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KOSOVO NEW OPPORTUNITIES FOR AGRICULTURE PROGRAM

FISCAL YEAR 2014 ANNUAL REPORT

OCTOBER 2014

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

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ACRONYMS AND ABBREVIATIONS

ADDIE	Analysis, Design, Development, Implementation, and Evaluation
AES	Agricultural Extension Service
AFAS	Association for Finance and Accounting Services
AFS	American Farm School
AI	Artificial Insemination
AO	Assistance Objective
ARDP	Agricultural Rehabilitation and Development Project
AVUK	Kosovo Veterinary Agency
B2B	Business to Business
CC	Collection Center
CLE	Contract Law Enforcement (USAID project)
COP	Chief of Party
DCA	Development Credit Agency
DCOP	Deputy Chief of Party
EAU	Economic Analysis Unit
EPPO	European and Mediterranean Plant Protection Organization
ER	Environmental Review
ET	Embryo Transfer
EU	European Union
EYE	Encouraging Young Entrepreneurs
FERA	Food, Environmental, and Research Agency
FTE	Full-Time Equivalent
FtF	Feed the Future
FV	Field Vegetables
FY	Financial Year
GEM	Gender Empowerment Matrix
GHP	Good Hygiene Practice
GlobalG.A.P.	Global Good Agriculture Practices

GMP	Good Manufacturing Practice
GoK	Government of Kosovo
Ha	Hectare
HACCP	Hazard Analysis and Critical Control Points
HORECA	Hotel, Restaurant, Catering
IADK	Initiative for Agriculture Development in Kosovo
IIF	Innovation and Incentive Fund
IPM	Integrated Pest Management
IQF	Individually Quick Frozen
IR	Intermediate Result
IT	Information Technology
IWM	Integrated Weed Management
KAMP	Kosovo Milk Producers Association
KDPA	Kosovo Dairy Producers Association
KFVA	Kosovo Food and Veterinary Agency
KIA	Kosovo Institute of Agriculture
KIESA	Kosovo Investment and Enterprise Support Agency
LOP	Life of Project
MAFRD	Ministry of Agriculture, Forests and Rural Development
MAP	Medicinal and Aromatic Plants
MFA	Ministry of Foreign Affairs
MFI	Microfinance Institution
MOU	Memorandum of Understanding
Mt	Metric Ton
NGO	Nongovernmental Organization
NOA	New Opportunities for Agriculture
PCB	Pro Credit Bank
PePeKo	<i>Peme e Perime te Kosoves</i> , or Fruits and Vegetables of Kosovo
PERSUAP	Pesticide Evaluation Report and Safe Use Action Plan
PMP	Performance Monitoring Plan
POS	Point of Sale
RFA	Request for Approval
RFP	Request for Proposal
RFQ	Request for Quotation

RTK	Radio Television of Kosovo
SIPPO	Swiss Import Promotion Program
SMME	Small, Medium and Micro-Enterprise
SOW	Scope of Work
SPAS	Simplified Pre-Award Survey
STTA	Short-Term Technical Advisor
SUP	Safe Use Practices
TDM	Tarimci Dernegi of Mamusha
ToT	Training of Trainers
TRMS	Transparent Raw Milk Sampling
UNECE	United Nations Economic Commission for Europe
UPOV	International Union for the Protection of New Varieties of Plants
US	United States
USAID REG	USAID Regional Economic Growth project
USAID	United States Agency for International Development
VAT	Value-Added Tax
VC	Value Chain

EXECUTIVE SUMMARY

This report presents annual results and overall accomplishments of the United States Agency for International Development (USAID) New Opportunities for Agriculture (NOA) Program achieved over the course of Fiscal Year (FY) 14. The report continues to follow the format of the annual work plan precisely. It does not restate the strategy and objective for each value chain, or a description of activities undertaken. Rather, under each value chain and project-level objective, the report lists the stated benchmarks and describes progress made towards achieving them in FY14. All benchmarks are listed for completeness, as they appear in the project work plan.

NOA retained its full staff compliment during the course of the year with zero staff turnover. This enabled the team to provide effective customer support throughout the year. NOA also utilized the services of graduate interns to assist with program activities and, most importantly, placed them in internships with processors, collection centers, and input suppliers in order to encourage their eventual job placement. The firms hosting these interns (on a cost share basis) have indicated overall satisfaction with the work done and several of them are planning to hire their interns, at their own expense, in full-time paid positions.

NOA FY14 – RESULTS

Project results, as targeted in the project Performance Monitoring Plan (PMP) for the 2014 work plan year, showed some excellent performance at both the Assistance Objective (AO) and Intermediate Result (IR) levels. Headline indicators for the project are sales generated, broken down into export and domestic sales and jobs created, presented as full-time equivalents (FTE).

At the AO level, sales generated provide the strongest indicator of project performance. Total sales generated by NOA-supported value chains during FY14 were \$54,622,568. The project sales performance is highlighted in the table below, disaggregating the original NOA-targeted value chains and those that were introduced into NOA's expanded scope of work in early 2013.

2014 Sales	2014 Targets	2014 Actual	Original VC	New VC
<i>Total Sales (\$ Mill)</i>	12 ¹	54.6	16.8	37.8
<i>Exports (\$ Mill)</i>	4	10.6	5.6	5.4
<i>Domestic (\$ Mill)</i>	8	44.0	11.2	32.4

From the above table, it is evident that the project has exceeded targeted sales for FY14 by a factor of more than three when considering all value chains. Overall sales results pertaining to the original NOA-targeted value chains have now exceeded life-of-project (LOP) targets by 20 percent. Export sales of original value chains have exceeded the target by 12 percent while domestic sales of initial value chains have yet to reach LOP targets, falling short by 9 percent.

New value chains introduced into NOA's scope of work in 2013 continue to generate significant outputs. Dairy sales saw strong performance with an increase over the initial sales benchmark of \$15.6M (€12 million), Medicinal and Aromatic Plants (MAP) sales \$3.7M (cultivated and wild harvest), and field vegetable sales \$8.1M.

Jobs generated by the project, expressed in FTE, achieved LOP targets during this reporting period. A total of 1,575 jobs were created at the farm level, while 1,352 jobs were created at the processor level, bringing the total FTE generated in FY14 to 2,927.

¹ This represents approved Project Monitoring Plan target (2013)

Both the rural income and gender empowerment surveys designed to measure progress on AO 2.5 and AO 2.7 indicators were conducted after the harvest season in order to capture relevant seasonal information. Results indicate measurable improvements in decision making input of women in production, resource allocation as well as disposition of income. The leadership pillar of the measure showed a decline however, and gives strong direction as to future engagement. The gender empowerment matrix increased by a 9% over the 2013 result. Rural household incomes as measured at the same respondents increased by 24% over the value of income reported during 2013. The annual household income reported for the year increased from €30,522 to €39,500. These results are primarily as a result of the adoption of new technologies and associated management.

At the IR level, the number of delivery contracts concluded is an excellent indicator of improved value chain coherence. An increasing willingness on the part of aggregators and producers to enter into pre-season contracts indicates strong progress towards formality in the sector; this is critical to sustainability and competitiveness. A total of 956 supply contracts concluded during the year, with open field vegetables dominating. NOA worked closely with the USAID Contract Law Enforcement (CLE) project, which provided field-level support to contract adherence. This performance is closely related to the linkage sales result (IR 1.2) where \$7.6 million in linkage sales was recorded.

Significant progress was made in FY14 with respect to the number of growers that have adopted new technologies, as measured by IR 2.6 (hectares under new technologies). During FY 14, hectares under new technologies increased to 502 ha, involving 1,500 farmers.

FY14 EXECUTIVE SUMMARY BY PROJECT OBJECTIVE

OBJECTIVE 1: PRODUCTS AND FARMERS LINKED TO MARKETS

Objective 1 is critical to the expansion of sustainable value chain intervention. Without adequate and sustained connectivity between farmers and markets, there will be insufficient confidence on both the producer and buyer sides of the chain to spur investment in necessary physical and human resources. Linkages continue to be developed using business to business (B2B) meetings, field days attended by farmers and buyers, public campaigns, inbound and outbound marketing visits, and direct one-to-one meetings designed to foster stronger market linkages. The introduction of a stronger aggregation function through collection centers and pack house development has contributed significantly to improved linkages between farmers and markets. A notable achievement during this year was finalizing the construction of three private pack houses supported, on a cost share basis, by the Government of Kosovo (GoK) in Gjilan, Xerxe, and Peja. Contracted production provided a strong initial incentive to produce to market requirements in terms of volume and quality. Excellent performance in this area was noted in the vegetable value chains, notably for gherkins and peppers, and in the dairy sector.

FRUIT VALUE CHAIN HIGHLIGHTS

Apples: Apples have remained a significant challenge to NOA interventions as far as linking farmers to markets in a more formal way. Growers, all of them established for years now, are used to supplying the markets informally, with little or no attention to packing standards, grading, or contracts. This attitude remains; the fact that the market does not require changes but continues to market Kosovo products (ungraded) alongside imported (graded) does not help. Thirteen (13) contracts for supply were concluded during the year, and one international short-term technical advisor (STTA) assignment provided the information necessary to growers willing to change marketing practice. This was reinforced by a study tour organized to Macedonian producers. Five (5) processors were supported with bulk bins, which will aid them in processing apples at their facilities.

Table Grapes: Like apples, table grapes are sold by traditional methods—at roadside and wholesale market outlets with limited attention to grading and presentation. In order to introduce some transformative opportunities to the sector, in FY14, NOA introduced new packaging options that meet international standards and drew the commitment of three large local grape traders to mediate local

and international sales of table grapes packed in the improved manner. The box and labeling approach was launched early in the harvest period at a function held in Pristina that attracted an enthusiastic audience. In parallel to the launch of the *Kosovo Prime* table grape packaging, which showcases the new varieties now present in Kosovo, NOA worked to ensure that field packing, hygiene, and grading to were on par with international standards. All this was reinforced by extensive field training as well as an 18-person study tour to Italy at the onset of the harvest. All three grape traders used the new packaging to their advantage, in both international and local markets. Unfortunately, unseasonal rains compromised grape quality, thereby limiting the potential to maximize exposure.

Strawberries: Strawberries continue to sell very well in the local market. Street promotions generated more than \$40k in sales with good participation from growers. To date, sales by program-supported farmers have reached a total of €500k from program farmers—this is approximately the same as this time last year. The anticipated increase in volumes has not materialized due to persistent rains during the summer, impacting yield and quality. NOA supported a roundtable event this year that focused on the increasing need for organization within the sector with specific emphasis on the need for a consolidated distribution mechanism for growers.

Raspberries: As with strawberries, street promotions have played a critical role in stimulating demand for fresh raspberries. This year, street promotions generated more than \$24k in sales, with fresh product sold through supermarkets generating more than \$50k. Additionally, sales to Europe for bulk frozen product continue to increase with total sales exceeding \$300k. With the rapid expansion in the number of hectares projected, it is likely that frozen and processed raspberry sales will continue to form the bulk of the market for Kosovo raspberries.

Blueberries: The harvest of blueberry was significantly reduced by the late snow events in Junik during May. It is estimated that up to 50 percent of flowers were lost and fruit set was poor. A total first crop of 1,000 kg was harvested, which generated sales of approximately \$14k, 10 percent of which was generated through street promotions. NOA supported packaging to international standards and retail pricing; demand for the product was overwhelming.

VEGETABLE VALUE CHAIN HIGHLIGHTS

Lettuce: Farm to market linkages for lettuce have revolved around two key improvements: 1) variety choices and 2) shelf life improvement. Agro Serra has been actively developing the market for pre-cut packaged salads. This year, the firm saw a dramatic increase in sales, as a result of extension of the production season and at the same time growing the market for the expanded volume. 16.2 mt of bagged product were sold throughout the year. Additionally volume of sales has increased for top iced head lettuce with improved shelf life. A total of 550,000 heads of this new product found its way to market—a significant market development. Traditional lettuce production from open field and greenhouse saw dramatic increases in sales, with a total of over 6million heads sold throughout the year.

Gherkins: Market demand for product is dependent on the perception of quality of product and reliability of the supplier. The work of the collection centers in aggregating production, grading product, and delivering in a timely manner has contributed to overall improvements in farmers being linked to markets. Gherkin farmers are all small—less than 0.5 hectares (ha) and are dependent on these value chain functions. A total of 1,800 mt of product sold resulted from increased grower and market confidence this year—more than double the project target. A total of 106 contracts were used in linking producers to markets and the strong 33 percent increase in collection center sales performance highlights the growing level of sustainability in this sector.

Asparagus: Asparagus was a completely new crop for Kosovo. The market amounted to no more than 500 kg per week traditionally with only high-end stores and hotels using the product. The program geared up for export as a result of anticipated low local market demand, preparing packaging to international standards in anticipation of export sales. However, promotional efforts were more than successful as local demand more than tripled over the local harvest season. Consumption was noticed at all levels, all local restaurants featured the product, and supermarket sales were brisk. All of

the 2.7 mt from the first harvest were sold locally. One sample shipment was sent to Scandinavia and the response to packaging and presentation was excellent, ensuring a firm basis for confidence in the external market in the future.

Medicinal and Aromatic Plants (MAPs): Export market linkage is crucial to this sector—98 percent of the crop is sold externally. The German BioFach trade fair (attendance supported by NOA) this year promoted Kosovo supply very well. Following the fair, more than 20 firms expressed solid interest in Kosovo’s diverse crop (both for cultivated and wild harvest). In bound visits followed on a regular basis and the principal exporter accumulated more than \$2.5 million in supply contracts. Saffron sales were dealt with separately and on an individual grower basis, resulting in sales locally as well as in Albania, Belgium, and France. Cultivated MAPs continue to receive excellent market reviews and the stage is set for rapid expansion in the years to come, provided financing is resolved for the critical post-harvest facilities and especially dryers.

Field Vegetables: New markets for Kosovo field vegetables are critical to the expansion of the sector. Traditional low value, green market sales as well as continued reliance on itinerant traders is no basis for a successful vegetable industry. NOA has worked to develop capacity within the recently formed *Peme e Perime te Kosoves*, or Fruits and Vegetables of Kosovo (PePeKo) fruit and vegetable association. The project organized a highly successful business to business conference which attracted 73 participants and successfully brought nine new companies to the Kosovo industry. During the course of the year, 956 supply contracts were signed, far exceeding project targets. Of these, 771 for pepper supply (traditional as well as newly introduced *feferoni* and *HS6* pepper for the powder market). Total sales fell just short of target however at 5,842 mt valued at \$4.2 million, with the excessive rains during harvesting causing quality losses.

LIVESTOCK VALUE CHAIN HIGHLIGHTS

Dairy: NOA has continued to support the promotion of the consumption of local dairy products through improvement in quality from Kosovo’s dairies, increasing the number of products on the market (especially cheeses) and through the annual world milk day event in combination with a schools education program. Milk sales have increased over induction baseline (induction to the NOA project in 2012) by \$5.2 million (without applying the designated multiplier). The industry continues to grow at a pace that is higher than market growth and is exceeding imports. The challenge remains the fluid milk market, which local suppliers are only just beginning to tackle.

OBJECTIVE 2: AGRICULTURAL PRODUCTS DIVERSIFIED AND INCREASED

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

Apples: In order to stimulate transformative changes in the sector, NOA successfully worked with a nascent association “Plant Kosova” to produce 30,000 apple plants, which were produced for the first time to European standards of plant and grafting quality. These plants were sold into the market to 10 growers covering 12 ha of new production. The quality of the established orchards will give new growers strong incentive to buy the best-quality planting materials in the future as opposed to cheap regional alternatives, and provide a focal point for training of new growers in years to come.

Table Grapes: Significant progress has been made in improving table grape production, firmly establishing the basis for diversification into new varieties, combined with superior performance resulting from adoption of modified canopy management systems. Over the project period, modified T trellising as well as Lyre trellising has been introduced. Results have been excellent in terms of quality and quantity of table grape produced. The Lyre system has produced over 50 mt per ha, (three times more than traditional varieties) compared to modified T system, which produced 27 mt per ha (two times more than traditional varieties). Both of these systems outperformed the traditional canopy

management approach which recorded 15mt per ha during the 2014 season. A total of 40,000 bench grafted new root/scion combinations were grafted and planted out, and a commercial rootstock mother garden has been established to provide planting materials in the future. During the period, 110 growers were trained in various aspects of production. Farmer initiated grafting over of wine to table grapes using new varieties continues with strong support from the Rahovec grape institute.

Strawberries: The NOA-introduced variety Albion continues to be the mainstay of strawberry production, producing throughout the spring and summer periods. A new variety, Buddy, was also introduced this year with excellent results. The material provides an excellent complement to Albion production in terms of season and taste. Five new growers entered production during the year. Critically, two nurseries continue to produce commercial runners, with 300,000 on offer at the time of compilation of this report, and sales over 100,000 already concluded. Of note this season is the interest by processors in providing planting materials to contract out growers. One juice processor has established a nursery to supply exclusively its contract producers with sufficient material on offer now to cover six new hectares of production.

Raspberries: The increase in raspberry cultivation has been very encouraging this year. Following the excellent results of commercial production thus far, farmers and municipalities have shown strong interest in expansion of area under this crop. Interest has peaked, in particular, since the collaboration with the Municipality of Podujevo resulted in some excellent raspberry crop performances this year. The Municipality supported the establishment of an additional 20 ha of crop by providing irrigation systems under grants to farmers. Farmers planted in the spring of 2014 and begun harvesting in August 2014—some as much as five mt/ha. Municipal officials have promised an additional €100k in support of further expansion, prompting other municipalities to follow their example in 2015. Five ha of crop was established by a private investor in Junik and the newly established raspberry nursery in Podujevo has been inundated with orders. It is projected that 500,000—sufficient for 50–65 ha—plants will be requested before the autumn ordering period closes.

Blueberries: Increase in area this year was driven by support from municipalities that were willing to provide the necessary irrigation infrastructure for willing growers. Two municipalities agreed to support farmers for up to 3 ha of new plantings. Planting material was provided by the project; at the time of compilation of this report, material was re-potted in preparation for early spring planting. As local propagation has been a medium-term goal of the project, it is encouraging to see 2,000 plants now effectively rooted and growing as a result of sustained efforts to root hardwood cuttings.

VEGETABLE VALUE CHAIN HIGHLIGHTS

Lettuce: Volume increases have been a direct result of improved quality and shelf life of several varieties introduced over the life of the project. Extension of the season by enabling winter and early spring production has produced a shift in marketability. Now buyers are aware that they can source lettuce almost year round from Kosovo suppliers. Out grower production for Agro Serra has been a new innovation this year that has also increased production—for the first time, the firm has engaged 20 contracted out growers.

Gherkins: The more than doubling of gherkins sales against target was made possible by an increase in the number of contracted producers who paid close attention to production techniques. Among these were 15 new women growers, seven minorities, and (for the first time) the municipalities of Partesh, Pasjan, and Novo Brdo contributed to expanding volumes. Expansion of volume was supported by at least one input supplier who developed embedded extension services, ensuring that growers were able to maximize crop performance. Despite the excessive rain, yields were excellent, with some growers achieving more than 50 mt/ha. Pricing was higher than usual, such that gross returns for the 90-day crop were as high as €15k per ha. This will no doubt reinforce plantings in the next season and draw increased demand.

Asparagus: The anticipated asparagus crop was up to 6 mt. However, the final amount produced and sold was 2.7 mt. This was due to some growers paying less-than-ideal attention to details regarding how to maximize production. Post-harvest trainings and field days were prompt to point out what

could be achieved and some growers actually achieved 6 mt/ha by applying proper production practices. Growers were convinced that, given the strong market observed and the prices received from the aggregation center, asparagus is a profitable crop that offers much potential for growth. Following the successful season, 16 new hectares were programmed for additional planting by existing and new growers, bringing the total area under asparagus production by the end of the NOA project to 26.6 ha. This area will be sufficient to produce upwards of 100 mt of annual product in the next few years and provides a testament to the approach and success of the project in developing new opportunities.

Medicinal and Aromatic Plants (MAPs): Cultivated MAP production increased significantly in FY14. The incredible demand for Kosovo's organic and bio-certified MAP crops are a result of high-quality and reliability of supply from Kosovo. This has stimulated an increase in the area under MAP production in Kosovo to 165 ha. In fact, demand far outstrips supply. It is only the capital requirement for drying capacity that is limiting expansion. In 2013, NOA invested in improved dryer technologies for its principal customer, APS, and for one contract grower—an investment that had proven successful. The Ministry of Agriculture, Forests and Rural Development (MAFRD) has now used its grant support to invest in MAP drying facilities, which are now starting to come on-line. Crops continue to be diversified, with over 25 different MAP products currently under cultivation. This year, sales of cultivated MAPs will exceed \$750,000 by the end of the selling season, setting the basis for expansion in the coming year.

Field Vegetables: In order to diversify and expand this traditional sector, the introduction of new varieties is critical. NOA has supported the introduction of three new pepper varieties, which capitalize on traditional production history for this crop. These include *HS6* for the dry market, *feferoni* as an import substitution for the process market and *kepab* pepper for the export pickled market. All three varieties have been the subject of successful contract orders. *HS6* produced particularly outstanding results including the contracting out of 360 mt of pepper to small growers, many of whom were women farmers. Additionally, cabbage for sauerkraut production was produced on trial alongside three hot pepper varieties for inclusion in the process market offerings.

LIVESTOCK VALUE CHAIN HIGHLIGHTS

Dairy: Improved herd management and quality are key factors precluding the expansion of milk production in Kosovo. This year, NOA continued to emphasize milk quality through farmer trainings (176 farmers adopting reproductive health technologies introduced). Raw milk quality data is now being transmitted to 2,035 farmers by SMS, and more than 1,000 farmers have received, on the basis of the transparent raw milk data scheme, €141,000 in government subsidy (under the grant to milk quality scheme). This will no doubt raise milk quality, expand volumes formally entering the market, and further raise the profile of the dairy sector in Kosovo.

OBJECTIVE 3: FOOD QUALITY AND SAFETY IMPROVED

In FY14, the project focused on the following five areas to improve food quality and safety:

1. Hazard Analysis and Critical Control Points (HACCP) training and implementation for processors in the fruit and vegetable and dairy sectors.
2. Global Good Agriculture Practices (GlobalG.A.P.) training and implementation for field-level certification of individual producers.
3. Organic certification for saffron producers.
4. Food safety skills development and application among processing firms and regulators.
5. Integrated Pest Management (IPM) trainings.

A critical shortcoming of the certification processes in Kosovo has been the lack of certified internal auditors to do the foundational work prior to international audits. This has been remedied this year,

with the certification, in collaboration with the USAID Regional Economic Growth (USAID REG) project, of five 22000:2005 certified auditors. In addition, NOA achieved the GlobalG.A.P. certification of 72 ha of commercial apple orchards, ensuring for the first time that more than 1,000 mt of harvest is certified to this level. Processors Koral (vegetable pickling) and Agro Serra (fresh-cut salads) were certified as HACCP compliant. A total of 63 individuals including 26 graduate students from the University of Pristina, were specifically trained in food safety requirements. NOA-supported raspberry fields provided fertile ground for GlobalG.A.P. training with 24 participants submitting to a full orientation course. This was particularly well received by new growers in Podujevo.

Strawberry producers benefited from a concerted effort to upgrade production to European standards. Five hundred brochures of the United Nations Economic Commission for Europe (UNECE) standard strawberry classification were produced and distributed. In addition, 100 posters of the same were distributed to collection centers and training institutes.

The project developed the concept and a prototype of a field-based packing stand that facilitates the packing of table grapes, raspberries, and blueberries in fields, immediately after harvest. The equipment (12 pack stands in all) was fabricated locally and introduced to all three crops as a means of ensuring much higher pack quality. These pack stands were designed with food safety in mind and form part of the total harvest hygiene training program given to growers.

Lettuce producers have had to take a serious look at quality and shelf life issues in order to keep the market satisfied. This year, on-farm cold storage at two sites, top icing of lettuce at three sites, and the maintenance of the Agro Serra bagged lettuce facility has added significant value to lettuce in the market. In addition, this year Agro Serra received HACCP certification, further adding to the firm's overall capacity.

This year, an asparagus aggregation unit was established in Reznik, constituting a unique food safety and food quality intervention to support the asparagus value chain. This unit set out to provide collection, grading, and packing services to the disparate asparagus producers across Kosovo—a challenging assignment in the face of a fiercely independent farming community. The facility adhered to all European standards for food safety and was able to collect, store, grade, and pack all of the asparagus for sale. Despite calls for “own sales,” the unit successfully managed all growers' expectations, no doubt contributing to the excellent local market response and setting a solid foundation for the next harvest.

MAPs post-harvest processing, especially drying, is critical to quality. NOA has continued to invest in drying technologies, building on the success of dryer improvements made for the 2013 plantings. During the course of this year, the project invested in a dryer that uses solar as the primary source of energy and employs state-of-the-art heat conservation process using mineral zeolite. The unit is now approaching completion and will be tested early in the new year. Certifications for both organic and bio production have been key to the success of the MAP sector, with more than 70 ha of crop coming under certification this year alone.

The dairy sector continues to focus on quality improvement. The transparent milk quality grant scheme is now successfully delivering quality data to more than 2,000 farmers who now have access to government grants that reward improved milk quality. The incentive to produce improved quality milk has a direct impact on herd health and productivity, adding value to final product quality and safety.

OBJECTIVE 4: INCREASED AFFORDABLE AND ACCESSIBLE CREDIT

Improving access to finance is more than assisting farmers to apply for loans. Financial institutions must develop more innovative products designed to meet the needs of the rapidly commercializing agriculture sector. In FY14, TEB Bank initiated an innovative product— an agricultural credit card now commonly called the “AGRO Card.” This was prompted by a field visit sponsored by NOA for senior managers of the Bank. The gherkin value chain was highlighted as one where inputs are critical

both in terms of timing and quality and where off-take was guaranteed by contract—an ideal opportunity for a new financial product.

TEB Bank launched the AGRO Card targeting farmers who require quality inputs and are prepared to procure these from authorized distributors. The product was launched prior to the production season. At the conclusion of its first operational production season, the card has surpassed established targets: 1,453 cards have been authorized with a limit of €1,046,450. This is a significant step forward for the sector as it ties the supply of certified quality inputs to producers with viable production programs, and establishes repayment schedules according to predicted cash flow. The card does not take collateral but rather acts as a pure credit card product—interest-free, provided payments are made on schedule.

Following many NOA-supported discussions and roundtable meetings, the Sigal insurance company took the bold step of launching a livestock insurance scheme at the end of Q4. This product introduces life cover for dairy cattle and will provide additional risk cover for financial institutions supporting the expansion of the national dairy herd.

OBJECTIVE 5: IMPROVED COORDINATION WITHIN THE AGRICULTURAL SECTOR

This cross cutting activity has emphasized improved focus within the teams of MAFRD with a view to strengthening the national extension services and contributing to the strategy for financial support to the sector.

Winter schools were conducted across all value chains from November 2013–January 2014, involving growers, extension workers, municipal and government employees, and educational institutions. Students were reliable participants and have shown promise to utilize the training as they enter production. An excellent example was in the strawberry value chain where two graduates have started up strawberry production and have performed extremely well.

The dairy sector provided an excellent example of the benefits of improving coordination during this year. As a result of the success of the transparent raw milk data delivery system, farmers were able to access government grants for improved milk quality, as opposed to grants to improve herd size. Grants for milk quality, improved value-added tax (VAT) regimes and increasing market demand continue to drive the sector forward. The association of milk producers is now embarking on the collection of a milk levy to cover the costs of sample collection, and is on its way to becoming a completely self-financing association providing unique and critical member benefits. This is the ultimate in coordination: when the private sector takes the lead in collaborating with public and private interests.

The NOA senior management team alongside the technical leads has continued to provide support to the Ministry of Agriculture Departments in all matters. Of particular importance has been the constant demand for project advice on the strategic focus of rural grants and subvention programs. This coordination at the highest level has been crucial to the availing of funding for specific value chains— notably dairy, MAPs, raspberries, apples, greenhouse construction, and the provision of irrigation infrastructure. At the time of compilation, it has come to our attention that the MAFRD budget has been approved for 2015 at a level of €60 million, more than 20 times that of four years previously—a testament in part to USAID’s and NOA’s assistance aimed at improving coordination within the sector.

GENDER EMPOWERMENT

NOA has continued to mainstream gender in its activities and has maintained participation by women at 20 percent over the reporting year. The work plan target of women as lead farmers was set at an additional 10. However, across all value chains, the project managed to work with 75 new women as lead farmers. This is a tremendous achievement since these farmers are showing strong leadership and are able to encourage others to become agricultural entrepreneurs. The voice of the woman farmer is

now being heard at many levels—in active associations, in farmer trainings, at field days, and through the extension service. The role of women in agriculture was reinforced by the annual woman farmer of the year awards held during Q1.

SCIENCE AND TECHNOLOGY

During the year, NOA continued to allocate resources to science and technology in agriculture. NOA scaled up the implementation of an automated short message service based information delivery system for small-scale dairy farmers. The farmers required improved access to public-sector milk quality analysis for their milk deliveries to processors. During the year, this service, now benefiting upwards of 3,000 small-scale dairy producers, was used as the basis of the first GoK grant to milk quality program. The benefits of this science-based innovation encouraged all members of the milk producers association to initiate direct payments for the service to their association, paving the way for a financially sustainable service.

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

During FY14, NOA pioneered the development of an IT platform service to support the new agricultural extension system in Kosovo. Agricultural extension is now working through community-selected lead farmers, who in turn are working through municipal extension professionals. The IT platform (fermaime.com) provides a real-time service, connecting lead farmers and extension workers across the country. Questions can be posed by anyone able to access the site and answers are generated from the extension workers themselves—the site guarantees and adheres to a 24-hour turnaround on responses. This service continues to grow very fast, with upwards of 3,000 hits per day to the extension service platform at the end of FY14.

MICROENTERPRISE

NOA is supporting microenterprises in Kosovo through an agricultural value chain program and facilitating increased credit to micro-enterprises. Interventions are aimed at improving high-value agricultural value chains within the MAP sector, open field and greenhouse fruits and vegetable sectors, and the dairy sector. Improvements focus on linkages across the targeted value chains as well as improvement in terms of both product quantities and quality—all aimed at making Kosovar companies more competitive in domestic and regional markets. Domestic value-added production continues to be supported to enable local microenterprises to expand production to reduce food imports. Food quality and safety has been addressed by working with local and international certification organizations to certify products according to international standards, supporting national information campaigns, and developing product testing capacity. By improving quality and reliability as well as the critical linkages among microenterprises, NOA has been actively improving microenterprise performance in the agricultural sector.

The majority of NOA support in agriculture goes to microenterprises. Only the larger processors and aggregators fall into the category of medium enterprises. Grants and technical support to medium enterprises is dedicated to improving performance at the microenterprise level though improved productivity for producers. All sales of fresh produce emanate from microenterprises. Total sales during FY14 derived from microenterprises amounted to \$44 million, of which \$10 million was exported. Of the total impact on the creation of full time equivalent jobs, 4,439 job (FTEs) were directly created at the microenterprise level—significantly, 70 percent being at the farm level. All delivery contracts signed were between microenterprises and aggregators across all value chains—956

contracts during FY14. This association with aggregators has increased confidence of the microenterprise producers to invest in their own production processes.

MINORITIES

NOA continued to work in FY14 with producers wherever they could be competitive, wherever they were or could be linked to aggregation units, and where there was agronomic potential for production. Minority municipalities provided distinct opportunities during FY14 and NOA was active in most. The following table highlights the participation of minorities during FY14.

Type	Apple	Table Grape	Asparagus	Blackberry	Blueberry	Gherkins	Lettuce	Raspberry	Strawberry	Saffron	Dairy	MAP	Pepper
Producers	7		1		2	28	1	80	2	3	40	28	15
Full time Employees						18							27
Part Time Employees	80					36							15

A total of 383 members of minority communities benefited from NOA support in FY14—either by being involved as growers or as employees. Gherkins and peppers value chains constituted the areas wherein minority involvement was greatest. This was due to the fact that these crops are essentially independent of long-term aggregation relationships and have short crop cycles. The MAP and raspberry value chains continue to be important in minority producing areas of Strpce and Prizren where some excellent performance has been noted, with strong opportunities for growth.

Market linkages for minority raspberry producers tend to be directly to established regional markets—Bosnia and Serbia, with some encouraging fresh market participation at Street promotions during the year by minorities. The market linkages for gherkins and peppers were to non-minority aggregators and processors and serves to show the critical nature of business linkages over any ethnic divide.

1.0 VALUE CHAINS

1.1 FRUIT VALUE CHAINS

1.1.1 APPLES

OBJECTIVE 1: PRODUCTS AND FARMERS LINKED WITH MARKETS

BENCHMARKS

- **At least one B2B event organized;**

During Q2, the project carried out a number of meetings and site visits to commercial growers, processors, traders and supermarkets to discuss the modalities of an upcoming B2B event. Market needs and the ability of local producers to supply local markets served as topics of discussion. On June 19, NOA organized a B2B event attended by 73 companies including 13 international firms. This event highlighted opportunities for exporting apples for fresh and processed markets and highlighted progress made regarding apple production.

- **At least 15 improved contracts signed between growers, processors, traders, etc.;**

In order to increase the market share of domestic products and avoid contractual misunderstandings between local suppliers and buyers, the NOA program's technical staff evaluated existing contracts and prepared new production and sales contract models with more specific technical details, including quality standards and market specifications. Signature of new sales contracts is ongoing. To date, 13 contracts have been signed and one remains under negotiation. The contracts are based on agricultural contracts developed with the support of the USAID CLE project and include alternative dispute resolution clauses enabling mediation for all parties and detail specifics regarding arbitration for registered companies. (See Annex II for more information on signed sales contracts.)

- **At least one harvest and one postharvest training organized;**

In addition to field visits and in-field trainings for management staff and workers engaged at the main collection points, international STTA postharvest expert Devon Zagory provided a training during Q2 for 22 participants. The main focus of this training was Good Hygiene Practices (GHP) and in-storage daily operations management.

In addition, in order to exchange experiences regarding postharvest and processing practices, NOA organized a study tour to Macedonian processing and postharvest companies for six local companies. This visit identified a number of valid issues requiring further attention by Kosovo fruit enterprises, particularly grading, post-harvest handling and packing to international standards, and the increasing importance of association among producers in order to enable better product marketing. This was seen as crucial as Kosovo's production increases and exports increasingly contribute to sales.

- **At least two apple producers supported with labeling and packaging materials;**

In order to improve cooperation between local producers and processors, during Q2, NOA assisted five local processors in purchasing 500 plastic bulk storage bins for use in warehouses. Local processors covered 25 percent of the cost of these bins while NOA supported the remaining costs as a grant under the IIF fund. Now, each processor has 100 bins for use in its daily operations. These are assisting producers in product transportation and improving the ultimate quality of product coming in from orchards. Demand from growers for export-appropriate grading and packaging has been less than enthusiastic. Local demand for bulk, unprocessed apples still outweighs demand for graded apples sold with improved packaging.

Until this situation reverses, growers are unlikely to feel the need to invest in sophisticated grading and packaging.



Apple production at “Heronadea”

- **At least 70 farmers trained on harvest and postharvest practices;**

During Q2, international STTA postharvest expert Devon Zagory conducted a training for 22 participants on postharvest handling. In addition, NOA organized a study tour to Macedonian processing and postharvest companies for representatives of six local companies. This visit identified a number of valid issues requiring further attention by Kosovo fruit enterprises. Furthermore, local STTA expert Avdirrahmon Shala, throughout a six-month assignment with NOA, provided technical support to apple producers and organized a number infield trainings where more than 40 apple producers were trained on postharvest management activities.

OBJECTIVE 2: AGRICULTURE PRODUCTS DIVERSIFIED AND INCREASED

BENCHMARKS

- **At least 10 ha hectares of new orchards established;**

During 2013, NOA supported the local nursery association “Plant Kosova” in acquiring newly bench-grafted apple saplings. 30,000 bench grafts were successfully grown out by members of this association. All bench-grafted saplings produced were distributed to apple producers resulting in the establishment of 12 hectares of new apple orchards using this material. This serves to demonstrate the benefits of using the best planting material now available locally at competitive prices. This is the first time that planting materials locally bench grafted to international standards, using the latest techniques and varieties, have been produced in Kosovo. Production of these new orchards is expected to encourage nursery producers and serve as an excellent focal point for production training in the future. The association Plant Kosova will continue to provide appropriate training and promotion at established orchards.



Demonstrating pruning techniques

- **At least 2 field days organized for nurseries and new orchard producers;**

With the aim of supporting this activity and developing more permanent technical support for the establishment of new orchards and apple production management, NOA engaged local production expert Avdurrahman Gashi. More than 23 nursery and orchard producers from different Kosovo regions received

in-field trainings during more than five specific trainings focused on apple pruning, production, protection and other topics related to farm management.



New high-quality apple planting material production at the “Plant Kosova” association

- **At least 50 farmers trained;**

Proper winter and green pruning of apple trees is the most important activity that has a direct effect on apple yields and quality. To support this activity, NOA engaged an international pruning expert, Ross Penhallegon, who conducted seven pruning training sessions in the field, each at a different apple orchard, demonstrating practical pruning techniques useful for different fruits and varieties. Participation was excellent with 65 farmers in attendance, exceeding expectations, and farmers were enthusiastic about adopting new practices that will enhance fruit yields and quality. In addition to the international expert, NOA also engaged local fruit production expert Avdirrahman Gashi during the production season to further provide technical advice and support apple producers.

OBJECTIVE 3: FOOD QUALITY AND SAFETY IMPROVED

BENCHMARKS

- **At least three local experts become certified auditors;**

USAID’s Regional Economic Growth Project (REG) in Macedonia organized training for ISO 22000:2005 internal auditors on food safety management systems. Five representatives from fruit and vegetable processing companies in Kosovo, along with USAID/NOA’s postharvest and certification specialist, participated in this training, led by representatives from TUV Austria. At the end of the training participants received FSMS Internal Auditor certificates for quality and food safety management systems, in accordance with the requirements of the international standard ISO 22000:2005 as delivered by TUV Austria. This certification allows graduates of the training to provide internal auditing services to clients in the future and provides a useful nucleus of certified personnel that external audit firms can call upon in the future.

- **At least 72 ha of apple orchards GlobalG.A.P. certified;**

Seven farmers from different value chains, including three apple producers with a total production area of 73 hectares, were selected for implementation of the Good Agriculture Practices (GlobalG.A.P.) standard of production. Two local experts have been engaged to support the selected producers. Besides the GlobalG.A.P. training held by local experts, the NOA program organized a first-aid training for selected producers required by the standard. GlobalG.A.P. standard was successfully implemented at all seven producers. Agroserra lettuce producers and APC raspberry producers successfully passed the certification audit and received their GlobalG.A.P. certificate from the certification body “Ceres” based in Germany, while additional producers are still in the process of successfully completing this activity.



The GlobalG.A.P. certification audit covers 1,078 mt of apples produced by the three largest apple producers in Kosovo, with harvest expected during Q1 FY15.

- **At least one new processor HACCP certified;**

During Q2, the NOA program engaged a HACCP food safety standard expert to support two local fruit and vegetable processing companies: “Koral” in Fushë Kosova and the lettuce processing company “Agroserra” in Mitrovica. All required activities related to the successful implementation of this standard, including certification audits were completed and both companies have received HACCP certification, issued by international certification bodies “Procert” and “IDCQ”.

Beside the HACCP certification of the above-mentioned companies, technical support related to the implementation of good hygiene practices and food safety standard infrastructure requirements at processing plants was delivered to an additional five local processors. To support this activity, the NOA program engaged a regional food safety specialist, Vladimir Kokarev.

