseries will hold farmer field days to promote the product.

- **1 B2B visit for selected nursery producers**

NOA has supported the transfer of knowledge to different stakeholders within the fruit sector and promoted exchanges with international nurseries and fruit producers, through a study tour to Italy. Four local nurserymen, 1 expert, 1 MAFRD staff member and 1 staff member from KFVA participated in this study tour, which took place Feb. 18-13, during Q2. NOA’s international STTA, Stefano Musacchi from Bologna University guided the group during this event.

The group learned about the certification scheme for planting material and was able to see, in practice, the entire process, from basic stock up to tree propagation at the nursery level and final orchard establishment. Different technical aspects of tree propagation were explored as well as the role of government bodies in phytosanitary control and certification processes.

- **At least 12 hectares of orchards established**

The start to the spring growing season was unseasonably wet and cool. Growth of the 30,000 bench grafts was slower than anticipated and this has resulted in the plants feathering out slower than anticipated. Plant quality is still excellent and vastly superior to anything comparable from Kosovo suppliers. Growers are eager to plant this material out. As plants are moved to growers’ fields, NOA and the nurseries will have to ensure that growers are taught to properly train the plants as they begin or continue to feather. Total orchard area will be at least 10 ha and is likely to be established during Q1 FY 4.

- **At least 30 jobs created**

Small- and medium-sized apple producers create seasonal employment. During Q1, Q2 and Q3, 12 additional part-time jobs were created at the apple-packaging unit in Kovraga and 9 more at the new nursery association “Fidankos” based in Decan. As a result of introduction of new planting techniques and yield increases at new orchards, total apple production at NOA clients increased by more than 690 tons. This directly impacted the creation of new jobs primarily for harvesting and post-harvest activities. Full time jobs and part time jobs generated are highlighted below (source, NOA PMP database):

<i>Name</i>	<i>Value Chain</i>	<i>FTE</i>	<i>PFTE</i>	<i>PFTE Days</i>	<i>Total Days PFTE</i>	<i>Total FTE</i>
Mehdi Bresilla	Apple	6	5	210	1050	10
Hivzija Mendujani	Apple	5	10	45	450	7
Sofije Veseli	Apple	2	5	120	600	4
Flurim Shala	Apple	16	15	150	2250	25
Hajrush Suka	Apple	4	3	30	90	4
Labinot Spahiu	Apple	10	20	150	3000	21
Refik Shabani	Apple	40	12	120	1440	45
Totals						117

- **At least 400 tons of apples sold annually**

Six-hundred and fifty (650) tons of apple from producers in Kovraga municipality of Istog were sold during last year (Q1 FY13), while 600 tons produced this year was contracted for sale to five different local wholesale traders. Apple producers ill-equipped to store their product sold their apples during Q4, while those with good access to storage facilities are waiting for better prices in the next quarter. Nevertheless, based on the opinions of producers, to date, this year’s average sales price of €0.32 /kg for producers without storage opportunities represents an excellent return to investment.

- **At least 6 farmer field school trainings organized**

During Q1 and Q2 three day winter training schools were organized for extension agents working with the Ministry of Agriculture, Forestry and Rural Development, were organized by NOA program. Plant propagation material production, cultural practices of apple crop, post-harvest handling storage and marketing of fruit crops, GlobalGAP implementation procedures, production budgets and pests and disease control were subjects of this training covered by local experts and NOA technical staff and attended by 38 participants. During Q4, three trainings on Integrated Pest Management and Safe Use of Pesticides for apple producers from different regions were held, facilitated by local experts and attended by 63 participants.

- **Sustainable virus-free root stock and bud wood locally produced**

6,000 apple rootstocks for establishing apple mother blocks were imported from Italy through a local vendor during Q1. Imported rootstocks have been distributed to four pre-identified local nurseries to produce bud wood suitable for grafting, as well as stool beds (foundation areas for rootstock) for vegetative rootstock propagation. Technical advice for growing grantees and local nurseries was provided. NOA program engaged a local expert for managing, coordination, recordkeeping and advising selected

orchards and nurseries. Based on the field evaluation reports, all of the planting material has established well and is now available to nurseries who wish to produce their own plants using this new source of rootstock and bud wood materials.



Local expert delivering technical advice at apple orchards and nurseries.

- **1 association established and functional**

For the first time, nursery producers have founded a nursery association called “Fidankos.” The association currently has six members, all nursery producers from the Dukagjini region. Association members were the beneficiaries of new planting materials and are now able to begin to serve the sector with improved planting material produced from the imported root stocks and new bud wood sources. During this year the association planted 6,000 apple vegetative rootstocks of M9, MM106 and M25 types for stool bed establishment. Furthermore, the association aimed to improve propagation technologies of apple saplings by planting 30,000 apple bench grafts. Feathered trees (albeit not as developed as anticipated) were produced at the nurseries which will be distributed to local growers during Q1 FY4. The association is committed to the advancement of the sector and, based on the success of the quality plantings in FY13, will grow in strength in future seasons.

- **At least 100 students attended trainings and field days**

Based on NOA’s apple value chain activities reports, trainings and different field days exposed a total of 76 different students to apple value chain activities.

OBJECTIVE 3: FOOD QUALITY AND SAFETY IMPROVED

BENCHMARKS

- **At least 63 commercial apple growers trained on GlobalGAP**

In the beginning of April 2013, NOA identified eight local producers for implementation of the food safety standard GlobalGAP. For farmers selected to implement GlobalGAP, local short-term technical advisor (STTA) experts Mr. Arben Mehmeti and Agron Haimi organized a one-day training session covering implementation of technical aspects for this standard. In addition to the apple growers, NOA post-harvest and certification specialist provided a number of GlobalGAP presentations. More than 90 participants from different value chains participated in these trainings.

- **At least 63 commercial apple growers trained on GMP**

Beyond the post-harvest cleaning, sorting and packaging issues raised during the training organized during Q1 at the packing training unit located in Kovraga, six part-time workers engaged in this collection unit have been trained on Good Manufacturing Practices (GMPs) and Good Hygiene Practices (GHPs). In addition to this, 50 workers employed at different processing companies were also trained on GMPs.



GlobalGAP training for eight selected farmers

- **30 apple growers trained on Integrated Pest Management (IPM)**

NOA program organized a workshop during Q1 addressing “Opportunities for High Density Apple Cultivation.” In addition to learning about high-density apple production results on demo plots, 44 participants also received IPM training in the field. During Q2 and Q4, an additional 68 apple producers attended an IPM training organized by local IPM expert, Arben Mehmeti and consulting company “Edi.”

- **4 local processing companies supported**

Six fruit processors received grants to support management capacity building in their companies with up to three new qualified interns per processing company. During Q3, NOA provided on-the-job training to each of the employed interns to ensure they will be able to fully support their respective firm’s objectives. It is hoped that the utility of the interns will ensure that they will gain permanent positions with the firm following the internship period.

In addition to the above activity, NOA also engaged a regional STTA to assess and implement the food safety standard HACCP at fruit and vegetable processing companies “Koral” from Fushë Kosova, and “Agroserra” from Mitrovica. Based on results achieved, expectations are that both companies will achieve Hazard Analysis and Critical Control Points (HACCP) certification by the end Q1 FY4. The same expert, throughout an intermittent six-month assignment provided HACCP technical assistance to the “Abi&Elif 19” processing company from Prizren to ensure its new processing plant complies with all relevant food safety laws and standards needed to obtain HACCP certification in the coming year. Besides the above mentioned, during FY13, NOA engaged international Farmer to Farmer processing experts for four local processors to support them on best processing practices. Firms supported were Koral, Abi & Elif 19, Ask Foods and MOEA. All assignments highlighted the need for continued work on increasing in-factory food safety standards.

- **At least 1 apple farm receives international food safety standard certificate in GlobalGAP**

Besides a number of trainings and presentations conducted by NOA Postharvest/Certification Specialist, in April 2013, eight farmers from different value chains, including the apple value chain (VC), started implementation of the GlobalGAP Standard on their farms. Two local experts were engaged to support the selected farmers in implementing this standard. After successful implementation of food safety standard requirements and



Export of fruit trees by Bytyqi Company

successful completion of the certification audit, six farmers received GlobalGAP certification for their products. Certificates were delivered by the certification house CEREAS from Germany. One apple producer was among those certified.

ADDITIONAL ACHIEVEMENTS

- Bytyci, a NOA fruit nursery client, successfully exported its first shipment of locally grown and grafted fruit trees to Holland on Jan. 16, 2013. The company shipped to a Dutch trading operation 32,000 one-year-old plants, grafted using local rootstock and scions. NOA worked closely with the firm and the Ministry of Agriculture to ensure that the firm had appropriate quality systems in place and that certification proceeded in accordance with EU regulations.
- One of NOA's goals is to promote spraying and record-keeping services that help maintain the quality of spray equipment and personal protective equipment as well as improve the effectiveness of orchard management. NOA has supported three local companies by purchasing suitable quality air blast sprayers to protect apples and other top fruits from pests and diseases. Immediately after equipment delivery, spraying service companies supported with air blast sprayers started providing commercial spraying services to apple producers located in their regions. The newly supported service providers followed specific project Pesticide Evaluation Report and Safe Use Action Plan (PERSUAP) requirements. This activity continues to improve the marketability and quality of local apples and will allow apple growers to produce more high-quality fruit and sell it at a higher price.



Delivery of air blast sprayer to Bejtullah Korrani, from

OBJECTIVE 5: IMPROVED COORDINATION WITH THE AGRICULTURE SECTOR

BENCHMARKS

- **Introduction of EPPO standards for apple tree production**

EPPO Standards have been taken into consideration during the setup of the selection criteria for the importation of 30,000 apple bench grafted apple plants from Italy. In addition to this, during the nursery producers study tour to Italy and the selection of planting material for import, technical advice related to EPPO standard requirements were offered by international STTA expert, Mr. Stefano Musacchi, professor of Bologna University. EPPO standard rules and requirements are being followed during apple bench graft planting and cultivation in the nurseries. The effective establishment of plants at the recipient nurseries has improved the quality of trees produced.

- **EPPO standards introduced to at least 2 local nurseries**

Introduction of EPPO standards have begun through technical assistance offered by Mr. Paolo Pini, international STTA from Italy, and his technical adviser, Caviccholi Andrea, in conjunction with local experts and NOA technical staff. In addition to the two proposed nurseries, technical advice and support is being delivered to two other local nurseries located in the Dukagjini region.

- **80,000 apple trees produced as per EPPO standards**

Beside 30,000 apple bench grafts produced as per EPPO standards, selected nursery producers involved in this process were able to implement the same production techniques at their production sites, thereby increasing the number of local apple trees produced as per EPPO standards requirements. However, it is unlikely that the full 80,000 target will be achieved during this season. It is possible that the nurseries will have produced an additional 10,000 trees on their own to this standard, putting 40,000 trees of superior quality on the market.

- **EPPO standards introduced at 30 local nursery producers**

EPPO standards were taken in to consideration during the production season at a total of five nursery producers (including those selected for bench graft out growing) and will be included in next year's production season. In addition to nurseries directly involved in this process, EPPO standards were introduced to nurseries throughout Kosovo through exchange of information and experiences between producers attending different events. The introduction of the new planting materials will enhance the awareness of the EPPO standard in the new year.

TABLE GRAPES

Top 10 Performance Indicators

1. Latest varieties of table grape used to graft over 8.1 hectares of wine grape
2. 60% success rate achieved – considered by experts a full success. Regrafting continues
3. Eleven new varieties of table grapes introduced in grafting process
4. Local grafters fully competent in grafting over techniques using cleft and chip grafting
5. 45,000 kilograms of table grapes successfully exported to Germany
6. Input supply firms in the table grape sector embed private sector extension services
7. Modified trellising introduced by local fabricator
8. StoneCastle satisfied with trellising modification; seeks to modify all table grape area
9. Excellent collaboration between public and private sectors throughout production year
10. Sufficient scions now available for future grafting processes

OBJECTIVE 1: PRODUCTS AND FARMERS LINKED WITH MARKETS

PROMOTE MARKET OPPORTUNITIES AND PRODUCTION IMPROVEMENTS ACCORDING TO INTERNATIONAL MARKET STANDARDS

BENCHMARKS

- **At least one B2B meeting organized with market actors**

The program achieved this benchmark during Q1. Sixty-eight (68) participants, among them growers, traders and consumers, attended a workshop held in October 2012. The following were major recommendations from the workshop to be considered and addressed during the work year:

Increase production; improve quality; attempt to organize the marketing of table grapes through collection centers; improve packaging; and potentially increase exports, especially by targeting diaspora populations in EU countries through marketing companies owned by Kosovo's diaspora population. The meeting led to increased interest in the table grape sector by marketing and aggregation operations and paved the way for developments in post-harvest handling.

- **One commercial cooling chamber established and operational**

During Q1, NOA's technical staff met with potential cooling chamber operators to determine existing capacities and to identify what additional support would be required to enable a facility to be fully functional for the 2013 table grape harvest.

In Q2, NOA identified an equipment partner to support the activity in Macedonia during a short field trip to determine the suitability of different cooling chamber designs. During a visit to "Gorenjsko Frigo," NOA program staff saw the cooling facilities established by this Macedonian company. Since the activity implementation would be on a cost-share basis, the firm was invited to visit Kosovo to see potential project implementation sites and to seek partnerships with local vendors. The local vendor would provide documents outlining the cooling unit design and a proposal for an appropriate technical solution during April 2013.

During Q3, the program received an unsolicited grant request from "StoneCastle" company to establish a cooling chamber and forced air-cooling tunnel for table grapes on its property (its own

table grape vineyards cover about 60 hectares) and from growers from the zone. The site was visited and initial talks with the company management were conducted to identify modalities of a possible cost share. Discussions with StoneCastle during late Q3, however, revealed that it had insufficient working capital to cost-share the proposed cooling facility effectively, making the grant unfeasible. NOA continues to seek other opportunities to establish this unit for the advancement of the sector.

- **Quality standards brochure for table grapes produced and distributed to market actors (collection centers [CCs], supermarkets and growers)**

NOA evaluated the brochures developed so far for other crops to identify a suitable model for the quality standards brochure to serve the table grape sector. A table grape-specific brochure was then developed detailing quality standards of table grape according to UNECE quality standards.

- **Up to 20 hectares converted from wine grape to table grape production by grafting over**

This represents the single largest field activity within the table grape VC during FY 2013. It required intensive focus in order to be successful. The objective of the conversion project was discussed in detail at two levels: at the institutional level, with MAFRD and the Rahoveci Institute, and at the field level, with the growers' association from Rahovec. The idea was well accepted at both levels.

During Q1, the list of varieties to be grafted onto wine grape rootstocks was prepared in collaboration with Prof. Adamo Rombolla, of Bologna University, and experts from the Rahoveci Institute. The list was then discussed with more than 30 growers during multiple meetings.

A Request for Quotation (RFQ) for improved variety table grape scions was prepared and published by a local supplier during Q2, calling for bids to supply 88,000 scions of 14 table grape varieties, a quantity sufficient to graft over approximately 20 hectares (each planted with up to 4,400 vines, depending on the number of scions per vine). Five companies responded to the RFQ and the selected firm offered 11 varieties, including workable substitutions for certain requested but unavailable varieties.



The team visiting the mother block for vine scion propagation in Italy.

The program organized a study tour to Italy with top fruit nurserymen, grape experts from Rahovec, experts from the MAFRD and KFVA and the local supplier of grape scions. The main objectives of the tour were to see first-hand apple, pear and grape nurseries; to inspect apple bench grafts and vines before they are shipped to Kosovo, and to facilitate the establishment of commercial relationships. The opportunity also allowed the participants to inspect grape scions prior to import.

Prior to scion importation, NOA's COR and a contracted local vendor travelled to Italy to inspect the scions. During this visit, NOA's CTO, Mike Kimes, fell seriously ill and was unable to inspect the scions; however, the local vendor did so on the project's behalf. The scions were supplied and delivered to *Action for Revitalization*, the service awardee. The scions were stored at Agro Celina's facilities in Xërxe and kept at the proper humidity and temperature prior to grafting. All stakeholders visited the storage facility twice per day to check on the storage environment.

The original plan to graft over using one bud per scion and one scion per vine was changed at the recommendation of a number of experts. It was suggested that in the event that vines were more

developed, two scions with two buds per scion should be grafted. This would modify the area grafted but ensure a higher success rate. Growers from the extended list were invited to an informative meeting at Rahoveci Institute early during Q2. Program staff provided explanations of the new developments in conjunction with Action for Revitalization. The list of growers was reduced, giving priority to growers with a minimum 0.5 hectares of vineyards to be converted. A final list was developed with 10 growers, each with the given minimum area of land.

No.	Varieties	Number of scions
1	Black magic	10,000
2	Cardinal	5,000
3	Michele Palieri	5,900
4	Italia	13,000
5	Crimson	10,000
6	Sultana	10,000
7	Autumn Royal	10,000
8	Victoria	4,000
9	Red Globe	10,000
10	Centennial	10,000
11	Vitro Black	100
TOTAL		88,000

NOA worked with a qualified local nongovernmental organization (NGO), Action for Revitalization, to provide field training for the team of grafters that was to conduct the operation early in spring. In Q3, this local NGO provided a one-day training for scion recipients. Varieties (of scions) delivered are listed above:

Scion conditions were excellent, as divided and labeled by variety. Grape scions supplied by the local vendor were stored in Xërxe and were monitored daily by the Rahoveci Institute and Association experts as well as the NOA intern assigned to support table grape production. It was important that the material be kept at the required temperature and humidity to maintain vigor without bud burst. Support from the Rahoveci Institute was excellent at all times. The Institute participated in all discussions and was instrumental in the decision when to graft, based on daily monitoring of field and scion conditions and necessary climatic parameters. In addition, changes in targeted field areas were monitored and cadaster modifications were made by the Institute.

Due to the long rainy period and the risk of freezing, it was not possible to work in the field when planned and grafting was ultimately delayed. Since the scion-soaking phase had already started (in accordance with requirements after their arrival in Kosovo), to control the situation, Rahoveci Institute experts recommended cutting of the stems in the target five hectares in anticipation of the delayed grafting work. Grafting over began in earnest with the easing of the heavy rains. Nineteen (19) grafters were trained and five support staff involved. Subsequently, enthusiasm was such amongst grape farmers that they began immediately to initiate field-based grafting using whatever table grape materials they had, gaining critical experience in the process.



Initial grafting enthusiastically carried out Graft union used in the grafting over process

Technicians from the Rahoveci Institute attended the entire grafting training, which was also visited by 40 students from the University of Pristina and 11 students from the regional Vocational Training Center. They saw for the first time the commercial-scale grafting over of wine grapes to table grapes. More than thirty thousand (30,173) vines covering a total of 8.1 hectares of wine grapes were grafted over to new varieties of table grapes during Q3—exceeding the targeted five hectares due to more efficient manipulation of the grafting process than initially planned.



Grafting over wine to table grapes on a commercial scale.

Twenty (20) growers, including StoneCastle, are involved in the grape conversion activity. Sylajmon Bala from the Rahoveci Institute and Ali Oruqi from the Association managed two groups of grafters. Each field converted was tagged as per grafting group, while rows were tagged as per grafter in order to easily recognize the quality of the work done by each local grafter.

76,625 buds were used to complete grafting over across the 8.1 hectares. The grafting ceased as soon as high temperatures were sustained. Some of the remaining scions were retained for late-season work—potentially the re-grafting of possible losses, while others were used to establish a rooting trial to provide scion mother stock.

The bud break in the early stages varied depending upon weather conditions. Strong new growth was observed at the first grafting sites indicating, at least initially, that the grafting exercise would be 80% effective. Over time, some of the shoots that emerged in the very early stages were lost; it appears that initial bud break was a result of shoot energy rather than effective graft union.

Results as of the end of Q3 indicate that shoot establishment exceeds 60% of grafted vines. This result is considered a significant achievement by those experienced in other countries. NOA staff along with Institute experts and association experts continued to monitor scion growth. During Q4, the establishment rate remains the same, since no significant changes were reported. The final success rate will be determined at the conclusion of the season—that is, at the end of October, after leaf fall.

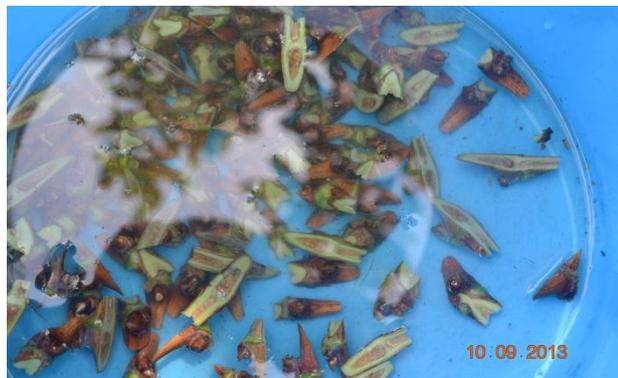


One of the best vineyards with a high number of successful grafts (with commercial modified T).

The re-grafting on vines that failed has been initiated with buds developed on the new mother stock, and will continue through spring. Chip budding on the rootstock and on the one-year shoots has been introduced in 2 sites with about 500 vines re-grafted thus far. Fourteen grafters exercised the new technology being observed by Andrew Teubes, NOA international STTA.



Chip budded vine



Collected buds

- **At least seven trainers and 20 intern support staff trained**

Training of grafters was initiated during Q2. “Agro Drini,” the local supervising grantee from the previous year, organized the grafting training and supplied required inputs (plastic bags and rubber ties).

Agro Drini worked (following consultation with previous STTA Schachar Karniel) with two Italian experts on grafting. The training was organized in Rahovec-area vineyards under the direction of Agro Drini, which organized the event with Action for Revitalization and the Rahoveci Institute. More than 30 people actively attended the training. The training was also attended by three top fruit nurserymen and their staff, as well as staff from the Rahoveci Institute and NOA. The training allowed local grafters to gain experience and confidence in implementing the grafting over process. Despite the risks associated with the new concept, local farmers were so enthused by the activity that they offered their own fields and locally sourced scion material for the exercises. In addition, a new chip budding techniques was introduced and has been applied by 14 grafters during Q4.



Grafting training in progress with the final result pictured at right

- **At least one technical leaflet produced**

Following the successful grafting over, the growers must better manage their new vines for maximum output. The technical leaflet produced will emphasize specific management practices required to optimize output.

Qamil Cena is leading the team of authors with the support of experts from the Rahoveci Institute and the NOA program. Experiences gathered from the local grafting over and from other sites (countries) are being used as references for the leaflet. The brochure preparation by the group of authors is in progress and will now include both methods of grafting used by the project during this year. The brochure will be made available for the following season's activities.

ADDITIONAL ACHIEVEMENTS

- Supervising grantee, Agro Drini, organized two table grape field days. One was held in Rahovec and the other in Suhareka. The field day in Rahovec was attended by 42 growers and students; 24 growers attended the session in Suhareka. The field days focused on the technical aspects of early season crop management and reinforced the need for attention to detail in plant management during early spring.
- “Agrofarma” company is interested in learning more about the materials required to implement grafting and the possible supply of those materials. The owner of the company has shown a readiness to supply all materials required for ongoing grape conversion activities. The program's support for wine to table-grape conversion seems to have stimulated commercial enhancement of the table grape value chain that will certainly continue after the program's intervention.
- The grafting-over exercise has been filmed in its four different stages. Documentaries thus far include the grafting process from scion selection through to filling plastic bags with soil, first bud break and shoot growth, as well as soil and plastic removal. The last documentary covered productive growth and establishing appropriate support systems at grafted sites. The entire documentary now covers the complete grafting-over process.
- Two missions by NOA STTA Andrew Teubes have been completed. During the first mission, one-to-one advice was provided to growers during field visits followed by a presentation organized in Rahovec. Forty (40) growers attended the presentation along with members of the Wine Institute. Two major topics were presented: 1) Disease management with the focus on powdery and downy mildew; and 2) The effects of different trellising systems on table grape yield and quality. During Teubes' second mission, topics included postharvest practices and grafting in the field. One workshop held with table grape growers with topics presented by Teubes attracted 38 participants.

- A new adaptive trellising system proposed by Teubes has been presented to the “Vinex” Company to explore the possibility of manufacturing it locally.
- Roundtable held: A roundtable attracting 20 participants was organized to identify bottlenecks in the table grape sector, all of which require addressing in the short term. The following issues were raised by the participants:

1. In-country planting material propagation;
2. Establishment of more demonstration fields with advanced technologies and new varieties;
3. Technical support to explore underground water sources that could be used for irrigation of vineyards;
4. Technical support to establish a disease-prediction system involving the establishment of appropriate climate-monitoring sites throughout the grape-growing region.

- Export of table grapes to Western Europe: table grapes collected from producers within Rahoveci Municipality by the collection centers operated by Habib Dina and “AgroCelina” have been exported to Germany through “Kelmendi GmbH.” Thus far, 45 tons of well-graded and “Rrush Tryeze Nga Rahoveci”- branded table grapes have been exported. The export will continue for at least one more month, weather permitting.
- The collection center of Habib Dina signed a supply contract with the wholesale trader “Fatosi.com.” Thus far, four tons of table grapes have been sold.

CHALLENGES

- Weather conditions that included a very long rainy period accompanied by very low temperatures caused delays in the start of the grafting. Therefore, the time frame for the grafting project implementation narrowed, especially since grafting had to be completed before bud break.
- Growers not following all recommendations. Some growers went into the fields with a rotovator just after the grafting over was implemented with the aim to control weeds. This caused strong shaking and graft displacement, which has caused some calluses not to form and resulted in graft failure. There are also some cases recorded where growers have thinned site shoots from the main shoot, causing damage of the callus and leading to the death of some shoots.

OBJECTIVE 2: AGRICULTURE PRODUCTS DIVERSIFIED AND INCREASED

INCREASING INCENTIVES TO PRODUCE HIGHER QUALITIES OF TABLE GRAPE

BENCHMARKS

- **At least two agro-input dealers provide embedded services to growers**

NOA has discussed the concept with Muja, an input supplier, and the Agro Drini Company. These firms are active in the supply of inputs to existing clients and as such may develop an interest in commercial extension services. Modalities were developed during Q2 to provide support to commercial agricultural extension services, from input suppliers to growers. Each firm now has a fully embedded extension service, which they are using to improve their commercial linkages and farmer confidence.

- **At least 150 growers benefit from promotional discounts and adopt improved practices**

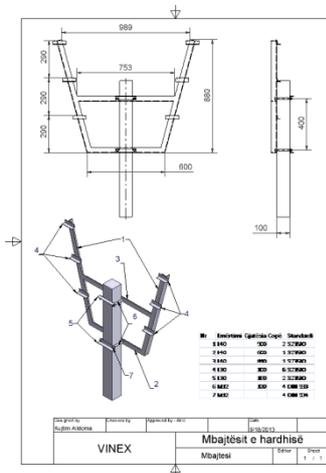
In order to support the commercial expansion of new technologies, promotional activities by the private sector have been encouraged. Rather than supporting farmers directly, promotional activities have been facilitated through the private sector.

During Q3, 14 growers benefited from the development of an improved “V” trellising system to support table grape production across an area of 7 hectares. The new trellising structure was designed by growers, a local manufacturer, Rahoveci Institute experts and NOA staff, and has been established in existing table grape vineyards in order to maximize quality and yields. A “T” trellising system also has been established at StoneCastle on an area of five hectares; other small growers have put in place more than two hectares of vines using the technology, all as a result of last year’s experience that indicated this system leads to higher quality and prices.



The V-trellising design and the manufactured version of the “V” trellising system now in place.

- **At least one local company willing to manufacture trellising system**



The identification of local steel processing companies capable of manufacturing “Y” trellising system continues. As far as the improved “T” trellising system is concerned, two companies have shown interest in manufacturing the system. They were asked to develop a model, and to estimate their costs, and then communicate such information to the growers’ associations.

During Q2, only one company showed a willingness to provide the model at a competitive cost for the modified T trellising system. The technical team from the “Vinex” company in Viti visited the Rahoveci site to see on the ground the T and Y trellising systems. The company’s management and engineers then designed and set up manufacturing of the system. Vinex continues to monitor the adoption of its Y trellising system, which it intends to promote widely during the season as a new product.

Andrew Teubes, during his last STTA mission, recommended further modifications to the existing trellising system, which leads to improved grape quality and greater quantity of grapes from vineyards spaced at three meters between rows. The local manufacturing company has shown willingness to manufacture the trellising system and has designed the required metal arms according to the requirements and recommendations (see engineering design above). Initial costing of this unit, however, appears to be too high and options are being discussed with farmers.

OBJECTIVE 3: FOOD QUALITY AND SAFETY IMPROVED

IMPROVEMENT OF POST-HARVEST TECHNOLOGIES AND PRACTICES, MAINTAIN FRUIT QUALITY IN FIELD AND IN STORAGE

BENCHMARKS

- **At least one forced air cooling unit is established in Rahovec/Rahovec region**

Two main stakeholders (StoneCastle and Agro Celina) were approached to implement forced-air cooling. Neither was able, unfortunately, to invest sufficient funds to complete its (50%) share of the investment on a cost-share basis, despite the program’s readiness to support this activity. Hence, the activity was cancelled. At this time, grape growers seem inclined to invest any capital they have available in expanding their planting area rather than on improving marketable qualities.

STRAWBERRIES

Top 10 Performance Indicators

1. €22,000 (11,000 kilograms) in street sales during traditional strawberry day event
2. Albion variety extends season at least through October
3. Late-season Albion exports initiated to Albania for the first time, finding an excellent market with 2,000 kilograms sold to date
4. Four supermarkets dedicate cold-chest displays to local strawberries
5. Strawberry sales top €700,000 through all market channels
6. Field days continue to be very well attended and grower interest is increasing
7. High-tunnel protected production brings harvest three weeks earlier for significant price premium
8. Local nurseries sell 300,000 strawberry runners for new plantings during Q1 and Q2
9. GlobalGAP certification awarded to first strawberry grower
10. Soft fruit round table paves the way for formation of soft fruit producers association

OBJECTIVE 1: PRODUCTS AND FARMERS LINKED WITH MARKETS

BENCHMARKS

- **At least €20,000 (\$25,600) in sales during street promotions in Kosovo**

A strawberry sales and promotion activity was organized for the second year on Mother Teresa Boulevard, the main pedestrian street in downtown Pristina. Twenty (20) farmers participated in the activity, selling 11 tons of strawberries worth €22,301 (\$29,214), thereby exceeding the set benchmark. Attendees made more than 15,000 separate purchases of fresh strawberries during this five-day promotional activity (June 4-8). Several new farmers joined the promotion this year, expanding the number of lead strawberry farmers in Kosovo. The success of the event was published as a success story on USAID's global web site.



MAFRD Minister Stavileci, Mission Director Shauket, NOA COP Wood and a local farmer during strawberry promotion day.



Children enjoying strawberries at the event.

In addition to the fresh strawberries, attendees also showed strong interest in the displays of strawberry seedlings and jams. A mini photo exhibition of new growing technologies was displayed, attracting the attention of passers-by. Organized by the program, several kindergarten and primary school children visited the event as a promotional and educational activity. Customer reaction to the promotional activity was excellent with particular appreciation expressed for the quality of the strawberries on display and for sale. Retail sales prices remain high, proving very profitable for our farmers, with strawberries fetching €2/kilogram during the peak season of May-June.

During Q4, following the sales and promotional activities in Q3, NOA organized a second berry promotional event (August 13-23). The event featured the late strawberry variety Albion along with other locally grown berries (raspberries, blueberries and blackberries). During the event, 1 ton of strawberries were sold at a very good price of €3/kilogram, equal to €3,050 in sales. During Q4, NOA facilitated linkages between farmers and supermarkets regarding Albion late-variety strawberries, generating an additional €57,960 in sales through supermarket chains (supplied by 10 farmers with 3 hectares of land planted with Albion).

- **At least 5,000 Euros (\$6,400) in sales in Tirana**

Due to unfavourable market conditions and unreasonable reference pricing for export strawberries, it was decided to postpone the Tirana market trial (planned for Q3) until the latter part of the season. This was primarily due to the fact that farmers could not cover the cost of both the transport and the import duties imposed by Albanian customs authorities. But during Q4, 2 tons of strawberries were exported to Albania amounting to €8,000 in sales, exceeding the set objective. (See benchmark below for more details.)

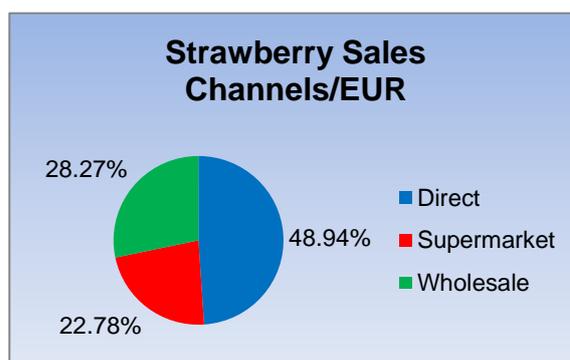
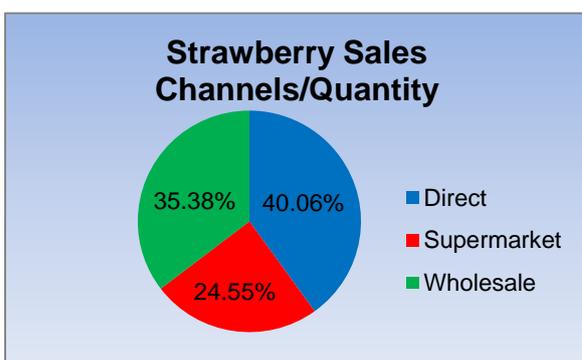
- **At least 5,000 kilograms of strawberries exported to Albania**

The promotional and sales activity planned for May 31-June 1 in Albania was cancelled despite the preparations. The partnership with the Ministry of Agriculture in Tirana was, however, excellent as through them the project obtained permission from Tirana municipality to use a very attractive promotional site. However, two main problems were encountered regarding Albanian customs issues: a) Customs was not able to issue special permission for expedited customs documentation. This meant that the shipment would have to remain at the border while the papers were hand-carried to Tirana for approval; and b) Customs applies a reference price that is higher than the realistic price in the Albanian market, namely, from March to August €2.2-2.3/kilogram for non-EU countries and €2.5-2.6/kilogram for EU countries.

Because it was a short-term event with fixed dates and timing, it was considered very risky to continue with the event due to the lack of commitment from Albanian customs. The program continued to seek out alternative opportunities to market to Albania but through other channels and means of promotion, and only after August when the reference price was no longer in place. In September 2013 (Q4), a Kosovar trader (All-berry, a program partner) exported to Albania 2,000 kilograms of fresh strawberries (Albion variety) dedicated to small supermarkets and restaurants in Tirana, at a sales price of €3-5/kilogram. At the time of compiling this report, shipments are still continuing and it is likely that the target of 5,000 kilograms in sales will be reached within the first few weeks of Q1 FY4.

