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KOSOVO NEW OPPORTUNITIES FOR AGRICULTURE PROGRAM

FISCAL YEAR 2012 – ANNUAL REPORT

OCTOBER 2012
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ACRONYMS AND ABBREVIATIONS

ACGP	Agricultural Credit Guarantee Program
AES	Agricultural Extension Service
AFAS	Association for Finance and Accounting Services
AWP	Annual Work Plan
B2B	Business to Business
BEO	Bureau Environmental Office
CAD	Computer Aided Drafting
CoP	Chief of Party
DCA	Development Credit Agency
DCoP	Deputy Chief of Party
EGAT	Economic Growth and Trade
EP	Environmental Protection
ER	Environmental Review
EU	European Union
F&V	Fruit and Vegetables
FtF	Farmer-to-Farmer
FY	Financial Year
GoK	Government of Kosovo
Ha	Hectare
HACCP	Hazard Analysis and Critical Control Points
IADK	Initiative for Agriculture Development in Kosovo
IC-K	Intercooperation Kosovo
IIF	Innovation and Incentive Fund
IPM	Integrated Pest Management
IPA	Instrument of Pre-Accession Assistance
ISO	International Organization for Standardization
MAFRD	Ministry of Agriculture, Forests and Rural development
M&E	Monitoring and Evaluation

MSDS	Material Safety Data Sheet
MSTA	MAFRD Senior Technical Advisor
NGO	Non-Governmental Organization
NOA	New Opportunities for Agriculture
PERSUAP	Pesticide Evaluation Report and Safe Use Action Plan
PMP	Performance Monitoring Plan
PPE	Personal Protective Equipment
RDC	Rural Development Center
RFA	Request for Approval
RFP	Request for Proposal
RFQ	Request for Quotation
RTK	Radio Television of Kosovo
SAM	Senior Advisor to the Minister of Agriculture
SME	Small and Medium Sized Enterprise
SAPD	Stabilization Association Process Dialogue
SPAS	Simplified Pre-Award Survey
STTA	Short Term Technical Advisor
SUP	Safe Use Practices
TA	Technical Assistance
TOR	Terms of Reference
US	United States
USAID	United States Agency for International Development
USDA	United States Department of Agriculture
VC	Value Chain

EXECUTIVE SUMMARY

OVERALL PROGRAM PROGRESS DURING FY '12

This report covers the second year of NOA's operation through to the end of September 2012.This period covers the planting and harvest of most of the NOA value chains but significantly does not capture the harvest and sales of the apple crop (October November) or the sales from all processing activities emanating from the 2012 agricultural season. NOA paid specific attention this work plan year to ensuring that the maximum number of grants was let, targeting new crop introductions and new technology adoptions. The team worked extremely well to get these grants initiated in time for the season—a tribute to the COP, Martin Wood who retired from the project at the end of May, and to the grants and administrative teams. The technical teams ensured file compliance and customer satisfaction ratings are high for NOA support during this year.

It was critical over this year, that the processor—collection center—producer linkages were seen by all value chain participants to be effective in improving the production and marketing system and that the risk of engagement was reduced by this system. Without attention to this, it would be impossible to build on this component during the next year. Introduction of new crops, planting methods and management processes had to be effectively communicated to grower grantees either directly or through contracted supervising grantees. This presented significant challenges. Growers of course were not aware of the full production requirements of the new opportunities being presented, timing and attention to detail were perhaps not viewed as critical. Of significance was the need for irrigation. Excessive rain at time of planting of course obscured this critical element, but generally, farmers underestimated the need for irrigation. This unseasonal heavy rain delayed proper establishment for many of the NOA introductions, especially the crops that required excellent field preparation such as asparagus. At the other end of the season, extremely dry conditions prevailed, hampering the ability of newly established crops to flourish. For a period of over 90 days, there was no effective rain throughout the country. Irrigation resources, where they were present were stretched to the limit and crop yields and performance suffered.

Team efforts were focused on finalizing grants which were season sensitive such that all possible opportunities to demonstrate the new opportunities in production were effective in the field. This entailed ensuring that all grants were finalized well in advance and that import arrangements for plating materials were fully executed in order to receive timely delivery of materials.

Mark Wood joined the project as COP on June 1st and effectively took over as project Director on June 15th after Martin Wood left.

FRUIT VALUE CHAINS

APPLES

The objective of the NOA investments in apple production is to help growers increase productivity and to ensure that they achieve a greater return to their investment, improve their confidence in the value chain and as a result, invest more in terms of time and resources into their production systems. Additionally, the introduction of new planting technologies has been a key comp of this VC program during the year. NOA has achieved to plant fully 6Ha of new apple varieties through six grower grantees. Three of these grower grantees have included in their production system full anti-hail protection—a new and critical technology for high quality apple production in Kosovo. Demonstration fields planted are growing well, and the best of them are first class examples of what needs to be done to transform the sector. Of interest is the willingness of growers to pay for international STTA as a result of NOA introduction—this augurs well for the future.

The market has increasingly become interested in higher quality offerings from consolidated supply and NOA has found strong interest amongst some of the associations to improve graded supply. This year has highlighted a significant deficiency in the implementation ability of growers—that of labor management. It is the farm labor that implements productivity enhancing technologies, and if they are not suitable trained, and then results will not materialize. This is an opportunity for support across all value chains, but especially in value chains with larger scale production.

The introduction and monitoring of integrated production (IP) has been of significant interest to at least one processor working with 150 growers. The processor is willing to offer a premium price to farmers who produce according to IP principals—very good catalysts to changing the way growers and the market look at improving environmentally sound production practice. This annual report does not capture the sales of the season or the adoption of technologies beyond our grantees. It is interesting to note that over 10% of the new jobs created this year come from the apple sector.

BLUEBERRIES

Cultivated Blueberries have been introduced to four growers—three commercial and one nursery grower for onward propagation. The plants introduced were mainly 2-year-old and some 3-year-old plants. The product was of the highest quality and field survival has been excellent. Growth to date has been encouraging. Heat stress in field combined with irrigation scheduling issues has however slowed growth during this quarter. Grower Grantee interest is high however and despite the continued high heat and low rainfall, the crops have survived well—a testament to their effective establishment. Losses will be well within the norm for this crop.

RASPBERRIES

Fourteen growers have been supplied with planting materials of new improved varieties of Raspberry. Eighty thousand raspberry canes have been imported and planted out. Two large-scale commercial growers, APC and ASK foods have planted areas larger than two ha and are set to become the commercial drivers of this value chain. The majority of the 14 growers are from minority areas—specifically Strpce. This area is fast becoming the raspberry production center with NOA, KPEP and YEP projects working to increase established hectarage. The plants have established very well this quarter and initial shoot development is very encouraging. The initial target for Raspberry production was five ha of new variety plantings under improved technologies. NOA has established nine ha over the course of the year with some excellent results. The introduction of the new varieties has effectively extended the marketing season by up to 90 days, creating additional revenue opportunities as well as increasing the job creation capacity of this crop.

STRAWBERRIES

Twelve commercial growers planted seven hectares of two improved strawberry varieties and two nursery producers have received support to multiply one of the imported varieties (the other cannot be multiplied due to plant breeder's rights issues) on 0.5 ha. Growth of the imported materials has been encouraging and yields for the full growing season next year are eagerly anticipated. During the course of the usual harvest season, NOA supported a commercial export of 0.6 Mt first class strawberries to Albania. Despite the high local market price, growers agreed to supply and quality response was excellent. The indication is that provided Kosovo can extend its harvest season on both sides of the present harvest period, export opportunities appear to be excellent. In addition to export investigation, NOA organized a very effective promotion period where more than 6mt of product were sold in Pristina, giving excellent market coverage. The industry has received FtF support with a visiting expert on production techniques designed to extend the harvest season appropriately by a combination of variety choice, limited production under protection and crop canopy manipulation. For the first time in Kosovo, locally grown strawberries have been available through the end of September and beyond. It is projected that the crop will continue to reach the market until early November. The introduction of nurseries to the new planting materials has resulted in some exciting prospects for sale

of propagating materials during the fall period which will give rise to a dramatic expansion in commercial strawberry production.

TABLE GRAPES

Four growers have received support to establish demonstration units for table grape production using improved varieties and management practices. These management practices include the introduction of a new trellising system and involved the import of trellising systems from the US. These support systems had been installed in all GG sites by the end of Q3. Since grape production is a multi-year activity, NOA has spent considerable effort in training 600 table growers already in production to improve their productivity. This has involved 20 demonstration sites in addition to the four new ones. At each site, up to 30 growers have been exposed to 13 new technologies. Additionally, the project has initiated support for growers willing to invest further in post-harvest improvements in their product. This involves improved field harvesting techniques, improved packaging and critically the introduction of rapid post-harvest cooling. The production of improved table grape quality and yield was evident during the harvest period of the crop. Improved technologies adoption increased marketable yield by an overall 16% in the first season and increased incomes through quality of production by an impressive 30%. Full use of the results was made at farmer field days and through a documentary of the process which will be used to encourage adoption in the year to come. Twenty-five percent of new jobs created came from this sector—reemphasizing the need to focus solidly on adoption promotion.

VEGETABLE VALUE CHAINS

ASPARAGUS

Six grants were let to asparagus grower grantees representing a total of 3.8 ha of new plantings. About 2.6 hectares have been planted this quarter, with the balance being planted early in Q4. Unseasonably heavy rains delayed initial plantings, and one grower grantee dropped off the program—citing management difficulties. Crown production by cooperating nurseries was excellent and the quality of the planting material provided to growers was outstanding. FtF volunteer support was delivered to new growers to ensure proper establishment. Initial growth is encouraging and some interest from larger scale operators is being felt. Seed for the next season establishment has been supplied to two of the three initial nursery producers for production. The study tour of Spain was canceled due to an inability to obtain visas for Kosovo passport holders.

GHERKINS

For the first time in Kosovo, gherkin production has been centered on open field production methods with 11 new technologies introduced to the industry this year. Twenty-three growers signed 47 contracts with four processing companies for delivery of size graded gherkins at a pre plant contact price. Twelve hectares of improved gherkin production was established during the course of the year divided into early and late production periods. Trellised gherkins yielded 41% higher—on average 50 tons/ha compared to 35.5 tons/Ha for flat field, traditional production. In addition, harvesting of trellised gherkins has been much more efficient—60% more with daily harvest potential increasing from 900 kg to 1500. Three hundred and fifty-one mt of product was sold through processors and during the late season in to supermarkets when the processing window closed.

Processors have been very satisfied with the collection center system despite not receiving as regular a supply as they would like, and requiring higher volumes. Growers are more than satisfied with the new technologies and the open field production system. This combination of increased confidence is likely to set up increasing demand for growth in the industry during the next season. All processors involved have indicated that they will be moving to programmed production through collection centers for all their future needs. In addition to the size-grading unit already in Mamusha, requests for support for two new units have been received.

LETTUCE

Thirty-six growers are using at least one of the 28 newly introduced productivity enhancing technologies introduced by NOA this year. Most of these technologies are new variety introductions, but significant improvements in productivity are being felt as growers adopt better field management practices. Over €195,000 in sales of new lettuce varieties have been realized this year across all newly introduced varieties. Market interest in the higher qualities of new varieties is increasing and growers anticipate multiplying their plantings by fivefold in the new year. The arrival of the new lettuce post-harvest handling line late in the year was a significant milestone and its commissioning is set for early in the new work plan year. This, in combination with improved packaging and marketing is opening up significant opportunities for import substitution in the salad market.

SAFFRON

Work by the project to date has involved identifying growers and examining the potential of the product from Kosovo in the international market. Evaluation of Saffron quality (very small harvest currently) has highlighted both the high quality of the product as well as the ability of the Kosovo Institute of Agriculture (KIA) in Peja to conduct the relevant analyses. During the year, all new growers have been identified including a potential high altitude site in Dragash, corms arrived out of cold store in Europe and have been planted in designated fields over a total area of an additional 1 Ha. Harvests of plantings made previously are set for early in the new work plan year. Market development, especially for low total volumes remains a challenge however and will be a key issue for this VC to address in the year to come.

CROSS-CUTTING THEMES

In support of key value chain activities, the NOA team provides cross cutting support services. These cross cutting support services include:

- Environmental compliance,
- Food quality and safety,
- Improved access to affordable finance
- Linkages along the value chain
- Marketing Kosovo products
- Outreach
- Improved coordination within the agricultural sector
- Gender mainstreaming

Each of these supporting activities is reported individually in this report, and details activities where they are unrelated to value chain specifics. Where specific support services have delivered targeted support to individual value chains, their activities and outcomes are reported under each value chain.

IMPROVING COORDINATION WITHIN THE AGRICULTURAL SECTOR

This was managed by the Senior Advisor to the Minister of Agriculture through to the end of September 2012. It was decided that the SAM had completed his scope of work and that there was no purpose served by continuing this assignment through to the end of the year when it was scheduled for completion. Considerable effort has been made to improve donor coordination and its impact on support to the sector. Work with the European community Liaison office resulted in a refinement of plans for the 2014 EU support to the restructuring of the agricultural extension service as well as the Kosovo Institute of Agriculture. Linkages with the Finnish extension training program have served to refine the opportunities for extension officer training. The Norwegian Ministry of Foreign affairs has continued to express interest in supporting the developing the agricultural training school in Lipjan as a center for training extension workers. Results of these interventions will become clear in the following year

The SAM was instrumental in the development of the Economic Analysis unit during this year, utilizing short term technical support to define methodologies for enterprise data gathering and analysis. Five Enterprises have had cost of production models generated as a result and the team are able to carry out their work independently. The Ministry has assigned a head of department to manage these activities. The team is continuing to work in the absence of the significant support that was received from the SAM during his assignment and will shortly make a significant web presence with their cost of production models being available through that medium.

During the year, the SAM spent much of his effort in supporting the ministry objective of introducing a restructured Agricultural Extension Service (AES) In-depth meetings have been held with 34 mayors and their staff to encourage them to support the restructuring of the AES. These meetings resulted in 23 mayors agreeing to reassign their agricultural staff to MAFRD, to provide office space and to support the work of the AES. This support is absolutely critical to the AES program since it is the municipal staff that will be assigned as MAFRD extension workers. This has resulted in the assignment in principle of 37 new agricultural extension workers to the MAFRD AES program. These core initial extension workers will receive support from NOA going forward.

Additionally, the Sam worked to structure a team of international consultants to derive a practical restructuring program for the Kosovo Institute of Agriculture in Peja. This team is scheduled to be in-country during October 2012.

MAINSTREAMING GENDER

In addition to these established cross cutting themes, NOA has increased attention to gender equality and woman empowerment into program activities. The SAM initiated an STTA assignment designed to investigate opportunities for improving access for women to extension services and support the NOA team on defining its internal approach to gender equality.

The Ministry of Agriculture, Forestry and Rural Development (MAFRD) is in the process of creating the country's first national agricultural extension service (AES). To date, there has been little coordination between MAFRD national policies and strategies and the municipalities' field agents (previous AES). While centralizing and restructuring the extension service, MAFRD would like to ensure that women have access to the programs and services to be carried out by the AES and that the AES is responsive to the needs of women in agricultural production.

The STTA was engaged in July, MAFRD/NOA team was divided in two groups: one group conducted visits in Kosovo to find out about obstacles and opportunities woman farmers face in the agriculture sector and the other group conducted a study tour visit to Macedonia to learn about their extension service agency and woman empowerment component. The assignment highlighted the proportion of women who are predominantly involved in agriculture. Statistics cited in the report indicated that more than 24,000 women are full time farmers. This represents more than 40% of all full time farmers. This number, although far higher than anyone expected, indicates a significant opportunity to target women in agriculture directly. The report highlighted for MAFRD and the project, ways to involve women as lead farmers and provided some excellent suggestions for incorporation in to the work plan for 2013.

In addition to this specific attention to how the MAFRD extension service might improve its gender awareness and effectiveness, the NOA program team has increased targeted efforts to gender specific activities. The NOA program team is committed to increase women's involvement through its daily activities, the aim is to empower existing woman farmers and encourage woman as lead farmers.

One of the initial activities focusing on women's empowerment and gender equality was a women's berry processing training organized in the beginning of September. One of the lead woman farmers who had knowledge on berry processing organized the training at her processing premises and around 20 other woman berry farmers participated. The initiative was very well accepted both by male and female farmers, NOA supported the operational costs of this activity.

In gherkin production, for example, program beneficiary Valbone Ademi from the village of Hence, in Fushe Kosove municipality, received support to plant 0.5 hectares of gherkins. She will plant another 0.25 hectares for the autumn pickling season and sell it in fresh market. According to our supervising grantee, she was one of the best farmers. The impact of this activity was positive since a group of women may be willing to contract production for next year with the engaged processor. A group of 16 women participated in 4 field days related to gherkin production. It is this type of intervention that NOA will enhance over the reporting year and build into its gender strategy for 2013.

Additionally, the NOA program has initiated discussions with Fruit and Vegetable processors about the engagement of women specifically in food technology and processing activities. In principle, all of them expressed interest in engaging female experts. Currently most of the employees involved in processing are female, so NOA has embarked on supporting workforce development activities for these companies. Key to success will be improving their knowledge during the process. Processors are positively motivated and starting to understand that just investing in equipment is not the solution. Based on processors, experienced women are more dedicated and stable in their positions and have a tendency to work long term, creating stability for companies.

In summary, a total 115 women have participated in NOA supported trainings—representing approximately 10% of attendance. Six women have been awarded grants in support of production. Women's production and processing cooperative Krusha Madhe was allocated specific space in the local product promotions in 22 supermarkets in Kosovo. Of note, in terms of women lead farmers, two women growers have fully adopted new technologies and improved yield dramatically, marketing over 20 mt of process quality gherkins at a value of €6,000.

PMP HIGHLIGHTS

The PMP data is fully reported in this project annual report under the section *monitoring and evaluation*. Highlights of the achievements of NOA over the second work plan year are as follows:

At the AO level,

1. Total value of sales (AO2.1) achieved to date are at 134% of *annual target of $4 million* with total sales this year of $5,388,783. Thirty-five percent of this sales achievement is attributed to sales through one processing company recently HACCP certified through NOA, 26% fresh fruit, 18% fresh vegetables and 21% processed product—mainly gherkins and processed apples. NOA is still however under the program targets on a cumulative basis, but this is to be expected and this year's results auger very well for exceeding over program goals over the life of the project. $2.8 million of these sales came from farmers defined as smallholders—an excellent indication that with the right tools and linkages, small holders can contribute to the agricultural mainstream in an effective way.

2. Total value of exports generated (AO2.2) is almost 4x the target set for FY2 but emanates from just one firm exporting fresh and processed berry to Germany and Austria. The program will need to diversify its exporting firms in the years to come in order to secure the export numbers.

3. Domestic sales (AO2.3) is a subset of the higher level AO indicators and is at 99% of the annual target set in the current PMP of $3.5 million. This is a solid achievement for the program in its second year and indicates that we are well on the way to achieving the overall program targets initially set.

4. The number of FTE—person days set for the program in year 2 was 1000 new jobs created. NOA has monitored this indicator very carefully and has over the past year created 983 new jobs by its activity (98% of target). Significant contributors to job creation have been the strawberry sector as well as the table grape and apple sectors. Improved technologies introduced have led to significant season extension in strawberries and higher yields in table grapes. The process industry has generated over 30% of the new job placements this year. This is encouraging and one of the reasons for emphasizing this part of the industry in the year ahead.

Highlights at the IR level,

5. Farmers engaged (IR1.3) are at 140% of the *program target of 600*. Some 863 individual farmers have been engaged in the program to date. NOA has reached out to many more growers and engaged them in the technology transfer process than anticipated. The training of trainers program enables excellent training reach and hence the better than target achievement.

6. The farmers engaged achievement is matched by the 121% result in trainings conducted (IR2.4). The program set an *annual target of 1,500* individuals trained. Attention to training resulted in exceeding this target with 1,828 individuals trained year to date.

7. Farmers receiving new varieties (IR2.9) are at 210% of target (84 farmers compared with a *target of 40)*—resulting from the concentration on early introduction to gain maximum benefit over the life of project.

8. New technologies introduced (IR2.3) (including new varieties) are significantly over target. The FY2 target was six new technologies introduced. Thus far NOA has introduced 111 new technologies. The program now considers *each aspect of the technology package to be a new technology* with individual yield impacts and will monitor these accordingly.

1.0 VALUE CHAINS

1.1 FRUIT VALUE CHAINS

APPLES

Kosovo currently is an unreliable and limited producer of low-quality apples. NOA is working to move the country from extensive to intensive production, in order to become a reliable producer of higher-quality fruit. The project is also working to introduce new varieties and production methods; advanced pest-management approaches; better post-harvest handling and storage practices; and strengthened linkages between producers and buyers both domestic and foreign. These steps should increase the quality and quantity of domestically produced apples. They also should expand the availability of sorted, graded and properly stored fruit beyond the limited period of the year that is currently the case. In all, NOA seeks to bolster Kosovo's apple industry in the face of a mounting flood of imports, already equal to 11,000 metric tons a year.

AGRICULTURE PRODUCTS DIVERSIFIED AND INCREASED

A major effort of the project involves diversifying and increasing Kosovo's overall apple harvest. NOA facilitated the import from Italy of 14,400 pre-budded feathered trees, each grafted onto M9 dwarf vegetative rootstock. These grafted varieties produce high yields of high-quality fruit. They also combine hardiness with disease-resistance.

Anti-hail system fully established in program-sponsored apple orchard.

NOA prioritized the diversification of Kosovo's apple harvest by introducing the following new varieties: Fuji Fubrax, Fuji Kiku 8, Gala Buckeye, Golden Reinders and Red Chief. Within Europe, the selected varieties are all proven and highly marketable.