- **At least 45 people trained on food safety assurance;**

In Kosovo, there is limited knowledge regarding Food Safety and Good Manufacturing Practices. Therefore, capacity building in this area has been an important goal of NOA. To improve the situation, an international STTA expert, Devon Zagory, was engaged during Q2. During a two-day training organized for Kosovo Agency for Veterinary and Food (AVUK) inspectors, Zagory presented food safety, good manufacturing practices (GMP) and good hygiene practices (GHP). Further training for local processors and collection centers also was organized. In addition to GMP and GHP training, a special lecture covering the proper use of bench-top digital pH meters provided by the NOA program was given to the management of seven local processors. Thirty-seven (37) participants received detailed information related to food safety and good hygiene practices, and gained a better understanding of EU market access regulations for food products.



The use of pH meters by processors



GlobalG.A.P. training for agriculture students

- **Two day GlobalG.A.P. training for agriculture students;**

In Kosovo there is limited knowledge regarding Food Safety and Good Agriculture Practices internationally known as GlobalG.A.P. Therefore, capacity building in this area is an important goal of the NOA program. To improve the situation NOA organized a two-day GlobalG.A.P. training. In addition to the NOA Post-Harvest/Certification Specialist, Reshat Ajvaj, two local STTA experts with proven implementation experience, Agron Halimi and Arben Mehmeti, were engaged to co-facilitate training.

Food safety, good agriculture practices and good hygiene practices were presented to participants from the Agriculture Faculty in Pristina. Twenty-six students, most of them plant protection master’s degree candidates, received detailed information related to production, food safety standard requirements, practical implementation of GlobalG.A.P. on the farm, certification procedures and the advantages of GlobalG.A.P. certification, including easier access to the EU market.

1.1.2 TABLE GRAPES

OBJECTIVE 1: PRODUCTS AND FARMERS LINKED WITH MARKETS

BENCHMARKS

- **At least two B2B roundtable meetings organized with market actors, growers, packers, and shippers.**

The Zëri Bujkut Company, based in Rahovec, and Kelmendi GmbH, based in Peja with its head office in Germany, signed an agreement during Q1 to export table grapes to the EU. A signing ceremony was organized by the mayor of Rahovec, with NOA facilitation. Grower association members and individual growers attended the event. Kelmendi GmbH had shown a readiness to collect all quality table grapes and export them into their European distribution system. To support this, NOA announced that a brochure on table grape quality standards would be launched and distributed to the community of growers and market actors. It provided details regarding product quality and grape classification. Additionally, the program continued to support and promote improvements in growing technologies targeting quality production. The Kelmendi collection center in Peja is complete and will serve the table grape sector very well. During Q3, a meeting of potential packers and shippers was held to discuss potential packaging and market interventions that could support the entry of newly introduced table grape varieties into the market during Q4. The outcome of these meetings was a new packaging design, with retail-ready carry packs (described below).

- **At least two packers and shippers of table grapes initiate new, improved packaging practices.**

The Program initiated a new table grape packing design in Q3 which was finalized in Q4. In cooperation with the three main table grape stakeholders: Stone Castle, Kelmendi and association “Action for Revitalisation”, NOA set the standard of table grape packing consisting of a cardboard box, plastic bagging, bottom and top paper pads. A joint local brand “Table Grape” – Product of Kosova was created, targeted to both export and local markets. Twenty-five thousand (25,000) cardboard boxes and 250,000 plastic carry bags were distributed to the three above-mentioned table grape stakeholders. After farmers received on-field trainings on table grape packing standards, an event was organized to launch the new and existing table grape varieties packed to the new packing standard. Prior to the event, Kelmendi organized the very first export shipment to Germany with new packing, followed by association “Action for Revitalisation” who also exported to Germany shortly thereafter. Stone Castle initiated local sales with ETC, Viva Fresh and Albi using the new packing which was very well accepted by retailers and final consumers.



Table Grape packing examples: Plastic Bag, Cardboard Box and bottom & top paper pads.

- **At least 40 growers accept and follow technical advice to produce table grapes to meet quality packing and grading standards.**



Fresh cracks in berries and infected wounds

A local STTA engaged by the program worked in the field with growers to support them in producing quality table grapes that meet quality packing and grading standards. This daily attention has helped guide growers on the critical aspects of canopy management and fruit management as the crop comes to maturity. More than 40 growers benefited from this support. The quality of the grapes was heavily influenced by unfavorable weather conditions. During the growing season incidence of disease was high as a result of the rain which continued through the ripening and harvesting periods. Early varieties were damaged more compared to late ones. Cracking of ripened berries was recorded which caused physical damage to the berries making some grapes unmarketable. In addition, wounds were infected by pathogens.

Thus, overall, the negative effect of the heavy rains at the harvesting period was considerable.

The team of Rahoveci Institute together with local experts, advanced growers and Program experts have monitored and recorded disorders, and proposed measures to combat these issues and resulting disease even though the effect on early ripening varieties was limited. Vineyards in valleys and terrain with depressions were more affected compared to hilly and more exposed sites. The defoliation of vines (a technique used to control for humidity) on north facing rows improved air circulation, thus improving the quality of grapes compared to non-defoliated sites.



Healthy, defoliated table grape vines

- **At least six field packing stations manufactured locally and in use.**

The design of the field packing stand was prepared and shared with manufacturers who responded to the RFQ published in Q3. Twelve (12) field pack stands were manufactured in total and distributed to 3 major actors of the sector: Stone Castle, Kelmendi GMBH and Action for Revitalization association. The utilization of the packing stands contributed to improved post-harvest and packing technologies. Field pack stands and packaging has been delivered to the three main actors involved in the postharvest, quality standards and marketing of Table Grape in Kosovo.



Sorting, cleaning and packing of table grapes



A mobile Field pack stand pulled by car

Training on utilization of the field packing stations was held in Rahovec at the Stone Castle site where 26 harvest managers and growers attended. The following was demonstrated: Operation of the field packing stand; box confirming; RPC utilization and harvesting; bunch and berry cleaning; plastic bag filling; box filling and scaling; and placement of bottom and top pads. New technologies introduced as part of this activity include:

1. Field packing stand;
2. Packages;
3. Bottom pad;
4. Top pad;
5. Plastic bag for bunches;
6. Bunch Cleaning scissors;
7. RPC boxes;
8. Field scale.²

ADDITIONAL ACHIEVEMENT

- **Promotional event on new growing technologies and new packing standard/design.**

In order to promote achievements in the sector, a launch event to promote table grape and its new packing was organized during Q where 50 stakeholders attended, joined by USAID Kosovo's Acting Mission Director, Chris Edwards. The event highlighted three years of expansion in Kosovo's table grape sector. USAID has worked with grape farmers to introduce new varieties and enhanced technologies to increase quality and production for both domestic and international consumers. It has also introduced specially-designed packaging and branding for local table grapes. This was a media event, with the presence of RTK1, RTK2 and KlanTV, as well as the Epoka e Re and Lajmi newspapers. The main wholesale and retail traders were present at the event. The local table grape producer and supplier, Stone Castle, and exporter Klemendi provided excellent feedback on packing designs and the new branding. In addition, point of sale promotional materials were launched at the event (pictured below).



OBJECTIVE 2: AGRICULTURE PRODUCTS DIVERSIFIED AND INCREASED

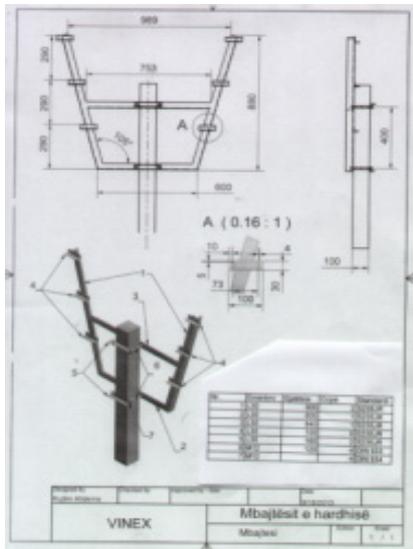
BENCHMARKS

- **At least 20 hectares converted from conventional to improved table grape trellising system.**

The Stone Castle's application for support in making improvements to its trellising system was evaluated and accepted. The "Lyre" trellising system was installed on 11 hectares of vineyards. Cost constraints restricted application of this system across the full 20 hectares initially planned. Based on specifications of the system provided by Andrew Teubes, an international consultant engaged by NOA, the first model was manufactured by a local company and has been evaluated in the field by the program, Rahoveci Institute, and growers. After field testing, Stone Castle's agronomists asked that additional modifications to the system be made in order to create a larger space to allow for the passage of tractors between the rows. The adjusted trellising system was manufactured by Stone Castle technicians during Q2. The

² A list of NOA-introduced technologies can be found in Annex VI.

program supplied only the required L and flat profile steel components. Stone Castle supported the costs of fabrication and field installation. The dimensions of the steel profile sections were established by Teubes, along with local steel manufacturers and Stone Castle technicians. The Vinex company in Viti prepared the final drawings after it was supplied with data regarding planting distances, distances between



The "Lyre" system sketch and the prototype being installed

concrete poles, number of vines located between poles, and estimated weight per vine and per row. This data helped the technicians calculate the engineering requirements for the final product and specify required materials.

An RFQ was published for supplying the needed steel and final procurement was concluded during Q2. Stone Castle had identified the need for, and financed the proper steel-cutting machine that will be used in the future by the company to expand its improved trellising system. System installation establishment began in Q2 on eight hectares with five wires per row, and was completed by the end of Q3.



New trellising installed at StoneCastle



Young shoots trained on both sides of the Lyre-shaped trellis. Increased open space ensures light penetration and air circulation, fostering better quality and increased quantity of grapes produced.

Additionally, Speed, a company in Suhareka, has modified its trellising system based on the Lyre system for table grapes over an area of five hectares, having been influenced by the positive results during demonstrations introduced by the program. Initial reports indicate that at least an additional 10 hectares is in the process of trellis modification. Total hectareage modified or under modification during the year is 26Ha.

During Q4, shoot training continued under the observation and management of Stone Castle technicians and NOA-supported local STTA. Improved canopy management

has been proven to be superior compared to the traditional approach with vertical shoot training. At the end of the harvesting season the yield was compared between the different technologies implemented.

The yield on the open canopy systems has been increased significantly. Data on the number of bunches, weight per bunch and total weight per vine were collected by Stone Castle field experts and the local STTA engaged by the Program. Yields of the Italia variety using the three different trellising systems are presented in the following table which highlights resulting improvements.

Evaluated yield parameters	Lyre System	“T” System	Traditional System
Number of bunches per vine	32	15	13
Average weight (gr) per bunch	630	734	468
Average yield (kg) per vine	20.16	11.01	6.08
Average yield (kg/ha) basing 2,500 vines per hectare	50,400	27,525	15,210

The average weight per bunch is higher in both trellising systems introduced by the Program compared to the traditional approach. Bunch weight on the T trellising system is the highest due to the lower number of bunches and lower competition compared to the Lyre system. The conclusion here is that, in the future, the fertigation program on the Lyre trellising system has to be improved to correspond with the crop load.

The average yield using the lyre canopy management approach is more than 3 times higher compared to the traditional system. Additionally, there are more than 2x the number of generative buds with the Lyre system left after the pruning compared to the traditional system. The cordon wires allow the bunches to hang freely resulting in increased exposure to the sun and air. The quality of bunches has been improved to such an extent that the Stone Castle experts have proposed that the entire Company’s Table Grape vineyards be modified to the Lyre trellising system in order to improve canopy management.

- **At least 750 mt of table grapes produced on new trellising systems**

Over 800 mt of table grapes have been produced on the new trellising systems. The quality of the new varieties was promoted at an event that took place on the 17th September. Red Globe and seedless varieties were particularly well accepted by participants. The new trellising systems produced superior yields and qualities of product and will no doubt prove the catalyst for rapid industry wide-adoption of the new canopy management practices.



Traditional management systems lead to poor light and air penetration, poor quality and lower yields.

- **At least 40,000 certified virus-free rootstocks imported by local nurseries (companies) and grafted in Kosovo.**

A local nursery imported 40,000 rootstock from regional nurseries based in Montenegro. Rootstocks were bench-grafted by a group of well-trained grafters followed by effective callusing. The grafted materials were planted in nursery lines. Fifteen students from a secondary school received practical training on rootstock classification, bud cleaning, cutting, and bench-grafting, according to requirements. The uptake in early stages has been evaluated at over 80 percent which is a very high percentage according to experiences in the region. The differences between the two groups are in the diameter of the trunk and development of the roots.



Bunches exposed to the air and the sun lead to increased crop load using the Lyre system

- **Mother vineyard established.**

During Q1, the program shared ideas and concepts with experts from the Rahoveci Institute to support the table-grape nursery sector during the planning phase. The goal was to ensure that everything remains in line with rules and regulations related to the propagation of table-grape planting material. Furthermore, a list of the types of rootstock and varieties for scion mother blocks was produced together with representatives from the institute and the growers association in Rahovec.

The list of proposed planting varieties, types, and quantities was studied in view of table-grape trends in developed markets. The proposed varieties for scion propagation were new in Kosovo, but suited to (EU) markets. The range of rootstocks proposed includes five different rootstock types suitable for various environmental conditions in Kosovo, and ensures compatibility with different grape varieties. The proposed mother block would contain at least five new varieties. Potential suppliers of the above mother rootstock and scions from EU countries were contacted during Q1. The list of imported varieties and types of rootstock chosen for the nursery was drawn up as follows:

Mother Block For Rootstocks		Scion Mother Block	
Quantity	Type	Quantity	Type
1,000	Kober 5 BB	450	Summer Royal
500	Paulsen 1103	255	Italia
500	Ruggeri 140	450	Victoria
250	SO4		

In Q 2, a RFQ for the supply of the required material was prepared and issued. Local nursery Fidanishtja Kashice was selected to supply the requested materials. All rootstock types and vine varieties originated in Italy with virus-free status. The supplier made a trip to Italy to inspect the planting material prior to its dispatch to Kosovo. The supply and delivery to the selected nursery was implemented as per the agreed-upon schedule. Storage and maintenance was led by the nursery, ensuring proper temperature and humidity specifications.

In early Q2, NOA staff, along with nursery personnel, evaluated the potential to utilize local bud-wood emanating from the over-grafting program in 2013. The quantity to be used would be decided by the local nursery.

A Scope of Work (SOW) was prepared and a Request for Proposal (RFP) published for interested entities to provide services to support nursery establishment. After applications were reviewed, Action for Revitalization was selected as the preferred subcontractor to support nursery establishment.

Action for Revitalization identified Agrodrini as the company that will run and operate the future nursery based on its professional capabilities, assets, and commitment. The nursery sites were visited and evaluated by NOA and international STTA, Andrew Teubes. The mother block site was rocky but suitable for vineyard establishment. The site for the nursery line (site for the rooting of the grafted vines) was suitably isolated from the vine areas, in a sandy site with high organic-matter content and a suitable irrigation scheme in place.

After the imported material was delivered in Q2 to the nursery and sites previously selected, the site-preparation process was delayed due to excessively high soil moisture. Rooted rootstocks and vines were transplanted into plastic sleeves (pictured below) and kept under nursery observation until the site could be properly prepared. The weather continued to be very wet with excessive rain, so the field was not prepared during Q3 as planned.

The nursery mother blocks for the scion and rootstocks were established after the soil conditions had improved. Varieties were divided by double spacing for easy harvesting. The site was fenced so that access to it can be controlled and monitored to prevent unauthorized entry.



Rooted rootstocks and vines transplanted into plastic sleeves

During Q3, a RFQ was issued for the development of a callusing room to be supplied for the nursery. This support was awarded to Muja Company. As a result, the following was installed during Q3:

- Callusing room with humidifier;
- Two bench-grafting machines, of the Omega type;
- Paraffin wax for grafting;
- Thermometer for monitoring the heat of the wax;
- Plastic boxes 50x45x30 centimeters for setting the calluses; and
- Omega Uno machines were utilized for conducting the bench-grafting by the team at the local nursery.

Grafted vines were stored in plastic boxes with peat moss following specific protocols regarding vine treatment after grafting. All grafts were kept for about three weeks in the callusing room under controlled humidity and temperature. After the callus had formed and roots initiated, boxes were exposed to the sun for further acclimatization before planting at the nursery lines. Ninety percent (90 percent) of the callused vines that emerged from this process were acceptable for planting.



Callused vines with initial root system and young shoots developed.

- **At least two field days concluded.**

During Q3 and Q4, field visits to the table grape rootstock nursery site were implemented with specific groups invited to the tour the site. Potential investors and groups of experts visited the site on four different occasions during Q3 and Q4 to observe the growth and phytosanitary status of the plants. These visits were to encourage commercial procurement from the nursery once materials become available.

- **At least 200 growers attend field days.**

In order to encourage growers to see the benefits of the new management techniques, the progress in over grafting and the developments of local planting material production, field days were arranged at appropriate times during the growing season – specifically Q3 and Q4. 110 growers visited the sites during 4 field days.

ADDITIONAL ACHIEVEMENT

During Q2, NOA, supported by international STTA Andrew Teubes, assessed the state of the scions held over the winter to determine their suitability for re-grafting wherever last year's grafts had not taken. It was estimated that up to 50 percent would require re-grafting and that sufficient bud wood was available for this exercise. Inspections prior to the dormant period had indicated higher success rates, but the wintering period reduced the percentage of successful grafts. Sufficient bud wood was available for the required replacements, and Teubes initiated chip graft training late in Q2, as well as bench-grafting techniques for the nursery staff.



At left, a grafting over that did not take with new shoots, developed during 2013. At center, the budding process. At right, successfully chip-budded shoots growing.

The percentage of grafting that were successful by the end of the Q3 was reported to be more than 60 percent, but growers were hesitant to cut the vines above the chip bud, causing delays to young shoot initiation. This new procedure requires time for farmers to see its overall benefits. Only seven growers did not continue with budding on their sites. Two new growers adopted this technology and converted 0.85 hectares from wine grapes to table grapes.



Unseasonably late snow caused some insignificant damage. Here, shooting vines are under pressure.

In addition to the late snow event and more significantly, the entire season was plagued by very high levels of rainfall and high levels of humidity, which subsequently limited yields and quality at harvest. Damage was reported at up to 80 percent reduction in yields in some vineyards where fungicide spray were unable to control disease, while others experienced much less damage, depending on site exposure.

- **Study tour to Italy with main sector actors**

Eighteen (18) people participated in a study tour to Italy from September 2nd – 7th. Main activities and achievements of the study tour included the following:

1. Best management practices were demonstrated to the group during three field trips;
2. Three short presentations/seminars were conducted for the group, led by Italian experts;
3. Three field packaging operators and one big commercial packaging center were visited;
4. The Italian partners hosting this event offered to train 10 young people from Kosovo on pruning in Italian vineyards;
5. All participants expressed great satisfaction with the study tour and knowledge gained;
6. The following 15 new technologies were introduced to the group:
 - a. Pergola system of vineyard establishment;
 - b. Plastic cover of the vineyards;
 - c. Net anti hail system over the vineyard;
 - d. Overhead drip lines;
 - e. Pruning to form the pergola;
 - f. Girdling of main trunks to suppress the over-vigour growth ;
 - g. Girdling of the main branches to suppress the over-vigour growth;
 - h. Girdling tools – “secateurs”;
 - i. Elements (items) required to establish crop protection system;
 - j. Field packing units – working table for 2 persons;
 - k. New packaging;
 - l. Bird control technologies to minimize damages caused by;
 - m. Quality control;
 - n. Sugar control;
 - o. Storage;



A covered vineyard in Italy



Crop load with pergola system

OBJECTIVE 3: FOOD QUALITY AND SAFETY IMPROVED

BENCHMARKS

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

After the establishment of two large GoK supported collection centers (where NOA had been significantly involved from the outset) in the region (Peja with Kelmendi and Xërxe with ETC), the conclusion was that there will be enough capacity available for the collection and cooling of table grapes. Therefore, any further intervention in infrastructure specific to the table grape sector was not necessary at this time. Both collection centers are fully equipped with forced air facilities.

- **At least one packing center established.**

The statement above also applies: Existing, newly established packing facilities will be more than sufficient to handle the table grape harvest at this time. Stone Castle has an interest in future developing its own specific facility on its property.

- **At least 100,000 kilograms of table grapes stored for out-of-season sale.**

Due to high disease pressure caused by the climatic conditions, and limited production, no table grape was stored for out of season sale.

1.1.3 STRAWBERRIES

OBJECTIVE 1: PRODUCTS AND FARMERS LINKED WITH MARKETS

BENCHMARKS

- **At least €25,000 sales in street promotions.**

This year's street promotion sales exceeded the target, reaching €30,677 in sales over just seven days of promotional activity (June 22–28, 2014).

Over the three years of promotional activity, the total value of strawberry street promotion sales amounts to €66,513 (33 mt), with 46,000 buyers/visitors contacted. Each year, there has been an increase in sales and participants. The first year, NOA had 12 farmers participating; in the second, 20 farmers. Now, in the third year, 26 farmers participated. Sales increased each year (60 percent in the second year and 72 percent in the third year). Specifically, the first year saw 6.7 mt (€13,535) in sales; the second year, 11 mt (€22,301); and the third year, 15.4 mt (€30,677). NOA believes the goal of promoting local, fresh strawberries to consumers has been successful through these activities, since they engage a very wide range of consumers, both directly and, thanks to media coverage, indirectly. These activities serve to

increase farmers' confidence regarding their ability to sell their products. More than 8,000 informative strawberry brochures about the fruit's nutritional values have been distributed over the three years.



Strawberry promotion in Pristina attended by USAID Mission Director Maureen Shauket (at right).

- **More than €600,000 total sales from NOA client growers.**

This year, weather conditions were not favorable for strawberry production, with frequent and heavy rains causing botrytis (grey mold), decreased production and poorer fruit quality. As of Q4, total sales of strawberries for 80 program beneficiaries amounted to €382,729. Sales figures remain similar to last year (€379,358), despite increased surface area planted and an increase in the number of farmers growing strawberries, indicating lower yields this season.

- **At least one roundtable event concluded.**

During Q3, on May 15, 2014, NOA organized a roundtable event focusing on local market, production, pricing, and import challenges. Twenty-four farmers participated. The then-coming street promotion activity was also discussed and logistic issues addressed. An important highlight was higher volumes of imports coming from Serbia this season compared with the previous year. Farmers requested quality-control measures regarding imported products, especially from neighboring counties, with specific attention to pesticide residues. Also discussed as critical is the lack of effective distributors. It was felt that there is a need to establish and facilitate the distributor's role in this market, to ensure there are value chain actors that will ensure supply to Hotel, Restaurant, Catering (HORECA) and supermarket chains on a daily basis, coordinate supply from several small farmers and ensure daily distribution/demand from retailers and HORECA. Small farmers do not have the capacity to distribute their products door-to-door because it is costly and time-consuming for them to engage in daily produce distribution. Therefore it is crucial to establish distributor/s that will consolidate market demand and offers of fresh fruits and vegetables.

OBJECTIVE 2: AGRICULTURE PRODUCTS DIVERSIFIED AND INCREASED

BENCHMARKS

- **At least four hectares of new strawberry plantings established.**

The program ordered 115,000 strawberry runners through a local vendor. Nearly all (100,000) were of the day-neutral variety *Albion*, and 15,000 were the day-neutral variety *Buddy*. This was sufficient for planting 2.3 hectares. Plants were shipped by Hargreaves UK to Kosovo and were planted at the end of March. The *Albion* plants were distributed to five new growers and the *Buddy* to three strawberry lead farmers. The condition of the new fields is very good. Harvesting started in August and will continue through November.



Strawberry tray plants runner - Buddy variety

- **At least five farmers involved in new plantings.**

Eight farmers benefited from the planting of strawberries during Q2; *Albion* was planted and established in municipalities where day-neutral varieties had not been planted before. Recipient farmers were Milazim Bislimi (0.5 hectares), Koliq, Pristina; Nehat Haliti (0.5 ha), Dumnica e Poshtme, Vushtrri; Refki Rysheni (0.45 ha), Kuklibeg, Dragash; Qemail Rexha (0.5 ha), Gjakova; and Zijadin Elezi (0.05 ha) Shakovice, Podujevo. Farmers Milazim Bislimi, Nehat Haliti, and Refki Rysheni are young graduates from the agriculture faculty in Pristina, where they specialized in strawberry cultivation. The *Buddy* variety is being planted/tested for the first time in Kosovo (introduced by NOA), by strawberry lead farmers Labinot Spahiu Llugaxhi, Lipjan (0.1 ha); Mehdi Bresilla Llugaxhi, Lipjan (0.1 ha); and Halim Baftiu Shtime, Davidovc (0.1 ha). The new strawberry variety ‘Buddy’ was planted this spring for the first time in Kosovo in demonstration plots by the strawberry lead farmers. It is a very sweet and attractive variety, with glossy fruit, and firm flesh and skin. The only disadvantage to Buddy is the “sunburn” its fruits can suffer during August when temperatures are very high. The *Albion* variety is well adapted and grows well under Kosovo’s climatic conditions.



Strawberry production in Nehat Haliti’s fields



Milazim Bislimi picking strawberries in his fields

- **At least two nurseries propagate new planting materials.**

The program has identified two nurseries (N.T.P. Dredhza, in Lluke, and Fidanishtja e Godancit, in Shtime) to further propagate strawberry runners. Hargreaves UK shipped to Kosovo 10,000 mother plant runners of the *Elsanta* variety. Each nursery has established plantations of 0.50 hectares for runner propagation in order to produce 300,000 runners for commercial sale. Planting was completed at both nursery sites toward the end of March. This will be sufficient to establish six hectares of new plantings. During Q4 nurseries began to sell runners. By the end of September, they had sold 110,000 first-class strawberry runners, which will be sufficient to plant out 2.1 hectares. Sales of runners will finish in the spring when the planting of strawberries ends.



Elsanta runners propagated by Skender Ramadani

- **At least 10,000 mother plants for propagation delivered to processor for contracting farmers.**

During Q1, NOA initiated the procurement of nursery stock for distribution (to growers) by processors who intend to buy back production. Ten-thousand (10,000) *Elsanta* strawberry mother plants are now planted at the MOEA nursery to benefit new strawberry growers in the Gjilan region. These mother plants will produce planting material sufficient to plant out six hectares in the coming season.

- **At least one hectare established with wild strawberries by NOA and ANI Holland.**

Despite an unproductive commercial relationship, where the firm did not deliver on its promises, it is still anticipated that ANI Holland will introduce a commercial “wild strawberry” for testing during the next fiscal year. NOA staff remains in continuous communication with ANI Holland to help facilitate this activity.

- **At least two regional study tours conducted.**

During Q3, the program conducted strawberry study tours to Macedonia and Serbia with the participation of 15 growers. The overall aim of the strawberry study tours to Serbia and Macedonia was to expose NOA-supported strawberry growers to their colleagues in the region, to increase their awareness of fruit promotion, help them better understand other supply chains, learn new techniques, network with key people, and act as a catalyst upon their return to Kosovo, for further positive changes in the regional industry. The group visited strawberry orchards in the Novi Sad and Skopje regions of Serbia and Macedonia, respectively. The study visits were very important, and farmers shared various experiences and technologies used in growing the fruit. The visits served to boost the confidence of the Kosovo farmers, as it confirmed they are producing at respectable levels and successfully applying best practices.



The study tours took in visits to a farm near Skopje, Macedonia, as well as another near Novi Sad, Serbia.

OBJECTIVE 3: FOOD QUALITY AND SAFETY IMPROVED

BENCHMARKS

- **500 brochures on United Nations Economic Commission for Europe (UNECE) standard printed and distributed to farmers.**

The UNECE standard defines quality requirements of strawberry fruits prepared and packaged for market. Five hundred (500) copies of the UNECE standards brochure were developed, printed and distributed during the strawberry winter school events held in four different municipalities. In addition, the brochure has been distributed to students in the agriculture faculty, pupils from agriculture secondary schools, and municipal extension agents.

- **100 posters printed and distributed to farmers and extension agents on UNECE standards.**

Posters highlighting the UNECE standards have been prepared based on information found in the aforementioned brochures. They are printed in a 100x70-centimeter format and have been distributed to strawberry lead farmers, municipal extension agents, AVUK, input dealers, the agriculture faculty, and agriculture secondary schools.



Poster and brochure prepared during Q2

OBJECTIVE 4: INCREASED AFFORDABLE AND ACCESSIBLE CREDIT

BENCHMARKS

- **At least four strawberry winter school days organized in four different regions.**

Four strawberry winter schools were carried out during Q2 in four different municipalities: Suhareka, Skenderaj, Podujevo and Gjakova. The local STTA, program fruit specialist and an agriculture-input dealer presented the best agriculture practices in strawberry cultivation, field preparation, planting, plant arrangement, management of runners, blossom removal, fertilization, cultivation, mulching, plastic culture, irrigation, harvesting, post-harvest handling, marketing, and the control (management) of pests, diseases and weeds.

- **At least two field days organized**

During Q4, the program staff held two field days, in Shtime and Lipjan, focusing on the promotion of day-neutral varieties (Buddy and Albion), which NOA has introduced for the first time in Kosovo. In total, 51 participants attended the field days. They included NOA beneficiary farmers, MAFRD staff, professors and students from the agriculture faculty in Pristina, extension agents from municipalities, input dealers and potential strawberry farmers from Shtime and Lipjan region.



Halim Baftiu explains his field management practices

- **At least 50 strawberry growers trained.**

Strawberry winter school trainings were provided during Q2 in different municipalities, including Suhareka, Skenderaj, Podujevo, and Gjakova. These trainings drew 140 people (growers, local experts, extension agents, input dealers, inspectors from AVUK, and students) and covered critical aspects of production.

- **At least 20 students from Faculty of Agriculture attend field days.**

Twenty-three (23) university students from Agriculture Faculty in Pristina attended two field days organized during Q4. Students were particularly interested in how they could get into the strawberry business since it appears that a good living can be made off small areas if attention to detail is maintained. Students realized that their technical knowledge could be put to good use if they decided to enter production.

1.1.4 RASPBERRIES

OBJECTIVE 1: PRODUCTS AND FARMERS LINKED WITH MARKETS

BENCHMARKS

- **At least €15,000 sales through street promotions.**

Twenty-five (25) farmers participated and presented their products over a 6-day event staged on ‘Zahir Pajaziti’ Square in downtown Pristina. (Last year, 17 farmers participated in a similar 11-day event). Total sales during this year’s street promotion were €18,424, exceeding the benchmark. This year in addition to raspberries, strawberries and blackberries and a new berry fruit, aronia, all were promoted by growers. Aronia is a fruit with interesting potential in the jam and juice markets; growers themselves were anxious to test market their product. As usual, interest from citizens and the media was very high. In regards to social responsibility, more than 250 kindergarten and primary school children, SOS Village orphans and elderly from Elder Care were treated to fresh berries. For each fruit on promotion, dedicated brochures about nutrition values and health benefits were distributed.

In addition, this year, NOA initiated a campaign highlighting “good nutrition practices,” launched simultaneously with the raspberry promotional days. The NOA sales and marketing specialist together with a local expert opened the campaign with an appearance on two national TV morning programs: RTK and KTV. The campaign highlighted good nutrition practices and the importance of fruits and vegetables in our daily diet. A manual highlighting good nutrition practices was distributed during berry promotion days and other program events.



Berries on display during the promotional event

- **At least €20,000 in sales to supermarket chains.**

During 2013, NOA facilitated the very first fresh raspberry sales in the local market. At that time, only four farmers were involved in fresh raspberry sales. This year, the number of farmers interested in fresh raspberry sales increased, mainly due to increased numbers of farmers in Podujevo (a region close to Pristina, Kosovo’s largest single market). As such, this year 22 farmers sold fresh raspberries to dozens of local supermarkets generating total sales of €38,856 as of Q4, thus exceeding the benchmark. The average farm gate price of fresh raspberries traded through wholesale and retail channels was €2.7/kilogram. The overall value of raspberries sold this year by project beneficiaries amounted to €227,536 (fresh sales accounting for 17 percent). Farm gate price in the bulk frozen market was €1.5/kilogram, which is still an exceptional price. Demand for frozen product remains high and no issues have been seen regarding the market for frozen berries from Kosovo.

- **First trial shipment of fresh raspberries exported to Western Europe.**

Export of the fresh raspberry remains as the main challenge within this sector. During Q4, farmers were not ready to try shipping fresh raspberries to regional or international destinations. Heavy rain shortened the shelf life of the raspberry crop, and this, in combination with high local demand, led to the decision *not* to try to export any raspberries this year.

OBJECTIVE 2: AGRICULTURE PRODUCTS DIVERSIFIED AND INCREASED

BENCHMARKS

- **At least 20 hectares of new raspberry plantations established.**

Through a local vendor, the program ordered 160,000 raspberry canes to support new growers in Podujevo. During the third week of March, the program’s fruit production specialist and Kosovo Food and Veterinary Agency (KFVA) phytosanitary inspector, Ismet Fejzullahu, paid a visit to Hargreaves UK to inspect the plants before shipping to Kosovo. Findings showed that raspberry plants were packed in appropriate boxes and loaded on a truck with controlled temperature and humidity mechanisms, as required. The team was able to check only those boxes packed close to the truck doors. Plants had good root systems and were well developed and washed. Canes were shortened so more plants could be packed per box. Bundles were labelled with the Elite standard green label. No disorders were noticed. Because of the strict phytosanitary procedures in the U.K. and the weather conditions in Kosovo, the supply of raspberry canes arrived in Kosovo during the first week of April.

During Q1 and Q2, twenty-eight (28) farmers in the Podujevo region completed winter preparations for planting raspberry canes. During Q3, they were planted immediately upon receipt, across 20 hectares, in 28 different locations.

Although the weather conditions during the spring were unstable and the plants experienced stress given several weeks of heavy rain as well as intermittent episodes of snow at high altitudes (Štrpce and G.Lubinje), they remained healthy and in good condition. APC and the 28 outgrowers have continued to be supported technically by NOA. All farmers are complying with environmental requirements and are applying good agricultural practices.

Field results are very good and the yields that farmers are achieving even in the first year of production are excellent, with some growers having harvested 5 mt/hectares by midway through the season.



The harvesting of raspberry in the fields planted this spring. At left, Mehmet Bryma's farm in Katunishte and at right, Sami Uka's farm in Dyz.

Cooperation with the municipality of Podujevo: NOA has established a very good cooperative relationship with the municipality of Podujevo, which is interested in expanding the soft-fruit sector in the region. The municipality of Podujevo's Department of Agriculture supplied the 28 NOA beneficiary farmers with drip irrigation systems sufficient to cover 20 hectares immediately after the canes were distributed in early Q3. They were installed by the farmers after they received instructions from the input dealer that provided the equipment. Installation and management of the drip irrigation equipment has been monitored by NOA technical staff. As a result of this success, which has shown the benefits of cooperation, the municipality of Podujevo is planning to support the establishment of at least an additional 20 hectares of raspberry, and has publicly committed to an investment of €100,000. Meanwhile, other municipalities throughout Kosovo seek to replicate this successful cooperative effort and establish raspberry orchards in their regions. For example, Viti, Pristina, Ferizaj, Gjakova and Skenderaj have committed to supporting an additional 25 hectares in total.

New raspberry plantations in Junik: During Q2, NOA facilitated purely commercial linkages between the Agro Juniku Co., APC, and Hargreaves UK for the purchase of 40,000 raspberry canes. Agro Juniku purchased the materials directly from the producer in the UK using its own funds for a planting of 5 hectares—the first such investment in Kosovo. This indicates that this value chain is making rapid progress towards sustainability. NOA supported this large investment with drip irrigation during the Q3.

Raspberry STTA visit: A SOW for an international consultant was prepared during Q2 to provide technical assistance to the new raspberry nursery in Podujevo. From June 15 to 21, the



The STTA advising a farmer how to remove flowers from recently planted raspberry canes.

international STTA, Garth Baxter from Hargreaves UK, visited Kosovo. His main focus was to provide practical and theoretical training to the soft-fruit nursery in raspberry propagation, a practice established this year in Peran/Podujevo. He evaluated the nursery and proposed some required changes. He also evaluated current raspberry demo plots and the 20 hectares of new plantations planted in the Podujevo region. His focus there was on field management and on providing recommendations on next steps in the raspberry sector.

New women raspberry farmers in Štrpce: On January 28, twenty-eight (28) women underwent a training session held by NOA and facilitated by Women for Women International, focusing on best practices in raspberry crop production. A symbolic number of the raspberry canes (1,000) were delivered in April, as demonstration material, to this group of enthusiastic women. NOA has engaged a local adviser to monitor and further advise the women from the Štrpce region (in the villages of Viqaj, Firaje, Brod, Gotovusa) on raspberry crop production. They are monitored weekly and advised by the raspberry grower Muhamet Duka from Firaje village, who was also a NOA beneficiary in 2012 and is now becoming a lead farmer in the region. The women's group's successful management of these micro plots will illustrate the potential of future investments in raspberry production and encourage other women to get involved and invest. (More information on women's trainings can be found in Annex IV.)

- **At least three new raspberry varieties under test by private sector.**

After several meetings and contacts during Q1, the cooperation with ANI Holland did not seem to be productive. During Q2, the program looked to other companies—such as Driscoll's, a 100-year-old American company—to stimulate investment interest in the raspberry sector in Kosovo. Although Driscoll's EU, Middle East, and Africa new business manager expressed interest in coming to Kosovo in May to determine the potential for new investment opportunities in the soft-fruit sector, the firm decided that Kosovo was not an investment target at present. During Q3, given that cooperation with Driscoll's had also not been productive, the program began looking to work with Hargreaves to test new varieties. This was discussed with the international STTA during his visit to Kosovo in June, and the firm was willing to test some varieties in Kosovo with APC or other farmers who have performed well to date on berry production. During Q4, five (5) blackberry varieties were under initial evaluation at APC, while for all other raspberry varieties, a specific license for testing from the patent holders was required. This will be forthcoming during Q1 FY15.



Ms Zirafete Arifi from Brod village in Shterpce managing her raspberry test plot.

During the last weeks of Q4, there was information about a large import of Polka variety plants that was not being routed through APC, the only license holder for the variety. This information was passed to the ministry and KFVA. This will be a very critical test case to determine the ability of the Kosovo institutions to protect license holders of patented materials. Any weakness in dealing with this will cast a very unfavorable light on Kosovo as a destination for the latest protected materials, and will prevent right holders from issuing the necessary testing permits.

ADDITIONAL ACHIEVEMENT

Winter school for farmers in Podujevo region: During Q1, Podujevo farmers and the municipality of Podujevo's Department of Agriculture requested information on raspberry cultivation, based on NOA's experience. In response, in October 2013, a presentation was organized in Podujevo and attended by more than 20 potential growers. Informative materials were also delivered to participants. Winter schools continued in February (during Q2) with a training module on integrated pest management (IPM) and safe-use practices, attended by 30 participants. A local STTA, Fadir Musa, explained how to prevent and treat different raspberry pests and diseases. Musa emphasized the use of chemical alternatives that are less toxic but still acceptable for plant protection. He also stressed the importance of pollination along with the proper application of pesticides in orchards so as to protect bees. A field day demonstrating the planting

techniques for raspberries and training for farmers on how to organize themselves into an association of soft fruit growers was held in late March. During Q3, an association was established initially with the name “Frutat e Llapit”; they later changed the name to “Mjedra e Llapit”. To enable the sustainability of the association, it was agreed that members would contribute to the association 15 percent of the price of the imported raspberry canes. The payment will be done after the crop is sold during Q1 FY 15.

In March 2014, APC Company in Podujevo finalized the establishment of the first licensed nursery for the propagation of raspberry canes in Kosovo. The nursery will provide an opportunity for Kosovo farmers to purchase certified raspberry canes locally, at better prices than imported canes. The company had already been licensed by Hargreaves UK to propagate the Polka variety in Kosovo. This progress was the result of a long-term effort by the NOA project to facilitate the licensing of a local entity to propagate Polka in Kosovo, and to establish the first raspberry nursery in the country. The company will provide quality propagation material locally for farmers who are interested in getting involved in the raspberry sector or expand their existing raspberry plots. While the propagation capacity of the nursery is not large enough to meet demand for raspberry canes, it is a good start and may encourage others to get involved in raspberry propagation. NOA facilitated a meeting with APC, Hargreaves Plants Ltd nursery and interested stakeholders in the soft-fruit sector to give participants a chance to establish contacts and discuss future orders of raspberry, blackberry, strawberry and other soft fruits directly from Hargreaves or through APC for these and other products. As of the end of Q4, orders had been placed to support more than 10 hectares of independent production, for delivery in 2015.