- **At least one supermarket display of Kosovo berries established in dedicated cold shelves.**

This year saw an increase in the number of farmers producing strawberries. As a result, there has also been an increase in the presence of local strawberries on the market. While farmers do access different sales channels, the majority sell through local supermarkets and big supermarket chains, direct point of sales and wholesalers. Several big supermarket chains, such as Albi, Viva Fresh and City Park, are displaying local fresh strawberries under refrigeration, and these linkages



remain firm. NOA has continued linking farmers to the supermarkets and, especially, the Albania exporter during Q4, thereby further promoting the late strawberry variety Albion. The figures below detail the proportions by volume and value of sales through different market channels.

ADDITIONAL ACHEIVEMENTS

- **€698,020 in sales of fresh strawberries for two quarters from 29 NOA program beneficiary farmers only**

Sales of fresh strawberries this year were higher due to a good production year and new farmers entering the sector. Also there has been increased customer awareness about local strawberries due to several promotional activities, including TV documentaries, brochures and the “strawberry sales and promotional days” organized now for two years in a row. In Year One, more than 9,000 people attended the main strawberry promotion event, while in Year Two more than 15,000 people attended.

OBJECTIVE 2: AGRICULTURE PRODUCTS DIVERSIFIED AND INCREASED

BENCHMARKS

- **Hargreaves agrees to supply technical assistance to cooperating nurseries**

In order to increase capacity in the inspection of planting material and in enforcing plant breeder rights, three AVUK inspectors, accompanied by NOA’s CTO and fruit sector lead, attended a four-day training during Q2 in England at the premises of Hargreaves Plants, a major international wholesale nursery. The training was facilitated by Hargreaves as part of an earlier agreement with the firm, which organized and partially funded this trip. Inspectors learned in practice how the certification scheme for planting material functions; the role played by the UK’s Food, Environmental and Research Agency (FERA) in the inspection area; and this agency’s relationship with other areas of the government. Inspectors were able to see the entire planting material propagation chain at Hargreaves, starting from tissue culture propagation up to field propagation. They met key actors in the



Hargreaves expert in the nursery of Skender Ramadani

chain and exchanged experiences with them. This visit was also used to solidify the opportunities for Hargreaves to partner with local nurseries in propagation activities. Hargreaves’ technical team visited Kosovo during Q4 to discuss development of the raspberry and strawberry value chains. The team’s members also visited two strawberry nurseries supported by the program with an aim to cooperate in the future.

- **At least two nurseries are identified to support implementation of activities**

NOA has identified two nurseries to further propagate strawberry runners. A delivery of 10,000 Elsanta variety strawberry runners was shipped by Hargreaves UK to Kosovo. The program split the shipment in two, distributing the runners to N.T.P. Dredhza – Lluke and Fidanishtja e Godancit, Shtime. Each has an established plantation of 0.50 hectares for runner propagation. Planting was done during November 2012 at both nursery sites. The propagation material delivered unfortunately failed to regrow after the winter due to poor weather conditions at the field sites owned by farmers Xhavit Mulaj and Skender



Skender Ramadani’s nursery trial field

Ramadani. The nurseries compensated for the loss by planting existing material in raised beds. They will use the runners initially for runner propagation and, later on, to establish fruit production sites. The program supported each nursery site with plastic mulch. The outcome of the production will be evaluated next fiscal year.

- **At least four different trainings organized**

This year, NOA staff, together with local STTA, organized four (4) strawberry field days. Trainings targeted commercial growers. The first field day was carried out in Llugagji at the sites of farmers Labinot Spahiu and Mehdi Bresilla. During this strawberry field day, different ways of cultivating strawberries in greenhouse and in open fields production were presented. On the second strawberry field day, held in Lluke e Eperme, Decan (at the farm of Xhavit Mulaj), a way of cultivating strawberries in greenhouses unique to Kosovo was presented. The third strawberry field day was carried out in Davidovc, Shtime (at the farm of Halim Baftiu). Presented during this field day were: proper practices of fertilization; the use of ‘Mankar’ equipment (for weed control); and GlobalGAP principles. The fourth strawberry field day was carried out in Godanc, Shtime (at the farm of Skender Ramadani). During this field day, different ways of propagating strawberry planting material were presented.



The third strawberry field day, Davidovc, Shtime



The fourth strawberry field day, Godanc

- **At least 50 growers will be trained**

During the four programmed trainings, NOA trained 188 people (growers, local experts, inspectors from AVUK, and students) in critical aspects of production. Topics continue to follow the NOA strawberry cultivation guide to include environmental requirements, biological characteristics of the varieties, cultivation systems, field layout and preparation as well as marketing and post-harvest handling.

- **At least 0.2 hectares high tunnels of early production implemented**

The program identified two farmers willing to develop 0.2 hectares of high tunnels for the indoor production of strawberries. The farmers were Halim Baftiu, from Davidovc, Shtime, and Xhavit Mulaj, from Lluke, Decan. They have self-funded and constructed the high tunnels, while the program covered the cost of the plastic covering. Strawberries were harvested in the spring, 25 days earlier than strawberries grown in open fields. The strawberries also sold at a higher price.



Xhavit Mulaj , greenhouse, Lluke, Decan



Halim Baftiu's high tunnel, Davidovc

- **Strawberry production brochure (500 copies) printed and distributed**

The “Strawberry fertilizer guide” brochure was prepared and printed. Included in this publication were technical instructions regarding: soil preparation, fertilizer programming, pre-planting fertilizers, fertigation, supplementary fertilizer, foliar sprays, plant analysis and nutrient-deficiency symptoms. Five hundred (500) copies of this brochure were distributed to farmers, students, pupils and municipal extension agents. The content of this brochure will be useful for the needs of students as well as for agriculture experts.

ADDITIONAL ACHIEVEMENTS

- *First-ever soft fruits round table.* The program organized a round table focusing on the berries sector. It drew 23 participants including the following main stakeholders in the sector: the Initiative for Agriculture Development in Kosovo (IADK) organization, ANI Holland Company from Holland, Macedonian businessmen and local berry lead farmers including minority farmers. This event was opened by Fatmir Selimi DcoP. The NOA technical team presented the work done within the berry sector during the past three years of the NOA project. The representatives from IADK presented their experiences in this sector. Avni Shavani, a NOA client involved in raspberry production, elaborated on his experiences during a successful study tour to Poland that took place in August 2013. In addition, the Dutch company ANI Holland explained its program concerning a potential investment in Kosovo and the possibilities for cooperation with local farmers. ANI Holland is interested in increasing the area of land under raspberry production in Kosovo and can link farmers with markets in Western Europe. The Dutch representatives stated their willingness to bring new raspberry cultivars to test under the agro-climatic conditions of Kosovo. In addition to raspberries, they are also ready to bring wild strawberry planting material for trial testing.

- The N.T. Biofruit company (owner Halim Baftiu) received GlobalGAP. certification in Q3. This good agricultural practice standard helps producers comply with accepted criteria for food safety, sustainable production methods, worker and animal welfare, and responsible use of water, compound feed and plant propagation materials. To date, Baftiu is the first NOA-assisted strawberry farmer to obtain GlobalGAP certification, though others are also interested. This certification paves the way toward the improved reputation of Kosovo products.



GlobalGAP auditor visits Biofruit

- Two nursery grantees sold 110,000 strawberry runners during Q2, valued at approximately €10,000, in addition to the 200,000 runners sold during Q1. Buyers are predominantly farmers expanding their areas under strawberry production as a result of grants from the Ministry of Agriculture. All buyers have been individual farmers seeking to expand their production by using improved-quality runners representing new varieties already shown to have significantly extended the production season. The quality of the runners and varieties available is creating substantial interest in this crop. There were no sales during Q3 and Q4 as the next planting of strawberry runners will take place in the fall season.

RASPBERRIES

Top 10 Performance Indicators

1. Street sales during berry promotions exceed target by more than 100%
2. Minority producers attend all 11 days of promotion in Pristina with very favorable responses
3. Fresh raspberries on sale in Kosovo supermarkets for the first time - sales exceed targets by almost threefold
4. Raspberry sales exceed €839,000 during the 2013 production season. 79% frozen exported to Serbia, 12% sold locally and 9% frozen exported to Italy
5. 5.5 new hectares of raspberries established during the year
6. Raspberry farm field school established now covering all production processes
7. Productivity at all altitudes indicates that raspberry is one of the most profitable crops with one of the lowest financial barriers to entry
8. Successful study tours to UK and Poland ensure that Kosovo is set to produce at the highest levels of technology
9. Hargreaves Plants of the UK maintains an interest in establishing a nursery in Kosovo
10. First two raspberry producers certified as GlobalGAP compliant

OBJECTIVE 1: FARMERS AND PRODUCTS LINKED TO MARKETS

BENCHMARKS

- **At least 10,000 Euros (\$12,800) sales during street promotions**

During Q4, the program organized jointly, with MAFRD, a raspberry and blackberry promotional event. Fresh berries were displayed and sold in downtown Pristina, Aug. 13-23, 2013. The 11-day event invited berry producers to display and sell their bountiful harvest of freshly picked berries to the general public. More than six tons of berries were sold.

Final sales figures from the berry promotional event include 20,000 clamshells (~300 grams/clamshell) of berry products sold to an estimated minimum of 14,000 direct buyers. Thus, total sales during this promotional event amounted to 24,110 Euros. Raspberry sales dominated, since this was the first time that fresh raspberries were launched on the local market. Juices, jams and black berries made up the balance of the sales.

The activity aimed to raise consumer awareness of the availability of fresh raspberries and of the growing availability of a larger variety of cultivated berries in general. Additionally, the event encouraged farmers to expand cultivation of these high-margin crops. The presence of minority farmers (Bosnians and Serbs) was another achievement of this event, enabling minorities to reach Pristina as the principal market.

There was positive consumer response to the event. Six thousand (6,000) copies of promotional brochures were distributed highlighting the various berries and including relevant information on their nutritional values. Continuous media coverage throughout the 11-day event ensured broad exposure and enhanced awareness. All the main TV channels covered the activity on their main news program, several other dedicated documentaries and reports (Bujku, morning programs, Bon Bon show, etc.) were aired. Web portals, radio and newspapers also covered the event.

NOA has effectively extended the seasonal availability of larger volumes of an increased mix of fresh berries, establishing the kind of sustained and reliable presence of quality product that leads

to increased local, regional and eventually European sales. The success of this event was also published on USAID's global web site.



Diversified berry products at a minority farmer stand Minister and USAID Deputy Director visit

- **More than 10 participating raspberry and blackberry growers**

A total of sixteen (16) farmers presented their berry products during the raspberry and blackberry promotional event. The event featured a wide range of berries: raspberries, blackberries, strawberries (wild variety - Regina and new cultivated variety- Albion) as well as wild blueberries.

- **At least 10,000 Euros (\$12,800) in sales to supermarket chains**

NOA facilitated joint and individual B2B meetings between farmers and supermarkets in order to establish linkages between them. Seven new retail/supermarket linkages were created this year. For the first time, this put fresh raspberries and blackberries onto Kosovo supermarket shelves (previously raspberries were mainly sold to collectors as frozen product dedicated mainly for export). As of July 2013, fresh raspberries could be found at the following supermarkets: City Park – Qafa, Tregu i ri i Gjelbert – Bregu i Diellit, Maxi- Pristina, ETC (sporadically), Albi and Viva- Prizren and Lupo -Ferizaj. The supply of fresh raspberries is expected to continue until October 2013. From a baseline of no sales through local supermarkets, NOA enabled €29,910 in sales this year.

The launch of fresh raspberries in local markets has been very successful resulting in good prices and sales volumes as well as a high level of satisfaction by producers and supermarkets alike. The quality of product, freshness, packaging and labeling were at the required level. Another achievement is the placement of berries in refrigerated areas, as seen in the below pictures taken at two different supermarkets in Pristina.



Raspberry/berry display at Tregu i ri i Gjelbert/Bregu i Diellit



Raspberry/berry display at City Park/Qafa

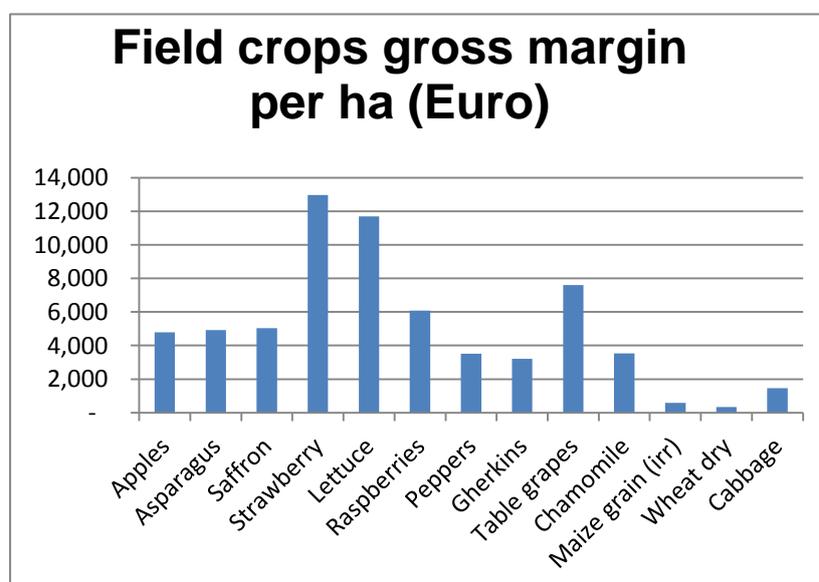
The retail price for fresh raspberries was very attractive during sales and promotional events, at €3.8/kilogram. The retail price at supermarkets was €5/kilogram while the farmer's wholesale price dedicated to supermarkets was €3/kilogram.

- **Export at least four trial shipments of fresh raspberries**

This activity was planned with one of the main raspberry growers, APC. Although the project considered initial trial amounts could be tested, the farmer was still not ready for the fresh raspberry export market. The activity has been postponed to FY 2014.

ADDITIONAL ACHIEVEMENTS

- Total sales of raspberries from all production areas amounted to €839,600 during 2013 (small amounts are still to be sold during Q1 FY4). Total sales of raspberries in 2013 include 79% for regional export markets (Serbia) as frozen product; 12% sold to local markets as fresh product and 9% sold to international (Italy) markets as frozen product. This is a significant increase year-on-year and indicates that the raspberry industry is set on a course of marked growth. Productivity indications show the crop to be very high value in terms of gross margins. Yields in areas more than 800 meters above sea level and using trellised production technologies consistently exceed 25,000 kilograms per hectare. Interviews with farmers indicate that 1,000 m² of production provide the equivalent of what would be earned in a year by a salaried worker.
- Yields at lower altitudes using non-trellised technology produce yields between 12,000 and 15,000 kilogram per hectare. At normal pricing levels for frozen product, margins are excellent and farmers are increasingly attracted to berry production. Increased interest is being felt for nursery production, and larger commercial investors are developing plans for expansion.
- Economic analysis indicates that strawberries and raspberries, in particular, are both in the top 4 of NOA-targeted crops in terms of gross margin per hectare. (It remains too early to make a determination for blueberries.) Their establishment costs and production cycle times mean that they present the fewest financial barriers to start up of any crop. This is highlighted in the figure below (source: NOA cost of production analysis).



OBJECTIVE 2: AGRICULTURAL PRODUCTS DIVERSIFIED AND INCREASED

BENCHMARKS

- **At least 5.5 hectares of new Polka plant variety established**



New raspberry plantation established March 2013 at Ask Foods

different growers and planted in five (5) regions: 5,000 canes at APC in Perane/Podujevo; 1,500 at Rugova in Zahaq/Peja; 3,000 at Biofood and Adem Ademi in G.Lubinje in Prizren; 5,000 at Biobuzmi in Bibaj/Ferizaj; and 16,500 by Ask Foods in Kravarica/Gjilan.

The plants were accompanied by all the necessary documentation. During Q3, several reviews and evaluations by NOA staff, international STTA and Hargreaves were conducted to assess the extent to which the raspberry plants had established themselves. Ultimately, the team concluded that although the weather conditions were generally very good when the canes were planted, they did not have sufficient time to grow a sufficient root system in order to survive the late fall frosts and cold winter; this experience led the team to conclude that *fall plantings of soft fruit are not advisable* under Kosovo conditions.

- **Raspberry farmer field school established**



Measuring soil moisture at Ask Foods

provided recommendations and promoted the use of appropriate equipment for weed control. Additionally, two types of tensiometers were demonstrated during field-based trainings at APC in Peran/Podujeva, MVM Association in Sterpce, Ask Foods in Kravarica/Gjilan Gege Zefi in Bibaj/Ferizaj and Ademi in Lubinje. The “Fidanishtja Godanci” nursery in Godnac/Shtime was

By the end of October 2012, Hargreaves Plants Ltd. UK had shipped 21,000 Polka plants to Kosovo. Of these, 6,000 Polka canes were distributed to the MVM Association’s six growers in Sterpce, while 15,000 Polka canes went to APC in Peran/Podujeve. By March 21, 2013, Hargreaves had shipped an additional 31,000 raspberry canes, thus making a total of 52,000 Polka canes received. As a result, the raspberry production area this year increased by at least 5.5 hectares. The additional 31,000 plants were distributed to six (6)

During Q3, international consultant Richard Dale was engaged in two assignments (April 15–May 30, and June 24–July 5) to support a number of activities targeting the post-harvest handling and marketing of fresh raspberries. Three local STTAs (who manage the raspberry demonstration plots), raspberry growers and representatives from the MAFRD and the Food and Veterinary Agency were trained through farmer field schools. The training encompassed a range of raspberry agronomy and crop protection topics, including weed control and soil moisture indicators. The training took place at grantee grower sites and in the classroom. The trainings were field-oriented, participatory and demonstration-based. The consultant

visited in order to evaluate the conditions at this nursery, which is a potential supplier of raspberry planting material in the near future.

Seventy (70) people took part in the field trainings. Three workshops (with 104 participants attending) were conducted (April 23 in Pristina, April 26 in Sterpce and June 28 again in Pristina) with a focus on fresh market raspberry production, IPM, weed control and sanitation. These events were translated into Albanian and Serbian.

- **At least five GAP/IPM tools integrated**

During Q1, the program purchased five Mankar herbicide/pesticide application units for specific crop weed control. Four of these were delivered to NOA grant beneficiaries, who are presently growing raspberries (APC, Ask Foods and MVM Association) and blueberries (Juniku & Dredheza). The fifth unit is used for training and held by NOA for future weed control training activities targeting soft fruit production. This equipment was promoted for the first time during Q1 at a raspberry field day in Jazhince/Sterpce and was used commercially during Q3.

During Q3, equipment for measuring soil moisture was installed at four pilot farms: Ask Foods, BioBuzmi, MVM-Sobrivoje Stevanovic and APC. Vacuum tube tensiometers were installed at the first three sites listed, while electronic resistance-block tensiometers were installed at the APC site. Due to his high appreciation of the tensiometers, the owner of APC purchased an additional six sensors to install in other raspberry fields. A field day was organized at APC in the beginning of Q4, focusing on irrigation management and demonstrating the electronic resistance-block tensiometers to more than 40 participants. The program printed and distributed to farmers 300 copies of a technical leaflet.



Tensiometer with sensors at APC (left) and vacuum tube tensiometers at Dobrivoje Stevanovic (right)

Fertilization best practices have constituted part of the technical advice provided by local STTAs. The fertigation venturi system was promoted during Q4 at 10 grower sites (APC in Peran/Podujeva, Bio Food in Lubinje/Prizren, Ademi in Lubinje/Prizren, Gege Zefi in Bibaj/Ferizaj, Muhamet Duka in Firaje/Sterpce, and five grower members of the MVM Association in Sterpce). A field day was organized in mid Q4 in Jazince/Sterpce at the farm of Slavisa Jovanovic where proper fertilization, using the fertigation venturi system, was demonstrated; a technical leaflet produced in Albanian and Serbian language (300 copies each) was distributed to more than 50 participants and other interested farmers.



Hosting farmer Ivica S. Jovanovic at the field day thanking USAID/NOA for its support to the raspberry sector

During Q4, noninvasive, locally procured grass seed, sufficient to cover 2 hectares when planted between rows of raspberries to control weeds, was delivered to 4 growers. (APC to cover 1 hectare, Gege Zefi 0.4 hectare, Muhamet Duka 0.4 hectare, Slavisa Jovanovic 0.1 hectare). The grass will be planted by the end of the raspberry harvest.

The program supported APC by cost-sharing mulcher equipment, suitable for most orchard and vineyard applications. It can handle not only grass cutting between the rows, but pruning as well. This equipment unit will be very beneficial not only when used at the existing 6.5 hectare orchard farmed by APC, but also to support out growers with whom APC is planning to cooperate next spring. This equipment could be useful for the promotion of mulching techniques to farmers growing other crops as well.

- **At least two nurseries implement the nursery development program with Hargreaves Plants**

Hargreaves’ commitment to support the nursery sector in Kosovo continues and was reinforced during a visit to the firm’s premises in UK during Q2. During Q4, Hargreaves sent a small delegation to Kosovo for four days to evaluate opportunities for raspberry nursery development and provide technical advice to that end. Two licensed nurseries were visited, namely “Fidanishtja Godanci” in Godanc/Stime (experienced in strawberry propagation) and Dredheza, in Lluke e Eperme/Decan (experienced with strawberry and blueberry propagation). Both could be potential suppliers of raspberry planting material in the future.



Hargreaves team visiting Fidanishtja Godanci in Godanc/Stime

Representatives from both nurseries also partook in a study visit to Poland (described below). Based on the knowledge and experience acquired during the study visit, the owner of “Fidanishtja Godanci,” Skender Ramadani tested different strawberry propagation techniques, demonstrated during a strawberry field day conducted during Q4.

- **Study tours to UK and Poland with identified nurseries and phyto-sanitary inspectors to enhance the propagation of runners and phyto-sanitary inspection procedures**

Three phyto-sanitary inspectors from AVUK/MAFRD took part in a four-day study tour, Feb. 4-11, 2013, to the UK to increase their capacity for the inspection of planting materials and enforcement of plant breeder rights. In addition, experiences were exchanged with a counterpart from FERA regarding the certification of planting materials. The study tour was facilitated by USAID/NOA as part of an earlier agreement with Hargreaves Plants Ltd., that the trip would be co-funded by the two entities. The participants were able to learn in practice how the certification scheme for planting material functions, and what FERA’s role is in inspections and in relation to other parts of the government. Inspectors witnessed the entire planting material propagation chain

at Hargreaves, from tissue culture propagation up to field propagation. They met key actors in the value chain and exchanged experiences with them.



Lab for tissue culture propagation



Kosovo team inspecting the raspberry canes before shipment

Study tour participants also met with an expert in the registration and protection of varieties and learned about procedures outlining the registration of new varieties under the International Union for the Protection of New Varieties of Plants (UPOV). The potential provision of a Polka raspberry variety propagation license to two local nurseries in Kosovo was discussed with Hargreaves's legal department. Inspectors and NOA staff were also able to inspect 31,000 raspberry canes prior to their dispatch to Kosovo. Inspections included examinations of packaging, root washing, labeling and visual disease control. The inspection was satisfactory.

The study tour to Poland took place during Q4, Aug. 11-14. Hargreaves facilitated the visit by the team of six participants from Kosovo to the Polish host company Niwa Berry Breeding Ltd. and a Polka breeder, Jan Danek. Raspberry nurseries, farms and processors were visited. The participants were very pleased to understand more about developments in the raspberry sector and other soft fruits; a participant from APC expressed his appreciation in a letter, stating he was very thankful for the opportunity to be part of the group. *'In particular I am very happy that I had the opportunity to see closely the complete process of harvesting, handling, processing, packaging and storage of fresh raspberries for export.'* That task is something APC is aiming to do in the coming year.



Visit to the Figura Marek Farm – raspberry (Polka) and blueberry crop production

- **At least one field trip organized within the region (Serbia)**

During Q3, at the farmers' request, the program assisted 14 raspberry growers, from Sterpce and Zupa Valley (Serbian and Bosnian minority) to attend the International Agricultural Fair in Novi Sad (May 21–23). These growers were able to see the trends in this sector and to create new linkages with machinery suppliers in particular. The participants were from Agro-Red-Gold, Sarska Malina and MVM Association.

Another field trip is planned for FY 2014. Raspberry growers from Kosovo will have an opportunity to see best practices for raspberry varieties grown in Serbia, which is considered one of the world's biggest producers of raspberries.

- **At least two nurseries licensed to produce Polka**

Representatives from two nurseries (Fidanishtja Godanc, in Godanc/Shtime, and Dredheza, in Lluke e Eperme/Decan) MAFRD's plant protection department, AVUK and the APC company all participated in the study tour to Poland. They learned about best practices in raspberry propagation and the legal protection requirements for different varieties, with Polka as a priority. During the visit to Poland, the team was able to understand more about the Polka variety, its history, license holders, UPOV, etc. It was understood that Hargreaves plants is the international head-license holder for Polka as a protected variety and that the propagation license for Polka can be issued by Hargreaves alone; the variety is considered the intellectual property of the *Skierniewice Institute*; terms of conditions for issuing new propagation licenses to interested stakeholders have to be agreed first between the Institute and Hargreaves. After the visit to Poland, and meeting with the Hargreaves delegation visiting Kosovo, the program determined that receiving a license for the propagation of Polka can be considered a mid-term project; the nurseries first need to be strengthened. There are some pieces of legislation in place, but need to be enforced in order to ensure that the Polka variety is protected. Hargreaves is interested in cooperating and to do some trial testing in small plots, in one of the nurseries, in the coming year.

OBJECTIVE 3: FOOD QUALITY AND SAFETY IMPROVED

BENCHMARKS

- **Installation of at least one forced-air cooling system for the fresh export of raspberries**

Although this activity was planned to be finalized during Q4, in time for the peak raspberry harvest period, it was not implemented during this FY; the program will make efforts to introduce this cooling technique, since it is considered a necessity for the fresh raspberry market, prior to the next harvest season. A forced-air cooling fan unit will be used inside the existing cold storage room at APC Company as a stand-alone, complete unit, running on reverse osmosis air flow, complete with a pre-cooling tarp for the tunnel. This will enable the firm to better prepare product for the fresh market.

ADDITIONAL ACHIEVEMENTS

- During the Q2, together with Biolab, the program held on Feb. 26, 2013, in Lipjan, a one-day workshop on raspberry post-harvest requirements and the GlobalGAP certification system. In all, 31 participants attended the workshop. They included NOA beneficiary farmers, phyto-sanitary inspectors from MAFRD/AVUK, and eight raspberry growers from Zupa Valley/Prizren (Bosnian minority), who are also members of the local NGO "Agro-Red-Gold." All showed an interest in learning about the latest information on the raspberry industry. Going forward, the program will take into consideration this enthusiastic group of raspberry growers and involve them in future capacity building activities.
- Two raspberry growers, GegeZefi - Bio Buzmi in Bibaj/Ferizaj and Muhamet Duka in Firaje/Sterpce received GlobalGAP certification during Q4. In order to implement the GlobalGAP requirements, farmers have been under the supervision of local STTAs since Q2 while auditing for the certification process took place in mid-July, at both farms, when the fruits were fully ripe. Products have been certified by CERES, a well-known certification body for 'Good Agricultural and Good Manufacturing Practices in the food industry, for certification of organic farming and food processing, and for organic textiles and biofuels'. The farmers are aware that the certificate for their products is valid until June 22, 2014, and must be renewed for next season. They have committed to continuing to apply good agricultural practices now and in the future since it is to their and the consumers' benefit.



The local STTA (left) and auditor (at center) and producer Gege Zefi (right) during the certification process in Bibaj/Ferizaj

BLUEBERRIES

Top 10 Performance indicators

1. Established blueberries growing well
2. Initial flowering and early fruit formation signal high potential yields
3. Media coverage of blueberry establishment encourages expansion
4. 3 municipalities promise financial assistance to association Blue Gold to expand area under blueberry production
5. 5 new hectares planted
6. 6 farmers selected for new establishment
7. 4 new varieties continue to show excellent promise
8. 8 farmer field school trainings conducted on blueberry cultivation
9. 25 farmers trained in blueberry production
10. Study tour to Poland conducted for field and nursery growers

OBJECTIVE 1: PRODUCTS AND FARMERS LINKED WITH MARKETS

BENCHMARKS

- **At least one leaflet issued and distributed**

A leaflet that emphasizes the health benefits of blueberries has been produced in 1000 copies and will be used to further promote blueberry. Since flower removal was recommended this year to stimulate the growth, there will not be sufficient fruit for any market testing this year. However, the brochure will serve to educate the market actors (consumers) on health benefits of blueberries and to inform them that the new fruit is coming soon to local markets. Leaflet distribution has been linked with the promotion of other soft fruits starting at the end of Q3 and has continued into Q4 through different events including the Raspberry/Blackberry promotion at Mother Teresa in Prishtina, strawberry and raspberry field events, and a berry roundtable event.

- **One article published**

A series of articles on the benefits of blueberry cultivation have been drafted. The original plan was to publish them on “Agmia” – an agricultural magazine for growers supported by MAFRD. The magazine is no longer being published so this delayed publication as we were looking for other publication options. The articles will now be hosted on the new agricultural “Ferma ime” portal in due course. Modalities for posting of the articles will be further developed in Q1 FY4.

- **At least one TV highlight created to stimulate blueberry adoption by growers**

The “Bujku” Show filmed blueberry field operations at Juniku and Sllup sites. Growers were interviewed regarding the economic potential of blueberry cultivation as well as the growing

conditions and possibilities for scaling up blueberry cultivation in Kosovo. A local TV station covering the Dukagjini area filmed nursery operator in Lluca e Epërme – Deçan during an open day event at his site during Q4. Parts of the filming have been aired on Radio Television of Kosovo (RTK) – the national TV channel.

- **At least one field visit for market actors organized**

Richard Dale, an international soft fruit STTA, had recommended flower removal from blueberry plants this year to enhance vegetative growth of the blueberry bushes. As a consequence there was no fruit production which could attract market actors to get involved in the marketing of blueberry fruits, and therefore no field visits for market actors were organized. Rather, potential *investors* (individual private entrepreneurs and institutions) have visited the blueberry growing sites and this has produced positive effects. Three municipalities (Junik, Deçan and Gjakova) are now convinced that blueberry cultivation offers potential economic growth within their respective municipalities and have therefore have shown willingness to co-finance further scaling up of blueberry cultivation through soft fruit association “Blue Gold”.

- **At least two growers attended marketing events for soft fruits organized in the region**
This was not conducted due to the lack of commercial harvest during this year.

OBJECTIVE 2: AGRICULTURE PRODUCTS DIVERSIFIED AND INCREASED

INCREASING PRODUCTION THROUGH AREA EXPANSION

BENCHMARKS

- **At least five hectares of new crops planted**

Fourteen thousand and one hundred (14,100) blueberry bushes, sufficient to establish five hectares of plantations, were received from suppliers in the United States during Q2. These two- and three-year-old bushes included the following four varieties: Bluecrop, Duke, Elliot and Legacy. They will be used to expand existing commercial plantations. For trial purposes, 20 bushes of each of the following five additional varieties were also ordered and received: Toro, Sierra, Nelson, Arlen and Chanticleer.

The below details the shipment received in mid-March from suppliers in the U.S.:

Cultivar	Plants	Size
Bluecrop	2,800	10”- 18” 2 year
Duke	2,800	10”- 18” 2 year
Elliott	1,400	10”- 18” 2 Year
Legacy	1,400	10” -18” 2 Year
Bluecrop	2,800	1 CT 3 Year
Duke	2,800	1 CT 3 Year
Toro	20	10”- 18” 2 year
Sierra	20	10”- 18” 2 year
Nelson	20	10”- 18” 2 year
Arlen	20	10”- 18” 2 year
Chanticleer	20	10”- 18” 2 year
Total plants	14,100	

Beyond the phyto-sanitary controls at the border implemented by local authorities, NOA’s fruit production specialist also visually checked the plants during unloading and distribution. There were no signs of any damage, pests or disease. Prior to distribution to the final grantees, the plants were stored at the “Juniku” farm, in its existing storage facility.

Potential grantees participated in the unloading process. This opportunity was used to provide them with an initial training on: plant monitoring (checking for and identification of possible

insect pests and cane disease), determining ages of the bushes, identifying differences across varieties in vigor and growth, how to store bushes at the farm prior to planting, the importance of soil moisture and how to avoid excessive humidity.

A Request for Approval (RFA) was issued during Q2 to seek interest in new commercial plantings. Fourteen (14) potential producers attended an informational meeting organized by the Program. Only three applied for support in establishing commercial plantations. Following field visits, two fully met the established criteria for selection. The area proposed by the two was sufficient to establish just 2.5 hectares (of the 5 hectares planned). Therefore, the RFA was reissued to identify three other growers to establish 4.5 hectares.

Six grantees were finally selected for project implementation, covering an area of 5 hectares in total. The list of growers and the area planted is as follows:

Grantee	Farm location	Area (hectares)	# of bushes		Total bushes
			2-year	3-year	
Krasniqi – R	Ramoc – Gjakova	0.50	840	560	1,400
Blerti	Sllup – Deçan	0.90	1,512	1,008	2,520
Toni	Sllup – Deçan	0.90	1,512	1,008	2,520
Fisi	Sllup – Deçan	0.90	1,512	1,008	2,520
Zdrava hrana	Susice – Shterpce	0.50	840	560	1,400
Juniku	Juniku	1.30	2,284	1,456	3,740
TOTAL		5.00	8,500	5,600	14,100

The three selected grantees from Sllup village agreed to aggregate their land to make a single plantation of 3 hectares which presents a unique case in country and increases the efficiency of field management.

The unusually heavy early season rainfall caused delays in implementation of field activities. Therefore bushes were stored and kept at each farm under monitoring done by grantees, program interns and NOA staff. Although humidity prior to planting was a major concern, growers managed it very well resulting with no losses prior to the planting stage.



Plants stored at Juniku farm prior to planting stage

NOA-supported interns received initial trainings on what to monitor, how to keep records and how to report to the Program during their field activities. Activities for the coming season were scheduled so the interns will continue to check on implementation in the field.

Blueberry grantees were motivated to apply PERSUAP approved herbicides to control weeds prior to establishing new plantings. Only products from the list of pesticides registered by MAFRD were recommended for use.

Grantees started the collection of saw dust which is used during the season to control weeds, keep moisture in the soil and contribute to pH management. Plowing in Sllup sites was implemented in strips about 1m wide with canes planted in plowed strips while the area between rows remained unplowed. The other beneficiaries plowed the entire area for planting.

To maintain the pH level, the distribution of elemental sulfur was recommended in the amount of 700 – 1000 kg/ha. This was challenging because the product is fabricated as a powder and its distribution to the field requires additional attention due to its possible impact on human health, especially if it is applied in large areas where workers are exposed to the product for longer

periods of time. Accordingly, the Program supported a local service provider who applied the sulfur dust to the new fields.

Plantations were established covering a total area of 5 hectares including 4 varieties (14,000 plants) for fruit production and 5 varieties (100) for trials. The application of sawdust was recommended to suppress weeds and keep moisture on the root zone.



