USAID KOSOVO PRIVATE ENTERPRISE PROGRAM (KPEP)

Audit of the Kosovo Fruit & Vegetable Sector

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Implemented by
Booz Allen Hamilton

Contract No. EEM-I-07-00007-00
Task Order No. 2

JANUARY 17 TO FEBRUARY 2, 2009

TABLE OF CONTENTS

FOREWORD 4

I. EXECUTIVE SUMMARY 5

A: Findings & Conclusions 5

B: Recommendations 6

II. INTRODUCTION 8

A. Background and Objectives for KPEP 8

B. Assignment Background and Specific Objectives 9

C. Background F&V Sector in Kosovo 11

III. REVIEW AND UNDERSTANDING OF KCBS IN F&V SECTOR 15

IV. COMPETITIVENESS OF MARKETING PRACTICES 19

A. Overview 19

B. Strengths & Weaknesses Impacting on Kosovo Fruit & Vegetable Markets 20

a. Good irrigated land is high cost, driving down competitiveness 22

b. Small farmers are difficult to organize into effective working groups 22

c. Market infrastructure 22

d. Financial credits for agriculture are not sufficient 22

C. Marketing of Fruits & Vegetables in Kosovo 23

D. Market Development Actions 29

E. Market Development Strategy 31

V. PRODUCT SELECTION FOR KPEP FOCUS 33

A. Criteria for selection – Methodology 33

B. Import Substitution Opportunities 35

C. Export Opportunities 38

D. Immediate Impact opportunities 40

E. Longer term Impact Opportunities 41

F. New Products 42

G. Conclusion & Short List of Opportunities 42

VI. SUGGESTED NEXT STEPS FOR KPEP 43

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Foreword

This report describes work done in Kosovo during the period January 18 – February 2, 2009 by Dr. Robert E. Lee, Agribusiness Consultant and Mr. Andriy Yarmak, Agricultural Economist, both of Land O'Lakes, familiar with the International Fruit & Vegetable (F&V) Sector, working with Mr. Muhamed Disha, the KPEP hired local F&V Specialist. The team focused their activity on two key and broad tasks set out in the scope of work for the assignment. The work included extensive interviews with F&V participants (private and government) across the F&V value chain from producer to consumer but, the focus was mainly on the marketing level of the chain. The work involved travel to selected cities across the country to visit markets, farmers, wholesalers, associations, processors, traders and retailers as well as the review of materials prepared by the former KCBS program, the Intercooperation project, the Mercy Corps project, and the MPS project. The visits and information reviewed provided the team a sound basis from which to make observations, draw conclusions and make recommendations as regards activities that the KPEP project could assist with in the F&V sector during the next few years.

I. Executive Summary

A: Findings & Conclusions

1. Farming areas in Kosovo are based on family units in village communities with a strong history of, and focus on, village committees and family/clan solidarity. With the size of holdings in Kosovo averaging 2.23 ha per family, and with over 90% of agricultural farming units with no more than 2.5 ha the average producer is very small and a user of significant family labor. And because of this small size, F&V production can be a good choice for Kosovo farmers these products are generally high return.
2. A great deal of good work has been accomplished by several projects – KCBS, Intercooperation HPK, Mercy Corps, MPS EU, and the Ministry for Agriculture & Forest Resource Development (MAFRD) – on behalf of the Kosovo Fruit and Vegetable (F&V) industry. This work provides a solid base on which to build many KPEP initiatives.
3. The KCBS project, predecessor to KPEP, carried out and accomplished several initiatives where lessons were learned. Also, KCBS implemented several grant programs that introduced new technology to the Kosovo F&V sector. And, perhaps some of the lessons learned and equipment introduced by KCBS could be used to provide demonstrations to more farmers under the KPEP project.
4. The Kosovo F&V sector is very competitive. The sector exhibits several characteristics that suggest it is quite competitive and they are discussed. And, this finding is not only the opinion of this KPEP team but, the opinion of the Intercooperation HPK team and their consultants. And, the HPK team has substantial experience on which to base this opinion because they have been working with the F&V sector and market of Kosovo for a long time.
5. Several factors have been identified as strengths or positive reasons for the support of the F&V sector in Kosovo. The list is not exhaustive but focuses on some important items:
    - *Good irrigated land is available to small farmers*
    - *Small farmers need high value products to produce*
    - *Small farmers in Kosovo are familiar with F&V production*
    - *Kosovo agriculture can supply many of the F&V Kosovo consumers demand*
    - *Kosovo can produce export quantities of some products*
6. Several factors have been identified as weaknesses or negative reasons for the support of the F&V sector in Kosovo. The list is not exhaustive but focuses on some important items:
    - *Good irrigated land is high cost, driving down competitiveness*
    - *Small farmers are difficult to organize into effective working groups*
    - *Market infrastructure – wholesale markets, regional collection centers, storage facilities – are weak*
    - *Financial credits for agriculture are not sufficient*
7. While not large, the market for F&V in Kosovo is active both domestically and internationally. Ties between sellers and buyers are being developed in the domestic market as well as in the neighboring international markets. The