The first licenced raspberry nursery in Kosovo

Soft fruit donor conference in Štrpce: In February, the NOA program supported the municipality of Štrpce in organizing a donor’s conference in order to draw attention to expanding agricultural production in the region, with a particular focus on raspberry production. All major donors with interest in the agricultural sector were represented, and the municipality presented its three-year agricultural-development strategy. The municipality has progressed well as a result, with the provision of one aggregation center supported by Mercy Corps and strong interest being shown by IOM for future collaboration. A private



Rodoljub Mladenovic, of the municipality of Štrpce, presenting its agricultural-development strategy.



NOA participants from North Mitrovica on study tour at the Bojovic cold storage facility in Brezovice/Arilje.

company is in the process of being formed to promote additional centralized packing and grading for the frozen market and is investigating Individually Quick Frozen (IQF) capacity to improve the marketability of product.

Study tour in Serbia: In mid-May, NOA supported the participation of four raspberry farmers and the NOA program fruit specialist on a three-day study tour in western Serbia. The study tour was organized by Mercy Corps for raspberry growers from northern Kosovo and from Prizren (Zupa Valley), Štrpce, Podujevo, and Ferizaj. Participants had a chance to meet and share experiences with raspberry producers in Arilje, and to visit nursery and processing companies and the fruit institute in Cacak.

Cooperation with Agro Red Gold: During Q3, NOA continued to support farmers from the Agro Red Gold Association (a Bosnian minority group) in raspberry production. NOA supported the Agrovjet laboratory in testing soil samples for 32 farmers from Zupa in order to provide a scientifically tailored fertilizer program for each field. Farmers were also supported on a cost-share basis by NOA, the association and Swiss Caritas to attend the International Agricultural Fair in Novi Sad, held May 22 to 25. The visit was reported as useful for the Zupa farmers, as they had the chance to create contacts with those involved in the raspberry industry, including input dealers. They also attended meetings, conducted during the fair, on plant protection materials.

The NOA Chief of Party remains in contact with the Norwegian Embassy, where officials are willing to support Agro Red Gold in expanding soft-fruit production in the region. During Q4, the NOA Chief of Party and technical team organized a visit to Lubinje/Prizren to create linkages between Agro Red Gold and the Embassy of Norway. The Norwegian Ambassador expressed his interest in supporting this Bosnian minority group to establish needed cooling facilities. During Q3, NOA's Chief of Party also met with the management of the newly awarded Advancing Kosovo Together project to discuss value-chain opportunities for minority municipalities. He emphasized the economic opportunities of raspberry production, highlighting the new nursery licensed to produce raspberry-planting materials.

OBJECTIVE 3: FOOD QUALITY AND SAFETY IMPROVED

BENCHMARKS

- **Installation of at least one forced-air cooling system to facilitate fresh export of raspberries.**

The forced-air cooling fan unit that was intended to be installed this year in APC's existing cold storage room was not ultimately accomplished. This came about after the company's having witnessed the fragility and resulting short shelf-life of the fruit during the particularly rainy summer. The company now prefers to work only in the frozen market due to the sensitivity of the raspberry crop. Since it currently exports frozen raspberries to well-established markets in Italy and Germany, the company is happy to continue with this marketing approach in the near term.

- **At least 10 growers trained on GlobalG.A.P.**

During the second week of March, the raspberry producer APC began implementation of the GlobalG.A.P. standard. Two local experts were engaged by the program to support APC in implementing this standard. Since APC will collect product from outgrowers, training on GlobalG.A.P. was also organized for outgrowers in Q3. This one-day training on GlobalG.A.P. was conducted on June 25, with 24 participants attending. The training was held at one of the recently established farms, owned by Muhamet Bryma in Katunishte village in the Podujevo region. The NOA post-harvest specialist presented the certification standard requirements and its benefits. During Q4, APC passed its GlobalG.A.P. certification audit and received certification. Representatives from the "Ceres" certification body, based in Germany, audited APC and determined that the company meets the criteria for this standard.



GlobalG.A.P. training in Katunishte/ Podujevo.

ADDITIONAL ACHIEVEMENT

NOA presided over a ceremony during Q1 during which six farmers received GlobalG.A.P. certification. Among these six farmers were the first two raspberry growers ever to be awarded the GlobalG.A.P. certification in Kosovo (Gege Zefi from Bibaj/Ferizaj and Muhamet Duka from Firaje/Štrpce). The

successful certification of both growers is the result of their hard work over the course of eight months, as well as the direct technical support provided by local experts engaged by the NOA program.

Raspberry processing training for woman farmers – During Q4, NOA organized a one-day training for women from the Podujevo region on raspberry processing. The training occurred in Peran/Podujevo at APC's premises where a woman trainer from IADK, Hafize Veseli, a food technologist, explained in theory and in practice, the hygiene, proper equipment, market requirements and procedures needed to prepare raspberry jam. The 16 participants in attendance included the wives and daughters of farmers who received support from NOA to establish new raspberry fields in the spring of 2014. (More information on women's trainings can be found in Annex IV.)



Women farmers being trained on jam preparation.

1.1.5 BLUEBERRIES

OBJECTIVE 1: PRODUCTS AND FARMERS LINKED WITH MARKETS

BENCHMARKS

- **Cultivated blueberries launched through supermarket chains and a promotional berry event.**



Blueberries on sale at the Albi Mall and Viva Fresh outlets

The initial quantities of blueberries were harvested at the end of June 2014. The total harvest for 2014 was estimated to be 1,000 kilograms, with the volume negatively impacted by the unseasonal cold weather during early flower set. Despite the small amounts of product, NOA decided to launch the product in the market in order to test price, demand, and buyer/consumer feedback.

NOA facilitated linkages with Kosovo's top four supermarkets: Viva Fresh, Albi Mall, Tregu i ri i gjelbert, and ETC. Two top hotels, the Swiss Diamond and Emerald, were also supplied with the initial harvested berries. Interest was high; indeed, demand far outstripped supply. The farmer price was between

€6.5 and €8 per kilogram. NOA supplied the initial standardized packaging, in 250- and 125-gram sizes. Dedicated labels for both packing options were provided by the program as well. Blueberry brochures printed in Q2 were utilized by supermarkets with an aim to better promote the blueberry's nutritional value to consumers. Over the first 10 days of sales, 100 kilograms of blueberries were sold.

- **At least €5,000 sales in street promotions and €20,000 in sales to supermarket chains achieved.**

Due to the very limited quantity of harvest this year, NOA did not organize specific street promotional activity dedicated only to the blueberry crop. However, the program incorporated this crop during the raspberry promotional day in Q4. Promotional materials were available at this event even though product was not on sale, the season's having closed. Supermarket sales were limited, considering only one ton of production constituted the whole harvest over the period of more than three months. Total sales at retail level for the crop during 2014 amounted to €10,000.

- **10 growers attend study tour to the Arilje production area in Serbia.**

Six (6) blueberry growers participated in this 3-day tour, which took place during Q4, visiting production sites in Serbia. Producers visited blueberry plantations and technologies presented to the group highlighted the most practical aspects of the VC development with a focus on the yield maximization and plant health. Growers were able to observe very advanced technologies on a farm producing more than 20 mt of blueberries per hectare and to visit sites where technologies had been poorly adopted, highlighting the critical need for attention to detail in this crop.

As a result of the study tour, growers stressed the need for knowledge coordination as well as for the rapid implementation of certain technologies observed during the study tour. Soil and water acidifying products were identified, as were potential suppliers of these products. Required quantities for the first application of these products were purchased by study tour participants and taken back to Kosovo.

Technologies highlighted during the study tour included:

1. Mulching;
2. Pruning;
3. Soil acidification;
4. Water acidification;
5. Pruning;
6. Virus disease identification symptoms;
7. Shading net cover;
8. Anti-hail netting;
9. Harvesters (mechanical);
10. Berry grading and storing.



Study tour participants visiting one of the best blueberry plantations in Serbia

OBJECTIVE 2: AGRICULTURE PRODUCTS DIVERSIFIED AND INCREASED

BENCHMARKS

- **Blue Gold Association participates in at least two promotional activities.**

The Blue Gold Association, an association of blueberry growers in western Kosovo, arranged farmer “exchange” visits to different blueberry growers during Q3. These allowed participants to exchange experiences as well as promote best cultural practices. In addition, the association organized lectures on soil management. More than 30 growers and interested stakeholders attended the trainings.

The association identified products required for ideal plantation management and contacted potential suppliers, thereby establishing commercial collaboration with them. Fitofarma from Ferizaj has proven to be highly motivated to supply specific inputs for the blueberry crop.

Blue Gold was active in promoting soil acidification techniques following the emergence of severe plant disorders in areas where pH was above the recommended levels. Specific soil samples were taken and analyzed and resulted in a new set of recommendations for areas with such pH problems.

- **At least two local input suppliers providing blueberry-specific inputs during 2014.**

NOA identified Yara, an international agrochemical and fertilizer supplier, during the previously implemented study tour to Poland. Yara currently supplies all of Poland’s large blueberry producers with appropriate fertilizers for this crop. Fitofarma and Agrounion, two Kosovo-based input suppliers, have

shown an interest in collaborating with Yara to develop a blueberry fertigation program in Kosovo. Fitofarma contacted the Ministry of Agriculture, Forests, and Rural Development (MAFRD) to register the new Yara product. In addition, five different fertilizer formulations have been developed specifically for blueberries; one is already in stock. The program's role with respect to this activity has been to educate suppliers and growers on the highly specific fertilizer requirements for blueberry production. Fitofarma and Yara have agreed to organize promotional activities for soft-fruit growers with a focus on fertilizers. Yara has now put on the market specific blueberry products.

A meeting promoting specific fertilization programs for blueberries and soft fruits in general was organized in July, by Fitofarma in collaboration with Yara representatives. Apart from the promotion, training on blueberry fertigation and irrigation was provided by the company. This event, supported by Fitofarma and the blueberry association, constituted an excellent start to private sector lead extension services supporting the soft fruit sector.

- **At least three municipalities co-finance blueberry establishment.**

The municipalities of Gjakova, Junik, and Deçan were partners during Q1 in the establishment of three hectares of blueberries. NOA discussed how to implement this activity with municipal representatives on several occasions. Willingness was expressed by all three representatives to collaborate with a local entity/association that would scale up blueberry production in the respective locations. NOA supported the drafting of a commitment letter between the association and the municipalities; all parties approved the draft during Q1.

During Q2, the municipalities of Junik and Deçan signed a memorandum of understanding (MOU) with the Blue Gold Association, wherein the municipalities agreed to finance the purchase and installation of an irrigation system, working through the association. Municipalities agreed to allocate financial support to the association, which will lead the technical aspects of project implementation and will report to the municipalities. Gjakova municipality did not follow up on the commitment made by the previous local government, citing budget constraints.

The program studied alternatives to project implementation in Gjakova, and identified Podujevo municipality as a suitable region due to its adequate soil and water, interest among growers in new opportunities, and commitment of the local government to establish a raspberry industry in the region.

One grower per municipality in both Deçan and Juniku was selected by the blueberry association and municipality staff to plant one hectare each. Water is available at both sites and an irrigation system was implemented as a part of the municipality's investment. The soft-fruit association has proposed a third grower in Podujevo.

- **At least three new hectares of blueberries planted.**

A RFQ for the provision of improved-variety blueberry, raspberry, and strawberry canes/plants was issued and published during Q1. The APC Company qualified to supply planting materials imported from the United Kingdom. APC eventually supplied 8,400 plants to support the establishment three new commercial hectares. It also delivered to the nursery provider 6,000 two-liter plastic pots and sufficient compost mixture. One-year-old bushes were supplied but were considered too small to risk putting them in the ground in fall as originally planned, since at least one early frost had already occurred. It was decided to identify a suitable site to keep and maintain the blueberry bushes until the spring planting.

Based on his previous experience as a nurseryman, the Blue Gold Association has identified and selected Skender Ramadani (a dedicated soft-fruit nurseryman) to manage the blueberry canes prior to planting out. Plants were transplanted into 2-liter pots and kept in the nursery. Later this fall they will be put inside the greenhouse for wintering over. The association has continued to closely monitor the management and the quality of the plants.



Imported plants in delivery pots and plants transplanted into 2-liter pots

- **At least 5,000 blueberry bushes locally propagated.**

In Q2, 5,000 blueberry cuttings of four varieties were collected from plantations and transplanted in specific rooting media for further rooting. The media, prepared on the instructions of experienced nurseries in Poland, is composed of peat-moss substrate, perlite and sand. Overhead sprinklers were installed to ensure humidity in the poly-tunnels, which is a crucial factor for cuttings to grow, become callused and properly root. This marks the first experience in blueberry propagation in Kosovo, and will be operated by a local nursery. The nursery mother block has been fertilized and the top soil covered with decomposed sawdust. Apart from end rows, all flowers were removed from parent bushes as recommended to enhance better growth and development of the blueberry bushes. In this way, future cutting collection for further propagation will be maximized. To date, two-thousand (2,000) bushes have rooted and are well developed, although are not yet ready for transplanting. This is a considerable achievement as it is Kosovo's first attempt at blueberry propagation.



Prepared bed with proper substrate and planted blueberry cuttings

OBJECTIVE 3: FOOD QUALITY AND SAFETY IMPROVED

BENCHMARKS

- **One local company manufacturing field pack stands.**

During Q3, field pack stands were designed and a RFQ for the supply of the prototypes was initiated. Twelve (12) field pack stands were manufactured and distributed to 8 blueberry growers while 4 stands in the same format were accorded to raspberry growers. Stands have proven to be a good tool supporting good agricultural practice and have been accepted by growers.

- **At least eight growers using field pack stands.**

All 8 growers had the opportunity to work with the field pack stands, and saw the utility in having in-field packing. They also appreciated the benefits of handling the crop just once, from field to final retail packaging.

OBJECTIVE 4: INCREASED AFFORDABLE AND ACCESSIBLE CREDIT

BENCHMARKS

- **One roundtable organized.**

A roundtable discussion was held with 8 growers, one nurseryman and one input dealer in attendance. Leading up to the meeting, the excellent price in the Pristina market for cultivated blueberries has encouraged producers to apply proper crop management practices in order to obtain high (potential) profits. The trip to Serbia has proven that the blueberry crop can be cultivated and can produce very high yields if properly managed. Attention to detail has emerged as a critical point upon which ultimate

success depends. Proper inputs must be identified and in stock so that they can be applied in a timely manner, such that application begins at the correct crop development stage. Much discussion has focused on fertilization and pH regulation. Growers are now fully aware that a combination of foliar feeding with soluble fertilizers at the beginning of the season followed by a fertigation program through drip lines positively impacts plant growth. Recommendations made are as follows:

- Only varieties proven to work under similar agro-climatic conditions should be planted in the future;
- Knowledge transfer remains the most crucial activity;
- Efforts should be made to lobby the MAFRD to list blueberries on the list of crops eligible for support (subvention); and
- Production area is still very small so market development is marginal. Therefore, future developments of the VC must focus primarily on increasing production area.
- **Two winter schools—trainings organized.**

The project identified and prepared the topics for presentation during Q1. The training, held during Q2, covered spring management, fertilizer application, and weeding, as well as fruit management for maximizing yield. The program's fruit production specialist led the lectures.

Booklets covering blueberry fertigation were prepared, printed, and distributed to growers during Q2. In addition, field visits to NOA-support blueberry production sites were used to provide information on topics such as blueberry-specific requirements and fertilizing programs, the best utilization of soil cover between the bushes and proper products to be used. Due to project implementation in different zones in the country, individual growers were encouraged to visit other sites and share their experiences with fellow growers. The program's fruit production specialist facilitated these activities. Lectures and instructions on various growing techniques were provided in the field during four different events.

- **Two spring schools—trainings organized.**

Two spring school trainings were conducted during Q2, including lectures on the importance of soil pH adjustment according to specific needs of the blueberry crop; methods and products to be used to improve and maintain soil pH and soil fertility; the identification of blueberry crop needs for specific product and product quantity calculation; the importance of the right product selection and distribution; and the effect and efficacy of timely use of plant feeding products.

The second part of the trainings was implemented in the field, where various types of soil were checked for pH levels. Growers were trained on how to collect soil samples; how to use portable labs in the field; and how to identify symptoms of nutrition deficiency.

- **At least 25 persons attended trainings.**

In total, 32 people attended trainings during Q2, including growers, interns, and municipality staff. The trainings covered the topics outlined above. During Q3, following these trainings, farmers noted their own increased awareness of the following crop-specific requirements:

1. Not all varieties have shown the same response to the country's agro-climatic conditions. The Duke variety develops slowly compared to other varieties. However, once established, Duke is the best-yielding and highest-quality variety;
2. The ripening during 2014 was very early, due to a mild winter. If such timing is maintained, this offers a huge advantage in the early marketing of blueberries.
3. Soil parameters have to be checked very frequently. The fertigation program must be designed and adjusted according to crop requirements and regular soil tests; and
4. An anti-hail net system would be the best crop insurance.

1.2 VEGETABLE VALUE CHAINS

1.2.1 LETTUCE

OBJECTIVE 1: PRODUCTS AND FARMERS LINKED WITH MARKETS

BENCHMARKS

- **At least 20 mt of bagged lettuce sold.**

Agro Serra has continued to supply existing markets in Kosovo with bagged lettuce. Although still limited, the winter supply has increased, both in terms of production and performance, compared to 2012 and 2013. A significant improvement by Agro Serra was noted in Q2 compared with the same period the previous year. During Q2, Agro Serra sold 2.7 mt of bagged lettuce and baby spinach to local restaurants and supermarkets. Production volume of bagged lettuce during Q3 was 4.1 mt, bringing the total product sold to 6.8 mt. During Q4 the firm further improved production as a result of contracting out growers; 9.4 mt of bagged lettuce and baby spinach was sold during Q4, which is a significant improvement over the same period in 2013 when 2.7 mt were sold. During the year, Agro Serra produced and sold 16.2 mt of bagged salad – falling short of the project target but a significant milestone none the less. The extension of the production season, inclusion of contracted-out growers, the acceptance by the market of pre-cut bagged product with improved shelf life, and now a well-defined marketing strategy sets up the sector for expansion into regional markets in the near future.

- **At least five new market linkages created.**

NOA held a meeting with Agro Serra about the importance of production continuity during Q1, in order to stimulate the production of the product year round. Specific production plans were drawn up with Agro Serra in view of accomplishing this. The firm planned to increase production threefold in the year ahead. Improvement of the market supply from Agro Serra during Q2 is a result of these earlier discussions. The volume of bagged lettuce produced in Q3 was enough to meet demand in existing marketing channels. Targeted new market linkages were identified and implemented during Q4 when production volume was higher. At the end of Q3, Agro Serra had initiated discussions with three new clients, which received supply volumes during Q4. Three new restaurant clients (Taverna Miq, Bambu and Bon Viviani) were identified and supplied with bagged baby lettuce during Q4. The new clients have requested to be supplied twice a week, which Agro Serra agreed to in accordance with specified requirements. Additionally, iced lettuce linkages were created for all Elkos supermarkets in Dukagjini as well as in four other supermarkets in Pristina.

- **At least 500,000 heads of iced/boxed lettuce sold.**

The icing of lettuce started in April (Q3) and continued through early October (end Q4). The promotion of iced lettuce has continued through the implementation of different events organized by the program during that timeframe. Three newly established iced/boxed lettuce lines, at Moni, Freskimi, and Agro Fresh, commenced activities at the end of April 2014. The first delivery of iced/boxed lettuce to the Peja market originated with Moni and was very well received. Moni and Freskimi are supplying the Peja market while Agro Fresh and Agro Serra supply the Pristina market with iced/boxed lettuce. The program provided these four enterprises 125 recyclable plastic containers each to improve the packaging of product and to alleviate any food-safety issues. The boxed lettuce packaging centers were more focused on restaurants, hotels, supermarkets and retail markets where it is feasible to return the plastic boxes. It is important to emphasize that Moni is negotiating with the Elkos Group to supply iced/boxed lettuce to 30 Elkos supermarkets in Kosovo but they only agreed initially to supply those supermarkets located in the Dukagjini area. This constitutes a significant new market linkage.



Opening of the iced/boxed lettuce line at the Moni facility in Peja

550,000 ice boxed lettuce heads were sold during the year. During Q3, 90,000 iced/boxed lettuce heads were sold to various markets. The largest amount of product (460,000 lettuce heads) was sold during the summer period, in Q4. Moni sold the largest amount of iced/boxed lettuce during this period - 190,000 heads, mostly to Elkos supermarkets, restaurants and hotels in the Peja region. Freskimi sold 55,000 heads in the Peja market. The Pristina market - mainly supermarkets Albi, Viva, Interex, hotels and restaurants - was covered by Agro Fresh and Agro Serra with 215,000 lettuce heads sold. Iced/boxed lettuce was well accepted in the Peja and Pristina markets as buyers seemed to appreciate the longer shelf life and improved freshness of product.

OBJECTIVE 2: AGRICULTURE PRODUCTS DIVERSIFIED AND INCREASED

BENCHMARKS

- **At least 6 million lettuce heads produced and sold.**

Thirty-eight (38) lettuce growers benefited from technical advice provided by NOA during FY14. Twenty-six (26) of these are seasonal growers with production orientated to spring and autumn and 12 others are growing as much as possible year round. 6.02 million lettuce heads grown on an area of 50.17 hectares were produced in FY14. These were sold directly without top icing to the market.

Quarter	Volume of Sales (millions of heads)
Q1	0.63
Q2	0.90
Q3	1.50
Q4	3.52

- **At least 50,000 lettuce heads will be produced during the winter period.**

Selman Shala, a lettuce grower from Qyshk, in Peja municipality, volunteered to test winter lettuce production, using his greenhouses as a demonstration site. Shala transplanted and harvested three crops of lettuce. He transplanted 6,500 seedlings in early October 2013 and harvested them in mid-December. Another 13,000 lettuce seedlings were transplanted in late October and harvested in mid-January. A final 13,000 seedlings were transplanted in mid-January, and sold in March. The initial harvest was sold in the Peja market where demand was particularly high. Another lettuce grower in Peja, Izet Kastrati, transplanted 15,000 lettuce seedlings in his greenhouse in the beginning of February. Harvesting of transplanted seedlings from mid-January came earlier than expected due to an unusually warm winter without extreme low temperatures. Lettuce transplanted in mid-February by both growers was harvested and sold in the last week of March in the Peja market, where demand for lettuce was still high. The winter growing technology was applied successfully by growers. Using fleece for covering transplanted lettuce seedlings during the winter production has a positive impact on production and the quality of lettuce produced. The total production in two farms in Peja during the winter season was 57,000 lettuce heads.



Winter lettuce production in Selman Shala's greenhouse.

- **At least 20 farmers sign production contracts with Agro Serra as outgrowers.**

Twenty-one (21) outgrowers were contracted by Agro Serra for lettuce production during FY14. Agro Serra continued to contract lettuce production with two growers, DST Product and Agro Meti, with another four growers starting to supply product as of the end of January 2014. Agro Serra bought 6,000 lettuce heads in December and continued to be supplied by Agro Meti.

The proposed contracting of Serbian community greenhouse growers with lettuce production did not take place due to the warm winter. Farmers had planted their greenhouses with other crops (green onion and spinach, which normally would not have been grown so early). Another three lettuce producers (Moni, Hibridi, and Ferma) supplied Agroserra with 30,000 lettuce heads during Q2. In Q3, two growers were contracted by Agro Serra to produce 20,000 lettuce heads. The contracted growers were Veton Iberdemaj from Istog and Besim Qitaku from Mitrovica with 10,000 lettuces heads each. Agro Serra continued on to identify 10 new potential outgrowers and continued to work with existing ones in Q4. Ten (10) new outgrowers will produce from October to December in greenhouses as weather conditions limit production during this period when market demand is particularly high. Agro Serra provided the lettuce seedlings to outgrowers and NOA supported with technical advice provided through Agroserra. Transport of raw material from the growing area to the packaging center remains Agro Serra's responsibility.

OBJECTIVE 3: FOOD QUALITY AND SAFETY IMPROVED

BENCHMARKS

- **At least 10 lettuce producers will be trained regarding food safety and quality standards (Integrated Pest Management [IPM] & GlobalG.A.P.).**

The international STTA engaged for this purpose, Devon Zagory, provided training on various aspects of food safety to fruit and vegetable processors and to four lettuce-packaging centers. Lettuce packaging centers visited were trained on how to apply food safety and quality standards. Zagory developed a guideline for food safety during his mission in Q2. The developed guideline was translated, printed, and delivered to lettuce growers and to the collection centers at the beginning of Q3. Ten lettuce growers attended the balance of trainings on IPM and GlobalG.A.P, facilitated by NOA local STTA in Q3 when GlobalG.A.P started to be implemented at Agro Serra. During this activity, 10 lettuce growers attended periodically to become more familiar with the certification criteria.

- **At least one lettuce producer will be certified with GlobalG.A.P.**

One hectare of lettuce was certified in FY14 with GlobalG.A.P. Field visits in accordance with the grower's pre-selection process were completed during Q1. The final selection process was completed in Q2. Agro Serra from Mitrovica was selected as the lettuce grower to be certified as GlobalG.A.P. compliant. An internal auditor was engaged to support Agro Serra to ensure it meets implementation criteria and to support certification activities. The last audit on June 5 assumed that Agro Serra has implemented all activities related to GlobalG.A.P certification. The certification body CERES GmbH was invited to do the GlobalG.A.P final certification, completing the audit on June 15. Final certification was delivered at the beginning of Q4.

- **At least two farm cooling facilities will be established.**

One on-farm cooling facility was established by the end of Q3. A second was established during FY14. The first facility established is located in Stanovc i eperm/Vushtri at Agro Fresh, a lettuce grower. The second was established at the farm of Izet Kastrati Raushiq/Peja at the beginning of Q4 after USAID grant approval.

The impact of an on-farm cooling facility on lettuce post-harvest handling is that it significantly increases the shelf life of stored product. Both beneficiaries were satisfied with the technical characteristics of established cooling facilities. OSA Termosistem manufactured the cooling facilities locally. The established facilities are being used for lettuce and other vegetable crops.



The on-farm cooling facility established at Agro Fresh

1.2.2 GHERKINS

OBJECTIVE 1: PRODUCTS AND FARMERS LINKED WITH MARKETS

BENCHMARKS

- **Sign supply contracts for at least 1,000 mt of gherkins**

Contracts signed by farmer-collection centers and processors for the supply of 1,816.6 mt of gherkins have been completely fulfilled during this season. The gherkins were shipped to processors, who were satisfied with product quality and timing, even though delivery was a little late due to cold weather at the onset of the season. Euro Tac delivered product to ABI Progress, Eurofood, Mix Produkt, and Shala Produkt, while Tarimci Dernegi of Mamusha (TDM) sold its gherkins in fresh markets, hypermarket chains and wholesale markets. NOA specialists linked the Serb minority association MDJ from Gracanica with processors and advised them on the cultivation of gherkins using the high trellis system.

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

During the year, NOA facilitated and implemented in the field 106 contracts among farmers, collection centers and processors. All parties remained satisfied with the quality of gherkins, their calibration and delivery as well as with payment parameters. The gherkins sector is in a good position to continue

sustainably based on progress to date and market demand. Farmers expressed interest to grow more and to contract their production.

- **At least two roundtables held, with the participation of a wide cross-section of value chain actors.**

NOA organized three roundtables with farmers of Mamusha and Neperbisht villages, collection centers and input suppliers to discuss the outcomes of cultivation, contractual engagement and other delivery and supply issues among farmers, collection centers and processors. Outcomes indicated that the crop is well established, that the relationships with and perception of the collection and grading centers is accepted by all, and that input supply is now effectively able to respond to all grower needs. Provided the market continues to upgrade its supply contracting, and matches this with its own forward programming, gherkin production is certainly at the point of commercial take off. Yields have been rewarding to growers despite the season's disease pressures. This year's performance, reaching almost 180 percent of targeted sales indicates the general success of NOA's efforts to support this value chain.

- **Sales of Collection Centers (CCs) will increase by at least 25 percent**

This benchmark has been fully achieved, taking into consideration that during 2013 the collection centers realized sales of a total of 510 mt of product, whereas during 2014 the collection centers realized sales of 675 mt. This equates to a sales increase of 32.35 percent. Of note is the fact that this year more than 60 percent of total sales were conducted outside of collection centers, through green market sales (a function of the late start to the season, which coincided with higher demand from household buyers) and direct supermarket and wholesale market contracts for product.

- **Training on strategic sourcing of raw material for at least five processors is completed**

In May, NOA engaged Saso Ristevski, the head of the Macedonia Processors Association, to deliver a presentation to Kosovo's PePeKo during a roundtable organized and sponsored by the program. Participants representing the 7 members of PePeKo engaged in discussions regarding capacity building of the processors' association and sourcing of raw materials. A specific topic was the standards of classification of the top vegetable crops grown in Kosovo – a topic that PePeKo will continue to develop in the future as it drives the industry to a competitive position.

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

This benchmark was achieved during Q4. Five participants (two of whom were representatives of PePeKo association) attended a study tour in Germany. Other intended participants were not able to attend the study tour due to difficulties experienced when trying to obtain the necessary visas. The study tour highlighted opportunities for further development of the gherkins sub-sector, specifically of pickle production. The tour set the stage for initial discussions between PePeKo and Hengstenberg, the largest pickle processor in Germany. Areas of cooperation could include supplying Hengstenberg with semi-processed product or processed product that meets its strict quality criteria.

- **At least one visit to a regional trade fair for members of PePeKo and CCs**

On July 10-11), the NOA program organized a study tour to Macedonia and Albania. Details are reported under the field vegetable section of this report.

- **At least five bimonthly meetings of the PePeKo association held**

This benchmark was achieved during Q3 and Q4. Bimonthly meetings of PePeKo were critical to the development of member services, and ensured that the association continued to move toward sustainability throughout the year. To that end, NOA engaged regional consultant Saso Ristevski to assist in the development of the association and facilitate the development of its five-year strategy. The association has so far held two bimonthly meetings. During Q4, the association conducted the interviews and contracted an executive secretary, who was trained by the regional consultant and will be organizing further meetings.

- **At least three meetings of Collection Centers as a group conducted.**

This benchmark was achieved during Q4 by having several direct meetings with collection center representatives in Mamusha, Neberbisht-Suhareka, Bellacërk-Rahovec and Mogilla-Klllokot. Meetings outlined the state of the industry, progress made thus far and discussed opportunities for expansion in the year ahead. The linkages between processors and the collection centers as well as the services offered to contract growers remain as critical issues that require further discussion and refinement in the coming season.

OBJECTIVE 2: AGRICULTURE PRODUCTS DIVERSIFIED AND INCREASED

BENCHMARKS

- **At least 10 women farmers planted 0.2 hectares each with gherkins**

During Q3, a local company contracted by NOA, distributed all inputs to 15 gherkins beneficiaries - women farmers from different regions of Kosovo. Those beneficiaries planted 0.2 hectare (0.49 acre) each.

Field day. On Friday, Aug. 29, NOA staged a field day on the farm of Selvete Fetahu, in Sfeqël/Podujevo, gathering regional municipal extension agents as well as vegetable lead farmers from the municipality and other vegetables farmers. Thirty-nine (39) farmers attended this field day along with new growers who had expressed interest in growing gherkins in the coming season. This marked the first time that the farmers from the Podujevo region were able to see in practice the production of gherkins using the most advanced production technologies, such as planting seeds in module trays with high-quality substrate, using black plastic mulch, drip irrigation systems for



Mrs. Selvete Fetahu, host farmer during the gherkins field day held in Sfeqël, Podujevo.



The gherkin cultivation process using best agriculture practices: seedling production on trays, drip irrigation, fertigation, black mulching and the high trellising system

fertilization and employing a high trellising system in open fields. Gherkins prices have been excellent and the host farmer has been thrilled with yields and sales price.

Farmers finalized the harvesting of gherkins and reported no problems this year in selling their output to processing companies, collection points and supermarkets. Farmers did face problems with downy mildew and anthracnose, two fungal diseases, as well as with insects and pests such as aphids and mites. NOA recommended appropriate remedial action to be taken in all cases.

Farmer visits: The NOA technical team made regular visits to farmers in different regions of Kosovo, where they are growing gherkins with program support. The farmers are now at the end of the season, and are wrapping up the harvest for the year. Due to this year's frequent rains and high temperatures, farmers faced severe problems with fungal disease caused by downy mildew. NOA staff and local STTAs engaged by the program recommended farmers use pesticides/fungicides, which led to an improvement in the overall situation on most farms.

- **At least 10 farmers from minority ethnic groups planted 0.2 hectares each with gherkins;**

NOA technical staff performed several visits to farmers from minority groups in different regions of Kosovo. During these meetings, NOA selected seven minority farmers that planted 0.2 hectares of gherkins each, during 2014.

A table showing all gherkin beneficiaries supported by the program in 2014 is provided at right.

Gherkin yields for the 4 hectares across all beneficiaries were 83,198 kilograms. This is an excellent result, taking into consideration the difficult climatic conditions that were experienced this year in Kosovo. Average yield exceeded 20 mt/hectare, with better growers achieving up to 50 mt/hectare. This result was achieved in the space of 90 days from planting. The farmgate price this year of 30-45 Euro cents/kilogram, providing gross revenues to farmers of up to €15,000 per hectare. Critical to these impressive results was the implementation of new production technologies linked to the overall improved cultivation of gherkins in open fields as introduced by the

No.	Farmer/Company	Location	Area/ha	Yields per plot	
1	Blerta Maliqaj	Klinë	0.2	3,000 kg	Albanian women farmers
2	Emine Morina	Loxhë, Pejë	0.2	5,390 kg	
3	Nurie Gashi	Bellacërk, Rahovec	0.2	11,000 kg	
4	Elvane Gashi	Bellacërk, Rahovec	0.2	7,500 kg	
5	Feride Shehu	Krushë e Vogël, Rahovec	0.2	10,240 kg	
6	Selvete Fetahu	Sfëqël , Podujevë	0.2	6,650 kg	
7	Mirvete Mexhuani	Dumosh, Podujevë	0.2	1,000 kg	
8	Nefise Gashi	Breznicë, Obiliq	0.2	1,111 kg	
9	Feride Ismajli	Komogllavë, Ferizaj	0.1	1,000 kg	
10	Gjevrije Elezi	Rakaj, Ferizaj	0.1	1,000 kg	
11	Zyrafete Qerimi	Komogllavë , Ferizaj	0.1	750 kg	
12	Bahrije Salihu	Komogllavë , Ferizaj	0.1	1,230 kg	
13	Shahadije Zharki	Ferizaj	0.2	3,260 kg	
14	Doruntina Jashari	Nakaradë, F. Kosovë	0.2	1,500 kg	
15	Ajete Ademi	Shtuticë, Drenas	0.2	1,217 kg	
16	Heteme Kukaqi	Bernjak, Rahovec	0.2	4,500 kg	Farmers from minorities
17	Sasa Jerinic	Verbovc, Klllokot	0.2	3,900 kg	
18	Sinisa Masic	Verbovc, Klllokot	0.2	3,100 kg	
19	Svetlana Stevic	Mogillë & Gracanice	0.2	5,000 kg	
20	Bozidar Denic	Kufce, Novobërde	0.2	4,350 kg	
21	Zoran Jovanovic	Partesh	0.2	2,550 kg	
22	Zoran Sosic	Pasjan	0.2	3,950 kg	
Total			4 ha	83,198 kg	

program. These technologies include: seedling production on trays, drip irrigation, fertigation, mulching and the use of the high trellising system.

- **At least 1 new minority area begins contracting supply to processors**

The program selected farmers from minority groups in different regions of Kosovo and supported them with all the necessary inputs for planting gherkins. There were 7 minority farmers who planted 0.2 hectares each of gherkins during this season. New minority areas of production include for the first time, Partesh, Pasjan and Novobrdo.

- **At least 1 input supplier introduces new embedded extension service**

Local company Fitofarma from Ferizaj/Urosevac now provides full technical advice to all gherkins producers concerning best practices in seedling production, trellis systems and the importance of using this system in order to produce higher qualities and quantities of gherkins. The company has grown significantly this year with respect to its ability to provide technical advice and services, and is now the best input supplier serving the needs of gherkin producers and producers of other new products. The firm has aptly taken on board new technologies, sourcing of commercial supplies and has involved itself in new product promotion at every possible opportunity.

- **At least 2 processors supported with improved infrastructure**

The program has supported one small processor, ‘Fitimi’ in Drenas, to improve its infrastructure and storage capacity. This has enabled the processor to improve food safety and increase sales. This activity was completed during Q3. As part of the collection center development program, NOA assessed the situation regarding the lack of adequate packing boxes and supported another collection center, “Shala Produkt,” in the village of Neperbisht in Suhareka, to introduce plastic bulk boxes for gherkins. Rizona was also supported in Q4 with pickling barrels designed to increase its processing capacity, presently dedicated primarily to pepper processing.

OBJECTIVE 4: INCREASED AFFORDABLE AND ACCESSIBLE CREDIT

BENCHMARKS

- **At least one roundtable organized**

One roundtable was carried out with representatives of TEB Bank and the biggest input dealers operating in Kosovo. The roundtable discussion presented the TEB Agro Card and pointed out the new business that this might create for input suppliers. In Q2, the program facilitated a meeting between input suppliers and TEB and provided the latter with a list of all input suppliers in Kosovo. Participants at this roundtable discussed opportunities to provide financial services to actors working across the gherkin value chain. Initial interest from input suppliers was very high and this roundtable discussion generated significant interest from input dealers in the new financial product launched by TEB.

- **At least one financial product refinement concluded for fresh produce & processors**

TEB Bank launched its Agro Card during Q2, which has subsequently supported contracted gherkin growers. NOA supported TEB to draw in qualified input suppliers as well as borrowers. See details of this activity and the Agro Card provided under the section of this report that focuses on Improved Access to Finance.

1.2.3 ASPARAGUS

OBJECTIVE 1: PRODUCTS AND FARMERS LINKED WITH MARKETS

BENCHMARKS

- **Distribute 5,000 promotional brochures to final consumers and buyers.**

The program designed two types of asparagus brochures. One contains general information on the asparagus crop, including its history, economic value, nutritional values and production in Kosovo, all meant to highlight the benefits of producing and consuming this vegetable. The other contains recipes targeting shoppers at retail chains. The program printed 6,000 brochures during Q2 and distributed them all in Q3 at several promotional events and venues, including the Swiss Diamond product launch event, street promotions, and wholesale and retail market points.

- **At least three linkages with local buyers created.**

Activities to link producers to local buyers started in Q1 and Q2 and continued through Q3. The program ultimately succeeded in establishing 15 market linkages with local buyers and two neighboring counties: Albania and Montenegro. Linkages were created with six large supermarket chains: Albi Mall, City Hipermarket- Era, Viva Fresh Store, Maxi, Interex, and Tregu i ri i gjelbert. Two wholesale traders who played an important role in distribution of the product were Osman Fejza and Gazi. Top hotels and restaurants buying NOA-promoted asparagus were Swiss Diamond, Gresa, Basilico, Image, Gizzy, and many more. A key role in market distribution and development was played by Agro Serra, an asparagus processing company and local market distributor. In addition, there were also dozens of mom-and-pop stores selling locally grown asparagus.

- **At least €15,000 in sales concluded.**

The sales benchmark was set based on at least five to six mt of expected harvest; however, this year, producers harvested only 2.7 mt of asparagus. A lack of attention to detail by some growers and reduced plant populations, reduced overall performance. The better growers however achieved the target 5 mt per hectare sold. That entire amount was sold in local markets at a wholesale price of €4.5 per kilogram. Total farm gate sales were €12,150 (ex-collection centers) for the year; the retail margin was €3.5, which generated additional sales of at least €8,000, equal to total €20,150 in sales. Market acceptance was excellent, and the quality of the product and packing standards were on par with international practices.