New field ready for planting using strip cultivation technique



Activities in the field – youth engaged on the farm

Five (5) back pack Sprayers were delivered to new grantees to enhance the efficacy of pesticide use and to control for human health and environmental issues. The calibration of the sprayers and the calculation of water required per ha were demonstrated in Sllup with the growers/beneficiaries and interns attending the demonstration. During this period (Q3), seven distinct insect pests were identified in NOA-supported blueberry plantations, of which only two are specific blueberry pests while the others are detrimental to many crops. Some pests damaged newly emerging leaves. In an effort to control the pest issue, NOA advised and guided interns and growers in the collection of samples to further identify the species and biological cycle of the insects. Since blueberry is a new crop, it is critical that pest populations and damage observations be kept for all fields.

As the weather improved and temperatures increased, the activity of the insect pests reduced to a minimum, thereby reducing the need for any spraying program at this stage. The plants were fully protected during the season such that no significant damage occurred.



Strip-prepared field with first line planted



The same (above) field fully established

In Q3, the USAID Mission Director visited Juniku site where 3.3 ha of blueberries have been planted, co-financed by the “Juniku” company and NOA. The NOA Deputy Chief of Party (DCOP) and Fruit Production Specialist accompanied the Director during the tour of the farm.

- **At least two nurseries engaged in blueberry supply**

The Dredhëza nursery, which has advanced well in the cultivation of the crop for further propagation, has established contacts and is communicating with soft fruit nurseries in Poland to possibly collaborate in the future on exchanges and technical support. The Program has facilitated these contacts and the nursery is looking forward to negotiating, again with NOA support, various opportunities for increased collaboration and technical exchange. Blueberry bushes established during the last year are in good condition and it is anticipated that at least some planting material will be taken for rooting trials this season. As part of the knowledge transfer and capacity building, the manager of the nursery was incorporated into the group visiting Poland during the Q4 study tour organized jointly with Hargreaves.

- **At least 1,000 bushes propagated locally and ready for sale**

Blueberry propagation is very specific compared to other soft fruit crops. Therefore special conditions and technologies are required to reach commercial propagation standards for the crop. At this first stage, the Dredhëza nursery has identified the proper growing media and growth regulators to start propagation.

Rick Dale, an international consultant on blueberries who provided NOA with technical assistance on blueberry production in FY 12, returned to Kosovo during FY 13 Q3 to draw further attention to this topic and prepare a presentation on the main principles of blueberry propagation. A PowerPoint program regarding blueberry plant propagation was presented by Mr. Dale during his mission in April 2013. As the “hardwood cutting” method of propagation is being recommended, Mr. Mulaj, the proprietor of the nursery, was advised to wait until early spring 2014 before initiating propagation. The knowledge he has gained during the study tour to Poland will serve him as a guide to implement blueberry propagation in Kosovo and to supply the local market. As a result of these developments, no cuttings were made available this year for onward propagation.

- **At least eight training sessions (field schools) organized for trainers and growers according to the crop calendar (pruning, plant nutrition, irrigation, plant protection, harvesting)**

Early in the year, a training calendar was outlined following the crop calendar and training was initiated during Q2 to support existing and new growers of the crop, as well as to reinforce the engagement of growers in two regions in particular (Gjilan and Deçan). During Q3, Rick Dale visited all sites prior to planting and provided recommendations. These visits were followed by a Workshop organized at the Juniku site and field training sessions (Farmer Field School) organized at the end of the assignment. Over 40 interested stake holders attended the workshop: growers, institutions, and experts, students of Prishtina University and the vocational training center in

Gjakova – agriculture branch, as well as 11 growers from Albania, who had heard about the interventions through their local mayor. The group was led by the former mayor of Tropoja, Mr. Shpend Hoxha. Topics such as plantation establishment, insect pest and disease control, blueberry marketing potential and irrigation and fertigation were presented at the class session. In the field sessions, the use of the Mancar sprayer to control weeds was demonstrated and the effective use of the tensiometer was demonstrated to participants in order to improve their understanding of irrigation scheduling.

Trainings to individual growers and interns were provided by NOA staff during field visits and through the Field School format. Trainings covering topics such as:

- Land preparation;
- Quality control of planting materials;
- Planting techniques;
- Saw dust distribution;
- Sprayer calibration and use and water quantity per hectare;
- Insect pest and disease identification; and
- Mechanical and chemical weed control – use of Mancar.

In addition, the Community Action Initiative Program and NOA/USAID organized training for potential blueberry producers in Leposavic wherein Rick Dale presented (with Serbian language translation) blueberry cultivation techniques. Eleven (11) potential blueberry farmers attended the meeting and have shown interest in participating in additional trainings and the possibility of blueberry cultivation on a commercial scale. Two trial fields were visited. Recommendations pertaining to field management and growing techniques were very well accepted by growers. Farmers have shown a willingness to participate in events like this which will be organized in other parts of Kosovo in the future.

During Q4, trainings focused on plant preparation for the winter period. No further Nitrogen use was recommended at this stage. Organic mulch such as saw dust has been distributed in layers sufficient to prevent weeds and to keep moisture in the ground. The final weed removal especially from the rows has been strongly recommended to be implemented before any snow falls. This will prevent rodents from wintering over in the fields, thus reducing the risk of root and cane damage.

Individual growers from Deçan and Juniku are looking for opportunities to engage local machinery service providers to prepare wood chips for use during the coming seasons. “Agro-klina” – the local entity as well as the Forest association from Peja which owns wood chopping machines have been approached. Both have shown readiness to establish business relationships with blueberry growers. The Program has facilitated this activity by introducing the benefits from the use of the mulch by introducing through trainings the techniques to produce it, offering information on the existing potential in country for organic composting, and by initiating and organizing the first meetings between blueberry growers (as individuals originally and later as an association) and the SNV forestry adviser and local wood producing firms.

- **At least 14 people trained on growing technologies**

Over the course of the project year to date, more than 25 farmers have been trained on blueberry growing techniques, including soft fruit growers in North Kosovo. STTA Rick Dale has been instrumental in providing this training and all his presentations are available in English, Albanian and Serbian.

- **At least four trained individuals supervising field production participate in study tour to Poland**

The proposed visit to Poland scheduled jointly with Hargreaves Plants (UK) was conducted during Q4. Two soft fruit nursery men, MAFRD and AVUK representatives and the APC director learned about the procedures for berry propagation and certification. Blueberry nurserymen had the opportunity to see how a commercial nursery is structured, the procedures and protocols to be

followed for blueberry propagation, licensing and certification of the licensed varieties. Possibilities for future collaboration have been explored focusing technical assistance, in particular, on propagation and plantation establishment.

In Q3, the USAID Mission Director visited Juniku site where 3.3 ha of blueberries have been planted, co-financed by the “Juniku” company and NOA. The NOA DCOP and Fruit Production Specialist accompanied the Director during the tour of the farm.

1.2 VEGETABLE VALUE CHAINS

LETTUCE

Top 10 Performance Indicators

1. Two hundred value chain stakeholders trained
2. Fifty farmers actively producing
3. Two million seeds of new varieties sold without project intervention, demonstrating that new technologies are self-sustaining
4. Ten new out-growers contracted to produce for Agro Serra
5. Market demand for pre-packed salads grows strongly with performance 20% over annual target
6. Almost 5 million head lettuce sold into local market
7. Value of sales of lettuce in the local market reaches €1 million
8. 92 FTE jobs created throughout the value chain
9. Four independent graduate agronomists specialized in lettuce production
10. Processors and producers on target for food safety standard certification

OBJECTIVE 1: PRODUCTS AND FARMERS LINKED WITH MARKETS

BENCHMARKS

- **At least 200 stakeholders within lettuce value chain will be trained (in project FY13)**

A total of 213 stakeholders within the lettuce value chain attended events organized by NOA during project FY13. The purposes of the events were to conduct training for participants in different fields related to the lettuce value chain, share information and create linkages among lettuce stakeholders. The events consisted of business-to-business meetings and open field days. Trainings were organized to promote applied technology in lettuce cultivation and post-harvest activities. NOA directly supported 50 lettuce growers with technical advice to increase their knowledge regarding new lettuce types and to ensure they can apply specific IPM technologies. Two field days were dedicated to the promotion of bagged and boxed lettuce, and the opportunities to promote them within the local market. One business-to-business event attended by 63 participants was specifically organized to promote and taste test new lettuce varieties.

- **At least 2 million seeds sold by input suppliers to farmers, valued at 50,000 Euros (\$64,000)**

Four input suppliers during the FY13 sold 2.1 million lettuce seeds valued at €51,000 as result of direct linkages between input suppliers and producers. The input supplier “Jonathan,” based in Gjakova, sold 150,000 lettuce seeds in Q1 to 12 farmers engaged in the promotion of new lettuce varieties. In Q2, seed sellers Jonathan, Agronomi, Fitofarma and Agro Farma sold 720,000 lettuce seeds, worth 8,820 Euros, to the same farmers. In Q3, the same input suppliers sold 500,000 lettuce seeds. Forty-five percent (45%) of total sales were for new varieties promoted by the project, suggesting that farmers and consumers alike have embraced the promoted varieties. Additional sales of 670,000 seeds during Q4 were for late season production, the majority of which were Batavia and butter head varieties. All seeds have been sold directly to growers by input suppliers at retail prices without project financial intervention, indicating an established input supply chain for this commodity.



Some of the lettuce types and hybrids promoted by the project and transplanted to Agro Serra plots.

- **13 hectares of lettuce will be planted through direct linkages between farmers and input suppliers**

14 hectares of lettuce were planted in FY13 *through direct linkages between farmers and input suppliers* (n.b., this is *not* the total number of hectares of lettuce planted). Two hectares of late-season lettuce were planted in Q1 through direct linkages between farmers and input suppliers. The planted area produced 280,000 lettuce heads and 671 kilograms of baby lettuce, which were later sold on the local market. In Q2, three hectares of lettuce of different types were transplanted into plastic tunnels for early spring harvesting. In Q3, four hectares of lettuce of different types and varieties were transplanted, with the majority going into open fields. In Q4, five hectares of lettuce were transplanted and 600,000 lettuce heads were produced. Total plantings this year amounted to 14 hectares as result of linkages of farmers and input suppliers. The establishment of this area under lettuce production and in such an organized and market-oriented manner indicates excellent uptake of new technologies as well as enhanced confidence in product marketability and input supply.

- **At least 100,000 Euros (\$128,000) in sales will be generated through improved linkages**

The program facilitated several market linkages (sales contracts) for the only lettuce processing company in the country, Agro Serra, introducing it to the “Swiss Diamond” luxury hotel; the supermarket chain “City Hipermarket,” and several restaurants, including Pjata, Basilico, Puro, Home and Rroni. These introductions resulted in regular daily/weekly orders. Unfortunately, lettuce production during winter months is limited and by the end of December, Agro Serra interrupted its supply to some of the biggest buyers. To help address the shortfall in production, Agro Serra developed a small supply window from Albania where a single supplier was able to partially satisfy Agro Serra’s winter requirements through a production contract, leaving the entire demand for product unmet. This proved a disadvantage for Agro Serra as it will have to recapture gains made.

During Q1, 18 new buyers were identified; the program facilitated 33% of these new contracts, which resulted in 76% of the company’s new sales. The list of new clients includes Vila Germia, Hotel Swiss Diamond, Interex, City Hipermarket 2 and restaurants: Guru, Rroni, Symphonia, Fransco, Pjata, Basilico, Metropol, Afa, Konaku, Collection, Puro, A&A, Te Buci. Increased production and supply to the above-mentioned clients was achieved in Q3 and Q4 as a result of warming weather conditions and opportunities to cultivate in both open fields and greenhouses. The total sales in Q2 and Q3 as a result of improved linkages was €50,000 while in Q4 new sales totalled €58,200, making a grand total of €108,200 in new market sales as a result of improved

linkages. The pre-packed washed and cut products—Baby Leaf and Spring Mix—were the most popular new lettuce varieties, and a first in Kosovo.



Bagged lettuce from established post-harvest line at Agro Serra in Mitrovica

- **At least 50 actors in value chain will be involved in these (lettuce value chain) activities**

Fifty lettuce growers in total were involved in lettuce production in project FY13. Twelve lettuce producers as direct beneficiaries and 10 newly interested lettuce producers identified in Q1 were involved in lettuce production during this period. Planting activity was intensified from early spring (Q3), involving 10 more growers, bringing the total value chain actors to 32. The activity continued and in Q4 the project identified 18 new lettuce growers. The new lettuce growers have been supported with technical recommendations for lettuce hybrids and applied growing technology through local and international STTA engaged by project.

- **Contract out growing to at least 10 farmers for lettuce production for packaging center**
The lettuce post-harvest line (packaging center) established at Agro Serra in Mitrovica started functioning on Oct. 15, 2012. Markets for the promoted new lettuce varieties were identified and demand for its output is steadily increasing. Agro Serra continues to process bagged salads on a limited scale. Estimated production is approximately 30 kilograms per day (at 20% of installed capacity). The quality of the salads is excellent and the estimated refrigerated shelf life is 10 days. This is a significant improvement over what has previously been available in Kosovo. Agro Serra continues to rigorously follow the protocols established last year in terms of process, cleaning and documentation. Ten out-growers were identified and contracted by Agro Serra in Mitrovica in order to expand its production area. Contracted out-growers have produced 95,000 lettuce heads for Agro Serra during the growing season, both in greenhouses and in open fields. Agro Serra provides the lettuce seedlings to out-growers and NOA provides them with technical advice through local STTA. Transport of raw material (lettuce) from the growing area to the packaging center remains Agro Serra's responsibility. The price for lettuce heads produced in greenhouse was €0.15 while open field production price was €0.10. Both parties agreed with the terms of the contract and showed a willingness to continue collaboration and increase growing quantities.
- **At least two promotion days and two B2B organized emphasizing different types of lettuce**

This benchmark was achieved during Q1 when two promotional events were organized: a) lettuce processing plant grand opening event; and b) lettuce tasting and promotion event.

The Lettuce Tasting and Promotional event was organised on Oct. 17, 2012 at the Emerald Restaurant with a focus on promoting the following new lettuce varieties: Iceberg, Romaine, Baby Leaf, Rucola (arugula) and Salanova. The aim of the activity was to:

- a) Promote/taste new lettuce varieties;
- b) Create linkages between leading restaurants/hotels and farmers; and
- c) Improve labelling and packing of local lettuce.

The biggest hotels and restaurants participated in the event. The Emerald's chef prepared 12 different recipes from the above-mentioned varieties and the entire audience was invited to taste them. Several linkages between the restaurant owners and farmers were created at this time.



Emerald chef performing few of the lettuce recipes for the audience

Before the event, NOA worked closely with the leading farmers on branding and packing. Due to the lack of any sort of individual farmer/company business identity, NOA initially supported logo creation and designed adequate labelling for each farmer (eight leading farmers). Instructions on packing were also provided, enabling a very good product display during the promotional event. Another agricultural project, Riinvest HPK, contributed to the activity by financing the labelling and branding costs (assigning a dedicated designer for this purpose). This event has done much to promote local demand for new varieties of lettuce and helped to establish new linkages between Agro Serra (processor) and local hotels/restaurants.

- **At least 2,000 kilograms of lettuce will be sold to Albania as trial export**

Trial export of bagged lettuce to Albania was planned for Q3. Initial contacts had been made linking to retail outlets. This market linkage was intended to coincide with the strawberry promotional activities during Q3. The activity was postponed as a result of customs problems on the Albanian side. In addition, shortages in the bagged lettuce supply in the local (Kosovo) market this year also justified cancellation of the trial export of lettuce to Albania. Issues with the customs officials at the Albanian border require future intervention as volumes of Kosovo-produced lettuce increase. Reference pricing and significantly convoluted approval processes which must be completed in Tirana while the product waits at the border need to be streamlined in the coming year.

CHALLENGES

The challenge remains to extend the growing season and generate better supply chains so the local producers can supply local markets year-round. Agro Serra's experience this winter showed the promise of lower altitude production contracts but it remains to be seen how the growing demand for "local" product can be met in the off season. Late season lettuce established late in Q4 will highlight the possibility of improved winter production locally.

OBJECTIVE 2: AGRICULTURE PRODUCTS DIVERSIFIED AND INCREASED

BENCHMARKS

- **At least five million lettuce heads produced and sold (30 hectares – a six-fold increase over 2012)**

Cultivated area and lettuce head production continues to increase. 4.96 million lettuce heads grown on an area of 35 hectares) were produced in FY13. November-March was a critical period with low production being the result of low temperatures. April-October is the peak season of lettuce production with production in both greenhouse and open fields. Fifty (50) lettuce growers have benefited from technical advice provided by NOA during FY13. Twenty-five (25) of these are seasonal growers with production orientated to spring and autumn and the others are growing as much as possible year round. 280,000 lettuce heads were produced in Q1 and demand was increasing thereafter. Three hectares (360,000 lettuce heads) of different varieties of lettuce were transplanted into plastic tunnels for early spring harvesting. Six hectares (720,000 lettuce heads) of lettuce were produced and sold during the Q3. 3.6 million heads were sold during Q4. The quantity of lettuce produced from Q1-Q3 was based only on production from 12 beneficiaries. The average production per grower was 100,000 lettuce heads. Five lettuce growers produced more than 300,000 heads each, others produced between 20,000 and 200,000 lettuce heads during the production year. The price per head varied from 0.12–0.25€ per head depending on quantity produced and growing season.



Lettuce production in Raushiq/Peja.



Lettuce types promoted by NOA.

- **At least 5,000 kilograms of baby leaf lettuce produced**

Agro Serra continues to process baby leaf bagged lettuce. Of the NOA lettuce beneficiaries, only Agro Serra has the opportunity to produce bagged lettuce as a result of its lettuce post-harvest line. Six hundred and seventy-one (671) kilograms of baby leaf lettuce were produced and sold in Q1 and five hundred (500) kilograms produced and sold in Q2. One particular limitation regarding processed lettuce is the limited quantity of fresh lettuce produced during winter months. Production of baby leaf lettuce increased in Q3 to 2100 kilograms and in Q4 production increased further to 2,700 kilograms. The grand total of production of baby lettuce in FY13 was 5,971 kilograms (119.5% of annual target). This is a significant achievement because this is a new crop on the market and indicates a change in demand profile.

- **At least 20 existing farmers encouraged to increase their surface area of production**

Lettuce production in 2012 was on average 0.6 hectare per grower (7.6 hectares across 12 growers). The lettuce production in FY13 on average was 0.7 hectare per grower (35 hectares across 50 growers). When compared with last year, per farmer production area has increased by at least 16%, which indicates that farmers are gaining confidence in the market as demand increases, and the market begins to rely more on local producers instead of imports.

- **At least 100 new jobs created**

Land preparation, seedling production, transplanting and maintaining 35 hectares established with lettuce generated 42 full-time equivalent jobs. Additionally 50 FTE positions were created further up the value chain in marketing and other related activities. 92 FTE equivalent jobs were created during FY13.

- **At least four graduated agronomists will be trained to update their knowledge on lettuce production**

Four agronomists were trained during FY13. The training of graduated agronomists to update their knowledge of lettuce production technology was initiated during Q3. Two new agronomists—*Dukagjin Selimi* and *Pajtim Krasniqi*—were interested in increasing their knowledge of lettuce growing technology. The field training was conducted by local STTA engaged to provide technical advice to lettuce producers. The training was organized as joint visits to NOA clients, which represent a great opportunity for new agronomists to learn about and address real problems during the production period. Two other agronomists—*Rreze Jakupi* and *Edita Mahmuti*—updated their knowledge on lettuce through field visits to lettuce producers with local STTA during Q4.

- **At least 60 lettuce producers will be trained regarding food safety and quality standards (IPM and GLOBALGAP)**

50 lettuce growers attended the trainings organized by the project on quality standards and IPM implementation. During these trainings, GlobalGAP standards were highlighted and stressed for growers who wish to enter commercial lettuce markets. NOA provided and discussed the detailed requirements for GlobalGAP certification during all trainings.

- **Two planting machines and one harvesting machine will be fabricated/adapted locally**

As a result of a highly successful study tour to Holland, where growers were able to see lettuce production on a large scale, farmers expressed interest in developing locally seedling-planting equipment. NOA identified local fabricators during Q2, with the capacity to produce the machines by modifying existing tractor-drawn equipment. The first transplanting machine was fabricated and adapted in Q3. This machine has been tested and modified according to field test results. The locally fabricated machine will be commercially promoted in FY4 to lettuce growers by the company producing this adapted product.



Lettuce transplanting machine locally fabricated/adapted in Peja

- **At least two new ice-making machines co-financed**

Co-financing three ice machines for improving the shelf life of harvested lettuce was planned to be implemented in early Q3 to coincide with the peak season of lettuce production. Three industrial ice making machines on order did not arrive as early as expected. Ice-making units procured from the United States arrived during the first week of September. The training of the three beneficiaries was conducted by international STTA Devon Zagory, using the ice machine already installed at Agro Serra. The three newly acquired ice machines will be in full use during the FY4 production season with growers now fully capable of utilizing this equipment to improve the shelf life of head lettuce and to create improved market confidence in local head lettuce production.

- **At least three farmer groups will be trained on basics of GlobalGAP**

The project identified the fruit and vegetable producers sector as the primary area where Kosovo can be competitive, particularly in penetrating regional markets. The greatest opportunity to achieve this objective is through the implementation of Good Agriculture Practices internationally known as the GlobalGAP standard. Besides a number of trainings and presentations conducted by NOA's postharvest/certification specialist, in April 2013, eight farmers from different value chains, including the lettuce VC, started to implement GlobalGAP standards on their farms. Two local experts were engaged to support the selected farmers in implementing this standard. Agro Meti was selected as an exemplary lettuce producer ready to implement GlobalGAP standards. An internal audit of Agro Meti completed in Q4 indicated that the producer must fulfill some additional recommendations given by local experts, prior to receiving certification. The actual certification process is expected to take place in FY4.

- **At least 30 farmers will continue implementing IPM standards.**

IPM standards were introduced and implemented during FY2. Farmers have continued implementation of IPM standards since early spring Q3. All interventions and recommendations by the local STTA engaged for technical support are based in IPM standards. The activity continued in Q4, implemented by 12 NOA beneficiaries and 38 newly identified lettuce growers.

OBJECTIVE 3: FOOD QUALITY AND SAFETY IMPROVED

BENCHMARKS

- **Mitrovica lettuce center will begin to implement at least one food hygiene standard**

The hygiene standards employed at Agro Serra were assessed and evaluated by regional STTA during Q2, identifying which standards the company has to fulfill in order to ensure implementation of the hygiene standard HACCP. The firm has continuously maintained its attention to standard adherence. It is likely that the firm will be fully compliant with HACCP standards by Q1 of FY4.

- **At least four different bagged types of lettuce packed by Agro Serra will be promoted**

As reported above, the program was engaged in the direct promotion of Agro Serra's bagged lettuce, facilitating several B2B linkages with top restaurants in Pristina throughout the year. Among the most popular varieties are: Baby Leaf, Spring Mix, Baby Spinach and Rucola (four types).

- **At least six lettuce producers will have their brand and logos in the market**

During the lettuce promotional event held in October 2012, as described above, the program supported six lettuce producers in developing their own labeling and branding. They are: Agro Serra, Moni, Shala Produkt, AgroFresh, ART-Agro-NPD and Basilikum. Except for Agro Serra, none of these entities had logos or labels previously. NOA support to the sector will continue to emphasize brand awareness. These logos were utilized in all marketing activities during 2013.

- **At least eight new lettuce varieties will be promoted to consumers**

NOA successfully promoted six varieties including Rucola (arugula), Iceberg, Romaine, Baby Spinach, Baby Leaf, Easy Leaf, and Salad Mix (carrot, white and red cabbage). All can now be found in supermarkets, hotels and restaurants. Two supermarket chains, Albi and City Park, along with the hotels and restaurants Emerald, Swiss Diamond, Roni, Basilico, Pjata, Puro and Rings, have all been regular buyers.

The consumer reaction to Baby Leaf/Easy Leaf, Baby Spinach and Rucola is excellent; supermarkets reported an increasing number of consumers for such products, emphasizing the need to improve and expand winter season supply.

GHERKINS

Top 10 Performance Indicators

1. Initial processor demand for gherkins doubles to 750,000 kilograms
2. New national fruit and vegetable processor association formed—PePeKo—uniting national processing industry
3. Sixty-four contracts signed for delivery (64% of target)
4. Actual contracts signed exceeds volume of initial projections by 51% - 1,135,000 kilograms contracted.
5. 75% of contracts fulfilled
6. Collection center sales increase by 234% over 2012 sales to €237,000
7. Private laboratory provides first-ever training for food quality technicians in processing firms
8. Euro Tac collection center in Mamusha more than triples its processing capacity
9. Twenty-one *new* field level jobs created by increased gherkin production
10. Five processing firms hire job placement interns to fill *new positions* as food quality technicians, agronomists and farmer contract administrators.

OBJECTIVE 1: PRODUCTS AND FARMERS LINKED WITH MARKETS

BENCHMARKS

- **At least 2 roundtables held, with participation by all players in the value chain**

At the beginning of the year, all actors of the gherkin value chain, including processors, collection centers and producers, were visited to present the NOA Annual Work Plan 2013. They were given the opportunity to comment on and propose modifications to activities.

The first roundtable for gherkins was organized with the main objective of promoting dialog among the actors of the gherkin value chain; and emphasizing improving collaboration between the demand side (market actors) and supply side (collection centers). Four collection centers participated—“AgroProduct” from Viti, “ShalaProdukt” from Suhareka, “EuroTac” from Mamusha and “AgroCelina” from Rahovec, and five processors—“EuroFood” and “ABI & ELIF 19” from Prizren, “Fitimi” from Drenas, “Koral” from Fushe Kosova and “R Company” from Gjakova.

The first part of the meeting was devoted to a presentation of the quantities of gherkins demanded by processors for 2013 and the quantities of gherkins that collection centers could produce/offer. Quantities of gherkins demanded by the processors, a total of at least 750 tons, or two times the quantity produced in 2012. That is a clear result of NOA’s support to establishing an improved supply system.

During the second part of the meeting, participants discussed issues such as contracts, gherkin quality requirements, distribution by classes, prices and payment of VAT.

The main findings of the meeting were as follows:

- Workshops or similar events before starting production have been very important for improving collaboration between CCs and processors;
- Trading of processed vegetables, including gherkins, has grown more challenging due to the fact that supermarkets have been requiring higher margins. The participants asked if the NOA program could help improve the situation;
- Signing contracts has been a good tool for improving the relationship between CCs and processors;
- Arrangements for payment of VAT was still a limiting factor for improved sales/purchase of fruits and vegetable including gherkins;
- Availability of 300 kilogram plastic bins at processors and 20 kilogram plastic crates at collection centers would improve considerably the transportation and manipulation within

facilities of gherkins and will preserve their quality. All participants asked for NOA’s financial support in purchasing a certain quantity of bins and crates for demonstration purposes; and

- Participants suggested the organization of joint (producer and processor) participation in the Novi Sad agriculture fair.

During Q3 of 2013, the Association of Processors “PePeKo” (*Peme e Perime te Kosoves*, or Fruits and Vegetables of Kosovo) was formed as a result of a meeting of processors designed to discuss the needs of the industry. Although not a specific attribute of the gherkin value chain, the association was formed to respond to a realization of the benefits to be gained from improving the aggregation function and enabling the processors to lobby for improved policies and support. During Q4, in order to improve collaboration among the processors, two meetings of the new association were organized. At the first meeting, the processors shared information about gherkins, including quality, sourcing of the raw material and cooperation with collection centers and in the second meeting, promotion of the processed gherkins and participation in different fairs was discussed.

- **Sign supply contracts for at least 700 tons, worth roughly 234,375 Euros (\$300,000)**

Bilateral meetings between processors and collection centers have been facilitated; collection centers “EuroTac”, “AgroCelina” and “ShalaProdukt” visited processors “EuroFood”, “ABI & ELIF 19”, “Koral”, “Etlinger” and “Ask Foods.” All parties had expressed satisfaction with the previous year’s process of signing contracts and the improved process of supplying gherkins from collection centers to processors. The main issues discussed during the meetings were daily quantities to be supplied, availability of plastic boxes for transport of gherkins and payment of VAT. As a result of these meetings, 64 contracts were signed: 10 contracts were signed between collection centers and processors and traders for 1,135 tons of gherkins; 53 individual contracts were signed between collection centers and producers; and one contract was signed between a processor and one individual female producer.

The resulting contracted product was 51% more than initial indications from processors.

CONTRACTS SIGNED BETWEEN COLLECTION CENTERS AND PROCESSORS

#	Collection Center	Buyer	QTY (tons)
1	EuroTac	Koral	100
2		ETC	150
3		EuroFood	100
4		ABI & ELIF 19	150
5		“Mix Product”	5
6	Fjolla	Kelmendi GmbH	100
7		Koral	100
8		AgroCenter, Peje	300
9		Fitimi	20
10	Nurie Gashi	Rudi, Gjakova	70
11	ShalaProdukt	Koral	40
Total			1,135

- **Sales by CCs will increase by at least 70%**

After the successes achieved during the 2012 production year regarding establishment of the supply “system,” all actors of the value chain expressed an interest in increasing capacities: producers to increase surface area under gherkin cultivation and processors to increase volumes of processed gherkins. In addition, processors now view collection centers as an important partner in sourcing raw material.

Sales of gherkins in 2013 started two to three weeks later than in previous years due to bad weather conditions during the month of May, given the lower temperatures and excessive rainfall.

The collection centers ‘EuroTac’ from Mamusha and ‘ShalaProduct’ from Suhareka sold gherkins to supermarkets and wholesale traders since their initial volumes were too low to meet processor requirements.

Later in the season, the collection center “EuroTac” supplied gherkins to processors “EuroFood,” “ABI & ELIF 19,” “Etlinger” and a smaller quantity to “Koral,” while the collection center “ShalaProduct” supplied gherkins to the processor “ABI & ELIF 19” for the first time. In addition, both collection centers and producers sold gherkins directly to different wholesalers and supermarkets. Total sales during FY13 amounted to 846,000 kilograms of gherkins valued at €237,027. This marks a 234% increase over last year’s sales. Despite fulfilling only 75% of all contract obligations, this represents a significant increase year to year. This performance is even more significant since two major processors failed to meet their obligations on the buying side: “Koral” bought only 10% of contracted product due to internal issues and “Ask Foods” bought no gherkins at all due to significant issues with their pack house construction resulting from delays in GoK funding of the project.

- **At least 5 processors engage 10 interns as contract coordinators**

To increase the human capacities of processors for sourcing raw material from producers and collection centers, NOA provided grant support to several processors to share the cost of hiring interns as contract coordinators. Six processors—“Abi & Elif 19” from Prizren, “Ask Foods” from Gjilan, “Moea” from Gjilan, “Etlinger” from Shtime, “EuroFood” from Prizren and “Koral” from Pristina—all submitted an application for a grant of this sort. As a result, five out of the six processors have each hired one contract coordinator. “Ask Foods” has postponed implementation of the grant.

From early spring, these interns started making field visits to develop contacts with producers and collection centers. The NOA Value Chain Linkages Specialist organized visits by interns to collection centers. These new positions continue to strengthen the relationships among processors, collection centers and farmers. During the production season these interns continued to make field visits to collection centers without the direct support of program staff. It is hoped that the majority of these new positions will remain fully funded by the processors as they seek to enhance their supply quality and reliability in the next season. At least two interns have already received commitments for full-time placement.

As part of this activity, the program co-financed new and improved self-fertile gherkin seeds and plastic net trellising support systems. These two technologies had been identified during the previous year as making a positive impact on yields and quality. Sixteen (16) gherkin producers proposed by the collection centers benefited from this activity. The results have shown that plastic netting used as a support system increases yields by at least 50%, producing higher quality product and making the crop easier to manage. Two producers, Burim Shala and Izet Kastrati, emphasized the importance of the plastic netting, both of them stating that they cannot imagine growing gherkins in the future without plastic netting. The list of producers now utilizing this technique is provided below:

Izet Kabashi, gherkin producer from Peja – “I cannot imagine growing gherkins without plastic nets. This is a great achievement reached with support from the NOA program.” As a result of his success, 40 more gherkin growers in the same area have independently taken the initiative to grow gherkins using this new technology/technique.

Name		Name	
1	Sami Kryeziu	9	Avni Isuafaj
2	Mithat Tac	10	Adem Durmishi
3	Ymer Fazliu	11	Shpejtim Rexhepi
4	Sherif Rexhepi	12	Muhamet Sogojeva
5	Ilir Hoti	13	Durim Istogu
6	Ismail Duraku	14	Burim Shala
7	Izet Kastrati	15	Mehmet Krasniqi
8	Besar Kryeziu	16	Hasan Shala

- **Generate at least 50 new jobs by processors and CCs;**

The increase in off take of gherkins by more than 450,000 kilograms over 2012's figures was the result of 18 hectares of effective additional plantings. According to NOA-supported cost-of-production models, each hectare generates 0.68 FTE. As such, at this level of production, 13 FTE jobs were created through increased gherkin production.

It is estimated that for each additional 1,000 kilograms of final processed product, processors must add .012 additional FTE and collection centers must add .03 FTE to support labor needs. Hence, in FY13 an additional 5 FTE jobs were created as a result of increased gherkin production at the processor level plus an additional 14 FTE positions at the collection center level. Additional market and logistic FTE increases at the rate of 25% of that of the processor, bringing the total new FTE created to 21.

- **At least 1 new collection center established;**

Two existing gherkin collection centers, "EuroTac" in Mamusha and "ShalaProdukt" from Neperbisht, Suhareka, submitted concept notes requesting financial support to improve their collection center infrastructure, including expansion of the area for grading (one CC) and the purchase of boxes for transporting gherkins (both CCs). The program awarded a grant to "EuroTac" to expand their facilities for grading and sorting of gherkins and to purchase plastic bins and crates. The new facilities, with an area of 340 m², have been built through co-financing. The owner financed the concrete foundation as well as all metal construction elements while the program financed insulated panels for the roof and walls. In addition, 2,000 plastic crates, divided among 20 kilogram and 300 kilogram plastic bins, have been co-financed. The new facilities will provide enough space for easier manipulation of products within the center, thereby helping to preserve the quality of products and enable the collection centers to increase the volumes of products graded and supplied to markets.



New facilities of the collection center "EuroTac"



***Inauguration of new facilities at "EuroTac"
Producer Izet Kastrati and his neighbor, adopter
of plastic netting for gherkins production***

An open day was organized at the collection center “EuroTac” to mark the inauguration of the new collection center facility. The opening was presided over by the mayor of Mamusha, representatives of the Turkish Embassy (given Mamusha’s significant Turkish connections), processors, producers and NOA program staff—in all more than 50 people. Key stakeholders emphasized the importance of collection centers in improving the marketability of local vegetables. The “EuroTac” company and producers of the growers association “Bereceti” presented a letter of appreciation to USAID, the mayor of Mamusha, MAFRD, all processors and the ELKOS Company, honouring their contributions to the development of the agriculture sector.

- **At least 100 contracts signed between collection centers and processors, and collection centers and producers**

As a result of bilateral meetings and round tables, 64 supply contracts were signed during 2013; 10 contracts have been signed between collection centers and processors for 1,135 tons of gherkins; 53 contracts have been signed between collection centers and producers; and one contract was signed between a processor and one female producer.