The project distributed 2,400 of the trees to each of six growing grantees (GG). The grantees each established one-hectare, high-density orchards with the introduced planting materials. These high-density orchards are now standard practice in major apple-growing countries but represent a novel approach in Kosovo. The grantees also received a trellising system, complete with locally produced concrete posts and wire, as well as drip-irrigation systems. The trellises support the feathered trees, maximizing sun exposure, supporting fruit-laden branches and facilitating harvests. The approach also results in higher efficiencies in land-use, irrigation and pesticide application. In all, high-density orchards reliably yield higher quantities of high-quality fruit, typically for 25 years or more.

The delivered trees performed well for the most part. The saplings already have developed branches that should allow for the first good commercial cropping in 2013, or earlier than would be the case of whip saplings. However, extremely dry conditions during the establishment period, coupled with some dehydration during transit, affected the Fuji more than other varieties. As a result, the Fuji experienced on average 17% loss, which is much higher than anticipated. Establishment losses with the other varieties were acceptable at less than 2%. The program agreed to replace the lost trees. Moreover, the originating nursery agreed to offer significant discounts on replacements in order to keep the planted areas fully stocked with the intended materials. Replacements will be made in the

spring of 2013. The bud break delay recorded in the Fuji variety indicated vigor losses of some trees at each planting site.

The program also supported three grantees, Heron Adea, Ask Foods and Fil&Farm, with anti-hail systems. The netting systems protect developing fruit from hail damage. A fourth grantee, MOEA, withdrew due to internal cash flow issues.

IADK, the program's apple supervising grantee (SG) successfully completed all activities and submitted its reports as per the agreement. Their technical staff visited all six trials and conducted soil analyses of the sites, as well as monitored soil preparation, plowing and leveling, as well as ensuring that supporting students remained engaged for the duration of the project. Staff also monitored the planting of the new apple stocks and the setting up of the trellis systems. They additionally held six advisory field trainings, two field days and a workshop; created, printed and distributed 500 manuals and leaflets; monitored the implementation of IPM procedures and the proper maintaining of the new plantings. Finally, IADK also submitted three contracted reports.

PRODUCTS AND FARMERS LINKED WITH MARKETS

NOA's holistic approach to assisting Kosovo's promising apple industry led it to organize 16 local growers on a study visit to Italy. The participants traveled during the first quarter of 2012 to the area surrounding the central Italian city of Bologna. There, they visited various components of that country's overall apple value chain, from nurseries, through producers and on to packers and distributers as well. The visits took them to orchards and apple-growing cooperatives as well.

Following the visit, Prof. Stefano Musacchi, an internationally renowned apple expert from the University of Bologna, was contracted directly by Kosovo's leading apple growers to provide technical assistance. During the third quarter, Prof. Musacchi paid two visits to local orchards. He is excited by the prospects for apples in Kosovo, and has been very specific in his recommendations. The NOA program is looking into opportunities to engage Musacchi as STTA during 2013, in partnership with growers, to share his expertise and insight with a larger audience.

In February 2012, NOA sent 12 program clients, together with three staff members to Fruit Logistica, the international postharvest agricultural fair held annually in Berlin, Germany. The purpose of the visit was to provide an opportunity for the program's clients to learn more about trends in the horticulture sector in the EU as well as to establish or renew linkages with European horticulture sector actors. As a result of the visit, one of NOA's client firms, the Lirimi Co., has been in contact with a Dutch supplier of packaging machines for apples, carrots and onions.

Meanwhile, NOA has also worked to promote the marketing of Kosovo's apple crop. NOA organized a meeting between representatives of the ETC supermarket chain and various apple producers to explore the possibilities for improving the marketing of apples through retail supermarket sales. ETC has shown great interest in purchasing domestically grown apples; indeed, it experiences annual demand of 5,340 tons, with a peak in December. During the meeting, ETC presented monthly demand by variety. Although the representatives of 11 associations, including the union of apple producers, were invited, representatives of just three associations attended. This highlights the moderate interest currently in expanding apple marketing efforts—the current crop is sold as straight run ungraded product into a predominantly unsophisticated market. However, as an outcome of the meeting, the producers associations agreed to appoint a contact person and forward offers to ETC that detail apple quantities, varieties and timing.

To further improve the marketing of domestically grown apples, members of "Pema," an association of apple producers from the village of Kovraga, provided its members with the contact information for all buyers from previous years. Members followed up by visiting the Sharri (Drenas), Arjeta (Skenderaj) and Beni Dona (Pristina) to explore possibilities for the further development and/or improvement of the sale and purchase of apples. To date, companies have been satisfied with their purchases from Kovraga-area producers, due to their ability to access larger quantities in one place. At the beginning of the 2012 harvesting season, three producers from Kovraga signed a contract with the Pristina-based trading firm Fatosi.com to supply 200 tons of Ida red apples by year's end. The graded

apples were to be packed in specially designed five-layer carton boxes. To support this initiative, NOA prepared a draft RFQ for the purchase of boxes and will be a cost share between NOA, Riinvest[1] and the growers for the initial supply.

FOOD QUALITY AND SAFETY IMPROVED

Traditionally, Kosovo's apple crop has come to market during a relatively brief period during the late summer and early fall, due to limitations in post-harvest handling and storage. NOA has made repeated field visits to local apple associations and growers to address harvest and post-harvest handling, all as part of the program's efforts to provide investment plans and help with technical activity planning. These visits have made it clear there is a lack of knowledge with the apple industry, especially when it comes to harvest and post-harvest management.

The program has determined at this time not to engage outside STTA, but instead to provide practical training, through project staff, specific to harvest and post-harvest management. As a part of this effort, NOA has supported the equipment for washing, grading and packing for training purposes at the farm of Kosovo Blakaj, in the village of Kovraga, in the municipality of Istog. NOA has signed a memorandum of understanding with Blakaj, who has constructed the simple grading and packaging shed. NOA subsequently organized a postharvest and promotion day to demonstrate advanced washing, grading, sorting, packing and other post-harvest management techniques. The program is also promoting the improved packaging of graded fruit dedicated for the Kosovo market. NOA is developing dedicated packaging suitable for retail markets as local growers establish a market presence and improved competitive position.

The NOA program initially planned to purchase a pre-equipped, on-farm containerized cold room with a capacity of approximately 16 metric tons. The plan was predicated on the assumption that cold storage represented a key gap in the value chain. The program later determined this was not the case. Instead, NOA will place increased emphasis on post-harvest management, grading and direct import substitution market linkages. Should the need for additional cold store capacity be identified, then this activity will be carried out in Year 3. However, as of yet, this is not anticipated. Likewise, NOA has put on hold any solicitation of grant applications from individuals or firms capable of reverse-engineering such as a containerized cold room. The MAFRD program to provide grant support to three commercial collection centers, if realized, will provide additional cold storage, which will enable apple storage.

NOA also seeks to extend the shelf life of Kosovo's apple crop, in part through the purchase and demonstration of SmartFresh, a commercial ethylene inhibitor that is widely used. NOA contacted USAID's agribusiness projects in Serbia and Macedonia to learn more about their experiences in introducing the technology. NOA also worked closely with "Jonathan," a local importer, to purchase enough SmartFresh for use as a demonstration project by three to four apple cooling storage units during the 2012 harvest season. However, the low volumes of product sought failed to interest either the U.S. supplier or its agents in Europe.

BLUEBERRIES

Kosovo commenced cultivation of high-bush blueberries in the years since the war's end in 1999. Although not a traditionally grown crop in Kosovo, the country enjoys favorable agro climatic conditions for the high-quality production of blueberries. NOA has supported establishment of the first commercial blueberry plantations, with an eye to fostering, by 2020, a local industry that profitably and sustainably produces fruit for local and foreign markets.

AGRICULTURE PRODUCTS DIVERSIFIED AND INCREASED

NOA facilitated the importation from the United States of 14,000 North American high-bush blueberry plants. The bushes arrived in excellent condition and were planted by four project grantees

[1] RiInvest is a private university engaging in development activities.

under good weather conditions. One-tenth, or 1,400, of the bushes were three years old. Their maturity will allow for an early berry harvest and market testing of the fruit. The balance of the imported bushes are two-year-old plants. Each grantee received bushes from all four imported varieties: Blue Crop, Duke, Elliot and Legacy.

Blueberry plants in storage prior to field planting.

Three of the grantees planted 4.5 hectares of blueberries, while the fourth established a 0.5 hectare propagation plot at an existing soft fruit nursery. Growers prepared their sites on time. The growers also applied 1,000 kilograms/hectare of elemental sulfur, sourced locally, to support pH reduction. The grantees also applied pine sawdust compost to suppress weeds, retain moisture and further lower soil pH. All grantees are using drip irrigation systems. However, excessive evapotranspiration, resulting from low humidity and high temperatures, placed very high demands on available water supplies, which resulted in excessive stress on some plantings. Final plant survival will only be determined during spring 2013.

Excellent 2-year-old blueberry bush despite high heat and moisture stress.

Well established NOA grantee blueberry field with drip lines.

Indeed, a lack of water for irrigation remained an issue on most of the sites, most notably on that operated by grantee the MOEA Co. Another grantee, Juniku, drilled two additional wells ensuring sufficient water at a very critical phase for the crop.

NOA also addressed weed control during the season as well. The project found evidence of lack of knowledge on proper herbicide use, especially as it pertains to this sensitive crop. Therefore, NOA explained proper herbicide use to growers during field visits. Mulch use was recommended to suppress weeds, and STTA Rick Dale presented a glyphosate application system during his consultancy this year.

The project also made known other specific products required for blueberry plantation management to three input dealers, which in the future could supply needed products. The market is not familiar with products containing iron; nor is it familiar with highly acidic peat moss, which is used at both fruit production sites and nurseries. Additionally, the formulation for proper compost to enhance blueberry propagation was made known to local input dealers. Meanwhile, growers continued to collect pine sawdust, which they will continue to use to suppress weeds, maintain soil moisture and lower soil pH.

Growers reported that roughly 50 people independently have visited the established sites to learn more about the crop. TV news coverage of the planting stage highlighted blueberries as a new crop with strong potential for future income generation and employment. Interest has been shown in new plantings with at least one request for support from an investor from Kosovo's large diaspora population.

The one nursery reports its 1,400 bushes are for the most part growing well, which should allow for their future propagation. However, some bushes dried due to an unknown reason at the nursery site. STTA Rick Dale witnessed this occurrence first hand and sought advice from the original U.S.-based supplier, Hartmann's Plant Company. Plant stress was mentioned as a probable cause, instead of either physiological or disease causes.

Late in the season a dozen more bushes dried up at the same site. This time, the grower identified moles as the probable cause, as their tunneling close to the root zone lifted the bushes and left their roots exposed to the sun and its desiccating effects. Measures to control the pest were recommended to the grower.

Two soft fruit nurseries met to discuss the strategy for the future nursery sector development. Both have shown readiness to be involved in any future mother plant import and to work with Hargreaves (UK) in the establishment and implementation of the international standards for propagation license and plant breeder rights for all soft fruit crops. Hargreaves has a strong interest to work with soft fruit nurseries in Kosovo.

PRODUCTS AND FARMERS LINKED WITH MARKETS

Since blueberries represent one of the new crops that NOA is introducing to Kosovo, the program decided that there was no suitable organization to whom to give a supervising grant, and the work would be supervised directly by NOA's own specialists and STTA. The program staff's FPS and CTO are currently supervising this activity.

Richard Dale, the blueberry expert, visited during the first work plan year (and has been providing STTA to USAID's agribusiness project in Serbia), returned to Kosovo in May 2012 to advise, give presentations and train farmers on blueberry production. At that time, 35 people, including prospective growers, and nine phytosanitary inspectors attended the presentation at the Juniku (western Kosovo) production site. After the presentation, a field tour allowed all participants to witness management technologies. Even more importantly, the training served to show participants the first two hectares of commercial plantation established by the private sector in the country. For many of them, it was first time seeing a relatively large blueberry plantation.

A planned study tour or Poland or the Netherlands was cancelled. Instead, NOA organized during the second quarter a study tour of Serbia, where the blueberry industry is about six years ahead of Kosovo. The program relied on the USAID agribusiness program in Serbia to organize the event. Rick Dale conducted a class on plantation establishment prior to the importation of plants.

RASPBERRIES

Kosovo's raspberry industry is small but holds great potential as a source of fruit for the domestic, regional and broader European markets. NOA seeks to support the market for fresh raspberries, in line with market trends.

AGRICULTURE PRODUCTS DIVERSIFIED AND INCREASED

To strengthen and expand Kosovo's fledgling commercial raspberry industry, NOA imported and distributed 80,000 raspberry canes, representing four varieties, in 2012. The imports sufficed to establish nine hectares of trial plantings. The selection of varieties targets the fresh market. They will enable an extended production season ensuring that the supply is more uniformly harvested rather than the previous short seasonal peak.

The canes were imported from the U.K., with the 55,000 Polka variety canes representing 69% of the total. Other varieties imported from the U.K. were Tulameen, with 15,000 canes (19%) and Autumn Bliss, with 9,000 canes (11%). Meanwhile, NOA imported from the U.S. 1,000 canes of the Nova variety (1%).

The original plan was to import 40,000 canes, a number sufficient for planting five hectares of trial plots. However, the Hargreaves Plant Co. Ltd, the U.K. supplier, notified the project that it had available a further 60,000 canes of the preferred Polka varieties. As a consequence, the program ordered an additional 40,000 canes, to include two larger actors in the value chain, Ask Foods and APC.

The introduction of the Polka variety has effectively extended the harvest season for fresh market raspberries by up to 90 days. Since this variety can also be used for processing, this is set to stimulate increased interest in the product by producers and consumers alike. Yields are promising and the harvest is still underway at the time of compiling this report. Producers are expressing strong interest in the expanded production of the crop in 2013.

Achieving a market for this product has been straight forward at least in the initial stages—the quantity of available product falls well short of demand and growers are confident of sales. Additionally, demand for product suitable for processing also exceeds supply, further stimulating grower interest.

Again, the original plan to establish five hectares of new raspberry plantations was revised upward to include nine total hectares, planted in eight municipalities throughout Kosovo. Plots vary in size from 0.3 to 2 hectares.

NOA provided eight awards to growers, one of them a woman-led enterprise. Of the others, six are individual companies while one is an association of six growers. Fully half of the selected growers constitute members of Kosovo's Serbian minority population.

Management has been mixed and varies by implementing company, demonstrating the need to intensify labor and management training. NOA made an award to BioLab, a local NGO, to supervise the grantees piloting the raspberry trial plots. The supervising grantee guided growers on the application of good agricultural practices and integrated pest management (IPM). The SG reported against milestones under monitoring by program staff.

New raspberry field established at APC.

BioLab organized six trainings covering field preparation, planting, field management, IPM and safe use of pesticides. It produced, printed and distributed two manuals (on IPM and raspberry cultivation practices) and 150 copies of each of six leaflets to raspberry growers and other interested farmers. In total, 56 participants received training in

the production of raspberries using new technologies. Trainings also covered environmental issues. All materials were translated and printed in the Serbian language as well, for distribution to Serbian minority farmers.

Two field days were organized at raspberry demonstrations plots in Firaje/Shterpce and in Peran/Podujeve to highlight the performance of the new varieties. The events drew 44 participants.

A supervising grantee and farmer in Sterpce during the harvest.

The program engaged STTA Richard Dale to provide assistance to the program staff as well as advice to raspberry growers. Dale held two workshops for raspberry grant beneficiaries on pests and diseases as well as on best practices for effective raspberry field management. Other subjects included disease control and an overview of the world raspberry industry, including trends in both the fresh and processed raspberry markets. Apart from growers, three Ministry of Agriculture staff and 10 AVUK inspectors attended the workshop, for a total of 25 attendees.

The program used findings and recommendations from the STTA report to design its strategy for interventions in the raspberry sector during FY2013.

The NOA project delivered a Mankar herbicide sprayer system to the MVM Association in Strpce. The device will allow raspberry growers to eliminate weeds in a way that leave the soil undisturbed. The equipment will be demonstrated early in the new work plan year to promote its use not only for raspberry plants, but for other berries and row crops as well.

A family raspberry growing business created in Lubinje village outside Prizren.

During the year, the program continued to keep records on the performance specifics of each variety. The new varieties show good performance and yields, with the Polka variety leading all others in terms of overall performance. The farmers logged initial local sales of the fresh market raspberry varieties granted by the program.

The main challenge to the project's efforts to support the cultivation of raspberries during the past growing season has been a lack of irrigation water during the abnormally prolonged summer drought, followed by weed control. NOA will continue to stress the importance of proper irrigation scheduling and weed control during FY2013 and work with the MAFRD team to delineate a grants program supporting investment in irrigation facilities.

STRAWBERRIES

Strawberries are widely grown in Kosovo. However, the further development of the industry remains hindered by low yields, little diversification of varieties and poor seasonal distribution of the harvest. That has created a short but concentrated harvest season when a limited number of varieties crowd the

market. To increase the competitiveness of the market, NOA has focused on introducing new varieties which will extend the season at both ends and provide higher quality planting materials.

AGRICULTURE PRODUCTS DIVERSIFIED AND INCREASED

The NOA project imported 310,000 runners of two strawberry varieties (160,000 *Honeoye* and 150,000 *Albion*) for distribution to 10 strawberry growers (300,000 runners) and two nurseries (10,000 runners). *Albion,* a day-neutral (meaning it continues to fruit regardless of the length of the day, until frosts put it into dormancy) variety creates possibilities for growers to extend their presence on the market. *Honeoye* is an early variety, which should allow growers to capture the early season market. The activity was completed on time with the runners delivered to the program in April 2012. Farmers reported being satisfied with the quality of the runners.

Strawberry runners dispatched from the supplier in boxes.

The introduction of the *Albion* variety has made significant changes to the marketing of strawberries in Kosovo. In recent years, fresh domestic strawberries were present just 60 to 90 days in local markets. Now, with the newly introduced *Albion* variety, strawberry availability is extended to 210 days, thus expanding the sales and marketing season for this important fruit. That meant, as of 2012, fresh domestically grown strawberries were available for purchase well into late October. NOA plans to follow up with further marketing efforts in order to increase consumer awareness of the extended availability of locally grown strawberries.

The twelve grantees received, beyond the 310,000 runners, drip lines sufficient to establish seven hectares of strawberries (six hectares destined for production and one for propagation). Plantation establishment was delayed at some sites due to wet weather. In other sites, plastic mulch was installed to cover beds. Doing so controls weeds and maintains soil moisture. Two grantees planted 0.30 hectares in plastic greenhouses to initiate earlier production than is possible in open fields. Overall, planting commenced in April and was completed by the end of May 2012.

High-yielding strawberries in production.

The two nursery grantees established plantations of 0.50 hectares each for runner propagation. The nurseries will propagate only the *Honeoye* variety as the *Albion* variety is grown under a license that does not currently permit propagation. Planting was completed on time and no losses were reported. The two grantees have reproduced 300,000 runners for sale to local producers in the Kosovo market. Indeed, runner production has stimulated strong interest from growers who will be purchasing the material during the first quarter of the next annual work plan year. It is likely that the runners will sell for between 10 and 15 Euro cents each. Notably, growers in Albania showed demand as well. Meanwhile, the main obstacle overcome by growers this year was drought.

NOA contracted IADK to serve as a supervising grantee and guide, advise and monitor the implementation and establishment of the strawberry plantations, including both for fruit production and runner propagation. IADK has provided necessary advice to farmers on a regular basis and assisted them when required. Reporting was done on a weekly basis and activities were coordinated with the program value chain specialist. However, there is a need for more advice in the years to come; the program is searching for more sustainable ways to provide advice linked to nurseries or processors through a private sector extension system.

Challenges faced by producers included adverse weather conditions (notably excessive rain at planting). This led to a shorter production season and diminished yields. Farmers should seriously consider combining protected and open-field production, as well as the cultivation of new varieties, in order to extend the season and increase production.

There is still significant demand on the local market. And creating surplus production for potential export to neighboring countries should be considered as volumes increase.

To further analyze the developments in Kosovo's strawberry value chain and to explore possibilities for improving marketing, NOA organized a round table during Q3. The meeting drew together 21 value chain actors, including farmers, processors, traders, supermarket officials and representatives of various other development projects. Notably, of the five invited strawberry wholesale traders, only one participated in the round table, indicating a lack of awareness of options for improving the system and a concern about cooperating with competitors. During the meeting, attendees discussed production, processing, post-harvest and marketing. The main findings from the meeting were:

1. Nurseries represent a very important factor for the development and sustainability of the value chain. Even though development projects have supported nurserymen for a decade, there remains limited knowledge, skills and infrastructure needed for the production of high-quality runners;
2. The quality of domestic strawberries is very good compared to those grown regionally;
3. Production of strawberries still remains low;
4. Strawberries should be packaged in half-kilogram plastic containers as the market demands; and
5. The limiting factor for supermarket sales of strawberries remains the lack of provision of invoices and the payment of VAT by producers.

FOOD QUALITY AND SAFETY IMPROVED

NOA's technical assistance during the year focused on the harvesting, sorting and packaging of fresh strawberries for the retail market.

Surendra Dara, a CNFA Farmer-to-Farmer volunteer from the University of California cooperative strawberry extension service, conducted a workshop on *Strawberry Production Technologies*, attended by 17 farmers, including two nurserymen. The workshop provided a good overview of strawberry production and postharvest handling practices. Dara also visited most of the program's beneficiaries and gave specific recommendations on best strawberry practices.