- **At least one export supply contract executed.**

In order to ensure that the Kosovo product meets international market expectations and that it can enter demanding European markets without issue, a full packaging solution was developed. During Q1, NOA initiated the design of promotional and packaging materials for asparagus. These included labels, plastic bags, cardboard boxes, and rubber bands. During Q2, all promotional materials were finalized and printed/produced reflecting top quality and design. A local asparagus branding concept was created, along with a local brand name (“Viridis”), and incorporated into all packing and promotional materials (see picture on the next page).

During Q3, NOA delivered sample asparagus product packages to Holland and Sweden. The reaction to the quality of the product and packing standard was excellent. Because of the limited amount of harvest



Asparagus packages, brochures and labels.

this year NOA could not support export trials with these countries beyond sample deliveries. However, some trial export was conducted with Albania and Montenegro (around 45 kilograms shipped and sold there), giving us an indication that potential markets can be developed in coming years with neighboring countries. In addition, this year NOA obtained a written offer for 19 mt of asparagus from another buyer, MK Trade International AB of Sweden.

ADDITIONAL ACHIEVEMENT

- **Import substitution and increased local demand.**

Over the six to eight weeks of local product harvesting, no imported asparagus was present on the local market. NOA considers this a great achievement. The initial assessment of local asparagus consumption was around 500 kilograms per month, while actual sales of 2,700 kilograms were seen over a period of less than two months. Thus, local market demand almost tripled with the launch of domestically grown product. During NOA’s street promotion, the majority of buyers were trying asparagus for the first time.

- **Increased awareness for local asparagus consumption: promotional activities.**

The program initiated additional promotional activities during Q3 in order to accelerate demand and promote asparagus to local traders and consumers. The following three activities are to be highlighted.

Swiss Diamond promotional event: In order to further promote asparagus production and consumption, the NOA program organized an event at the Swiss Diamond Hotel on April 18, 2014, gathering more than 100 people, to promote Kosovo-produced asparagus. The gathering was an opportunity to introduce Kosovo-grown asparagus to hoteliers, restaurateurs, and retail traders, as well as to members of the international community living in Kosovo. Several recipes containing asparagus were prepared by Head Chef Vito De Angelis and tasted by participants. The USAID mission director and the Minister of Agriculture gave supporting remarks. The event was covered by the mainstream media.



Asparagus bunching with branding

Street promotion activity: NOA organized a four-day asparagus street promotion activity at Zahir Pajaziti Square (May 5 to 8, 2014), where the main asparagus processor and distributor, Agro Serra, had a chance to communicate and sell to consumers, as well as promote the nutritional values of asparagus through brochures. The aim of the activity was to increase consumer demand, heighten consumer awareness about the benefits of asparagus, and promote both its nutritional value and production opportunities.



Asparagus street promotion at Zahir Pajaziti, Pristina May 5-8, 2014

Cooking Shows: NOA engaged Chef “Linda” a household name in cooking presentations, to prepare the asparagus recipe brochure, which also resulted in the product’s being featured on the cooking shows broadcast on KTV followed by RTK and RT21. Each show highlighted various asparagus recipes and the health benefits of asparagus. The effect of these TV cooking shows was noticed during the promotional days, where many interested buyers mentioned that they were first introduced to asparagus through these programs.

- **International food fair in Tirana: Asparagus export promotion.**

In addition to local promotional and linkages activities, NOA organized and supported the participation of four woman farmers in the international food fair in Tirana. Of the four, two were asparagus farmers/processors. The fair was organized by the French and Albanian Ministries of Agriculture and took place on April 25 and 26, 2014. Since asparagus and saffron are NOA’s top export priority products, the program chose to support the women’s booth with these products. Visitor interest was high for asparagus; special visitors to be mentioned include the French ambassador in Tirana and the Minister of Trade and Industry from Kosovo. Around 45 kilograms of asparagus were sold and promoted during these two days; market acceptance and visitor feedback were both excellent.



International food fair in Tirana: The French Ambassador in Tirana with USAID/NOA asparagus farmer Qefsera Vuqiterna, visiting the program-sponsored booth with three woman farmer beneficiaries.

OBJECTIVE 2: AGRICULTURE PRODUCTS DIVERSIFIED AND INCREASED

BENCHMARKS

- **At least 11 asparagus producers trained and advised on crop management.**

During Q1, the project organized winter school trainings to increase knowledge among different stakeholders involved in the asparagus value chain. The trainings covered best agricultural practices for asparagus cultivation. Twenty-two (22) participants attended the training, including four municipal extension agents, eleven asparagus growers, two vegetable producers from the Pristina region, three input dealers and two students from the Faculty of Agriculture. NOA’s vegetable production specialist covered the following topics:

- Good agriculture practices involved in asparagus cultivation, fertilization, and irrigation;
- Control (management) of key pests, diseases, and weeds that menace the asparagus crop; and
- Harvest and post-harvest handling procedures and storage of asparagus.

After the dormancy period in Q3, the program provided additional trainings for asparagus growers and other interested stakeholders on technical issues related to open field cultivation to broaden local knowledge related to the production of asparagus, a new crop for Kosovo. Training for asparagus growers was provided by international and local STTA. The engagement of STTA took place at the beginning of Q3 when asparagus started to break its dormancy. The training period coincided with the harvesting

period. A volunteer consultant, Robert Morris, was engaged at the beginning of Q3 to provide practical training on harvesting and post-harvest handling of asparagus grown on the 11 hectares planted in 2012 and 2013 and to provide advice regarding export and domestic sales promotion. Moreover, he provided hands-on practical training in open-field harvesting, grading, sizing, bunching, pre-cooling, cold-chain management and quality assurance.

Training was implemented with 11 growers, two local nurseries, public extension agents, input suppliers and one new post-harvest packinghouse that have the capacity to produce, or assist in the production of high-quality asparagus for sale in both the EU and Kosovo markets.

Robert Morris also provided practical training to growers and packers on harvesting, packing and projecting asparagus crop productivity in terms of expected quality and quantities that should be saleable in 2014 and 2015. On-going training and technical advice was provided to 11 asparagus growers throughout Q4, by local STTA engaged by the NOA program. This training, provided mainly through field visits and the provision of recommended interventions, focused mainly on topics directly related to production such as weed control, pest and disease management, fertilization and irrigation.

- **Up to six asparagus growers will participate in a study tour to Italy or Greece.**

The study tour for asparagus growers planned for Q2 was canceled due to a realigned budget for the asparagus value chain. The project felt that the study tour would not add sufficient value so the budget for asparagus was refocused on post-harvest, marketing, packaging, and promotional activities.

- **At least four public extension agents will be trained on production techniques and plant protection (IPM implementation).**

Four public sector extension agents attended winter school trainings organized by NOA during Q1 and Q2. The purpose of the trainings was to increase knowledge among public advisers and to enable them to support asparagus growers when it comes to good agricultural practices. Four public extension agents attended in-field trainings on asparagus harvesting techniques and, in Q3, on other topics related to post-harvest activities. Farmer-to-farmer volunteer Robert Morris led the training during his mission in Kosovo.

- **At least three input suppliers will attend asparagus production winter school program.**

Three interested input suppliers attended the winter school training for asparagus production during Q1. They were very active during the training and expressed their interest in identifying and supplying specific inputs related to asparagus production. These input suppliers have been actively supporting asparagus growers and continued to stock asparagus-specific inputs during Q2. Three input suppliers attended field training in Q3 together with growers and other stakeholders.



Winter school training on asparagus production.

- **At least 25,000 asparagus seedlings will be produced independent of NOA grant support by asparagus nurseries.**

The three nurseries contracted by NOA to produce asparagus crowns for asparagus growers were contacted during Q2, to discuss their ongoing interest in independent asparagus crown production (that is, without ongoing project support). Two nurseries, Fidanishtja e Godancit and Agro Serra, expressed their interest in continuing to produce asparagus crowns. Fidanishtja e Godancit bought two kilograms of asparagus seed from the U.S., of which 0.5 kilograms was sown in February, during Q2. The asparagus seedlings produced in two nurseries (10,000 seedlings) will be used for promotional purposes initially,

ensuring that the market is aware that locally produced asparagus plants are now available. The nurseries now have sufficient experience and inputs (asparagus seeds) to produce asparagus crowns on a commercial basis, in response to market demand. The seedlings produced in the two nurseries were sold mostly to gardeners. The promotion focusing on asparagus in Q3 resulted in an increased awareness among farmers of asparagus production. Commercial growers have not contacted nurseries for their engagement on commercial asparagus seedling production. The nurseries will continue their activity however on asparagus seedling production and will promote planting material for gardeners for the coming season with the same volume (10,000 seedlings) and will continue to seek opportunities to start crown sales on a commercial basis. Farmers have seen the opportunity to grow their own crowns on site.

ADDITIONAL ACHIEVEMENT

- **Scaling up of asparagus, 16 new hectares will be planted.**

Asparagus promotion events held in Q3 had the effect of increasing farmers' awareness of asparagus production. Following strong demand from growers to engage in asparagus production, the NOA program prepared and published an RFQ to procure 15.4 kilograms of asparagus seeds of four different varieties during Q3, soliciting bids from interested local input suppliers. A local supplier, Agrofarma, was selected by the end of June, with the delivery of asparagus seeds initially anticipated by the end of July. The selection of eight new asparagus growers was done in mid-August and seeds were delivered to the growers by the end of August. Seeds delivered to the eight potential growers should suffice to plant out 16 new hectares with asparagus. The seeds were planted in trays and beds to produce seedlings that will be transplanted into open fields in the early spring of 2015.

Growers will cover this spring the costs associated with asparagus seedling production, land preparation, the installation of necessary irrigation systems and other activities involved in the establishment of 16 hectares of asparagus. Based on field observations, the plants are in very good condition without any symptoms of pests or disease. Transplanting will take place in the spring of 2015. Asparagus, a completely new crop in Kosovo introduced by NOA, is now set to cover 26.6 hectares in 10 municipalities with 17 active growers. Based on yields experienced to date, this area will be able to produce up to 100,000 kilograms of market-ready product and will provide a commercial basis for expansion in the future. Plans for asparagus production are presented in the table below.

Planned area established with asparagus by year and municipalities

Nr	Municipalities	2014	2013	2012	Total area	Growers
1	Istog	4	2		6	4
2	Drenas	6			6	2
3	Peja	4		1	5	2
4	Lipjan	1		1	2	2
5	Podujev	1			1	1
6	Kamenic		2		2	1
7	Vushtri		2	0.5	2.5	2
8	Prishtinë		1		1	1
9	Mitrovicë			0.5	0.5	1
10	Obiliq			0.6	0.6	1
11	Total	16 ha	7 ha	3.6 ha	26.6 ha	17

OBJECTIVE 3: FOOD QUALITY AND SAFETY IMPROVED

BENCHMARKS

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

The planned post-harvest handling and food safety training was completed during Q3 with 11 asparagus growers receiving training from volunteer Robert Morris. The training focused on harvesting, post-harvest

handling and food safety protocols. Morris' technical report was translated and delivered to asparagus growers at the beginning of Q4.

- **One food-safety guideline developed and distributed.**

International STTA Devon Zagory developed a guideline for food safety during a mission conducted in Q2. This food safety guideline is not specific to asparagus, but covers all aspects of food safety for processors of fresh product including asparagus, with special emphasis on water quality and sources of contamination. During Q3, the guideline was translated, printed and delivered to asparagus growers and collection centers. Volunteer Robert Morris together with regional STTA Vladimir Kukarev developed specific guidelines for food safety for the asparagus collection center. The material was translated and delivered to the asparagus collection center.



The ceremony marking the opening of the asparagus collection center in Reznik/Vushtrri.

- **At least one hydro-cooling line established.**

The NOA program prepared and published a RFQ to procure a hydro-cooling line for asparagus during Q1, soliciting bids from interested local vendors. NOA worked extensively with potential local fabricators to determine their capacity to produce the equipment locally. A supplier was selected by the end of January, with completion of the hydro cooler initially anticipated by the end of Q1. In addition, a RFA was released soliciting applications from potential recipients of this equipment. Fabrication was completed and installed in the first week of Q3. The asparagus collection center was completed on April 20, 2014. Local fabricator OSA Termosistem manufactured the hydro cooler and sealing machine. The machinery was tested and workers were trained on its operation. The line was installed in time for receiving harvested asparagus from growers. The opening ceremony was organized during the first week of May. The established line fulfills all technical and food safety requirements for the cooling, packing and storing of harvested asparagus and will substantially increase the shelf life of harvested asparagus. It will also bring all growers together under the collection center where it is installed. Collaboration between the collection center and growers has been good to date and is expected to continue and expand in the coming harvesting season.

1.2.4 MEDICINAL AND AROMATIC PLANTS (MAPS), INCLUDING SAFFRON

OBJECTIVE 1: PRODUCTS AND FARMERS LINKED WITH MARKETS

BENCHMARKS

- **At least five kilograms of the 2013 saffron crop sold into markets at a price point agreeable to growers.**

The first quarter of this year was significant in terms of the quantity of saffron sold. A total of 1.5 kilograms were sold at an average price of €5.3/gram. Sales volumes linked to yield increases are promising, with prices remaining highly variable, ranging from €3.5 to €10 per gram, depending on whether sold wholesale or retail. New markets have been identified in Albania and Belgium, as a result of

a public launch of Kosovo-grown saffron held during an event in Brussels. Six-hundred (600) grams have been sold on consignment in France with final pricing still to be determined. The remaining three quarters of the year registered no significant sales, with only small amounts, between 200 and 300 grams, sold, mainly in Kosovo and Albania. Therefore total documented sales for this year are 2 kilograms, totaling €11,332. Farmers are holding stocks, still hoping for increased prices. They remain reluctant to lower their price expectations.

- **Total saffron sales exceed \$20,000.**

The 1.5 kilograms in saffron sales for Q1 were worth €7,060 (\$9,900); this should be compared with just over €5,000 in sales for all of 2013. Despite a good start in Q1, saffron sales were symbolic in the following three quarters through September 2014. Total sales for this year were 2 kilograms, worth in total €11,332 (\$14,441) or 70 percent of target. As a consequence, our project target was not reached. One of the main reasons for the relatively low sales is the high expected price per gram of €10. Documented sales come from two farmers who sold all of their 2013 harvested crop, at a more reasonable price of between €3.5 and €7 per gram. That is still a very good price compared to the average international wholesale price of €2 per gram. The quality of the Kosovo saffron crop, based on an analysis conducted in the U.S., confirms that this season's product ranks in the superior class.

- **At least \$500,000 cultivated MAP sales.**

The strong sales of cultivated herbs reported during Q3 is ongoing, due to the increase in overall cultivated area. Both new and common herb species are being cultivated in response to high demand by EU processing companies. The success in chamomile sales stems from increases in area and yield and have done much to boost overall sales of MAP products. The visits paid to Kosovo by many EU processing companies during the year (specifically after the Biofach trade fair) has led to the increase in sales of various herb crops. The visits also served to increase confidence levels among existing farmer/producers, prodding them to increase production. The interest also has encouraged new farmers to become involved in herb cultivation.

In Q3, producers continued to enjoy strong sales; MAP sales, excluding chamomile, totaled \$531,000. Cultivated chamomile sales occur mostly in late spring, followed in summer by other herb crops, such as peppermint, marshmallow and melissa/lemon balm. These latter sales also include various wild species such as primrose and yellow gentian (see the below table). Meanwhile, more sage was planted in the fall, as production expanded to other areas on the Dukagjini plain. Sage, a perennial herbaceous crop, continues to contribute to the targeted sales objective, increasingly attracting buyers from international markets. Yields and growing market opportunities are increasing farmer confidence in the cultivation of these herbs (again, sage in particular). Cultivated MAP sales throughout 2014 (including Q4 sales) are reported to be \$750,000. Sales for this year will be finalized in Q1 of 2015, after the harvest and marketing seasons are complete.

The NOA project team has paid a number of visits to Klina municipality, where officials have expressed a strong interest in establishing a chamomile center of production. The viability of this proposal depends on the contribution to be made by the municipality; the exact amount budgeted will be determined during Q1 2015. The success of the chamomile crop is essentially the driving force in increased interest from municipalities to enter the production process.

As demand for herbs cultivated in Kosovo continues to grow in high-value EU markets, 20 well-known herb processing companies from Germany, Switzerland and Austria are now being supplied with locally produced herbs. Chamomile remains the most important individual crop by volume and value, followed by common mallow (black marshmallow), sage and other herbaceous crops. The area under cultivation continues to expand as these crops offer attractive returns, even when grown on small plots.

- **At least two new market contacts made through BioFach trade fair.**

European market demand for, and interest in, Kosovo's MAP products remained high throughout the year. Field visits led by sales managers and herb specialists from EU processing companies, both before and during the harvest of chamomile and other early maturing cultivated herb crops, clearly indicated the

growing potential of new market contacts. A visit by German herb specialist Juergen Serr to APS, collection centers and individual herb farmers demonstrated the increased interest among EU processing companies in those cultivated herbs presently grown in Kosovo as well as in various new herb species being eyed for local production.

Due to continued European market demand for, and interest in, Kosovo MAP products, business visits by processing companies initially contacted through BioFach 2013 have increased in frequency. A visit during Q1 by Marcus Baehler, an herb marketing specialist from Germany authorized to buy organically certified MAP crops and products for several processing, medicinal and food industry companies, highlights this growing demand. The second visit during Q1 was from an herb specialist from Austria, Joachim Kowalski (previously employed by ‘Sonnenetor’), who has offered to facilitate new sales contacts between APS in Istog and herb buyers in the German and U.S. markets.

During Q2, a joint visit along with the APS company to the world’s largest organic fair once again confirmed demand for cultivated and collected herb species. Business meetings planned before the trip with the 20 most important sector-specific processing companies, including U.K. and U.S. companies, have led to the best contracting results ever for a single Kosovo-based company working in this sector. The overall contracted sales of APS with EU companies have reached the value of €2.4 million. This is a 250 percent increase compared to APS’s sales concluded in 2013. The increased demand is resulting in a rise in prices for Kosovo product. This visit also highlighted two new opportunities for the sector: the introduction of additional efficiencies through the addition of renewable energy sources for herb dryers and the potential introduction of cost-effective essential oil distillation technologies for small- and medium-scale aromatic oil production in Kosovo. Inbound visits to the processor continued during Q3 and demand continues to rise. This has confirmed without doubt that the cultivated MAP products being promoted by the project will continue to find a place in the European market.

The importance of the BioFach trade fair for the MAP sector in all its facets, but specifically marketing, is unquestionable. As reported above, following the BioFach fair, 20 herb-processing companies from EU bought product from NOA-supported producers. Much of this can be attributed to the presence of the company at the BioFach fair.

- **At least one promotional activity for saffron concluded.**

In Q1, in order to further promote Kosovo-grown saffron and target export markets, NOA worked with Kosovo’s Ministry of Foreign Affairs (MFA) to include saffron in the Ministry’s end-of-year promotional activities that target the foreign embassies and delegations in Kosovo. This initiative was very well received by the MFA (particularly by the General Director, Ambassador Albert Prenkaj). On Dec. 12, 50 exclusive packs of saffron were delivered to the MFA by producer “Saffron & Co.” Included in this delivery were English-language brochures that highlighted Kosovo-grown saffron and a mini documentary on saffron production, both provided by NOA. NOA supported the glass packaging while the MFA procured the saffron directly from the producer.

In Q2, on April 25 and 26, 2014, NOA organized and supported the participation of four woman farmers in the international food fair in Tirana. The four included one saffron farmer. The fair was organized by French and Albanian Ministries of Agriculture and lasted two days. Visitor interest was high in the Kosovo-grown saffron in particular; special visitors to be mentioned include the French ambassador in Tirana and the minister of trade and industry from Kosovo.

Cooperation between NOA and the MFA continued in Q2 as the two parties planned to jointly organize future B2B meetings, either in or through targeted Kosovo embassies in France, Italy and in one of the Nordic countries. The national election process slowed this relationship and no further meetings were held during Q3 or Q4 as the national government failed to form and no decisions could be made with regard to new initiatives. The saffron growers settled into a slow selling pattern in Q3 and Q4, realizing that the product would not find instant higher volume sales. Growers were satisfied to wait and slowly sell their product in higher-priced retail markets. At least one grower has started to sell corms (saffron bulbs) into the market after 3 years of in-field multiplication. So far, 320,000 corms have been sold at a price of €0.05 each. These sales represent at least 1 additional hectare of planting.

- **At least one export sales contract for saffron concluded.**

Q1 saw three different export sales: two separate sales in Belgium, worth €3,850 and €2,500, respectively, and a third sale to Albania valued at €710, for a total of €7,060 in export sales for this quarter.

Export 1: In November, 2013 as a result of a prior export linkage meeting facilitated by the NOA program, a NOA-supported farmer, Imer Duraku, sold 1.1 kilograms of saffron to two Belgian buyers, Anita Vankan and Arber Gerlica. Imer sold his entire 2013 harvest at a price of €3.5/gram, realizing €3,850 in sales in one day. Anita Vankan and Arber Gerlica are very serious buyers and showed interest in buying all of Kosovo's 2013 harvest. However, a majority of local farmers did not accept their offered price, even though it was a very good wholesale price when compared to prices in Switzerland and in the U.S.

Export 2: Qefsere Vuqiterna sold an initial 130 grams to Ylli, a retail buyer in Albania, for €710. This marked the producer's first sale to Albania.

Export 3: Together with Belgian partner, Nicola Jansen, Shaban/Avni Luma (the largest NOA-supported saffron grower) organized a promotional event in Brussels on December 11, 2013. One hundred and forty-five (145) people attended the event highlighting Kosovo saffron. The event yielded €2,500 in saffron sales, at the price of €15/gram, with continued strong interest seen.

No further export contracts were concluded during Q3 or Q4. A very small quantity of saffron was exported to Albania (not more than 50 grams) to maintain the one distribution/retailer in Tirana/Albania.

OBJECTIVE 2: AGRICULTURE PRODUCTS DIVERSIFIED AND INCREASED

BENCHMARKS

- **A total of at least 100 hectares of cultivated MAPs under production.**

As was the case with the sales benchmark, this important benchmark has also been exceeded during the work plan year. One hundred and sixty (160) hectares of diverse herb species are now under cultivation, across different regions of Kosovo. The current total area, divided by crop, is highlighted in the table below. The information represents both perennial and annual plantings and reflects the current standing of cultivated MAPs in Kosovo.

Chamomile production dominates in the Istog region. As of Q1, there were 60 hectares of chamomile under cultivation. Significant increases in the area under cultivation of traditionally wild species, including primrose and yellow gentian, generated from small trial plot areas have been noted during Q1.



Chamomile harvest and processing underway during Q3.

The areas under herb cultivation are increasing. This trend is set to be maintained. Cornflower (*Centaurea cyanus*) has been planted and introduced to local herb growers for the first time as an economically viable herb species. An additional 15.5 hectares of basil, lemon balm, cornflower and parsley were planted during Q2 in response to incredible demand from international herb markets.

Crop	Area Established (Ha)	Municipality/location
Chamomile	60	Istog (5 sites)
Menthe	8	Lipjan and Raushiq
Marshmallow	15	Vushtrri
Melissa (Lemon Balm)	9	Istog
Common Mallow (black)	17	Mitrovica/Skenderaj/Strpce
Primrose/Yellow Gentian	12	Peja/Istog and Mitrovica
Oregano/Sage/Thyme	18	Istog/Lipjan and Krusha
Cornflower	11	Guarkoc
Basil/Parsley	9	Istog
Leeks	1	Istog
Total plantings 2014 to date	160	

During Q3, activities to support women farmers in the Štrpce area were intensified. Two groups of farmers, consisting of 11 (minority) women in the village of Gotovusha and another six in the village of Brod, planted a total of 2 hectares of common mallow (black marshmallow). They are selling both dry and fresh blooms as well as some foliage to the exporter. The buyer pays cash for the product. The women have benefited significantly by improving their family financial position despite their cultivating very small areas of just 500 m² each. Total sales were €4,720. NOA supported the women with drip irrigation systems and necessary water tanks. Marketing activities started at the beginning of the activity. During Q4 NOA saw a slight increase in herb cultivation by 4.5 new hectares of cornflower and 1 hectare of leeks (used in medical herb preparation) grown as a demonstration plot for traditional herb processors in the EU. In order to enhance the chamomile crop, 11 hectares of Italian clover was for the first time used as green “manure” in the chamomile fields in Gurakoc. The clover is not to be harvested or sold; instead, it is plowed under to enhance soil conditions and nutrient availability.

- **At least one new technology assessed for drying.**

Dryer technology is at the heart of cultivated MAP production. Without cost-effective drying technologies, cultivation of these crops is not economically viable. The challenge is to reduce the initial cost of installing the drying equipment and to reduce the unit cost of the drying process. During Q3, NOA concluded an investigation of opportunities to develop a drying system with a significant solar component. An RFQ for a prototype system was released that seeks applications for the construction of a pilot solar unit that would include the use of a mineral called zeolite. This mineral releases moisture when heated — for example, when exposed to the Sun. The mineral then effectively stores that heat until it comes into contact with



Newly established dryers in action.

moisture, such as that present in freshly harvested herbs. Those critical qualities make it an attractive option for drying herbs, even when solar radiation is not present. In addition, for new areas of cultivation that will involve many smaller farmers, NOA is investigating the use of a rotary dryer design, which promises to be efficient but will have a relatively low initial capital cost. Prototype designs of the rotary drying units have been developed for application in the field of nut drying and should be useful in the herb-drying process. Meanwhile, the zeolite system is complete and ready for testing early in Q1, 2015. The rotary dryer technique will be made available to growers in Klina, should they be able to purchase their own combine for harvesting, which would necessitate installation of the new dryer. As of the end of Q4, it was still unclear whether they would be able to make this purchase.

Strategic planning to expand the area used to cultivate herbs will ultimately increase production, adding pressure to limited, existing drying capacities. Work is underway to develop improved drying efficiencies with biomass as a heat source. Effective utilization of the heat-recovery system introduced through the NOA grant to AgroProduct in 2013, has encouraged MAFRD to consider herb-drying equipment for small cultivators a grant-worthy production activity. The first sage drying unit to be established with MAFRD funding and utilizing the energy efficient system developed through NOA, is approaching completion in Krusha e Madhe.

- **At least two new chamomile varieties introduced.**

In previous years, the common practice of chamomile growers has been to use their own seed or to be supplied with inexpensive seed from sources within the region. This led to undesirable results at the end of the crop cycle. To address this shortcoming, to increase overall chamomile performance and yields and to expand exports, four different seed varieties were identified (proposed by an international buyer); two from regional and two from EU-based companies. NOA was able to facilitate the acquisition of two of the recommended varieties: an Italian seed variety and seed from the Serbian herb institute, Josip Pancic. Both varieties were seeded in three cultivation sites during Q1, under very good seeding conditions. Crop monitoring after seeding in all plots has shown high germination rates, and continued development of the crop is excellent. Chamomile growth during the early spring of Q2 was outstanding and yields were at least 20 percent higher than with conventional approaches and seed. Certainly, the flower head size was significantly increased as was the uniformity of the field. The second harvest also appeared to be greater than had been the case with traditional home-saved seed.



Superb chamomile head size as a result of improved seed and crop management.

- **Seed production initiated for chamomile.**

Chamomile cultivation increased from 38 hectares in 2013 to 60 hectares in 2014. The introduction of two new varieties allowed part of the production to be kept for seed multiplication. Three hectares that were set aside for seed harvest were harvested separately to be used as next year's planting material. It is expected that this will be sufficient to plant an area of 200 hectares during the coming planting season early in Q1 of 2015. Seed quality is good and germination in the early plantings is good.

- **At least one study tour completed.**

The study tour planned for Q3 was initially postponed for early autumn in Q4 for technical reasons, then subsequently dropped due to timing issues.

OBJECTIVE 3: FOOD QUALITY AND SAFETY IMPROVED

BENCHMARKS

- **At least four saffron growers receive organic certification;**

The organic certification process for all four saffron-producing companies was successfully concluded during Q1. Saffron & Co., the first saffron-producing company to receive certification, is trying to capitalize on this development, selling product as organically certified. Sales have been against this

certification to date. Another three saffron-producing companies successfully concluded the process and received their certification during Q1. Certification has been critical to enabling growers to begin discussions with buyers and begin to conclude sales. Without these certifications (Bio and Organic) no buyer would even enter into discussions with Kosovo sellers.

- **At least one grower of cultivated MAP bio certified.**

More than 60 hectares of diverse herb crops have been organically certified; several producers of cultivated herbs have been awarded with this critical certification provided by regional certifier “Albinspekt,” based in Albania. The organically certified herb producers are listed below.

With the increase of cultivated MAP areas, organic certification is expected to increase. Cornflower was included in the bio certification program during Q3. Bio Certification areas are highlighted in the table below.



Detail of organic certification

Crop	Area Established (Ha)	Grower/location
Chamomile	25	Driardi/ Gurakoc
Chamomile	30	APS/ Istog
Oregano	2	Individual farmer/ Istog
Melissa	2	Individual farmer/ Istog
Peppermint	2	Individual farmer/Vushtrri
Cornflower	4.5	APS Istog
Total area	65.5	

1.2.5 FIELD VEGETABLES

OBJECTIVE 1: PRODUCTS AND FARMERS LINKED WITH MARKETS

BENCHMARKS

- **Conclude one B2B conference in April, 2014.**

Based on the success of the 2013 B2B conference the follow-on, second NOA B2B conference, “Progress in Fruit and Vegetable sector of Kosovo,” was held in Pristina, June, 19-20, 2014. The event drew 73 participants representing 13 EU and regional companies and business associations, as well as 20 local companies. The conference was co-organized by PePeKo (the F&V processors association of Kosovo) and Kosovo Investment and Enterprise Support Agency (KIESA) under the Ministry of Trade and Industry of Kosovo. NOA succeeded in linking nine new (buyer) companies to Kosovo companies. These include the following, from the listed countries:

- Natureta, Slovenia;
- Exotic King, Croatia;
- Sanus product, Croatia;
- Green product, Macedonia;
- F&V Processor Association, Macedonia;
- Business Network of Albanians, Germany;
- Fresh Food (branch of Cosmonte foods, food distributor in Dubai), Kosovo-Germany;
- Sweet Beans, Kosovo-USA; and
- Inovativi Switzerland.

Some of the export opportunities identified during the conference included the continuation of initial linkages established during the previous B2B conference held in 2013 and expand upon new markets for fresh and processed field vegetable products from Kosovo. The expanded and newly created linkages constitute a number of market opportunities that can be solidified in the months ahead. Exotic King from Croatia agreed to collaborate with Kosovo partners in exporting product, of peppers, cabbage, tomatoes, onions and other fruits that vegetable collection centers can calibrate and pack in proper package for export to Croatia and to Norway. Thereafter, Agrocelina collection center exchanged supply offers with Exotic King for exporting cabbage that will be ready for harvesting in October-November. Kelmendi GmbH received an offer from FLJORA in Serbia to buy 2,000 mt of cabbage during late harvest 2014, to be further processed in Serbia for onward sale to German markets.

Rizona, a small rural based collection and processing center provides another example of NOA's market linkage success. The company's success is, in part, the result of a NOA-organized and supported business trip to the EU and the subsequent B2B event at which linked Rizona to importing companies in the EU. The firm exported 120 mt of fresh and processed vegetables to Sweden and Germany and has another 40 mt of contracted exports scheduled for October, 2014. Included in these shipments was the first-ever delivery of pickled kebab pepper to Swedish markets. Rizona is in negotiations with Oaza-AL in Stuttgart for a joint investment agreement beginning in 2015 that will focus on vegetable processing in Kosovo to serve German markets. Finally, Rizona recently started collaborating with Fresh Food Co and the Cosmonte Foods Co for the export of food products from the region to Dubai.

Ananas Impex, based in the Podujeva Municipality, was linked with Adelina Gross of Sweden and continues its export of the HS6 pepper variety as dried spices. In the past year, the company has sold 210 ton of dried pepper spice valued at €690,000. In addition to existing NOA client companies that exports fresh vegetables, this season NOA provided marketing advice and supported linkages between a collection center in Krusha e Madhe - a collection point in Krusha e Madhe organized by farmer Mr. Besnik Duraku and MELI-I trading company, from Kamenica. This season, the center exported 420 mt of fresh red kurtoska and green kurtoska to Serbia. NOA linked MELI-I with Exotic King in Croatia and with contacts in Macedonia for vegetable export from Kosovo. Also, Bashkimi collection center in Krusha e Madhe exported 100 mt of kurtoska to Green Product vegetable processors from Macedonia which had participated in the NOA-supported B2B conference held in Pristina on June 19, 2014.



Owner of Swedish firm Adelina Gros overseeing first export of 10mt pickled pepper



Kelmendi GmbH satisfied farmers of Anadrini area with a higher price of €0.50/kg

- **PePeKo prepared for fair participation.**

NOA hired regional consultant, Saso Ristevski, to assist in the development of PePeKo association, provide training on effective trade fair preparation, co-organizing the above-mentioned B2B conference and to facilitate sending processors from Kosovo on a study tour in Germany to visit "Hengstenberg GmbH & Co.," the largest pickle and sauerkraut manufacturer in the world. The study tour to Germany was a perfect opportunity for processors from Kosovo to learn how one of the world's largest vegetable processors functions and how they obtain raw material from farmers, process it, market it and sell it. The linkage with Hengstenberg Co was organized by NOA-engaged STTA, Richard Steinfeld. As a result of

this visit, the German company and companies in Kosovo are in the process of discussing the possibility of establishing a joint venture focusing on vegetable processing. This was felt to be more important at this time than direct fair participation, in increasing awareness of opportunities in this competitive market.

STTA Richard Seinfeld was engaged by NOA for his second assignment to work with ABI Progress in Prizren on sauerkraut cabbage pickling and to modify recipes to improve the quality of processed peppers. Seinfeld worked with ABI Progress to prepare the sauerkraut cabbage processing recipe using technology based on U.S. pickling industry experience. During the first assignment Mr. Seinfeld spent a week at ABI Progress in order to prepare the facility for cabbage shredding and pickling-processing. The cabbage variety *PADOC* dedicated for sauerkraut was subsequently planted in order to have 10 mt ready for processing in August, 2014. Unfortunately the sauerkraut cabbage variety was destroyed by hail and there was no possibility to secure the proper variety. During Q4, NOA delivered to ABI Progress a cabbage shredding machine with the capacity to shred 500kg/hour and two tanks for cabbage fermentation (8,000 liter capacity). During his second visit, rather than test the sauerkraut recipe as intended, Seinfeld trained ABI Progress on various vegetable processing methodologies focusing, in particular, on pepper puncturing and new gherkins processing protocols.

NOA sponsored a two day study tour for 50 participants to Macedonia and Albania. The study tour was the first ever practical visit for 42 of the participant farmers aimed at exposing them to how the fruit and vegetable sector functions in competitive markets within the region. Two NOA staff accompanied the group of farmers to assist in question and answer sessions and in facilitating discussions that took place during the course of the visits. The visits to Agrokos pack house in Strumica (60,000 mt throughput capacity) as well as to the Lushnje fresh market (700 mt daily fresh produce) provided much food for thought as farmers considered their competitive and comparative positions.



“KB Krusha” processed up to 100tons of Ajvar this year, selling at 3€/kg



Farmers visit “Oaza Samandov”, the largest greenhouse complex in Macedonia

- **At least 600 production contracts signed between collection centers and producers.**

As a result of continued efforts to promote programmed production through formal contracting, during the year the number of contracts, facilitated by NOA, between vegetable collection centers, processors and farmers exceeded our target. In total, 956 contracts were signed, of which 779 were for pepper and cabbage delivery. NOA engaged one field intern to support contract negotiation and drafting and two consultants who advised farmers on pepper and cabbage cultivation. Additionally, USAID’s CLE program supported three interns in the field to support contract follow-through in collaboration with the NOA program. CLE-engaged interns were very supportive in the field, visiting farmers and working with them on contract obligations, how to deal with issues of compliance and streamlining relationships between producers and processors. CLE regularly reported their activities and findings to NOA, making for excellent collaboration between the two projects.

The program witnessed a few contract failures that were primarily due to low volume of supply and in a few cases due to force majeure, weather conditions and misunderstandings. The CLE field support helped to ensure that these issues were resolved without further legal recourse.

GOK supported packhouses are for the most part fully functional with ASK and Kelmendi facilities totally functional. The ETC facility was still incomplete but had started buying from farmers to fulfill internal supermarket demand.



Three Pack Houses: Kelmendi GmbH, Raushiq Peja; Elkos group, Xerxe, Rahovec and Ask foods, Livoq i Eperm, Gjilan. having 7,000m³ storage and package capacity per cycle

- **At least €4 million of fresh and processed vegetable sales.**

During this year the sales of fresh and processed vegetables recorded by 15 NOA client companies including Kelmendi GmbH, Elkos group-ETC Agrocelina, MELI-I, Bashkimi, Ananas Impex, Koral, Etlinger, KB Krusha, Apetiti, Rizona, Eurofood, Mix Product, Ask Foods, Fitimi, and ABI progress amounted in total to 5,842 mt valued at €3.5 million in sales. 2,112 mt were processed while 3,730 mt were sold fresh. 575 mt of fresh vegetables and 704 mt of processed vegetables were exported. Excessive rains and the failure of the three large packhouses to be operation at the onset of the season contributed to export orders having to be refused. Farmers were satisfied with the seasonal price for peppers which increased as a result of lower yields by 30 percent from €0.20 – 0.27/kg over last year's figures.

OBJECTIVE 2: AGRICULTURE PRODUCTS DIVERSIFIED AND INCREASED

BENCHMARKS

- **40 growers enter commercial production of *feferoni* peppers.**

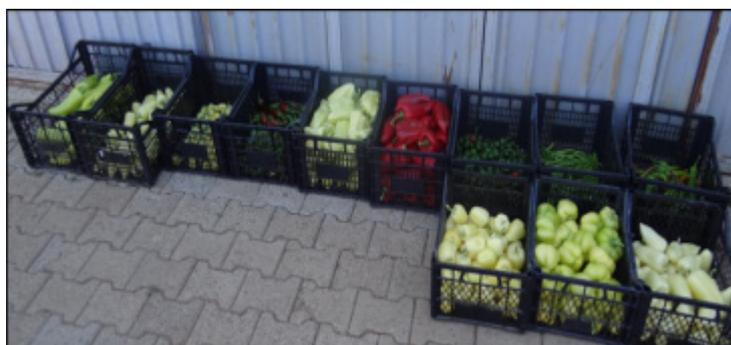
Processors identified the most suitable variety of feferoni based on field demonstrations and descriptions of the various varieties provided by seed suppliers. NOA then coordinated with processors to stimulate contract initiation. Processors contracted growers, NOA supported growers with the necessary seedling establishment, equipment and drip irrigation as well as with on-going technical advice. ABI, Etlinger and Fitimi contracted 264 mt of feferoni with 18 farmers cultivating 10.5 hectares throughout Kosovo.

By the end of the year, contracted volume is still 50 percent short of import requirements for the product. Processors were reluctant to contract their total supply requirement due to limited confidence in producers ability to produce the required quantities, as well as the fact that the selected varieties were new to Kosovo. Additional trial plots were completed to test the following new varieties and to determine their suitability for pickling: RAD-Semo, sweet; USA- S, hot; Mini Somborka, hot; B-BER, sweet; S-AMI, sweet; Rafaello, sweet; Cherry- Semo, hot; Christian, hot; Biber-2, sweet; Traditional somborka, hot; S-D-S, sweet; and AMI, sweet.



Feferoni peppers ready for the market

The HS6 pepper variety suited to drying for the ground spice market was promoted for the second year to new farmers in the Podujeva area where the Ananas Impex processor/exporter is based. Two women's associations agreed to organize woman farmers that cultivated this variety for the first time. Seven farmers planted 3.15 hectares in Sveqla, Podujeva and Prugoc village of Pristina. In addition, one farmer planted kebab pepper variety for export through Rizona.