- **At least one study tour for at least 20 participants organized**

A study tour to Macedonia was organized for representatives of two collection centers, “EuroTac” from Mamusha and “AgroCelina” from Rahovec, and producers. The main objective of the study tour was to understand the supply system of gherkins in Macedonia and to learn from experiences there. The representatives also visited a large collection center, “AgroFructus” in Strumica. The visit significantly increased the awareness of the utility of pack houses and collection centers.

The NOA program supported a visit to a trade fair in Konya, Turkey. Various partners involved in the gherkin VC and vegetable sector were direct beneficiaries of this support, including the association of vegetable producers in Mamusha and an input dealer and a manufacturer of greenhouses. During the four-day activity, the group visited demonstration plots of peppers, gherkins, cabbages and tomatoes, as well as displays of various suppliers of inputs and machinery. The visit stimulated at least one input supplier to establish his own trial center for tomatoes, peppers and cucurbits. NOA supported this initiative by providing interns to routinely collect data for end-of-season evaluation.

OBJECTIVE 2: AGRICULTURE PRODUCTS DIVERSIFIED AND INCREASED

INCREASE MARKET SHARE AND EXPLORE EXPORT MARKETS

BENCHMARKS

- **At least two study tour visits to processors in Macedonia and Albania**

A marketing visit was organized to Croatia, for four vegetable processors “ABI & ELIF 19” and “EuroFood” from Prizren, “Frutomania” from Gjilan, and “Koral” from Fushe Kosova. The purpose of the visit was to offer processors an opportunity to understand market requirements in Croatia and to build market linkages with Croatian market actors. The visit was organized by the owner of a business that acts as an intermediary between Croatian and Kosovo companies. During the trip, distributors and supermarkets chains were visited; in addition, a producer of sweet potatoes was visited. The distributor, “Euro Adria Logistika,” showed interest in Kosovo’s “Frutomania” juices, which could be distributed through hotel, restaurant and catering (HORECA) market channels in Croatia.

- **At least two regional buyer visits to individual processors in Kosovo (dedicated B2B visits)**

As a result of the marketing visit to Croatia, a Croatian food distributor, “Euro Adria Logistika,” visited the Kosovo-based processor “Frutomania” to determine the capacities of the company and collect samples of its products for market testing. Due to bureaucratic procedures in Croatia (especially after Croatia joined the EU) the first shipment of “Frutomania” products to Croatia did not take place and the tourism season 2013 has been lost; however, both partners have been

working to prepare for next season and are hopeful for excellent market opportunities for “Frutomania” products in Croatia.

- **Participation in at least two regional fairs for at least 20 participants**

The program supported the visit to Novi Sad ag fair for four processors, five producers and two staff members. The main purpose of the visit was to offer an opportunity for NOA beneficiaries to attend the fair (the largest in the region) in order to build new market linkages or to renew old linkages. The main benefit of participation in this fair was contacts developed with equipment suppliers.

- **At least two new contracts concluded for regional supply**

Despite efforts to improve linkages to regional markets for gherkins, no new contracts with regional buyers have been entered into by NOA gherkin producers or processors during this year.

- **At least 20 female and minority farmers plant five hectares with gherkins**

Women’s groups in different regions of Kosovo have been contacted to identify female farmers interested in gherkin production. Women who were involved in the project’s 2012 gherkin program were also visited to explore their ongoing interest. Ten women and 10 producers from minority ethnic groups were identified and supported to establish four hectares of demonstration plots for gherkins. Inputs were distributed by the input dealer “Jonathan” as the most competitive supplier. Three intern advisers were engaged to provide continuous advice to the producers. The lists of women and minority producers are as follows:

Women		Minorities	
Name	Place	Name	Place
Muradie Ramadani	Krusha e Madhe	Lukic Miroslav	Hoqa e Madhe/Rahovec
Fahrie Hoti	Krusha e Madhe	Nasip Shala	Mamusha
Advie Duraku	Krusha e Madhe	Emin Butuq	Mamusha
Verica Milosevic	Partesh	Ismajl Mazrek	Mamusha
Arbenita Abazi	Gjylekar, Viti	Dejan Nojkic	Mogilla/Klllokot
Mejreme Abazi	Gjylekar, Viti	Zivojin Palosevic	Mogilla/Klllokot
Shkurte Ademi	Hence, Fushe Kosove	Gradomir Zivkovic	Budriga/Klllokot
Nurie Gashi	Bellacerk, Rahovec	Ivan Jovanovic	Budriga/Klllokot
Elvane Gashi	Bellacerk, Rahovec	Zoran Jovanovic	Partesh
Besiana Gashi	Bellacerk, Rahovec	Goran Nojkic	Mogilla/Klllokot

Due to bad weather in the spring, the start date for the planting of gherkins was postponed; however plants developed well later in the season. The first sales of gherkins took place by the female producer Nurie Gashi, who sold gherkins to the processor “R Company” from Gjakova, with which she had signed a contract. All of the gherkins from female and minority demonstration plots were sold to wholesale traders in city markets. Although NOA provided assistance to build new market linkages, in the majority of cases, targeted producers sold their gherkins to linkages and through channels they had established prior to receiving NOA assistance as production volumes were small due to the limited size of planted area.

- **At least one new minority area begins contracting supply to processors**

Minorities in different regions of Kosovo were contacted to identify producers with potential for gherkin production. The processor “Koral” signed five contracts with producers representing minority groups from Klllokot. Producers from Mogilla organized in an informal group, which supplied smaller than anticipated quantities of gherkins to the processor “Koral” because the firm processed lower levels of product than anticipated. Sales to the open market off-contract dominated this group’s activity during the production season.

OBJECTIVE 3: FOOD AND QUALITY SAFETY IMPROVED

THROUGH INCREASED PROCESSOR KNOWLEDGE OF FOOD TECHNOLOGY

BENCHMARKS

- **At least 30 interns engaged by five processors as agronomists, food technologists and laboratory personnel**

Six processors—“Abi&Elif 19” from Prizren, “Ask Foods” from Gjilan, “Moea” from Gjilan, “Etlinger” from Shtime, “EuroFood” from Prizren and “Koral” from Pristina—submitted grant applications for co-financing interns in positions of food technologists and lab technicians. Out of six applicants, five processors ultimately hired the interns; however, all of them had difficulties identifying suitable candidates, especially as food technologists. As expected, graduate candidates on the market had little to no practical experience. As a result, firms had a difficult time justifying hiring individuals (even university graduates) without experience. One processor, “Ask Foods,” could not identify any suitable candidates; planned support to the firm in this particular area has been cancelled.

The processors “Frutomania,” “Etlinger,” “EuroFood,” “Abi & Elif” and “Koral” have fully utilized the interns to help improve the quality of their products. Interns have adapted very well into the structures of their host companies and processors have expressed satisfaction with the intern support provided and feel more confident in their ability to increase production capacity. They are likely to retain the services, self-funded in the new year. One intern has already received a full-time commitment at a salary higher than his entry level.

- **At least five training sessions for food technologists and laboratory interns provided**

The lab technicians hired by the processors concluded a five-session capacity building training provided by the local pharmaceutical company “TrePharm.” The training included instruction on the theory of quality systems in industry as well as on standards, procedures and equipment for quality control. The training also covered physical, chemical and microbiological practices in the food processing industry. On Sept. 23, at “TrePharm,” 13 lab technicians (lab workers and food technologists from the private sector and the Kosovo Food and Veterinary Agency) were certified on best laboratory practices. In a small ceremony, the certificates were handed out to the newly trained technicians by the Minister of MAFRD, Blerand Stavileci; the owner of “TrePharm,” Mergim Prishtina, and the NOA Chief of Party (COP), Mark Wood.

ASPARAGUS

Top 10 Performance indicators

1. 10.5 hectares of asparagus established to date
2. Production over initial two vegetative seasons shows strong growth
3. Two commercial nurseries excel at asparagus crown production from seed
4. At least one seed procurement made by nurseries without project intervention
5. Strong producer interest in increasing area under asparagus
6. First commercial harvest set for March/April 2014
7. Local market beginning to anticipate Kosovo production
8. Four agronomists now specialize in asparagus production in association with international STTA and local experts
9. Local expertise now available on production practice
10. At least one Europe-based buyer has expressed interest in the Kosovo harvest

OBJECTIVE 1: PRODUCTS AND FARMERS LINKED WITH MARKETS

BENCHMARKS

- **At least three supermarkets/hotels/restaurants will be linked with producers of asparagus**

The first harvest of asparagus from the 3.5 hectares established in 2012 is planned to be a short, one-week season with no more than half a metric ton of harvest. Full-scale commercial harvesting will occur in Y4 (2014). Field inspections have shown good growth and indicate an earlier-than-projected semi-commercial harvest, in April/May of 2013. However, since the volume would have been small, a decision was made not to harvest at all, but rather to allow the plants to generate additional fern to increase the potential for the 2014 commercial harvest. There is strong interest from high-end outlets in the projected local harvest, but significant work needs to be done to ensure a smooth linkage between production and market early in 2014.

- **At least one B2B event will be organized for the identification of new marketing channels**

The B2B event organization was postponed until FY4 as a result of the very small harvested quantity since this activity was closely related to the harvesting of asparagus. The event will be timed at least one month prior to the commercial harvest next year. The expected quantity of asparagus in FY4 is a minimum of 10,000 kilograms. Despite this postponement, the B2B event conducted by NOA earlier in the year targeting processing firms, elicited interest in the upcoming harvest. At least one European buyer indicated a willingness to purchase the whole Kosovo crop for the Swiss diaspora market. This interest will be followed up closer to the time of harvest.

- **At least one promotion day will be organized drawing 100 participants**

An asparagus promotion day to promote the initial harvest of the established seven hectares has been postponed until 2014, to coincide with the first commercial harvest. This promotion will still involve potential new farmers, market actors currently involved in asparagus import, as well as students and interns involved in the sector.

- **At least 500 asparagus promotion leaflets will be printed**

Preparation of the 500 asparagus leaflets is complete and distribution will be linked to the above-proposed event. The leaflets will be printed one month prior to commercial harvest next year. These leaflets will promote Kosovo's asparagus production, qualities anticipated as well as post-harvest handling and market timings.

OBJECTIVE 2: AGRICULTURE PRODUCTS DIVERSIFIED AND INCREASED

BENCHMARKS

- **At least 15 asparagus producers will be trained on managing transplanted asparagus**

STTA Farmer-to-Farmer volunteer, Robert Morris came to Kosovo in June 2013 to provide advice, give presentations and train framers on maintaining their newly established asparagus plots and to train new farmers on the transplanting of asparagus crowns. The advisor conducted field trainings on weed control for 11 asparagus growers and for another 20 interested stakeholders. He also updated the asparagus production manual, addressing production, harvesting, postharvest and marketing issues. A PowerPoint presentation accompanied this manual for training Kosovo producers. The updated manual was translated into Albanian and delivered to 11 asparagus growers to update their knowledge. It will serve as a valuable tool as the industry grows.

- **At least two new asparagus producers will be identified to establish new areas with asparagus**

Five new asparagus growers were selected to establish an additional seven hectares of asparagus during FY13. The growing areas are located in four municipalities: Istog, Kamenica, Vushtri and

Pristina. Two producers were selected for two hectares each and the three others for one hectare each, for a total of seven hectares.

- **At least seven hectares new asparagus plantings will be established**

Crown production needed to establish seven hectares of asparagus was contracted in July 2012. The two nurseries contracted have performed well. October 2012 marked the first frost in Kosovo for the 2012/13 winter season and NOA staff ensured that the crown production areas totalling 9,000 m² were adequately covered with insulating materials to guarantee effective wintering-over. The success of commercial crown production as well as the first successful wintering-over was encouraging. Due to the wet unseasonal weather conditions in June 2013, the transplanting of asparagus seedlings started late in June 2013.



Asparagus fern showing excellent annual growth

By the end of July, a total of five hectares of asparagus were transplanted in the Istog, Vushtrri and Kamenica areas. The Agro Serra nursery delivered the entire contracted quantity of asparagus crowns, which yielded 3.5 hectares planted in transplanted asparagus. The Fidanishtja e Godancit nursery was not able to deliver the contracted quantity of asparagus crowns, effectively delivering only 50% of the contracted quantity. Based on field inspections, the crowns were damaged by heavy rains that flooded a portion of the nursery area. The nursery agreed to produce seedlings for the remaining quantity of asparagus crowns, which were delivered to the beneficiaries in the first week of September 2013. The nursery made seed purchases independently, from the USA, without project intervention. All expenses for reproducing the asparagus seedlings were covered by the nursery itself. The transplanting of 7 hectares was completed in the third week of September 2013. Maintenance of the newly established seven hectares was monitored by technical staff and local STTA engaged by the program.



Asparagus field in early autumn with excellent potential to yield next spring

- **At least 10 new jobs will be created**

Since the full production cycle has not been documented, it remains too early to determine FTE requirements for the crop. NOA costs of production models indicate 0.1 FTE/hectare for establishment per year, but up to 0.9 FTE/hectare when the crop is in full production. On this basis, established crop (to date) will require ultimately 10 new FTE positions.

- **At least four agronomists will be trained on growing technology and plant protection (IPM implementation)**

Four agronomists interested in updating their knowledge on asparagus growing technology attended trainings and field visits during the international STTA mission in Kosovo in Q3. Working in collaboration with the local STTA, they learned more about how to manage established asparagus plots. Maintenance of asparagus plots started in March 2013 with weed control, pest and disease management, irrigation and fertigation, and continued through October 2013. Local STTAs were responsible for advising and conducting trainings for asparagus producers as well as for interested new agronomists. New agronomists have joined field visits with local STTA to the growers and advised on land preparation, IPM, transplanting and irrigation. Local STTA worked closely with NOA technical staff and with international STTA engaged for 14 days during June 2013.

OBJECTIVE 3: FOOD QUALITY AND SAFETY IMPROVED

BENCHMARKS

- **At least 10 producers will be trained on post-harvest and food safety**

The training of asparagus producers on post-harvest activities was planned to be organized at the farm level using the lettuce post-harvest line established in Mitrovica as an example of the requirements for asparagus post-harvest handling. Training of asparagus producers is related to the harvesting period for the asparagus crop, which will start in April 2014. The training has been postponed until FY4 when the commercial harvesting of asparagus will begin. The post-harvest training will be given by an international STTA and will emphasize spear selection, post-harvest cold chain management, packing and presentation.

- **At least three asparagus producers will be supported in packaging and labelling of asparagus**

The activity has been postponed until FY4 when commercial harvesting of asparagus will begin.

MEDICINAL AND AROMATIC PLANTS, INCLUDING SAFFRON

Top 10 Performance Indicators

1. €380,000 in cultivated MAP sales generated, 100% dedicated for export
2. €10,000 generated by saffron sales to local and small export markets in France
3. Switzerland identified as a market for Kosovo saffron but at a price point lower than farmers will currently accept
4. Saffron detailed cost-of-production study indicates unit cost of production at less than €2 per gram when yields exceed 3,000 grams per hectare
5. New drying system introduced to Kosovo MAP sector resulting in 50% energy saving
6. Drying system begins to be adopted by other growers and is receiving support by GoK grants
7. 61.5 hectares cultivated herbs established during the year, or more than double project target
8. Eight new MAP crops under cultivated production
9. New harvesting technology introduced and adopted by cultivated MAP producers
10. Twelve new contracts signed for sale of Kosovo-cultivated MAP products into the EU

OBJECTIVE 1: PRODUCTS AND FARMERS LINKED TO MARKET

BENCHMARKS

- **Value of sales contracts increased by at least €500,000 Euros (\$640,000) from cultivated MAP**

The cultivation herb season in 2013 was more than successful. Crucial improvements have been made in increasing cultivated areas, involving a larger number of farmers in cultivation, improving crop management (seeding and post-harvest technology), and achieving a much higher efficiency in both harvest and post-harvest processes. This is predominantly attributed to new investments made in the area of harvesting and drying equipment. These new investments and technologies were proficiently coordinated with powerful market promotion of the cultivated herb products. This included identifying processing companies from the EU (Germany, Austria, UK) and organizing their visits to Kosovo to meet with local herb processors. The contacted EU buyers are new companies already familiar with Kosovo-grown cultivated herbs (chamomile in particular). €300,000 in cultivated chamomile sales were recorded this season with an additional €80,000 in other cultivated MAP products bringing the total cultivated MAP sales to €380,000 or 76% of the target.



This season's quality chamomile crop

- **At least 15,000 Euros (\$19,200) saffron sales through the MAP marketing channels achieved**

Saffron sales are small but ongoing. The efforts on the international market are related to opportunities in the U.S., Italy and Switzerland followed by local market demand. Investigation of the U.S. market, with the support of an international marketing consultant, Peter Furth, is concluding, with small niche markets being identified. The quality of Kosovo product has been confirmed as high in the U.S. by independent laboratories but price points seem lower than generally anticipated by growers. Farmer price expectation remains an issue as Kosovo product enters established markets and cannot demand price parity with established suppliers. To date 1.239 kilograms were sold during 2013, 639 grams of product have been sold on the local market at a price of €7.93 per gram with an additional 600 grams sold in France. This local market price unfortunately does nothing to bring bulk pricing expectations in line with market reality.

- **At least two new contracts signed for EU export of various MAP products**

As already reported in Q3, this benchmark continues to be very successful with continued high interest in Kosovo's cultivated MAP production. Twelve (12) new contracts have been made with EU companies for sales of cultivated MAP crops. Many have already increased their initial orders. International buyers made multiple in-bound visits, during which they expressed satisfaction with production, processing, traceability and the overall quality of products. Most of these visits were made at peak season, during the months of May, June and July, and were successfully hosted jointly by APS, Driardi and other herb cultivators in the region.



A new buyer from the UK expresses satisfaction with Kosovo's oregano crop.

- **At least three exporters participate in the ‘BioFach’ fair**

NOA program support to Kosovo MAP producing companies to enable their attending the ‘BioFach’ fair is probably the most significant annual marketing activity for MAP products. This event effectively opens doors and links Kosovo MAP producers to buyers in the EU. During Q2, NOA supported attendance at the fair for all saffron producers represented by the New Venture saffron producer and for APS, NOA’s main cultivated MAP producer. It was this fair attendance that prompted the rapid, increased interest in Kosovo’s cultivated MAP products.

- **At least two EU buyers conduct inbound visits to cultivated MAP producers**

There were 10 in-bound visits made by interested EU buying companies. They visited APS, Driardi, cultivated herb fields and the collection centers. The timing of the visits coincided with the production and harvest periods, and clients had a perfect opportunity to see full fields with new plant materials, the newly established dryers, new harvester and mowing technology, and full collection centers. In early May, the ‘Martin Bauer group’ and ‘Weleda’—two companies that already had trading relations with APS—started their seasonal visits. Both companies increased their demand for collected and cultivated herbs, beyond the existing contracts, by contracting an additional 10 hectares of organically cultivated lemon balm for the coming season. Two very successful visits have been hosted for companies that visited Kosovo for the first time during mid-May, including representatives of the Czech-German company ‘Extravit’ and the UK’s ‘The Organic Herb Trading Co.’ The program initially came into contact with these companies while participating at the BioFach fair during Q2, and they were significantly impressed with the production capacity in Kosovo, the process capacity and the quality of product coming from cultivated fields and from existing wild harvest collection centers.



‘The Organic Herb Trading Co.’ managing Director Mike Brook visiting the APS plant.

The visiting companies collected all necessary information about the capacity of Kosovo producers/collectors, sales values and samples of all herbs and will initiate purchasing from Kosovo.

- **At least one new market contact generated for Kosovo saffron**

NOA was able to identify new markets for Kosovo saffron. Several new market linkages were created even though sales still represent symbolic amounts: total sales for this year were 1.239 kilogram, with 639 grams sold in the local market at a price of 7-10 Euros per gram, farm gate price. This is a very high price that is unlikely to be met by prices for volume export sales. In comparison, Greek red saffron, which has a good market presence, is selling for between 6 and 7 Euros per gram. During Q4, 600 grams were shipped to France by three farmers at a price still to be finalized, since delivery was for forward sale, without price commitment.

The list of buyers to date is provided below:

- a) Bio Natural, a Pristina retail shop with a focus on medical aromatic plants;
- b) Tregu i ri i gjelbert, a retail supermarket known for stocking fresh produce and small amounts of product;
- c) Albi Mall – Veternik, a large mall-based supermarket;
- d) The Swiss Diamond hotel;

- e) Several restaurants and cafes (Mansion, Baron, Kongo Bar);
- f) Several other individual buyers.
- g) France (NOA farmer's partner)

NOA facilitated several B2B meetings that brought together farmers/producers and representatives of local hotels and restaurants. Local bulk consumers of saffron usually buy low-quality powdered saffron at €3 per gram, while Kosovo farmers intend to market their high-quality saffron at €8 to €10 per gram. This situation needs to change in order to stimulate increased local demand for local product. Farmers will need to modify their expectations and local customers that buy in volume will have to be persuaded that better quality saffron is better for their business. Swiss Diamond did, however, buy 14 grams of local saffron at 7 Euros per gram, despite having imported saffron in stock, following a promotional event organized by NOA on Dec. 19, 2012.



Local saffron promotional event held in Dec 1012 – the head chef of the Swiss Diamond Hotel presents his creations.

A marketing visit to Swiss markets later in Q3 identified at least four Kosovo Diaspora importers who could potentially purchase the Kosovo crop depending on price (see details below). Niche markets in the U.S. have also been identified but price point remains the issue.

In Q4, NOA had several meetings with a potential collector/buyer pair from Belgium, Anita Vankan and Arber Gerlica. Their initial plan was to cultivate saffron on their own, but after they found out that there is some quantity available from local farmers, they decided initially to propose collecting fresh-cut flowers and paying €2 per 200 flowers (estimated to produce 1 gram of dried final product). NOA facilitated individual and joint meetings with the farmers and despite what appeared to be a good offer only one or two smaller farmers were willing to cooperate. Farmers still think that despite slower sales, they are selling at a better price by marketing on their own into the local market.

- **At least two farmer field days held with potential saffron growers from high-altitude target areas**

During Q3, the program identified the community of Dragash as showing potential for high-altitude saffron production in Kosovo. The soil condition is excellent as is the climatic environment. All farmers rely on wild harvest medicinal and aromatic plants and the opportunity to establish many small saffron growers is excellent. However, the capacity to aggregate product is a critical component and prerequisite to successful expansion of saffron production and marketing in Kosovo. Hit Flores, a Dragash-based processor of wild medicinal and aromatic plants, is interested in expanding saffron production but is totally committed at this time to the expansion of its *wild* harvest product (as opposed to cultivated production of saffron). Hit Flores continues to have limited management time to commit to this new crop and it remains to be seen if high-altitude production will be possible.

- **At least 20 new farmers from high-altitude areas agree to adopt saffron production in the new season**

This is a challenging benchmark. High-altitude production represents a good opportunity for the crop and could provide good income opportunities, especially for women, in Dragash. NOA is continuing to seek partnerships with NGOs and projects interested in active promotion of micro-scale production in these high-altitude areas. Discussions were held with Caritas during Q3, through its head of mission to Kosovo, Kreshnik Basha. While Caritas is active in remote communities and has expressed interest in working with NOA, still no progress was made during Q4 in consolidating interest in high altitude production, and given the still nascent marketing opportunities for Kosovo saffron, this development seems unlikely at the moment.

SAFFRON

• Marketing and sales activities in local markets

- Branding and labeling for seven farmers was designed, including a product brochure (English and Albanian) which continues to be featured in promotional activities. This branding gave growers an opportunity to see what sort of efforts are required for more effective marketing and may pave the way for growers to eventually come together under one label to facilitate export effectiveness.
- A saffron recipe brochure was designed and printed to enlighten consumers about cooking with saffron. It was distributed to all retail shops that sell local saffron.

• Marketing and sales activities in foreign markets- Switzerland

In order to intensify activities aimed at finding new markets abroad, NOA organized a visit to Switzerland during Q3. The aim of the visit was direct promotion of local saffron to Albanian restaurant owners in the largest Swiss cities. As the quantity of local saffron available is relatively low for negotiation with big importers/buyers, the program is seeking to contract directly with smaller/buyers, targeting, in particular, Kosovo Diaspora-owned hotels and restaurants.

Summary of findings: More than 25 contacts/meetings with main actors: big and small importers, food distributors, exclusive hotels, restaurants, Kosovo embassy, journalists and other influential people within the Kosovo diaspora community were conducted.

There are three main channels for penetrating the Swiss market:

1. Kosovo diaspora hotels/restaurants accessed via the establishment of a new Kosovo importer/distributor that will buy Kosovo saffron at moderate prices;
2. Existing big importers (mainly Swiss companies) that will buy at a relatively low price;
3. Direct-targeting exclusive retailers through a new or existing importer/distributor that will buy at a better price.

The visit identified two potential Kosovo importers: 1) RB, Rexhep Berisha, Peja Beer importer and; 2) ALBGROUP, Erhamer Selmani, which imports high-quality olive oil from Albania. Both are interested in developing the market for saffron and facilitating its distribution. However, each of them requires that they become the exclusive importer of Kosovo saffron – an arrangement that requires further examination in order to determine whether this would prove advantageous for Kosovo sellers.

Two existing (Swiss) saffron importers were also identified. The first of these is “Aquila” which has been importing saffron for Swiss wholesalers and retailers since 1917. As Aquila shipments average 50 kilograms or more, it was not very interested in the limited quantities that Kosovo is yet able to offer and it was not willing to pay a high enough price for the quality differential Kosovo offers. A second, recently established saffron importer, Marco Maruccio, imports smaller shipments of a minimum of 2 kilograms, and was in fact interested in cooperation with NOA farmers.

Pricing, packing and import countries: Prices quoted by potential buyers in Switzerland were much lower than expected (lower than farmer's expectations), as detailed below:

The *wholesale import price* in bulk (direct importers) is from 0.70 EUR- 2.0 EUR/1gr. Certified saffron from Spain is imported for 4-5 EUR/1 gr but it is well positioned in the market.

The *supply price for restaurants/hotels* is from 4.5-7 CHF/gram. This equates to 3.25 EUR -5.7 EUR/gram. The typical packaging for restaurants is in 20-25 gram glass jars.

The *supermarkets/retail price* is 10 CHF/gram (8.11 EUR/gram. but here it is packed in smaller packages of 350mg-400mg and 650 mg. Import countries include Spain, Iran, Morocco, Greece, India and Italy.

Demand: When meeting with Kosovo restaurant owners, all of them showed interest in local saffron but expressed that the price must remain the same as or lower than their current suppliers who sell at 5 EUR /7 CHF/gram (delivered price after all logistics and clearance charges). Current demand as a result of NOA visits/promotion is around 1-1.2 kilogram, which can be shipped directly after an importer is identified. Potential buyers include the following:

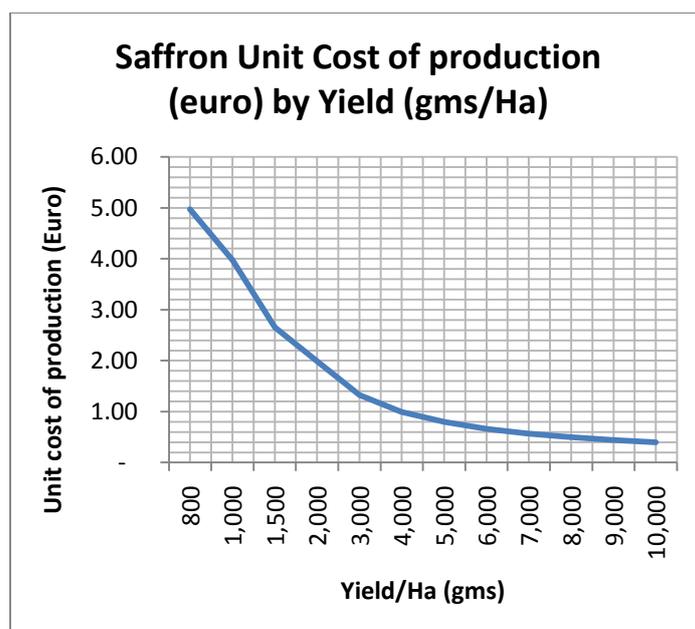
- Il Postino, Zurich - 500gr
- Stella del Centro, Winterthur - 300gr
- Swiss Diamond, Lugano - 300gr
- Walden Hotel, Davos - 50gr
- Il Pantheon, Zurich – 200gr (perhaps)

Program-supported farmers have very high expectations concerning saffron pricing. Several hundred grams were sold in Kosovo at between 6 EUR-10 EUR/gram due to linkages created by the NOA program. Their expectations for foreign markets were even higher (price). The trip to Switzerland indicates that wholesale export price cannot realistically exceed 2 EUR/gram. What remains is to convince our farmers that their expectations are too high for new entry into the wholesale market. This is challenging and farmer's tendency is to store the product until they can obtain a higher price (without due consideration for the fact that the price sought may not be feasible).

Challenges & Next Steps: The key problem to marketing Kosovo saffron is pricing. Farmers expect nothing below 5 EUR/gram while the market price of import in Switzerland is 2 EUR/gram (FOB Kosovo). If farmers ultimately agree to the going market price (2 EUR/gram), the program will be able to follow up with the existing and new contacts in Switzerland and initiate an initial shipment of 1-1.2 kilogram of saffron demanded by Kosovo restaurants owners in Switzerland. Thereafter farmers, assisted by the program, could continue to develop new sales channels focusing on higher prices, exclusive retail shops and hotels/restaurants, through an importer. Identification of the appropriate importer is another key step to move toward the Switzerland market.

After program debrief with farmers on findings from Switzerland market research and cost benefit calculation on saffron production, farmers remained uninterested to export at a price of 2-3 EUR/gram to Switzerland.

NOA will continue to explore other regional markets, where we can take advantage of proximity and direct contacts to potentially realize higher farm gate prices. Work during the year confirmed the details regarding the cost of production of saffron. The following figure highlights the nature of the relationship between yield and unit cost of production.



It is clear that at a yield of between 3,000 and 4,000 grams per hectare, the unit cost of production for saffron is under €2 per gram. The project will continue to work at highlighting yield performance and corresponding price point to improve opportunities for sale outside the present unrealistic price boundaries set by growers. Second year harvests should bring yields above 3,000 grams per hectare.

OBJECTIVE 2: AGRICULTURAL PRODUCTS DIVERSIFIED AND INCREASED

BENCHMARKS

- **At least four regions identified for cultivation of MAP**

Program activities continue to increase cultivation capacities in four already identified regions and other areas that have shown an interest in MAP cultivation. The four regions are Istog, Gurakoc, Lipjan and Vushtri. Other regions/municipalities such as Rahovec, Theranda and Prizren have been regularly visited to discover possible herb cultivation activity amongst farmer producers there. In the four identified regions, NOA continues to work in each of these target zones to promote expansion of cultivated MAPs through direct visits to farmers and farmer cooperatives, discussing herb cultivation possibilities and perspectives.



Cultivated lemon balm and oregano fields.

- **At least 25 hectares of herbs cultivated, involving at least 20 farmer/producers**

61.5 hectares of cultivated herbs have been established to date. The areas established and maintained during Q1 and Q2 are highlighted in the table below (no plantings were established beyond Q2):

Crop	Area Established (hectares)	Municipality/location
Chamomile	38.0	Istog (3 locations)
Menthe	2.8	Lipjan and Raushiq
Marshmallow	3.0	Vushtrri
Melissa	1.5	Istog
Oregano/Sage/Thyme/Parsley	16.2	Istog, Lipjan and Krusha
Total plantings year to date	61.5	

- **At least one new herb dryer established in the production regions**

The project’s successful assessment of the capacity of a local company, “Montkomerce GZ,” to design new water-heated technology drying systems with specifications ideally suited to MAP processing resulted in the establishment of two new dryers to support cultivated MAP production. This valuable cooperation and experience has been welcomed by MAFRD, which is now willing to support dryer introduction throughout Kosovo, using these new technologies. The new technology requires 50% less energy than the old systems and produces a superior quality product. Both APS and Driardi have expressed satisfaction with the new technologies and this, in combination with strong buyer interest, is encouraging increased MAP plantings in the new year.



New dryers in action for chamomile

- **At least one new herb (chamomile) harvesting machine in place**

The procurement procedure for purchasing of the harvesting machine was completed on time, in May. When the machine reached Driardi it was successfully tested prior to operation. As seen in the photographs below, the chamomile harvesting machine was fully functional at Driardi during the 2013 chamomile harvest. According to the grantee, the new machine/technology has significantly improved the harvesting and mowing of chamomile fields. It is more efficient, and the crop quality is higher due to the more advanced picking and mowing techniques offered by the equipment.



Chamomile harvesting machine

- **Production guide established for at least three cultivated MAP products**

Production guidelines have been prepared for chamomile, mentha (Mint) and marshmallow and are ready for training of new growers.

OBJECTIVE 3: FOOD QUALITY AND SAFETY IMPROVED

BENCHMARKS

- **At least 20 growers begin the process of organic certification.**

NOA finalized the organic certification process with four saffron producers during Q3. Certificates were issued in Q4. Their plots are in good condition and fulfill the elementary criteria for the certification process. The first two areas of saffron production that started the certification process are located in the villages of Cermjane and Krusha e Madhe; two other areas, in Bunjak and in Novoberde, followed during Q4.

- **‘GlobalGAP’ standard initiated with at least 2 cultivators of MAP**

Due to the pressure of modifying production technologies with new plantings and harvesting operations, GlobalGAP certification of MAP products did not take place during this work plan year.

FIELD VEGETABLES

Top 10 Performance Indicators

1. Farmers and processors sign 513 individual contracts
2. 7,735 metric tons field vegetable product contracted with Kosovo processors
3. 11 EU-based, diaspora-owned food distribution companies sign 24 contracts with processors and collection centers
4. Kosovo fresh product well received in new Scandinavian markets
5. Fruit and vegetable association PePeKo formed and begins to standardize bulk-product packing standards in country
6. 3,000 metric tons of fresh peppers and cabbage exported to the EU with a value of €1.2 million
7. Total revenues generated by field vegetable sales exceed €3 million, with more than 10,000 metric tons in sales.
8. 10,000 mt in sales realized
9. New *feferoni* pepper variety successfully introduced to Kosovo producers
10. Farmer-to-Farmer volunteer provided one-on-one support to four processing firms

OBJECTIVE 1: FARMERS AND PRODUCTS LINKED WITH MARKETS

FACILITATE THE DEVELOPMENT OF LINKAGES BETWEEN SECTOR STAKEHOLDERS

BENCHMARKS

- **Create at least 4 linkages between producers, collection centers and processors**

In Q2; seven (7) fruit and vegetable collection centers, including minority producers from Mogilla and Klllokot, along with eight (8) processors all benefited from the programmed cultivation promotion organized and supported by NOA. The promotion all together included 420 farmers during Q1 and Q2. NOA prepared the format for contracts specifying delivery of product to collection centers and processors. Kelmendi GmbH signed a contract with Agrocelina, Xerxe for a total of 2,510 metric tons of product (1,750 metric tons of vegetables and 400 metric tons of fruit) and, by late March, concluded 20 contracts with individual farmers in the Peja area for 360 metric tons of “Somborka” variety peppers. Fifteen (15) farmers involved in these contracts represent Ashkali and Roma minority populations. In addition, Agrocelina concluded a contract

with ABI & Elif for the commercial cultivation of 10 hectares of the industrial “Hypell” tomato variety, with the contracted volume depending on yield but with a commitment to buy at least 800 metric tons. Rizona concluded a contract with the women’s association “Fatjona” in Baja e Malisheves for 40 metric tons of vegetables for processing and with individual farmers for a further 360 metric tons of peppers for processing. Ask Foods concluded its first eight contracts for 1,500 metric tons of vegetables from the Klllokot and Gjilan areas, 30% of which engaged Serb minorities; the firm’s contracting for peppers in the Anadrini area continued. Ananas Impex concluded contracts with 13 farmers for the HS6 spice pepper variety for industrial cultivation; those 150 metric tons will substitute imports from Macedonia. By the end of Q4, the total contracted volume of field vegetables amounted to 7,735 metric tons, delivered via 513 contracts, and valued at approximately €1.9 million at farm gate.