The consultant's conclusions regarding the development of the strawberry industry in Kosovo were as follows:

- Kosovo's strawberry industry shows good potential for growth primarily because it represents an underdeveloped sector. There seems to be demand for good strawberries in Kosovo, which further promises future growth. However, strawberry cultivation requires specific knowledge. Growers need to work on building the knowledge base individually, as well as collectively as a group, to support the growth and promotion of the industry.
- If farmers follow the training and recommendations provided for every stage of the production and postharvest handling cycle, it is fair to expect that there will be a significant improvement in the yield and quality of locally produced strawberries. Farmers must evaluate various cultivation practices and eventually design a system that is ideal for strawberries growing under Kosovo's specific climate conditions. Exploring cooler or high-altitude areas for growing strawberries and nursery plant propagation is something to consider, according to Dara's final STTA report.

Nursery field day in Lluka, Decan.

Three field days, in Llaushe, Davidovc, and Xerxe, were organized to promote new varieties and new technologies, drawing 102 growers. In addition, one field day was organized in Lluke, Decan to promote locally propagated runners. That event drew 35 farmers and phytosanitary inspectors from the KFVA. It is expected that the nursery will produce about 150,000 runners (all first class), sufficient to establish at least 3 hectares of commercial strawberry production. Sales from runners are estimated at 15,000 to 18,000 Euros early in the new work plan year. The project has supported another nursery in Godanc, Shtime, which should produce similar results.

Additionally, NOA, with MAFRD and IADK, organized a strawberry promotional event, held June 12-14 in downtown Pristina. The event resulted in the sales of 6.7 metric tons of strawberries, worth 13,535 Euros, as well as boosted consumer awareness. The success sparked improved grower confidence and increased interest in new technologies. The cost of the event was shared among the three partners. This is set to be an annual event.

Looking beyond Kosovo, the NOA project also began investigating export opportunities for locally grown strawberries. Albania represents a potential target market during the peak import months of April and May. To explore this option, NOA organized several meetings among lead farmers and potential traders to discuss trial export shipment to Albania. Four farmers (Mehdi Bresila, Labinot Spahiu, Gege Zefi and Halim Baftiu) volunteered to go through the process of trial export. Lirim Krasniqi, an export/import trader who deals with the Albania market, was identified as the potential strawberry exporter.

The first trial export shipment of 1.5 metric tons was planned for early/mid-May but excessive cold and rain delayed the shipment for several weeks. The trial export was completed June 6, 2012, when 600 kilograms of well-packed and labeled strawberries were shipped for sale on the Tirana wholesale market. The farmer's price was 1.40 Euros/kilogram, with the trader selling them at the same price. Note at the time, prices in Kosovo were better—1.50 Euros and higher). Quality feedback was excellent.

NOA's recommendation for 2013: Kosovo farmers/traders should continue researching/driving market demand in Albania, as it is a market that holds good prospects for growth. That requires maintaining a continuous market presence, as well as making efforts to build clientele and product awareness. It is critical to have an early product (available in April and May) in order to obtain the best prices and gain farmer/trader interest.

NOA further supported client visits to the Fruit Logistica trade show in Berlin, Germany. Three strawberry producers, along with one processor of strawberry jams, attended the fair. All reported researching different packaging options for strawberries as well as meeting with other regional and EU producers. These farmers are producers of other crops as well, so the fair gave them exposure to a broad range of crops beyond just strawberries.

TABLE GRAPES

Kosovo's table grapes show great import-substitution potential given the possibility of increasing domestic production in the near to short-term. However, regional competition remains fierce. That requires domestic producers to diversify the varieties grown, including through the introduction of

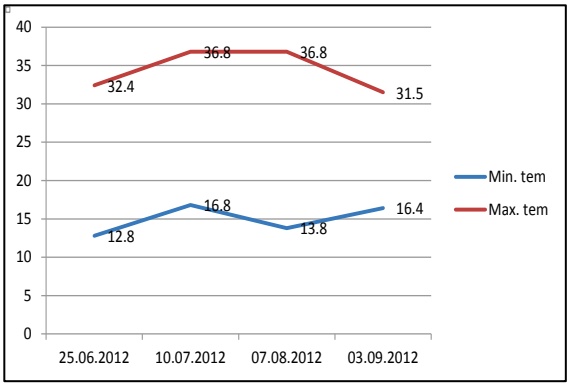
late-season varieties. The NOA project's focus is on adding new varieties in Kosovo, as well as introducing new trellising technology required to increase productivity.

AGRICULTURE PRODUCTS DIVERSIFIED AND INCREASED

The project ordered, imported and delivered Y-style trellises sufficient to cover six hectares of vineyard. The installation of the trellising system's arms and cross arms has been completed while the installation of wire and drip lines is ongoing.

NOA identified and contacted a local steel processing company to explore the possibility of manufacturing the Y trellising system domestically. The company will soon visit the sites fitted with the installed imported systems to learn about its design.

The program imported two new table grape varieties to support establishment of 6.2 hectares with table grapes. The effort involves four grantees. All grape planting material arrived aboard three trucks in early April, together with the apple planting material also imported from Italy. Introduced varieties were grafted on drought-resistant Paulsen 1103 rootstock, which is suitable for local alkaline soil conditions. New planting distances for Red Globe were established at 3 x 1.5 m and for Crimson 3 x 2m, compared to former dense planting of 2.4 x 0.9m done in the past.



Distribution of plant materials to grantees was implemented under the same conditions and at the same time. The planting was done at different times, however, due to inclement weather during this stage. Identical technologies during pre-planting and planting were applied to all growers, according to crop-specific requirements, in order to ensure acceptable results as well as to ensure the technologies were clearly responsible for results obtained.

At the final field assessment, the project team recorded non-burst buds of the vines, which were desiccated. In all, 2,499 vines were lost, out of 15,000 vines imported, for a percentage loss of 18%. The losses included 693 Crimson seedless and 2,132 Red Globe vines.

Some primary reasons for the losses of planting material include:

- The planting period was very wet due to heavy rains, followed later by extreme drought with no rain at all over a 90-day period with very high temperatures, as presented in the following table that captures the unusual weather situation.
- The supplied varieties were new for Kosovo, therefore their physiology wasn't sufficiently known.
- Specific requirements during the transport were not detected in time and led to the dehydration of some young plants.

Date	Min Temp Rahovec	Max Temp Rahovec
25.06.12	12,8	**32,4**
10.07.12	16,8	**36,6**
07.08.12	13,8	**36,8**
03.09.12	16,4	**31,5**

The lost vines require replacing. The original vendor has shown readiness to supply the planting material and has offered a discount on a new shipment of the same varieties of vine, due to be imported in the spring of 2013.

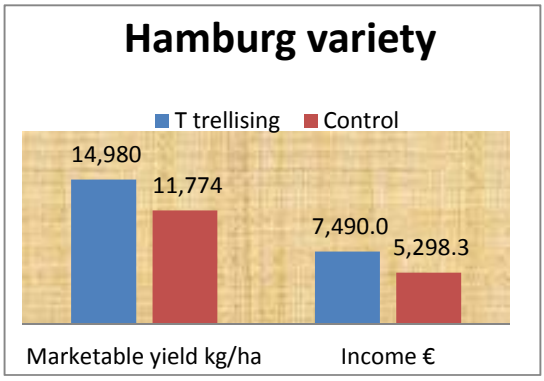
NOA awarded a grant to the AgroDrini Co., which is implementing activities as per milestones planned jointly with the supervising grantee and agreed by the program. The supervising grantee guided the program's table grape activities and processed the establishment of 20 demonstration plots with the newly adapted modified T trellising system in Rahovec and Suhareka.

NOA organized a training of trainers program, training seven trainers who in turn provided trainings to 960 participants in new cultural practices and new technologies, all under the direction of STTA Prof. Adamo Rombola, a viticulture expert from the University of Bologna in Italy.

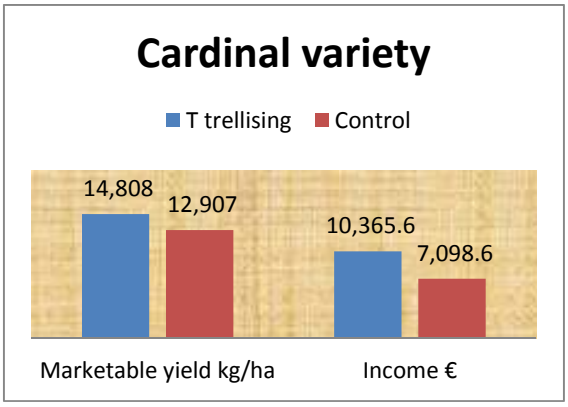
By the end of the harvesting season, results from the program's new modified T trellising system and traditional system were compared against different measurable parameters, such as berry size, weight and sugar content, as well as total and marketable yields. These parameters were measured on all four varieties in the trial/demonstration: Black Magic, Cardinal, Muscat Italia and Muscat Hamburg.

Significant differences in marketable yield and income are registered for all varieties, and from vineyards of different ages. Results are presented in the following tables and charts for all varieties included in the trial/demonstration.

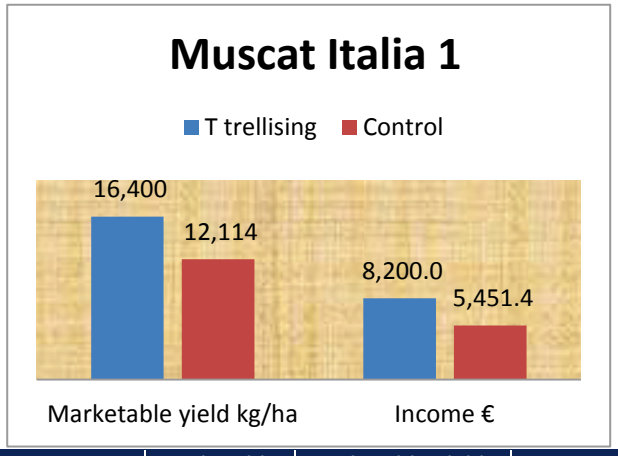
Hamburg Variety	Yield/ha	Marketable yield %	Marketable yield kg/ha	Price /kg	**Income €**
"T" trellising	14,980	100	14,940	0.50	**7,470**
The control (traditional system)	16,820	70	11,774	0.45	**5,298**



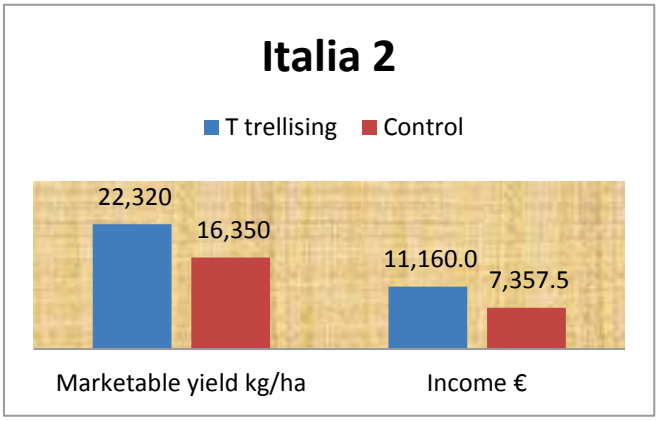
Cardinal variety	Yield/ha	Marketable yield %	Marketable yield kg/ha	Price /kg	**Income €**
T trellising	14,808	100	14,808	0.70	**10,365**
The control (traditional system)	18,438	70	12,906	0.50	**7,098**



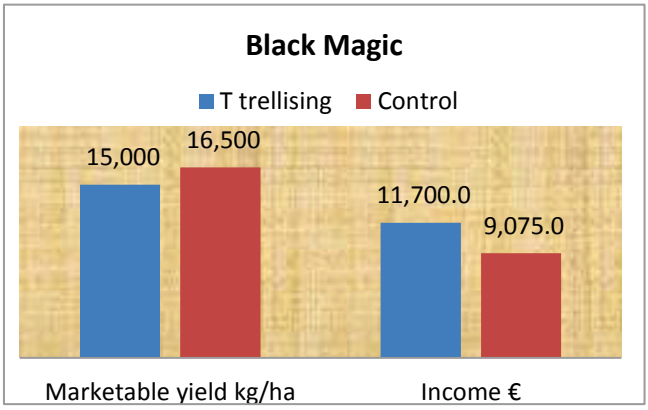
Muscat Italia	Yield/ha	Marketable yield %	Marketable yield kg/ha	Price /kg	**Income €**
T trellising	16,400	100	16,400	0.50	**8,200**
control	17,306	70	12,114	0.45	**5,451**



Italia 2	Yield/ha	Marketable yield %	Marketable yield kg/ha	Price /kg	Income €
T trellising	22,320	100	22,320	0.50	**11,160**
control	21,800	75	16,350	0.45	**7,357**



Black Magic	Yield/ha	Marketable yield %	Marketable yield kg/ha	Price /kg	Income €
T trellising	15,000	100	15,000	0.78	**11,700**
Control	16,500	100	16,500	0.55	**9,075**



Black Magic is the earliest ripening variety. The vineyard was newly established, and is now in its third year. Therefore the conversion from a double Guyot to a mono Guyot system was implemented

with fewer cuttings when compared with older vineyards, where cuttings were harder. This has had an impact on the total yield in the first year of the mono Guyot system implementation.

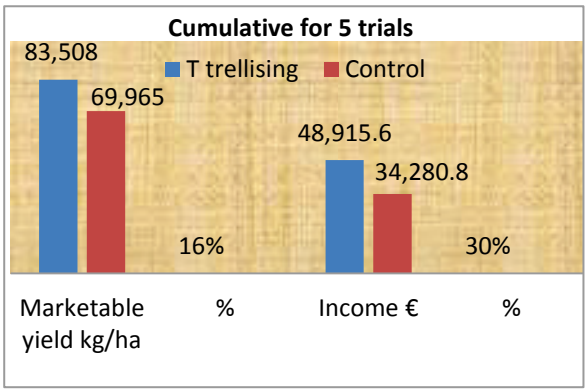
The total yield and marketable yield was higher with the control. This vineyard was at the third leaf stage only, therefore the exposure of the bunches to light and air circulation was equally as good on both trellising systems, resulting in the same percentage of marketable yield. This will not be the case from next leaf in the following season, because more dense shoots and leaves will cause lower quality of bunches grown under the traditional trellising system. This has been confirmed with other varieties grown on older vines. The sales price was, however, higher, due to berry thinning and better bunch formation.

Production on the T trellising system was well managed during the season. Bunches were freely hanging; small and crushed berries were thinned; and leaves were removed at the required stages to allow better air circulation and light penetration. During the harvest period, there were no second class or unmarketable yields at any of the training sites.

Marketable yield in the trial was 100%, while the marketable yield with the traditional trellising system vineyards was 77%. The cumulative marketable yield from all T trellising system was 16% higher when compared to the traditional trellising system.

Sales prices were higher when using the improved T trellising system by about 30%. They varied from 0.55—0.78 Euro/kilogram, compared to the price of 0.45 Euro/kilogram for grapes growing using the traditional system.

Cumulative for 5 trials				
	Marketable yield kg/ha	Δ%	**Income €**	Δ%
T trellising	83,508	16%	**48,915.6**	30%
Control	69,965		**34,280.8**	



These results were disseminated through field events, such as FFS, field days and TV news broadcasts. More than 100 growers attended two field days organized in Rahovec and Suhareka during the harvest period. Students from the professional agricultural school in Rahovec municipality attended these events and showed interest in production technologies.

PRODUCTS AND FARMERS LINKED WITH MARKETS

To develop linkages and improve the marketing of table grapes, the project visited various individual producers, along with the Stone Castle vineyard and winery, in Rahovec municipality. In the area, table grapes are usually sold at wholesale and road-side markets without major problems. However, because of lower quality, they fetch lower prices compared to grapes imported from Macedonia.

NOA learned that producer Habib Dina plans to establish a collection center, aggregating table grapes from four to five producers who farm 11 hectares of grapes. They expect to harvest 165 to 180 metric

tons of different varieties. Dina will strictly control the quality of the grapes he collects, thus improving the level of the fruit supplied to traders. Following this initiative, the program facilitated a meeting between Dina and Fatosi.com, a wholesaler that supplies the supermarket chain InterEX. The parties agreed to a daily supply of 1.5 to 2 tons, starting in late July. In addition, the marketing manager of Stone Castle, Shani Hoxha, shared his company's intent to raise the profile of its table grapes by adding a plastic sheet, imprinted with the company's logo and slogan, to the wooden rates it uses to ship product.

The program, working jointly with Riinvest, co-financed the printing of cardboard inserts that both protect the fruit and carry a logo for use by four table grape clients. The labeled inserts have been well received by wholesale and retail traders. Indeed, three metric tons of newly labeled table grapes were exported to Germany, through Kelmendi GmbH. In addition, the program supported the rental of a cold room to pre-cool table grapes before shipment to the wholesale market in Pristina. As result of these activities, Dina sold 128 tons at a direct value of €64,300, while StoneCastle sold 379 tons at value of €155,000.

Table grapes packed in a new market-ready format.

The program facilitated 13 growers in attending the Fruit Logistica fair in Berlin, Germany. There, they gained experience in the reality of the international trade in table grapes. This exposure certainly laid the foundation for improved product development; indeed, at farmer training days, growers now make mention of what they need to do to complete in the international arena. No formal contracts have been made to date as the industry remains in the early stages of product development.

FOOD QUALITY AND SAFETY IMPROVED

NOA organized a second seminar with Prof. Adamo Rombola for the Rahovec region after the professor, during field surveys, met face to face with seven trainers. Progress on introducing new cultural practices during the spring was discussed in order to continue the program training initiated in the winter. More than 90 people attended the seminar. Lectures were followed by field demonstrations on topics such as leaf, shoot cluster and berry thinning, and shoot pruning. More intensive trainings were provided to the seven trainers, one on one, at their respective demonstration plots.

The third seminar with Rombola took place in Rahovec and was attended by more than 100 growers. The main focus was on achieved results, further improvement of cultural practices, and possible wine vineyard conversion into table grape vineyards. The physiological, technical and economic reasons behind all recommended practices were presented and discussed during the workshops.

The idea of converting vineyards was further developed, including the possible implications of such a step. The conversion as a process is known to local growers but has never been implemented on a commercial scale in Kosovo. MAFRD has been informed and has shown readiness to support this idea at the political level. This aspect will likely be incorporated into the 3rd annual work plan of the project.

Rombola, during his third mission to Kosovo, provided technical assistance on improving table grape quality and quantity. Training and demonstration activities were performed through daily field visits to the trial sites. Guidelines were provided on proper canopy management according to the environmental conditions and the table grape cultivars. Special attention was devoted to bunch preparation for packing, packaging materials, field and shed packing, use of sulfur-dioxide, pre-cooling and storage showing experiences of other table grape producing countries. These issues were presented and discussed at a table grape workshop, followed by a field demonstration on pre-harvest and harvest practices along with calibration of a new duster provided by the program to four service providers.

Pruning - implementation of Mono Guyot system.

Pruning table grape vines.

Defoliation process to allow better air circulation and light penetration.

Tractor operating duster used for first time on a private vineyard in Kosovo.

High-quality bunches produced by the end of the season, all clearly evident to producers

NOA originally planned to organize a study tour to visit one or more table grape production sites in either Italy or Israel. This activity did not take place during the work plan year. Concentration has been on providing technical assistance to local table grape growers through Prof. Rombola of Bologna University. This has proved extremely effective and will continue to be the method NOA uses to transfer technology to producers.

1.2 VEGETABLE VALUE CHAINS

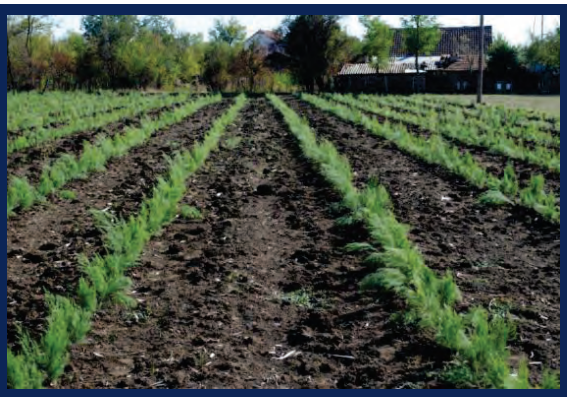
ASPARAGUS

Asparagus is a relatively new crop in Kosovo, with limited domestic demand. However, Kosovo shows promise as an exporter of the crop. Furthermore, stepped up promotion could stimulate increased domestic demand for asparagus, sparking greater production and quickly reversing Kosovo's current status as a net importer of the crop. NOA's efforts focus on knowledge transfer within the industry; increased production; and greater promotion.

AGRICULTURE PRODUCTS DIVERSIFIED AND INCREASED

NOA awarded six grants to farmer/growing grantees to plant asparagus. Although this activity was scheduled to be completed by the end of February 2012, the grant award was delayed without adverse effect. The asparagus crowns were held, in good condition, by nurseries, and eventually distributed to growers in late May. The grantees were to plant the crowns on a single one-hectare, one 0.6 hectare and four 0.5 hectare plots.

Due to the unseasonably wet conditions in June, the transplanting of the asparagus seedlings started late in the month. Farmers planted 2.6 hectares of asparagus during this quarter. One of the selected grantees, Arbana Cooperative, declined to plant 0.5 hectares due to time constraints brought on by the wheat harvest. Agrogreen and Zika, grantees with 0.5 hectares each, established asparagus plots during Q4. The total area planted with asparagus during FY12 is 3.6 hectares, divided among six grantees. The plots were well maintained and plants were well developed. No significant pest or disease pressure has been identified and NOA expects the first pre-commercial harvests in spring 2013.



Established asparagus plot in Dobrotin/Lipjan.