12 new pepper varieties successfully cultivated in NOA-supported test plots

The total number of contracts for chili pepper, HS6 and kebab pepper was 32, for a total contracted volume of 360 mt. Processors provided the seeds for seedling production while the farmers provided drip irrigation systems for their fields. NOA supported the endeavor with substrate, seedling modules, soil analyses and technical advice. The success of these growers is stimulating interest in other municipalities. Vitia Municipality has requested the exporter and NOA to organize a promotional event in their region prior to the 2015 growing season.

- **At least 600 mt of feferoni sold through processors.**

This benchmark was only partially completed. Two-hundred and sixty-four (264) mt of feferoni was sold through processors. Yields were impressive, providing good returns to growers. Processors have been satisfied with offtake and quality and it is likely that contracts will fill total industry requirements in 2015.

OBJECTIVE 3: FOOD QUALITY AND SAFETY IMPROVED

BENCHMARKS

- **Pepper and cabbage process standards developed.**

NOA and PePeKo initiated discussions and organized a roundtable with processors at which consultant Saso Ristevski of the Processors Association of Macedonia, delivered a presentation on how quality standards should be developed going forward. Mr. Ristevski's presentation also stressed that the PePeKo association should be the driver of evolving industry standards.

In order to further support food safety in partner firms, NOA supported through the grants program, the development of sophisticated control functions to enable complete monitoring of the facility and to enable more specific temperature controls in the eight neglected cold stores at the ABI facility in Prizren. These cold stores have a combined capacity of 8,000m³ and are now equipped with new cooling management software and improvement of storage conditions as NOA grant support. NOA additionally supported with grants, companies Etlinger and Fitimi to increase raw material storage capacity, extend processing period

and fulfill their food safety and quality standards by supporting the development of two storage units for fresh raw material.

- **At least three commercial pepper cultivators certified with GlobalG.A.P.**

NOA organized the winter school in Rahovec for 42 farmers that were informed about the priority and benefits of certification with GlobalG.A.P. standard. NOA selected only one eligible farmer- Mrs. Valbona Ademi, who is cultivating chili pepper for the second year under contract with the processor Fitimi. GlobalG.A.P. certification of this grower will be completed in Q1 FY15.

OBJECTIVE 4: INCREASED AFFORDABLE AND ACCESSIBLE CREDIT

BENCHMARKS

- **Produce a list of farmers who cultivate peppers and cabbages.**

NOA engaged two interns to coordinate activities, answer technical questions posed and provide up-to-date information to farmers growing peppers and cabbages. During their visits, a list of lead pepper and cabbage farmers was created. This list was in addition to the full list of lead farmers developed within the Ferma Ime extension service module. (<http://www.fermaime.com/?id=33>) The list will improve contacts to better create market linkages between farmers, collection centers, traders and other stakeholders.

- **Organize at least two roundtable workshops with value-chain stakeholders.**

Three roundtables and one focus group discussion were organized with farmers in Krusha e Madhe and from the Rahoveci area to discuss the importance of soil analyses and vegetable cultivation under contract. Fifty-seven (57) farmers participated in these events. Focus group discussions addressed “Seedling cultivation for chili pepper” and “Contracted cultivation and plant protection”. Local extension personnel and municipal officials were also present to partake in these discussions.

1.3 DAIRY

OBJECTIVE 1: PRODUCTS AND FARMERS LINKED WITH MARKETS

BENCHMARKS

- **At least 100 dairy farmers will adopt new technologies/practices.**

This benchmark was completed during Q3. As a result of the *Dairy Farm Management Knowledge-Transfer Training Program* conducted by lead dairy farmers located throughout Kosovo, 176 farmers have adopted at least one new practice in dairy farm management. The lead dairy farmers acted as trainers and used their dairy farms for demonstrating day-to-day dairy farm management practices to other small-scale dairy farmers who attended the training. Proper dairy farm management practices serve to maintain the health of the animal, boost milk production and improve milk quality. They include practices such as implementing good feeding programs, keeping proper reproductive records, and providing good ventilation, lighting and dry, clean and comfortable bedding, as adopted by the small-scale dairy farmers who attended the training. Utilization of breeding calendars proved an efficient tool in helping small-scale dairy farmers to improve reproduction efficiency.

“This type of training was exactly what was needed to teach us better farm management. I was quite interested in better understanding milking practices, even though I have been doing it for several years. This training taught me how to follow proper milking procedures in order to improve raw milk quality. I believe trainings like this must be organized more frequently, because they express practical ways to see certain processes in dairy farm management” - Mrs. Gjyzide Sherifi, dairy farmer from the village of Rubovc, Lipjan municipality.

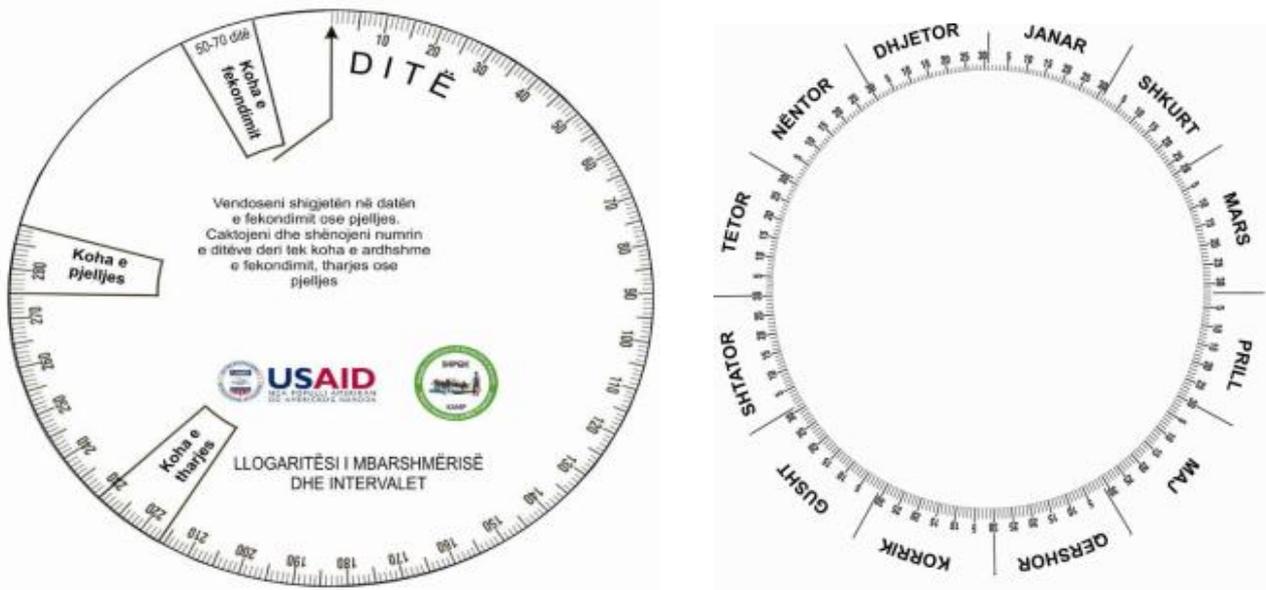


Figure 1. Breeding calendars delivered to 200 dairy farmers who attended the dairy farm management knowledge transfer training.

- **At least two roundtable discussions concluded with industry stakeholders.**

Board members of the Kosovo Association of Milk Producers (KAMP) and Kosovo Dairy Processors Association (KDPA), representatives from MAFRD, Swiss Solidar and USAID NOA met several times during Q4 to discuss the mechanisms for the collection of fees from dairy farmers in order to support the financial sustainability of the Transparent Raw Milk Sampling (TRMS) project. There was unanimous agreement from both the KAMP and KDPA boards to commence collection of fees in October 2014 for milk delivered to dairy plants during the month of September. Thanks to NOA's persistence, as of Q4 (and for the first time ever), dairy farmers who are participating in the TRMS project will contribute to the financial sustainability of the TRMS project by paying one-fifth of a Euro cent (€0.002) for every liter of milk sold to dairy processors.

- **TRMS system delivers raw-milk quality data by SMS to more than 2,000 dairy producers each month.**

The SMS application affiliated with the TRMS system has proven to be an important catalyst for the economic growth of the Kosovo dairy industry. The SMS message application makes information on the quality of raw milk quickly available to all those dairy farmers, throughout Kosovo, who are participating in the TRMS project. In the month of September 2014, 2,035 raw milk test results were delivered to dairy farmers via SMS messages. NOA is consistently sharing the experience with the key agriculture stakeholders in Kosovo (MAFRD, World Bank, Danida, and Swiss Development Corporation), all who are keen to assist and collaborate in developing new mobile application technologies that benefit farmers in Kosovo. New SMS and IT interventions under development include price/market information, soil and feed analysis, and agro climatic-disease prediction for crops.

- **Dairy industry sales increase by at least \$2 million over current levels.**

There is a steady increase in local sales within the dairy industry compared to previous years. The increase in sales of dairy products from NOA clients in Year 4 was more than 4 million Euros (~\$5 million), when compared to the same period a year earlier.

ADDITIONAL ACHIEVEMENT

- Farmer interest in the TRMS system has increased significantly as government subsidies are now linked to raw-milk quality data. Throughout the year, TRMS project field agents gathered and updated the dairy farm holding numbers and contact information – information that was then inserted into the Intertrace software, which enables the electronic delivery of raw milk test results through SMS

messaging and a parallel website. From data captured during Q4, it is anticipated that the number of formalized dairy producers will reach 4,000 during 2015.

OBJECTIVE 2: AGRICULTURE PRODUCTS DIVERSIFIED AND INCREASED

BENCHMARKS

- **At least two new local dairy products enter the market.**

Kosovo has small cheese product lines that supply about 30 percent of the cheese consumed in the country. Given this fact, diversifying cheese product lines deserves much attention in Kosovo. The limited variety of local cheeses and yogurts in Kosovo gives foreign exporters a competitive advantage in local markets. To address this problem, in Q4 NOA engaged a dairy volunteer, Stephen Morgan, who successfully completed a hands-on training for dairy technologists at the Sharri dairy in Prizren, teaching them to produce parmesan and mozzarella cheeses. These new cheese products are now present in the market in Kosovo.

- **At least 10 individuals trained by means of dairy short course.**

During Q4, 11 dairy technologists from 10 different dairy plants and 2 students from the food technology faculty of the University of Pristina attended a dairy technology-training program at the American Farm School (AFS) in Thessaloniki, Greece. The aim of the training program was to enable dairy technologists and students to gain practical experience and to acquire the necessary technical skills in producing new fermented dairy products and applying that knowledge within the context of the local dairy processing industry. It was an excellent experience for the group as they were able to work with AFS cheese technologists in the cheese-making process. The hands-on training produced excellent results as the group learned for the first time how to produce different types of cheeses such as feta, kasseri, mozzarella, graviera, provolone and seasoned haloumi. In addition to cheese making at the AFS dairy laboratory, the group also learned techniques for detecting the level of fat and salt in matured cheeses. The training program fulfilled participant expectations and they were thankful to USAID NOA for enabling them to put theory into practice.



Adding rennet for cheese coagulation and removing whey from the cheese curd before placing cheese curd in molds.

- **At least eight schools participate in the annual awareness campaign**

In coordination with KAMP and KDPA, NOA successfully organized the second dairy education school campaign. This has become an annual event to help increase consumption of local dairy products throughout Kosovo and to increase familiarity among children and their parents of local dairy brands. The campaign activities lasted for two months. Informational talks took place in the school classrooms of *eight primary schools* throughout Kosovo. Each talk lasted for 40 minutes emphasizing the health benefits of consuming dairy products. In total, 219 school children attended the talks and received promotional materials. Following the talks, the same school children, along with their parents, visited the Devolli,

Kabi, Eurolona Magic Ice, Sharri, Abi, Rona and Bylmeti dairy plants, where children were warmly welcomed and accompanied by the managers of the eight dairy plants through the production process. Parents and children were pleased with the visit since it gave them an opportunity to see in practice how dairy products are produced in local dairy plants.



Providing talks in school classrooms about the health benefits of children's consumption of dairy products.



A dairy technologist from Magic Ice explains to school children and their parents how ice cream is made.

ADDITIONAL ACHIEVEMENT

- NOA supported the Korenica Widows' Association in purchasing a locally fabricated automatic milk duplicator and cheese vat. After the installation of the cottage cheese unit, association member Hatixhe Binaku commenced production of cottage cheese, now being sold in local markets.
- It has become a tradition to celebrate World Milk Day each year on June 1. Domestic dairy processors represented by Vita, Rugove, Bylmeti, Kabi, Abi, Golaj, Magic Ice, Ajka, Sharri and Eurolona set up booths in front of the government building on Pristina's Ibrahim Rugova Square to mark this annual event. They delivered free product information and dairy product samples, attracting many people. NOA coordinated the event.



Children and their parents sampling local dairy products while celebrating World Milk Day in downtown Pristina.

OBJECTIVE 3: FOOD QUALITY AND SAFETY IMPROVED

BENCHMARKS

- **At least five KFVA raw milk lab staff trained. (Dropped)**

Due to some internal disagreements within the Kosovo Food and Veterinary Agency (KFVA) on how to organize the training, this benchmark was dropped during the year.

- **At least two dairy farmers GlobalG.A.P. trained.**

An in-house consultant during Q4 shared materials on the importance of implementing GlobalG.A.P. standards at two selected dairy farms owned and managed by Dukagjin Deda and Fazli Berisha. The objective of the presentation was to raise awareness among dairy farmers of the importance of starting to implement GlobalG.A.P. standards in dairy farms. Introduction of GlobalG.A.P standards in dairy farms will help dairy farmers assure the safety and traceability of dairy products.

ADDITIONAL ACHIEVEMENT

- In order to avoid interruptions in raw milk testing, the KVFA raw milk laboratory purchased and installed a new backup instrument (Combo FOSS). At the request of the KFVA lab director, during Q2, NOA trained the raw milk lab technicians how to import raw milk test results data from the new Bactoscan (bacteria scanning system). Since the training, the consolidated raw milk test results are now being posted on the KFVA website.

OBJECTIVE 4: INCREASED AFFORDABLE AND ACCESSIBLE CREDIT

BENCHMARKS

- **At least 50 dairy cows will be insured as part of a loan package.**

After almost a year of discussions with different partners and stakeholders, the dairy cow insurance product was finally launched during Q4. The Sigal insurance company has finalized the criteria for dairy cow insurance. Thanks to the technical support and the linkages created by NOA, the first arrangements for heifer insurance between Sigal insurance company and an investor were reached for 70 dairy heifers imported from Germany. As this is the first agriculture insurance product in Kosovo, it lays the foundation for the development of additional agricultural insurance products.

ADDITIONAL ACHIEVEMENT

- NOA assisted the MAFRD economic analysis unit in updating animal feed requirements and feed prices needed to update cost of production estimates for raw milk.

OBJECTIVE 5: IMPROVED COORDINATION WITH THE AGRICULTURE SECTOR

BENCHMARKS

- **At least 10 dairy plants implement VAT reform on raw milk.**

According to the president of KDPA, Ramadan Memaj, the introduction of flat-rate Value-Added Tax (VAT) for dairy farmers is one of the best agriculture policies adopted by Government of Kosovo (GoK) in recent years, since it favors growth within the dairy industry. The main objective of VAT reform was to increase agricultural sales through formal channels. The VAT tax incentive has formalized the status of *more than 3,000 commercial dairy farmers*. Twenty-two (22) dairy plants - members of KDPA - are now fully implementing the VAT reform on raw milk. The VAT reform has made the local dairy industry more cost competitive against imported dairy products.

- **At least 1,000 dairy farmers are trained to access milk quality grant scheme funds**

Thanks to the tireless efforts of KAMP members and the USAID NOA project, during Y4, for the first time ever, the GoK has disbursed the first tranche of payments based on raw milk quality to dairy farmers who met the criteria. This is the first grant implemented by MAFRD and aims to provide financial incentives for improving the quality of primary agriculture products. While collecting raw milk samples for analyses, TRMS field officers trained and disseminated, to more than 3,000 dairy farmers throughout Kosovo, information regarding the documentation that dairy farmers need to have in order to access the milk quality grant scheme. According to Luan Statovci, an official from MAFRD's payments agency, €141,000 has been paid as a first tranche to dairy farmers who were eligible to access the milk quality grant scheme funds. The dairy grant scheme program is providing dairy farmers an improved margin and improving quality and, therefore, competitiveness within the dairy sector. Dairy farmers are very thankful and appreciate the efforts of KAMP and USAID NOA in making the milk quality grant scheme program a reality.

ADDITIONAL ACHIEVEMENT

- USAID NOA together with Helvetas Swiss Intercooperation produced the Agriculture Trade Balance report. The report covers the period 2007 to 2013 and provides details of the trade balance for the main agricultural products with which NOA is working. The preliminary data show that the total trade balance for agricultural products was a negative €229 million in 2013, an increase of some 55 percent from 2007 (€146 million). The result in 2013 was slightly lower than the maximum trade deficit recorded in 2012, which was €245 million.

2.0 CROSS-CUTTING CATEGORIES

2.1 IMPROVED COORDINATION IN THE AGRICULTURE SECTOR

BENCHMARKS

- **At least 8,000 farmers trained by the MAFRD extension system**

Capacity Building of lead farmers and extension agents. Capacity-building training sessions were performed with extension agents and dairy lead farmers working with the Ministry of Agriculture, Forestry and Rural Development. Thirty extension agents and livestock production lead farmers from the Pristina region received practical training in the best agricultural practices in livestock production. The training took place at “Euroлона” in Fushë Kosova on Nov. 7, 2013. In addition, twenty-seven extension agents, including livestock production lead farmers from Peja region, received practical training in livestock production and best practices in dairy farm management. The training took place at Sali Abazi’s farm in Jabllanica, Peja on Nov. 12. Three lecturers demonstrated best practices associated with the proper management of dairy farms.



Training on the best practices in dairy farm management.

The program supported a second regional training attended by twenty-two lead farmers and others in Lipjan on Nov. 13. The trainees included extension service agents and lead farmers representing the fruit production sector. Trainers explained the advantages of proper management during fruit harvesting and post-harvest periods. Lead farmers learned about storage conditions for the main pome and stone fruits grown in Kosovo.



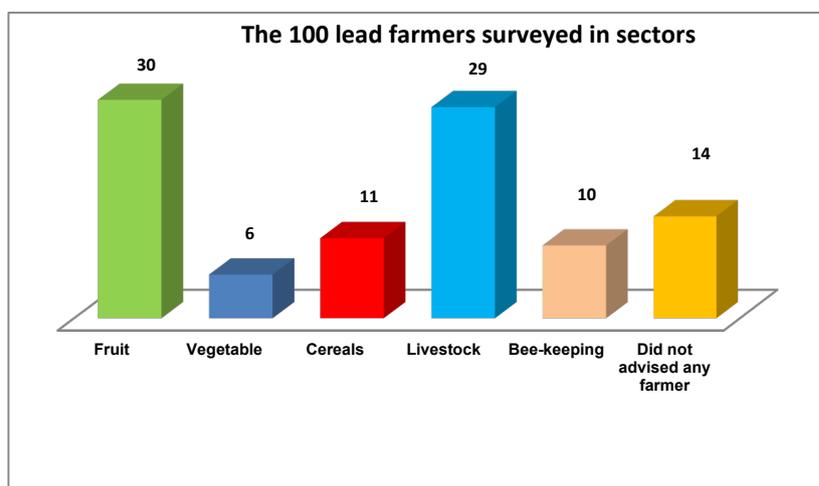
Training on post-harvest handling and storage of fruits (a), and the main post-harvest diseases of fruit crops (b)

Provision of technical training to contact-farmers by lead farmers of the dairy sector. From March 24 - 27, and on April 01, 03, 08, 17, 23, 25 and 29, 2014, the Program performed nine training sessions in Pristina, Lipjan, Vushtrri, Podujeva, Gjilan, Ferizaj, Prizren, Gjakova and Peja regions, which attracted a total of 245 dairy lead farmers and extension agents working with MAFRD. Farm owners served as trainers at their own farm localities. The objective of this kind of training is to simplify the information and messages conveyed to contact farmers. This training methodology proved to be very successful based on feedback received by farmers who attended them. Trainers focused on best practices in dairy farm management, including: a) balancing dairy feed ration, b) dairy cow reproduction efficiency and c) proper milking procedures. Lead farmers are being increasingly seen as critical to peer-to-peer training - a methodology that is best suited to reaching significant numbers of farmers.

Provision of technical training to lead farmers of the fruit sector. On March 20, 21, 25 and 27, 2014 in Lipjan, the Program performed four theoretical training sessions, which attracted a total of 139 fruit-growing farmers and regional extension agents working with MAFRD. Continuing the practical trainings with lead farmers in the fruit sector, on May 7, in Akllap village outside Lipjan, NOA carried out a peer-to-peer training session for 37 lead fruit farmers from all municipalities across Kosovo who are working with MAFRD. The practical training with fruit lead farmers continued on May 8, in Lipjan municipality, drawing 35 participants. The trainer explained the proper care of bees in orchards and how bees can contribute to much higher yields.

Conduct survey of lead farmers and support provided by them.

During June (20-27th), 2014 the Program finalized a survey which clearly shows how active the lead farmers are in providing advice and training to their peers in their communities. A total of 100 lead farmers from 30 different municipalities were randomly selected to participate in the survey. Eighty-six (86) of these lead farmers were active during this season and advised a total of 2,020 contact farmers in different fields (figure opposite). Taking into consideration the fact that



Subsectors in which lead farmers provided technical advice

there are actually 500 lead farmers now working in collaboration with the MARFD’s extension services, the estimated number of farmers trained by lead farmers during the 2014 season calculates to 15,500.

- **At least 20 food and phytosanitary inspectors of Kosovo Food and Veterinary Agency trained;**
- **At least 5 MAFRD plant-protection officials trained; and**
- **At least 10 new graduates trained.**

Capacity building training to the phytosanitary inspectors, plant protection officials of MAFRD and new agronomists. Capacity building for inspectors, plant protection officials of MAFRD and new agronomists was provided during Q2. On March 4th and 5th, the Program organized two training sessions for Kosovo Food and Veterinary Agency (KFVA) inspectors. Thirty-seven (37) KFVA inspectors and students from the Faculty of Agriculture were trained during this two-day training. Devon Zagory, an International STTA on post-harvest handling and food safety, presented issues concerning food safety, good manufacturing practices and good hygiene practices. In addition to trainings for KFVA inspectors, another training session was carried out on March 7th with local processors and technical staff from targeted collection centers. Participants received information regarding food safety, good hygiene practices, the present situation regarding food safety and the need for Kosovo producers and processors to make improvements in this area in order to expand their access to global markets in the future.



Food safety trainings with the KFVA inspectors (a); and the final training session, where processors were equipped with pH meters (b)

- **At least 6 roundtables concluded**

Roundtable discussions held with the all stakeholders working with the extension services. A roundtable was carried out, to better coordinate up-coming activities with extension services agents and lead farmers working with MAFRD. The roundtable was held in Pristina on Dec. 3, 2013 with all stakeholders and donors working with extension services in attendance. This included the MAFRD - Extension Services Department officers; representatives from NOA program; World Bank – ARDP program; FAO; Austrian agriculture program – ADA and representatives from “Ferma Ime” portal. The aim of this roundtable was to coordinate activities that would be implemented in the coming year in collaboration with extension services. In order to maintain and build the technical knowledge of lead farmers already selected, several capacity building trainings has been organized in the following five sectors: livestock, fruit, vegetable, cereal and bee-keeping sectors. Another objective of this meeting was to coordinate trainings and to identify the type of support that would be provided by various donors in the coming year, in order to avoid duplication of efforts. It was decided that the regional trainings with lead farmers, focusing on three sectors (livestock; vegetable and fruit production sectors), would be covered by the NOA program while trainings targeting the cereals production sector would be supported by the World Bank – ARDP program. The Austrian project, ADA, offered to cover expenses related to lead farmer trainings on bee-keeping and fruit production.

A second roundtable took place in Pristina on Sep. 30, 2014, in collaboration with the Ministry of Agriculture, Forestry and Rural Development. The main issues discussed during this meeting were the role of lead farmers in the advancement of the agriculture sector throughout the country and the chosen methodology for reaching contact farmers. The goal of this activity was to outline the potential role that the new lead farmers whether public or private, could play in the future development of the agriculture sector. Taking part in the roundtable discussion were representatives of the MAFRD, World Bank, EU Project of Extension Services, MAFRD’s Extension Services and Policy Department and municipal extension agents from 20 municipalities. During this meeting the NOA Program delivered information materials to the extension agents and other participants, and distributed a consolidated DVD containing all NOA publications, documentaries and other materials in focusing on vegetable, fruit and livestock production. By the end of the roundtable, participants reached some conclusions regarding how to improve extension services through the use of lead farmers and how to improve and harmonize the flow of technical information. The next meeting will be held at the MAFRD towards the end of October. (More information on Roundtables held during FY14 can be found in Annex V.)



Andrew Teubes demonstrating the new trellising system (a); and best table grape pruning and grafting practices (b)

Workshop with all stakeholders of extension services in Kosovo to discuss next steps in public and private extension services. On September 18, 2014, in Pristina, NOA's Deputy Chief of Party and Training Coordinator took part in a workshop regarding agriculture extension services in the EU and in Kosovo. This event was organized by an EU-funded project, "Assistance in strengthening MAFRD advisory services and improving the quality of technical services provided by the MAFRD laboratories", in collaboration with the MAFRD. In attendance were representatives from the EU Program in Kosovo; the MAFRD; various donor agencies; agricultural NGOs; municipal agriculture directors; municipal extension agents; and lead farmers. The workshop covered the following topics: The program and the strategy of the Ministry of Agriculture 2014-2020; common agriculture policies and EU requests relative to the functioning of extension services in Kosovo; the expansion of extension services through the use of lead farmers; adoption of extension services in some EU countries; issues related to improved agriculture extension services in Kosovo; necessary steps for the certification and the registration of public and private extension agents; and the development of guides to help agriculture extension services in Kosovo comply with EU extension services.

- **Winter and spring school trainings for all NOA value chains**

Winter school trainings - Asparagus VC. On Dec. 19, 2013, training was provided on the best agriculture practices for asparagus cultivation. The training was held at NOA office in Pristina, attended by 22 participants including municipal extension agents and vegetable producers from Pristina region, input dealers, NOA asparagus clients and students from the Faculty of Agriculture. Topics covered by Ismet Babaj, NOA's vegetable production specialist, were: a) good agriculture practices of asparagus cultivation, fertilization and irrigation, b) control (management) of key pests, diseases and weeds of the asparagus crop and c) asparagus harvest, post-harvest handling and storage procedures.

Winter school training – Strawberry VC. During this quarter trainings for members of the strawberry VC took place in Podujevo, Skenderaj and Gjakova during Q3, attended by berry producers and other stakeholders within the strawberry VC. During these training, the training topics were covered by Vahid Avdiu, professor at Faculty of Agriculture, Kujtim Lepaja, the program's fruit specialist and Flamur Hoxha, an agricultural input dealer. Trainings were provided in different municipalities including Suhareka, Skenderaj, Podujeva and Gjakova, drawing 140 farmers in total.

Winter School training – Table Grape VC. On Feb. 19th, 20th and 27th, 2014 NOA held field trainings in Rahovec for participants in the table grape value chain. International STTA, Andrew Teubes, demonstrated proper winter pruning practices for table grapes and presented the main advantages of the new trellising system established by the Program. The three trainings sessions attracted 60 participants.

Winter school trainings Pepper VC: Three training sessions were provided during winter school sessions for participants of the pepper value chain. These trainings took place on Feb. 6th, in Rahovec; Feb 21st, in Peja, and in Podujeva on Feb. 26th. In total, training sessions drew 185 farmers - all of whom were pepper producers. The trainings also achieved the signing of 30 contracts between farmers and collection centers. Topics covered during these trainings included: best practices in pepper cultivation including proper seedling production, fertilization and irrigation, covered by Ismet Babaj, vegetable production

specialist at NOA; the main principles of pepper plant protection (IPM and SUP), covered by Naim Krasniqi, training coordinator at NOA; programed pepper cultivation, covered by Musli Berisha, marketing linkages specialist at NOA; and GlobalG.A.P. - Good Agriculture Practices, covered by Reshat Ajvazaj, NOA post-harvest specialist.



NOA technical team held winter school trainings on the pepper VC, in different regions in Kosovo

Spring School training – Blueberry VC. On April 01, NOA held a blueberry spring school training session in Deçan municipality. The training drew 34 participants. These included berry lead farmers, municipal extension agents from Deçan municipality and students from the University of Pristina. The trainer, Xhevdet Elezi, is a soil scientist with the Faculty of Agriculture in Pristina. He assisted in presenting best practices in blueberry cultivation, emphasizing the importance of proper soil preparation prior to planting.



Local STTA Xhevdet Elezi and the NOA technical team demonstrating the measurement of the soil pH and EC

ADDITIONAL ACHIEVEMENT

- **Formalization of enlargement of the extension services through the lead farmers program.**

On Oct. 2, 2013, NOA supported a ceremony in Pristina to formalize election (by farmers themselves) of lead farmers. This event was attended by the Minister of Agriculture, Forestry and Rural Development, Mr. Blerand Stavileci, representatives from World Bank (ARDP program), Extension Services Department of MAFRD and extension agents from 25 municipalities. By that



the

Formalization of the elected lead farmers

time, 3,272 contact farmers from all municipalities had been reached, resulting in the election of 371 lead farmers that would support five sectors (fruit, vegetable, cereals, livestock production and beekeeping) across 25 municipalities.

- **Roundtable on Agricultural Insurance.**

In collaboration with the MAFRD, the NOA program organized a roundtable attended by 13 representatives of the University of Pristina (Faculty of Agriculture), the association of insurance companies and the MAFRD. Discussion focused on the best and most appropriate agricultural insurance models for Kosovo and the required involvement of main stakeholders in order to advocate for such insurance in the near future. Mr. Alan Pieper, the consultant hired by NOA presented findings and proposed roles for the main stakeholders. According to his findings, the best model for Kosovo would be a Public-Private model engaging the MAFRD along with insurance companies.

- **Roundtable on seedling production of fruits crops in Kosovo.**

On Dec. 12, 2013, thirty-one (31) participants joined a round-table organized by the program. Representatives from different institutions and stakeholders attended, including the Ministry of Agriculture, Kosovo Food and Veterinary Agency (KVFA), the Kosovo Institute of Agriculture (KIA), the Faculty of Agriculture and plant propagation material producers from different regions of Kosovo. The main aim of the round-table was to bring together all stakeholders involved in seedling production in Kosovo to discuss the main problems faced in producing propagation material in Kosovo. Officers from the Ministry presented the law in force governing seedling production in Kosovo, with a particular emphasis on new administrative guidance. Plant propagation producers stated that the certification procedure, labelling, inspections and verifying the authenticity of scions, rootstocks and cultivars all remain problems, especially with respect to seedlings imported from neighboring countries such as Serbia. (More information on Roundtables held during FY14 can be found in Annex V.)

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

In September – October, in collaboration with EDI consulting company, the Program organized several intensive training sessions on best agricultural practices, with a particular emphasis on new crop production and plant protection technologies. A total of 230 people from across Kosovo attended the training. Their ranks included municipal advisors, lead farmers and other farmers. Early in Q1, the program supported the final two training sessions. On Oct. 7, 2013 (Q1), EDI trained 16 lead farmers and extension agents from Vushtrri region on plant



Training on Integrated Pest Management and the Safe Use of Pesticides by Bajrush Shala

protection and the safe use of pesticides. The presentation included the best methods for managing insect pests and diseases that afflict fruits (strawberry) and vegetables (gherkins and lettuce). A plant protection expert demonstrated how to use pesticides properly and explained all steps in correctly implementing an IPM program. The last plant protection and Integrated Pest Management (IPM) training was carried out on Oct. 23rd, 2013, led by specialist, Bajrush Shala. At the conclusion of the training, he received letters of appreciation for his 50 years of work in the implementation of best agricultural practices in the plant protection field in Kosovo. The Minister of Agriculture, Forestry and Rural Development, Blerand Stavileci, NOA project; and lead farmers all contributed letters of appreciation.

- **Capacity building of the interns engaged by processors and collection centers.**

As part of its support to project stakeholders, in Year 2, the NOA program had identified interns to support targeted processing companies and collection points. This year, before fielding the interns, the program built their capacity to coach and train host processing firms and collection points. On Oct 18th, 2013, ten (10) interns participated in a capacity-building training using a training of trainers (ToT) methodology, and employing ISD/ADDIE models – sophisticated adult trainer modules designed to enhance trainer capacity. The training was presented by Edon Kurtishi, a consultant with EDI consulting company. Participants learned about participatory methodologies, presentation skills, body language skills and best practices in the effective provision of training.



Capacity building training of interns based on the ISD/ADDIE, tailored by EDI Co., and supervised by NOA technical staff

On Nov. 18, 2013, NOA met again with Edon to finalize the training modules that interns had (subsequent to the prior training) designed for their host processing firms and collection centers. Modules were standardized using TOT methodologies and the ISD/ADDIE models. On Nov. 27, 2013, NOA organized a final training session for interns aimed at enabling them to tailor the training modules to different audiences and to implement them effectively.

On Dec. 10, 2013, NOA organized a training session for 25 participants which was organized by EDI and led by program interns. Participants, all of whom the Pristina region, included extension agents, lead farmers and students from the University of Pristina who are studying fruit and vegetable production. The training covered the management of key pest and diseases affecting NOA-targeted fruit crops and good agriculture practices in vegetable production.

- **Agricultural Insurance – Training on loss adjustment.**

As part of a larger scope of work, international agricultural insurance consultant, Roman Shynkarenko, provided a training on loss adjustment crop inspection focusing on both apples and potatoes. This consisted of two days of in-field activities. On the first day, Oct. 29, 2013, twenty-eight (28) participants learned about loss adjustment crop inspection of the apple crop at “Agrovizioni,” in Lipjan. A day later, thirty-three (33) participants attended a field-day focusing on loss adjustment crop inspection of the potato crop in Barileva, Pristina. Participants of the training included students from University of Pristina (Faculty of Agriculture), apple and potato lead farmers, representatives from different institutions including insurance companies, the Extension Services Department, Economic Analyses Department and Loss Adjustment Commission staff of the Ministry of Agriculture and municipal extension agents. During the two field days Mr. Shynkarenko simulated all loss adjustment processes, yield assessment, and trained participants regarding the formulas that insurance companies use to calculate reimbursement.



Training on loss adjustment led by Roman Shynkarenko

- **Meeting with PePeKo fruit and vegetable processors association.**

NOA facilitated a meeting on Jan 10, 2014, between PePeKo and Mr. Saso Risteski, Head of the Macedonian Processors Association. The objective of the meeting was to describe progress made by the

Macedonian counterpart association and to explain the benefits of a fully functional association. Members received the meeting extremely well and were energized to follow the example set by the Macedonian association.

- **Launching of new online module for extension services agents and lead farmers.**

On Jan 29, 2014, a newly designed module was launched online. This was an idea initiated and supported by USAID/NOA in collaboration with the “Ferma Ime” online portal. The module, called “Sherbime Keshillimore,” is designed to support public extension services (extension agents and lead farmers). It is a (non-



The profile of a municipal extension agent, inside the module ‘Shërbimet Këshillimore’ on the Ferma Ime portal

paid) direct incentive to keep lead farmers active at all times by facilitating constant interaction with and among farmers. At the same time it offers a platform for the instant exchange of information and experiences throughout the country. NOA and Ferma Ime portal worked to generate interest in supporting this module until Ferma Ime finally received commitments from the Austrian program ADA Kosovo and from the World Bank’s ARDP Program to support it. Positive discussions have also been held with the Norwegian Embassy. Two interns have been engaged to help link farmer’s queries to experts that can respond to those queries. The Ferma Ime extension services portal is now active at:

<http://www.fermaime.com/?id=33>

- **Update information on the module “Sherbime Keshillimore” and the “Ferma Ime” portal.**

So far, the site is registering 5,000 hits per day on the portal site, while the extension module has logged 4,000 hits/day. Some 2,000 visitors/day are actively seeking information on the site and reading the articles and answers posted within the module. 30 percent of the interest comes from farmers located in Albania. The module includes contact details for 2,000 people involved in the industry, including municipal extension agents, lead farmers and contact farmers from all around Kosovo. The module allows farmers or anyone else interested in farming to ask any sort of questions regarding agriculture, and receive an answer with 24 hours. (<http://www.fermaime.com/?id=33>)

- **PePeKo Participation in Regional Conference for Fruit & Vegetable Processors and their Associations in Ohrid.**

The new association of F&V processors (PePeKo) was invited to participate in the regional conference of F&V associations in Macedonia on 14-16th of May, 2014. Two representatives from the Kosovo Processors Association (MOEA and ABI) together with the NOA DCOP participated in the conference and presented the current situation in the sector and opportunities for the development of the F&V processing sector in Kosovo. Approximately 40 representatives of Processor Associations and businesses from the regional countries attended the conference including individuals from Macedonia, Serbia, Albania, Greece, Bulgaria, Bosnia & Herzegovina and Kosovo. The conference was an excellent opportunity to exchange ideas between sector stakeholders and the participation of the Association from Kosovo was highly valued by other participants. The event was organized by Swiss Import Promotion Program (SIPPO); during the event a proposal was made to organize this type of conference on yearly basis.

2.2 IMPROVED ACCESS TO FINANCE

OBJECTIVE 1: LAUNCH AGRO CREDIT CARD FACILITY

On February 27, 2014, USAID's NOA program, in partnership with TEB Bank, launched Kosovo's first-ever agricultural Agro Credit Card. It represents the newest banking product for agribusiness purposes. The Agro Card now provides easy access to finance for farmers throughout Kosovo. The NOA program and TEB, a market leader in the card business, initiated and developed this new agro-banking product. TEB invested in the software and hardware programs required to support the product and developed the marketing campaign, while NOA supported air-time for broadcasts promoting the concept of this new financial product. The Agro Card enables farmers to purchase agricultural inputs with a grace period and the ability to make payments in installments, according to the cash flow generated by their agricultural enterprise. The card carries a 0 percent interest rate if installments are paid on schedule. The product aims to meet the working capital needs of all farmers in the agricultural sector. The sustainability of this product is its biggest strength. The launch event drew coverage by RTK television, KTV television, Radio Kosova, Kosova Press online media and the Epoka e Re and Zeri daily newspapers.

BENCHMARKS



Presentation of the Agro Card to input dealers in Kosovo on February 14, 2014, at Hotel Sirius in Pristina.

- **At least 30 agro input dealers involved in the Agro Card program as participating dealers (dealers that accept the Agro Card).**

As of the end of March 2014, TEB reported having in place *300 agreements with input dealers* (including client petrol stations – fuel being a significant input for farmers). Excluding petrol stations, 28 purely agro input dealers are involved. There was no need to identify additional dealerships during the production season.

During Q1, TEB fully articulated its plan to procure 100 point of sale (POS) devices for agro input merchants who will use them to process purchases made using the new Agro Card. Some existing petrol stations already have suitable POS devices. During Q2, prior to TEB's launch of the product, NOA organized a workshop with 26 lead input dealers in the country to present the concept of the Agro Credit Card. TEB's Card Business and Agro Unit representatives led the presentation, supported by the NOA access to finance specialist. The product and partnership between input dealers and the bank was very well accepted. In the following month, almost all participant input dealers signed partnership agreements with TEB regarding POS installation and Agro Card acceptance.

- **At least 1,000 Agro Credit card accounts signed up for the 2014 agricultural season.**

The Agro Card was launched on February 27, 2014. Over the first three months following the launch, TEB approved 1,256 Agro Cards, thus quickly exceeding the target for the 2014 production season. By the end of Q4, TEB had approved 1,453 Agro Cards. It is likely that card numbers will continue to grow as farmers begin to apply for credit to support the marketing of their crops as well as late autumn field preparation (in addition to supporting input provision).

- **At least €1,000,000 credit approved for agricultural inputs.**

The overall approval card limits of the Agro Card as of September 30, 2014 (Q4) is €1,046,450. This reflects market demand at present and supports the initial costs that farmers incur for crop establishment. Yet to be determined is the demand for end-of-season credit to facilitate harvest and post-harvest investments.