- **Facilitate at least 2 linkages between Kosovo and regional/EU processors**

During Q2, with planning beginning even earlier, NOA supported an outbound marketing trip by the Rizona processing company to eight (8) food distributors in Finland, Sweden, Germany and Switzerland to test the possibility of a new market for “kebab” variety peppers and other processed vegetables. In planning to enter this market, Rizona provided enough seed to local producers to plant 2 hectares of “kebab” peppers, marking the variety’s first-ever commercial cultivation in Kosovo. As a result of this business linkage trip, eight food distributors in EU agreed to conclude contracts with Kosovo processors. These include agreements with “Pernionkebab” in Finland for “kebab” peppers and a three-year contract with Kelmendi GmbH for fresh and processed vegetables amounting to up to 400 metric tons in 2013. Encouraged by the success of this business trip, the program concluded that a B2B linkage conference in Pristina would be organized early in Q3.

In Q3, NOA surpassed the targeted number of linkages between Kosovo and regional/EU processors by organizing and supporting a B2B conference in Pristina. This was conducted as a joint event with the Swiss Diaspora for Development Project gathering key Balkan Diaspora food distributors from Sweden, Germany and Switzerland. The conference motto was, “Let’s move forward to change the perception about Kosovo’s agribusiness sector.”

This event, held April 25 in the prestigious Swiss Diamond Hotel in Pristina, brought together 18 food distributors and other business people from the EU and 19 representatives of local fruit and vegetable processors and vegetable collection centers. The two-day market linkage conference led to 11 food distributors from the EU creating 24 linkages (as described below) with Kosovo processors and vegetable collection centers.

Kelmendi GmbH, a Germany-Kosovo distributor of more than 2,400 food articles in EU, capitalized on the Pristina B2B event by achieving the following: 1) Linked with Krusha e Madhe Agriculture Cooperative, agreeing to import fresh peppers from Kosovo during the 2013 season (200 metric tons target volume); 2) Rizona shipped to Germany its first 12 metric tons (valued at €22,000) of processed “kebab” peppers, thereby opening a new opportunity to continue cultivation of this new variety in Kosovo; 3) Kelmendi GmbH began selling Rizona’s “kebab” peppers in the REWE market chain (the second largest German food distributor, with 15,000 supermarkets and 210,000 employees); 4) Kelmendi linked with Babanaj, a fresh fruit and vegetable distributor in Switzerland, to organize the purchase and storage of 300 metric tons of pumpkins cultivated in Kosovo for the Swiss market; and 5) Kelmendi linked with the Adelina food distributor in Sweden to include their Kosovo-origin pepper product lines.

Babanaj GmbH, began during Q4 to buy fresh peppers from the Kelmendi group in Kosovo with the first 40 metric tons successfully delivered.

Pernion Kebab agreed to be supplied with “kebab” peppers and other products from Kosovo through Adelina Co. of Sweden.

Plivit Trade, based in Malmo, Sweden, the largest food distributor for Scandinavia, linked with Koral for the import of 250 metric tons of pickled *somborka* peppers filled with cabbage. It also linked with Ananas Impex for the import of the firm's ground red pepper product. During Q4, Koral agreed to supply an additional 350 metric tons of processed vegetables, which will be delivered in Q1 FY 4.

Adelina, of Malmo, Sweden, a distribution network including 300 supermarkets, established the following linkages: 1) Linked with Krusha Crocus as it is interested in importing all saffron cultivated in Kosovo. Krusha Crocus already sent an offer to Adelina in this regard; 2) Linked with Pestova for the first time to initiate the import of Kosovo-origin Vipa brand potato crisps; 3) Linked with the Rizona and Hosa Fresh (village of Rogova) vegetable collection center for the import of fresh peppers. Adelina agreed to import 200 metric tons of fresh "somborka" pepper, with the first 80 metric tons exported during Q4; 4) Linked with Ananas Impex for the import of pepper spices (1 ton of pepper has already been exported in Sweden as a test). Adelina also has exclusivity for the distribution of Ask Foods products to Sweden/Scandinavia.

Mediterranean Import AB of Goteborg, Sweden, specializing in the distribution of pickled fruits and vegetables for Balkan Diaspora: 1) Linked with MOEA to import of natural fruit juices; and 2) Showed strong interest in Ask Foods products following a visit to this company, but will only import from Ask Foods if it is provided exclusivity clearance, since both MOEA and Ask deliver similar products and need to clarify contractual obligations.

Yazhan, a Turkish food distributor in Stuttgart, Germany, and one of largest food distributors for the Balkan Diaspora in the city, met with several Kosovo companies. Yazhan will send to NOA a plan indicating which Kosovo companies they are interested in partnering to import foodstuffs in the near future. Yazhan is looking to open a market for sliced "kurtoska" variety pepper, exported as semi-processed product from Kosovo to Germany for further processing (the annual export of sliced "kurtoska" from the Balkans to Germany is approximately 15,000 metric tons).

Alban Market, of Lucerne, Switzerland, a fresh and processed food distribution and meat processing company: 1) Linked with Rizona for pickled "kebab" peppers. (Rizona planted 1 hectare of this new pepper variety for the 2013 season); 2) Linked with Ananas Impex to import ground spice peppers; 3) Linked with Ask Foods for the import of Class I apples from Kosovo beginning on January, 2014; 4) Linked with Rizona and has already sent pumpkin seed to Kosovo for the test cultivation of 0.20 hectares of pumpkins for import to Switzerland, as well as import of fresh "somborka" pepper; 5) Linked with MOEA for import of fruit juices; and 6) Linked with Agroprodukti Syne for the import of medicinal herbs and teas from Kosovo.

NTSHMGS, an U.S.-Kosovo investment and trade company: 1) Linked with Koral and is planning to establish Kosovo's first-ever, hectare-sized commercial plot of sweet corn with an eye to targeting import substitution (thus capturing some of the market for sweet corn presently imported from Hungary).

R.B import-export of Basel, Switzerland, a beverage and food distributor supplying 3,000 supermarkets (Coop, Migros, OTTOS): 1) Linked with Ask Foods and is willing to import its products to Switzerland; and 2) Linked with Krusha Crocus, and offered to purchase its saffron; 3) Expressed interest in importing Kosovo's entire asparagus harvest beginning in 2014, with an initial commitment to purchase 10 metric tons.

Drini GmbH, of Rothenburg, Switzerland, a tea and beverage distributor and importer of Jaffa juices from Kosovo, is interested in cooperating with NOA to establish 100 hectares of walnut orchards in Kosovo as a private investment.

Fetaxid, of Zurich, Switzerland, represented by Fehmi Fetahu, head of the Albanian Business Association in Switzerland and owner of a bauxite floor company, delivered professional advice to ABI on constructing a new factory floor using bauxite instead of ceramic tiles.

S.Thaqi-Biel-Solothurnstr. GmbH, of Biel, Switzerland, linked with several Kosovo processors attending the B2B including the owner of COOP franchise food market, with an annual turnover of 20 million CHF. The company is especially interested in Kosovo saffron and is also interested in investing in a fertilizer packaging unit in Kosovo, as a joint investment by three partner companies owned by members of the Kosovo Diaspora in Switzerland.



Dried peppers and fresh somboroka peppers being prepared to supply new export market linkages.

- **Facilitate establishment of the Kosovo Association of Vegetable Processors**

NOA encouraged Kosovo’s fruit and vegetable processors to establish their own fruit and vegetable processor association during Q2. Five of the largest processor company representatives gathered three times during the quarter to hammer out the details of establishing this association. The newly minted association’s name is PePeKo (*Peme e Perime te Kosoves*, or Fruits and Vegetables of Kosovo). The head of the association is Irfan Fusha of ABI & Elif, deputized by Naser Rusinovci of Koral and Alban Ibrahimimi of MOEA as secretary of the association.

During Q4, at the request of the association and in order to begin to standardize the logistics of their trade, NOA supported this association with 375 large plastic bulk crates for fruit and vegetable transport. PePeKo distributed these boxes to its member companies and collection centers. These boxes will form the foundation of the bulk movement of fruit and vegetables in Kosovo and catalyze expansion using this standardized method of bulk packing.

- **Facilitate export of at least 5,000 metric tons of fresh vegetables (peppers and cabbage)**

The Q4 export season was marked by a shortage of peppers on offer due to cold weather experienced early on in the cultivation season. The cold snap caused poor plant stand establishment but increased field prices by at least 20% (up from from €0.20/kilogram in the previous season to €0.25-0.45/kilogram). Any contracts above 1,000 metric tons were not accepted due to this supply situation. A total of 3,000 metric tons of product was exported—falling short of the target.

- **Generate at least 1.5 million Euros (\$1.92 million) in export revenues**

€1.2 million in exports was generated through the following: Agrocelina collection center exported 1,300 tons of peppers at a unit price of €0.40/kilogram or value of €520,000; Krusha e Madhe farmers exported to EU and to the region, the *kurtoska* pepper variety valued at €400,000; Kelmendi GmbH exported 500 metric tons valued at €200,000; other smaller exporters to the EU moved 200 metric tons of peppers and cabbage valued at €80,000.



A happy Kosovo farmer delivering his product to Agrocelina collection center for export to Germany by Kelmendi GmbH.

- **Generate at least 1.5 million Euros (\$1.92 million) in processor revenues**

The processing season ends in November, and final sales values will be reported in Q1 FY4. Indications are that 3,200 metric tons of product was procured by NOA's processing clients for onward processing, which should generate processor revenues in excess of the targeted €1.5 million.

- **At least 4,000 metric tons of field vegetables delivered to processors**

Three fruit and vegetable processors were granted support to establish new modern pack houses by the Ministry of Agriculture. The financial support was initially designed as an advance and then on the basis of reimbursement. Bureaucratic delays manifested themselves during mid-season however and the delay in payments for their co-financed portion by the GoK put severe strain on NOA client ASK Foods. This resulted in the firm's not being able to meet its contractual obligations to farmers. As a result, farmers sold into the supermarket and wholesale market systems. A total of 3,200 metric tons of product was purchased by the processing sector by the project's six processing clients: Ask Foods, MOEA, Koral, Etlinger, Euro Food and Abi & Elif 19.

Facing delays in purchases by processors as a result of the above, farmers sold into the supermarket group Elkos/ETC up to 4000 tons of pepper at a price of 0.35€/kilogram or at a value of €1.4 million and 3000 tons of cabbage at 0.13€/kilogram, for a value of €390,000.

The total field vegetable sales generated throughout the season to date (including limited sales through Q1 FY4) is 10,200 metric tons at a sales value of €3.09 million (at an excellent average blend price of €0.30/kilogram).

- **Export/processor demand study completed**

During Q3, NOA interns prepared a report on market demand for processed fruit and vegetables by examining sales in major outlets in Pristina. The report details the product mix and market share of various products. The intern team presented its results to the NOA technical team as well as to the processor association. This market demand study will be used by NOA in its further work with the field vegetable value chain. The report confirms the volumes of vegetables supplied for processing.

ADDITIONAL ACHIEVEMENTS

Three public-private investment fruit and vegetable pack houses under constructed in Peja, Xerxe and Gjilan are making excellent progress. All projects are behind schedule due to a significant delay in the GoK's releasing the second tranche of funding to the projects to advance construction. This delay was

in excess of 45 days causing significant cash flow issues for the participating firms. The result, in addition to delays in construction, was a reduction in offtake from farmers as company cash flows dried up. Official openings of these premises is scheduled for late October (even though the premises will not be fully operational by then).

OBJECTIVE 2: AGRICULTURE PRODUCTS DIVERSIFIED AND INCREASED

BENCHMARKS

- **At least 4 hectares of planted peppers use module seedlings, drip irrigation and soluble fertilizers for the production of “Somborka” and ”Kurtoska” pepper varieties**

During Q3 and Q4, all four hectares were as planned both planted and harvested. All inputs as part of the NOA grant support were delivered to farmers in three regions of Kosovo. The seedlings were planted in open fields. The farmers used the new technology package and were very satisfied with the results. This will lead to increased extension of the new technologies in the next season.

- **At least 10 hectares of chili pepper (*feferoni*) under production**

Feferoni imports into Kosovo from Macedonia traditionally exceed 600 metric tons per annum. There is nothing to stop Kosovo farmers from growing this product, except tradition. NOA arranged a study tour to Macedonia, to the village of Morutino, where the product is grown.

During Q3 all required inputs were delivered to 50 farmers (each 0.20 hectares) in three regions of Kosovo to support the establishment of 14 hectares of *feferoni*. Poor seedling germination and cold weather reduced effective hectareage to 7 hectares. Three field days were organized in three regions of Kosovo where farmers and processors concluded that chili pepper cultivation is profitable and will be organized on more than 20 hectares. The success of the production was highlighted at a field day held in Henc village, Fushe Kosova. The mayor attended and promised equipment support to the participating women’s group—a promise that he delivered upon immediately. Processors attending field days were able to select product types that they required, and to compete with each other to buy from the current fields.



Chili pepper field day held on Aug. 30 at Valbona Ademi’s property in Henc village outside Fushe Kosova

- **Generate at least 250,000 Euros (\$320,000) in additional sales from new chili production**

The seven hectares yielded 175 tons of fresh peppers at an average price of €0.71/kilogram, generating €125,000 in farm gate revenues.

- **At least 50 new growers engage in chili production**

NOA sponsored and delivered the inputs required for chili production to 50 farmers as reported under the benchmark above. Additionally, 20 farmers were supported with new technologies in the production of *somborka* pepper varieties.

- **At least 30% of new growers will be women**

Women accounted for twenty-six (26) out of the 70 growers involved and supported in introducing new varieties or new technologies in pepper production. Thus 37% of growers were women.

OBJECTIVE 3: FOOD QUALITY AND SAFETY IMPROVED

BENCHMARKS

- **At least 2 NOA processor clients begin the process of HACCP certification**

Three (3) NOA clients are now involved in the HACCP certification process. Koral, Abi & Elif 19 and Agro Serra are all developing HACCP procedures and ensuring that their plants are up to the standard. It is anticipated that Koral and Agro Serra will be certified in late 2013.

- **At least 4 processor firms receive dedicated STTA support**

Four Farmer-to-Farmer volunteers arrived in Kosovo during Q3 to advise targeted companies on processing of fruit and vegetables. Richard Steinfield worked with Koral to advise it on vegetable processing improvements. The second volunteer, Mevlin Roy Farmer, conducted his assignment advising the MOEA juice processing company on improvements in juice and jam processing. The third volunteer, Jeri Rutherford, delivered advice to Ask Foods on GMPs and to Ask Foods team leaders on better manufacturing practices. The fourth volunteer, Richard Steinfield, additionally during Q3 helped ABI with the creation of new new recipes for processed vegetables.

1.3 DAIRY SECTOR

Top 10 Performance Indicators

1. Four dairy processors engage six extension service providers and agree to keep them on staff at their expense in the future
2. Kosovo Milk Producers Association launches its dairy farmer training program
3. For the first time in Kosovo, dairy farmers can carry out artificial insemination on their own milk cow herds
4. The first embryo transfer (ET) dairy calf from the ET program is due by the end of the calendar year
5. Raw milk quality data now delivered automatically by SMS to producers, completing the TRMS process
6. Local dairy product sales surpass imports by value for the first time ever
7. Local product sales growth maintains 36% annual growth rate
8. Local dairy product sales increase by €8.9 million of 2012 performance
9. American Farm school in Thessaloniki provides first training for Kosovo dairy technicians
10. GoK signs administrative instruction permitting small farmers to supply, at an effective zero rate of VAT, processors of dairy and other agricultural products

OBJECTIVE 1: PRODUCTS AND FARMERS LINKED TO MARKETS

BENCHMARKS

- **At least three dairy companies will set up private extension service**

This has been one of the most important critical shifts in mindset for the dairy industry: encouraging dairy processing companies to provide the total package of dairy farm management practices to all their raw milk suppliers, particularly with regard to breeding, feeding, necessary barn management, on-farm milking procedures, and milk quality management. This is the first time that dairy companies have established their own extension services. As a result of the engagement of private extension officers, the Devolli, Euroлона Bylmeti and Ajka dairies have improved their relationships with raw milk suppliers and have indicated that they will engage these extension officers permanently to work with their milk suppliers.

ADDITIONAL ACHIEVEMENTS

At the request of Hatixhe Binaku, the president of the Korenica widows' association, NOA assisted in drafting and submitting a request to MAFRD seeking financial support to purchase a second-hand lacto freezer to enable the uninterrupted collection of raw milk produced by the 40 dairy farmers in the village of Korenica. MAFRD responded positively and provided the funds to purchase the second-hand lacto freezer. NOA also organized two days of theoretical and practical presentations at the Milk Collection Center, on best dairy farm management practices. The main presentation topics were: proper milking procedures, balancing feeding rations and improving dairy cow reproductive efficiency. Eighteen (18) female dairy farmers attended the presentation and were practically trained on how to detect sub-clinical mastitis using the California Mastitis Test.

- **At least six new jobs will be generated**

Six private dairy extension officers from four dairy plants (Bylmeti, Ajka, Euroлона, Devolli) are now delivering full-time extension advice to motivate and support their contract dairy farmers to adopt improved dairy farm management practices in their dairy farm operations.

- **Extension booklet targeting feed management produced and disseminated through processors**

The dairy feeding program affects productivity and profitability more than any other single factor in dairy farming operations. In Q4, the Kosovo Milk Producers Association (KAMP) developed a dairy extension booklet. Its more than 15 dairy feeding ration formulas corresponding to different levels of milk production and different ages of dairy animals. Each ration applies different combinations of forage and malt.

Through municipal agriculture advisors, KAMP conducted seminars on proper dairy feeding using the extension booklet it had developed. These improved feed rations helped contribute to an increased milk supply to the point where it exceeded demand by dairy processors during the summer season. The dairy extension booklet developed by KAMP also emphasized the importance of using premixes in the daily ration. Introducing premixes in the feeding ration will improve production and reproduction particularly on many of the small- and medium-sized dairy farms, where premixes have not typically been used.

- **At least 10 dairy farmers trained through KAMP on AI techniques**

New management of the artificial insemination (AI) system is needed to improve dairy reproduction efficiency in Kosovo. The technique needed to effectively inseminate a cow is a skill requiring adequate knowledge, experience and patience. KAMP in coordination with NOA selected and trained 10 commercial farmers in AI management. These dairy farmers have started to perform AI on their own herds—an absolute first in Kosovo. The training contained the following modules:

General aspects of reproduction, describing the background of the reproductive cycle and details on the reproductive organs; Heat detection, describing how the farmer can detect whether his cows are in heat and whether they are ready for insemination; Semen handling, describing how to handle the semen which is stored in liquid nitrogen prior to the insemination: Timing of AI, describing the optimal timing of the artificial insemination; Insemination, describing the correct insemination technique; and Limitations of heat detection, describing the problems and constraints in heat detection.

There is growing interest among dairy farmers in learning to perform AI on their own dairy herds. Local AI expert, Behlul Behluli, DVM, trained two additional dairy farmers in Q4 who were not selected in the first group of 10 dairy farmers.

- **At least 10 embryo transplant heifers available through Eurolona**

To help promote a sustainable dairy industry, NOA is supporting the introduction of embryo transplant technology in order to develop a heifer-raising program, targeting improved genetics with lower costs and reduced time to first lactation. This program will generate high-quality heifers with superior genetic capabilities that are acclimated to Kosovo, all at a lower cost than imported heifers.

Ten bovine embryos imported from Iowa State University at cost have been transferred into dairy recipient cows at the Eurolona and Rudina dairy farms. This is a first for Kosovo. Dr. Behluli is monitoring the growth of the 10 bovine embryos. The first embryo transplant calf is due in December at Rudina dairy farm. Less than adequate feeding, in some surrogate dairy cows, has caused the embryos to be aborted. He is advising farmers on how to balance the feeding program to enable the proper development of the embryos.

- **Transparent Raw Milk Sampling (TRMS) system delivers quality data by SMS to dairy producers**

Thanks to USAID's persistence and support, delivered through the NOA program, as of Q3 2013, raw milk test results are being delivered to dairy farmers via SMS messaging. This is a first for Kosovo. This is a great achievement, as it enables dairy farmers and dairy plants to act faster in addressing any problems with raw milk quality. This latest technological advance allows dairy farmers to receive raw milk test results from the KFVA (Kosovo Food and Veterinary Agency) national laboratory within 24 hours of their supplying raw milk samples for testing. Once they receive the information on their mobile phones, farmers can plan and undertake immediate interventions to improve the health of their dairy herd, modify the hygienic conditions of their dairy barns and facilities, and adjust feeding levels as needed.

The KFVA, in partnership with NOA, held a public event to highlight the successful implementation of the TRMS project during Q4. Before the national media, the U.S. Ambassador to Kosovo, Tracey Anne Jacobson, Norwegian Ambassador to

Kosovo, Jan Brathu, and Blerand Stavileci, Kosovo's minister of Agriculture, Forestry and Rural Development, emphasized the successful integration of science and technology in improving raw milk quality and the profitability of the Kosovo dairy industry.

The farmer's response: Delivery of Raw Milk Test Results via SMS

Dairy farmers receive timely feedback on milk quality and dairy cow health. Dairy farmer Dukagjin Dedaj displays a message reporting fat, protein, sugar and other milk parameters. Dedaj manages a herd of 52 dairy cows.

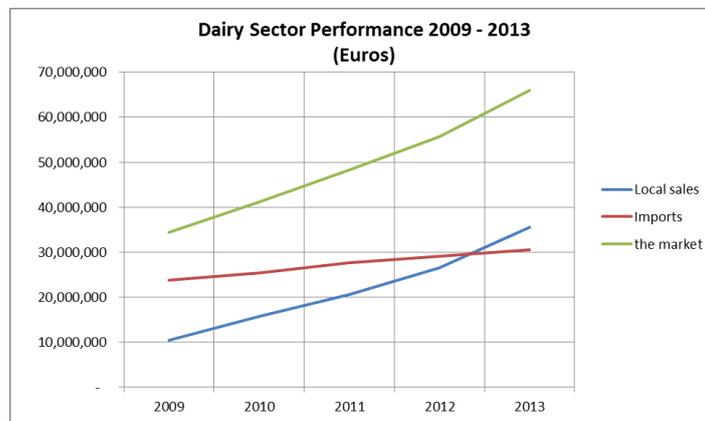




U.S. Ambassador to Kosovo, Tracey Anne Jacobson presenting the launch of the TRMS. Later, visiting the KVFA laboratory facilities with the Minister of Agriculture and Norwegian Ambassador, Jan Brathu.

- **Dairy product sales increase by at least €1 million over current levels**

This benchmark was surpassed in Q2. Sales of dairy products by NOA clients during Y3 increased by €8.9 million compared to the previous year. The dairy sector has experienced remarkable growth during the 2013 project year. This growth is highlighted in the chart below.



For the first time ever, domestic sales into the local dairy market exceeded sales of imported product. This strong import substitution showing is a result of continuous attention to quality, branding and market awareness. Market growth has been a fairly steady at an impressive 18% per annum. Imports have responded to this with an average 6% annual increase in value and, critically, local processors have increased their annual sales into this market by an average 36% over the last five years.

OBJECTIVE 2: AGRICULTURAL PRODUCTS DIVERSIFIED AND INCREASED

BENCHMARKS

- **Fruit yogurt and Gouda cheese with seasoning introduced in the market by two targeted firms**

The limited varieties of locally made cheeses and yogurts are providing foreign exporters with a competitive advantage in the local market. During Q4, a dairy volunteer engaged by NOA, Stephen Morgan (CNFA), successfully completed a hands-on training, teaching the dairy technologist at the Sharri dairy in Prizren to produce Gouda cheese, as well as seasoned Gouda and feta cheeses. The cheese is now being sold in small quantities through selected restaurants in Prizren where, according to Veli Halimi, owner of the Sharri dairy plant, the Gouda cheese with seasonings has been well received. Additionally, Morgan trained the Sharri technologist how to mix fruits with yogurt. However, the production of fruit yogurt will not commence at a commercial scale since the dairy's production line requires further investment in order to realize

the benefits of diversification. Two processing companies, the Sharri and Rugove dairies, have launched the production of Gouda cheese with seasonings. The production of fruit yogurt at the Devolli, Eurolona and Bylmeti dairies has not started on a commercial scale since the yogurt production lines requires further investments.



Gouda cheese with seasoning produced at the Sharri dairy plant

- **At least three individuals trained by means of dairy short course**

Nine senior students from the food technology faculty of the University of Pristina in Mitrovica attended an eight-day dairy technology training program at the American Farm School (AFS) in Thessaloniki, Greece. The aim of the training program was to enable students to gain practical experience and to acquire the necessary technical skills in developing fermented dairy products, and then applying this knowledge to the local dairy processing industry. This was an excellent experience for the group as they were able to work with an experienced AFS cheese technologist during the cheese-making process. The hands-on training was the first time participants learned how to produce Gouda, mozzarella and Greek-style chesses, such as graviera and provolone with seasonings. In addition to cheese-making at the AFS dairy laboratory, the group also learned techniques for detecting the level of fat and salt in matured cheeses and in set yogurts. The training program fulfilled student expectations and they were thankful to USAID NOA for helping them put theory into practice.



Explaining the techniques for cutting the curd



Putting the cheese curd in the molds

- **Schools campaign completed**

The dairy school educational campaign was successfully completed during Q3. The campaign activities lasted for a month and included talks given to first- and second-grade school children throughout Kosovo. The talks took place in the school classrooms of eight primary schools throughout Kosovo and were followed by 223 school children. At the end of the presentation, promotional materials were given to the school children. The day after each talk, the same school children, along with their parents (in total 198 parents), visited one of the following dairy plants: Devolli, Kabi, Eurolona, Magic Ice, Sharri, Abi, Rona, or Bylmeti. During these visits, children and their parents were warmly welcomed by the dairy managers and escorted on a tour of the dairy production process. Parents and children were pleased with the visit and thanked USAID/NOA for organizing and supporting the visit, which gave them an opportunity to see and learn how dairy products are being produced in local dairy plants. Additionally, at MAFRD's request during Q4, NOA helped a local consulting firm in organizing a visit to a dairy farm and dairy plant for 15 small children. The visit was later highlighted by state broadcaster RTK.

ADDITIONAL ACHIEVEMENTS

NOA together with MAFRD officials and Kosovo Dairy Producers Association (KDPA) members celebrated the World Milk Day event on Mother Teresa Boulevard in Pristina. Domestic dairy processors represented by Vita, Rona, Bylmeti, Kabi, Abi, Rugove, Magic Ice, Ajka, Sharri and Eurolona set up booths and provided promotional materials in front of the Ministry of Agriculture building, forming an interesting group display that promoted Kosovo dairy products. The dairies attracted many people to the event by offering products, free of charge, for tasting. The Minister of Agriculture, Forestry and Rural Development, Blerand Stavileci, and the USAID Mission Director, Maureen Shauket, gave an interview to national TV emphasizing the importance of consuming local dairy products.

OBJECTIVE 3: FOOD QUALITY AND SAFETY IMPROVED

BENCHMARKS

- **At least two dairy plants HACCP certified**

Eurolona dairy obtained HACCP certification during this year. Additionally, VERITAS, the international HACCP certification company, conducted an audit that extended the HACCP certification of the Kabi dairy plant for one additional year. After detailed inspection of documents and premises the auditors announced that Kabi dairy remains in full compliance with international HACCP standards.

ADDITIONAL ACHIEVEMENTS

Aflatoxins were detected in corn imported from regional countries during Q3. Supported by NOA, a laboratory specialist trained the KFVA laboratory technicians on how to detect the presence of aflatoxin in corn and milk using ELISA (Enzyme-linked immunosorbent assay), a rapid and sensitive testing technique. The director of KFVA, Vladet Gjinovci, thanked NOA for helping KFVA lab technicians who, through on-the-job training, for the first time at KFVA lab are now able to utilize their own equipment to detect the presence of aflatoxin in corn and milk. The Devolli and Bylmeti dairies have purchased AFLA sensors and are now regularly checking the raw milk supply for the presence of aflatoxins.

Kosovo Marks World Milk Day



USAID Mission Director A. Shauket (left) visits the Eurolona dairy booth during World Milk Day celebrations held June 1 in Pristina, Kosovo. Accompanying Shauket is Blerand Stavileci, Kosovo's Minister of Agriculture, Forestry and Rural Development.

OBJECTIVE 4: INCREASED AFFORDABLE AND ACCESSIBLE CREDIT

BENCHMARKS

- **A dairy cow finance program developed together with commercial lending institutions**

During Q2, NOA utilized the services of an international STTA, Roman Shynkarenko, to develop agricultural insurance products suited to Kosovo's agricultural sector. The consultant found that a livestock insurance scheme was the most feasible product for immediate introduction and determined that Sigal Insurance had sufficient information to launch an insurance program designed to support the dairy sector.

In an effort to inform different commercial lending institutions about the request by dairy farmers to develop a special livestock finance program, NOA met with representatives of commercial lending institutions to discuss the possibility of developing a dairy cow finance program. Despite the extensive discussions with different commercial lending institutions, and the fact that there was a commercial program ready for launch, none of the banks made progress in developing such a product during the year.

In support of its work with commercial lending institutions, NOA provided information about commercial loans that KDPA members and their dairy farmers would require, given sufficient interest from the banks. According to KDPA's president, Ramadan Memaj, if commercial lending institutions were ready to provide favorable loan terms, then the total monetary value of the loans requested by KDPA members would be expected to reach approximately € 11.8 million. These loans would primarily support herd expansion and capital development.

Change to Tax Legislation Stimulates Domestic Agriculture

A newly signed amendment to Kosovo's tax legislation championed by USAID should strengthen the farm sector, by incentivizing domestic production of milk, fruit, vegetables and other raw agricultural products.



Government signs flat rate administrative instruction

OBJECTIVE 5: IMPROVED COORDINATION WITHIN THE AGRICULTURAL SECTOR

BENCHMARKS

- **Dairy association engages in at least one policy constraint with government**

Kosovo's Minister of Finance, Besim Beqaj, signed the Administrative Instruction for removing the VAT on raw milk during Q4 of 2013. While NOA initially proposed applying the change only to raw milk, Kosovo government officials expanded it to cover other primary agricultural products as well.

NOA spent nearly a year promoting the VAT change for raw milk, at the request of the dairy producer and processor associations. The main objective was to increase agricultural sales through formal channels. The Administrative Instruction, signed on Sept. 10, 2013, by the Minister of Finance effectively discounts the 16% VAT that dairies previously paid on the full value of their finished products.

The incentive works by allowing dairy, fruit and vegetable processing plants to claim an effective credit for VAT owed by the primary producers of the raw milk and raw fruits and vegetables that they purchase. This allowance would permit all producers who register with the MAFRD, and who turn over less than €50,000 per annum, to be covered by this instruction. Currently, an

estimated 50% of the raw milk produced in Kosovo is sold informally. This achievement will have far-reaching positive effects on bringing formality to agricultural markets in Kosovo and will benefit all production sectors.

This administrative instruction will also have very significant impact once the MAFRD milk quality grant scheme comes into force. This scheme provides grant incentives to producers of recognized qualities of milk. It is based on data emanating from the TRMS activity of the milk industry associations, and relies on the formalization of the sector to enable producers to be awarded in a clear and equitable manner. Results of the transparent milks sampling scheme will feed into the Ministry grant scheme, validating the basis for grant payment to quality.

- **Backup instruments procured for KVFA**

The director of KFVA laboratory drafted a list of the back-up instruments that the KFVA raw milk laboratory needs in order to ensure the uninterrupted testing and delivery of raw milk test results to the dairy producers and dairy processors. While the director of the KFVA laboratory has contacted several potential donors who could donate second-hand milk laboratory back-up instruments, thus far, no concrete results have been achieved.

2.0 CROSS-CUTTING CATEGORIES

2.1 IMPROVED COORDINATION IN THE AGRICULTURE SECTOR

Top 10 Performance Indicators

1. Economic Analysis Unit (EAU) and NOA maintain a total of 15 gross-margin models for use by the private sector
2. Fifty municipal and MAFRD extension workers and managers trained through intensive winter school program
3. New public agricultural extension services program designed and implemented
4. Communities select 371 lead farmers from 25 municipalities
5. NOA staff serve as advisors to MAFRD in designing 2014-2020 strategy
6. Three large-scale private collection centers near completion
7. Minister of Agriculture requests NOA support in designing ministry integration of crop insurance into support to agriculture
8. Training provided to 230 agronomists and lead farmers on safe and effective pesticide use
9. Private Sector extension agents receive capacity building training
10. World Bank ARDP supports public sector extension implementation

BENCHMARKS

- **EAU places at least five enterprise cost of production models on the MAFRD website**

NOA's discussions with MAFRD's EAU during Q2 and Q3 confirmed the design of a new website that will highlight the cost-of-production models developed by the ministry. All parties agreed during Q3 that the website will be linked to the main MAFRD website but will be hosted separately to facilitate its administration and frequent updating. Additionally, the EAU agreed that the cost-of-production models developed should be presented alongside economic analyses and financial analyses models to enable greater utility. Furthermore, the ministry's staff are doing some summary surveys and will provide conclusions for the new crops regarding production costs models. The commitment of the EAU staff to the agricultural census has delayed initiation of website design however, and at the time of compilation, no website design contract has been concluded. No pressure is coming from the EAU of the Ministry and it may be that a private or public private solution may resolve the issue of the necessary platform for this information better. NOA has further developed cost-of-production models using EAU budget structures; currently there are a total of 15 models available highlighting cost-of-production and comparative gross margins.

- **At least 40 public sector extension workers trained with technical support from NOA**

Fifty (50) agriculture extension agents from all of Kosovo's municipalities (including MAFRD central staff), were certified following three months of intensive training organized by NOA during Q1 and Q2.