strongest trade ties seem to be between Turkey, Greece, and Macedonia. These ties can be built on as the industry grows.

8. While the F&V industry has conditions that allow for competitiveness our audit of the sector uncovered several things that impact on the competitiveness of the market place and these are elaborated further in the report. Some examples of things identified include: farmers are too small to individually serve major buyers; often farmers produce good quality products but do not work hard to sort and pack products as required by buyers; small farmers do not have easy access to market information; it is difficult for traders to assemble required product of consistent quality properly sorted and packed from local small farmers; village wholesale traders do not actively think beyond domestic markets; and presently there are few processors of significance.
9. The retail sector of the F&V market chain includes several participants – retail (green) markets, small corner store shopkeepers, and a growing supermarket sector. Some findings include: green markets will continue to be a strong part of the market for some time to come; small corner shops are perhaps a threatened entity as they have been in most countries where the growth of supermarkets has gained a foothold; large retailers (supermarkets) presently do not represent more than 5% of the F&V market but this will grow substantially in the next few years; large retailers would work with local farmers if organized to meet their needs; store displays are a basic point of sale and in many stores spoiled product remains on the shelves to long driving away customers.
10. Finally, Kosovo offers conditions for the production of many F&V products that can serve the small farmers of the country well and make a positive contribution to increasing the countries GDP, employment, and rural income. The products can help by reducing imports and expanding exports. They can give farmers and processing companies new opportunities. In summary the short list of product opportunities selected includes:

1. Highest Priority:

• Peppers	• Canned Products
• Potatoes	• Jams, Marmalades
• Early & greenhouse vegetables	• Onions

2. Second Priority:

• White beans	• Apples
• Organic produce	• Pears
• IQF products	• Watermelons
• Table Grapes	•

B: Recommendations

It is the opinion of the investigating team that many actions can be taken to help improve the competitiveness and foster increased sales and development of Kosovo's F&V industry. And, these recommendations are set out in sections IV-D and VI of this report. So as not to repeat many of the suggestions here the recommendation is kept to a core strategy around which KPEP can focus its efforts on behalf of the F&V industry.

During the course of this report many observations have been made about things that impact positively and/or negatively the F&V industry. But, two key elements have been continuously emphasized and these two elements form a core market development strategy. The two elements include:

- First, the necessity of working to get farmers to market their products together to build market power; and,
- Second, establish a focal point center where product (both local and import) can be assembled for re-distribution to onward markets.

Lets start with the second task first as its development supports the first task. The establishment of a modern wholesale market on the primary transportation corridor between Pristina and the coast of Albania will be a major driver for increased competitiveness and expanded sales of Kosovo F&V products. The development is suggested along the new road being completed and in a F&V production zone where farmers, traders, and buyers can easily assemble their products. At first blush it seems that somewhere within a 50 kilometer radius of Prizren and, not to far from the new road would be a good location.

The second major thrust, bringing farmers together into effective groups organized to meet market demands of buyers, will be accomplished via several coordinated actions that include:

- Conducting work shops with farmers and farmer groups to explain the necessity of working together to build market power and demonstrate benefits of working together at marketing.
- Help farmers who want to organize as associations or cooperative groups prepare the paper work to make it happen and, help them learn how to manage and administer their new groups successfully.
- Establishment of local collection centers where farmers can bring product together for grading, sorting, and packing to meet traders and other buyer's needs. These collection centers would become directly linked to traders and other buyers located at the proposed new central wholesale market. The APC collection centers for wild product might be good examples of how these collection centers could be established.

This core strategy will aim to provide the thrust and basis around which KPEP can focus its action oriented initiatives to the benefit of the F&V industry. The project will not be able to do everything but the project team can help to push and promote the development of these initiatives with the organizations and groups that can help bring the initiatives to fruition. It will become a community and national effort.