In addition to this innovation by TEB, FINCA has also had success with its re-launch into the agriculture sector. Through the end of Q2, this microfinance institution has advanced more than \$1 million in loans to farmers, based on cash flow projections and with minimal or no collateral required. FINCA loans ranged from less than €1,000 to €25,000. NOA held multiple meetings with FINCA's senior management over the pre-season period to discuss its re-entry into the sector and their tailored approach to agro-lending. Increases in FINCA's agro-lending during Q3 and Q4 were limited by internal portfolio ceilings.

- **At least three farmer/input supplier field days concluded at which the Agro Card is the main topic.**

During Q2 and Q3, a total of 14 trainings/workshops were organized to introduce and promote the Agro Credit Card. These included one with input dealers (26 participants) and 13 with lead farmers in Vushtrri, Gjilan, Ferizaj, Prizren, Gjakove, Peje, Lipjan, Fushe Kosove, Podujeve, Mamushe and Suhareke (combined attendance of 385 participants).

OBJECTIVE 2: SUPPORT ALL DCA SIGNATORY BANKS WITH TECHNICAL EXPERTISE FOCUSING ON NOA-SUPPORTED CROPS

BENCHMARKS

- **At least three roundtables on value chain-financing concluded.**

During Q2, one roundtable was organized with lead agro input dealers and TEB Bank to discuss and present the new agro lending product, which was very well accepted. Other types of financial needs were also discussed. Due to the seasonal workload associated with various new crops (asparagus, blueberries and other berries) the project postponed the two remaining roundtables for post season. Financial institutions were too committed during loan capture and collection. (More information on Roundtables held during FY14 can be found in Annex V.)

- **At least three training workshops with individual banks conducted.**

Local bank BPB (Bank for Business) approached the project to request training for its recently established agro unit. The training was split into two sessions with two groups (April 23 and May 5, 2014). The topic of the training was agriculture development trends, opportunities and obstacles with a focus on horticulture crops. In parallel with training support, the program is discussing with BPB the option of developing dedicated products for financing the expansion of the national dairy herd.

Both TEB and Raiffeisen banks have received new directives from their boards to re-energize their agricultural lending. During Q1, NOA and Raiffeisen initiated discussions focusing on utilizing a livestock insurance scheme to support dairy farming. This was targeted initially at Devolli, as it is the largest dairy in Kosovo. The intent is to use contract relationships as the security for financing, with the aggregator who provides connectivity to producers serving as a source of constant technical information and processing producer payments through the banks. This intention was further strengthened during Q2 by the municipality of Peja, which offered to cost-share support to dairy producers willing to increase their herd size in conjunction with Devolli. The Sigal insurance company continues to express interest in providing livestock "life coverage" but has yet to fully sanction the product launch in Kosovo. Discussions held during Q2 with Sigal's senior management confirmed its continuing strong interest in this product, especially in partnership with its "sister" company, Raiffeisen Bank. During Q3, the project held two meetings with Sigal management to discuss this issue and requested the support of Raiffeisen at the highest level to move this forward. During Q4, Sigal finally authorized the introduction of the livestock insurance product.

OBJECTIVE 3: INCREASED VALUE CHAIN FINANCE

BENCHMARKS

- **At least one trade credit facility confirmed for input supply.**

There has been no movement of significance on this benchmark this year. Trade credit is provided by input suppliers at very low levels. No large-scale input credits have been noted thus far. All *feferoni* production is based on seed provided in advance, on credit, by processors. This is a very modest first step in value-chain financing by processors, who are naturally cautious when advancing credit to growers. This is a critical source of financing for the sector but confidence all round is inhibiting advances in this area. Work is still required on all aspects of value chain structure to enable improved trade credit supply.

- **At least four processors/consolidators begin using new factoring models.**

Advance Global Capital initiated its without-recourse invoice factoring (discounting) system and launched it with two large buyers: Interex and Meridian supermarkets. During Q1, the firm managed to streamline its online platform, train users and initiate the process of buying receivables. The product has been well received by all. It is able to handle the process very effectively, including even micro transactions, and looks to rapidly expand during 2014. During Q2, the firm fully established its credentials in the market and saw an increase in client demand – still with just the two initial supermarkets. The firm applied to the Central Bank of Kosovo for registration as a non-bank financial institution and hopes to see its registration approved shortly. As at the end of Q4, their registration as a non-bank financial institution was still pending despite having increased the firms paid up share capital significantly.

OBJECTIVE 4: INCREASED LEVERAGED FINANCE

BENCHMARKS

- **MAFRD investments in agriculture for 2014 are made with NOA technical support.**

NOA technical staff continue to work with MAFRD in its development and management of financial investments. Of specific note during Q1 was an effort to ensure that the promised grants underpinning the milk quality scheme actually take off during 2014. During Q2, project staff continued to liaise with MAFRD senior political and civil service management to maintain a high level of confidence, particularly in the roll out of the grants for enhanced milk quality. Numerous meetings were held with the ministry and the paying agency to harmonize the positions of the AVUK laboratory and the TRMS program. During Q3, NOA continued to liaise with the paying agency to ensure that the process for payments was effective. Some data discrepancies were noted and rectified during the last week of Q3. Payments were made during Q4 and significantly boosted the morale of the sector.

- **At least five municipalities invest in agricultural production in partnership with the private sector.**

The municipalities of Podujevo, Decan and Junik have all participated in the development of raspberry and blueberry plantings during 2014. Commitments by the municipalities range from €10,000 to €30,000. MOUs between the municipalities and grower associations were signed. The municipality of Gjakova reversed its decision to support this project following a leadership change and the revision of its budget. The most outstanding municipal support came from Podujevo municipality, where 27 farmers were supported in partnership with NOA and the private sector to establish an additional 20 hectares of raspberries. Vitia and Pristina Municipalities have been actively developing investment options but have stopped short of full financial commitment this year.

- **At least one “equity investor” activity initiated.**

During Q1, the NOA Chief of Party met with Sanjit Nayak, of SolutionOne, based in Luxembourg. Mr. Nayak represents a group of independent investors seeking equity opportunities in the region. He visited

Ask Foods to determine the potential for such an opportunity. During Q2, Najak met with the leadership of the dairy associations, at least one private dairy company seeking expansion capital, and with King Mushrooms. He also worked with NOA to discuss interest in apple trading from the region. In addition to the linkage with this equity provider, NOA has had multiple meetings with Recurra Financials to discuss the opportunity of establishing a private equity solution that could provide investment alternatives for Kosovo-based and diaspora investors. During Q3, Nayak fell seriously ill and has not been able to provide leadership to the initiative on behalf of investors. This benchmark was not met during FY14.

2.3 GENDER EQUALITY

OBJECTIVES: INCLUDE WOMAN FARMERS, INCREASE THEIR KNOWLEDGE, RAISE AWARENESS OF THEIR ROLE, AND INCREASE THOSE TAKING THE LEAD

BENCHMARKS

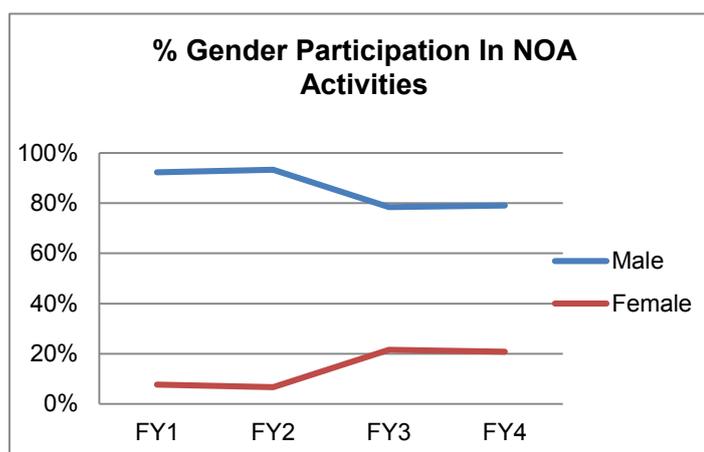
- **Maintain at least 30 percent women’s participation in all program activities;**

Considering all program activities conducted this year, woman participation stands at 20 percent (453 women among a total of 2,170 participants in NOA-supported activities). Overall participation has increased significantly so it was difficult to achieve the aggressive 30 percent internal target for women’s participation in FY14. The woman farmer participation trend has improved significantly over the last two years compared to FY12 and FY13.

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

From the four value chains cited below, 75 woman lead farmers were identified and supported with cultivation advice to support production and form linkages to processors and collectors.

Peperoni value chain - Two new woman lead farmers from Fush Kosove and Lipjan were identified and supported to establish farms of 0.5 ha each. Support provided included the provision of seeds, substrate and technical advice on peperoni cultivation, and the creation of linkages to processors.



Black mallow value chain – Seventeen (17) woman lead farmers were newly identified from Strpce (12 are minorities) and supported to establish farms measuring 0.05-0.10 ha each. Support provided included the provision of seeds and seedlings, trainings, irrigation systems, technical support and the creation of linkages with collectors/processors.

Raspberry value chain- Forty (40) new woman farmers from Strpce (4 are minorities) were identified and supported with basic cultivation training and 1,000 raspberry seedlings to support production trial plots.

Gherkin value chain- Sixteen (16) new woman farmers from 12 different municipalities of Kosovo were identified and supported to establish farms measuring 0.20 ha each. NOA provided seeds, substrate, mulch, irrigation systems and netting.

- **At least 4 training activities dedicated to women farmers conducted;**

Overall during this year, six woman farmers’ trainings were organized, exceeding the target. Two hundred and forty-eight (248) women farmers participated. See the below detailing the specific trainings, place and number of participants.

Training on best practices in raspberry crop production for women raspberry farmers in Štrpce: On January 28, 2014 (Q2), twenty-eighty (28) women underwent a training session directed by NOA and facilitated by Women for Women International.

Pepper cultivation training with woman farmers in Podujeva: One hundred and twenty-four (124) woman farmers were trained during Q2 on pepper cultivation and marketing. Participants represented the following villages: Sfeqel, Batllava, Bradash, Doberdol and Prugoc.

Best agriculture practice training on vegetable cultivation in Podujeva: Twenty (20) women participated in this one day training held in Q2.

Lead farmer training in the livestock sector: Twenty (20) woman farmers participated in this one day training organized in Lipjan in Q3.

Raspberry processing training dedicated for woman farmers in Podujeva – During Q4, NOA organized a one day training for women from Podujevo region. The training occurred in Peran/Podujevo at the APC premises where the woman trainer from IADK, Hafize Veseli, a food technologist, explained theoretically and practically, the hygiene, proper equipment and processes involved in raspberry jam production. The sixteen (16) participants were wives/daughters of the farmers who had been supported to establish new raspberry orchards in the spring of 2014.

Black mallow cultivation training in Štrpce- Brod: Forty (40) woman farmers (minorities and non-minorities from Brod, Firaj and Gotovush) participated in this Q3 training prior to receiving direct support from the NOA program in the form of plants, seeds, irrigation systems, technical advice and the creation of linkages to buyers. (More information on women’s trainings can be found in Annex IV.)

- **National Woman Farmer event concluded;**

On November 21st 2013, in recognition of the contributions of women to the agricultural/rural sector, USAID in partnership with the Ministry of Agriculture, Forestry and Rural Development held, for the second time, the “Woman Farmer Day” event. This celebration inspired by the UN “International Day of Rural Woman” held on October 15, is becoming an annual event, gathering in 2013 more than 200 woman farmers from all over Kosovo, along with other stakeholders.



Participants attending the 2013 Woman Farmer Day event

The aim of the conference was to highlight the important role women play in the agricultural sector, drawing special attention to the influence and contributions that rural women farmers are making to agribusiness in Kosovo. Supportive remarks were made by USAID/Kosovo Mission Director, Maureen A. Shauket, the Minister of Agriculture Blerand Stavileci and the Head of the World Bank/Kosovo Jan-Peter Oltar. At the end of the conference, two women farmers were named as “Woman Farmer of the Year” and awarded separate €3,000 checks in recognition of their achievements in agricultural production and processing, respectively. Farmers awarded prizes were Xhevrije Doroci (Mitrovica) and Sulbije Sahiti (Lipjan).

- **At least 3 municipalities conduct specific woman farmer trainings.**

The above mentioned six trainings for woman farmers only were organized in three different municipalities Podujeva, Sterpc and Lipjan

During this year, NOA repeated the survey to determine progress in gender empowerment. The GEM index constructed measure progress against 5 indicators which are weighted to give an overall empowerment measurement. The table below highlights the results of this year’s survey and compares this with the results obtained in the initial survey.

<i>Year</i>	<i>Production</i>	<i>Resources</i>	<i>Incomes</i>	<i>Leadership</i>	<i>Time</i>	<i>Overall Results with weighted %</i>
2014	0.33	0.36	0.55	0.11	0.55	0.38
2013	0.3	0.3	0.47	0.15	0.55	0.35
% Change	10%	20%	17%	-27%	0%	9%

The weighted result shows a positive trend with an improvement in women’s empowerment as measured by the GEM index of 9%. Women had greater input into decisions involving production, resource allocation and disposition of income. There was no change in their allocation of time. The survey indicates that participation in leadership roles had declined over the reporting period. These results give important direction for future engagement.

2.4 OUTREACH AND COMMUNICATIONS

BENCHMARKS

- **At least 24 success stories/snapshots completed.**

During Q4, NOA produced four success stories and six news articles. They were translated into Serbian and Albanian languages and published on the program website (www.noakos.com). A total of 33 snapshots have now been produced as well as 59 news articles highlighting project successes. All these are available on the NOA web site and attached in Annex VII of this report.

Snapshots:

- August – USAID Helps Women Prosper by Growing Sought-After Botanical Ingredient for Export
- September – USAID Assistance Comes to Fruition for Young Strawberry Farmers

News articles:

- July – 15th Anniversary Celebration Tour Concludes in South Mitrovicë/a
- July – Agro Card Issued to 1,000th Agribusiness
- September – Chili Pepper Field Day
- September – Stakeholders’ meeting in soft fruit sector in Podujevo/Peran
- September – Promotion of Kosovo Table Grapes
- September - Common Mallow Field Day

- **At least three television documentaries completed and aired.**

This benchmark was met and later exceeded. The last short documentary produced featured highlights of Kosovo's grape sector, and USAID's work in and contribution to this sector through the NOA program. It was shown at the USAID/NOA Table Grape Promotion event on September 18th.

Earlier, USAID through its NOA program, supported the production of a documentary showcasing how agriculture contributes to overall employment in Kosovo. This Work Force documentary which illustrates the growth of employment in Kosovo as a result of direct investments in agriculture aired, pro bono, in November 2013 on the national television channel (RTK).

The second documentary entailing the re-grafting of wine grape vines into table grapes was completed in Q3.

A third documentary, covering the asparagus value chain was completed as planned during Q3 and aired at the Program's asparagus promotion event in April 2014.

A fourth additional documentary was produced featuring trainings held by the Program on good management of dairy farms. It showcased how lead farmers are more effective trainers to their peer farmers than sector specialists.

- **Farmer of the year award concluded.**

This benchmark was met successfully. After the Ministry of Agriculture, Forestry and Rural Development moved the date forward, the Farmer of the Year award was successfully held on February 15th (during Q2) at the Emerald Hotel in Pristina. This agriculture event was covered by all mainstream media in Kosovo.

ADDITIONAL ACHIEVEMENT

Visibility

- **Television appearances:**

In terms of the continuing visibility of the program, during Q4, NOA was successfully featured in a number of editions of the agriculture show "Bujku" broadcast by Radio Television of Kosovo (RTK). In addition, the program has made appearances during new broadcasts on major television stations again twice during Q4 – for the All Berry Days event held August 14-23, and the Table Grape Promotion event held September 17.

- **Events**

The following major events were coordinated during Q4:

- All Berry Days – August 14-23, 2014: NOA held Berry Promotion Days on August 14-23, in downtown Pristina. This third annual event allowed raspberry, blackberry, strawberry and wild blueberry producers to display and sell their bountiful harvest of freshly picked berries to the general public.
- Chili Pepper Field Day – September 5, 2014: The Program promoted new chili pepper varieties and new growing technologies. With the assistance of USAID, three Kosovo processors have contracted 17 local farmers to produce for them 250 mt of chili peppers this year. Contracting is new among value chain actors in Kosovo and a feature that the Program has been working to instill in Kosovo's agribusiness.
- Table Grape Promotion – September 17, 2014: This event gathered some 50 table grape stakeholders, producers, wholesalers, and supermarkets, at the promotion of Kosovo-produced table grapes event. The gathering was an opportunity to present to the market in Kosovo the state of the table grape industry following USAID's interventions over the past three years. The event highlighted new table grape varieties, new growing techniques in the table grape sector, as well as

specially developed branding and packaging, all supported by USAID. The event was covered by almost all mainstream media in Kosovo.

- Promotion of Warehouse at “Fitimi” Food Processing Company – September 18, 2014: USAID promoted the improved storage facilities for vegetables (raw products) serving processing needs, at “Fitimi” food processing company. USAID has granted insulation panels and plastic laminates in the amount of 16 928 Euros to the company.
- MAP (common mallow) Open Day in Strpce – September 26, 2014: This Open Day promoted the expansion of herb species amongst 17 women farmers in remote, hilly areas of Kosovo. The event took place in the Gotovuša/Gotovusha village of Štrpce/Shtpce where the women have planted common mallow, where USAID has provided them with seeds, seedlings and drip-irrigation equipment, along with technical advice in raising the crop.
- Raspberry Day in Podujevë/o: USAID in partnership with the Municipality of Podujevë/Podujevo held a Raspberry Promotion Day in downtown Podujevë/Podujevo, spotlighting the successful raspberry harvest by more than two dozen new and first-time growers/farmers in the municipality.

2.5 MICROENTERPRISE

NOA is supporting micro-enterprises in Kosovo through an agricultural value chain program, and facilitating increased credit to micro-enterprises. Interventions are aimed at improving the agriculture value chains of new high value crops, the medicinal and aromatic plants (MAP) sector, open field and greenhouse value chains and the dairy sector regarding both product quantities and quality to make Kosovar companies competitive in both domestic and regional markets. Domestic value-added production continues to be supported to enable local microenterprises to expand production to reduce food imports. Food quality and safety has been addressed by working with local and international certification organizations to certify products according to international standards, supporting national information campaigns and developing product testing capacity. By improving quality and reliability as well as the critical linkages between microenterprises, NOA has been actively improving microenterprise performance in the agricultural sector.

The majority of NOA support in agriculture goes to microenterprises. Only the larger processors and aggregators fall into the category of medium enterprises. Grants and technical support to medium enterprises is dedicated to improving performance at the microenterprise level though improved productivity for producers. All sales of fresh produce emanate from micro enterprises. Total sales during FY 14 derived from microenterprises amounted to \$44 million of which \$10 million was in export sales. Of the total impact on the creation of full time equivalent jobs, 4439 job (FTE’s) were directly created at the microenterprise level – significantly 70 percent being at the farm level. Microenterprises continued to benefit significantly this year from NOA activities, with associated with the aggregation function provided by collection centers. All delivery contracts signed were between micro enterprises and aggregators across all value chains – 956 contracts during FY14. This association with the aggregators has increased confidence among micro enterprise producers to invest in their own production processes.

2.6 MINORITIES

NOA continued to work during 2014 with producers wherever they could be competitive, wherever they were linked or could be linked to aggregation units and where there was agronomic potential for production. Minority municipalities presented some specific opportunities during the 2014 work plan year and NOA was active in most of them. The following table highlights the participation of minorities during this year.

Type	Apple	Table Grape	Asparagus	Blackberry	Blueberry	Gherkins	Lettuce	Raspberry	Strawberry	Saffron	Dairy	MAP	Pepper
Producers	7		1		2	28	1	80	2	3	40	28	15
Full time Employees						18							27
Part Time Employees	80					36							15

A total of 383 members of minority communities benefited from NOA support over the project work plan year – either by being involved as growers or as employees. Gherkins and Peppers were the value chains where the greatest minority engagement occurred. This was due to the fact that these crops are essentially independent of long term aggregation relationships and have short crop cycles. The MAP and raspberry value chains also continue to be important in the minority producing areas of Strpce and Prizren where some excellent performance has been noted, with strong opportunities for growth.

Market linkages for minority raspberry producers tends to focus on establishing linkages to regional markets in Bosnia and Serbia. This year, the program also noted encouraging minority participation at fresh product street promotions. Market linkages for gherkins and peppers were to non-minority aggregators and processors, demonstrating the critical nature of business linkages across ethnic divides.

3.0 INNOVATION AND INCENTIVE FUND (IIF)

3.1 FY 2014 GRANTS

The Program published three Requests for Applications (RFAs) and received six applications for which evaluation committees comprised of Technical staff were established in order to screen the Applications. In addition, the program received ten unsolicited applications.

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

The COP, DCOP and Technical staff assessed all applications and agreed that technical staff would visit the applicants that manifested the 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,” “collection centers,” and “processors.” Through grants, the Program supported a collection center with crates and boxes, two producers with farm level fridges for vegetables and one processor was supported with conservation tanks for gherkins pickling. For post harvesting of asparagus, a new crop in Kosovo, a grant was provided to support a collection center with a hydro-cooler, a sealer and field boxes. The biggest table grape producer was supported with the Lyra trellising system. A small processor was supported to expand its capacity to process vegetables and to improve its facility in order to adapt to food safety standards. Support to transparency and neutrality during sampling of milk for quality control and payment of raw milk in Kosovo was also given through a grant to the Association of Milk Producers. Details on these newly-issued grants are provided within the relevant sections of this annual report. Out of nine approved grants approved this year, seven were finished and two are still ongoing.

The grants team visited the nine successful grant applicants and conducted the Simplified Pre-Award Survey (SPAS). Negotiation memoranda were prepared for one simplified and eight in-kind grants.

A listing of the grants support this year, the name of the grantee, the amount of the grant, and the purpose of the grant are described below, in the Table 1.

No.	Grantee	Grant Short Description	Grant Amount	Project Total Cost	Status
1	Fitimi	Expanding the capacity of the factory for processing of vegetables and improve the facility by the standard of food safety	€ 16,928	€ 35,526	Finished; Grant Closed
2	Stone Castle V.W.	Trellising system for vineyards - Muskat	€ 20,216	€ 45,956	Finished; Grant TBC
3	SHQK	Transparency and neutrality during sampling of milk for quality control and payment of raw milk in Kosovo	€ 13,395	€ 82,340	Finished; Grant TBC
4	Kasimi	Post-harvest line for asparagus	€ 11,050	€ 18,180	Finished; Grant TBC
5	Etlinger	Insulation of storage facility	€ 25,801	€ 52,664	Finished; Grant TBC
6	Shala Produkt	Completion of the collection center with plastic crates and boxes for gherkins	€ 5,700	€ 8,100	Finished; Grant TBC
7	Rizona	Conservation tanks	€ 7,200	€ 11,400	Ongoing

No.	Grantee	Grant Short Description	Grant Amount	Project Total Cost	Status
8	Agro Fresh	Fridge at farm level with a capacity of 30 m3	€ 5,750	€ 7,530	Finished; Grant TBC
9	Freskimi	Fridge at farm level with a capacity of 30 m3	€ 5,750	€ 7,700	Ongoing
		Total	€ 111,790	€ 269,396	

Table 1: FY 2014 Grant Recipients

3.2 FY 2014 SUBCONTRACTS

During the reporting period, three Statements of Work were prepared by the Technical Staff for Grape Nursery Establishment; the Establishment of New Blueberry Plantations; and Grafting over of wine grapes.

The three corresponding RFPs were prepared and published and the program received three proposals in response to them. After reception, proposals were evaluated by assigned members of the evaluation committee, and a summary evaluation sheet was presented to the members of the committee. The chosen company to do each job was sub-contracted under a Firm Fixed Price Subcontract.

A listing of the subcontracts issued this year, the name of the subcontractor, the amount of the subcontract, and the purpose of the subcontract are described in the table 2 below.

No.	Subcontractor	Contract Short Description	Sub-contract Value in €	Status
1	Action for Revitalization	Grape Nursery Establishment	€ 2,880	Finished
2	Blue Gold	Establishment of New Blueberry Plantations	€ 5,990	Ongoing
3	Action for Revitalization	Grafting over of vine grapes	€ 3,120	Finished
		Total	€ 11,990	

Table 2: FY 2014 Subcontractors

3.3 FY 2014 Total Awards under the IIF

Table 3 below summarizes the type of award made under the IIF in FY 2014 and the percentage of funds approved that have been distributed to date.

Type of Award	Type of Awards	
	Approved	% Distribution
Grants	€ 111,790	85.84%
Subcontracts	€ 11,990	70.06%
Total	€ 123,780	

3.4 Environmental Compliance

In order to confirm the adherence of new initiatives to environmental standards and to monitor environmental compliance regarding established investments, NOA continued monitoring activities during FY 2014.

3.4.1 IIF COMPLIANCE WITH USAID ENVIRONMENTAL RULES AND REGULATIONS

During FY 2014, NOA supported two activities through the Innovation and Incentive Fund (IIF) that fall under the category “Categorical Exclusion” (activities that are not expected to have an effect on the natural or physical environment). There were nine environmental reviews (ERs) produced for activities

that fall under the category “Negative Determination with Conditions,” or activities that have a potential for environmental impact (see table below). For these grants, NOA conducted full ER Checklists and the mitigation measures were specified for each proposed activity in order to prevent unintended impacts.

No.	Organization	Categorical Exclusion	Negative Determination with Conditions	Grant/Subcontract Short Description
1	FITIMI		X	Grant for improvement of storage capacity of the beneficiary’s vegetable processing facility according to food safety standards
2	SHQK /Kosovo Dairy Processors Association (KDPA)	X		Subcontract for consultancy on transparency and neutrality during sampling for quality control and payment of raw milk in Kosovo
3	BLUE GOLD	X		Subcontract for consultancy service on the establishment of new blueberry plantations
4	STONECASTLE VW		X	Grant for trellising system in table grape vineyards
5	KASIMI		X	Grant for the purchase of asparagus post-harvest line
6	ETLINGER		X	Grant for insulation of storage room at the beneficiary’s vegetable processing facility
7	ACTION FOR REVITALIZATION		X	Subcontract for grafting over of grape vines
8	AGRO FRESH		X	Grant for the purchase of a refrigerated container for lettuce cooling
9	SHALA PRODUKT		X	Grant for the purchase of plastic crates for gherkins
10	RIZONA		X	Grant for the purchase of barrels for pickling vegetables
11	FRESKIMI		X	Grant for the purchase of a refrigerated container for lettuce cooling

3.4.2 PERSUAP

During Q2, the program updated the PERSUAP. Local consultant Fadil Musa was engaged to update the PERSUAP in conjunction and cooperation with NOA’s Environmental Compliance Specialist and a NOA intern. The local consultant provided necessary technical inputs to the updated PERSUAP, based on the latest list of pesticides newly registered in Kosovo; and evaluated the registered pesticide’s active ingredients. The consultant further provided a matrix of the active ingredients by pesticide type, class, Environmental Protection Agency and World Health Organization acute human toxicities; chronic human health toxicity issues; groundwater contamination potential; and ecotoxicity.

During Q2 and Q3, the six IPM manuals developed in 2012 were updated to include weed control measures for six crops: raspberries, strawberries, apples, table grapes, lettuce and gherkins. A new IPM manual for blueberries was created and the IPM manual for asparagus, developed by international CNFA volunteer John Cassaza, was translated into Albanian. Pest Management Plans (PMPs) give the growers

and pest control advisors the best information available to manage agricultural pests, for the crops covered by the Program. The aim of the PMPs is to reduce the risks to production from pests by using a combination of best practices including Integrated Pest Management (IPM) and Integrated Weed Management (IWM). These management tools maximize crop health, and thus resilience to or tolerance of pests without an over-reliance on pesticides. During Q3, 200 to 300 copies (depending on the product) of each of the IPM manuals were printed and distributed to farmers, extension service providers, education institutions and private sector organizations. The manuals have also been posted on the NOA program web page.

3.4.3 ONGOING ADVICE

During FY14, the program held a number of field demonstrations involving STTA from abroad and locally who advised farmers on better production practices. They also covered topics on the safe and effective use of agricultural chemicals, fertilizers and pesticides. Demonstrations were provided to raspberry, table grape, asparagus, apple and other VC growers with whom the program is cooperating. During Q2, local consultant Fadil Musa conducted the training on IPM and safe use of pesticides for new farmers engaged in the program. The trainings emphasized raising awareness of the importance of pollination and the proper application of pesticides in orchards in order to protect bees. During Q1, record keeping notebooks were delivered to all farmers with whom NOA was working. NOA staff, together with local consultants and interns, continues to advise farmers about the methods and importance of proper recordkeeping. The program produced, and provided to farmers, a list matching commercial pesticide product names with each of the active ingredients found in the list of Kosovo-registered products.

4.0 REPORT ON INDICATOR TARGETS AND RESULTS

In the following summary, we provide background information on each indicator, its definition as stated in the project PMP, predetermined methods of data collection and the results achieved during the fourth year of the program. All results which are related to value of sales are converted to dollars using the current currency rate of €1= \$1.27 and have a 1.84 multiplier applied (please refer to project PMP for multiplier explanation).

The report on jobs created is translated into full time equivalent based on 225 days/year.

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 FY14, the program recorded **\$54,622,568** in sales generated by NOA-supported crops and VC actors. The main value chain contributor is Dairy with 52% or \$28.4M of total sales generated. To date, cumulated sales across FY1-4 now totaling \$102,497,353 represent 315% of the LOP project target (\$32,500,000) for this indicator and 120 % over LOP targets when considering sales under the initial project value chains only (not accounting for sales of dairy, MAP and field vegetables value chains which were added to the NOA scope of work in FY2). The table below disaggregates sales in FY4 by initial NOA value chains and those introduced during FY2, as well as by destination (export or domestic).

2014 Sales (in \$Million)	2014 Targets	2014 Actual	Original VC	New VC
Total Sales	12	54.6	16.8	37.8
Exports	4	10.6	5.6	5.4
Domestic	8	44	11.2	32.4

Table 1: Total Value of sales disaggregated by destination and by Original and New Value Chains

Original value chains have exceeded the initial project targets, with domestic sales achieving 91% of the FY4 target. Fig.1 below summarizes total value of sales disaggregated by type of market (domestic, regional and international) and the four main (grouped) value chains (Fruits, Vegetables, MAP and Dairy).

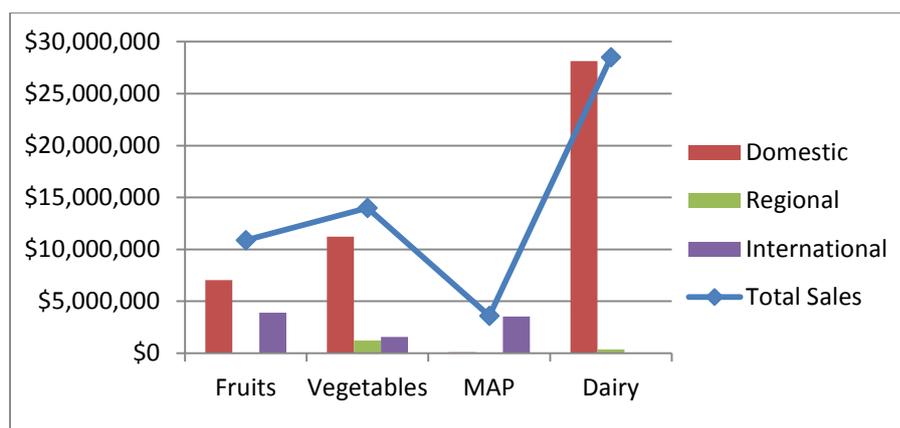


Figure 1: Total value of sales by type of market and value chain

Total Value of Sales by Value Chain:

In the following, sales by value chain are reported and summarized graphically, presenting the proportion of overall sales achieved by each value chain.

NOA Original Value Chains:

Lettuce: In FY4, over 6M heads of lettuce were produced, resulting in \$3.2M in sales. This marks an increase of 28% over last year’s performance of \$2.5M in sales. Bagged lettuce played a significant role in this achievement as improved quality and shelf life facilitated stable demand for product.

Gherkins: The value of sales for gherkins during FY4 was \$2M. This marks an increase of 43% over total sales in 2013 sales of \$1.4M. Collection center empowerment, the promotion and planting of gherkins based on contractual agreements, contracts signed between farmers and collection centers and between collection centers and processors are some of the key factors which contributed to the marketing of over 1,800mt of gherkins during FY4. In addition, due to increased demand for domestically produced gherkins, and production not being able to meet that demand, price per kg reached €0.80/kg. Fig. 2 below presents sales of gherkins by destination market (country).

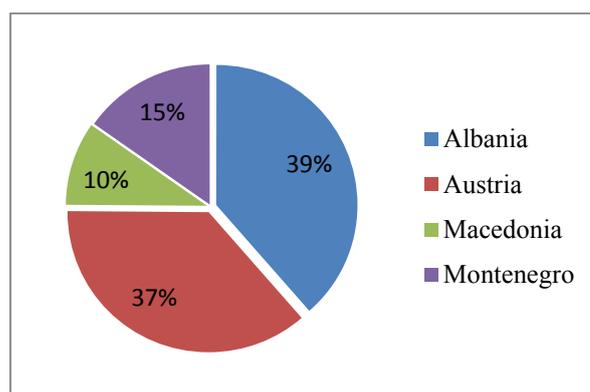


Figure 2: Gherkins export by destination country

Table Grape: Table grapes sales in FY4 amounted to \$2.4M (note: as the season has not yet closed at the time of report compilation, more sales are expected).

In order for the program to record all sales from all Table Grape growers, the project has used the most up to date list of growers from the wine institute located in Rahovec. Information consists of area under table grape production by grower. Additionally, we interviewed 20 randomly selected growers from the list to determine the average yield for 2014, quantities sold to date and the average price. Using this methodology, it was determined that 2,030mt has been marketed from 207Ha at an average price of

\$0.64/kg. As the sales of table grape have not yet been concluded, it is expected that companies such as Kelmendi GMBH and Stoncastle will export table grapes and the results will be reflected in the next quarterly report.

Apple: Apple sales re reported during FY4 is \$920,289. This value represents sales from fresh apple with a value of \$220,000, and \$700,000 from sales of apple juice by a single juice processor, MOEA. Apple sales have not yet been concluded this year as apples will continue to be sold into the spring of next year. It is important to mention that in 2013 we reported \$300,000 of apple sold, and this year-over-year increase in sales came as a result of program interventions to improve apple packing, support new storage facilities established by program customers and implement Global GAP on 73HA of orchards.

Strawberry: Total value of sales of strawberries recorded in FY4 is \$942,327. Fresh strawberries accounted for 88% of total strawberry sales in FY4, or 450mt. 700kg was sold in the Albanian market. This strong performance is a result of establishing new growing technologies, increasing yield, extending seasonality and conducting promotion and marketing activities.

Raspberries: Raspberries sales in FY4 totaled \$511,653. Total value of sales in the Raspberry value chain will only be covered in the next reporting period, Q1, 2015 since sales data is still being reported and sales are ongoing.

Saffron: The value of saffron sales in FY4 totaled \$22,976. Sixty-four percent (64%) of sales were marketed through local channels followed by sales to buyers in Albania and Belgium. Growers have held stock back waiting for better prices and some intend begin selling both seasons' production in December.

Blackberries: Blackberry sales in FY4 reached \$1M. Over 95% of these sales were marketed by Eurofruti including wild collected and cultivated blackberries, with the entire volume destined to EU countries. Fresh blackberries sales contributed a symbolic \$15,913 to overall sales.

Blueberries: Sales generated from blueberries in FY4 amounted to \$2.5M. This value includes sales generated by Eurofruti wild harvest collection centers and all destined for exports.

NOA New Value Chains:

While “new” value chains - Dairy, MAP and Field vegetables - did play a significant role in exceeding NOA life-of-project sales targets, it is important to note that AO level targets for sales from the initial value chains alone were in fact met without including “new” value chain sales results.

Dairy: Increase in sales from the dairy sector is an ongoing trend. In FY4, the sector managed to increase overall sales by at least \$16.5M, from (Note: €12M is the actual sales increase over baseline, however, the final figure is the result of applying the approved multiplier of 1.84 and an exchange rate of \$1.27/Euro). NOA reports the difference between 2012 sales (when dairy was added to the NOA scope of work) and sales generated in 2014. Sales reported for FY4 increased by **\$28M** (including the multiplier),

The below table shows the steadily increasing total value of dairy sales in 2012, 2013 and 2014:

Year	Total sales in €	Increase in sales over baseline in €	Total increase in sales with multiplier in \$
2012	€26M	Baseline	-
2013	€35M	€9M	\$23M
2014	€38M	€12M	\$28M

Table 2: Dairy Sales in 2012-2014

MAP: In total, \$3,682,284 in sales was generated by the MAP sector during FY4. This included sales of chamomile, marshmallow, peppermint and other aromatic plants. Nearly all MAP products were marketed to EU countries, with the exception of saffron (discussed separately above) sold in Albania with value of \$2,056, and domestic MAP sales of \$71,102. NOA customer APS was the only exporter used to calculate these sales. Its main clients are from EU countries.

Field Vegetables: The value of sales generated by the Field Vegetables (FV) value chain totaled \$8.1M in FY4. The majority of FV sales in FY4 (\$5.1M) came from selling fresh and processed peppers. Seventy-four percent (74%) of sales generated by FV were marketed in the domestic market while international markets accounted for 13% of sales and regional destinations generated 13% of sales.

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 recorded in FY4 is \$10,685,461. Fig. 3 below presents a summary of export sales disaggregated by destination country.

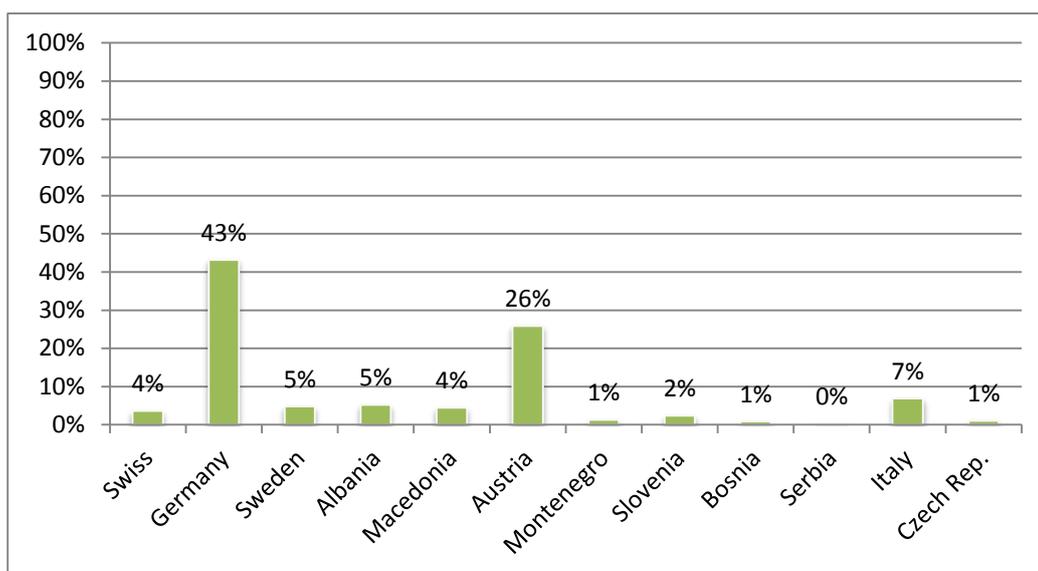


Figure 3: % of exports (sales) by destination country

The most important export market in FY4 was Germany which absorbed 43% of exports, followed by Austria at 26%. For both countries, MAP, Blueberries, Blackberries and Field Vegetables, were the main products purchased. Table 3 below provides information about the export value of sales (in \$US) generated per product and destination country. The total value of sales per value chain includes the different type of products produced within each specific value chain. For example, total field vegetable sales include both fresh and processed product.