In Q3, 240,000 asparagus seeds were purchased and imported from the U.S. Sub-contracts with two nurseries (Agro Serra and Fidanishtja e Godancit) were extended for the production of 200,000 crowns, for delivery in the spring of 2013. The numbers suffice for the establishment of at least 7 hectares of asparagus fields. The seeds were delivered, sown and germinated during Q3. The seedlings were then transplanted in open fields for further development by the end of August in Q4. The transplanted seedlings in open fields appeared well developed, due to the application of new growing technology including a fertigation system; improved weed control; and pest and diseases management. The nurseries performed exceptionally well under previous grants. With the asparagus, the emergence and seedling vigor both are excellent.

Asparagus seedlings transplanted with drip fertigation.

Since asparagus is one of the new crops NOA is introducing to Kosovo, the project decided there was no suitable organization to whom to give a supervising grant. Instead, the work will be supervised by the program's own specialists. The program staff's VPS and CTO continued to support this activity over the year. Production is showing great promise.

STTA FtF volunteer, John Casazza, who previously came to Kosovo during 2011, returned in late May 2012 to advise, give presentations and train six grantees and others on transplanting new crowns from the three nurseries where they had been developed. Thirteen participants attended the planting demonstration, of whom six were grantees, two were nurseryman and the others interested stakeholders. Interest in this crop has remained high, including among some larger commercial operations. NOA hopes that some recently privatized land may come under asparagus production as a result of the awareness created by the program's activities this year.

Challenges included the following:

- Very wet weather conditions during the planting period made timely planting impossible.
- This is a new crop introduction and lack of knowledge and awareness remain key issues.
- Special requirements for loose, sandy type soils.
- Unknown market demand locally means that grower confidence in salability is low, resulting in reduced confidence in the outcome.

PRODUCTS AND FARMERS LINKED WITH MARKETS

Arrangements for a study tour to Spain were made in February for a May 6-11 visit to study asparagus planting and processing. Unfortunately, it was cancelled at the last moment owing to an adverse visa decision relayed to the program by the Spanish consulate in Skopje. This decision made travel impossible.

GHERKINS

Kosovo has a great appetite for gherkins, or immature cucumbers used for pickling, both by households and large processors. NOA promotes new gherkin varieties and production techniques, which together increase the quality and quantity of the local harvest. This serves to substitute for the gherkins now imported to satisfy domestic demand. NOA also supports collection centers, especially with sizing machines, and promotes linkages that join producers with these centers.

AGRICULTURE PRODUCTS DIVERSIFIED AND INCREASED

NOA modified and extended RDC's subcontract to oversee gherkin production, with the support of the program, through the end of FY2012.

RDC has supervised the program's introduction of new production technologies for gherkins. These include trays and substrate for seedling production and new varieties and trellising with plastic netting. Support for establishing demonstration plots has been provided to 23 gherkin producers from 17 municipalities. These include nine producers from the FY2011 planting season and 14 new farmers. For these plots, the program provided inputs and technical advice, and producers were linked with traders and processors. Below are detailed all those farmers engaged in gherkin production, along with their plot size.

No	Farmer	Location	HA	Early production (Ha)	Late production (Ha)
1	Bedri Shabani	Gracë/ Vushtrri	1		1
2	Qamil Shala	Neperbisht/ Suhareke	0.5	0.5	
3	Eshref Sadiku	Skifteraj/ Viti	0.5		0.5
4	Imer Fazliu	Celinë/ Rahovec	0.5	0.5	
5	Adem Durmishi	Bardhosh/ Prishtinë	0.5		0.5
6	Nehat Taq	Mamushë	0.5	0.5	
7	Bajram Gashi	Qabiq/ Klinë	0.5	0.5	
8	Izet Kastrati	Raushiq /Pejë	0.5	0.5	
9	Naim Fejza	Mogillë/ Kllokot	0.5	0.5	
10	Selami Sadiku	Skifteraj/ Viti	0.5		0.5
11	Fehmi Shala	Topanicë/ Kamenicë	0.5	0.5	
12	Fidan Krasniqi	Prizren	0.5	0.5	
13	Ferat Morina	Mamushe	0.5	0.5	
14	Bislim Istogu	Verbovcë/ Drenas	0.5		0.5
15	Afrim Kuqi	Lutogllavë/ Pejë	0.5	0.5	
16	Shani Hoti	Malishevë	0.5	0.5	
17	Nurie Gashi	Rahovec	0.5	0.5	
18	Esat Hajzeri	Vinarcë/ Mitrovicë	0.5	0.5	
19	Valbona Ademi	Hencë/ Fushë Kosovë	0.5	0.5	
20	Zoran Sosic	Pasjanë/ Ropotovo	0.5	0.2	0.3
21	Bozidar Danic	Kusce/ Gjilan	0.5	0.3	0.2
22	Driton Morina	Akrashticë/ Vushtrri	0.5	0.5	
23	Agim Sada	Gjakovë	0.5	0.5	
		Total	**12**	**8.5**	**3.5**

Planning was done in two stages:

* Early production—for harvest in June and July, targeting industrial processors.

* Late production—for harvest in September and October, targeting home processors.

In all, 16 producers targeted early production, five producers targeted late production, and another two producers targeted both early and late production.

RDC staff, including two student interns, visited each gherkin producer at least twice per month during the production season, providing technical advice and keeping complete and accurate records of production parameters. RDC, in conjunction with NOA, hired a specialist who prepared a draft IPM manual for gherkins, which later was published and distributed to producers and other interested farmers.

NOA tested four new varieties of gherkins this year: Regal F1, from the Clause Company; Mirabelle F1, from Seminis (Monsanto); Szatmar F1, from ZKI, and Parcifal F1, from Nickerson Zwaan. Of them, Mirabelle F1 and Szatmar F1 out perfromed the others. In all demo plots, Szatmar F1 showed the best overall results. It proved resistant to pests and diseases and produced quality gherkin fruits ideal for processing. Mirabelle F1 also performed very well, with roughly a 10 % higher yield compared to Szatmar. It also was more resistant to low temperatures during the seedling production period.

Of the 23 producers, 16 have tested trellising systems with plastic netting, while seven producers have grown gherkins without trellising (a technique called ground lying). Trellising produced the best results out of all technologies introduced, leading to higher yields and better quality, thus lower costs and higher incomes.

Indeed, trellising holds great promise for gherkin growers in Kosovo. In trials, the technology enabled better ventilation of plants and prevented contact between fruit and the plastic mulch and/or soil, thus preserving their quality. The difference in yields also has been significant: Trellised gherkins yielded 50 tons/hectare, compared to non-trellised fields that produce on average just 35.5 tons/hectare, equating to a 41% higher yield. In addition, trellised gherkins prove easier to harvest, especially first class (or the smallest) gherkins. Trellises make it is easier and faster to located and pick fruit, contributing to improved harvest labor efficiency of at least 60% compared to harvesting of gherkins without trellising. During one eight-hour working day, a worker is able to harvest 1,400 to 1,700 kilograms of trellised gherkins, compared to the 930 to 980 kilograms daily a worker can harvest from a non-trellised field.

Plastic netting--another new technology for open field production.

Open field gherkin production draws attention.

A FtF volunteer Bruce Williams returned during Q4, coinciding with the spring planting, to provide follow-up, on-site technical support to client growers under NOA's gherkin production program. Williams reported being very impressed with the potential for production in Kosovo. Some farmers should be able to achieve yields of 100 metric tons per hectare, according to Williams. The dry season

(in combination with irrigation) contributed much to the excellent performance. However, production potential is best realized where high-quality management is in place. The STTA assisted farmers with technical issues toward the end of the harvest as well, highlighting late-season pest and disease control. Williams also trained farmers on managing the harvest when the crop was coming to an end.

- The main challenge to supplying processors with gherkins involved EuroTac's (the collection center) ability to collect gherkins at the rate the processors demanded. It has been a challenge for processors to work with this new system of supply since volume projections remain difficult to make by growers and collection center management alike.
- Unseasonably wet weather conditions at planting remained a challenge during establishment of the gherkins fields and delayed planting and, later, harvesting.

PRODUCTS AND FARMERS LINKED WITH MARKETS

NOA organized a linkages workshop early in the season that drew together producers, processors, collection centers and wholesale buyers.

For the first time ever, members of the Association of Mamusha vegetable producers signed contracts to supply gherkins, through the EuroTac collection center, to the following buyers: "ABI" from Prizren, "Koral" from Pristina, "Ask Foods" from Gjilan, "Etlinger" from Shtime and "EuroFood" from Prizren.

However, wet conditions during the spring postponed the harvest of gherkins for at least two weeks; the first shipment took place on June 3. Processors were not all ready to receive gherkins as well due to the late preparation of their processing lines. One processor failed to obtain jars from its regional supplier in time. This was the first time that they had engaged in effective contract production.

Between June and August 2012, 247 tons of gherkins were sold to five processors, at an average price of €0.34 (~$0.43), totaling €83,930 ($106,591), or 41% of total sales reported during the quarter. In addition, a total of 114 tons of larger gherkins were sold to the ETC supermarket chain, at an average price of €0.20 (~$0.25) totaling €22,740 ($28,880).

The processors remained very satisfied with the quality of the gherkin furnished as well as with the supply mechanism now established. They now deal with only one person (the owner of the collection center). Furthermore, gherkins are being supplied fresh and mechanically sized gherkins are delivered according to their needs. This is in sharp contrast to previous years, when processor dealt with a large number of uncoordinated producers and quality was lower due to manual sizing. However, "EuroTac" could not supply on an ongoing basis the required quantities, as in mid-June the price of gherkins in the open fresh market rose to the point where some producers did not want to supply the center according to their commitments. Additionally, temperatures ere lower for a week during the harvest, which also impacted yield. The fluctuating supply of gherkins remained an issue for processors, as it impacted the number of workers they needed for processing. Meanwhile, another collection center, "AgroProdukt" from Kllokot, signed a contract with "Ask Foods" to supply gherkins.

Gherkins arriving at the processing plant.

A planned linkages workshop for Kosovo's value chain actors and regional buyers was cancelled for different reasons. For the most part, the project decided, after following up with Macedonian actors, that international relationships had to be more carefully cultivated before a workshop could lead to meaningful outcomes. The program will further explore the aspect of regional market opportunities during the first two quarters of 2013.

NOA did facilitate the participation of 13 processors, producers and input suppliers to the Fruit Logistica trade show in Berlin during quarter 2. Their attendance emphasized the need to focus on quality, volume and uniformity to compete in the market. The delegation returned with a "can do" attitude about the tasks at hand needed to compete effectively in the future.

A study tour to Bulgaria, a major regional gherkin supplier, was cancelled due to the project's inability to find a facilitator to organize and implement this event in time for the seasonal requirements.

FOOD QUALITY AND SAFETY IMPROVED

A single gherkin-sizing machine purchased late in the 2011 work plan year for the Mamushe facility in the Gjilan region provided a significant benefit to the industry. The machine improves the sorting and grading of gherkins, as well as expands capacity. This in turn benefits growers and processors. Indeed, gherkin-sizing machines remain key for improving the relationship between producers (supply side) and processors and retailers (demand side). In order to expand the production of gherkins grown for processing in other regions of Kosovo, the program awarded two grants for purchasing gherkin-sizing machines to two additional vegetable collection centers, "Agroprodukti" in the village Mogilla, Kllokot municipality, and "Shala Produkt" in the village Nëpërbisht, Suhareka municipality. The program purchased the machines, which will be ready for installation early in the 2013 work plan year. In the meantime, the collection centers, as part of their co-financing of the project, have adapted facilities to accommodate the machines for the next season.

Abi & Elif's gherkin processing line.

In recognition of the role mechanization plays in increasing production capacity and improving the safety and quality of processed fruits and vegetables, the processors "Ask Foods" from Gjilan and "Koral" from Fushë Kosova have applied for financial support of their purchase of various processing machines. "Ask Foods" seeks help in buying a vacuum linear filling machine dedicated for the filling of semi-liquid products in jars. "Koral" seeks to purchase an autoclave dedicated to the sterilization of canned products. While "Ask Foods" already has purchase and installed the machine, while "Koral" has identified a supplier. It now expects to install it early in the new work plan year.

LETTUCE

NOA's seeks to broaden the variety of lettuces grown in Kosovo, as well as modernize lettuce production, grading, harvesting and packing.

AGRICULTURAL PRODUCTS DIVERSIFIED AND INCREASED

RDC's subcontract to supervise lettuce production as supported by the NOA program was modified and extended through the end of FY2012. Going forward under this extended subcontract, RDC supervised a total of 12 lettuce growers; six from the FY2011 planting season and six new farmers from the 2012 production season.

NOA engaged a FtF volunteer, Matthew Mulanax, who is specialized in early season lettuce production, grading, harvesting and packing, as well as value-added bagged lettuce, to conduct an assignment in August 2011. As a result of the FtF visit, the project was able to determine the exact specifications of the post-harvest technologies suited to Kosovo's growing and market conditions.

As a result of this assignment, NOA introduced new varieties of lettuce to 12 lettuce growers in 11 municipalities. These included head lettuce (Iceberg) as well as multiple leafy varieties. Additionally, the project introduced new production technologies. These efforts all began in the first quarter. Already, the new varieties have entered the market in Kosovo, generating significant interest within the catering and retail sectors.

Farmers continue to plant the different lettuce varieties promoted by NOA and RDC. Given the strong demand in Kosovo market for lettuce, farmers have further expanded their cultivation as well. For example, the Agroserra Co. purchased an additional 300,000 lettuce seeds, mostly Iceberg and other varieties promoted by the project. Lettuce growers report selling 912,035 lettuce heads in the Kosovo market through the end of Q4. The main concern lies with the various Romaine varieties, which proved unpopular on the local market.

FOOD QUALITY AND SAFETY IMPROVED

New processing equipment for the pre-cooling of lettuce positively extends the product's shelf life, increasing the value for producers, packers, retailers and consumers alike. During quarter 3, the Agroserra greenhouse lettuce producer, located in Mitrovica, submitted a grant application entitled, "Postharvest technology in the production of green salad." The proposal involved creation of a modern lettuce collection, grading and packing center that would fulfill all food safety standards and hygiene requirements in producing fresh, bagged lettuces, including mixes hitherto unavailable on the domestic market. Immediately after receiving NOA's approval of the grant application, the applicant began to invest in construction of the center. The NOA program ordered lettuce post-harvest equipment that would have a positive impact on the extension of the shelf life of fresh leafy vegetables. Equipment procured included: ice-making equipment with storage bunker, washing and cooling machine, packing table, sealing machine, leak and gas detector. Additionally, special packaging was to be utilized. The equipment arrived in Kosovo during the second week of September and was delivered to Agroserra. Establishing installation, the post-harvest lettuce line inauguration occurred in the last week of Q3 with demonstration of the line. Training of Agroserra staff by international STTA was conducted during quarter 1 of FY2013.

Post-harvest line established at the Agroserra Co. in Mitrovica.

The training covered vacuum pre-cooling, cold-chain management and the packaging of fresh lettuces.

A study tour that would have brought Kosovo producers to Salinas, Calif., unfortunately was canceled after the planned commercial escort was no longer available. Without a privileged entry to plants operated by producers and packers, access would be almost impossible, and the benefits anticipated from the visit would not be realized.

This activity was redirected to Holland during quarter 4, with eight participants originally scheduled for the Salinas tour. The focus of this study tour was on lettuce production and marketing in the Netherlands. The main focus of this study tour as on: variety of lettuce cultivars, cultivation of lettuce, post-harvest activities and marketing channels. Overall, the organization and function of the lettuce value chain formed the core of the study tour.

The study tour achieved the following objectives:

- Participants obtained a clear overview of the organization and structuring of the Dutch lettuce sector, including technical aspects of lettuce cultivation.
- Participants collected many learning and action points for further development of the lettuce sector in Kosovo, specifically identifying appropriate technologies that could easily be implemented in Kosovo. Of specific note were adaptations of commercially available equipment to improve harvesting and handling.
- Growers and processors were energized after seeing the systems of production, realizing that these systems were possible under Kosovo conditions.

Study tour in Holland – Field demonstration of the harvesting of Romaine-type lettuce.

Additional achievements:

- During FY2012, in total, Kosovo growers sold 912,035 heads of lettuce at an average price of €0.21 ($0.26) totaling €195,899 ($264,463). (Note: 1.84 multiplier added to calculate the final value);
- Fifty-five lettuce growers participated in two open field days organized in April and June 2012;
- Thirty-six growers are planting lettuce using new technologies; and
- One hundred and thirty brochures provided to farmers, with information on new technologies for lettuce production and proper pesticide and fertilizer use, along with an IPM manual.

SAFFRON

NOA seeks to assist in the reintroduction of saffron, a traditional Kosovo crop that holds great promise as a lucrative export product.

AGRICULTURAL PRODUCTS DIVERSIFIED AND INCREASED

NOA organized a saffron field day during quarter 1 for interested growers, buyers and women's associations, held in the village of Celina in Rahovec municipality. The event was held at the farm of "AgroCelina," a producer owned by Fehim Rexhepi, a grower who had received saffron corms earlier in 2011, under the IIF. The field day was attended by16 participants including eight producers, the owner of essential oil distillery, an importer from France and other interested participants. It was the first time all those involved in Kosovo's saffron value chain had been brought together. The issue with saffron remains the marketing of the product. NOA is not the first program to reintroduce the crop in Kosovo, where it has been grown off and on since at least the 1500s. In order to be successful, the program will have to ensure that strong market linkages are made for the harvests in late 2012 and

beyond. Production targeting has also been modified during the year. The crop is well suited to higher-altitude light soil sites, where labor has a very low opportunity cost. During Q4, attempts were made to introduce the crop to the high altitude Dragash area. Although grower interest was seen, the aggregator (a producer of MAP products) did not show interest, at this time, to develop this new crop. This will be pursued again in 2013.

An effort to negotiate for U.S. military humanitarian funds to leverage program assets to plant up to an additional five hectares of saffron was abandoned after a women's association expressed no interest in extending the range of its crops to include saffron.

Instead, NOA ordered 385,000 corms from "Green Garden," a supplier in Holland, in April 2012.

A Request for Applications from potential growers of saffron was published on June 8. Three applications were received and after visits and soil analysis were carried out, grants were awarded to all three applicants during Q4.

The corms were delivered in early September to three grantees, in the villages of Krusha e Madhe, Kecekolla and Novo Brdo.

It was intended that at least one grantee would grow under high-altitude conditions ideally suited to saffron. The effort also would target minority producers of non-wood forest products. However, several attempts have been made, unsuccessful, to identify producers in Dragash municipality.

FOOD QUALITY AND SAFETY IMPROVED

Mounira Lage, an international consultant based in Morocco, was unable to visit Kosovo due to visa issues. Instead, a short home-based assignment was substituted for her STTA assignment. Lage prepared a manual on saffron harvest and postharvest procedures. The manual has been translated, distributed to growing grantees and posted on the program's website.

Details of Kosovo's saffron production, including analysis details obtained from laboratories in Morocco and France, as well as the Peja Institute, were sent to potential buyers identified in the past year. The TA report highlighted the positive yields obtainable in Kosovo. That potential has been used to encourage additional production interest.

Tests on the saffron produced in FY12 were conducted by the Peja Institute, as well as by labs in France and Morocco.

Analyses were performed following the Standard ISO/TS 3632-2, or equivalent. Saffron samples were obtained from NOA grantee "Agrocelina." Test results indicated the samples were of high quality. In total, 1,180 grams of saffron was harvested in 2011.

	Marocco		KIA			LABORATOIRE DE MARSEILLE - France	
Characteristics	Value	Test Methods According to ISO/TS 3632-2-2003 Saffron (Crocus sativus L.)	Value		Test Methods	Value	Test Methods
Moisture and volatile matter content	11.9	Max 12 (Mass fraction) %	11.9	Max 12	01.ISO 3632-2	12.5	NF ISO 3632-2 i/c V 32-120-2
Total ash (mass) on dry matter %	4.2	Max. 8	4.9	Max 8	01.ISO 928 & ISO	4.6	NF V 03-403 IDT. ISO 928
Acid-insoluble ash (Mass fraction) % on dry matter	0.5	Max. 1	0.12	Max 1	01.ISO 3632-2	0.1	NF ISO 930 i/c V 03-405
Solubility in cold water			56	Max 65	01.ISO 941		
Crocine, (E1% 1cm 440 nm on dry matter)	214	Min. 190 for category I	198	Max 190	01.ISO 3632-2	170	NF ISO 3632-2 i/c V 32-120-2
Picrocrocine, (E1% 1cm 257 nm on dry matter)	109	Min. 70 for Category I	101	Max 70	01.ISO 3632-2	94	NF ISO 3632-2 i/c V 32-120-2
Safranal, (E1% 1cm 330 nm on dry matter)	34	Min. 20- Max. 50	28	20-50	01.ISO 3632-2	20	NF ISO 3632-2 i/c V 32-120-2

Comparison of laboratory analysis results for Kosovo saffron

Those tests revealed there was no need to proceed with any other lab building capacity. The Kosovo Institute for Agriculture (KIA) was able to produce some very consistent results and is therefore well suited to future analysis work.

Remaining challenges include:

- Weed control is an issue with saffron, requiring grower attention.
- Rodent control. It has been noted that rats and moles pose a real threat to saffron production.
- Grower awareness of saffron as a new crop.
- Marketing initial volumes remains critical to maintain grower and industry confidence.

PRODUCTS AND FARMERS LINKED WITH MARKETS

A study tour to Spain and Morocco to visit growers and traders was cancelled because of difficulties in obtaining visas. The visa confirmation for Morocco actually materialized very late in Q4, but was too late to enable effective information gathering, so the study tour was cancelled altogether.