During the three-month course, municipal extension agents received trainings focusing on the following areas: the latest technologies and good agriculture practices, a new methodology



The certification ceremony attended by USAID/Kosovo's Deputy Mission Director and the Minister of Agriculture, Forestry and Rural Development

regarding how extension agricultural educators can reach more farmers in their municipalities; soil and plant sampling for analysis; cultural practices (resistant seedling and sapling production); principles of crop nutrition and irrigation; plant protection; post-harvest handling, storage and marketing linkages; farm-crop budgeting, gross margin analyses and business plan preparation (for fruit and vegetable crops); balancing feed rations for dairy cows, dairy cow reproduction management and good milking practices; farm record keeping; environmental impacts in agriculture and information for MAFRD grants form preparation.

This intensive training led to the development of an innovative program to expand the extension service without significant additional budgetary requirements. It was assumed that all extension agents were already salaried by the municipality and that they needed a better methodology for use in reaching farmers. Some extension agents had been charged with reaching as many as 2,000 farmers. This was clearly impossible with the current methodology. The new program designed for the national extension program focuses on the selection of lead farmers at the community level, who will become focal points for information and training to farmers. All municipal extension agents participated in the discussions leading up to the final design of this new extension methodology.

On June 19, 35 municipal extension agents participated in a general informational meeting on the new extension services program that could provide services throughout Kosovo. It was clear that MAFRD, the World Bank (under the Agricultural Rehabilitation and Development Project [ARDP]) and NOA would support this proposal. During this meeting, experts explained and clarified all procedures involved in the enlargement of the extension program. World Bank ARDP confirmed its financial participation, and encouraged all contributing parties to stand firmly behind the lead-farmer model of extension that was introduced.

The new extension program was designed to be implemented in the following stages:

1. General meeting with extension agents to explain the new program (Completed),
2. Election of lead farmers in all municipalities (Completed),
3. Equipping lead farmers with advice and materials (October 2013-May 2014; ongoing),
4. Winter school training for lead farmers (October 2013-March 2014).

Following an intensive period of community activity, spearheaded by the municipal extension workers, a presentation was made outlining final lead farmer selections. This meeting was attended by Minister of Agriculture Blerand Stavileci, representatives from the World Bank (ARDP program), the Extension Services Department of MAFRD and extension agents from 25 municipalities. Thus far, from all municipalities combined, 3,272 farmers were contacted to select lead farmers. As a result, 371 lead farmers were selected from 25 municipalities, covering five sectors: fruits, vegetables, cereals, livestock and beekeeping.



Ceremony marking the conclusion of the lead farmer selection attended by Minister of Agriculture Blerand Stavileci, World Bank representatives and extension agents

- **Capacity building of interns engaged by private sector companies (processors and collection centers)**

Interns engaged by processors and collection centers have been provided competence based training by the Edi Consulting Co., which will be finalized during October 2013. The interns are now completing their modules based on the innovative Analysis, Design, Development, Implementation and Evaluation (ADDIE) model. This structural training model is being implemented for the first time in the agriculture sector in Kosovo. Interns cost shared by NOA and placed with private sector companies (collection points and processing companies) have so far prepared the modules based on their work groups. During Q1 FY4, all interns will provide training sessions to different audiences (NOA staff, processing company staff and farmers) using the structural methodology ISD/ADDIE. The trainings were all presented by Edon Kurtishi, a consultant with Edi.

- **At least three MAFRD collection center grantees develop programmed production plans for 2014**

All three collection center grantees presented their business proposals and later received from MAFRD initial grant funding, permitting work to begin on the collection center sites. Ask Foods (Gjilane), ETC (Xerxe), and Kelmendi (Peja) are in the final stages of construction. Initially, construction work proceeded as planned, but during Q4, the MAFRD disbursement processes broke down due to a change in the competent authority, from a payments *unit* to a payments *agency*. This delayed payments of the agreed second tranche of funding by more than 40 days and put considerable strain on the implementers since they had been expecting reimbursement of expenses and cash flows were adversely affected. The ripple effect of this issue affected activities all the way down to the field level, where at least one of the three firms was unable to purchase from farmers as agreed. These collection centers will likely be completed by the end of November 2013. Only after completion will firms begin to make detailed plans for the 2014 season. Official preliminary openings of the sites will take place toward the end of October 2013.

- **At least one new bank lending product developed, operational and placed under DCA; and at least one value chain has a crop insurance model available to it**

Developments under this benchmark are discussed fully under the improved access to finance section. In all cases, MAFRD management is being kept abreast of developments as it continues

to watch the industry for further signs that the DCA facility is having an impact on agricultural lending.

Two successive STTA assignments by Roman Shynkarenko concluded that there are excellent opportunities for agricultural insurance in the dairy, apples and potatoes sub-sectors. A meeting with the minister of agriculture during Shynkarenko's last assignment during Q3 confirmed that the ministry would like to include crop insurance in relation to their offerings of subsidy and direct payments. The ministry is specifically interesting in providing some element of crop insurance as part of their support to farmers in the new year. The minister requested specific further input from this consultant early in Q1 FY4 to determine the specific support areas that would be suitable.

Sigal insurance company has in place all the necessary underwriting documentation and policies to implement a dairy cow insurance scheme with immediate effect. It is now waiting for the financial institutions to request borrowers to access this type of cover as a precondition to accessing finance.

Additionally during this year, and highlighted in other areas of this annual report, NOA was instrumental in working with the dairy associations, the Ministry of Finance and the Ministry of Agriculture to finalize a ground-breaking change to the VAT structure for agriculture. The implication is that all processors purchasing from small farmers no longer have to pay the VAT obligation on the part of producers. This significant change will serve to drive increased formalization of the sector to the benefit of the whole industry.

During this year, all technical staff of NOA has been heavily involved in supporting the working groups of the MAFRD in determining their long term strategy (2014-2020) as well as supporting the MAFRD teams to determine their grant and subvention models. NOA technical staff has been invited consistently to participate by the MAFRD teams and continue to serve in this capacity.

- **Training of lab workers and food technologists engaged by the program to the private sector companies.**

NOA in collaboration with 'TrePharm,' a Kosovo private pharmaceutical firm, provided five practical training sessions for 13 interns (lab workers and food technologists from the private sector and the Kosovo Food and Veterinary Agency); this activity took place during August-September 2013. This activity has been highlighted elsewhere in this report. On Sept. 23, at the 'TrePharm' facilities, 13 lab technicians were certified as having attended the five training sessions during August and September, 2013. This certification ceremony was honored by the presence of Blerand Stavileci, Minister of Agriculture, Forestry and Rural Development, Mark Wood COP of the NOA program and Mergim Prishtina MD of 'TrePharm.'



Certification ceremony: Mark Wood, NOA COP, Minister of Agriculture Blerand Stavileci and 'TrePharm's Mergim Prishtina during the certification ceremony.

- **Training on Integrated Pest Management and the Safe Use of Pesticides**

During Q4, NOA provided capacity building trainings to 230 new agronomists engaged at collection points and to lead farmers elected by farmers themselves working with MAFRD throughout Kosovo. The training was provided on Plant Protection and the Safe Use of Pesticides.

Attendees included interns, extension agents, phytosanitary inspectors from the Kosovo Food and Veterinary Agency, and fruit and vegetable farmers (apple, table grape, strawberry and raspberry, pepper, gherkins, lettuce, tomato and cabbage). A plant protection expert demonstrated how to use pesticides properly and explained the steps in implementing an IPM program. These trainings sessions took part in 10 different municipalities, including: Suhareka, Mamusha, Rahoveci, Peja, Gjilani, Lipjani, Ranillug and Klllokot. The eight days of trainings were held at collection points and municipal localities. Trainings were carried out starting in September 2013, and are to be concluded early in Q1 FY4.



IPM and SUAP trainings provided by Bajrush Shala – Plant Protection expert

Additionally this year, NOA organized 18 specific round-table events designed to bring together donors, together with private sector and NGO stakeholders, in order to encourage harmonized approaches to the development of value chains. Each NOA value chain was featured in an least one event. (Further details in PMP annexes.)

2.2 IMPROVED ACCESS TO FINANCE

Top 10 Performance Indicators

1. Two informative workshops carried out informing banks of investment opportunities within NOA value chains
2. Gherkin and dairy value chains receive specific bank interest in generating targeted products
3. Five banks receive continued information on NOA value chain methodology
4. Two access-to-finance courses conducted targeting women borrowers
5. \$9 million in additional loans to support agribusiness as a result of the DCA facility
6. 3% interest rate reduction attributed to DCA facility
7. TEB bank's agro card product ready to launch well before the 2014 planting season
8. Input suppliers identified by TEB bank as their POS access for farmers
9. NOA cost-benefit analyses are made available to banks with positive feedback
10. All banks agree to work with MAFRD rural grants scheme

OBJECTIVE 1: ENCOURAGE FINANCING/INVESTMENT IN PROGRAM-TARGETED VALUE CHAINS

BENCHMARKS

- **At least two informative workshops with banks on sector investment/financial opportunities**

On Feb. 14, 2013, NOA, the Kosovo Chamber of Commerce and MAFRD jointly organized a workshop to inform banks and financial institutions regarding MAFRD's 2013 grants and subvention program. The Kosovo Chamber of Commerce led this activity, with NOA's playing a supporting role. The financial sector showed great interest in MAFRD's 2013 grants program, as six leading banks and three leading microfinance institutions (MFIs) participated in the workshop. A dedicated woman's access-to-finance workshop was organized in early Q3 with 25 women involved in agriculture in attendance.

At the end of Q4, NOA provided all banks with detailed cost-benefit calculations regarding NOA's value chains and other basic crops for comparison, providing the banks with updated information and a tool to evaluate risk. This was designed to encourage bank representatives to expand lending activities to promising crops offering high profitability. The feedback from all banks was excellent and banks asked for similar information on other crops as well, including greenhouse production. The positive feedback enhances the need for frequent updates, which will be provided by NOA in the coming year. A sustainable entity responsible for carrying out this work in the future will be identified early in the coming work plan year.

- **At least two value chains have access to targeted financial products**

Gherkins: The program organized a field visit with TEB focusing on the gherkin value chain during Q1. The bank was impressed with the results achieved with respect to this crop (contracted sales among farmers-collectors-processors) and the opportunity this presents to reduce loan risk. As a result, TEB offered Mamusha farmers an 18% interest rate, for loans up to 5,000 Euros, while the weighted market average interest rate for a similar loan is 19% to 23%. This visit was critical to a decision by the bank's senior management to develop an agricultural credit card product, which was initially slated for release perhaps as early as late Q3. By the end of Q3, the product was completely defined. A meeting with bank officials late in Q4 indicated that release was imminent but is dependent on budget releases from corporate HQ. NOA indicated its readiness to provide budget support in a limited and focused way, thus ensuring the timely launch of this new and innovative product.

Dairy: During Q1, NOA organized several meetings with BKT and one meeting with RBKO addressing the need to develop a dedicated financial product for financing growth in Kosovo's dairy cow herd, given the present lack of production capacity and the fact that the local price per liter of milk remains among the best in the region. NOA had proposed a three-way model

involving banks, processors/collectors and farmers. Farmers continue to express strong interest in this proposal. During Q2 discussions continued with the dairy sector, through the associations of processors and producers. A meeting with ProCredit Bank planned for Q2 was postponed to Q3 because two levels of management responsible for agro lending had moved from ProCredit Bank to other banks, leaving the bank short-staffed.

The Kosovo dairy producer and processor associations summarized their financial requirements late in Q3 and presented these to the leading lending institutions along with updated cost of production figures. The signing of an industry-critical administrative instruction by the ministry of finance (alleviating VAT structural issues), in combination with a newly structured grant to milk quality late in Q4, ensures enhanced formalization of the sector by stimulating formal supply of milk to the processors. This will go a long way to opening up more structured access to finance in the year ahead.

Lettuce and Fruit & Vegetables: Encouraging Young Entrepreneurs (EYE) is a private, voluntary initiative with the goal of supporting the private sector in Kosovo. EYE aims to encourage young (not necessarily young in age but early in company establishment) entrepreneurs in starting a venture and converting their outstanding ideas into growing enterprises. Providing financial resources for these new ventures is one type of direct support EYE provides. In order to expose the agriculture sector to additional financing possibilities, NOA introduced EYE's founder, Vllaznim Xhiha, to some of the leading entrepreneurial NOA beneficiaries during Q2. These were namely: Ask Foods, MOEA and Agroserra. Field visits were organized and information about sector development opportunities, challenges and obstacles were shared. EYE showed a specific interest in lettuce production and processing during these visits but no movement has been seen during the last quarters of the year in the progress toward actual investments.

- **At least five banks introduced to NOA-related value chain financing methodology**

During Q3, project staff visited all bank agricultural departments to check on progress. Banks expressed satisfaction with the DCA program in general and indicated that it has resulted in increased agricultural lending. The initial DCA lending results were published, showing that an additional 4 million USD in new agro loans have been issued through several local banks. Loan amounts under this DCA are between €5,000 and €250,000. In addition, a modest but very encouraging interest rate decrease of 3% for agro loans was observed.

During the course of the year, NOA senior management provided specific training to Pro Credit Bank (PCB) frontline lending staff from all regions to encourage enhanced commercial focus lending. During Q4, jointly with PCB, NOA organized a workshop on the raspberry value chain introducing to the farmers the idea of commercial farming and mutual efforts between our program, municipalities and lead farmers/collectors to expand raspberry cultivation in the coming year. Recent developments within the raspberry VC were shared with participants.

- **At least two access-to-finance training courses conducted specifically for women producers**

The NOA program organized a workshop during Q3 to inform women farmers about MAFRD's grants and subsidy programs for 2013. As information is a very important factor for decision-making and, in this particular case, facilitates access to finance, 45 female farmers participated in the meeting organized on April 16 at the Sirius Hotel. Female farmers were encouraged by MAFRD to designate representatives to the yearly working groups for next year's grants program in order to incorporate their demands and needs. We expect an increased number of grant applications from women this year as result of their access to more information and increased interaction between female farmers and MAFRD.

ADDITIONAL ACHIEVEMENTS

- TEB Bank has hired additional staff dedicated to its agricultural portfolio. Late in Q2, preliminary meetings were held with FINCA as it had expressed an interest in developing a dedicated

agricultural product targeting smaller borrowers, especially since the major banks have lifted the floor on lending in this sector to €5,000. FINCA had requested grant support for their expanding program. However, changes in senior management during Q3 at FINCA seemed to have altered the direction of the organization and no follow-up contact was made.

- During Q2, NOA brought in a STTA to investigate the opportunity to develop agricultural insurance products. The investigation showed that one company (Sigal) was licenced to offer such insurance products and that the firm was willing to embark on further necessary product development. Two other firms were in the process of licensing. The consultant identified opportunities for initial offerings within the dairy sector (animal life insurance), the potato sector (all risks possible) as well as the apple sector (hail risk). Development of these products would augment the banks' approach and effectively reduce risk. The consultant will return in early in Q4 to further develop the most promising opportunities—potato, apple and livestock insurance products.
- During Q3, NOA met with Advance Global Capital—a UK-based receivables financing operation interested in establishing a facility in Kosovo. Initial discussions lead to the establishment of a list of target companies for this facility, which intends to buy high-quality debt, initially from premium debtors such as tETC and Meridian Corp. The company started during Q4 but since it is not currently registered as a non-bank financial institution, the project is not able to support it. Initial factoring activity is contracted to be initiated during Q1 of FY4 with at least two large buyers and senior suppliers.

OBJECTIVE 2: DEVELOP NEW AGRO LENDING PRODUCTS TO FIT PROGRAM NEEDS

BENCHMARKS

- **At least one new agro-lending product introduced to the market**

During Q2 there were positive developments with TEB Bank's agro credit card product. TEB confirmed that product development (software) is in the final stage, and product launch was expected in August or September Q4, but as per current status, launch will be delayed until the end of 2013. During Q3, NOA provided to TEB a list of recommended agro merchants (input dealers) to start negotiations to create a dedicated POS network and sign contracts for the new program. The list of all registered input dealers was obtained from MAFRD and then screened prior to submission to TEB. TEB expects support from NOA during product launch and promotion; a detailed plan detailing the costs of product launch/marketing will be prepared and presented to NOA for possible cost share. Product launch is expected in early 2014, and senior bank management does not expect any issues with the roll out. The NOA 2014 work plan highlights direct support to TEB for this, an initiative that is welcomed by the bank.

- **At least 10 input dealers involved in the program**

NOA program submitted to TEB the list of all registered input dealers. TEB is in process of selecting top companies for piloting (expected to happen toward the end of year 2013). TEB's objective is to include as many agro input dealers as possible in the program.

- **At least 100 producers access credit using the new product**

NOA will recommend to TEB those producers who have entered into reliable off-take agreements with processors and collection centers. Discussions with TEB management during Q2 confirmed their interest in pushing the industry to increased formality through their product offerings. Discussions in Q4 indicated that the bank has set firm performance targets for marketing of this product in its first year.

OBJECTIVE 3: INCREASE BANK LENDING EXPERTISE IN AGRO SECTOR

BENCHMARKS

- **At least three trainings on agro lending organized with participating banks**

During Q3, NOA provided commercial agriculture lending training to all Pro Credit Bank field officers. The training highlighted: the need to select farmers with the right commercial credentials; how to identify farmers with capacity using non-financial signals; and the need to promote all borrowers to the level of contracted out growers to improve their risk profiles. Fifty-six (56) agricultural loan officers and their managers were trained.

In Q4, NOA held two additional workshops with PCB lenders and farmers focusing on two topics:

- a) Pro Credit Bank organized the first workshop on July 25 at Halim Baftiu in Davidovc, Shtime municipality. The workshop topic was on technologies for growing vegetable seedlings, quality of agricultural inputs and crop diversification. The event was facilitated by NOA, specialists while PCB staff introduced the bank's lending products dedicated to the sector. Forty-one (41) participants attended the event, four of them NOA/USAID beneficiaries;
- b) PCB organized the second workshop on July 30 in Podujeva. The workshop topic was the raspberry value chain: commercial contracting, expansion of production through collaboration with municipalities, NOA/USAID and lead farmers and bank financing support.

- **Improve CBK/Commercial Bank Agro sector reporting**

There were no activities during the work plan year under this benchmark.

2.3 GENDER EQUALITY

Top 10 Performance indicators

1. Participation of women in NOA activities reached 22%
2. Woman's participation in NOA activities double that of 2012
3. 36 selected lead farmers are woman
4. Lead farmer, Valbona Ademi from Hence village takes a strong lead in mobilizing Fushe Kosovo Woman's group in feferoni production
5. Woman's group Fjola receives grant from Austrian Development Agency as a result of NOA intervention with municipality of Rahovec.
6. GEM index determines leadership and production decision making as crucial areas for targeted woman's training
7. 212 women participate in the woman's farmer of the year awards and establish an annual event honoring women in agribusiness.
8. NOA develops documentary featuring women in agribusiness
9. Women feature in both saffron and gherkin production documentaries
10. Women dairy farmers receive specific herd management training

OBJECTIVES:

INCLUDE WOMAN FARMERS IN ALL PROGRAM ACTIVITIES

INCREASE WOMAN FARMERS' TECHNICAL KNOWLEDGE

BENCHMARKS

- **At least 25% woman participation in all program activities**

Woman's participation in NOA training and other activities for the 2012 reporting year was 10%. As of Q1 for 2013, the percentage had more than doubled, to 27%. Nevertheless, it is worth mentioning that the Q1 participation percentage was influenced by the "woman farmer of the year" activity supported by the NOA project during the quarter, wherein out of a total of 212 participants, 189 were woman (89%). During Q2 specifically, the percentage of woman participation in NOA program activities was 20 %.

In Q3 alone, the percentage of women's participation in NOA program activities increased to 31%, while the cumulative result for the year to date (at that time) was 26% participation by women. The high percentage of woman participation for this quarter was mainly affected by two women's practical trainings conducted on farm management and an access to finance workshop.

Since there were no targeted women training events during Q4, the percentage dropped to 15% for the quarter. Nevertheless, the overall figure of woman participation in NOA activities for FY 2013 remains at 22%, a two-fold increase over last year's performance. 673 woman farmers were supported by the program with direct grants, trainings (practical and theoretical trainings), informative workshops and promotional activities during 2013.

- **At least 10 woman lead farmers identified and supported**

By the end of Q2, the program had identified 34 woman lead farmers (26 in Q2 alone) who directly benefitted from the Program and continue to receive program support, exceeding the target of 10 woman lead farmers. These lead farmers were established to be the contact points for public sector extension services as they look to extend value chain specific information to targeted farmers (through lead farmers).

Gherkins: During 2012, two very successful women lead farmers were identified and benefited by implementing new gherkin variety production and growing technologies. In both cases, they have proven their abilities as farmers, with excellent production yields as a result of proper implementation of new growing technologies. The program highlighted these individuals as

model farmers during the year and will continue to use their farms as training venues for new women farmers.

An additional *10 new woman farmers and 10 minority farmers were identified* in Q2 as NOA beneficiaries cultivating 0.20 ha (each) of gherkins. These individuals have received the following support: seeds, plastic mulch, drip irrigation, support system and technical advice. In addition, the program supported them in linkages and facilitating contractual sales with local gherkins processors, when the final product was harvested. Despite some issues with disease, these crops continued to perform well.

Vegetables (Peppers): Special attention has been paid to identifying women lead farmers cultivating open field vegetables (particularly peppers). NOA identified 17 woman lead farmers in different regions of Kosova and supported them in establishing 0.20 ha of pepper (each). Supporting included: seeds, drip irrigation, technical support and linkages with processors. These farmers served as focal points through which technical information was disseminated. Field days focusing attention on new varieties of feferoni with woman farmer Valbona Ademi in the village of Henc were particularly successful, resulting in leveraged support coming from the municipality of Fushe Kosova as well as processor interest in the new crop. NOA client Fitimi was particularly interested in working further with this group.

Saffron: Among six saffron growers, one woman lead farmer is already in place, who also happens to be a start-up business (in agriculture). This woman benefited by receiving saffron corms and technical assistance in saffron production. The program also facilitated new markets for the final product, and provided branding and labeling support. The saffron woman lead farmer participated at Bio Fach, Berlin during Q2, representing all Kosovar saffron growers. In Q3, she received a request for 300 gr of saffron from Bio Fach fair contacts, but the pricing was lower than expectation and the relationship was not continued.

Strawberries: Three woman lead strawberry farmers continue to work with the Program. Excellent marketing results have been achieved with all strawberry growers with yields in excess of 25mt per ha being achieved.

Apples: One woman lead farmer has benefited from the Program, receiving new apple varieties.

Raspberries: NOA continues to work with one woman lead raspberry farmer on production and marketing issues and results are significant – yields of raspberries in the first season of production exceed 10 mt per ha providing excellent returns on investment for all farmers.

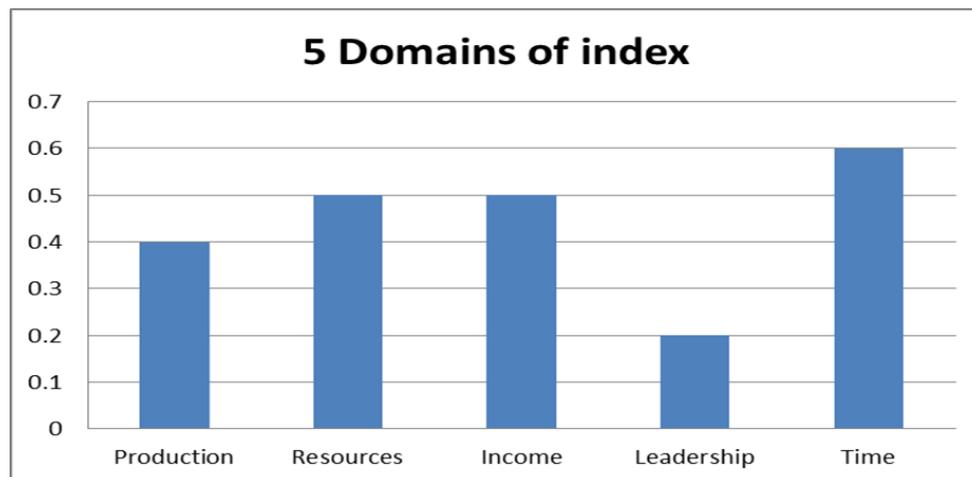
Field Vegetable production: During Q2, NOA facilitated another contract signing between the women’s association “Fatjona” and vegetable processor Rizona. To date, NOA support had led to the contracting of a total of 40 tons of vegetables (Pepper, Gherkins and Lettuce) for this association. During Q4, NOA was initiated technical advice to NGO Fjola in the municipality of Rahovec. This is a group of war widows who manufacture Ajvar. NOA COP and DCOP spent considerable effort in working with the Austrian Development Agency which had indicated they would advance a grant to the NGO predicated on Municipality support. NOA managed to persuade the municipality to advance their portion of the grant, ensuring that the NGO receives its grant early in Q1 FY4.

- **At least four training activities dedicated to women farmers conducted**

Set objectives within this benchmark were exceeded (see below trainings/workshop). More than 600 women have participated in NOA-supported trainings, informative meetings and networking events. As of Q3, five different events/trainings with a particular focus on woman farmers have been organized. No further, women-specific events were organized during Q4.

During the year, NOA conducted a comprehensive gender empowerment analysis using what we term the Gender Empowerment Matrix (GEM)

Results of the initial GEM findings are summarized in the figure below which highlights the index values per domain.



A “0” score indicates not empowered, a score of 0.1-0.5 indicates low empowerment and a score of 0.6-1 indicates highly empowered. The total score is subject to weighting (see the NOA PMP document for a detailed explanation). The objective of this disaggregation is to provide a direct measure of progress but critically to provide management feedback on project performance in order to refine training needs as necessary to maximize its impact on the level of women’s empowerment.

This baseline gives the project a firm foundation in the design of trainings in the new year and will enable us to bring the level of women’s empowerment up, especially in the areas of leadership and production decision making.

- **Training on Marketing and Value Chains in Horticulture**

Volunteer International STTA, Ms. Susan Hofmann, a very experienced trainer, conducted a two-day training with a group of 21 woman lead farmers and association representatives (March 26-27). Feedback from the participants was excellent indicating that teaching methods were very participatory and practical, enabling woman farmers to analyze and interpret their own value chains, market and customers. A follow up training for the same or similar target groups of farmers will be planned for the coming year.

- **Farm Management – Dairy**

A local expert on farm management training was identified, two woman-led dairy collection points were visited and their training needs were identified. A two-day training for women dairy producers was conducted including one day of theoretical sessions and one day of practical demonstration. Topics covered included: dairy cow feeding, disease identification, reproduction and milk/farm hygiene.



Women's Value Chain and Dairy Management training underway

Access to finance: The NOA program organized a workshop to inform women farmers about MAFRD's grants and subsidy programs for 2013. As woman's empowerment is one of the NOA's objectives, informing women of financing and grant opportunities is critical. Forty-five (45) woman farmers participated at this meeting organized on 16 April at Sirius Hotel. Woman farmers were encouraged by MAFRD to delegate representatives to sit on the yearly working group planning sessions to structure next year's MAFRD grants and ensure their needs and demands are met.



Questions and answers on the MAFRD grants and subvention program

- **Woman entrepreneurship networking event**

The NOA program organised a women's networking event gathering 43 woman entrepreneurs and farmers for Woman's Day on March 8. The occasion drew special attention to successful women who are accomplished entrepreneurs in vibrant economic sectors in Kosovo such as the arts, health sector, gastronomy, the judicial sector, banking and trade sectors. Several inspiring speeches were given by successful woman entrepreneurs from different fields of business and arts (Blerta Zeqiri, Florina Skeja, Gezime Rexhepi-Collaku and Vesna Golubovic). A cocktail was accompanied by the performance of a very talented woman violinist and photo slide show promoting products and services of business woman participating in the event. Women entrepreneurs shared challenges they face and discussed how they have successfully surmounted hurdles encountered along the way. They communicated how they established their business and the impact they are making on Kosovo's employment and general economic progress.

- **Day of Rural Women conference was organized**

This conference, completed during Q1, drew 212 participants and stakeholders, garnering widespread coverage by almost all local media. In order to emphasize rural women's impact on agricultural and rural development, the conference focused on the role of women in society, particularly in areas such as economic improvement and agricultural development. Supported by the United Nations Development Programme, the conference also awarded two "Woman Farmer of the Year 2012" prizes. One of the 5,000 Euro prizes went to a woman farmer in production and the other to a woman farmer active in processing. NOA staff was engaged during Q4 in planning the event that took place in early Q1 FY4.

- **At least three documentaries produced highlighting successful women in agribusiness**

NOA has developed one five-minute documentary highlighting the Program's lead women farmers who grow and sell gherkins. The three women are NOA grantees who have pioneered the planting of gherkins with excellent results. This should encourage other women farmers in their villages and associations to follow in their footsteps. Additionally, NOA prepared a documentary specifically highlighting the role of women and minorities in agribusiness value chains in Kosovo. The documentary on saffron production also highlighted the role of women.

2.4 OUTREACH AND COMMUNICATIONS

Top 10 Performance Indicators

1. A total of 31 articles posted on NOAKOS website
2. 25 success stories drafted, cleared and published during the work plan year
3. NOA website restructured during Q2 for easier access and upload functionality
4. Five full-length documentaries covering gherkin, saffron, lettuce, dairy sector, and women & minorities in agriculture produced. A sixth documentary covering table grapes is in process
5. Four documentaries featured on KTV
6. Three live discussion shows broadcast
7. A total of 20 significant TV appearances by the project
8. Forty local and international web portals feature NOA activities
9. NOA activities feature three times on USAID's global website
10. NOA activities highlighted seven times in USAID's Kosovo E-News

BENCHMARKS

- **At least 24 articles per year**

Nine (9) articles have been written up for the NOA website during Q4.

A total of 31 articles have been written and published within the fiscal year, exceeding the benchmark as set at the beginning of the year. The articles contain information on various program activities, events, visits and accomplishments. They are written up in English and, after USAID clearance, are translated into Albanian and Serbian. They are all posted on the program website.

- **At least 30 success stories within the fiscal year**

A total of 25 success stories/snapshots have been written and published within the fiscal year, which is five snapshots shy of reaching the benchmark. Annex 7 to this report includes the final English version of all success stories/snapshots written, cleared by USAID and published on NOA's website in three languages.

- **Program Website – www.noakos.com**

The program website [<http://www.noakos.com>] continues to publicize the work and results produced by NOA. It presents one of the main methods by which the program communicates with its current and potential clients, and serves as a depository for the substantial amount of information that the program continues to produce. The team continues to receive compliments from numerous sources on the information it provides.

During Q2, the program website underwent a slight reconstruction and general freshening/reconfiguring of its appearance and design in order to make it more informative and attractive. With its new image and formatting, the website is now even more user-friendly in terms of editing and updating. This will help ensure it remains more reliably up to date with current NOA activities, and continues to provide a dynamic picture of the projects activities.

- **At least five (5) television productions;**

Five full-length (20-minute) documentaries have been completed and have received clearance from USAID. They cover the gherkin, saffron, lettuce, dairy sector, and women & minorities in agriculture.

Each of these documentaries has also been compacted into a 'mini-documentary,' presenting a shorter version of the same. This has been made to enable the program to respond appropriately to any eventual time restraints that may arise during presentations or shows.

A sixth documentary is in progress (filming) and will feature the regrafting of wine grape vines to table grape varieties.

Two of the documentaries (gherkins, lettuce) have been broadcast on Koha Television (KTV) as part of a show sponsored by the program that covers the vegetable industry.

Additionally, on RTK, the program broadcast three live shows, where our experts and farmers covered the following topics of discussion: fruit industry, vegetable industry, and the dairy industry. The shows were broadcasted on Kosovo's national television station RTK, on an economic-focused show called "Kapitali." Finally, one television show was also made and broadcasted on KTV, highlighting the vegetable sector and featuring two documentaries made by NOA (lettuce and gherkins documentaries).

ADDITIONAL ACHIEVEMENTS

- **Visibility**

Television & electronic media appearances: In terms of the continuing visibility of the program, NOA has successfully been featured in more than 20 television appearances during this fiscal year. These included appearances on the main news broadcasted by major television stations, and their agriculture shows. The program was also featured on more than 40 electronic (local and international) web portals.

Other appearances: USAID global website

The NOA program was featured three times on USAID's global website, highlighting the Milk Day, Strawberry Days and Berry Sales and Promotion Days.

USAID/Kosovo Program E-News

During this fiscal year the NOA program also made seven appearances (with its success stories and articles) in a newsletter distributed by USAID in Kosovo, called the USAID/Kosovo Program E-News, which runs twice monthly.

3.0 PERFORMANCE MONITORING AND RESULTS

REPORT ON INDICATOR TARGETS AND RESULTS

In the following summary, we provide background information on each indicator, its definition as stated in the project PMP, predetermined methods of data collection and the results achieved during the third year of the program. All results which are related to value of sales are converted to dollars using the current currency rate of €1= \$1.35 and have a 1.84 multiplier applied (please refer to project PMP for multiplier explanation).

The report on jobs created is translated into full time equivalent based on 225 days/year. Thereafter, a multiplier of 1.96 is applied to account for jobs indirectly created (please refer to PMP for multiplier explanation). The complete table of indicators and results to date is included in Annex I to this document.

AO2: Increasing Private Sector-Led Growth

Indicator AO2.1: Total value of sales as a result of USG assistance

Definition of the indicator: Total value of sales of Program-supported crops

Disaggregation by: Type of market (domestic, regional and international) and by value chain.

Data Source: Program reports, records of customers, data collection tools designed by the Program.

Annual Results: Total sales generated by NOA-supported crops and VC actors through Program interventions implemented during the project's FY13 were \$41,963,698. The inclusion of three new value chains during the work plan year accounted for 63% of the total sales reported, including milk sales of \$26.6M (additional over previous year and predominantly local sales), MAP sales of \$2.5M (all export), and field vegetables which generated \$2.3M.

	FY13 Targets	FY13 Actual	Original NOA VC	New VC
Total Sales (\$ mill)	10	41.96	10.56	31.4
Linkage sales (\$ mill)	2.5	3.2	2.95	0.25
Export sales value (\$ mill)	3.0	10.28	5.82	4.46
Domestic sales value (\$ mill)	7.0	31.68	5.42	26.26

From the above table, it is evident that the project has exceeded PMP sales targets by a factor of three when considering all value chains. If the original value chains are isolated, sales targets for project FY13 have been exceeded by 5%. Export sales growth has been much better than anticipated with targets exceeded by 94% considering only original value chains or by a factor of three when considering all project value chains. Domestic sales of the original NOA VC products fell short of the anticipated \$7M, having achieved 78% of target. However, when new VCs are included (particularly dairy sales), the Program far surpassed the \$7M target, achieving a total of \$31.68M in domestic sales of all NOA-targeted

products. Linkage mediated sales comfortably exceeded targets by 28%, indicating strong performance in formalizing the relationships between farmers and markets – either for fresh or processed product.

Fig.1 provides a summary of total sales (all value chains) generated, disaggregated by type of market or destination. 76% of the sales were destined for domestic markets, which include products sold from producers to collection centers, green markets, processors, supermarkets and consumers. In addition, 24% of sales were destined for international markets, of which 4% were sold in regional markets. International markets are predominantly European Community countries, whereas, the regional market is made up this year of Serbia and Albania.