Country	Value of export sales (\$)										
	MAP	Field Veggies.	Table Grape	Blackberry	Blueberry	Asparagus	Saffron	Gherkins	Strawberry	Raspberry	Dairy
Swiss	\$380,144	\$94,640									
Germany	\$ 2,133,923	\$744,430	\$5,094	\$715,061	\$ 883,310						
Sweden		\$ 502,641									
Albania		\$361,386				\$386	\$2,056	178,403	\$ 1,402		\$83,040
Macedonia		\$330,280						\$45,206			\$83,040
Austria	\$1,098,801			\$315,468	\$1,086,612			\$209,770			
Montenegro		\$ 70,104				\$175		\$ 68,574			\$83,040
Slovenia		\$119,177			\$129,150.26						
Bosnia		\$ 94,640									
Serbia										\$25,746	
Italy					\$523,443					\$203,185	
Czech Rep.	\$ 69,416										
Total	\$3,682,284	\$2,317,298	\$5,094	\$1,030,529	\$2,622,515	\$561	\$2,056	\$501,953	\$1,402	\$228,931	\$249,122

Table 3: Value of sales disaggregated by product and destination country

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

Definition of the indicator: Total value of sales made to domestic markets. This includes only Program-supported crops sold to local/domestic markets.

Disaggregation by: Product.

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

Annual Result: In FY4, program customers generated \$43,983,416 in domestic sales. Table 4 and Figure 4 below summarize domestic sales disaggregated by product followed by % disaggregated by original and new value chains.

Product	Value in \$	% of total domestic sales
Apple	\$ 940,853	2%
Table Grape	\$ 2,371,236	5%
Asparagus	\$ 19,727	0%
Blackberry	\$ 15,914	0%
Blueberry	\$ 11,220	0%
Gherkins	\$ 1,992,480	5%
Lettuce	\$ 3,191,601	7%
Raspberry	\$ 282,723	1%
Strawberry	\$ 1,036,928	2%
Saffron	\$ 14,762	0%
Dairy	\$ 28,041,600	65%
MAP	\$ 55,340	0%
Field Veg	\$ 6,008,031	14%
Total	\$ 43,983,416	100%

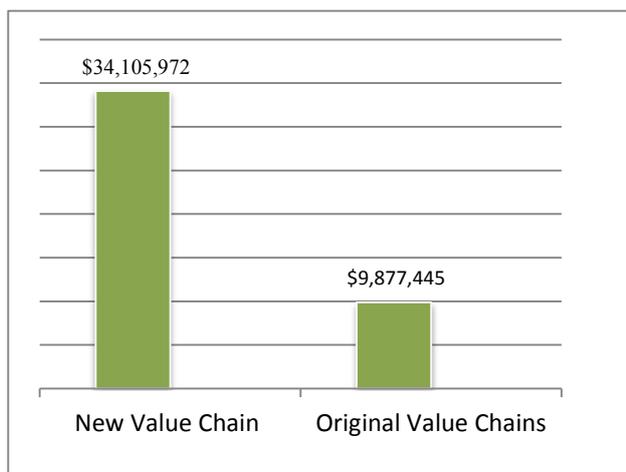


Table 4: Value of domestic sales per value chain

Figure 4: Value of FY4 sales from original and new value chains.

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 equivalent (FTE) generated (including farmers own labor) across different levels of 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 FTE. 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: Total number of FTE’s generated during FY4 is 2,927. These jobs constitute FTE created at the farm level (1575) and at the processing level, including dairy (1352). In the following paragraph we provide detailed information about how the program collected and calculated jobs generated during FY4.

As result of changes in the methodology of data collection used to calculate the number of jobs created at the farm level, earlier this year, the program conducted interviews with randomly-selected customers directly involved in the NOA program and from all value chains to define the number of FTE’s required for each ha under production, for each value chain. Furthermore, the program conducted phone interviews with 808 farmers that were directly involved in the program’s activities, to determine the number of ha under production. This method allowed the program to capture jobs generated throughout the entire targeted area. In addition, these methodological changes will only impact estimates of farm production, whereas, processors will continue to report on jobs using tools that were developed initially by the

program. Fig.6 below provides a summary of FTE’s required per ha, at the production level only, for each of the individual NOA-targeted crops.

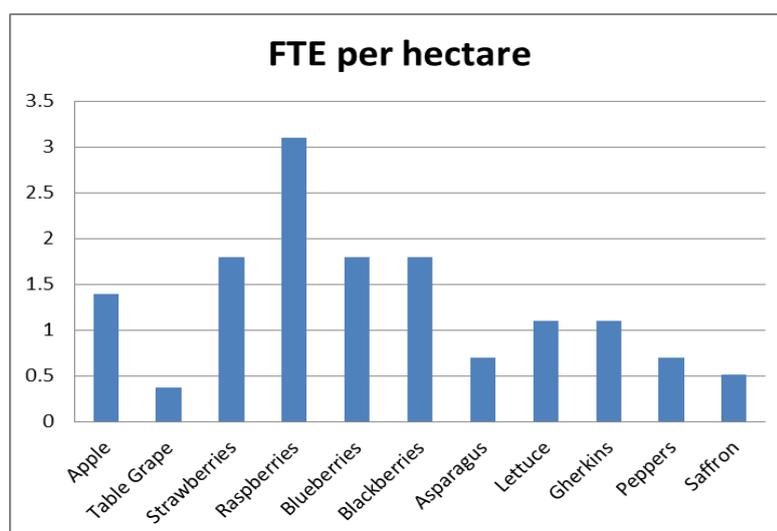


Figure 5: Number of FTE generated per hectare by value chain

Information from 1,525 farmers engaged directly or indirectly in program’s activities was updated through telephone interview and lists of farmers from associations and/or collection centers. This data provided area under crop by value chain. Table 5 below shows the number of farmers engaged with the program⁸⁰, the total number of FTEs/ha required at the farm level, the total number of ha under NOA-influenced production, and the total FTEs generated, all disaggregated by value chain. (Dairy is covered under processing)

Value Chain	# of Farmers	FTE/HA	Total HA	Total FTE
Apple	336	1.4	576	806
Table Grape	488	0.38	267	101
Strawberries	48	1.8	38	68
Raspberries	136	3.1	59	183
Blueberries	13	1.8	17.2	31
Blackberries	12	1.8	4	7
Asparagus	11	0.7	8.66	6
Lettuce	83	1.1	57.16	63
Gherkins	85	1.1	12.63	14
Peppers	306	0.7	417.15	293
Saffron	7	0.52	5.1	3
Total				1575

Table 5: Number of FTE disaggregated by Value Chain at the farm level

While table 5 above provides information about FTE at farm level only, Fig. 6, below, shows total FTE generated as a result of production and processing activities combined, disaggregated by original and new value chains. (Livestock production is always treated separately in the project database)

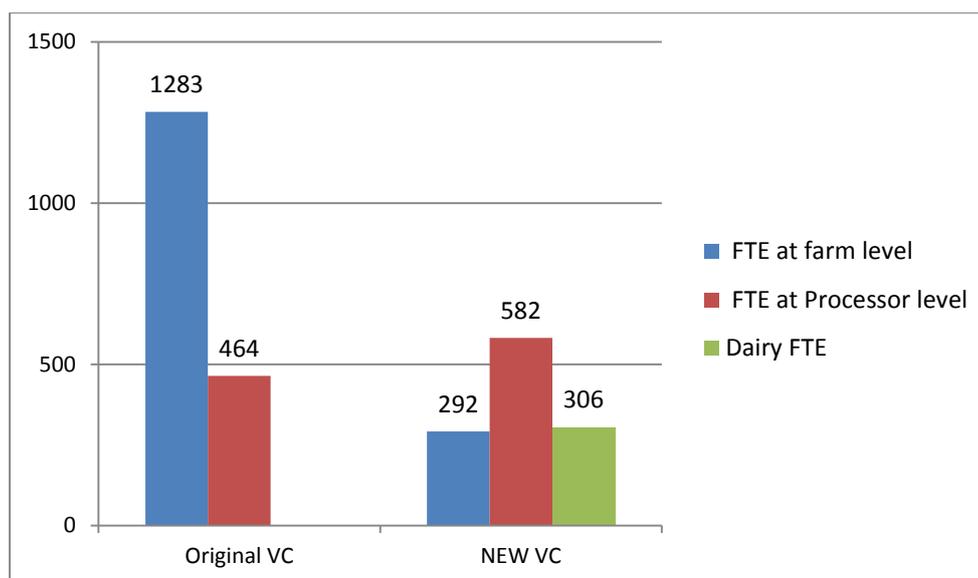


Figure 6: Number of FTE by level of value chain and comparison between Original and New Value Chains

Of note, according to the FTE calculations applied, 84% of FTE created were for men and 16% were for women. In addition, 6% were from minority groups.

Indicator AO2.5: Changes to gender empowerment measures (GEM) as a result of program interventions

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

Data Source: Data will be collected by conducting an annual survey performed by a dedicated NOA enumerator team specifically trained in carrying out this survey.

Annual Results: In March 2013, program conducted a survey with women participating directly and indirectly in program's activities, with the aim to identify the level of women engaged and empowered in farm operations and beyond. The baseline results have been included in the 2013 annual report. In 2014, the program has repeated the same survey to assess any possible change in the women empowerment index. In the table below we provide result comparisons between 2013 and 2014.

<i>Year</i>	<i>Production</i>	<i>Resources</i>	<i>Incomes</i>	<i>Leadership</i>	<i>Time</i>	<i>Overall Results with weighted %</i>
2014	0.33	0.36	0.55	0.11	0.55	0.38
2013	0.3	0.3	0.47	0.15	0.55	0.35
% Change	10%	20%	17%	-27%	0%	9%

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

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

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

Annual Results: In FY4, the program increased domestic sales from \$32M in FY3 to \$44M in FY4. Thus, import substitution as result of program interventions in FY4 is [**\$12M**].

Indicator AO2.7: Percent (%) increase in rural income as result of USG assistance

Definition of the indicator: This indicator tracks changes in income of rural program customers as a result of program interventions. It includes all income generated through selling program-targeted products and disregards whole farm income derived from other sources such as revenues received from remittances.

Data Source: annual surveys

Annual Results: In order to assess change in rural income, in 2013 program has organized survey with 55 program directly involved farmers to define the baseline value for rural income which was defined as €30,552. In, November 2014, NOA has repeated the same survey with same farmers, and found that total value of income has been increased to €39,500 or **24%** increase. Adopting new technologies, management practices and overall surface has played direct role in increase in income.

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: FY4 concluded with the signing of **[956]** contracts between actors engaged in project targeted value chains. 770 contracts were used for domestic transactions, and 184 were for international markets, and 2 contracts for regional markets. This is a significant change from the last annual report when the program reported 310 contracts signed. This increase came as a result of the program's deep engagement in connecting farmers with processors and the latter with other actors in the value chain. In addition, the program conducted several trainings with the objective of formalizing business and has engaged with the USAID CLE program to reinforce field contract support.

Table 6 below disaggregates contracts by value chain and market destination.

<i>Value Chain</i>	<i>Domestic</i>	<i>Regional</i>	<i>International</i>
Apple	6		
Asparagus	14	1	
Blueberry	5		
Field Vegetables	605		174
Gherkins	98		5
Lettuce	17		
Saffron	1		
Strawberry	25	1	
Table Grape	2		2

Table 6: Contracts signed disaggregated by product and destination

The vegetable value chain is the main contributor to total number of contracts signed in FY4, bringing a total of 914 signed contracts, the majority of which are agreements established between field vegetable growers and processors or export companies.

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, [**\$7,652,134**] in linkage sales was generated during FY4. These sales were generated as a result of linkages created between producers, collection centers, processors and other market players. This reflects a major increase compared to FY3 results which totaled only \$3.4M. The rapid increase in linkage sales is largely a result of the increase in the number of signed contracts in FY4 as well as the NOA program’s direct engagement and support to sales and marketing activities. Figs. 7 and 8 below show sales as a result of NOA-supported linkages by type of market and value chain.

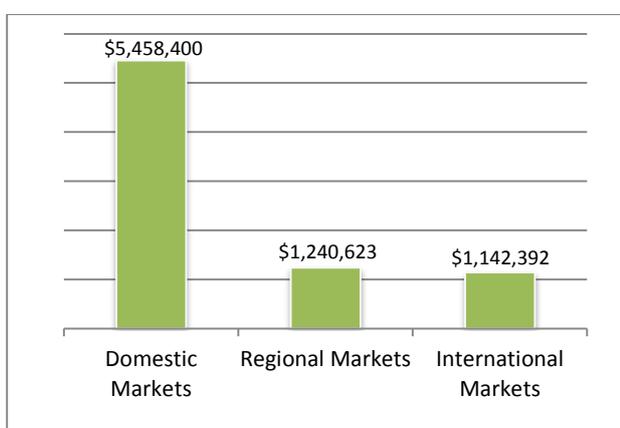


Figure 7: Value of linkage sales by type of market

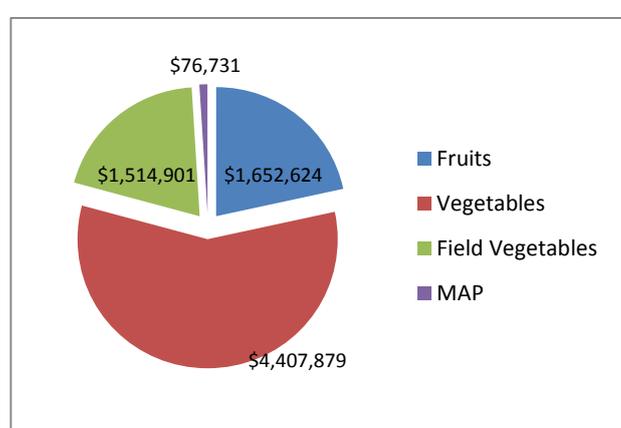


Figure 8: Value of linkage sales by Value Chain

As can be seen from Fig. 7, the majority of linkage sales were destined for domestic markets. As shown in Fig 8, vegetable sales (original value chains) were 60% of all linkage sales concluded.

Indicator IR.1.3: Number of participants in study tours, B2B, market investigation and trade shows

Definition of the indicator: Number of people who participated in program sponsored events, including study tours, business to business events and trade shows.

Disaggregation by: Gender, ethnicity.

Source of data: Data are received from the program’s event participant lists and reports from Program specialists.

Annual Results: In total, [**126**] people participated in two study tours, and two B2Bs. See Table7 below for study tour and B2B’s information and the number of participants that attended each.

Event Name	Type Of Event	# of Participants	Female	Minorities
Strawberry Study tour in Macedonia	Study Tour	8		
Strawberry study tour in Serbia, Novi Sad	Study Tour	5		1
Study tour to Italy – table grape harvesting	Study Tour	18		
B2B Macedonia/Albania	B2B	47		
B2B Conference Swiss Diamond Hotel Pristina	B2B	48	10	1

Table 7: Study tour and B2B participation

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 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: Following the agreements and signing of over 950 contracts, program customers identified [252] new markets. Three new markets were identified by the saffron value chain with product sold to France, UK and Germany. Table grapes were sold to Germany in three different markets. Six new markets were identified within the region. These included markets for asparagus in Albania, peppers were sold in Montenegro and Macedonia, and table new grapes markets were identified in Montenegro. New local markets identified and entered make up the bulk of results contributing to this indicator, as summarized in Tables 8 and 9 below.

Type Of market	# of markets
Local	240
Regional	6
International	6

Table 8: New Markets by geographic focus

Value Chains	# of markets
Fruits	101
Vegetables	134
Field Vegetables	6
MAP	11

Table 9: New markets by Value Chain

Indicator IR.2.2: Number of new technologies and/or management practices introduced as result of USG assistance

Definition of the indicator: This includes production and 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: Seven [7] new technologies were introduced in FY4, including the following:

- Bench Grafting
- Callusing Room for grafting
- Rooted Rootstock
- Chipped Grafting
- Lyre Trellising locally fabricated
- Rodent Control in saffron
- Buddy strawberry Plants

Indicator IR.2.3: 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: In total, [3,641] individuals were trained in agriculture productivity as a result of NOA assistance in FY4. This figure includes individuals trained directly by the program as well as those trained (confirmed) by lead farmers which the program directly assisted.

Gender	# of people trained	%
Men	1374	87%
Women	218	13%
Minorities	29	1.8%
Total #	1621	

Table 10: People Trained in FY4 by gender & ethnicity

Value Chain	# people trained	Female	Minorities
Apple	46	3	
Asparagus	47	6	
Blueberry	31		
Dairy	260	25	
Gherkins	50	9	
Peppers	267	65	14
Raspberry	358	55	4
Strawberry	153	17	
Table Grape	70	1	
Other	339	37	11

Table 11: Number of People Trained by Value Chain

A total of 1,621 people were trained directly by program staff and/or consultants in trainings related to good agricultural practices during FY14. In addition, 235 people participated in NOA organized presentations covering different topics. Tables 10 and 11 below provide a summary of these results disaggregated by gender, minority status and by value chain.

In addition to the above, in the improved coordination section of this report, we have provided information about surveys that were conducted by the program to gain insight about lead farmer activities, and how they are disseminating knowledge to other farmers. A sample of one-hundred (100) lead farmers were interviewed by phone; results showed that, out of the total contacted, 85 lead farmers had provided advice, trainings or assistance to at least 2,020 farmers. Because the data collection method used to collect this information does not allow us to disaggregate the data by gender and ethnicity, we are only able to report the combined total number of 3,641 individuals trained directly by program staff and by lead farmers. It should be noted that we have chosen *NOT* to extrapolate the lead farmer training over the total number of lead farmers – 500 in total - which would bring the total trained this year to **12,361** (or 176% of LOP target) but instead to use only the data from direct interviews.

Indicator IR.2.4: Number of farmers, processors and others who have adopted new technologies or management practices as result of USG assistance

Definition of the indicator: Number of farmers adopting new practices or techniques provided by NOA.

Disaggregated by: Gender, ethnic group, location

Source of data: Data received from field visit reports and IIF reports.

Annual Results: In total, [1500] farmers and others adopted new technologies and management practices in FY4. A summary of farmers and others who adopted new technologies and management practices on the varying number of hectares is provided in Table 12 below, disaggregated by value chain.

Value Chain	# of people adopting technologies	HA
Apple	161	70
Table Grape	488	28
Strawberry	48	43
Raspberry	136	25
Blueberry	13	17
Blackberry	12	4
Gherkins	85	27
Lettuce	83	50
Asparagus	11	34
Saffron	7	26
Pepper	306	7.5
MAP	150	171
Total	1500	502

Table 12: Number of farmers and others who adopted new technologies

Indicator IR.2.5: Number of firms receiving USG assistance to invest in improved technologies (FACTS)

Definition of the indicator: Number of collection centers and processors to whom the Program has provided trainings or technical support, and/or IIF funding to improve or upgrade their operations.

Disaggregated by: None

Source of data: Program training participation lists and IIF reports.

Annual Results: In total, in FY4, forty-four [44] firms invested to improve their production and processing technologies. Twelve (12) firms received funds from the IIF to adopt one or more technologies introduced. In addition, twenty-two (22) NOA customer firms were financed by the MAFRD to support apple production, apple infrastructure and strawberry production on a total of twenty-two (22) hectares.

Indicator IR.2.6: Number of hectares under improved technologies and/or management practices as a result of USG assistance (FACTS)

Definition of the indicator: This includes lands which are being cultivated using new/improved technology and/or management practices as defined in indicator IR2.2.

Disaggregated by: None

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

In total, over the course of FY4, improved technologies were used on [502] Ha of program-targeted crops. Table 13 below summarizes the area of land on which farmers are now practicing new technologies, by

value chain. The column heading *NOA supported* are those areas that NOA directly supported in some way while the *total Ha* column includes areas where adoption was the *direct and indirect* result of NOA support – essentially highlighting total adoption of technologies. (Note this total is not reported in the PMP although adoption as a result of indirect influence can also be attributed to NOA interventions)

Value Chain	Number of Farmers	HA under new technologies
Apple	161	70
Table Grape	488	28
Strawberries	48	43
Raspberries	136	25
Blueberries	13	17
BlackBerries	12	4
Asparagus	11	27
Lettuce	83	50
Gherkins	85	34
Peppers	306	26
Saffron	7	7.5
MAP	150	171
Total	1500	502

Table 13: Ha under new technologies

IR 3: Food Quality and Safety Improved

Indicator IR.3.1: Number of firms receiving USG assistance that obtain certification with international quality control, environmental and other process voluntary standards or regulations

Definition of the indicator: Number of farmers and/or firms that receive certification from licensed bodies, for at least one of the existing food and safety standards.

Disaggregated by: Gender, ethnic group, location, product

Source of data: Reports from post-harvest specialist.

Annual Results: Number of farmers/ firms that received GlobalGAP certification in FY4 is five (5). In addition, two (2) companies were granted HACCP certification, totaling [7] companies implementing standards. See Table 14 below for information on companies certified.

Company Name	Farmer Name	Product	Certification
Agroserra	Gani Hajzeri	Lettuce	HACCP Certified
KORAL		Processing	HACCP Certified
Moea	Alban Ibrahimimi	Apple	GAP Certified
Agroserra	Gani Hajzer	Apple	GAP Certified
Agrovizioni	Rexhep Spahiu	Apple	GAP Certified
Ask Foods	Erton Namani	Apple	GAP Certified
APC	Avni Shabani	Apple	GAP Certified

Table 14: Farmers/firms certified as Global GAP /HACCP compliant

Indicator IR.4: Increased Access to Agricultural Finance

Indicator IR.4.1: Value of DCA lending to the agricultural sector

Definition of the indicator: This measures the value of DCA-backed loans received by Program customers from financial institutions (including banks and MFI's) to invest in Program-targeted crops and value chains.

Disaggregated by: Data reported under this indicator will be disaggregated by value chain

Source of data: Information will be derived from bank reports submitted to the MAFRD and USAID.

Annual Results: In total, to date, \$9M in DCA-supported loans have been reported. These loans were issued up until February 2014. The next DCA report is due during Q1 FY15.

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: The Agro credit card product was established and launched by TEB bank in FY4. This brings the total result for this indicator to six finance institutions offering new financial products to support the agriculture sector (over the LOP).

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

Definition of the indicator: This indicator includes SMMEs along all levels of the targeted value chains including producers, processors, traders, business development support service providers and the like. All SMMEs that receive any type of Program-supported technical assistance aimed at improving their ability to qualify and apply for bank loans or to obtain private equity will be counted under this indicator regardless of whether or not they actually apply for and/or receive a bank loan.

Disaggregated by: Disaggregated by the level of the value chain at which the SMMEs operate and the value chain itself.

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

Annual Result: In total, [77] entities participated in FY4 program sponsored activities related to access to finance and loans. The list of events and the number of participants at each is summarized in Table 15 below:

Event Name	Category Of Event	Date of Event	Number of SMME's
Fulfillment of needs of the agribusiness sector,	Access to finance	9/13/2013	27
Round Table - Crop Insurance Model For Kosovo	Access to finance	10/31/2013	10
Training for Agro Credit	Access to finance	5/5/2014	14
Training for Agro Credit	Access to finance	4/23/2014	14
Agriculture Insurance, NOA Office, Pristina	Access to finance	7/30/2014	12
Total			77

Table 15: Number of SMME's receiving access to finance assistance

Indicator IR.4.4: Value of grants issued for value chain operators of targeted crops and products as a result of USG assistance (including IIF)

Definition of the indicator: This indicator tracks the total value of grants issued to support investment in Program-focused value chain development. It includes grants issued by the Program under the IIF as well as grants provided by other donor organizations, NGOs, Government or other entities.

Source of data: IIF reports, customer survey.

Annual Result: During FY4 the program invested [**\$141,973**] through the IIF Grant schemes whereas, activities financed through IIF-funded subcontracts amounted to [**\$15,227**]. Please refer to the IIF section of this report for a detailed list of grants and subcontracts. In addition to IIF, as a result of NOA's interventions, the MAFRD financed a total of [**\$296,865**] in grants to support agricultural infrastructure and the apple and strawberry value chains.

Indicator IR.4.5: Number of Program customers receiving grants as a result of USG assistance (including IIF)

Definition of the indicator: The total number of customers that receive funds as a result of Program assistance. This includes recipients of IIF Grants as well as other program customers that have received grants from other entities.

Disaggregated by: Gender, ethnicity and value chain

Source of data: IIF grant reports, customer survey.

Annual Results: in FY4, twelve [**12**] value chain operators received assistance through the program's IIF grant scheme. In addition, twenty-two [**22**] farmers were financed by the MAFRD to invest in apple orchards, infrastructure and strawberry production. A detailed list of the program's grants and subcontracts is included in the IIF section of this report.

Indicator IR.5: Improved Coordination within the Agricultural Sector Indicator

IR.5.1: Number of interventions improving the functionality of the Agriculture sector

Definition of the indicator: This indicator refers to policy reforms/regulations/administrative procedures drafted and presented to stakeholders for consultation but not yet submitted formally to government or other bodies that would approve it. In addition, the project will report any intervention improving the functionality of the Ministry of Agriculture to influence coordination in the agricultural sector. The indicator will include policy changes influenced, administrative instructions concluded with NOA support as well as modified MAFRD management or grant making decisions influenced by NOA – regardless of the number of meetings that have been required to bring the intervention to conclusion.

Source of data: Data collected from internal reports.

Annual Results: A total of eight [**8**] ongoing and intermittent activities were supported by the project in FY4 in order to enhance improved coordination. These are detailed in the improved coordination section of the report, including support to the development of an agricultural extension service, development of an IT platform supporting the service, the development of government subsidy programs to the dairy sector, and rationalizing the VAT structure for small farmers.

IR.5.2: Number of donor, GOK and agriculture sector roundtables or other events facilitated by NOA

Definition of the indicator: Number of formal agricultural coordination events sponsored by the Program.

Source of data: Program Records

Annual Results: Seventeen [**17**] round table meetings were facilitated by the program in FY4, involving GOK, private and NGO actors within the agriculture sector and engaging a total of 256 participants. This surpassed the FY4 target of 12 events. A list of events organized with the number of participants that attended is presented in Table 16 below.

Event Name	Type Of Event	Value Chain	Date of Event	# of Participants
Seedling Production in Kosovo Fruit Sector	Round Table	Fruits	12/12/2013	25
Informational meeting to set up 20 hectares with raspberry, APC Peran	Round Table	Fruits	11/10/2013	23
Meeting with Anie Holland, NOA Office, Pristina	Round Table	Fruits	10/14/2013	5
Meeting with Processors of fruit and vegetables, PEPEKO	Round Table	Field Veg's	11/22/2013	7
Crop Insurance Model For Kosovo. MAFRD-Economic Analyses Unit, Pristina	Round Table	Access to finance	10/31/2013	10
Dairy processing association roundtable	Round Table	Dairy	12/19/2013	13
Discussion on contracted program cultivation and plant protection	Round Table	Vegetables	2/27/2014	13
Focus Group For Pepper	Round Table	Vegetables	2/14/2014	3
Pre Launching Presentation of the Agro Card Product	Round Table	Access to finance	2/14/2014	22
Seedling cultivation /pepper (chili) contracting	Round Table	Vegetables	2/14/2014	21
Association Management-Sasho Risteski	Round Table	Farm Management	1/1/2014	11
Cooperation with farmers,Season 2014 –Contracts, Suharekë	Round Table	Vegetables	3/19/2014	10
Cooperation with farmers,Season 2014 -Contracts , Mamushë	Round Table	Vegetables	3/19/2014	12
Strawberry Fair Preparation	Round Table	Fruits	5/15/2014	24
Standards for pepper classification	Round Table	Vegetables	5/23/2014	10
Establishment of association "Frutat e Llapit"	Round Table	Fruits	4/3/2014	26
Roundtable with farmers from Krusha e Madhe, Rahovec	Round Table	Vegetables	6/3/2014	21

Table 16: Number of participants that attended various agriculture sector coordination events.

5.0 FINANCIAL REPORT

The NOA FY14 general financial report is shown below. The report shows expenditures through September 30, 2014, against contractual budget lines. In addition, costs incurred (paid out) of the Innovation and Incentives Fund (IIF) are also shown. Please note however, that to better understand *obligated* costs under the IIF and the funds that remain therein, the reader is referred to Section 4 of this report.

CONTRACT # AID-EDH-I-00-05-00006
Kosovo New Opportunities for Agriculture
FY14 Annual Report (October 2013-September 2014)
CONTRACT EXPENDITURES through September 30, 2014

Contract Category	Contract Budget	Total Cost Incurred as of 9/30/14	Remaining as of 9/30/14	% Used
Total All Other	\$12,384,241	\$11,458,754	\$925,487	93%
IIF Activities	\$2,820,796	\$2,758,788	\$62,008	98%
Fixed Fee	\$684,677	\$641,345	\$43,332	94%
TOTALS	\$15,889,714	\$14,858,888	\$1,030,826	94%

ANNEX I: INDICATOR TARGETS AND RESULTS

Indicator	Unit Measure	FY4 Target	FY4 Actual	FY5 (5 months)	Total Targets	Results for LOP	Performance over LOP	
AO2: Increasing Private Sector-Led Growth								
AO2.1	Total value of sales as a result of USG assistance	\$	\$12m	\$54,622,568	\$7.5m	\$32.5m	\$102,497,353	315%
AO2.2	Total value of exports as a result of USG assistance	\$	\$4m	\$10,392,623	\$3m	\$9.7m	\$22,825,616	235%
AO2.3	Total value of domestic sales as a result of USG assistance	\$	\$8m	\$43,682,707	\$4.5m	\$22.8m	\$79,674,329	349%
AO2.4	Number of Person-days/FTE generated through target value chains as result of USG assistance	Number FTE	2000	2927	1500	6500	6153	95%
AO2.5	Changes to gender empowerment measures (GEM) as a result of program interventions	%	20	9	-	10		
AO2.6	Increase in the value of import substitution as a result of USG assistance	\$	\$11M	\$12m	\$3M	\$21M	\$14M	67%

Indicator	Unit Measure	FY4 Target	FY4 Actual	FY5 (5 months)	Total Targets	Results for LOP	Performance over LOP	
AO2.7	Percent (%) increase in rural income as result of USG assistance	%	25%	-	10%	10%		
IR 1: Products and Farmers Linked to Markets								
IR1.1	Number of delivery contracts issued for targeted crops	Number	475	956	325	1150	1354	119%
IR1.2	Value sales resulting from linkages created between farmer, processors and traders as result of USG assistance	\$	\$3m	\$7,652,134	\$1.5m	\$9m	\$11,924,015	133%
IR1.3	Number of participants in study tours, B2B, market investigation and trade shows	Number	60	126	30	230	357	155%
IR 2: Agricultural Products Diversified and Increased								
IR2.1	Number of new markets entered for target value chain products	Number	10	252	12	12	422	3517%
IR2.2	Number of new technologies and/or management practices introduced as result of USG assistance	Number	5	7	4	23	151	657%

Indicator	Unit Measure	FY4 Target	FY4 Actual	FY5 (5 months)	Total Targets	Results for LOP	Performance over LOP	
IR2.3	Number of individuals trained in agriculture productivity through USG assistance (FACTS)	Number	2500	3641	500	7000	7803	111%
IR2.4	Number of farmers, processors, and others who have adopted new technologies or management practices as a result of USG assistance	Number	1500	1500	1750	1750	3406	195%
IR2.5	Number of firms receiving USG assistance to invest in improved technologies (FACTS)	Number	30	44	35	35	137	391%
IR2.6	Number of hectares under improved technologies and/ or management practices as a result of USG assistance (FACTS)	HA	60	502	60	205	502	244%
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	8	7	10	10	14	140%
IR 4: Increased Affordable and Accessible Credit								
IR4.1	Value of DCA lending to the agricultural sector	Number	\$5 m	\$9m	\$1 m	\$9m	\$9m	100%

Indicator	Unit Measure	FY4 Target	FY4 Actual	FY5 (5 months)	Total Targets	Results for LOP	Performance over LOP	
IR4.2	Number of institutions offering new products targeted at agriculture and agri-businesses as a result of USG (NOA Project) assistance	Number	5	1	0	5		
IR4.3	Number of SMMEs receiving USG (NOA Project) assistance to access bank loans or private equity (FACTS)	Number	55	77	75	75	309 412%	
IR4.4	Value of grants issued for value chain operators of target crops and products as result of USG assistance (excl. IIF) <i>From IIF – grants and subcontracts</i>	\$	\$400k	\$296,865	\$400k	\$1.1m	\$296,865	27%
			\$500k	\$15,227	\$200k	\$2.9m	\$2,989,995	103%
IR4.5	Number of Program customers receiving grants as a result of USG assistance (excluding IIF) <i>From IIF – grants and subcontracts</i>	Number	20	22	20	55	22	40%
			50	12	20	280	157	56%
IR 5: Improved Coordination within Agricultural Sector								
IR5.1	Number of interventions improving the functionality of the Agriculture sector	Number	0	8	0	5	12 240%	

Indicator	Unit Measure	FY4 Target	FY4 Actual	FY5 (5 months)	Total Targets	Results for LOP	Performance over LOP
IR5.2	Number of donor, GOK and agriculture sector roundtables or other events facilitated by NOA	12	17	5	52	82	158%

* Refer to Annex of list of technologies introduced

ANNEX II. FY14 SUMMARY OF SIGNED SALES CONTRACTS

<i>Value Chain</i>	<i>Destination</i>	<i>Total</i>
Apple	Domestic	6
Asparagus	Regional	1
Asparagus	Domestic	14
Blueberry	Domestic	5
Field Vegetables	International	174
Field Vegetables	Domestic	605
Gherkins	International	5
Gherkins	Domestic	98
Lettuce	Domestic	17
Saffron	Domestic	1
Strawberry	Regional	1
Strawberry	Domestic	25
Table Grape	International	2
Table Grape	Domestic	2
Total		956

ANNEX III. FY14 SUMMARY OF SALES BY VALUE CHAIN AND DESTINATION

ValueChain	Fresh vs Processed	Location	Total in €	Total in \$
Achilea Milefolium	Fresh	International	3,726 €	\$4,732
Aconitti Tuber	Fresh	International	736 €	\$935
Ajvar	Processed	International	73,600 €	\$93,472
Althaeae Officinalis Radix	Fresh	International	55,200 €	\$70,104
Althea Folium	Fresh	International	11,592 €	\$14,722
Apple	Fresh	Local	172,637 €	\$219,249
Aronia	Fresh	Local	2,042 €	\$2,594
Asparagus	Fresh	Local	15,533 €	\$19,727
Asparagus	Fresh	Regional	442 €	\$561
Blackberry	Processed	International	811,440 €	\$1,030,529
Blackberry	Fresh	Local	7,124 €	\$9,048
Blackberry Jam	Processed	Local	4,824 €	\$6,127
Blackberry Juice	Processed	Local	581 €	\$738
Blackberry Leaf	Fresh	International	53,360 €	\$67,767
Blueberry	Processed	International	2,032,280 €	\$2,580,996
Blueberry	Fresh	Local	8,835 €	\$11,220
Blueberry & Raspberry Juice	Processed	Local	603 €	\$766

Chamomile Powder	Fresh	International	31,869 €	\$40,473
Dairy	Processed	International	360,934 €	\$458,387
Dairy	Processed	Local	22,080,000 €	\$28,041,600
Elderberry Flower	Fresh	International	220,800 €	\$280,416
Feferoni	Processed	Local	310,299 €	\$394,079
Felix Mass	Fresh	International	16,560 €	\$21,031
Fruit Nursery	Fresh	Local	16,192 €	\$20,564
Processed Gherkins	Processed	International	132,480 €	\$168,250
Gherkins	Fresh	Local	542,940 €	\$689,534
Gherkins	Fresh	Regional	18,400 €	\$23,368
Juniperus Communis	Fresh	International	44,252 €	\$56,200
Kraste	Fresh	International	38,640 €	\$49,073
Lettuce	Fresh	Local	2,513,072 €	\$3,191,601
Malus Sylvestris	Fresh	International	11,040 €	\$14,021
MAP	Fresh	International	1,676,572 €	\$2,129,246
MAP	Fresh	Local	42,320 €	\$53,746
Peppers	Processed	International	681,518 €	\$865,527
Peppers	Processed	Local	2,394,227 €	\$3,040,668
Peppers	Processed	Regional	677,120 €	\$859,942
Pickled	Processed	International	149,040 €	\$189,281
Primrose	Fresh	International	264,960 €	\$336,499
Processed Apple	Processed	Local	552,000 €	\$701,040
Processed Gherkins	Processed	Local	1,025,942 €	\$1,302,947
Processed Gherkins	Processed	Regional	211,668 €	\$268,818
Processed Peppers	Processed	International	180,762 €	\$229,567

Processed Peppers	Processed	Local	2,026,208 €	\$2,573,284
Processed Peppers	Processed	Regional	67,436 €	\$85,644
Processed Strawberries	Processed	Local	88,320 €	\$112,166
Ramsons	Fresh	International	23,920 €	\$30,378
Raspberry	Fresh	International	159,988 €	\$203,185
Raspberry	Fresh	Local	221,329 €	\$281,088
Raspberry	Fresh	Regional	20,272 €	\$25,746
Raspberry Jam	Processed	Local	684 €	\$869
Root Primrose	Fresh	International	160,742 €	\$204,143
Rosa Canina	Fresh	International	64,768 €	\$82,255
Rosehips	Fresh	International	69,920 €	\$88,798
Rrenje Sanze	Fresh	International	2,162 €	\$2,746
Saffron	Fresh	International	4,848 €	\$6,157
Saffron	Fresh	Local	11,624 €	\$14,762
Saffron	Fresh	Regional	1,619 €	\$2,056
Salvia Officinalis	Fresh	International	32,016 €	\$40,660
Seedling Strawberry	Fresh	Local	10,120 €	\$12,852
Strawberry	Fresh	Local	718,039 €	\$911,909
Strawberry	Fresh	Regional	1,104 €	\$1,402
Table Grape	Fresh	International	4,011 €	\$5,094
Table Grape	Fresh	Local	1,867,115 €	\$2,371,236
Wild Apple	Fresh	International	41,952 €	\$53,279
Total			43,046,360 €	\$54,668,877

ANNEX IV. FY14 TRAINING EVENTS FOR WOMEN

Event Name	Event Date	Type	Category	Number of participants	Gender
Apple-Cost of production Meeting	7/6/2012	Presentation	Fruits	1	Female
Assessment of losses from natural disasters of Apples, Lipjan, Llugaxhi	10/29/2013	Open Field Day	Fruits	1	Female
Balancing feed ration; The dairy cows reproduction management and hygiene in the dairy farms. Jabllanicë e Leshanit, Peja	11/12/2013	Training	Dairy	1	Female
Capacity Building of the Interns engaged in Collection Points and Processing Companies, Pristina	6/26/2013	Training	Training Of Trainers	6	Female
Chili Pepper Field Day, Kufcë e Epërm	9/10/2013	Open Field Day	Vegetables	3	Female
Contracts for programmed cultivation	2/20/2013	Training	Vegetables	1	Female
Cultivation of Raspberry, Podujevë	1/23/2014	Training	Fruits	4	Female
Dairy Farm Management Training/Women Farmers	4/4/2013	Training	Dairy	14	Female
Demonstrimi i terheqjes se kulturave vjeshtore	11/15/2012	Training	Fruits	5	Female
Farm management of dairy cows. Euroлона Farm-Miradi e Epërme Fushë Kosovë	3/24/2014	Training	Dairy	1	Female
Farm management of dairy cows.Rubovc,Lipjan	3/27/2014	Training	Dairy	17	Female
Farmer Field School APC- Raspberry Production, Peran,Podujeva	4/17/2013	Training	Fruits	3	Female