Through email exchange, a company based in Atlanta, Georgia, expressed interest in Kosovo-produced saffron. The company has been informed about Kosovo saffron, provided with contacts for saffron producers and forwarded the results of quality analyses. The company informed one client producer that it is interested in lower quality and lower priced saffron. This was not an ideal solution for the growers. Thus, while quantities remain small, marketing remains an issue.

The harvest of the 2012 crop was just beginning in late Q4 with indications that higher volumes would be harvested than were in 2011. Stronger marketing efforts will be required to move this product quickly into the market. One option may be to work with producers of Greek saffron and integrate Kosovo harvests into their marketing channels initially. This will be investigated early in Q1 of 2013.

2.0 CROSS-CUTTING CATEGORIES

ENVIRONMENTAL COMPLIANCE

The Program completed submission of all Environmental Reports (ERs) for all grants and subcontracts awarded to date which were considered as negative determination with conditions. A total of 42 ERs have been submitted covering 124 farms.

A five, day-long introductory trainings on "GlobalGAP and Safe Use of Pesticides" were held in Prizren, Gjilan, Vushtri, Peja and Prishtina where 172 participants attended. RTK's TV show "Bujku" recorded the last training in Prishtina and aired the recording the following weekend on its weekly show. As a result of this activity the understanding about GlobalGAP certification criteria was broaden, and the importance of using less toxic pesticides and applying other tools for managing pests and diseases was understood. One spraying service provider was identified among the participants to be selected later as a NOA grantee that will provide spraying and record keeping service for apples in Decan region.

The six IPM manuals developed for apples, table grapes, strawberry, raspberry, gherkins and lettuce produced by the Environmental Committee were printed - 3,000 copies. The distribution was as follows: 600 copies have been distributed to the NOA beneficiary farmers and supervising grantees; 600 copies to MAFRD –Extension Service/Municipalities; 120 copies each have been distributed to MAFRD-Plant Protection Department and to Helvetas who contributed in the development of these materials; 600 copies to the Faculty of Agriculture and 600 copies to the Vocational Agricultural Schools.

19 trainers have been certified by the program [Dr.Alan Schroeder and Dr.Fadil Musa served as the trainers for these trainees] to deliver training on SUP and EP based on USAID requirements. The local trainers are already providing trainings to the program farmers and can be considered as trainers for the future stages of the program. The list with the names of trained people has been forwarded to YEP, KPEP and other USAID projects which are interested to engage local trainers to conduct trainings on SUP and EP.

During April, local consultant Dr. Fadil Musa conducted the field crop-specific trainings on apples, table grapes, strawberries, raspberries, lettuce and gherkins, for supervising grantees and farmers at the farms of the growing grantees for the six crops. TV outreach show/safety message enforcement has followed the training/capacity building in IPM and Safe Use during April twice in succession. Training for blueberries/raspberries and asparagus has been the subject of separate trainings held by STTAs.

The supervising grantee IADK conducting the IPM training for strawberry growers.

All supervising grantees, their IPM lead and students have delivered the trainings on SUP, IPM and Environmental Protection to the growing grantees they supervise, in the group of 2-4 farmers from the same region or individually for those who could not

participate in the group. They have insured that all the growing grantees received the trainings on IPM, SUP and EP.

Four grants have been awarded to four local companies for providing spraying and record keeping service for table grape vineyards and apple orchards. The Program purchased four air-blast spraying units and four dusters (for sulphur, copper) for delivering this service initially in Rahovec, Suhareka and Decan. This equipment will enable these companies to provide service for dusting, which was lacking, and help them to expand their business as well.

The grant beneficiary for sprayings service preparing to demonstrate the duster during the table grape field day in Rahovec.

The program has purchased and distributed 100 sets of Personal Protection Equipment, 64 have been distributed to NOA beneficiary farmers and the rest will be distributed over the remaining life of the project. The distribution of this equipment fulfills the Program's commitment to promote the use of PPE including exploring ways to subsidize or cost-share PPE.

The set of the PPE delivered by the program to the growing grantees; b) The metal lockable cabinet for pesticide storage purchased by the farmer as a part of MoU.

STTA Dr. Alan Schroeder assisted by the local plant protection expert Dr. Fadil Musa and the Program environmental compliance specialist to complete an update of the PERSUAP produced in June 2011. The update addressed crops that have not been part of the PERSUAP (DCN 2011-KOS-055), essentially stone fruits, and made modifications to ensure the report remained current and accurate. The updated PERSUAP was approved in January 2012. The Program continues to check regularly with MAFRD for new pesticide registrations. Next quarter is going to be followed by the new update based on the latest national pesticide list. Collaboration with MAFRD is excellent on these matters.

ADDITIONAL ACHIEVEMENTS

- The Program has supervised the activity implemented by Helvetas ICK for "Monitoring and training on Apple Integrated Production". The 62 apple growers from different regions throughout Kosovo have been monitored by four advisers and four students that have been trained by Helvetas ICK to implement integrated production criteria as a potential basis for premium payments by the buyer MOEA Company.

  The preliminary results from the implementation of this project show that from 62 apple growers monitored, 32 growers met IP criteria or they are above 60% of IP implementation, 11 apple IP growers are between 50% to 60% and 19 apple IP growers do not meet IP criteria (below 50%). The monitoring process will continue during October. MOEA will start collecting the II and III class of apples (for processing) and the price will vary according to the performance of the farmers in the implementation of the IP criteria. The final report in November 2012 will include extensive data from all 4 monitoring sites. The fact that the firm is willing to pay a premium based on adherence to IP principles is a first in Kosovo and will establish an excellent precedent for future supply contracts

- Five 'Mankar' spraying systems have been purchased to introduce new technology equipment for chemical weed control based on the ULV (Ultra-Low Volume) designed for control of the weeds with low herbicide consumption and minimal risk of drifts thus enabling better environmental protection. This new equipment is going to be used initially at the raspberry and blueberry plantations for targeted application under canes and blueberry bushes and between the rows.

- There were 282 participants who attended in 22 events organized by the program on SUP, IPM and EP.

CHALLENGES

- Ongoing awareness creation of the importance of the Implementation of PERSUAP requirements within the team and with grantees and collaborating farmers.

- The Study Tour through MASHAV to Israel to study phytosanitary controls and monitoring was cancelled and there is a strong need for the phytosanitay inspectors to improve their knowledge regarding plant protection issues. NOA will work with locally available specialists to begin establishing monitoring methodologies for target pests and diseases as an alternative to this activity.

IMPROVED FOOD QUALITY AND SAFETY

A HACCP consultant delivered trainings and introduced food quality standards during Q2. The program conducted a four-day HACCP training course for local fruit and vegetable (F&V) processing companies. Thirteen representatives of different local processing companies attended the training. The participants received training materials, copies of relevant food handling and safety regulations and other important information. To further participant understanding of the subject, all were invited on the course's third day to visit Eurofruti, a processor of wild-harvested fruit that recently received HACCP certification following NOA's support to the firm in the form of a grant that underwrote the cost of pre-certification training and auditing. Companies engaged in this activity have received very good information and started to implement some of the steps of quality standards, specifically HACCP, in their processing facilities.

In the first week of April, NOA staff participated at a short HACCP presentation held by Mr. Vlladimir Kokarev. Food safety standard requirements and implementation procedures were part of this presentation. In addition to this, the expert also presented observations on progress from his engagement in the previous quarter, assistance provided, results obtained, problems encountered and recommendations for follow-up work. His view was that improving procedures, which will eventually lead to HACCP certification, will be a critical aspect of the development of the food industry in Kosovo.

During the last few years the number and capacities of local fruit processing companies in Kosovo has increased. Unfortunately they are still facing difficulties in raw material supply, proper use of equipment and production of sustainable quality products. Early in Q4 NOA engaged a FtF volunteer, Mr. William Schafer from the USA to support local fruit processors on the above mentioned issues. The main purpose of the activity was to provide on-the-job technical assistance to existing fruit and vegetable processors such as: "Ask Foods" and "MOEA" from Gjilan and "ABI" from Prizren.

Farmer to Farmer Volunteer William Schafer advising program-targeted fruit processor.

Outcomes of this activity include identification of the main constraints within the existing processing facilities; support provided to processing companies on-the-job in product formulation specifically for juice, jams and marmalades; presentation/demonstration of on-the-job best practices of food processing technologies within the targeted companies—especially in relation to different types of recipes and formations; the development of a list of processing equipment required and equipment specifications to improve the current situation and assist companies in identification of vendors for required equipment for processing; Identification of human resource capacity building needs for each processing company; assessment of food laboratory and QC capacities in the processing plant level; one on one training of fivw processing company's personnel on best practices, and development of new recipes and formulas.

Processors require technical advice especially in food technology and managing process flow and equipment. For successful completion of this activity the program initially had difficulties in finding suitable candidates in the region to conduct the required technical assistance. With HO assistance a USA, FTF F&V expert Mr. Bill Schafer was identified an appropriate resource to accomplish this activity proposed in this year's work plan. The expert's support was oriented toward processing equipment, food technology, food safety and security and value chain linkage development at local processing companies such as: ABI, Ask Food, Koral, Mib Trade and Supermix.

William Schafer advising program-targeted gherkins processor.

The results achieved: identification of constraints within the existing vegetable processing facilities; support provided to vegetable processing company staff on-the-job, product formulation; demonstration of the best practices for vegetable processing technologies within the targeted companies; development of a list of processing equipment required for immediate improvements; assessment of food laboratory and QC capacities at the processing plant level; and one on one training of 9 processing company's personnel on best practices.

In order to enable a group of Kosovo fruit and vegetable processors to attend the food processing trade fair to gain new knowledge and ideas pertaining to processing/investment opportunities, during February 2012, NOA organized a study tour to Food/Food Tech Fair in Bursa in Turkey. This is one of the region's largest exhibitions of both food and drink products, and basic food processing equipment. Three NOA staff, and 10 participants attended the event. Six other NOA customers also attended at their own expense. The first day of the event was spent at the Food-Food Tech Fair in Bursa while the next two days were used to visit five food processing equipment companies from the Bursa region.

Kosovo participants to the Food/Food Tech Fair in Bursa, Turkey.

This activity enabled the Kosovo processors to see many different types of processing equipment, gain ideas for improving the processing technology in their plants, gain knowledge for developing their equipment and processing investment plans and discuss trends in market demand for processed products.

As a direct result of this visit, one of the processors - ABI & Elif - purchased equipment suitable for vegetable processing (valued at 200,000 Euros) from Goztepe company. In addition, OSA Termosystem (an equipment processing company) has approached the program and offered to produce gherkin sizing machines locally. However, this firm subsequently proved unable to compete in terms of price.

ADDITIONAL ACHIEVEMENTS

- **Food Safety Standard technical support for new processing plant companies**

Fruit and vegetable processing companies "Abi&Elif" from Prizren; "Koral" from Fushe Kosova and "As Promet" from Leposavic are constructing and adapting new processing plants. They required technical advice from our program related to proper processing equipment for their production, advice on construction plans based on HACCP standard requirements and utilities management (water, electricity, sanitation). After field visits and an evaluation of existing situation and needs, HACCP/STTA together with two local consultants were engaged to support them with the above-mentioned issues. During an intermittent three month assignment period, a number of joint field visits were carried out and nonconformities were identified and interventions carried out. GHP (Good Hygiene Practices) trainings for 70 workers/staff involved in the processing operations were delivered including different important information and materials.

Both Abi&Elif and Koral were short listed for award of the European Community Liason Office grants and will use the work carried out under this assignment to design HACCP appropriate infrastructure placements should they be awarded the financial support.

- **Award Grants in order to improve Food Safety Standards at the existing processing plants**

The Program has received two unsolicited concept papers from two processing companies, ASK Foods and Sole Kosova (Koral) for support to procure equipment enabling enhanced food safety and hygiene within these companies.

The Grant Agreement with ASK Foods involves a new automatic jar filling machine, which will eliminate hand filling of the jars. The Grant has been approved and successfully completed. A promotion day highlighting the machine will be organizing in October 2012.

The other application received from Sole Kosova (Koral) involves an autoclave (which does sterilization and pasteurization of the processed fruits and vegetables). This grant was approved during Q4. Its installation will be completed during the new work plan year.

- **Short Course on Post-Harvest Technology - 18-29th of June - UC Davis, California**

NOA financed attendance for four participants at a two-week course on Post-Harvest at the well-known University of California, Davis, USA. Three participants were young professionals from local companies interested to gain more knowledge on post-harvest issues: ASK Foods, Frutomania (a fruit and vegetable processor) and Agrovizioni (one of the main fruit producers that has already built cold storage for fruits and vegetables). NOA Deputy Chief of Party, Fatmir Selimi, accompanied the participants to the course. The quality of the training and professors was excellent and all four participants benefited immensely from the activity. Interest has been shown in other courses of a similar nature.

INCREASED AND AFFORDABLE FINANCE

NOA assisted MAFRD to organize meeting with donors attempting to harmonize funding and strategy. Donors are working under the coordination of MAFRD. During the course of the assignment of the Senior Advisor to the Minister of Agriculture, multiple meetings were held between individual donors and the ministry through MAFRD organized meetings with the donor community to stimulate agricultural funding to the sector. As a result of these and other forum discussions, the MAFRD budget has increased significantly. World Bank and Danida funding is set to provide significant enhancements to MAFRD grant funding mechanisms. The NOA technical team has been invited to participate fully in the discussions regarding these new grant mechanisms early in the coming work plan year.

In order to streamline and improve the quality of grant applications to the MAFRD rural grants scheme, specific trainings were organized.The EC Rural grant scheme applications were opened from March and closed on May the 30th. After the training provided early in the reporting year, NOA DCoP continued to advise our customers on certain issues regarding the grant applications. The main support was provision of information and documents that are relevant for the application. The following customers or their consultants were assisted: ABI&Elif 19 from Prizren, EuroFood from Prizren, ASK Food from Gjilan, Koral from Fushe Kosove and Fungo FF from Kamenice. At the time of compiling this report, both ABI&Elif and Koral are short listed for award.

In order to bring new skills to the sector NOA worked with financial interns in order to bring them into the agricultural finance arena.This training in the basics of agricultural finance was completed for 28 students by consulting company AFAS. Students participating in this training were very satisfied with the quality of training. All students participating in the training spent at least two months as interns in various financial institutions in Kosovo. The top seven students were assigned to work with the grant supervisors contracted by the project and three were assigned as interns within NOA for a 6-month practical assignment.

Through the USAID office NOA was approached by ProCredit Bank in Kosovo to discuss possibilities of collaboration. One of the ideas developed by the bank was to organize a joint study tour to Bulgaria where main players in the agriculture sector could learn from Bulgarian experience, develop business linkages with agribusiness companies and learn about opportunities in the sector through business ideas already developed in Bulgaria. The trip took place in September 2012, two staff members participated in the trip and the program covered some of the costs of the trip. ProCredit Bulgaria organized visits and selected clients. The focus of visits was horticulture and the diary sector. There were 23 participants - manly potential businesses recently entering into agribusiness in Kosovo (new privatized land owners such as Dukagjini, Kag-Asfalt, and Fetoshi corporate). In addition, there were agribusinesses that are in the expansion phase and are looking for ideas and new investment opportunities. It was a good opportunity for the project to meet with new comers in the sector and guide as to where they can get information and technical support in horticulture. According to bank, at least 3 of the participants are likely to make investments as a result of the study tour.

A specific opportunity arose to directly impact access to finance. A meeting was organized at the NOA premises to facilitate access to finance between ProCredit Bank and the 4 biggest medical and aromatic processing companies: Agroprodukt-Syne, Fungo FF, Hit Flores and Euro Fruti. The issue of pre-financing their collection centers has become a major obstacle in this business causing too much burden for four main processing companies. Therefore, they want to involve banks in financing harvests from their 50 suppliers/collection centers. PCB was very open and flexible in providing their expertise and assistance. It was agreed that 4 main companies would initially talk to their suppliers and organize a joint meeting with PCB with NOA facilitation. In addition, each of these companies will address their financing needs directly to PCB.

In order to stimulate the development of new agricultural credit products, a meeting with the Head of SME and Card Business, Orcun Ozdemir from TEB and was organized at the NOA premises. The topic was how to develop an agro credit card with installment and bonus features similar to what TEB is providing in Turkey (in addition in Turkey they have a grace period included in Agro Credit Card) . Currently TEB has a STARCARD product dedicated to Retail customers (payroll mainly) which can be adapted to an AGRO Credit Card (without grace period, but with installment features and bonuses. For example: a farmer can purchase his/her inputs at a recognized input dealer and repay the debt with installments plus earn a certain percentage as a usage bonus. This will be a loan product but developed through the new Card mechanism proposed. TEB will present the need for developing such a product by the beginning of year 2013 to its Executive, and within the first half of the year, is committed to launch the pilot product. TEB will need project support in identifying input dealers and a group of the first farmers to be targeted as potential eligible clients. This product will have wide applicability within agriculture because all sub sectors need inputs seasonally and are willing to repay for them gradually in installments instead of one-time payments when supplies are needed.

In order to reduce the perception of risk and encourage greater lending enthusiasm, NOA organized training on horticulture developments in Kosovo with a focus on NOA crops. The training was provided to Raiffeisen and ProCredit Bank. The aim of the training program was to inform loan officers on recent trends of horticultural development in order to encourage investment in new crops/varieties and technologies which are promoted by the NOA project. MAFRD was also part of the training program sharing with bankers the MAFRD strategy and grants/subventions program for 2012. Feedback from bankers was very good both about NOA and MAFRD activities and plans. Bank officers expressed their interest to participate in NOA's coming field days.

During February/March, the program initially held two days of training for Raiffeisen Bank's loan officers in Pristina, coming in from RBKO's offices around the country. The purpose was to advise the loan officers of the particular needs of an agricultural borrower, referencing the cash flow cycles that pertain to agriculture which are unlike that experienced by other borrowers.

In April, the same training was provided to ProCredit loan officers at which 92 officers, branch managers and risk management staff attended. Some 550 copies of the Gherkins and Lettuce production manuals were distributed to six banks and three other financial institutions—one copy for each lending officer. The banks have asked for other materials which the Program produces in the future to be similarly distributed so that their lending officers gain a greater understanding of agricultural issues and opportunities.

A separate training was held for TEB loan officers in Q4 and bank officials in Mamushe to highlight the utility of working within established value chains to offset financing risk. The bank officials were impressed by the development of the value chain concept in Kosovo and saw the benefits of working with clients who are contracted and have access to technology and reliable markets. This forms a solid basis for new agro lending products in the New Year.

SUMMARY OF PROGRESS TOWARD ASSISTANCE TO MAFRD TO ESTABLISH A DEVELOPMENT CREDIT AUTHORITY (DCA) PROGRAM

During Q1 2012, NOA short-term technical expertise worked with the USAID Mission and USAID/EGAT/DCA personnel to explore the possibility of extending a loan guarantee program for Kosovo commercial banks. This involved the Ministry of Agriculture using their own funding to pay

for the premium to establish a Development Credit Authority (DCA) program for several banks to lend to the agricultural industry.

The first part of the assignment, included visits with the commercial banks, the Ministry of Agriculture, the Central Bank of Kosovo, and agricultural producers and processors, to assess the level of agricultural lending experience, understand the constraints to lending to the sector, and ascertain the need for additional financing within the industry. This first visit affirmed that the agriculture sector had the lowest level of credit from the formal financial institutions (3.3% of all banking assets), and that interest rates were high. Constraints to increased use of credit were the relatively higher rates of interest, and a lack of properly structured investment opportunities for the banks, as well as a very low level of exposure by the banking industry as a whole to the industry.

The conclusions from this first assignment were that both the Ministry and USAID were interested in collaborating; that the Ministry was prepared to gift between € 2.5 and € 5.0 million to the USG to establish the guarantee; and that there were ways that the guarantee could be used to put downward pressure upon the interest rates. This agreement in principle was followed up with a visit by the Minister of Agriculture to the Office of Development Credit Assistance in Washington DC, to confirm the interest of all parties, and this resulted in the issuance of a joint press release by USAID and the Ministry confirming their mutual desires to continue to work towards the launching of the DCA supported guarantee.

A second assignment was conducted to help to prepare the specifics of the term sheet that would frame the guarantee. This included meeting with six commercial banks and the Central Bank of Kosovo to discuss actual lending rates, determine the optimal size of loans to be guaranteed, estimate demand for the product and determine to what degree the guarantee would help to bring down relatively high interest rates. The assignment determined that the size of loans where the guarantee would most effective would be between € 5,000 and € 50,000. In addition, it was determined that the Central Bank of Kosovo would be able to provide the information that would allow the Ministry to track the progress in interest rate reduction by providing weighted average interest rates for all agricultural loans, and for all loans made to agro-processors. These metrics can then be used to compare against the loans being guaranteed under the MAFRD funded DCA to ensure a reduction in interest rates and a substantial increase in leverage and financing activity to the industry.

In January, STTA Mr. Ken Smarzik accompanied the two USAID/EGAT/DCA representatives and an advisor from the Ministry to present initial guarantee conditions (term sheet items) to the participating banks. Specifically, the visits were to ascertain the appetite for the guarantee, explain the DCA conditions that would accompany the guarantee, and continue to underscore the importance of reducing the interest rate, in particular for the smaller borrowers, where the cost of borrowing is at least four basis points higher than the average lending rate for 2011.

In addition, a result of this trip was to provide MAFRD with the analytical basis for finalizing support from the Ministry of Finance; provide some guidelines on coordinating MAFRD's direct investment grants program and the lending under the ACGP, and provide some indicators to measure the progress of the Agricultural Credit Guarantee program [ACGP] towards achieving the goals of additionality and more competitive interest rates for the sector.