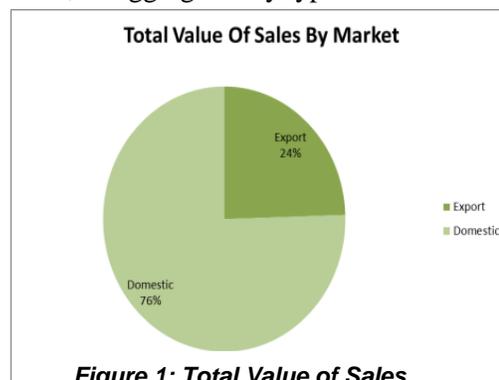


Figure 1: Total Value of Sales Disaggregated By Type of Market

Total Value of Sales by Value Chain:

NOA Original Value Chains:

Lettuce: Significant achievement for FY13 was achieved in this value chain. The NOA program recorded sales of 5M heads lettuce sold, with a farm gate unit price of \$0.28/unit, for a total of \$2.5M generated.

Gherkins: Value of sales for gherkins during FY13 is \$1.4M. The fresh market accounted for \$818,936 and the process market accounted for the balance of \$0.58M. Notably, client processor, Etlinger exported \$100K of processed product to Austria.

Table Grape: Table grapes sales in FY13 amounted to \$736,136 (note, the season has not yet closed at the time of report compilation). Out of this total, \$50K was sold to international markets mainly in Germany by Kelmendi GMBH.

Apple: Apple sales by NOA client firms totaled \$319,546 in FY13, to date, with no exports recorded. Sales of apples is still incomplete as apples are often stored at this time. Apple sales will conclude in Q2.

Strawberry: The value of sales of strawberries recorded in FY13 is \$942,327 with a total quantity of 190T. This total includes \$10,800 of export sales to Albania. This excellent result can be attributed to the introduction of new varieties that extend the season through to the end of the year. Sales are ongoing at the time of report compilation.

Raspberries: \$1.1M in raspberry sales was achieved during FY13. In the raspberry value chain, 84 % of the crop is exported; primarily to Serbia for the frozen market and small quantities of frozen product are exported to the EU. The balance was sold locally to meet expanding local demand for fresh raspberries.

Saffron: \$28,501 in saffron sales were achieved during the year. 55% of saffron sales have been marketed through export channels, dominated by one large shipment to France.

Blackberries: Blackberry sales contributed a total of \$29,603 to total domestic sales, sold fresh to local markets.

Blueberries: Sales generated from blueberries in FY13 amounted to \$12,915, all of which were marketed through local markets. Most of these were wild blueberries (bilberries) but small amounts were harvested from new commercial plantings. As new commercial blueberry plants will not come into full production until next year, we expect sales to expand rapidly in the coming season. FY13 sales show promise for next year's first commercial harvest.

Processed fruits and vegetables: The value of sales generated from processed products is \$6,427,058. This figure includes processed gherkins and semi processed products from NOA processing client, Eurofruti.

NOA New Value Chains:

Dairy: As the majority of the increase in sales numbers comes from NOA program’s three new value chains, Figure 2 provides a summary of the percentage of sales for each of the three new value chains. The dairy sector represents 87% of all sales generated from new value chains. This figure is only tracking the changes in sales between period 2012-2013 which amounts to \$23M (Note: the actual figure is €10M, but the final figure is subject of 1.84 multiplier and exchanged into US \$).

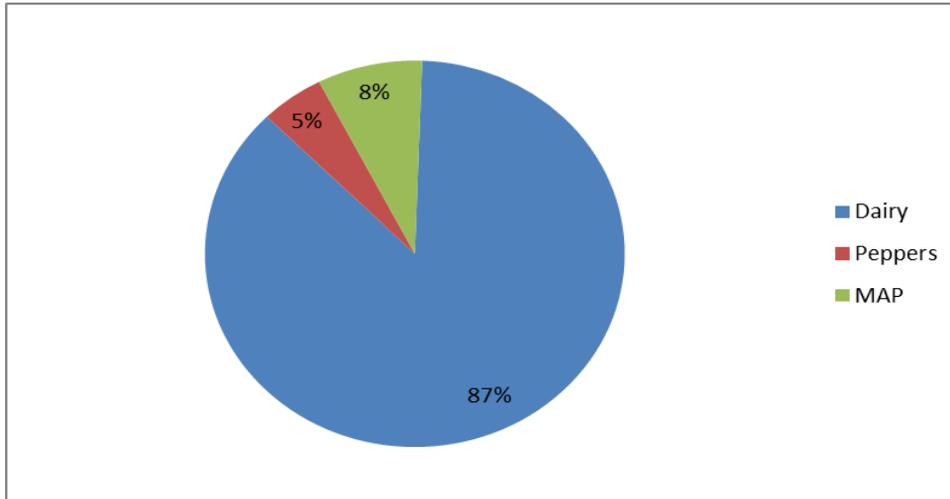


Figure 2: New Value Chains % of sales

In order to validate the figures recorded for the dairy sector, NOA evaluated the sales and effective import substitution for dairy processors for the years 2009-2013. Figure 3, presents the trend in the increase of dairy sales over the five year period.

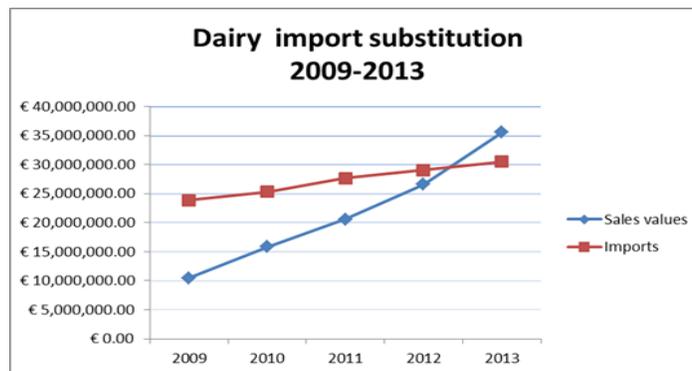
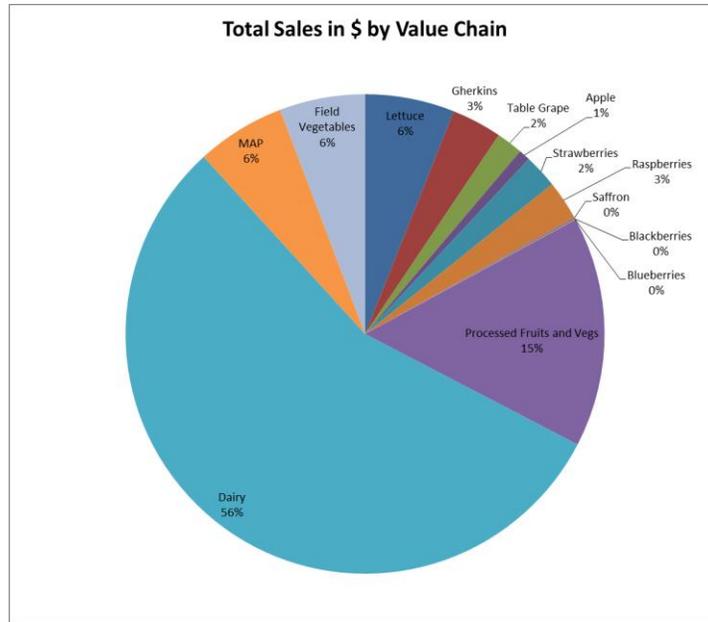


Figure 3: Dairy Sector Development Trend

MAP: In total, \$2,480,945 in sales has been generated by the MAP sector in FY13. Sales include marketed chamomile, marshmallow, peppermint and other aromatic plants. All MAP products have been marketed to EU countries.

Field Vegetables: Field vegetable sales consist of sales generated from fresh pepper, processed pepper, and crushed red peppers. The total value of sales generated during FY13 is \$2,386,319 of which \$1,400,728 are pepper sales marketed through local markets and the remaining sales are of peppers and processed field vegetables marketed to the EU.

The below pie chart depicts total sales disaggregated by NOA value chains. Annex III presents a summary of sales by value chain and destination.



Indicator AO2.2: Total value of exports as result of USG assistance

Definition of the indicator: This indicator tracks the value of sales of program targeted crops sold to foreign (including regional and international) markets.

Disaggregation by: Product, destination country.

Data Source: Data is collected from Program reports and producer’s, processors’ or other value chain actors’ records as well as from data collection tools designed by the Program.

Annual Result: The total value of exports during FY13 is \$10.28 M. Figure 4 disaggregates export sales figures by value chain.

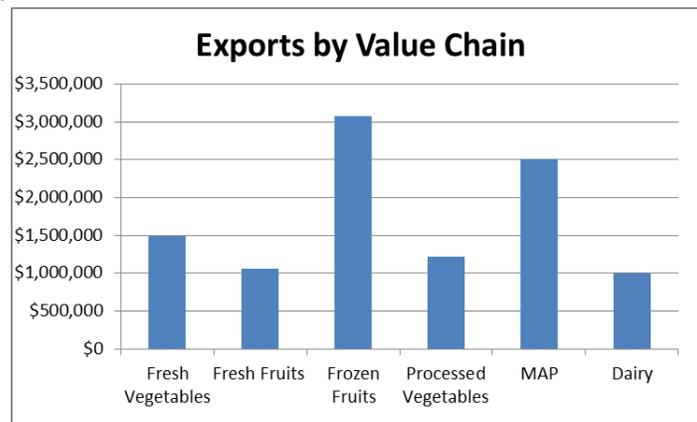


Figure 4: Total value of exports by value chain

During FY13, a total of \$10.28M in export sales is generated. These figures include sales from exported peppers in Sweden, Austria, Germany and Switzerland, by Kelmendi GMBH; Fresh fruit exports accounted for \$1M, including raspberries sold to Serbia and Italy by a NOA-supported raspberry association and other producers, and table grape sales which accounted for \$50K in export to Germany, In addition, NOA processing client Eurofruti exported over \$3M in frozen fruits, mainly berries. Furthermore, processed vegetables generated by exporting Ajvar amounted to \$1.1M, and crushed dried peppers and pickled gherkins together generated \$11.5K. The MAP value chain also performed well,

generating exports of \$2.5M through the sale of Chamomile, Marshmallow, Peppermint, Common Mallow, and Lemon Balm. Finally, dairy sector exports totaled \$1M.

Figure 5 provides a summary of exports disaggregated by destination. Two main destinations Germany [51%] and Austria [23%] constitute 74% of all exports recorded.

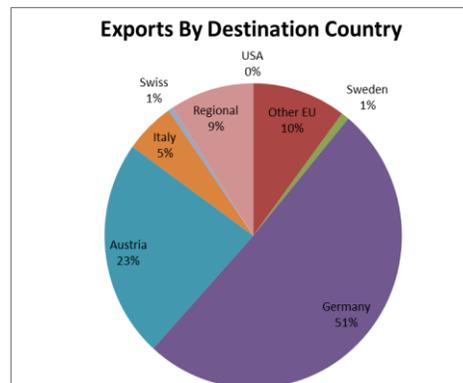


Figure 5: Value of exports by destination

Indicator AO.2.3: Total value of domestic sales as result of USG assistance

Definition of the indicator: Total value of sales made to

domestic markets. This includes only Program-supported crops sold to local/domestic markets.

Disaggregation by: Product.

Data Source: Data received from Program customer records and from data collection tools designed by the Program.

Annual Result: In FY13, NOA recorded \$31,686,179 in sales to domestic markets. Figures 6 and 7 present domestic sales disaggregated by value chain and values disaggregated by old and new NOA-targeted value chains.

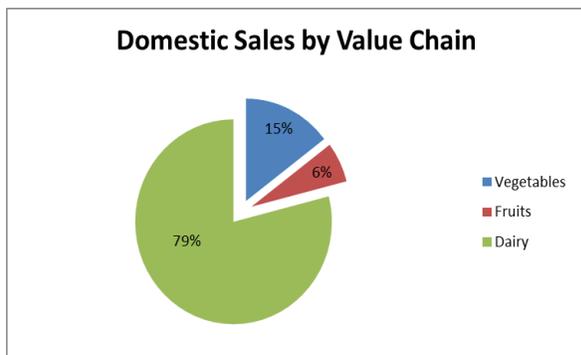


Figure 6: Domestic Sales by Value Chain

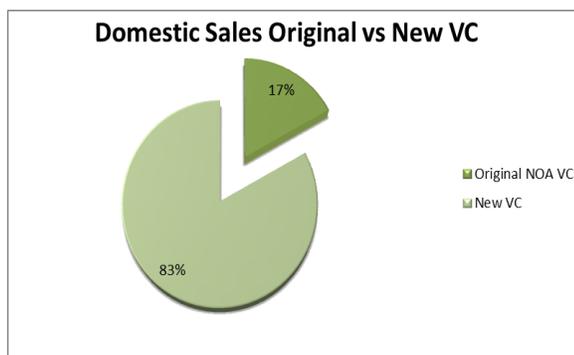


Figure 7: Domestic Sales of Original and New VCs

Indicator AO2.4: Number of person-days/FTE generated through target value chains as result of USG assistance

Definition of the indicator: Number of person days of full time employment generated (including farmers themselves) across different levels of the Program-targeted value chains. Data presented sums the number of fulltime jobs created as FTEs as well as part time employment converted into FTEs based on a standard 225 workdays per year. The sum of the FTEs and part time conversion into FTEs renders the total number of FTEs generated.

Disaggregation by: Value chain

Data Source: Data received from program customers’ records and from data collection tools designed by the Program.

Annual Results: In total, 1984 FTEs have been generated in FY13. These jobs are predominantly in support of production, collection and processing of program targeted crops. Figure 8 and 9 provides proportions of FTE by gender and minority designation.

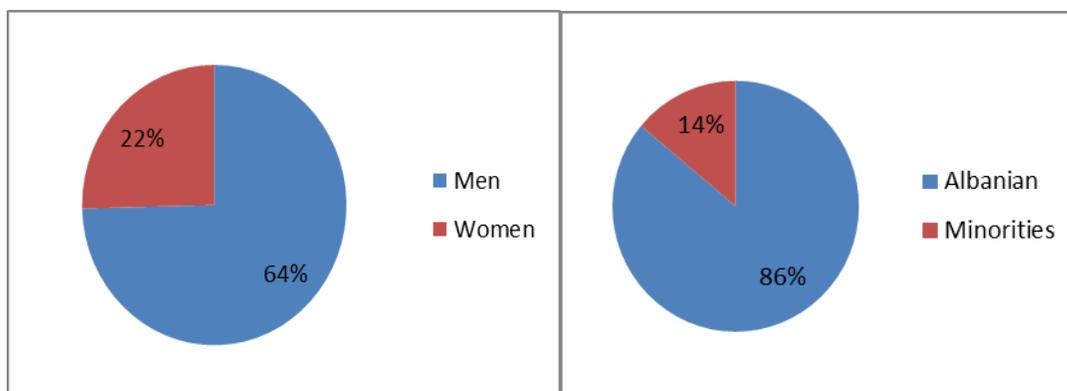


Figure 8/9: FTE generated disaggregated by gender and nationality.

A summary of jobs generated, disaggregated by value chain, is presented in the table below:

Product	# of FTEs
Apple	153
Asparagus	21
Blueberry	4
Dairy	676
Gherkins	174
Lettuce	80
Raspberry	220
Saffron	16
Strawberry	71
Nurseries	8
Table Grape	486
Other Berries	75
Total	1984

FTE generated by Value Chain

Major contributors to jobs generation are the dairy, apples, and table grapes sectors. The target for FY13 was 1500 FTE jobs. Overall we exceeded this target by 32%, and even when discounting the dairy FTEs generated, total FTE amounted to 1308 or 87% of the original target. FTE generation remains the single most challenging target for the project. In part this is because as firms grow, they aim to increase efficiencies which tends to drive down labor requirements per unit of sale rather than increase them.

Indicator AO2.5: Changes to GEM as a result of program interventions

Definition of the indicator: The GEM is based on a simplified index derived from the gender empowerment index developed for USAID Feed the Future monitoring. It makes measurements of the 5 domains of empowerment: Production (P), Resources (R), Income (I), Leadership (L), and time (T).

Data Source: Data will be collected by conducting a semiannual survey conducted by a dedicated NOA enumerator team, specifically trained in carrying out this survey.

Annual Results: In order to assess level of women participating in agriculture activities and number of women actually having decision making responsibilities, the program conducted a baseline survey during February and March 2013, with farmers that are directly and/or indirectly engaged in program activities.

The survey covers five domains; Production, Resources, Income, Leadership and Time, (PRILT) addressing a total of 14 indicators. This approach is based on systems developed for USAID Feed the Future, the US government’s global hunger and food security initiative.

At the time of reporting, it is too early to make an assessment of progress beyond the baseline level. Recurrent surveys will inform project progress and be updated annually, beginning in March of 2014 (a year after the baseline was completed).

Results of the initial GEM findings are summarized in Figure 9 below.

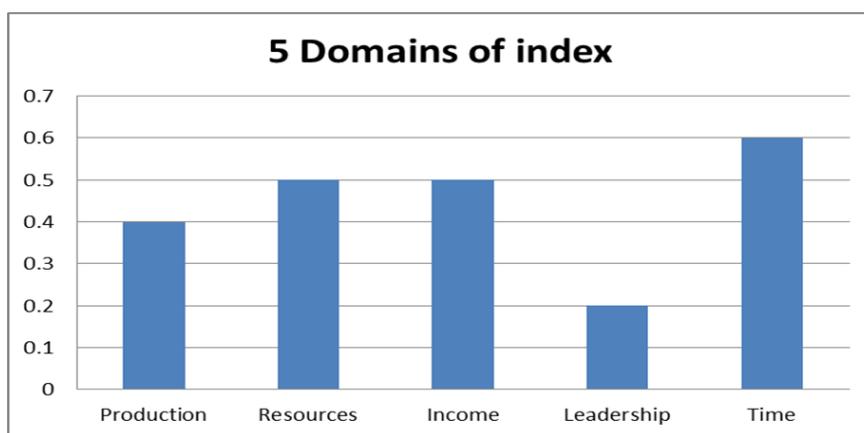


Figure 9: Five Domains of the GEM Index

A 0 score indicates not empowered, a score of 0.1-0.5 indicates low empowerment and a score of 0.6-1 indicates highly empowered. The total score is subject to weighting (see the NOA PMP document for a detailed explanation). The objective of this disaggregation is to provide a direct measure of progress but critically to provide management feedback to the project in order to refine training needs as necessary to maximize impact on the level of women’s empowerment.

As can be observed, women fall into the low empowerment level, with the leadership domain scored at the lowest level. NOA has been effective in working with increasing numbers of women in agribusiness. The average weighted GEM indicator considering all 5 domains is 0.35, indicating that there is significant progress to be made with women’s empowerment.

Indicator AO2.6: Increase in the value of import substitution as a result of USG assistance

Definition of the indicator: To calculate change in import substitution, previous quarterly local sales values (or baseline values) will be deducted from the current reporting period local sales to generate a net increase or decrease in import substitution.

Data Source: Local sales generated as result of program interventions.

Annual Results: In FY2, we reported \$3,482,430 as the total value of domestic sales generated - a figure used as a baseline to measure change. In FY13 this figure rose to \$31,686,179 including the new value chains. A \$5.4M increase in import substitution was generated by the original value chains, and the balance from newly introduced value chains, mainly dairy.

Indicator AO2.7: Percent (%) increase in rural income as result of USG assistance

Definition of the indicator: This indicator tracks changes in income of rural program customers as a result of program interventions. It includes all income generated through selling program-targeted products and disregards whole farm income derived from other sources such as revenues received from remittances.

Data Source: Semi-annual surveys

Annual Results: In March 2013, NOA conducted a survey of farmers who are directly engaged with the project as beneficiaries. The survey indicated an annual rural income level of €30,552 per household. This serves as a baseline indicator for future comparisons. The next determination of income levels will be made at the same (calendar) time as the original survey – in February 2014.

IR 1: Products and Farmers Linked to Markets

Indicator IR.1.1: Number of delivery contracts issued for targeted crops

Definition of the indicator: Number of delivery contracts signed between Program-targeted value chain actors.

Disaggregation by: Type of market (domestic, regional and international), product.

Data Source: Data is collected from Program customers, using the delivery contract log tool developed by the Program.

Annual Results: In total, 310 contracts were signed during FY13. The table below disaggregates these contracts by groups of similar value chains. A list of the number of contracts signed per value chain and destination is attached in Annex II.

Value Chain	# of contracts
Vegetables	94
Field Vegetables	189
MAP	4
Fruits	16
Saffron	7

Number of contracts by value chain

Vegetable contracts consist mainly of those between gherkin farmers, collection centers and processors. There were 40 lettuce production contracts. In the field vegetables sector, 81%, or 153 contracts, were signed between pepper producers and collection centers. Of this number, 19 pepper contracts were for exports and one contract was for regional sale.

Indicator IR.1.2: Value of sales resulting from linkages created between farmers, processors and traders as result of USG assistance

Definition of the indicator: Total value of sales carried out as a result of the Program's engagement in the identification and creation of linkages between program customers including farmers, collection centers, processors and traders.

Disaggregation by: Type of market (domestic, regional and international), product.

Source of data: Collection of reports and advisory forms filled out by Program specialists.

Annual Results: In total, \$3,393,051 in sales have been generated as a result of linkages created between producers, collection centers, processors and other market players. In the tables below, we provide a summary of sales linked by type of market and value chain.

Linkages Sales by Type of Market	
Type of Market	Value in \$
Local	\$2,809,314
Regional	\$32,398
International	\$551,339

Linkages Sales by Value chain	
Value Chain	Value in \$
Fresh Vegetables	\$1,575,913
Fresh Fruits	\$1,306,461
Processed	\$482,174
Saffron	\$28,502

Indicator IR.1.3: Number of participants in study tours, B2B, market investigation and trade shows

Definition of the indicator: Number of people who participated in program sponsored events, including study tours, business to business events and trade shows.

Disaggregation by: Gender, ethnicity.

Source of data: Data are received from event participant lists and reports from Program specialists.

Annual Results: In total, 112 people participated in two study tours, B2Bs and trade fairs. A summary of events and the number of participants to each is provided in the table below.

Event Name	Type of Event	# of Participants
Study visit with 10 NOA clients in Strumica-Macedonia	Study Tour	10
Bio Fach Trade Fair	Trade Fair	2
Linkage trip to EU	Study Tour	1
Top fruit nursery man, grape exports	B2B	7
Partnering for Kosovo's Fruit and Vegetable Industry	B2B	55
Soft fruit study tour to Poland	Study Tour	5
Study tour to Hargreaves Pants UK	Study Tour	4
Grape study tour to Italy	Study Tour	6
International Agricultural Fair in Novi Sad	Trade Fair	22

IR 2: Agriculture Products Diversified and Increased

Indicator IR.2.1: Number of new markets entered for target value chain products

Definition of the indicator: Number of new markets (countries) identified as a result of the Program's efforts.

Disaggregated by: Type of market: local, regional or international, product/value chain.

Source of data: Data is collected using sales records and tools developed by the Program and kept by Program customers.

Annual Results: In total, 150 new markets have been identified, 84% of markets were in the local market, mainly as result of contract agreements between producers and processors which sold for the first time. In addition, we have established five new markets in the region - in Serbia and Montenegro.

The target is 15 but we count market entry regardless of size in this assessment, and therefore, this number is significantly higher than initial target. In the tables below we provide a summary of results disaggregated by type of market and value chain respectively:

Type of Market	# of markets
Local	126
Regional	5
International	19

Value Chains	# of markets
Fruits	64
Vegetables	65
Field Vegetables	7
MAP	14

Indicator IR.2.2: Number of new technologies and/or management practices introduced as result of USG assistance

Definition of the indicator: Value adding technologies and management practices related to grading and sorting, drying, canning, packaging, Fertigation and irrigation, IPM, open field production, micro spraying, trellising, plastic mulch, pruning, etc.

Disaggregated by: None

Source of information: Data is collected from IIF reports and customer advisory forms.

Annual Results: 25 new technologies have been introduced this year including the following:

- ✓ Gherkins Icing Machine;
- ✓ Horizontal Dryer improving energy efficiency for herbs with focus on chamomile;
- ✓ Improved Harvester/Mower for herbs;
- ✓ Raspberry vacuum tube tension meter;
- ✓ Field tensiometer with electronic resistance block sensors in raspberry fields;
- ✓ Fertigation venturi system;
- ✓ Modified spraying system for raspberries;
- ✓ Storage atmosphere control through software system;
- ✓ Improved lettuce transplanting methods.
- ✓ 9 new varieties of table grape introduced
- ✓ 7 varieties of blueberries introduced

Indicator IR.2.3: Number of people trained in agriculture productivity as a result of USG assistance (FACTS)

Definition of the indicator: Total number of people that participated in Program-sponsored trainings on agricultural productivity.

Disaggregated by: Gender, ethnic group, location and value chain

Source of information: Data received from training participation lists.

Annual Results: In total, 2028 people participated in program sponsored trainings and open field days. In addition, 920 participated in program organized presentations, covering different topics. The tables below provide a summary of results disaggregated by gender, minority status and by value chain. Annex IV provides a list of training events held and the number of persons trained during FY13. Annex VIII provides a list of local, regional and international STTA engaged during FY13 to support various trainings, events and other activities.

Gender	# of people	%
Men	1642	81%
Women	386	19%
Minorities	272	13%
Total #	2028	

People Trained in FY13 by gender & ethnicity

Value Chain	# of people trained
Apple	60
Blueberry	75
Dairy	163
Environmental	207
Access to finance	254
Other (including Post Harvest, Management Practices)	335
Gherkins	30
Lettuce	38
Peppers	160
Raspberry	374
Strawberry	177
Table Grape	155

Number of People Trained by Value Chain

Indicator IR.2.4: Number of farmers, processors and others who have adopted new technologies or management practices as result of USG assistance

Definition of the indicator: Number of farmers adopting new practices or techniques provided by NOA.

Disaggregated by: Gender, ethnic group, location

Source of data: Data received from field visit reports and IIF reports.

Annual Results: In total, 1200 farmers and others have adopted new technologies and management practices. In the table below, we provide a summary of farmers and others who adopted new technologies and management practices, disaggregated by value chain and the number of hectares on which the technology is being used. Annex VI presents a list of new technologies introduced by NOA.

Value Chain	# of Farmers	Ha
Apple	161	205
Table Grape	461	470
Strawberry	35	50
Raspberry	152	22
Blueberry	9	10
Gherkins	93	30
Lettuce	50	35
Asparagus	11	10.6
Saffron	8	6
Pepper	70	14
MAP	150	120

Number of farmers and others who adopted new technologies

Indicator IR.2.5: Number of firms receiving USG assistance to invest in improved technologies (FACTS)

Definition of the indicator: Number of Collection Centers and Processors to whom the Program has provided trainings or technical support, and/or IIF funding to improve or upgrade their operations.

Disaggregated by: None

Source of data: Program training participation lists and IIF reports.

Annual Results: In total, 32 firms have invested to improve their production and processing technologies. These firms received funds from the IIF to adopt one or more technologies introduced which are reported under IR2.3. In addition, a detailed list of firms receiving grants can be found under the IIF section of this report.

Indicator IR.2.6: Number of hectares under improved technologies and/or management practices as a result of USG assistance (FACTS)

Definition of the indicator: This includes lands which are being cultivated using new/improved technology and/or management practices as defined in indicator IR2.2.

Disaggregated by: None

Source of data: Program reports including IIF reports and field visit reports.

Annual Results: In total, improved technologies are now being used on 250.6 Ha established through direct NOA support. The below table summarizes the area of land on which farmers are now practicing new technologies, by value chain. The column heading *NOA supported* are those areas that NOA directly supported in some way while the *total Ha* column includes areas of adoption that were made independent of NOA direct intervention – essentially highlighting total adoption of technologies.

Value Chain	NOA-Supported Ha	Total Ha
Apple	6	205
Table Grape	28	470
Strawberry	7	50
Raspberry	14	22
Blueberry	10	10
Gherkins	30	30
Lettuce	35	35
Asparagus	10.6	10.6
Saffron	6	6
Pepper	14	14
MAP	90	120
Total	250.6	972.6

Ha under new technologies

IR 3: Food Quality and Safety Improved

Indicator IR.3.1: Number of firms receiving USG assistance that obtain certification with international quality control, environmental and other process voluntary standards or regulations

Definition of the indicator: Number of farmers and/or firms that receive certification from licensed bodies, for at least one of the existing food and safety standards.

Disaggregated by: Gender, ethnic group, location, product

Source of data: Reports from post-harvest specialist.

Annual Results: The number of farmers/ firms that received GlobalGAP certification is six.

Company Name	Farmer Name	Product	GAP Certified	Date of certify award
N.T. Biofruti	Halim Baftiu	Strawberry	Yes	24.06.2013
Bio-Buzmi	Gegë Zefi	Raspberry	Yes	14.08.2013
N.P. DUKA	Muhamet Duka	Raspberries	Yes	15.08.2013
N.T.P. Valon Trade	Safet Abazibra	Table grape	Yes	24.09.2013
Me - Agro	Mehdi Bresilla	Apple	Audit completed	
SH.P.K. Heron&Adea	Kamer Elezi	Apple	Audit completed	

List of farmers/firms certified as GlobalGAP compliant

Indicator IR.4: Increased Access to Agricultural Finance

Indicator IR.4.1: Value of DCA lending to the agricultural sector

Definition of the indicator: It measures the value of DCA-backed loans received by Program customers from financial institutions (including banks and MFIs) to invest in Program-targeted crops and value chains.

Disaggregated by: Data reported under this indicator will be disaggregated by value chain.

Source of data: Information will be derived from bank reports to MAFRD and USAID.

Annual Results: In total \$9M is the reported value of DCA supported loans issued to date. These loans were issued between Jan-Feb 2013.

Indicator IR.4.2: Number of finance institutions offering new products targeted at the agriculture sector and agri-business as a result of USG assistance

Definition of the indicator: This indicator counts all finance institutions that have developed such agricultural financing products.

Disaggregated by: Type of financial institution

Source of data: Internal Program reports.

Annual Results: In total, six banks are using DCA as part of their new loan product line. Banks include Procredit Bank, Reiffeisen Bank, TEB Bank, NLB, Economic Bank and BKT.

Indicator IR.4.3: Number of SMMEs receiving USG assistance to access bank loans or private equity (FACTS)

Definition of the indicator: This indicator includes SMMEs along all levels of the targeted value chains including producers, processors, traders, business development support service providers and the like. All SMMEs that receive any type of Program-supported technical assistance aimed at improving their ability to qualify and apply for bank loans or to obtain private equity, will be counted under this indicator regardless of whether or not they actually apply for and/or receive a bank loan.

Disaggregated by: Disaggregated by the level of the value chain at which the SMMEs operate and the value chain itself.

Source of data: Relevant data is collected from Program reports.

Annual Result: In total, 142 entities participated in program sponsored activities related to access to finance and loans. The list of events with participants is summarized below:

Event Name	# of participants
Information for the preparation of MAFRD and NOA grants	31
Informing of women farmers, about grant program of MAFRD, Sirius	44
MAFRD program presentation for 2013	17
VAT modifications	9
Woman Entrepreneurs Networking	41
Total	142

Indicator IR.4.4: Value of grants issued for value chain operators of targeted crops and products as result of USG assistance (including IIF)

Definition of the indicator: This indicator tracks the total value of grants issued to support investment in Program-focused value chain development. It includes grants issued by the Program under the IIF as well as grants provided by other donor organizations, NGOs, Government or other entities.

Source of data: IIF reports, customer survey.

Annual Result: During FY2 the program has invested \$754,132 through the IIF in activities related to targeted crops. These were recorded as grants whereas \$37,957 was issued as subcontracts. In the IIF section, a detailed list of grants disaggregated by value chain is provided.

Indicator IR.4.5: Number of Program customers receiving grants as a result of USG assistance (including IIF)

Definition of the indicator: The total number of customers that receive funds as a result of Program assistance. This includes recipients of IIF Grants as well as other program customers that have received grants from other entities.

Disaggregated by: Gender, ethnicity and value chain

Source of data: IIF grant reports, customer survey.

Annual Results: In total, 47 value chain operators received assistance through the program’s IIF grant scheme including new production of blueberries, asparagus, new growing technologies in peppers, technical support to farmers and milk producers, conversion of wine yards etc. Detailed list of grants and subcontracts is included in IIF section of this report.

Indicator IR.5: Improved Coordination within the Agricultural Sector Indicator

IR.5.1: Number of interventions improving the functionality of the Agriculture sector

Definition of the indicator: This indicator refers to policy reforms/regulations/administrative procedures drafted and presented to stakeholders for consultation but not yet submitted formally to government or other bodies that would approve it. The project will report any intervention improving the functionality of the Ministry of Agriculture to influence coordination in the agricultural sector. The indicator will include policy changes influenced, administrative instructions concluded with NOA support as well as modified MAFRD management or grant making decisions influenced by NOA— regardless of the number of meeting that have been required to bring the intervention to conclusion.

Source of data: Data collected from internal reports.

Annual Results: A total of 8 ongoing and intermittent activities were supported by the project in order to enhance improved coordination. These are detailed in the improved coordination section of the report.

IR.5.2: Number of donor, GoK and agriculture sector roundtables or other events facilitated by NOA

Definition of the indicator: Number of formal agricultural coordination events sponsored by the Program.

Source of data: Program Records

Annual Results: 18 round table meetings have been facilitated by NOA in FY13, involving GOK, private and NGO actors within the agriculture sector with a total of 221 participants. A list of events with the number of participants is attached in Annex V.

4.0 INNOVATION AND INCENTIVE FUND

4.1 FY 2013 GRANTS

The Program published nine RFAs and received 39 applications for which were established evaluation committees comprised of technical staff in order to do the screening of the received Applications. In addition there were 50 unsolicited applications received.

For each RFA there was an Information Day organized for the interested parties, in which the Grants Manager and the respective Technical Officer would present the main elements of the RFA, and answered different administrative and technical questions and queries.

The COP, DCOP and Technical staff, assessed all applications and agreed that technical staff would visit the applicants that manifested greater potential, or where clarifications were needed, to properly evaluate their sites/plots and to determine whether or not they were in compliance with program objectives.

The approved applications were for ‘growers’, ‘nurseries’, ‘collection centers’ and ‘processors’. Through grants the Project supported four crops with several varieties including apples, table grape, blueberries (commercial cultivation of four varieties and test cultivation of other five varieties) and asparagus (three varieties). For cultivation and propagation of the apples the Program supported an apple nurseries association in establishing of apple mother-plants (five varieties). The Program also supported conversion of wine grape to table grape (ten varieties) in 8 hectares. Support for cultivation has continued with six blueberries growers and five asparagus growers, and also with new technologies of pepper cultivation including 70 trial plots.