Event Name	Event Date	Type	Category	Number of participants	Gender
Farmer Field School -Raspberries for Fresh Market,Kravaricë Ask Foods	4/19/2013	Training	Fruits	1	Female
Farmer Field School, Llukë,Sllip,Ramoc	7/24/2013	Training	Fruits	1	Female
Field and crop budget,gross margin analyses on vegetables	2/13/2013	Training	Improved Coordination	7	Female
Field day for raspberry	11/2/2012	Open Field Day	Fruits	2	Female
Field Days of Table Grapes -Suahrek	9/6/2012	Open Field Day	Fruits	6	Female
Food safety and good agricultural practices, Pristina AVUK	3/4/2014	Training	Vegetables	2	Female
Food safety and good agricultural practies,Pristina AVUK	3/5/2014	Training	Vegetables	3	Female
Global GAP Certification Event, Pristina	12/17/2013	Presentation	Post-Harvest and Certification	1	Female
GlobalGAP& Safe use of pesticides Gjilan	10/17/2011	Training	Environmental	1	Female
Good practices of pepper cultivation / protecting / marketing of contracts. Podujevë	2/26/2014	Training	Vegetables	10	Female
Grant Sigining Ceremony	12/2/2011	Presentation	Access to finance	2	Female
HAAC Implementation	3/16/2012	Training	Post Harvest and Certification	4	Female
HS6 pepper variety promotion-Training. Bardash Podujevë	3/21/2014	Presentation	Vegetables	25	Female
IIF Presentation Ferizaj	4/26/2011	Presentation	Access to finance	2	Female
IIF Presentation Gjilan	4/26/2011	Presentation	Access to finance	3	Female
IIF Presentation Peja	4/27/2011	Presentation	Access to finance	3	Female
IIF Presentation Prizren	4/21/2011	Presentation	Access to finance	1	Female
Implementation of Global Gap, USAID/NOA	9/23/2014	Training	Post Harvest and Certification	15	Female

Event Name	Event Date	Type	Category	Number of participants	Gender
Integrated pest management of raspberries. Podujeve	2/11/2014	Training	Fruits	2	Female
Introduction to HACCP and Food Safety Standards	3/13/2012	Training	Post Harvest and Certification	3	Female
Investment Promotion Meeting	7/18/2012	Presentation	Access to finance	6	Female
IPM and land management	7/20/2012	Training	Environmental	1	Female
IPM Gherkins Module 3	5/28/2012	Training	Environmental	2	Female
IPM Module 3 Gherkins	4/4/2012	Training	Environmental	2	Female
IPM Training	1/31/2012	Training	Environmental	2	Female
IPM-Table Grape	7/28/2012	Training	Environmental	1	Female
Launching of Agro Credit Card- Press Conference, Sirius Hotel Pristina	2/27/2014	Presentation	Access to finance	3	Female
Lettuce Field Day- Post Harvest Principles, Shipol, Mitrovica	8/13/2013	Open Field Day	Post-Harvest and Certification	2	Female
M&E	1/23/2012	Training	Marketing and Linkages	1	Female
Main pests and diseases of fruit crops	2/13/2013	Training	Improved Coordination	7	Female
Maintenance of the space in orchards with raspberry. Bibaj, Ferizaj	11/7/2013	Open Field Day	Fruits	2	Female
Market Entry Opportunity	9/8/2011	Training	Marketing and Linkages	1	Female
New Gherkin Varieties Presentation	7/11/2011	Presentation	Vegetables	3	Female
Plant propagating material production. Cultural practices of table grape crop	1/30/2013	Training	Improved Coordination	5	Female
Plant Protection (IPM and SUP), Table Grape, Pepper. Rahovec	9/24/2013	Training	Vegetables	1	Female
Plant Protection (IPM,SUP) -Vegetable Crops,Zahaj,Pejë	9/17/2013	Training	Vegetables	1	Female
Post-Harvest and Grafting, Rahovec	9/18/2013	Presentation	Post Harvest and Certification	1	Female
Post-Harvest handling,storage and marketing linkages	1/29/2013	Training	Improved Coordination	4	Female

Event Name	Event Date	Type	Category	Number of participants	Gender
Presentation to the interns engaged by CLE Program	3/28/2014	Presentation	Vegetables	6	Female
Presentation for the project activities	11/26/2012	Presentation	Fruits	3	Female
Processing Lettuce Plant-Grand Oppening	10/15/2012	Presentation	Post Harvest and Certification	2	Female
Programed cultivation of vegetables, Xerxa promotion for Ananas impex H6S pepper variety	12/13/2012	Presentation	Vegetables	2	Female
Programed vegetable cultivation promotion,Ranillug,Gjilan	1/16/2013	Presentation	Vegetables	4	Female
Promotion & Tasting of Saffron, Swiss Diamond Hotel	12/19/2012	Presentation	Marketing and Linkages	10	Female
Promotion of contracted cultivation of HS6 Peppe, Pasjan/Partesh-Gjilan	4/8/2014	Training	Vegetables	1	Female
Raspberry Cultivation Pests and Deseases	5/30/2012	Training	Environmental	3	Female
Raspberry Cultivation Practicies	7/15/2012	Training	Fruits	1	Female
Ride the capacities of women farmers in issues of sales and marketing	3/27/2013	Training	Marketing and Linkages	14	Female
Safe use of pesticides,Leposaviq with Albanian	2/5/2013	Training	Environmental	1	Female
Safe use of pesticides,Zubin Potok	1/19/2013	Training	Environmental	5	Female
Sales and marketing in Horticulture, Hotel Sirius-PRISHTINE	3/26/2013	Training	Marketing and Linkages	20	Female
SMS Software Development	2/14/2013	Presentation	Dairy	1	Female
SOE land owners presentation	6/30/2011	Presentation	Access to finance	2	Female
Stakeholder meeting in the Raspberry sector. Peran, Podujeva	9/9/2014	Open Field Day	Fruits	6	Female
Strawberry Promotion in Mother Teresa Square, Pristina	5/22/2014	Presentation	Marketing and Linkages	1	Female
SUP	2/2/2012	Training	Environmental	4	Female
SUP and Environmental Protection	2/21/2012	Training	Environmental	2	Female
SUP and Environmental Protection	2/23/2012	Training	Environmental	2	Female

Event Name	Event Date	Type	Category	Number of participants	Gender
Table Grape Workshop	2/16/2012	Training	Fruits	2	Female
Table Grape - V trellising system presentation in the new vineyards	7/21/2012	Presentation	Post-Harvest and Certification	1	Female
Table Grape -Pinirimi e llastrave ...	7/14/2012	Training	Fruits	1	Female
Table Grape Promotion	9/17/2014	Presentation	Fruits	8	Female
Table Grape -Removal	8/13/2012	Training	Fruits	1	Female
Table Grape-IPM	4/15/2012	Training	Fruits	4	Female
Table Grape-Land Management	5/5/2012	Open Field Day	Fruits	3	Female
Table Grape-Vine Management	5/24/2012	Training	Fruits	2	Female
Drop Fertigation System	10/15/2012	Training	Fruits	2	Female
The fertilization of Strawberry, Weed control, GlobalGap , Davidovc -Shtime	6/14/2013	Open Field Day	Fruits	8	Female
The issue in agriculture environmental	3/5/2013	Training	Improved Coordination	5	Female
Training of Lab Technicians at Processors and KFVA, Sllatin e Madhe "TrePharm"	8/29/2013	Training	Post-Harvest and Certification	6	Female
Training of Trainers for NOA Interns	10/22/2013	Training	Training Of Trainers	2	Female
Training of Trainers- Presentation Ability	10/17/2013	Training	Training Of Trainers	2	Female
Training on Application for rural grant scheme	2/28/2012	Training	Access to finance	1	Female
Training with extension agents under MAFRD, Lipjan	1/9/2013	Training	Improved Coordination	3	Female
Transparency and neutrality during sample collection, quality control and payment of raw milk in Kosovo	11/16/2012	Training	Post-Harvest and Certification	1	Female
Winter School Training- Women Farmers	1/28/2014	Training	Fruits	24	Female
Woman Entrepreneurs Networking	3/8/2013	Presentation	Access to finance	41	Female
Working group with NOA Interns, NOA Office, Pristina	9/4/2013	Training	Training Of Trainers	1	Female

ANNEX V. FY14 ROUNDTABLES

Event Name	Type Of Event	Value Chain	# of Participants
Seedling Production in Kosovo Fruit Sector	Round Table	Fruits	25
Informational meeting to set up 20 hectares with raspberry, APC Peran	Round Table	Fruits	23
Meeting with Anie Holland, NOA Office, Pristina	Round Table	Fruits	5
Meeting with Processors of fruit and vegetables, PEPEKO	Round Table	Field Veg's	7
Crop Insurance Model For Kosovo. MAFRD-Economic Analyses Unit, Pristina	Round Table	Access to finance	10
Dairy processing association roundtable	Round Table	Dairy	13
Discussion on contracted program cultivation and plant protection	Round Table	Vegetables	13
Focus Group For Pepper	Round Table	Vegetables	3
Pre Launching Presentation of the Agro Card Product	Round Table	Access to finance	22
Seedling cultivation /pepper (chili) contracting	Round Table	Vegetables	21
Association Management-Sasho Risteski	Round Table	Farm Management	11
Cooperation with farmers ,Season 2014 -Contracts	Round Table	Vegetables	12
Cooperation with farmers, Season 2014 -Contracts	Round Table	Vegetables	10
Strawberry Fair Preparation	Round Table	Fruits	24
Standards for pepper classification	Round Table	Vegetables	10
Establishment of association "Frutat e Llapit"	Round Table	Fruits	26
Roundtable with farmers from Krusha e Madhe, Rahovec	Round Table	Vegetables	21
		Total	256

ANNEX VI. 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 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, buck weed		Drip Irrigation	Rucola cultivate	Crop Production	Rotten Control
Humidity Control	Berry Thinning	Albion Variety	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	Body Plants	Duke Variety	Pollka Variety		Miranda Variety	Tatiana Variety	Depally Variety	
Anti-Hail	Fertigation System		Blue Crop Variety	Tullemen Variety		Gallina Variety	Gaugin RZ Variety	Modified atmosphere packaging	
High Density Fruit Orchards	Planting Distances		Elliot Variety	Nova Variety		Zatmir Variety	Dagama RZ Variety	Hydro cooling	

Apple	Table Grape	Strawberries	Blueberries	Raspberries	Blackberries	Gherkins	Lettuce	Asparagus	Saffron
Apple IPM	IPM		Legacy Variety	Autumn Bliss Variety		Bereg Variety	Beldy Variety Variety	Harvesting knives	
Red Chief Variety	Red Globe Variety						Ezteban Variety	Modified atmosphere packaging	
Fuji Kiku 8 Variety	Crimson Seedless Variety						Ezra Variety		
Gala Variety	Bench Grafting						Bijou Variety		
Fuji Full Brax Variety	Callusing Room for grafting						Alanet Variety		
Golden Rainders Variety	Rooted Rootstock						Sadavi Variety		
	Chipped Grafting						Palosta Variety		
	Lyril Trellising						Primafin Variety		
							Bacio Variety		
							Jabeque Variety		
							Manavert Variety		
							Expression Variety		
							Papiro Variety		
							Seagull Variety		
							Saula Variety		

Apple	Table Grape	Strawberries	Blueberries	Raspberries	Blackberries	Gherkins	Lettuce	Asparagus	Saffron
							Botiola Variety		
							Contessa Variety		
							Sartre RZ Variety		
							Saigon RZ Variety		
							5 in 1 Variety		

ANNEX VII. FY14 SNAPSHOTS



SNAPSHOT

In Kosovo, USAID Pioneers Delivery of Raw Milk Test Results Via SMS

Cell phones deliver lab results on milk quality and cow health.



Photo by USAID New Opportunities for Agriculture (NOA) project

Dukagjin Dedaj, dairy farmer displays a message reporting fat, protein, sugar and other parameters. Dedaj's 52 cows consistently produce "extra class" raw milk, allowing him to charge premium prices.

"It's a miracle. I'm sitting at home and a message shows up telling me about the health of my cows."

January 2014
U.S. Agency for International Development
www.usaid.gov

Dukagjin Dedaj a dairy farmer for more than a decade started with a herd of 15 cows that grew into 52. Dedaj's always known his cows produce excellent quality milk. Today, thanks to USAID, the proof is in his pocket.

Pulling out his cell phone, Dedaj showed off a message recently received from a state laboratory. It concisely detailed how his raw milk measures against eight standardized parameters, including fat, protein and sugar percentages.

The message also grades Dedaj's milk as "extra class." That classification allows Dedaj to command premium prices from the dairy processor that purchases the 720 liters of milk his cows produce daily. It also earns him a government grant designed to increase the domestic supply of the highest grades of raw milk.

USAID, in partnership with local partners, established Kosovo's national raw milk-sampling laboratory in the mid-2000s. Samples are collected at farms biweekly. The samples are blinded - the experts doing the testing do not know the samples' origins - to eliminate bias.

Initially, field officers shared the results with farmers. USAID then created a password-protected website. More recently, in the fall of 2012, as part of USAID's New Opportunities for Agriculture (NOA) a local IT company developed a software to disseminate testing results by SMS. Now, roughly 1,700 Kosovo dairy farmers receive their test results on their phones twice monthly.

"This is the biggest thing USAID has done for dairy farmers, who understand its importance," Dedaj said.

Dedaj receives testing results just days after his milk has been sampled. Purchasing dairies access the same information, which sellers and buyers then use to set a wholesale price for the raw milk.

"We no longer argue about quality—that's a third party's job to determine now. All we talk about is price," Dedaj said.

The results are also allowing farmers to intervene more quickly should testing reveal any deficiencies in their raw milk. For example, any decrease in the butterfat content in the milk cows produce prompts the farmer to adjust their feed regimen, perhaps by mixing in more soybean meal. Dedaj recently received a message indicating his milk had slipped a grade, to first class. Testing revealed one of his cows had a single teat with mastitis. While the infection leads to inflammation, it wouldn't have been apparent at such an early stage had Dedaj not been alerted to something wrong.

"It's a miracle. I am sitting at home and a message shows up and tells me about the health of my cows," Dedaj said.

The New Opportunities for Agriculture project runs from January 2011 to January 2015 focuses on creating market linkages, increasing and diversifying agricultural products, improving food quality and safety, increasing affordable and accessible credit. In addition, the activity supports the sector through small grants to farmers, agricultural enterprises and associations.



SNAPSHOT

Change to Tax Legislation Stimulates Domestic Agriculture

USAID-championed incentive encourages formal growth



Kosovo Government signs administrative instruction which introduces VAT flat rate for agriculture primary products.

“With this solution, everyone wins.”

- Blerand Stavileci, Kosovo’s Minister of Agriculture.

PRISTINA, Kosovo—A newly signed amendment to Kosovo’s tax legislation championed by USAID should strengthen the farm sector, other raw agricultural products.

The administrative instruction, signed Sept. 10, 2013, effectively discounts the 16% value-added tax (VAT) that dairies and collection centers previously paid on the full value of their finished products. The incentive works by allowing these middlemen to claim a credit for VAT owed by the primary producers of the raw milk and other agricultural inputs that they purchase, process, package and then sell to the public.

The change should make domestic products more cost competitive against imported goods, said Milazim Berisha, head of the Kosovo Association of Milk Producers. While VAT receipts should dip in the short term, the government should collect more of the tax in the longer term, as sales of finished agricultural products increase, said Arben Musliu, a dairy expert with USAID’s New Opportunities for Agriculture project.

“This is a great achievement for Kosovo agriculture, particularly for dairies,” said Ramadan Memaj, president of the Kosovo Dairy Processors Association. “USAID’s support was a real catalyst.”

USAID spent nearly a year promoting the change, at the request of dairy producers and processors. The main objective was to increase agricultural sales through formal channels. (While USAID initially proposed applying the change only to raw milk, Kosovo officials expanded it to cover other raw agricultural inputs as well.)

Currently, an estimated 50% to 70% of the raw milk produced in Kosovo is sold informally. The government does not collect VAT on this milk. Nor can the government monitor, measure or otherwise control the milk sold this way. Now, the VAT change should incentivize more formal sales. That will positively impact both the public coffers and the public health, Musliu said.

The incentive also should formalize the status of an estimated 20,000 dairy and other farmers, said Kosovo’s minister of finance, Besim Beqaj. It will do so by allowing middlemen to claim the VAT credit only for purchases of raw product made from government-registered producers. This requirement should encourage these producers to register—and pay VAT on the raw inputs they supply. Otherwise, any producers who don’t register will face limited sales opportunities.

“With this solution, everyone wins,” Kosovo’s minister of agriculture, Blerand Stavileci, said.

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FIRST PERSON

USAID Shines a Light on Kosovo’s Female Farmers

Recognition empowers women to catalyze the modernization of farming



Kosovo Women Farmers of the Year Sulbije Sahiti (left) and Xhevrije Doroci display their awards while surrounded by their peers.



Doroci’s award recognized her achievements in food processing.

“This award buoys my enthusiasm and gives me the strength to go forward, and to work even harder.”

**~Xhevrije Doroci,
Kosovo’s 2013 female farmer of the year (processing)**

PRISTINA, Kosovo—USAID and its partners highlighted the vital but largely unrecognized role female farmers play in the economic development of Kosovo during an annual gala event held Nov. 21.

The *Woman Farmer Day* conference drew more than 200 female farmers from across Kosovo. The event, now in its second year, concluded with a ceremony to name Kosovo’s female farmers of the year, singling out two women for their achievements in production and processing, respectively.

“This award buoys my enthusiasm and gives me the strength to go forward, and to work even harder,” said Xhevrije Doroci, one of the two winners. Doroci pledged to earmark her award toward the construction of a cold storage unit on her farm near Mitrovica, in northern Kosovo, where she produces jams, relishes and pickles.

USAID and Kosovo’s Ministry of Agriculture, Forestry and Rural Development jointly sponsored the event to foster broader public recognition of the influence and contribution of rural women in building prosperity. KEP, a local microfinance lender, provided the two 3,000 Euro awards.

“In the field, women play a very active role, but it’s still not discernible,” says Emine Kelmendi, coordinator of the human rights unit within Kosovo’s agriculture ministry.

In Kosovo, agriculture accounts for more than one-third of employment, and 15 percent of gross domestic product. Women, however, own fewer than 6% of all agribusinesses, USAID Mission Director Maureen A. Shauket said.

“The numbers might be small but the impact that women are having is powerful, and today we are here to celebrate the women leaders who are being role models for others,” Shauket said.

USAID, through its New Opportunities for Agriculture (NOA) project, is working to modernize Kosovo’s agriculture economy. It seeks to do so in part through changing the mindset of its farmers, said NOA director Mark Wood.

“Men, for generations, have taken the lead, but can be bound by traditional farming methods that often can be much improved upon using more modern ways,” Wood said. “Women, on the other hand, can work as catalysts, because they are not so bound by tradition.”

However, to be effective, a catalyst must be present, active and seen, Wood added. While Kosovo’s female farmers already are present and active, they need increased visibility, he said.

A higher profile also can open access to training, workshops and credit, Shauket said.



“The numbers might be small but the impact that women are having is powerful, and today we are here to celebrate the women leaders who are being role models for others,” said USAID/Kosovo Mission Director, Maureen A. Shauket.

“With the right tools to support them, we know that women make an incredible impact on their families, on their communities and on the future of Kosovo,” Shauket said.

Sulbije Sahiti, the second farmer-of-the-year winner, plans to spend her award on a greenhouse heater. That should allow her to grow flowers and ornamental plants year round on her farm outside Lipjan, in central Kosovo.

“I have seen directly the link between excellence in farming and the ability to support one’s own family,” said Sahiti, who grew up one of 11 children on land farmed by her father. She now supports a family of four, as well as her invalid husband.

USAID has supported Kosovo agriculture since the end of the 1998-99 war. Through USAID/NOA, it has identified a number of leading women farmers who have been successful in adopting new technologies and processes. Many, like Doroci and Sahiti, have been active in training and mentoring their fellow female farmers.

The Kosovo government also has increased its backing of female farmers: It now supports 435 such farmers, up from the nine it assisted just three years ago, said agriculture minister Blerand Stavileci.

“This increase is far more significant than it is symbolic,” Stavileci said.



FIRST PERSON

Kosovo Dairy Partnerships Bridges Differences While Building Prosperity

The linkage bridges the ethnic differences, promoting both economic wellbeing and mutual trust.



“Thanks to this project, I’m able, from my land, to earn a living for my family.”

***~Slobodan Ničić,
dairy farmer from
Gračanica***

Kosovo Serb dairy farmers are increasing their incomes, commercial sustainability and local production of quality milk through a novel public-private partnership (PPP) supported by USAID. The Crimson Finance Fund (CFF), a lending institution supported by USAID, conceived of and structured the PPP between the Municipality of Gračanica, local dairy farmers in the municipality, the Kosovo Albanian dairy Bylmeti, which was eager to expand its supply network, and CFF.

The linkage bridges the ethnic differences in this post-conflict nation, promoting both economic wellbeing and mutual trust. “Politics can sow divisions, while economics bring people together,” said former Gračanica Mayor Bojan Stojanović. The predominantly Kosovo Serb enclave is located just outside Kosovo’s capital, Pristina.

Under the PPP, each farmer received five pregnant, high-yielding heifers imported from Germany to increase their daily milk output. The Gračanica municipality recognized the leveraging opportunity and donated one of the cows and a lacto-freezer to each farmer. Loans extended by CFF to the dairy farmers financed the cost of the remaining heifers. CFF also helped the dairy farmers become officially registered businesses and improve their manure management for natural fertilization. Bylmeti, in turn, agreed to purchase the milk produced by the cows at an established, fair price, and collect the milk from each farmer every two days.

“I wanted to help create a model that shows how different ethnic groups can cooperate to the benefit of everyone,” said Ymer Berisha, Bylmeti’s director. For Bylmeti, the value lies in improving the herd size and herd quality of the farmers in its catchment area.

USAID provided further assistance by providing a milking machine to each farmer. The gesture demonstrated the utility of moving toward commercial production using improved milking technologies, and away from hand-milked, subsistence-type production. USAID also engaged a veterinarian to provide initial animal husbandry and extension services to the farmers. USAID further assisted Bylmeti in establishing its own private sector extension services. Bylmeti continues to provide those services on a sustained basis.

“The synergy of these combined contributions has generated

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Slobodan's stable of cows in Lepina, municipality of Gračanica.

results greater than any individual contribution and shows the way for effective agribusiness development through working together," said Mark Wood, director of USAID's New Opportunities for Agriculture (NOA) project.

The loan component of the arrangement provided a strong incentive for the participating dairy farmers to succeed, Stojanovic said. "If we had just given the farmers everything, the farmers would have sold their cows."

Between January and August 2013, the program earned each of the eight farmers a monthly check averaging 485 Euros. The amount represents an average income in Kosovo.

"Thanks to this project, I'm able, from my land, to earn a living for my family," said Slobodan Ničić, a dairy farmer in the village of Lepina, in Gračanica municipality.

Bylmeti uses the additional locally produced raw milk to produce the pasteurized fluid milk, yogurt and cheese it sells throughout Kosovo.

"Your project implemented in Gračanica is regarded as a valued partner by the Ministry. Its practical approach, tangible and concrete, is clearly seen at the individual farmers." Minister of Agriculture, Forestry and Rural Development Blerand Stavileci.



FIRST PERSON

Farmer Celebrates Export Sale of Saffron Bumper Crop

Pricey spice diversifies local agricultural output, creating jobs and profits



Everyone contributes to the harvest and processing - Saffron grower Duraku and his wife separating stigmas from bulbs.

“USAID/NOA really hit the spot with bringing in the European buyers.”

~ Imer Duraku, 45, saffron grower who struggled earlier to find a market for his saffron, prized for its color, aroma and taste.

A pioneer in the reintroduction of saffron farming is celebrating the sale of his entire second harvest of the pricey spice, as well as the windfall in profits the bumper crop generated.

Imer Duraku is one of eight Kosovo farmers to begin growing saffron in 2011 and '12 with the assistance of USAID. He planted 126,000 saffron bulbs—technically called *corms*—on a half-hectare plot of his farm in this village outside Rahovec/Orahovac, in southwestern Kosovo.

Duraku's first harvest in 2012 yielded just 150 grams of saffron, and a disappointing 350 Euros in sales. In 2013, Duraku's recently certified organic saffron operation produced 1,100 grams, a sevenfold gain, of the same area. USAID also assisted in his certification process.

Duraku quickly exported his entire 2013 harvest, selling it to a Belgian wholesale buyer for 3,850 Euros, or 3.5 Euros per gram. USAID, through its New Opportunities for Agriculture project, helped facilitate this and other export deals that have benefitted Kosovo's saffron farmers.

“USAID/NOA really hit the spot with bringing in the European buyers,” said Duraku, 45, who had struggled earlier to find a market for his saffron, prized for its color, aroma and taste.

USAID and other donor programs reintroduced saffron cultivation to Kosovo following the 1998-'99 war. Historically, saffron had been grown in Kosovo since at least the 1500s. The small country in southeastern Europe currently has about 6.4 hectares planted in saffron. USAID, through the New Opportunities for Agriculture Program, directly supported the planting of half that area.

While saffron requires a large up-front investment, it is a perennial crop. As such, there is no recurring cost for seed as is the case with annual crops. On average, the saffron plant can blossom for up to eight years.

Furthermore, crocus fields yield ever-increasing volumes of saffron. A farmer can expect to produce up to six kilograms of dried spice from each hectare planted with saffron. Overall in 2012, Kosovo produced just five kilograms of saffron. The 2013 harvest, in contrast, yielded nine kilograms—a volume

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Duraku with well managed field planted with saffron in Rahovec/Orahovac..

sure to grow further in the years to come. While Duraku still earns more growing carrots and onions, saffron should begin to account for a growing share of his income.

And unlike the conventional crops Duraku also grows, saffron is highly labor-intensive.

“But bear in mind that the heavy work is required for only about a month’s time,” said Duraku, who puts to work 10 people full-time during the fall saffron harvest.



SNAPSHOT

USAID Helps Modernize Table Grape Industry, Catalyzing Exports

New varieties, technologies and practices put table grape industry on path to growth.



Employees of the StoneCastle vineyard in Rahovec/Orahovac prune table grapes trained to grow on new “Y”-shaped trellises. USAID’s international experts introduced the technique to local growers.



The vineyard at StoneCastle, which USAID has supported to become Kosovo’s finest.



Introduction of a “T”-style trellising system at StoneCastle improved grape quality and quantity.

RAHOVEC/ORAHOVAC, Kosovo—USAID’s comprehensive efforts to modernize the table grape industry in this historically viticultural region have paid off, with local growers signing a major export deal to supply markets in western Europe.

Zëri i Bujkut, a Rahovec-based association of grape growers, recently agreed to supply Kelmendi GmbH with up to 7,000 tons of fresh table grapes, beginning with the fall 2014 harvest, said association president Habib Dina. The deal, signed in November, potentially covers the entire local harvest of quality table grapes. USAID’s New Opportunities for Agriculture (NOA) project helped broker the deal with Kelmendi, a food wholesaler with offices in Kosovo and Germany.

The export deal confirms the tremendous gains in the quality, quantity and overall marketability of the table grapes grown in Kosovo, thanks in large part to technical, cultural and other changes introduced by USAID with the assistance of the local municipality and producer’s association. These changes reflect internationally recognized best practices, and include the introduction of new and improved trellising, novel seedless and seeded grape varieties with proven market appeal and state-of-the-art canopy management, says Michael Kimes, USAID/NOA’s chief technical officer. This last practice includes advanced training and pruning techniques taught by international and local experts.

The contract deal marks a significant move forward in the export-oriented development of Kosovo’s fresh fruit and vegetable industry. In Rahovec, for example, many of the vineyards traditionally produced wine grapes that often went unsold even on local markets. USAID’s interventions have



A local expert engaged by USAID examines grapes for presence of insect pests.

included the commercial-scale re-grafting of the region's wine vines, converting them to produce table grapes. That conversion will allow local growers to better satisfy local demand for table grapes, replacing imports in the process, as well as opening new export markets.

Kelmendi, with the assistance of Kosovo's Ministry of Agriculture, is currently constructing a large-scale packing facility in Peja/Pec, a little more than an hour's drive from Rahovec. The facility will include modern forced-air cooling equipment for table grapes and other fresh fruits, increasing Kosovo's capacity to export quality produce.



SNAPSHOT

Kosovo Grown Asparagus Debuts to Popular Acclaim

Cooperatively marketed asparagus flies off shelves, replacing pricier imports



2014 saw Kosovo's first commercial harvest of asparagus, capping a three-year effort by USAID to introduce cultivation of the spring delicacy. The attractively bundled spears enjoyed solid sales.



To stimulate interest in the asparagus crop among retailers, restaurateurs and consumers, USAID staged a culinary event featuring dishes made with the fresh-picked spears. Previously, the only asparagus sold in Kosovo was imported.

Kosovo growers sell their hand-picked asparagus under the brand name Viridis. It's Latin for fresh, young and green.

June 2014
U.S. Agency for International Development
www.usaid.gov

A new opportunity for Kosovo's farmers has sent up its first tender green shoots, only to see them quickly harvested, cooled, packaged and sold to an enthusiastic public.

Kosovo produced its first-ever asparagus crop in 2014, marking the culmination of a three-year effort by USAID to introduce cultivation of the spring delicacy.

During this debut eight-week season, 11 local growers sold more than two tons of asparagus spears. The growers cooperatively marketed the asparagus under the brand name *Viridis*, which is Latin for young, green and fresh.

The Kosovo-grown asparagus quickly supplanted imports in the local market, given its edge in quality, freshness and price. Sales were brisk: "It just flew off the shelves," said Mark Wood, program director of USAID's New Opportunities for Agriculture project.

An April promotional event staged by USAID at a local hotel downtown Pristina drew retailers, restaurateurs, hoteliers and asparagus enthusiasts, including the hosts of Kosovo television's top-rated cooking programs.

"This asparagus is a high-quality product," pronounced Vito de Angelis, the hotel's executive chef. "Of course, it will be on my menu." De Angelis treated the crowd to a full menu of creative asparagus dishes.

USAID introduced asparagus to Kosovo in 2011, establishing three nurseries to produce asparagus crowns. In 2012, farmers began transplanting those crowns to establish Kosovo's current 10.6 hectares (26.2 acres) of asparagus fields. Farmer-to-Farmer volunteers provided all the technical expertise for the project.

USAID also helped establish a modern processing line to ensure asparagus reached consumers fresh from the farm, beginning with 2014's initial commercial crop. The use of special packaging ensures a long shelf life for the hand-selected spears.

Kosovo's embrace of asparagus is helping prepare the way for European export sales as well. The country, located in southeastern Europe, can begin harvesting asparagus two weeks earlier than producers clustered in northern Europe due to the southern latitude of Kosovo and the ideal microclimate.

USAID, since 2011 through its four-year New Opportunities for Agriculture project, works to diversify Kosovo's agricultural output to promote growth, create jobs and generate exports.



SNAPSHOT

USAID Helps Women Prosper by Growing Sought-After Botanical Ingredient for Export

Flowering plant valued as a cosmetic ingredient provides regular income for rural poor



Freshly-picked common mallow flowers by Strpce women farmers, before being taken to a collection center.



Ankica Živković, a common mallow grower and lead woman farmer from Gotovusa/Strpce, advising fellow women farmers on harvesting techniques of common mallow flowers and leaves.

August 2014
U.S. Agency for International Development
www.usaid.gov

USAID is helping expand cultivation of a flowering plant prized by the skin-care industry for its emollient properties to bring lasting economic relief to a multiethnic group of women farmers.

USAID, along with the nonprofit Women for Women International, is supporting 17 ethnic Serb and Albanian women cultivate small plots of common mallow (*Malva sylvestris*) in two villages in this largely rural municipality in southern Kosovo. USAID provided the women with seeds, seedlings and drip-irrigation equipment, along with technical advice in raising the crop.

The women began harvesting the plant's leaves and flowers in May, selling them to Agroprodukt ShpK for 1.5 Euros per kilogram. The price allows each farmer, working in her spare time, to earn upward of the 300 Euros per month an average worker makes in Kosovo.

"I like this crop because I get to work close to my home and it requires very little investment. I also see my neighbors who are doing really well working with this crop. They have their children working alongside, and are making a steady income," says Ankica Živković, a farmer in the village of Gotovusha. "It's easy to pick the flowers and anyone can do it. With other crops you don't always have the market for it, so it's hard. In the case of common mallow we are guaranteed a market."

The women form part of a network of small family farmers who supply Agroprodukt. Working through collection centers, the firm buys freshly harvested mallow on a daily basis from May through October.

In Gotovusha and the nearby village of Brod, the women tend family plots that range in size from 500 to 1,000 square meters. Overall, about 4 hectares (10 acres) of mallow are under cultivation across Kosovo. The nature of the mallow plant limits its cultivation to small plots.

"Although common mallow is such a demanding and labor-intensive crop, it is also much sought-after and very suitable for farming families with many hands to help," explains Samir Reza, a medicinal and aromatic plant expert with USAID's New Opportunities for Agriculture (NOA) project.

Agroprodukt collects and dries the mallow plant's leaves and flowers and then exports them, mostly to buyers in Germany. There, the plant finds its way into a large number of cosmetic and natural-health products. For example, the flower extract contains a soothing gel used in skin lotions. Meanwhile, its leaves are used in



USAID/NOA's Program Director (from right) and MAP expert visiting fields of common mallow worked on by women farmers beneficiaries in Strpce.

herbal and medicinal teas.

Some of the women farmers have begun to dry mallow on their own, which earns them a higher price and expands Agroprodukt's export capacity. In response, the firm is considering offering some of the growers a five-year contract, says owner Halit Avdijaj.

"This is the first time we have targeted women farmers in resource-poor, rural areas and have managed to arrange the logistics for this very sensitive product and maintain its quality to meet stringent European Union quality standards," says Mark Wood, chief of party of USAID's NOA project. "To see the enthusiasm and self-esteem shown by the women farmers in having their own income source is very encouraging."

USAID funded the NOA project to support its overall strategy of promoting growth, creating jobs and generating exports in Kosovo.

SNAPSHOT

USAID Assistance Comes to Fruition for Young Strawberry Farmers

Bumper crops of strawberries have two first-time entrepreneurs reeling in profits — and eyeing expansion



Nehat Haliti hoists a flat of freshly picked strawberries on his family farm outside Vushtrri/Vučitrn, Kosovo.

“The exciting development is that here we have young, well-educated individuals that see a way to utilize their technical skills by applying them in the expansion of their own business. Multiply this by 500 — and imagine!”

~ Mark Wood, program director, USAID/New Opportunities for Agriculture Program.



August 2014
U.S. Agency for International Development
www.usaid.gov

Two young agricultural entrepreneurs, both fresh out of college, are enjoying the fruits of their labor: record-breaking yields of strawberries grown with USAID’s assistance.

Nehat Haliti and Milazim Bislimi have been harvesting 100 to 200 kilograms of fresh strawberries a day this summer, not even half a year after each planted 25,000 strawberry runners provided by USAID. The bumper crops being turned out on their respective farms, both in the greater Pristina region, profit each of the young farmers upwards of 450 Euros a day.

“I can’t wait for morning to come, to jump into the field and start harvesting my strawberries,” says Haliti.

While both young men graduated from the University of Pristina with degrees in agriculture, neither had any practical experience in their shared area of specialization: fruit growing.

USAID, through its New Opportunities for Agriculture (NOA) project, stepped in to provide the two with practical training, as well as the planting materials, needed to get started in farming.

“The fact that I now own my own strawberry business is like a dream come true,” Bislimi says. He adds that in the two first months of harvesting, he has sold 10,000 punnets (containers) of strawberries for 1 Euro each, reeling in 10,000 Euros of profit in two months. Bislimi says he will harvest until the very end of the harvest season.

The two are harvesting 35 to 45 tons of strawberries per hectare, putting them on the path to breaking the domestic record of 15 tons, according to Kosovo Ministry of Agriculture statistics. During the first two months of the harvest (July and August)

“Every scrap of technical advice NOA provided to these new farmers they followed to the end, and that’s the reason why they have been so successful in growing strawberries,” says Kujtim Lepaja, USAID/NOA’s fruit specialist.

The two began harvesting Albion-variety strawberries in July and should continue until the first autumn cold snap. Local fresh markets have offered a consistently high price of between 2 and 3 Euros per kilogram for fresh-picked



"The Albion variety we received from USAID/NOA is great because it tastes and smells delicious," says Milazim Bislimi, left, at work on his farm in Koliq/Kolić, Kosovo.

strawberries. Albion are prized for their sweetness.

Looking forward, both farmers are adding employees — Haliti, for example, already has seven people working with him — and are drawing up plans to expand at their own cost.

"These young graduates had the technical skills but no capacity to be agriculture entrepreneurs. They had no idea that they even could be agriculture entrepreneurs. They all had family-owned land, totally unutilized, and they didn't know how or where to start with no financial resources," says USAID/NOA program director Mark Wood. "These graduates would have looked into the normal job market. We have changed the paths these two young graduates would have followed, from being job takers to job makers."

SNAPSHOT

Cultivation of tiny gherkins becomes a big deal in Kosovo, thanks to USAID

Advanced trellising, other technological innovations get industry off the ground and growing.



Selvete Fetahu shows off some of the 7 tons of gherkins her family grew this year on their northeastern Kosovo farm. Sales were brisk.

“We never had a single problem in the entire process because we followed the technical advice of the USAID experts, who guided and directed us all the way to the end.”

~ Selvete Fetahu, first-time gherkin grower, Podujevë/Podujevo.



A display at a USAID-sponsored field day demonstrates the proper classification of gherkins prior to their sale for making pickles.

October 2014
U.S. Agency for International Development
www.usaid.gov

Kosovo’s gherkin farmers are no longer in a pickle, thanks to USAID’s assistance in helping them sustainably, profitably and dramatically increase production of this sought-after crop.

Kosovo, like many other European countries, has a huge appetite for gherkins — the immature fruit of the cucumber plant. Home canners and industrial processors alike pickle and preserve the fresh-picked young cucumbers in late summer and early fall. Pickles are a mainstay of many a traditional winter meal.

For years, farmers in Kosovo didn’t grow enough gherkins to meet local demand. Now, together with USAID’s assistance, annual domestic production of gherkins has grown to 2,000 metric tons, supplanting imports.

USAID, through its New Opportunities for Agriculture (NOA) project, has focused on introducing new varieties and production techniques to Kosovo’s gherkin farmers, many either women or minorities.

The newly introduced improvements include the production of seedlings in trays filled with quality substrate, as well as the use of drip irrigation, plastic mulch and more targeted fertilization. Farmers also have begun using high trellises to grow cucumber plants, which increases their exposure to air and sunlight. That in turn favors growth, discourages pests and facilitates thrice-weekly harvests in season.

“The yields of the crop using improved management techniques promoted by NOA are resulting in yields which are significantly higher than traditional production practices for the crop. The remarkable yield response combined with a ready market means that even very small areas of production can be extremely profitable,” says USAID/NOA program director Mark Wood.

In 2014, USAID/NOA directly assisted 22 gherkin farmers — 15 female ethnic Albanians and 7 members of Kosovo’s Serbian minority population. Despite the heavy rains seen during the 90-day growing season, the farmers saw good yields on their 0.2-hectare (0.49-acre) open-field plots.

Selvete Fetahu had to overcome the doubts of her husband and sons to convince the family to plant gherkins for this first time this year. Their plot, outside Podujevë/Podujevo in



Fetahu employed five relatives, along with two seasonal workers, to tend her family's 0.2-hectare (0.45-acre) gherkin plot.

northeastern Kosovo, yielded 7 tons of gherkins. The harvest netted her family 5,600 Euros, which they used to pay off an agriculture loan — and to rent more land with an eye to planting even more gherkins next year.

“We had no trouble at all in selling our gherkins,” Fetahu says. “It’s a great crop to cultivate.”

Farmers like Fetahu who are eager to learn and put into practice the ongoing technical assistance that USAID/NOA continues to provide, are showing increasing confidence and competence needed to bring sustainability to the sector, says Naim Krasniqi, a USAID/NOA value chain specialist.

To further diffuse the innovative changes in the gherkin industry, USAID/NOA has staged field days for interested farmers. A recent such peer-learning event in Fetahu’s village drew dozens of farmers.

USAID/NOA also has helped link Kosovo’s gherkin farmers with commercial buyers. Much of the crop is currently being grown contractually. Contracts in farming pre-establish quality, price, quantity and timing. That predictability will serve to underpin the next stage in the sector’s development: exports.

U.S. Agency for International Development Kosovo

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