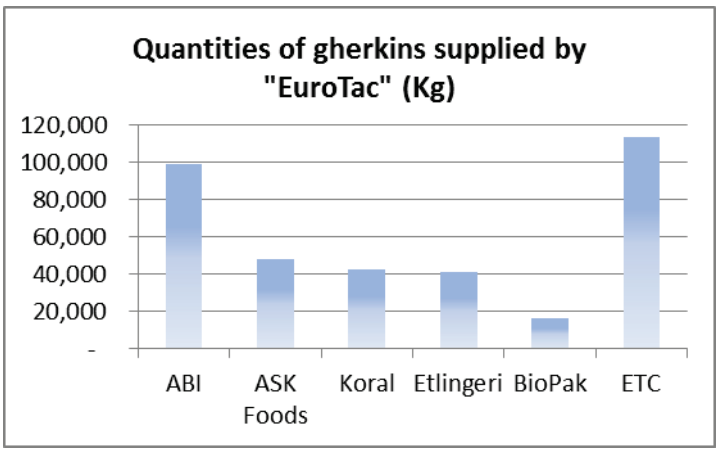
The establishment of the ACGP, using the DCA, will address two objectives—ensuring access to credit for investment in commercial agriculture, and introducing competition into the banking system, through the participation of several banks, with the result of reducing interest rates.

By 25 September, the new DCA agreement was signed with 6 commercial banks: Raiffeisen, ProCredit, NLB, TEB, BKT and Banka Ekonomike.

LINKAGES ALONG THE VALUE CHAIN

In the process of developing linkages for *gherkins* between collection centers and market actors (processors and supermarkets) the program facilitated visits of five collection centers to processors -

"ABI", Prizren; "Koral", Prishtina, "ASK Foods" Gjilan and "EuroFood" Prizren and Supermarket "ETC" and traders "Fatosi.Com" from Prishtina and "Lirimi Company" from Prizren. As a result of these meetings, 247 mt of gherkins were sold to five processors and one supermarket.



For *table grapes*, the Program facilitated visits of a new collection center owned by producer Mr. Habib Dina to wholesale traders - "Fatosi.Com" from Prishtina and "Lirimi Company" from Prizren, and collection center "AgroCelina"; one contract was signed with "Fatosi.Com". As result, 75 mt of grapes have been sold to "Fatosi.Com" and 3 tons have been sold to collection center "AgroCelina" for export to Germany through exporter "Kelmendi GmbH".

In addition to main products, the linkages created between producers and processors have been followed by supply of other products outside the NOA VC's such as carrots, cauliflowers, aubergines (egg plants), onions and beetroots. Although these are not NOA value chains, they are critical to growers who have diversified their production and required market linkages for all their production. The linkage mechanism established through the gherkin collection center experience, has formed a solid base for the programming and marketing of additional open field vegetables.

OVERVIEW - ACHIEVEMENTS

- During the FY2, 88 contracts have been signed;
- Total value of sales as a result of linkages made - $878,828
- Novi Sad Fair is one of the most important fairs in Balkan region. The 79th International Agricultural Fair, at the Novi Sad Fair, took place from 12th - 18th of May 2012. A group of 24 Program's clients including three staff members had a 3-day visit to the Novi Sad fair. The purpose of the visit was to provide an opportunity for the Program's clients to get know trends of the horticulture sector in the Balkan region and to establish or re-new linkages with the regional actors in the horticulture sector.
- Five different events with 66 participants have been organized related to market linkages; study tour to Novi Sad [21 participants], three B2B meetings [24 participants] and a round table meeting [21 participants].

MARKETING KOSOVO'S PRODUCTS

Advising and supporting firms on pre trade fair attendance was completed during Q2, by training processing firms in trade fair presentation prior to the Fruit Logistica event held during the year. This activity was critical to future attendance and will form part of NOA support in future years. NOA will continue to work with customers as they prepare for trade fair events—critical to effective participation.

Local product display shelving established in major supermarkets.

In order to increase customer awareness about locally processed F&V, NOA designed and produced dedicated shelves for local products to be put on display in supermarkets. A round shelf was designed in the shape of the traditional table or "Sofra". In total, 27 shelves were produced and distributed to six of the biggest supermarket chains in Kosovo : **ETC**—7 branches, **Albi**- 7 branches, **Viva Fresh**- 4 branches, **Maxi—**2 branches, **City park- ERA** -2 Branches and **Interex**—1 branch. Recently two other supermarkets of smaller size, **Abi** and **Nertil,** accepted the promotional shelf, one unit each. Two sample shelves are placed at NOA and MAFRD offices.

Shelves are exposed at the above mentioned supermarkets. Eleven local processors are represented with their products on these shelves. Processors are required to intensify their direct promotions at the supermarkets where these shelves are placed. The dedicated local products shelf is a reference point for those local products and their promotions.

The whole activity is branded with the MAFRD campaign slogan "from our land to our table". Hangers, footsteps, flyers and pop ups with the same motto are installed in supermarkets to emphasize areas where the shelves and local products are placed.

A cocktail launching event was organized at the end of April to celebrate the launch of the campaign, and especially for USAID, MAFRD and the NOA program to thank the representatives of supermarkets and processors, for their contribution in promoting local products. The program features in the ongoing MAFRD publicity campaigns.

In order to increase customer awareness of local strawberries and create market opportunities for local farmers, a week of promotional days was organized on Mother Teresa Boulevard (12-14 June 2012). The activity was initiated by NOA and ultimately supported by MAFRD and IADK. Responsibilities and costs were shared among partners and excellent results were achieved. For four days of promotion, 6.7 tons of Strawberries were sold with a total value of 13,535 EUR .The 15 biggest strawberry farmers participated from all over Kosovo. More than 10,000 customers approached the event and their feedback about the products was excellent.

The media coverage was excellent following the activity results each day. Many new sales contacts were made, and farmers evaluated the activity highly and were very willing to participate in next year's similar events.

Farmers' recommendations: Similar promotional and sales events have to be organized from the 25th of May until the beginning of June in order to reach farmers with varying seasonality (different regions have different peak seasons). The possibility of organizing the events in other bigger towns and places has to be considered.

Kosovo-produced strawberries, packaging and promotional materials.

The project facilitated strawberry sales with a few of the bigger supermarket chains for Albion variety during the autumn season, it was the first time our producers could supply the market with local strawberries and sales have been ongoing through the end of September. Sales are projected to continue into November—a totally new marketing opportunity for Kosovo growers and consumers.

Strawberries ready for shipping.

From last year's marketing research in regional countries, an opportunity to export strawberries to Albania was identified with the peak import season in Albania being April and May. The initial plan was to do the trial export in early or mid- May, but the production season in Kosovo this year was delayed for several weeks due to bad weather condition (heavy rain and cold) causing low production quantity and a delayed production season. Despite low quantities and increased demand in local markets in Kosovo, 4 farmers and one trader volunteered to participate in the trial export to Albania. The trial export shipment took place on 9 June 2012. Six hundred kg of labeled and well-packed strawberries - 1,200 packages of 500 gr each were shipped to Albania. The farmers who supplied Lirimi Trader were: Agro Vizioni (Labinot Rexhepi); Me Agro(Mehdi Bresilla), Halim Baftiu and Bioi Buzmi (Gege Zefi). The wholesale price was €1.2 /Kg, while the price in Kosovo at the time was between €1.4-1.5 per Kg. In June the price per kg is better in Kosovo than in Albania because May is the end of peak strawberry import in Albania. If Kosovar producers are able to produce and export to Albania earlier in May then there is a very good opportunity to obtain better prices. This will likely come from protected production units which by definition are higher cost so time will tell if the earlier production can provide economic returns in this market.

As a follow up activity to the Strawberry promotion days, farmers requested our program's support for promotion and sales of their fresh blackberries. Previously, the majority of fresh blackberries were processed due to lack of fresh markets. This year, farmers sold all good quality fresh product at a very good price, €3-4 /Kg. Identification of new markets and linkage to supermarkets were identified and promotional activities organized by NOA contributed to better product packing, price and product demand.

For the first time, local blackberries were sold through three leading retail supermarket chains: ETC, Albi Mall and City Park, due to NOA program's support in facilitating sales agreements. Over a period of two months, 4 farmers sold 8,129 EUR worth of product to these supermarkets. City Park and Albi kept the berries in a refrigerated area.

New retail packaging – a first for Kosovo produced berries.

During Strawberry and Blackberry promotional activities, farmers spoke of their lack of knowledge on berry processing - specifically, jam preparation. A successful woman farmer, Shkurta Halimi who is knowledgeable about fruit processing was among those participating in the promotional events. Shkurta volunteered to organize a training on jam processing for other women berry farmers or berry farmers' wives. The NOA program facilitated the activity in terms of organization and financial support for operational costs. Interest for such training was high and a two-day training was organized for two groups of 15 women.

Training on berry processing at Shkurte Rrustemi premises.

It was a very good opportunity to see woman farmers sharing experiences in fruit processing and discussing common problems/opportunities. During the training, the women's husbands used the opportunity to talk over cultivation, markets and other topics. This activity highlighted the collaborative role of men and women in the daily responsibilities of production and marketing.

CHALLENGES

- The quantity of berries (Strawberry and Blackberry) was limited and for a very short period of time (short production season), causing limitations in terms of marketing and engagement with larger sales contracts. Albania remains a good potential for fresh berry exports but with earlier products and in much bigger quantity, initially to satisfy local needs and to create surplus production for export to Albania and other potential regional countries. The other problem with berry sales remains that few big supermarket chains have soft fruit cold shelves.
- Maintenance of dedicated shelves for local products is problematic especially with a few supermarkets (ETC and Interex). The lack of commitment from local producers to properly care for their products on display on these shelves might cause a withdrawal of shelves from some supermarkets. One of our local producers, MOEA, has offered to conduct shelf product maintenance in return for a larger share of the shelf space. This arrangement was put in place late in Q4 and results will be evident early in Q1 13.

OUTREACH AND GENERAL

GENERAL OVERVIEW - EVENTS ORGANIZED AND COORDINATED

- Between July-September 2012, 21 events were organized by the program, of which 7 were presentations, 10 trainings, and 4 open field days. The total number of participants was 333;
- Total number of farmers trained during FY2was over 1,828 people - 121% of the target planned for FY2;
- Since the start of the program, a total of 176 public events have been organized, where over 2,033 participants were present at program-sponsored events, of which 152 were women.
- Restructuring of the website and keeping it current.
  - The NOA website is to include interactive map which is under construction
  - Success story sequencing and the inclusion of success stories on the web site.
  - Using the internet to provide interactive web-based solutions for NOA staff supporting reporting, logistics and even planning
- All publications produced by the program were published on the website
- Our website is now averaging 44 hits a day.(see **OR-3-12** for detailed video view results)
- One newsletter per month was compiled through the end of May 2012 (8 issues)

- The Program has now shifted from issuing monthly Newsletters to composing success stories which would highlight an individual or company—something that people can easily relate to. The Success stories showcase the benefits of entering into the business of agriculture by portraying individuals that the Program has supported and who have achieved success in various value chains promoted by the Program. Target success story frequency is 3 per month. The visit of the F2F STTA Bruce Williams during Q3 supported the O&C lead in developing the principles of this modification as well as the development of the video matching program where success stories will be matched by documentary videos for TV broadcast as well as for web site and internal use . (OR-3-2012)
- The Program has compiled 3 success stories through Q4 with success stories for each VC in the process of compilation.
- The contract with RTK's Bujku show has come to an end in September. In the last quarter of FY12 three shows were recorded and aired. One show is still in the process of completion. The shows in general have contributed to farmers' awareness and education by answering technical and informational questions. All Bujku shows were converted to an online format and published on the NOA website and on YouTube. Altogether they have been viewed 3,799 times on YouTube to date, while on the NOA website there have been 2,145 views of the Bujku shows.
- The new outreach approach in terms of media in FY'13 will be based on the Success stories the Program will generate. These successes will be featured in the form of matching documentaries or shows produced by a private local production company, and aired on one of Kosovo's main television stations. In this way the Program continues to increase its visibility, and the message to be sent across to the public watching is that agribusiness is worth getting into—demonstrating this through real/live examples of the benefits it offers. The shows will contribute to improving the overall image of agriculture in Kosovo. FtF volunteer Bruce Williams who has long experience in producing agricultural shows for television was instrumental in supporting the development of this concept. Emphasis will be placed on encouraging youth to engage in agribusiness and highlighting the role of women in the sector.
- Until now 3,000 IPM Manuals were produced, designed, edited, proof-read, printed and distributed.
- In the last quarter of FY 12 the Program's Annual Work Plan and the Annual Report have been formatted. Also, two leaflets compiled by our supervising grantees (BioLab and IADK) have been cleared.

This event was successfully held during Q4 in conjunction with MAFRD (Minister of Agriculture spoke as key note speaker). Presentations by NOA technical staff as well as visiting STTA Professor Rambolo were well received by an audience of over 100. An investor guide was developed for each NOA target value chain, highlighting capital and operational costs as well as the anticipated payback period. This meeting paved the way for the collaboration with ProCredit bank and a visit to Bulgaria for investors seeking to understand opportunities in Kosovo in the agribusiness field.

In conjunction with the "From our Land to our Table" NOA supported the production of a promotional TV campaign. The second piece of the 3 part promotional sequence was produced and aired (https://vimeo.com/44871863). The third piece of the series is scheduled for early in FY 13. MAFRD is very satisfied with this promotion and feels that it augments very well its policy and emphasis on local production. The MAFRD promotional spots have been designed to increase public awareness of locally grown product as fresh, of high quality and being grown by Kosovo producers.

IMPROVED COORDINATION WITHIN THE AGRICULTURAL SECTOR

During the course of Q4, it was determined that the scope of work of the SAM had been completed and that his assignment would end by the end of the work plan year. As a result, the SAM left Kosovo at the end of September. As part of the continuation of the coordination work, the NOA CoP had several meetings with the Minister of Agriculture in conjunction with officials from USAID to ensure continued communication with the ministry. The CoP indicated that he would dedicate more time to coordinating between NOA and the Ministry, especially between the senior MAFRD technical staff

and the project. As a result of this, NOA has been invited to participate in detailed discussions as to the format for the MAFRD grant scheme in 2013.

Donor Coordination has been a crucial part of this assignment with the following highlights for the year:

- The SAM has spent considerable time working with the donor community to support harmonized support to MAFRD activity. Recent emphasis has been placed on identifying a training venue for developing Agricultural Extension Service (AES). This has been done in harmony with the Norwegian Ministry of Foreign Affairs (via Norwegian Embassy), Ministry of Education, Ministry of Economic Development, Municipality of Lipjan, Faculty of Agriculture, German GIZ and the Norwegian funded Lipjan training facility under the management of the Lipjan Municipality. The final MoU and contracts were drawn up towards the end of Q4 and the venue will become the center of training for the new AES staff.
- The SAM worked with Japanese JICA to develop a new proposal for a 3-year technical assistance program to support training for the new MAFRD AES and restructuring of the Kosovo Institute of Agriculture in Peja.
- The SAM worked with the Embassy of Finland and the Finnish funded Training of Agricultural Advisers in Kosovo (TAGAK) program implemented by Savonia University, ProAgria (Finland) and the University of Pristina Faculty of Agriculture) to refine the curriculum and develop plans for the training of AES field agents in the future.
- The SAM worked with European Community Liaison Office in Kosovo to refine the plans for €1.5 M support in 2014 to the development of the AES and restructuring of KIA and clarify whether this should be in the form of a Twinning program (TA only) or a Technical Assistance program (TA plus commodities).
- The SAM worked with USAID and NOA to explore options for USAID FORWARD funding to support MAFRD. These included a request to support MAFRD communication and outreach as well as a request to support women farmers specifically
- The NOA technical team has been invited to participate in the detailed discussions to be held early in Q1 13 involving the structure of the MAFRD grant schemes. The funds available to MAFRD are the result of many coordination discussions between donors and the government. These have significantly increased the amount of funding available to the agricultural sector and augers well for targeted developmental grant schemes in 2013.

Additionally, the SAM has been working to promote institutional reform within the MAFRD and highlights are as follows:

- The SAM continued during this quarter to emphasize the role of the Economic Analysis Unit and to support their development of appropriate cost of production models for target crops. The EAU have received training in cost modeling and have participated in producer interviews to validate assumptions. The EAU has developed corn, wheat, alfalfa, grape and apple cost of production analyses as a basis for developing decision making tools for MAFRD subsidy and grant programs. The SAM supervised the work of USAID-funded *STTA Luciano Leonetti* during Q3 who, during Q4, was supervised by the CoP following the departure of the SAM.
- The SAM initiated the request for USAID-funded *STTA to support the development* of programs to support women in agriculture within the new AES, including development of a TOR and recruitment of an appropriately skilled consultant.
- The SAM refined TOR's for two additional USAID-funded STTA assignments to support the development of the AES:
  - Development of a farm management program component for the AES (proposed for September/October 2012)
  - Establishment of laboratory capacity and operating guidelines for KIA to support analyses of soil fertility, seed quality, feed and feed ingredients and plant disease management (proposed as a 3 person team from University of Tennessee and the Dutch inspection service scheduled for October 2012, which will outline the planned restructuring of KIA in support specifically of the new reformatted agricultural service)

- As part of the ongoing work to develop an agricultural extension program, the SAM has met with 34 mayors and their agricultural staffs to discuss MAFRD/Municipality cooperation for the establishment of the new AES. More than 80% of the municipalities have agreed in principle to the reassignment of their staff to the ministry, to provide office space for a municipal AES office, and to support the work of the AES. Late in Q4, a letter was drafted for counter signature by the Mayors of municipalities authorizing the transition of staff and budget. This then finalized the transformation from municipal to central extension services. Despite the fact that not all municipalities signed up, 37 agricultural extension officers from 23 Municipalities will be enrolled in the MAFRD extension service early in Q1 13. NOA has continued to work closely with the AES Director in developing the training program for these new staff. This will begin with a "winter school" to begin in November 2012.

Capacity building of the staff within MAFRD continues to be a key function of the liaison with the MAFRD team. During the reporting period, the SAM achieved progress in the following areas:

- The SAM completed plans (terms of reference for the USDA contractor, North Dakota State University, and logistics) for the participation of 8 trainees in the Cochran Fellowship program for training in the organization and operation of an agricultural extension service to support the establishment MAFRD's new AES. The SAM agreed to attend the first 4 days of the program in North Dakota to ensure that program was tailored to meet MAFRD's requirements. The training highlighted the role of a modern agricultural extension service in stimulating agricultural production. The attendees returned with a renewed sense of purpose and have in meeting following the program, been much more confident in dealing with the development of the program
- The SAM has conducted training programs for MAFRD staff in:
  - Agricultural Cost of Production Analysis
  - Design and Conduct of Feasibility Studies
  - Financial Analysis for Agribusiness Enterprises
  - Market Research
- The SAM continued to provide support for MAFRD's proposed agricultural credit guarantee program.
- The SAM continued to provide support for MAFRD's proposed matching grant program to establish three product collection and storage centers.
- The MAFRD grants to the establishment of 3 large scale pack houses has progressed through the initial screening stage, with 6 companies being short listed. These companies are in the process of developing full business plans. The final closing date for submission is mid November 2012.

3.0 MONITORING AND EVALUATION

DEVELOPMENT OF THE PERFORMANCE MONITORING PLAN (PMP)

During November 2011, NOA program submitted a modified PMP plan, updating targets and modifying definitions for few indicators. As the volume of data was increasing constantly, the need for developing a database arose, therefore, on May 2012 the program hired Cegis, a local company, to develop a database using MYSQL program. The database has been completed and has been operational since June 2012. In addition, during the same period, external auditors from Inspector's General Office conducted a performance of USAID's Economic Growth programs, focusing specifically on the New Opportunities for Agriculture Program and one other USAID funded EG activity. The audit focused heavily on the Program's PMP plan and data collection methodologies, as well as results reported during FY1.Based on comments made in the auditors' report, during August 2012, in conjunction with USAID's Kosovo COTR, the NOA program has removed eight indicators which are not relevant for measuring results, and added new indicators which will measure change in rural income and results pertaining to gender. The final version of the PMP will be submitted to USAID in November 2012.

REPORT ON INDICATOR TARGETS AND RESULTS

In the below paragraphs, we provide information on each indicator, definitions, how information pertaining to them are collected and results achieved during the second year of the program. All results which are related to value of sales are converted to dollars using the current currency rate of €1= $1.32 and a 1.84 multiplier is applied (please refer to PMP for multiplier explanation). The total value of sales presented hereinafter reflects these calculations.

The report on jobs created is translated into FTE based on 225 days/year per FTE, Thereafter a multiplier of1.96 is applied to account for jobs indirectly created (please refer to PMP for multiplier explanation). The complete list of indicators and results to date is included in Annex I.

AO2: INCREASING PRIVATE SECTOR-LED GROWTH

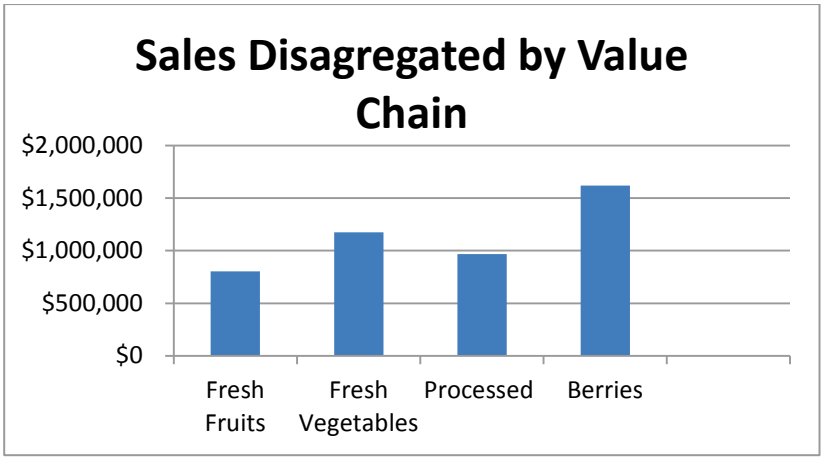
Indicator AO2.1: Total Value of sales as a result of USG assistance

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.