Other approved applications included support to engagement of interns by processors (horticulture and milk) and collection centers; training of interns engaged by processors, collection centers and NOA; support to three spraying service providers for fruits; three lettuce postharvest lines; transparent raw milk sampling; equipping of two collection centers with plastic crates; two dryers and a harvester for MAPs and support to a bigger processor with improvement of storing capacities. Details on these newly-issued grants are provided within the relevant sections of this annual report narrative. Out of 47 approved grants from this year 8 were finished and the rest are still ongoing.

The grant team visited the 47 successful grant applicants and conducted the Simplified Pre-Award Survey. Negotiation memoranda were prepared for twenty-one fixed obligation grants, one simplified and 25 in-kind grants.

Disbursement of grants took a long time, because of the fact that NOA is introducing innovative and new technologies which cannot be found to be purchased within Kosovo and regulation authorizing procurement from the Geographic Code 937 (from April 1, 2012).

A listing of the grants, the name of the grantee, the amount of the grant, and the purpose of the grant are described in the table 1 below.

TABLE 1: FY 2013 GRANT RECIPIENTS

No.	Grantee	Grant Short Description	Grant Amount	Project Total Cost	Status
1	Abi & Elif 19	Increase of human capacities of the company	€ 8,100	€ 10,800	Ongoing
2	ASK FOODS	Increase of production capacities and output by employing new professionals in selected fields	€ 11,475	€ 15,300	Did not start; Grant Termination
3	Etlinger	Increased professional capacities of the company through support for engagement of professional staff	€ 7,200	€ 9,600	Ongoing
4	EuroFood	Increased human capacities for increased production and improved quality of products	€ 8,775	€ 11,700	Ongoing
5	MOEA LLC	Increase of human capacities in the processing sector, respectively in MOEA-Frutomania	€ 8,775	€ 11,700	Ongoing
6	Sole Kosova	Adaption of new investments according to the Kosovo Agri-System for processors	€ 10,800	€ 51,300	Ongoing
7	SHQK/SHQK	Transparency and neutrality during sampling of milk for quality control	€ 14,487	€ 79,940	Ongoing
8	Action for Revitalization	Conversion of wine grape into table grape through grafting	€ 36,015	€ 58,365	Ongoing
9	Bylmeti	Technical support to the farmers and milk producers	€ 1,680	€ 2,400	Finished; Grant TBC
10	Magic Ice	Engagement of an expert for extension	€ 1,680	€ 2,400	Did not start; Grant Termination
11	Euroлона	Technical support to the farmers and milk producers	€ 1,680	€ 2,400	Finished; Grant TBC
12	Ajka	Technical support to the farmers and milk producers	€ 1,680	€ 2,400	Finished; Grant TBC
13	Krasniqi-R	Establishment of blueberries orchard in 0.5 ha	€ 6,312	€ 10,905	Ongoing
14	Blerti	Establishment of plantation with cultivated blueberries in 0.9 ha	€ 11,362	€ 16,852	Ongoing
15	Toni	Establishment of plantation with cultivated blueberries in 0.9 ha	€ 11,362	€ 16,852	Ongoing
16	Fisi	Establishment of plantation with cultivated blueberries in 0.9 ha	€ 11,362	€ 16,852	Ongoing
17	Zdrava Hrana	Trial Cultivation of Blueberries in 0.5 ha	€ 6,312	€ 7,541	Ongoing
18	Juniku	Establishment of plantation with cultivated blueberries in 1.3 ha	€ 16,671	€ 33,132	Ongoing
19	Pemishtja Korrani	Spraying services for apple orchards	€ 3,500	€ 6,250	Finished; Grant TBC
20	Agro-Sistem	Services for spraying of apple, pear, plum and cherry orchards	€ 3,500	€ 6,149	Finished; Grant TBC
21	Premili-Alb	Improving of application of pesticides in orchards and vineyards of Gjakova municipality	€ 3,500	€ 8,310	Finished; Grant TBC
22	Euro Taç	Improvement of infrastructure of the Euro	€ 28,998	€ 64,968	Finished;

No.	Grantee	Grant Short Description	Grant Amount	Project Total Cost	Status
		Tac Collection Center			Grant TBC
23	PlantKosova	Establishment of motherplants nurseries and improvement of quality of seedlings	€ 82,032	€ 120,973	Ongoing
24	SHPQK	Support to farms for milk production in improvement of feeding, reproduction and prevention of diseases in cattle	€ 5,500	€ 7,300	Finished; Grant TBC
25	Agroproduct ShPK	Provision of a horizontal dryer, building of a new alternative energy heating system	€ 45,529	€ 96,871	Ongoing
26	Driardi	Cultivation, harvesting and drying of chamomile	€ 44,900	€ 69,534	Ongoing
27	Jonathan	Implementation of demonstration of new pepper growing technologies	€ 17,045	€ 19,925	Ongoing
28	Agro Pharma	Implementation of demonstration of new pepper growing technologies	€ 11,890	€ 13,990	Ongoing
29	Agro Nili	Implementation of demonstration of new pepper growing technologies	€ 11,890	€ 13,690	Ongoing
30	Alpitur	Asparagus cultivation in 1ha of land	€ 1,220	€ 9,587	Ongoing
31	Exploring Inteligence	Asparagus cultivation in 2ha of land	€ 2,440	€ 16,894	Ongoing
32	Agro Idila	Asparagus cultivation in 1ha of land	€ 1,220	€ 8,617	Ongoing
33	Gadis Group	Asparagus cultivation in 1ha of land	€ 1,220	€ 11,367	Ongoing
34	Agrokor E & A	Asparagus cultivation in 2ha of land	€ 2,440	€ 18,534	Ongoing
35	Moni	Postharvest line for lettuce head	€ 15,425	€ 18,180	Ongoing
36	Agrofresh	Postharvest line for lettuce head	€ 15,024	€ 17,411	Ongoing
37	Freskimi	Postharvest line for lettuce head	€ 15,195	€ 18,595	Ongoing
38	EDI	Capacity building of interns engaged by processors and collection centers	€ 5,270	€ 5,270	Ongoing
39	Agro Celina	Building of professional capacities of the company through support for engagement of professional staff	€ 2,700	€ 3,600	Ongoing
40	Kelmendi GmbH	Building of professional capacities of the company through support for engagement of professional staff	€ 2,700	€ 3,600	Ongoing
41	Krusha e Madhe	Support with human capacities	€ 1,800	€ 2,400	Ongoing
42	Agroprodukt	Support for human capacities in gherkin and/or pepper Collection Centers	€ 1,800	€ 2,400	Ongoing
43	Shala Produkt	Fulfillment of a working system with an adviser to the gherkin collection center	€ 2,250	€ 3,000	Ongoing
44	Rizona	Intern Agronomist	€ 1,800	€ 2,400	Ongoing
45	Euro Taç	Improvement of knowledge of producers through engagement of an adviser	€ 1,800	€ 2,400	Ongoing
46	Abi & Elif 19	Improvement of storing capacities	€ 39,800	€ 77,500	Ongoing
47	Agrocelina	Increase service efficiency through standard packaging	€ 10,500	€ 12,900	Ongoing
Total			€ 558,616	€ 1,053,024	

4.2 FY 2013 SUBCONTRACTS

During the reporting period three Statements of Work were prepared by the Technical Staff on: NOA Project visibility through Outreach TV Shows; for Meeting the needs of Agribusiness Sector in Kosovo and NOA Program Process and Impact Assessment.

The first two were prepared as sole source subcontracts while the third one was published. There were seven proposals received and after reception, the proposals were evaluated by assigned members of the evaluation committee, and a summary evaluation sheet was presented to the members of the committee. The chosen company to do the job was sub-contracted under a Firm Fixed Price Subcontract.

A listing of the subcontracts, the name of the subcontractor, the amount of the subcontract, and the purpose of the subcontract are described in the Table 2 below.

TABLE 2: FY 2013 SUBCONTRACTORS

No.	Subcontractor	Contract Short Description	Sub-contract Value in €	Status
1	IARD	Outreach TV Show	€ 9,595	Finished
2	KCC	Meeting the needs of Agribusiness Sector in Kosovo	€ 6,921	Finished
3	RAR-Consulting	NOA Program Process and Impact Assessment	€ 11,600	Ongoing
Total			€ 28,116	

4.3 FY 2013 AWARDS UNDER THE IIF

Table 3 below summarizes the type of award made under the IIF in FY 2013 and the percentage of funds approved that have been distributed to date.

Type of Awards		
Type of Award	Approved	% Distribution
Grants	€ 558,616	81.18%
Subcontracts	€ 28,116	58.74%
Total	€ 586,732	

5.0 FINANCIAL REPORT

The NOA FY13 general financial report is shown below. The report shows expenditures through September 30, 2013, against contractual budget lines. In addition, costs incurred (paid out) of the Innovation and Incentives Fund (IIF) are also shown. Please note however, that to better understand *obligated* costs under the IIF and the funds that remain therein, the reader is referred to Section 4 of this report.

CONTRACT NO. AID-EDH-I-00-05-00006 Kosovo New Opportunities for Agriculture FY3 Annual Report (October 2012 - September 2013) CONTRACT EXPENDITURES through September 30, 2013				
Contract Category	Contract Budget	Total Cost Incurred as of 9/30/2013	Remaining as of 9/30/2013	% used
Total All Other	\$ 12,394,241	\$ 8,202,100	\$ 4,192,141	66%
IIF Activities	\$ 2,820,796	\$ 2,427,526	\$ 393,270	86%
Fixed Fee	\$ 684,677	\$ 478,364	\$ 206,313	70%
TOTALS	\$ 15,899,714	\$ 11,107,990	\$ 4,791,724	70%

ANNEX I. INDICATOR TARGETS AND RESULTS

	Indicator	Unit Measure	FY1 (8 months) Targets	FY1 (8 months) Results	FY2 Targets	FY2 Results	FY3 Targets	FY3 Results	FY4 Targets	FY5 Target (5 months)	Total Results
AO2: Increasing Private Sector-Led Growth											
AO2.1	Total value of sales as a result of USG assistance	\$	\$1m	\$522,304	\$4m	\$5,388,783	\$8m	\$41,963,698	\$12m	\$7.5m	\$32.5m
AO2.2	Total value of exports as a result of USG assistance	\$	\$200k	0	\$500k	\$1,906,353	\$2m	\$10,277,518	\$4m	\$3m	\$9.7m
AO2.3	Total value of domestic sales as a result of USG assistance	\$	\$800k	\$522,304	\$3.5m	\$3,482,430	\$6m	\$31,686,179	\$8m	\$4.5m	\$22.8m
AO2.4	Number of Person-days/FTE generated through target value chains as result of USG assistance	Number FTE	500	259	1000	983	1500	1984	2000	1500	6500
AO2.5	Changes to gender empowerment measures (GEM) as a result of program interventions	%	-	-	-	-	10	35	20	-	10
AO2.6	Increase in the value of import substitution as a result of USG assistance	\$	-	-	-	-	\$7M	\$5.4M	\$11M	\$3M	\$21M
AO2.7	Percent (%) increase in rural income as result of USG assistance	%	-	-	-	-	30%	-	25%	10%	10%
IR 1: Products and Farmers Linked to Markets											
IR1.1	Number of delivery contracts issued for targeted crops	Number	-	13	100	88	250	310	475	325	1150

	Indicator	Unit Measure	FY1 (8 months) Targets	FY1 (8 months) Results	FY2 Targets	FY2 Results	FY3 Targets	FY3 Results	FY4 Targets	FY5 Target (5 months)	Total Results
IR1.2	Value sales resulting from linkages created between farmer, processors and traders as result of USG assistance	\$	\$500k	\$75,323	\$1.6m	\$878,830	\$2.4m	\$3,393,051	\$3m	\$1.5m	\$9m
IR1.3	Number of participants in study tours, B2B, market investigation and trade shows	Number	20	34	60	118	60	110	60	30	230
IR 2: Agricultural Products Diversified and Increased											
IR2.1	Number of new markets entered for target value chain products	Number	-	5	3	15	5	150	10	12	12
IR2.2	Number of new technologies and/or management practices introduced as result of USG assistance	Number	3	6	6	111*	5	25	5	4	23
IR2.3	Number of individuals trained in agriculture productivity through USG assistance (FACTS)	Number	500	306	1500	1828	2000	2028	2500	500	7000
IR2.4	Number of farmers, processors, and others who have adopted new technologies or management practices as a result of USG assistance	Number	350	70	800	636	1200	1200	1500	1750	1750
IR2.5	Number of firms receiving USG assistance to invest in improved technologies (FACTS)	Number	-	11	5	50	15	32	30	35	35

	Indicator	Unit Measure	FY1 (8 months) Targets	FY1 (8 months) Results	FY2 Targets	FY2 Results	FY3 Targets	FY3 Results	FY4 Targets	FY5 Target (5 months)	Total Results
IR2.6	Number of hectares under improved technologies and/ or management practices as a result of USG assistance (FACTS)	HA	5	8.4	30	54	50	251	60	60	205
IR 3: Food Quality and Safety Improved											
IR3.1	Number of firms receiving USG assistance that obtain certification with international quality control, environmental and other process voluntary standards or regulations	Number	-	1	1	-	4	6	8	10	10
IR 4: Increased Affordable and Accessible Credit											
IR4.1	Value of DCA lending to the agricultural sector	Number	-	-	\$500 k	-		\$9m	\$5 m	\$1 m	\$9m
IR4.2	Number of institutions offering new products targeted at agriculture and agri-businesses as a result of USG (NOA Project) assistance	Number	-	1	2	-	4	6	5	0	5
IR4.3	Number of SMMEs receiving USG (NOA Project) assistance to access bank loans or private equity (FACTS)	Number	-	41	15	49	240	142	55	75	75

	Indicator	Unit Measure	FY1 (8 months) Targets	FY1 (8 months) Results	FY2 Targets	FY2 Results	FY3 Targets	FY3 Results	FY4 Targets	FY5 Target (5 months)	Total Results
IR4.5	Value of grants issued for value chain operators of target crops and products as result of USG assistance (excl. IIF) <i>From IIF – grants and subcontracts</i>	\$	- \$200k	- \$387,840	\$100k \$1m	- \$1,652,866	\$200k \$1m	- \$792,089	\$400k \$500k	\$400k \$200k	\$1.1m \$2.9m
IR4.6	Number of Program customers receiving grants as a result of USG assistance (including IIF) <i>From IIF – grants and subcontracts</i>	Number	- 10	- 28	5 100	- 70	- 100	- 47	20 50	20 20	55 280
IR 5: Improved Coordination within Agricultural Sector											
IR5.1	Number of interventions improving the functionality of the Agriculture sector	Number	-	-	2	-	8	-	0	0	5
IR5.2	Number of donor, GOK and agriculture sector roundtables or other events facilitated by NOA	Number	8	11	12	36	12	18	12	5	52

* Refer to Annex VI for list of technologies introduced.

ANNEX II. FY13 SUMMARY OF SIGNED SALES CONTRACTS

Value Chain	Location	Total
Apple	Local	7
Apple and Plum	International	1
Apple and Plum	Local	1
Cabbage	International	1
Cabbage	Local	4
Chamomile	International	3
Carrots	Local	1
Corn flour	International	1
Eggplant	Local	2
Peperoni	Local	1
Gherkins	International	1
Gherkins	Local	54
Lettuce	Local	39
Marshmallow	International	1
Malone	Local	4
Mint	International	1
Onion	Local	4
Pears	Local	1
Peppers	International	19
Peppers	Local	133
Peppers	Regional	1
Plum	International	1
Plum	Local	1
Potato	Local	2
Pumpkin	International	1
Saffron	Local	7
Spinach	Local	1
Table Grape	International	2
Table Grape	Local	2
Tomato	International	3
Tomato	Local	5
Watermelon	Local	5

ANNEX III. FY13 SUMMARY OF SALES BY VALUE CHAIN AND DESTINATION

Value Chain	Type Fresh VS Processed	Location	Total in €	Total in \$
Ajvar	Processed	International	809,600.00 €	\$1,101,056
Ajvar	Processed	Local	257,600.00 €	\$350,336
Apple	Fresh	Local	178,741.28 €	\$243,088
Blackberries	Fresh	Local	21,254.59 €	\$28,906
Blackberry Jam	Processed	Local	463.68 €	\$631
Blackberry Juice	Processed	Local	209.48 €	\$285
Blueberry	Fresh	Local	9,566.84 €	\$13,011
Blueberry & Raspberry Juice	Processed	Local	1,600.80 €	\$2,177
Chamomile	Fresh	International	251,932.80 €	\$342,629
Crushed red hot pepper 100gr	Processed	International	910.80 €	\$1,239
Crushed red pepper 100gr	Processed	International	3,218.16 €	\$4,377
Crushed red pepper 200gr	Processed	International	1,214.40 €	\$1,652
Dairy	Processed	International	731,694.00 €	\$995,104
Dairy	Processed	Local	18,410,629.00 €	\$25,038,455
Frozen Fruits	Semi Processed	International	2,265,408.00 €	\$3,080,955
Fruit Nursery	Fresh	Local	4,416.00 €	\$6,006
Gherkins	Fresh	International	78,899.20 €	\$107,303
Gherkins	Fresh	Local	928,336.27 €	\$1,262,537
Gherkins 0.55kg	Processed	Local	4,508.00 €	\$6,131
Gherkins 0.72kg	Processed	Local	24,698.32 €	\$33,590
Gherkins 1.5 kg	Processed	Local	2,671.68 €	\$3,633
Gherkins 2.5kg	Processed	Local	10,399.68 €	\$14,144
Lettuce	Fresh	Local	64,560.15 €	\$87,802
MAP	Fresh	International	1,342,004.00 €	\$1,825,125
Marshmallow	Fresh	International	157,320.00 €	\$213,955
Mint	Fresh	International	86,480.00 €	\$117,613
Peppers	Fresh	International	725,635.48 €	\$986,864
Peppers	Fresh	Local	1,037,576.00 €	\$1,411,103
Processed Fruits & Veggies	Processed	Local	307,271.20 €	\$417,889
Raspberry	Fresh	International	42,393.60 €	\$57,655
Raspberry	Fresh	Local	101,977.11 €	\$138,689
Raspberry	Fresh	Regional	695,230.20 €	\$945,513
Saffron	Fresh	International	11,176.16 €	\$15,200
Saffron	Fresh	Local	9,936.00 €	\$13,513
Strawberry	Fresh	Local	698,020.17 €	\$949,307
Table Grape	Fresh	International	37,260.00 €	\$50,674
Table Grape	Fresh	Local	508,026.00 €	\$690,915
Mushroom	Processed	International	372,600.00 €	\$506,736
Total				\$41,065,797

ANNEX IV. FY13 TRAINING EVENTS

Event Name	Event Date	Type	Category	Value Chain	# of participants	Gender
Balancing rations in feeding of cow dairy. Improvement of dairy cows reproduction	20-02-13	Training	Dairy	Dairy	7	Female
Blueberry Production Workshop, Junik	30-04-13	Training	Fruits	Blueberry	5	Female
Capacity Building of the Interns engaged in Collection Points and Processing Companies, Pristina	26-06-13	Training	Training Of Trainers	General Agriculture	6	Female
Comercial Farming, ProCreditBank, Peje	17-05-13	Training	Access to finance	General Agriculture	1	Female
Contracts for programmed cultivation	20-02-13	Training	Vegetables	Peppers	1	Female
Dairy Farm Management Training/ Woman Farmers, Gjakove-Korenica	11-04-13	Training	Dairy	Dairy	21	Female
Dairy Farm Management Training/Women Farmers	04-04-13	Training	Dairy	Dairy	14	Female
Demonstration of autumn products	15-11-12	Training	Fruits	Raspberry	5	Female
Farm record keeping, budget and gross margin analyses. Business plan preparation -LIVESTOCK	27-02-13	Training	Dairy	Dairy	6	Female
Farmer Field School APC- Raspberry Production, Peran, Podujeva	17-04-13	Training	Fruits	Raspberry	3	Female
Farmer Field School- Raspberries for Fresh Market, Peran, Podujeve	17-04-13	Training	Fruits	Raspberry	3	Female
Farmer Field School -Raspberries for Fresh Market, Kravaricë Ask Foods	19-04-13	Training	Fruits	Raspberry	1	Female
Farmer Field School-"Raspberries for fresh market", Bibaj-Ferizaj	19-04-13	Training	Fruits	Raspberry	5	Female
Farmer Field School, Llukë, Sllip, Ramoc	24-07-13	Training	Fruits	Blueberry	1	Female
Field and crop budget, gross margin analyses on vegetables	13-02-13	Training	Vegetables	General Agriculture	7	Female

Event Name	Event Date	Type	Category	Value Chain	# of participants	Gender
Hygiene in dairy farms-The focus in proper milking practices. Safe use of pesticides	26-02-13	Training	Environmental	Dairy	5	Female
Information for the preparation of MAFRD and NOA grants	13-03-13	Training	Access to finance	General Agriculture	6	Female
Information Meeting of the NOA Interns Engaged To The C.C. And Processing Companies, NOA Office, Pristina	14-05-13	Training	Training Of Trainers	General Agriculture	7	Female
Informing of women farmers, about grant program of MAFRD, Sirius	16-04-13	Training	Access to finance	General Agriculture	41	Female
IPM and SUP, Crops: Apple, Pepper, Salad, Agriculture Institute Peja	23-09-13	Training	Vegetables	General Agriculture	3	Female
IPM, Elimination of bad grass	15-10-12	Training	Fruits	Raspberry	3	Female
Main pests and diseases of fruit crops	13-02-13	Training	Fruits	General Agriculture	7	Female
Main pests and diseases of vegetable crops	05-02-13	Training	Vegetables	General Agriculture	5	Female
Plant propagating material production. Cultural practices of table grape crop	30-01-13	Training	Fruits	Table Grape	5	Female
Plant Protection (IPM and SUAP), Lipjan	27-09-13	Training	Vegetables	Peppers	2	Female
Plant Protection (IPM and SUP), Table Grape, Pepper. Rahovec	24-09-13	Training	Vegetables	Gherkins	1	Female
Plant Protection (IPM,SUP) -Vegetable Crops, Mogilla	13-09-13	Training	Vegetables	General Agriculture	1	Female
Plant Protection (IPM,SUP) -Vegetable Crops, Perlepticë, Gjilan	19-09-13	Training	Vegetables	General Agriculture	2	Female
Plant Protection (IPM,SUP) -Vegetable Crops, Zahaq, Pejë	17-09-13	Training	Vegetables	General Agriculture	1	Female
Post-Harvest handling, storage and marketing linkages	29-01-13	Training	Post-Harvest and Certification	General Agriculture	4	Female
Post-Harvest handling, storage and marketing of fruit crops and Global Gap principles	06-02-13	Training	Post-Harvest and Certification	General Agriculture	6	Female
Principles of vegetable crop nutrition and irrigation, AES Trainings, Lipjan	16-01-13	Training	Vegetables	General Agriculture	6	Female
Programed vegetable cultivation promotion, Pasjan, Gjilan	16-01-13	Training	Vegetables	Peppers	2	Female
Promotion of Apple Packing Center	30-10-12	Training	Post-Harvest and	Apple	5	Female

Event Name	Event Date	Type	Category	Value Chain	# of participants	Gender
			Certification			
Raspberries for fresh market- IPM (weed control sanitation), Hotel Prishtina	28-06-13	Training	Fruits	Raspberry	2	Female
Raspberries for fresh market, Shterpce	26-04-13	Training	Fruits	Raspberry	4	Female
Raspberry for Fresh Market, Prishtina, Hotel Sirius	24-04-13	Training	Fruits	Raspberry	4	Female
Ride the capacities of women farmers in issues of sales and marketing	27-03-13	Training	Marketing and Linkages	General Agriculture	14	Female
Safe use of pesticides, Leposaviq	02-02-13	Training	Environmental	General Agriculture	2	Female
Safe use of pesticides, Leposaviq with Albanian	05-02-13	Training	Environmental	General Agriculture	1	Female
Safe use of pesticides, Zubin Potok	12-01-13	Training	Environmental	General Agriculture	4	Female
Safe use of pesticides, Zubin Potok	19-01-13	Training	Environmental	General Agriculture	5	Female
Safe use of pesticides, Zubin Potok	26-01-13	Training	Environmental	General Agriculture	6	Female
Sales and marketing in Horticulture, Hotel Sirius, Prishtine	26-03-13	Training	Marketing and Linkages	General Agriculture	20	Female
Strawberry Sales and Promotion Planning Activity, Prishtinë	15-06-13	Training	Marketing and Linkages	Strawberry	1	Female
Drip Fertigation System	15-10-12	Training	Fruits	Raspberry	2	Female
The issue in agriculture environmental	05-03-13	Training	Environmental	General Agriculture	5	Female
Training of Lab Technicians at Processors and KFVA, Sllatin e Madhe "TrePharm"	29-08-13	Training	Post-Harvest and Certification	Gherkins	6	Female
Training of Trainers of the NOA Interns, NOA Office, Pristina	22-05-13	Training	Training Of Trainers	General Agriculture	6	Female
Training with extension workers from MAPRD, Vegetables Seedling Production, Lipjan	08-01-13	Training	Vegetables	General Agriculture	3	Female
Training with extension agents MAFRD "Farm crop budget gross margin analyses to the fruit crops"	12-02-13	Training	Fruits	General Agriculture	8	Female
Training with extension agents under MAFRD, Lipjan	09-01-13	Training	Vegetables	General Agriculture	3	Female
Training and Monitoring of Apple Integrated Production	30-11-12	Training	Fruits	Apple	1	Female
Training of Trainers of the NOA Interns, NOA Office, Pristina	28-05-13	Training	Training Of Trainers	General Agriculture	5	Female

Event Name	Event Date	Type	Category	Value Chain	# of participants	Gender
Transparency and neutrality during sample collection, quality control and payment of raw milk in Kosovo	16-11-12	Training	Post-Harvest and Certification	Dairy	1	Female
Vegetable production in open field and green house. AES Trainings, Lipjan	15-01-13	Training	Vegetables	General Agriculture	6	Female
Working group with NOA Interns, NOA Office, Pristina	04-09-13	Training	Training Of Trainers	General Agriculture	1	Female
Working groups with NOA interns, NOA Office, Pristina	04-09-13	Training	Training Of Trainers	General Agriculture	2	Female

ANNEX V. FY13 ROUNDTABLES HELD

Event Name	Type of Event	Number of Persons
Working meeting for Gherkins	Roundtable	14
Contract signature for programed cultivation, Ranillug	Roundtable	24
VAT for fruit and vegetable processors	Roundtable	4
Meeting of the fruit and vegetable processors	Roundtable	5
KEN SMARZIK - KC6F. Kosovo Credit Guarantee Fund Establishment, NOA Office Pristina	Roundtable	21
Pepeko-Roundtable of processors about contracting, NOA Office Pristina	Roundtable	10
PePeKo meeting , Pristina	Roundtable	3
Meeting with PePeKo	Roundtable	5
Processors Meeting, Kravaricë, Gjilan	Roundtable	11
Roundtable for Table Grape, Hotel Plaza, Rahovec	Roundtable	15
Agriculture insurance, NOA Office, Prishtinë	Roundtable	14
Fulfillment of needs of the agribusiness sector,	Roundtable	27
Linking Saffron Farmers with Buyers, Prishtinë	Roundtable	9
Linking Supermarkets with Raspberry Farmers, NOA Office, Prishtina	Roundtable	10
Preparing for the trading of fresh raspberries in the supermarket and fair, NOA Office, Prishtina	Roundtable	6
Roundtable on Farmer Registration, MAFRD Paying Agency, Prishtina	Roundtable	9
Roundtable for Berries, NOA Office, Pristina	Roundtable	13
Put it on Paper Roundtable ,NOA,CLE	Roundtable	21

ANNEX VI. FY13 NEW TECHNOLOGIES INTRODUCED

Apple	Table Grape	Strawberries	Blueberries	Raspberries	Gherkins	Lettuce	Asparagus	Saffron	Herbs	Post Harvest
Pre-bodied feathered trees	Pruning	Irrigation	Plantation Establishment	New Trellising System	Sizing Machine	Micro Spraying	New Crop	Crocus Corms Sativus Variety	Harvester	Storage Atmosphere control through software
Pruning	Modified T trellising	Fertigation	Wood Clips Mulching	Fertigation	Trellising System	Plastic Mulch	Underground Drip Irrigation	Planting & Cultural Care	Horizontal Dryer	
Trellising	Single Guyot	Plastic Mulch	Fertigation	Drip Irrigation	Fertigation (Venture Type)	Tray Seedling Production	Seedlings/Crown Production	Harvesting Techniques		
Apple Drip Irrigation	Shoot Thinning	Strawberry IPM	Irrigation	Mankar Sprayers (Weed Control)	Plastic Mulching	Continues Successive Planting	Transplanting	Drying		
Advanced Fertigation system	Cluster Thinning	New Nursery Propagation	Nursery Propagation	Cover Crop with rotation, rape seed, buckweed	Drip Irrigation	Rucola cultivate	Crop Production			
Humidity Control	Berry Thinning	Albion Variety	Soil Acidification	Cane Pruning	Open Field Production	Grazia Variety	UC 157 F1 Variety			
Tree Training System	Y trellising	Honeoye Variety	New Crop Introduction	Pruning of primary Canes	Mirabelle Variety	Venicia Variety	Jersey Giant Variety			
Panel Insulation System	Drip Irrigation	High Tunnels	Duke Variety	Pollka Variety	Miranda Variety	Tatiana Variety	Depally Variety			
Anti Hail	Fertigation System	Indoor Cultivation-Ground	Blue Crop Variety	Tullemen Variety	Gallina Variety	Gaugin RZ Variety				

Apple	Table Grape	Strawberries	Blueberries	Raspberries	Gherkins	Lettuce	Asparagus	Saffron	Herbs	Post Harvest
High Density Fruit Orchards	Planting Distances	Indoor Cultivation-Raised Beds	Elliot Variety	Nova Variety	Zatmir Variety	Dagama RZ Variety				
Apple IPM	IPM		Legacy Variety	Autumn Bliss Variety	Bereg Variety	Beldy Variety Variety				
Red Chief Variety	Red Globe Variety			Vacuum Tube Tensionmeter	Icing Machine	Ezteban Variety				
Fuji Kiku 8 Variety	Crimson Seedless Variety			Tensionmeter with electronic resistance		Ezra Variety				
Gala Variety				Venture Fertigation System		Bijou Variety				
Fuji Full Brax Variety				Spraying System		Alanet Variety				
Golden Rainders Variety						Sadavi Variety				
						Palosta Variety				
						Primafin Variety				
						Bacio Variety				
						Jabeque Variety				
						Manavert Variety				
						Expression Variety				
						Papiro Variety				
						Seagull Variety				
						Saula Variety				
						Botiola				

Apple	Table Grape	Strawberries	Blueberries	Raspberries	Gherkins	Lettuce	Asparagus	Saffron	Herbs	Post Harvest
						Variety				
						Contessa Variety				
						Sartre RZ Variety				
						Saigon RZ Variety				

ANNEX VII. FY13 SUCCESS STORIES / SNAPSHOTS

[Please see PDF version of this report for Kosovo NOA Snapshots.]

ANNEX VIII. LIST OF STTA ENGAGED IN FY13

#	Name/Surname	Position	Country of Origin	Start Date	End Date
LOCAL and REGIONAL STTA					
1	Agran Halimi	Global GAP	Kosovo	3/18/2013	10/17/2013
2	Alexandra Martinoska	Cost of Production	Macedonia	5/21/2012	5/26/2013
3	Arben Mehmeti	Global GAP	Kosovo	3/18/2013	10/17/2013
4	Arizana Berdynaj	Technical Assistance	Kosovo	10/22/2012	2/21/2013
5	Basri Hyseni	Financial Management	Kosovo	6/21/2012	12/31/2012
6	Behar Avdiu	Lettuce/Asparagus	Kosovo	3/18/2013	10/17/2013
7	Behlul Behluli	Municipality Extension	Kosovo	1/1/2013	9/30/2013
8	Bujar Ejupi	Municipality Extension	Kosovo	1/1/2013	9/30/2013
9	Fadil Musa	Municipality Extension	Kosovo	1/1/2013	9/30/2013
10	Fadil Musa	Pesticide Training	Kosovo	1/1/2013	9/30/2013
11	Lavdim Lepaja	Raspberries	Kosovo	4/11/2013	11/12/2013
12	Muhamed Kamberi	Municipality Extension	Kosovo	1/1/2013	9/30/2013
13	Muje Gjonbalaj	Municipality Extension	Kosovo	1/1/2013	9/30/2013
14	Muzafer Luma	Financial Management	Kosovo	6/25/2012	12/31/2012
15	Muzfer Luma	Raspberries	Kosovo	1/1/2013	9/30/2013
16	Qamil Cena	Financial Management	Kosovo	6/20/2012	12/31/2012
17	Ramadan Zajmi	Raspberries	Kosovo	6/6/2013	9/30/2013
18	Sherif Kurteshi	Dairy Farm Management	Kosovo	2/15/2013	3/14/2013
19	Vahid Avdiu	Lettuce/Asparagus	Kosovo	3/18/2013	10/17/2013
20	Xhavit Ramadani	Municipality Extension	Kosovo	1/1/2013	9/30/2013
21	Xhumret Veliu	Media Consultant	Kosovo	8/5/2013	9/5/2013
INTERNATIONAL STTA					
22	Roman Shynkarenko	Crop Insurance Advisor	Ukraine	7/28/2013	8/16/2013
23	Johan Andreas Teubes	Grape Post-Harvest Specialist	South Africa	6/19/2013	9/30/2013
24	Vladimir Kokarev	Food Safety/HACCP Specialist	Macedonia	5/15/2013	11/15/2013
25	Richard Dale	Blueberry/Raspberry Specialist	US	4/10/2013	7/8/2013
26	Susanne Hofman-Souki	Horticulture Marketing Specialist	Germany	3/23/2013	4/1/2013
27	Adamo Rombola	Table Grapes Specialist	Italy	3/4/2013	6/7/2013
28	Stefano Musacchi	Apple Technical Specialist	Italy	2/18/2013	4/19/2013
29	Vladimir Kokarev	HACCP Specialist	Macedonia	2/15/2013	8/15/2013

#	Name/Surname	Position	Country of Origin	Start Date	End Date
30	Roman Shynkarenko	Crop Insurance Advisor	Ukraine	1/31/2013	3/1/2013
31	Peter Furth	Saffron Marketing	US	1/15/2013	2/15/2013
32	Stewart Pettigrew	Market Linkages Specialist	Australian	9/27/2012	8/31/2013
33	Andrew Bridges	Editor/Writer	US (Kosovo-based)	9/24/2012	11/30/2013
34	Richard Steinfeld	Fruit and Vegetables Processing	US	9/20/2013	10/8/2013
35	Jeri Rutherford	Fruit and Vegetables Processing	US	6/28/2013	8/10/2013
36	Steve Morgan	Dairy Processing Specialist	US	8/19/2013	8/31/2013
37	Melvin Farmer	Fruit and Vegetables Processing	US	6/22/2013	7/6/2013
38	Robert Morris	Asparagus Specialist	US	6/1/2013	6/15/2013
39	Richard Steinfeld	Fruit and Vegetables Processing	US	6/16/2013	6/29/2013

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