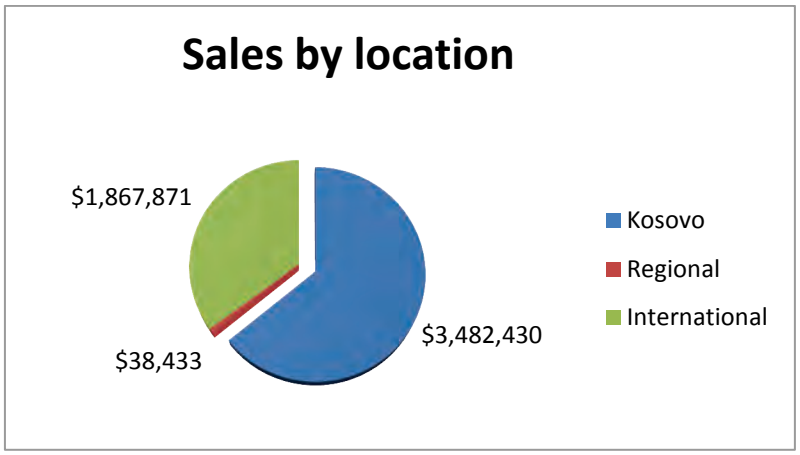
Data Source: Program reports, records of customers, data collection tools designed by the Program.

Annual Results: In total, $5,388,783 worth of sales were generated as a result of the Program's intervention during FY2. This is a major increase in sales results as compared to FY1, fueled by FY2 activities targeting increased sales and increased production of targeted crops. In the table below, we provide the total value of sales disaggregated by sector.



More than a third (35.5%) of total sales are attributed to Blueberries and Blackberries (predominantly from grantee Eurofruiti supported by NOA to obtain HACCP certification), 25.7% fresh vegetables (apples, table grape, strawberries), fruits 17.6% and processed fruits and vegetables contributed with 21.2% (including pickled gherkins and processed apples).

In addition, 63.9% are domestic sales, 35% international (Germany, Austria, Sweden and Other EU countries) whereas only 0.7% are regional (Serbia and Macedonia).



Gherkins: During FY2 in total 1,400mt of gherkins have been marketed, of which 1315mt of fresh gherkins with an average price of €0.46/Kg [$0.6] and 85mt of processed gherkins with an average price of €1.32/Kg [$1.74]. This marks a major increase in gherkins sales compared to the 114mt of gherkins sold as reported during FY1. The increase in sales is primarily a result of growers having adopted new planting technologies while using new varieties on 12Ha of trail plots.

Lettuce: Since the start of the program, activities have been organized around the introduction of new lettuce varieties and planting technologies. As result, in total 4Ha of new variety lettuces were planted, resulting in the production of over 900,000 heads of lettuce marketed at an average price of €0.21/head [$0.27].

Table Grape: 552T of table grapes at an average price of €0.42/kg [$0.55] were sold during FY2, 27T with average price of €0.75 [$0.99] were sold to Germany by Kelmendi GMBH Company.

Apples: As a result of implementing controlled atmosphere for apples, 43T of apple have been sold at an average price of €0.29 [$0.38] by Dielloni Company to the domestic market.

Strawberries: 34T of strawberries were sold at an average price of €1.53 [$2]/kg, mainly to domestic markets identified by the program. It is important to add that, because of introduction of new strawberry varieties, the production period was extended from two to six months.

Blackberries: 156T have been sold at an average price of €2.74 [$3.61]/kg, of which 151T have been exported in Germany by Eurofruti with average price of €1.50 [$1.98]/kg. The export price compared to domestic price is actually lower due to the fact that Eurofruti products were targeted for processing in Germany to produce jams and juices, whereas, domestically, blackberries were sold fresh and mostly of first class quality.

Blueberries: 158T of blueberries were sold by Eurofruti at an average price of €2.84/kg [$3.75] marketed in Germany and Austria.

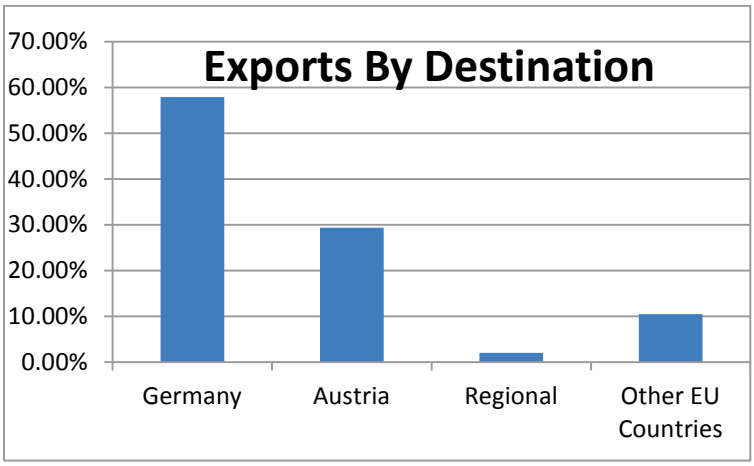
Indicator AO2.2: Total value of exports as result of USG assistance

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: Total value of exports during the FY2 is $1.9M. This figure consists of Blueberries and Blackberries sold by Eurofruti in Germany [$1.1M], Austria [$558,624], and other countries $237,330 [Raspberries in Serbia $59,464, and the rest of the countries $204,104]. Please refer to chart below for summaries of export results based on destination:



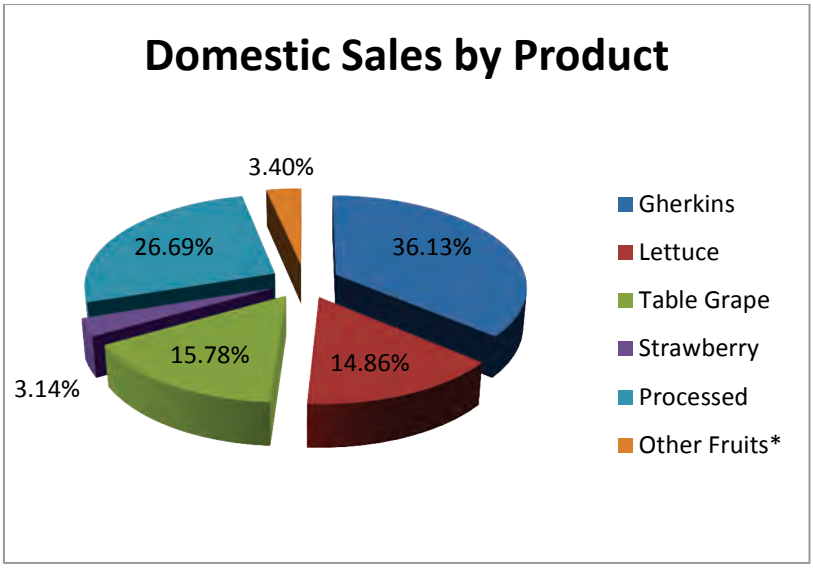
Indicator AO.2.3: Total value of domestic sales as result of USG assistance

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: $3,482,430 in sales of program sponsored crops to domestic markets were generated in FY2. The chart below presents domestic sales disaggregated by product:



Information in the chart includes only products that have had significant attribution in sales, and disregards products such as apples, raspberries and blackberries which together constitute 3.4% of domestic sales.

*Other fruits include Apples, Raspberries and Blackberries.

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 983 FTE's have been recorded for FY2. They are engaged in production, collection and processing of program targeted crops. Of the total number, 233 FTE's are women (23%) and 103 (11%) are from minority groups.

The below table summarizes FTE generated, disaggregated by crop:

Crop	# of FTEs
Apples	110
Strawberries	127
Raspberries	82
Blueberries	5
Table Grape	257
Lettuce	19
Gherkins	13
Asparagus	7
Processed	363
Total	***983***

As can be seen from the table, the top four enterprises contributing to job creation are processors, followed by table grapes, apples and strawberries.

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: All contracts signed during the FY2 are for domestic markets. In that regard, 88 contracts have been signed as a result of engagement of our value chain linkages department. Fifty-five between gherkins producers and processors, 2 between apple growers and traders, 19 between raspberry growers and collection center (these are part of minority groups in Sterpce region), 10 MOU's between growers and supermarkets, 1 between ETC and Askfoods, and 1 between Eurotac and Koral processing company.

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, $878,828 worth of sales have been generated as a result of linkages created between producers, collection centers, processors and other market players. All sales generated are domestic; $466,482 between processors and traders, and supermarkets, $223,310 between gherkins producers and collection centers, processors and others, $32,868 between strawberry growers, and $156,168 between table grape growers and traders.

Indicator IR.1.3: Number of farmers engaged in target value chains as a result of USG assistance

Definition of the indicator: Total number of farmers that are producing crops targeted by the program and farmers that showed interest (during open field days) in producing those crops in the following year.

Disaggregation by: Gender, ethnicity, value chain.

Source of data: Customers' employment records, training participation lists, data collection tools designed by the Program.

Annual Results: Since the start of the program, in total 863 farmer producers are engaged in program sponsored activities. In the table below, we provide information disaggregated by crop, gender and ethnicity;

Crop	Men	Women	Minorities
Apple	93	3	2
Table Grape	300	4	0
Strawberries	23	2	0
Raspberries	61	2	49
Blackberries	9	0	0
Blueberries	14	2	2
Gherkins	280	20	71
Lettuce	29	3	0
Asparagus	7	1	1
Saffron	9	1	0
Total	**825**	**38**	**125**

As can be seen, from the total number, 38 women farmers and 125 minorities are producing program sponsored crops, and gherkins [91] and raspberries [51] engaged the most women and minorities.

Indicator IR.1.4: 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, 118 people participated in nine individual events including 5 B2B's and 4 Study Tours. Of the total, 5 were from minority groups.

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, 15 new markets have been identified, all of which are domestic markets. Six new markets have been identified for Eurotac who is selling now to 5 new markets and Agrocelina selling to one new market. In addition, 2 new markets have been identified for the table grape value chain and 7 new markets for the blackberry value chain. Refer to table below for summary:

Seller	Buyer	Value Chain
Eurotac	Ask Foods	Gherkins
Eurotac	ABI Elif	Gherkins
Eurotac	Koral	Gherkins
Eurotac	Etlinger	Gherkins
Agrocelina	ABI Elif	Gherkins
Eurotac	BioPak	Gherkins
Freskia	ETC	BlackBerries
Zenel Salihu	ETC	BlackBerries
Lush Krasniqi	ETC	BlackBerries
Lush Krasniqi	Albi-Mall	BlackBerries
Lush Krasniqi	City-Park	BlackBerries
Sabri Berisha	ETC	BlackBerries
Milaim Morina	Furra "Lumi"	BlackBerries
Habib Dina	Fatosi Com	Table Grape
Habib Dina	Agrocelina	Table Grape

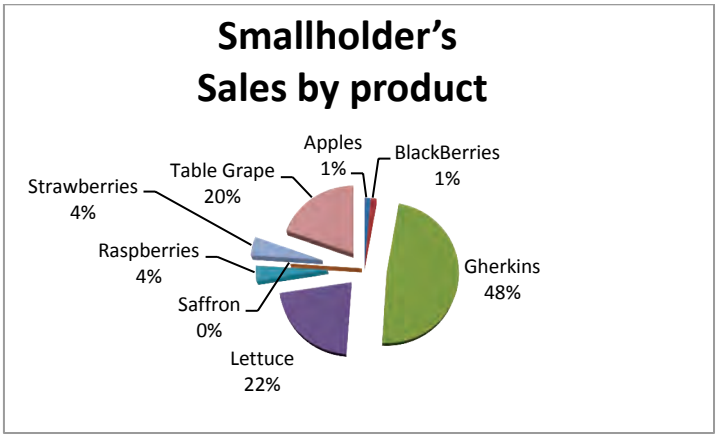
Indicator IR.2.2: Value of sales/purchases from small holders for products as a result of USG assistance (FACTS)

Indicator Definition: Value of sales made by farmers that have <5 Ha of land under targeted crop production.

Disaggregated by: Product

Source of data: Data is collected using sales record tool developed by the Program and kept by Program customers.

Annual Results: $2,805,341 was generated during FY2 by stakeholders. These sales represent only sales generated by program farmers/ producers. In the chart below, disaggregation by crop is provided:



As can be seen, the biggest contribution to sales was generated by smallholders/farmers producing gherkins who sold a total of $1.1M, followed by lettuce which accounted for $517,342 and table grapes accounting for $471,913. The rest of the crops combined generated $258,310 in sales.

Indicator IR.2.3: 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: Since the start of the program, 111 new technologies have been introduced. This figure includes new varieties [51] of program targeted crops. In the apple value chain, the program was able to introduce 16 technologies (including 5 new varieties). New technologies introduced per crops include the following: Table Grape [13], Strawberries [7], Blueberries [11], Raspberries [11], Blackberries [1], Gherkins [11], Lettuce [29], Asparagus [8] and Saffron [4]. For a detailed list of technologies introduced please refer to Annex III.

Indicator IR.2.4: Number of people trained in agriculture productivity as a result of USG assistance (FACTS)

Definition of the indictor: 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: During FY2 in total 1828 people were trained in 36 individual events (1587 men and 241 were women). Four hundred and sixty-seven people participated in environmental related subjects for all targeted crops (introduction of IPM and safe use of pesticides). Nine hundred and thirty people participated in Table Grape trainings related to new production practices, open field days. Twenty people were trained in Strawberry production, 95 in Raspberries production and 30 trained in fruit nursery-related subjects. Furthermore, 89 people were trained in Gherkins production techniques, whereas, 44 people were trained in Lettuce production, 10 in Asparagus production, and 13 in Saffron production. Seventy-eight people were trained in Post-Harvest activities, and an additional 110 in other trainings. In Annex II, a detailed list of events including trainings is provided.

Indicator IR.2.5: 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, 634 farmers (570 men and 47 women) have adopted new technologies and management practices. Number of farmers adopting new practices or techniques per crop was as follows: Table Grape [461], Gherkins [53], Raspberries [36], Lettuce [30], Saffron [16], Asparagus [17], Strawberries [11] and Blueberries [3]. Of total 37 are women and 9 are from minority group.

Indicator IR.2.6: 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, 50 firms have invested to improve their production and processing technologies. These firms received funds from the IIF to adopt one or more technologies we have introduced and which we reported in IR2.3.

Indicator IR.2.7: 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 the indicator IR2.3.

Disaggregated by: None

Source of data: Program reports including IIF reports and field visit reports.

Annual Results: In total, 53.9HA using improved technologies have been planted: Apples [6], Table Grape [6.2], Gherkins [12], Lettuce [4], Strawberries [7], Raspberries [9.2], Blueberries [5], Asparagus [3.6] and Saffron [0.9] HA.

Indicator IR.2.8: Number of new varieties (including new crops) introduced as result of USG assistance

Definition of indicator: Assumes that these crops and/or varieties are planted for the first time by Program customers.

Disaggregated by: Product/value chain

Source of data: Program reports including reports from IIF.

Annual Results: 47new varieties of program sponsored crops have been planted during FY2. This includes: 5 new varieties of Apples are planted for the first time in the country (Red Chief Variety, Fuji Kiku 8 Variety, Gala Variety, Fuji Full Brax Variety, Golden Rainders Variety), two new varieties of Table Grape (Red Globe Variety and Crimson Seedless Variety), five Gherkins varieties, 21 Lettuce varieties, two new Strawberries varieties (Albion Varity and Honeoye Variety), four Raspberries and four Blueberries varieties, three Asparagus varieties and one Saffron variety.

Indicator IR.2.9: Number of farmers receiving new varieties (including new crops) as result of USG assistance

Definition of the indicator: Total number of farmers who receive program-sponsored new varieties and plant materials.

Disaggregated by: Gender, ethnic group, location.

Source of data: IIF grants and subcontractor reports.

Annual Results: In total, 84 farmers have received new crop varieties through the program's IIF scheme. Four women producers have planted crops with new varieties (1 apple, 1 gherkins and two raspberry farmers), and 13 farmers from minority groups (including seven raspberry, four gherkins, and one apple, and one asparagus grower).

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: Although Eurofruti was assisted during FY1 on HACCP implementation, officially they became HACCP certified in May 2012.

Indicator IR.3.2: Number of NOA-supported products certified and meeting established international standards

Definition of the indicator: Number of products certified from licensed bodies, for at least one of the existing food and safety standards

Disaggregated by: Product and Certification.

Source of data: Reports from post-harvest specialist.

Annual Results: As result of USG assistance Eurofruti Company has been able to get HACCP certified thus opening new market opportunities outside the country. Although the company has been selling Blackberries and Blueberries in German and Austrian market, HACCP certification played an important role to strengthen and continue to sell products in export markets. market.

HACCP certification includes all the crops, and since the company works with different crops which are outside NOA program's focus, we only counted the two.

Indicator IR.3.3: Value of sales of Program-supported certified products (a sub-set of total value of products sold)

Definition of the indicator: Value of sales of all certified, Program-targeted products sold by Program customers. This does not include certified products that are not program-targeted crops but still sold by Program customers.

Disaggragated by: Type of certification.

Source of data: Data are collected from sales records of the sellers, using tools developed by the Program.

Annual Results: All the sales generated by Eurofruti with programs crops Blackberries and Blueberries are included in this indicator. Therefore, the total value of sales recorded is $1,619,038, including Blackberries $528,507 and Blueberries $1,090,529 sold in Germany and Austria.

Indicator IR3.4: Number of local food inspectors trained

Definition of the indicator: Local food inspectors include all Kosovo-based inspectors that receive training under the Program. Training includes classroom based learning, field based trainings, study tours and other intensive learning methodologies (mentoring, etc.).

Disaggregated by: Gender, ethnicity, location.

Source of data: Data are collected from training participation lists, study tour lists, Program records and reports.

Annual Results: In total, 13 food inspectors (10 men and three women) have been trained during FY2 in four days of HACCP training. Inspectors trained are food quality controllers within their respective organizations, and do not represent any quality control public organizations.

INDICATOR IR.4: INCREASED ACCESS TO AGRICULTURAL FINANCE

Indicator IR.4.1: Value of lending by program customers to support investment in Program-targeted crops and products as result of USG assistance

Definition of the indicator: The total value of loans received by Program customers from financial institutions (including banks and MFI's) invested in targeted crops and value chain.

Disaggregated (if possible) by: Point in the value chain: production, processing, marketing, etc.

Source of data: Data received from customers' records cross checked with financial institutions' records.

Annual Results: Nothing to report.

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: Nothing to report.

Indicator IR.4.3: Number of SME's receiving USG assistance to access bank loans or private equity (FACTS)

Definition of the indicator: This indicator includes SMEs along all levels of the targeted value chains including producers, processors, traders, business development support service providers and the like.

Disaggregated by: Level of the value chain, value chain, size of SME.

Source of data: Relevant data is collected from Program reports.

Annual Result: During FY2 in total 49 SME's have been assisted through four different events. Of them 30 are from the production level, 6 processors, and 13 traders.

Indicator IR.4.4: Number of producers in target value chains receiving assistance to access credit

Definition of the indicator: This includes only direct credit to producers provided by MFIs and banks. It does not consider credit or advances provided by buyers.

Disaggregated by: Gender, ethnicity, location, value chain.

Source of data: Data collected from Program training reports and technical specialist's reports on type of assistance provided.

Annual Results: 46 farmer producers (six from minority group, and one woman) were assisted in access to credit related activities in four individual events organized by the program through access to finance training.

Indicator IR.4.5: 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 indictor 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 managed to invest $1,583,150 through the IIF in activities related to targeted crops. In the IIF section, a detailed list of grants disaggregated by value chain is provided.

Indicator IR.4.6: 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, 73 value chain operators received assistance through the program's IIF grant scheme including operators from the following crops value chains: 9 Apple, 8 Asparagus, 1 Blackberries, 4 Blueberries, 2 food safety, 7 post-harvest, 10 raspberries, 3 Saffron, 13 Strawberries, 9 Table Grape, 1 grant is issued for educational purposes and is implemented by AFAS, 1 Gherkins and 1 Lettuce implemented by RDC, and 4 Outreach.

Indicator IR.5: Improved Coordination within the Agricultural SectorIndicator IR.5.1: Number of policy reforms/regulations/administrative procedures drafted and presented for public/stakeholder consultation as result of USG assistance (FACTS)

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.

Source of data: Data collected from reports from the Advisor to the MAFRD

Annual Results: Nothing to report.

Indicator IR.5.2: Number of policy reforms/regulations/administrative procedures presented for public/stakeholder consultation *and submitted for approval* as result of USG assistance (FACTS)

Definition of the indicator: This indicator refers to policy reforms/regulations/administrative procedures that have been presented to stakeholders, perhaps revised, and have been formally submitted to the Government or other entities that would approve them.

Source of data: Data collected from reports from the Advisor to the MAFRD

Annual Results: Nothing to report.

Indicator IR.5.3: 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: 36 meetings have been facilitated by the Program between GOK and other actors within agriculture sector. Meetings are mainly organized by the program's coordinator within ministry of agriculture [30], 1 with RBKO bank, and 5 meetings organized with SOE's by program staff. For all above mentioned meetings, improved coordination within sector was the main agenda.

4.0 INNOVATION AND INCENTIVE FUND (IIF)

FY 2012 GRANTS

The Program published seventeen Requests for Applications and received 78 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 unsolicited applications received.

For each RFA there was an Information Day organized for the interested parties, at which the Grants Manager and the Technical staff presented the main elements of the RFA, and answered different administrative and technical questions and queries.

Because the RFAs were very specific, a difference from the previous year, application presentations were more detailed and to the point. DCoP and Technical staff assessed all applications and agreed that technical staff would visit the applicants that manifested greatest 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' and 'supervisors' for seven crops with several varieties including apples (four varieties), table grape (two var.), strawberries (two var.), raspberries (two var.), blueberries (two var.), asparagus (two var.) and saffron. For cultivation of the abovementioned crops the Program (through the IIF) supported six apple growers, four table grape growers, ten strawberries growers, eight raspberries growers, three blueberries growers, six asparagus growers and three saffron growers.

Other approved applications included training of young graduates mainly from the Agriculture Faculty; production of two TV advertisements; support to four spraying service providers for apples and table grapes; a lettuce postharvest line; irrigation for blackberries, two gherkin sizing/sorting machines, and support to two bigger processors for equipment (autoclave for Sole Kosova and filling machine for ASK Foods). Out of 66 approved projects from this year, two were terminated due to grantees withdrawing from their initial commitments.

The grant team visited the 66 successful grant applicants and conducted the Simplified Pre-Award Survey (SPAS). Negotiation memoranda were prepared for seven fixed obligation grants, and fifty-nine in-kind grants.

Disbursement of grants took longer than planned because of the fact that NOA is introducing innovative and new technologies which cannot easily be found and purchased within Kosovo and regulation authorizing procurement from the Geographic Code 000 and 937 (from April 1st 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 table below.

FY 2012 GRANT RECIPIENTS

No.	Grantee	Grant Short Description	Grant Amount	Project Total Cost	Status
1	AFAS	Training and internship Program for the Best Agriculture Faculty Students	€ 26,250	€ 26,250	Finished; Grant Closed
2	ASK FOODS	Anti-Hail System for 6.5 Ha of apples	€ 50,063	€ 89,824	Ongoing
3	EUROFRUTI	Strengthening system of collection/processing through assistance in improving infrastructure due to HACCP requirements	€ 29,650	€ 39,500	Finished; Grant Closed
4	DIELLONI-E	Cooling and storage for apple and pears	€ 16,689	€ 26,839	Finished; Grant Closed
5	IADK	Supervision of Grantees for Trial Cultivation of New Apple Varieties	€ 33,400	€ 34,200	Ongoing
6	Heron & Adea	Trial Cultivation of new Apple Varieties 1.0 ha	€ 16,478	€ 34,948	Ongoing
7	Me Agro	Trial Cultivation of new Apple Varieties 1.0 ha	€ 16,478	€ 24,468	Ongoing
8	Agrounion sh.p.k.	Development of 1.0 ha of Apple Demonstration	€ 16,478	€ 22,435	Ongoing
9	Agrovizioni	Demonstration of New Varieties and Technologies of Apples in 1.0 ha	€ 16,478	€ 26,448	Ongoing
10	UVB	Trial Cultivation of new Apple Varieties 1.0 ha	€ 16,478	€ 26,268	Ongoing
11	Fortikultura-Sofije Veseli	Apple Orchard 1.0 ha	€ 16,478	€ 23,050	Ongoing
12	NTP Agro-Drini	Supervision of Grantees of Trial Cultivation of New Varieties of Table Grapes	€ 33,686	€ 33,686	Ongoing
13	NGO Zeri i Bujkut	Trial Cultivation of New Table Grape Variety 1.7 ha	€ 46,060	€ 53,874	Ongoing
14	Speed company	Demonstration of Table Grape and New Technologies 1.0 ha	€ 27,095	€ 35,095	Ongoing
15	Fehmi Sokoli	Establishment of 1.5 ha Table Grape Vineyard	€ 40,643	€ 57,862	Ongoing
16	Stone Castle V.W.	Establishment of 2.0 ha Table Grape Vineyard	€ 54,190	€ 76,652	Ongoing
17	IADK	Supervision of Grantees of Trial Cultivation of New Varieties of Strawberries	€ 28,000	€ 28,000	Ongoing
18	NSh Fidani - Dudije Bala	Trial Cultivation of Strawberries 0.3 ha	€ 3,051	€ 5,805	Ongoing
19	ALBA - Zeqir Jahiu	Trial Cultivation of New Varieties of Strawberries 0.5 ha	€ 5,085	€ 8,532	Ongoing
20	Kopshti i perimeve - Avni Shala	Establishment of strawberry orchard 0.6 ha	€ 6,102	€ 6,802	Ongoing
21	Kopshti i perimeve - Hetem Balaj	Strawberry cultivation in open field 0.3 ha	€ 3,051	€ 5,141	Ongoing
22	Prosperiteti i Karadakut - Lumnie Bislimi	Trial Cultivation of New Varieties of Strawberries 0.5 ha	€ 5,085	€ 9,172	Ongoing
23	Kopshti i perimeve - Selim Balaj	Strawberry plantation 0.3 ha	€ 3,051	€ 5,141	Ongoing
24	Me Agro	Establishment of strawberry orchard 1.0 ha	€ 10,170	€ 14,860	Ongoing
25	Agrovizioni	Establishment of strawberry orchard 1.0 ha	€ 10,170	€ 14,860	Ongoing
26	KB Horticoop	Trial Cultivation of New Varieties of Strawberries in 1.0 ha	€ 10,170	€ 14,633	Ongoing
27	Kultivari	Trial Cultivation of New Varieties of Strawberries 0.5 ha	€ 5,085	€ 10,712	Ongoing
28	NTP Dredheza	Nursery for strawberries	€ 917	€ 3,997	Ongoing

No.	Grantee	Grant Short Description	Grant Amount	Project Total Cost	Status
29	Fidanishtja e Godancit	Nursery for strawberries	€ 917	€ 3,617	Ongoing
30	Biolab	Supervision of Grantees of Trial Cultivation of New Varieties of Raspberries	€ 26,525	€ 26,525	Ongoing
31	NPT Beni Com	Cultivation of raspberries in 0.5 ha			Terminated
32	Minifarma "AgroF&T"	Cultivation of raspberries in 0.5 ha	€ 4,458	€ 9,402	Ongoing
33	Producers association of Raspberries Vilamet Miker	Cultivation of raspberries in 2 ha	€ 17,830	€ 28,690	Ongoing
34	NSH Success	Cultivation of raspberries in 0.5 ha	€ 4,458	€ 9,158	Ongoing
35	DPZ Ademi	Cultivation of raspberries in 0.5 ha	€ 4,458	€ 6,328	Ongoing
36	Bio Food	Cultivation of raspberries in 0.5 ha	€ 4,458	€ 6,328	Ongoing
37	KB Rugova	Cultivation of raspberries in 0.5 ha	€ 4,458	€ 8,888	Ongoing
38	NTP "Juniku"	Establishment of 2 ha of Trial Cultivation of Blueberries	€ 26,680	€ 45,175	Ongoing
39	MOEA	Trial Cultivation of Blueberries in 2 ha	€ 26,680	€ 38,476	Ongoing
40	PP "Nikola's"	Trial Cultivation of Blueberries in 0.5 ha	€ 6,670	€ 9,520	Ongoing
41	NTP Dredheza	Nursery Plantings of Blueberries in 0.5 ha	€ 6,670	€ 9,750	Ongoing
42	Fil & Farmer	Completion of high density apple orchard	€ 21,000	€ 26,000	Ongoing
43	APC	Demonstration and Promotion of new Raspberry cultivars for fresh market	€ 12,700	€ 22,350	Ongoing
44	INIT productions	Production of a TV advertisement for the promotion of agriculture in Kosovo	€ 10,000	€ 10,000	Finished; Grant Closed
45	KB Arbana	Trial cultivation of Asparagus in 0.5 ha			Terminated
46	Exploren Inteligenc - Musli Kasumi	Demo cultivation of asparagus in 0.5 ha	€ 610	€ 3,230	Ongoing
47	Exploren Inteligenc - Muhamed Ismajli	Asparagus plantation in 0.6 ha	€ 732	€ 3,450	Ongoing
48	Asparakos	Asparagus plantation in 0.5 ha	€ 610	€ 3,230	Ongoing
49	Agrogreen	Asparagus plantation in 0.5 ha	€ 610	€ 3,230	Ongoing
50	HA Projekt	Asparagus plantation in 1.2 ha	€ 1,464	€ 5,088	Ongoing
51	Valon-Trade	Spraying services for vineyards with table grape	€ 4,500	€ 9,507	Ongoing
52	Vreshtar	Spraying services for vineyards with table grape and apple orchards	€ 4,500	€ 9,912	Ongoing
53	Dinamanti	Spraying services for vineyards with table grape and apple orchards	€ 4,500	€ 9,912	Ongoing
54	Lakto-Theranda	Spraying services for vineyards with table grape and apple orchards	€ 4,500	€ 9,912	Ongoing
55	ASK Foods	Increase of production capacities and improvement of safety and quality of the processed fruits and vegetables	€ 43,800	€ 85,686	Ongoing
56	ASK Foods	2.7 ha Raspberries (different varieties)	€ 17,158	€ 18,458	Ongoing
57	Sole Kosova	Improvement of food quality and safety by introducing of New technology and International standards (HACCP)	€ 66,000	€ 370,400	Ongoing
58	Shala Produkt	Install Gherkin calibration system and improve receiving and collection of existing storage for fresh vegetables	€ 16,500	€ 26,611	Ongoing
59	Agroprodukti	Installing of calibration system for gherkins and improvement of long term storage of fresh vegetables	€ 16,500	€ 28,444	Ongoing
60	Manaferra Drita	Drip irrigation system for blackberries	€ 5,985	€ 13,864	Ongoing
61	Agro Serra	Post-harvest technology in lettuce processing	€ 78,665	€ 101,772	Ongoing

No.	Grantee	Grant Short Description	Grant Amount	Project Total Cost	Status
62	INIT productions	Production of a second NOA/MAFRD TV advertisement for the promotion of agriculture in Kosovo	€ 10,000	€ 30,000	Finished; Grant Closed
63	Krusha e Madhe	Saffron Cultivation in 0.3 ha	€ 13,025	€ 14,325	Ongoing
64	New Venture	Saffron	€ 13,025	€ 14,115	Ongoing
65	Te Xhema	Cultivation of Saffron	€ 12,735	€ 13,825	Ongoing
66	PP "Zika"	Cultivation of Asparagus in 0.5 ha	€ 610	€ 3,230	Ongoing
		Total	**€ 1,040,522**		

FY 2012 SUBCONTRACTS

During the reporting period four Statements of Work were prepared by technical staff on: asparagus crowns/seedlings production; management of trial plots of lettuce and gherkins; amendment of Design Brief for Collection, Packing and Refrigerated Storage Centers; and Outreach Visibility Campaign.

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 companies to do the job were contacted to negotiate the budget.

In the first year, there were three nurseries subcontracted to do the asparagus seedlings production, but due to poor performance of one of the nursersies, continuation of subcontracts was only done with the other two subcontractors/nurseries. After successful management of the trial plots for lettuce and gherkins, the Program awarded RDC continuation of both subcontracts.

The Subcontract for Design Brief for Collection, Packing and Refrigerated Storage Centers which was done in coordination with MAFRD to assist the Ministry in designing three collection/ storage centers in three different regions of Kosovo, was amended due to the Ministry asking for substantial changes in the designs. 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 below.

FY 2012 SUBCONTRACTORS

No.	Subcontractor	Contract Short Description	Sub-contract Value in €	Status
1	AGRO SERRA	Asparagus Seedling Production	€ 20,664	Ongoing
2	FIDANISHTJA GODANCI	Asparagus Seedling Production	€ 20,664	Ongoing
3	RDC	Lettuce Variety Diversification - Continuation	€ 27,230	Ongoing
4	RDC	Demonstration of New Gherkin Varieties - Continuation	€ 60,881	Ongoing
5	PATRIA GROUP	Design Brief for Collection, Packing and Refrigerated Storage Centers Continuation	€ 6,990	Finished
6	Radio and Television of Kosovo - RTK	Outreach/Visibility Campaign	€ 31,935	Ongoing
		Total	**€ 168,364**	

FY 2012 AWARDS UNDER THE IIF

The table below summarizes the type of award made under the IIF in FY 2012 and the percentage of funds approved that have been distributed to date.

Type of Awards		
Type of Award	**Approved**	**% Distribution**
Grants	€ 1,040,522	78.69%
Subcontracts	€ 168,364	65.75%
Total	**€ 1,208,886**	

ANNEX I. INDICATOR TARGETS AND RESULTS

	Indicator	Unit Measure	FY1 (8 months) Targets	FY1 (8 months) Actual	FY2	FY2 Results	FY3	FY4	FY5 (5 months)	Total
	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	$12m	$7.5m	$32.5m
AO2.2	Total value of exports as a result of USG assistance	$	$200k	0	$500k	$1,906,353	$2m	$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	$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	2000	1500	6500
	IR 1: Products and Farmers Linked to Markets									
IR1.1	Number of delivery contracts issued for targeted crops	Number	-	13	100	88	250	475	325	1150
IR1.2	Value sales resulting from linkages created between farmer, processors and traders as result of USG assistance	$	$500k	$75,323	$1.6m	$878,828	$2.4m	$3m	$1.5m	$9m
IR1.3	Number of farmers engaged in target value chains as a result of USG assistance	Number	300	331	600	863	900	1500	1500	1500
IR1.4	Number of participants in study tours, B2B, market investigation and trade shows	Number	20	34	60	118	60	60	30	230

	Indicator	Unit Measure	FY1 (8 months) Targets	FY1 (8 months) Actual	FY2	FY2 Results	FY3	FY4	FY5 (5 months)	Total
	IR 2: Agricultural Products Diversified and Increased									
IR2.1	Number of new markets entered for target value chain products	Number	-	5	3	15	5	10	12	12
IR2.2	Value of Sales /purchases from smallholders for products as a result of USG assistance (FACTS)	Number	$500k	$230,540	$2.5m	$2,805,341	$3.5m	$5m	$3m	$14.5m
IR2.3	Number of new technologies and/or management practices introduced as result of USG assistance	Number	3	6	6	111*	5	5	4	23
IR2.4	Number of individuals trained in agriculture productivity through USG assistance (FACTS)	Number	500	306	1500	1828	2000	2500	500	7000
IR2.5	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	1500	1750	1750
IR2.6	Number of firms receiving USG assistance to invest in improved technologies (FACTS)	Number	-	11	5	50	15	30	35	35
IR2.7	Number of hectares under improved technologies and/ or management practices as a result of USG assistance (FACTS)	HA	5	8.4	30	54	50	60	60	205
IR2.8	Number of new varieties (including new crops) introduced as result of USG assistance	Number	15	20	15	31	10	0	0	40
IR2.9	Number of farmers receiving new varieties (including new crops) as result of USG assistance	Number	20	21	40	84	50	60	0	170
	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	8	10	10

	Indicator	Unit Measure	FY1 (8 months) Targets	FY1 (8 months) Actual	FY2	FY2 Results	FY3	FY4	FY5 (5 months)	Total
IR3.2	Number of NOA-supported products certified and meeting established international standards	Number	-	-	-	2	2	6	4	12
IR3.3	Value of sales of NOA-supported certified products (a sub-set of total value of products sold)	$	-	-		$1,619,038	$500K	1.5m	$2m	$4m
IR3.4	Number of local food inspectors trained	Number	-	-	20	-	40	40	30	130
	IR 4: Increased Affordable and Accessible Credit									
IR4.1	Value of lending of program customers for targeted crops and products as a result of USG assistance	Number	-	-	$500 k	-	$2.5 m	$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	5	0	5
IR4.3	Number of SMEs receiving USG (NOA Project) assistance to access bank loans or private equity (FACTS)	Number	-	41	15	49	40	55	75	75
IR4.4	Number of producers in target value chains receiving assistance to access credit	Number	-	46	100	46	200	400	600	600
IR4.5	Value of grants issued for value chain operators of target crops and products as result of USG assistance (excl. IIF) *From IIF—grants and subcontracts*	$	- *$200k*	- *$387,840*	$100k *$1m*	- $1,583,150	$200k *$1m*	$400k *$500k*	$400k *$200k*	$1.1m *$2.9m*
IR4.6	Number of value chain operators of target crops and products receiving grants as result of USG assistance (excl. IIF) *From IIF—grants and subcontracts*	Number	- *10*	- *28*	5 *100*	- *73*	10 *100*	20 *50*	20 *20*	55 *280*

	Indicator	Unit Measure	FY1 (8 months) Targets	FY1 (8 months) Actual	FY2	FY2 Results	FY3	FY4	FY5 (5 months)	Total
	IR 5: Improved Coordination within Agricultural Sector									
IR5.1	Number of policy reforms/regulations/ administrative procedures drafted and presented for public/stakeholder consultation as result of USG assistance (FACTS)	Number	-	-	2	1	3	0	0	5
IR5.2	Number of policy reforms/regulations/ administrative procedures presented for public/stakeholder consultation as result of USG assistance (FACTS)	Number	-	-	0	-	2	3	0	5
IR5.3	Number of donor, GOK and agriculture sector roundtables or other events facilitated by NOA	Number	8	11	12	36	12	12	5	52

***** Refer to Annex III for full list of technologies introduced

ANNEX II. TRAININGS AND EVENTS, FISCAL YEAR 2012

#	Value Chain	Subject Matter addressed	Total # trainees	# Men trained	# Women trained
Trainings					
1	Gherkin	• Gherkins production workshop • New Gherkins varieties planting techniques • Production of Gherkins using advanced methods	89	69	20
4	Lettuce	• Lettuce Field Day • Lettuce Findings and Recommendations	44	36	8
5	Asparagus	• Training of Asparagus Beneficiaries on planting methods	10	10	
6	Saffron	• Open Field day of Saffron production	13	13	
7	Blueberry	• Establishment and management of cultivated blueberries	20	18	2
8	Raspberry	• Cultivation-pests and diseases on Raspberries • Plant Protection Training • Planting practices supporting system and fertigation • Filed demonstration of Polka variety • Cultivation Practices • Raspberry open field day	95	93	2
9	Strawberry	• Cultivation of new Strawberry Cultivars • Improved Strawberry planting techniques	20	18	2
10	Table Grape	• Table Grape production technologies • Pruning and thinning of leaves • Berry Protection • Green Pruning • Training of trainers • Establishment of T trellising • Introduction of GUYO system • Hurd thinning • Tying of branches • Removal of top bushes and shoots	960	917	43
11	Environmental	• Introduction of IPM & Safe Use of Pesticides for all program targeted crops	467	427	40

#	Value Chain	Subject Matter addressed	Total # trainees	# Men trained	# Women trained
12	Post-Harvest and Certification	• Post-Harvest and Certification	78	49	29
13	M&E	• Marketing & Linkages	4	3	1
14	Access to finance	• Training on Application for rural grant scheme	28	27	1
Total Trainings			**1828**	**1680**	**148**
Presentation					
1	Gherkins	• Presentation of new lettuce hybrids	18	16	2
2	IIF	• Grant Signing Ceremony	26	23	3
3	Apple	• Apple-Cost of production Meeting	9	8	1
4	Table Grape	• Table Grape-Cost of production	17	17	-
5	Blackberries	• Blackberry promotion and sales days in Mother Teresa street	6	6	-
6	Table Grape	• Table Grape Info Session	4	4	-
7	Marketing	• NOA Program Presentation	15	13	2
8	Marketing and Linkages	• Trade Fair Preparation	8	8	-
9	Blackberries	• Blackberry Promotion Day Preparation	8	8	-
10	Access to finance	• Investment Promotion Meeting	94	88	6
Total Presentation			205	191	14
Total from Trainings & Presentation			**2033**	**1871**	**162**

ANNEX III. LIST OF TECHNOLOGIES INTRODUCED BY NOA

Apple	Table Grape	Strawberries	Blueberries	Raspberries	Blackberries	Gherkins	Lettuce	Asparagus	Saffron
Prebodied feathered trees	Pruning	Irrigation	Plantation Establishment	New Trellesing System	Drip Irrigation	Sizing Machine	Micro Spraying	New Crop	Crocus Corms Sativus Variety
Pruning	Modified T trellesing	Fertigation	Wood Clips Mulching	Fertigation		Trellesing System	Plastic Mulch	Underground Drip Irrigation	Planting & Cultural Care
Trellesing	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 Succesive 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 Varity	Soil Acidification	Cane Pruning		Open Field Production	Grazia Variety	UC 157 F1 Variety	
Tree Training System	Y trellesing	Honeoye Variety	New Crop Introduction	Pruning of primary Canes		Mirabelle Variety	Venicia Variety	Jersey Giant Variety	
Panel Insulation System	Drip Irrigation		Duke Variety	Pollka Variety		Miranda Variety	Tatiana Variety	Depally Variety	
Anti Hail	Fertigation System		Blue Crop Variety	Tullemen Variety		Gallina Variety	Gaugin RZ Variety		
High Density Fruit Orchards	Planting Distances		Elliot Variety	Nova Variety		Zatmir Variety	Dagama RZ Variety		
Apple IPM	IPM		Legacy Variety	Autumn Bliss Variety		Bereg Variety	Beldy Variety Variety		

Apple	Table Grape	Strawberries	Blueberries	Raspberries	Blackberries	Gherkins	Lettuce	Asparagus	Saffron
Red Chief Variety	Red Globe Variety						Ezteban Variety		
Fuji Kiku 8 Variety	Crimson Seedless Variety						Ezra Variety		
Gala Variety							Bijou Variety		
Fuji Full Brax Variety							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 Variety		
							Contessa Variety		
							Sartre RZ Variety		
							Saigon RZ Variety		

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