Clearly, if this core development initiative is not possible to undertake the team has suggested many smaller investigations, actions, and capacity building initiatives that can be reviewed in sections IV-D and VI of this report.

II. Introduction

A. Background and Objectives for KPEP

Kosovo's economy faces many challenges. The IMF estimated that the economy grew by 3.1% in 2006 and by 3.5% in 2007. This growth is not considered sufficient to address the high unemployment rate and to absorb new job entrants each year. Although exports have grown faster than imports (in % terms) for the past two years, the size of the annual trade deficit is still almost 1 billion euros. Thus, increasing employment and reducing the trade imbalance are two of the most important challenges. To help meet the challenges the KPEP was designed by USAID to assist and is to stimulate private sector competitiveness within the Kosovo economy in several priority sectors.

To accomplish this program KPEP will focus on four main components: 1) private sector support in targeted sectors offering potential for growth and competitiveness; 2) identify demand driven development for business-support services, 3) improve the business enabling environment; and, 4) help with workforce development. The KPEP project will also address several cross-cutting areas including gender, youth, and minority development. Finally, KPEP will manage a Strategic Activities Fund (SAF) valued at $3,760,000.

Private enterprise growth has been centered in construction; agricultural production and processing for the domestic market; and retail services. Progress has been made in re-establishing milk production, eggs and poultry products, and F&V. The post-privatization process has yielded positive results in the manufacturing sector but, the economy is not sufficiently diversified yet and much remains to be done in improving the competitiveness of Kosovo's private sector industries. Even sectors that have realized favorable growth, such as agriculture, will need to continue to grow and expand and the sector has the potential. In the sector continued upgrading and the application of international standards, including food safety and other standards, to achieve quality levels comparable with external competitors will need to be carried out. Also, within this sector the intent is to promote the improved quality and efficiency of locally produced goods and services to increase employment in the sector and help reduce Kosovo's massive trade imbalance. The actions to be taken will aim to identify end-market opportunities, emphasize the development of local and regional capacity to promote competitiveness; and, set the stage for sustainability of the private sector and gradual reduction of external assistance.

The KPEP project is expected to build on the successes of the KCBS program which included three broad clusters –livestock (dairy, meat, poultry, and animal feed); F&V; and construction materials. Two of the sectors were Agricultural and it is necessary to understand what was done in these sectors and build on it to reach higher levels of competitiveness. Now, versus the time when KCBS was initiated, conditions in Kosovo are more stable and normalized but, at the same time, markets locally, regionally, and globally are more competitive than ever. While enterprises may be able to continue growing through the opportunities available in the domestic market and with the influx of new infrastructure funding, Kosovo sectors or industries need to use the current growth opportunities as a spring-board to enter new markets, develop new products and processes, advance labor skills and productivity, and improve the business environment in anticipation of greater regional integration and eventual entry into the EU.

B. Assignment Background and Specific Objectives

1. Background

It is necessary to conduct an audit of the F&V sector to determine the present situation with respect to competitiveness in the sector. This sector was a target sector of earlier assistance under the KCBS program and as such the work under KPEP should build on what has been accomplished by the KCBS program. In carrying out an audit that will help develop a sound strategy for further higher level development of the sector it will require gaining a good understanding of what is happening in the industry at all levels of the value chain - production, processing and marketing (wholesale & retail). It will require determining strengths and weaknesses of the sector and identifying the key constraints to success. Understanding the situation at present and the key constraints will help to identify the steps that will need to be taken to help improve competitiveness of the F&V sector at all levels of the value chain.

The results of the overall audit will be the following:

- A document that identifies strengths and weaknesses of Kosovo and the present fruit and vegetable industry. The strengths will include factors that argue in favor of Kosovo as a place to pursue further development of the fruit and vegetable sector. Weaknesses will include those factors that argue against expansion of a fruit and vegetable industry in Kosovo. These strengths and weaknesses of the country environment will be incorporated with key business barriers and constraints identified at each level of the fruit and vegetable value chain in order to determine a set of implementable action steps. The findings of this work will come via interviews with producers, processors, and marketers (wholesalers & retailers) presently operating in or with the sector.

- The audits of each level of the value chain will lead to the development of a strategy for the F&V industry that can be pursued over the next several years. And, a set of action plans and steps that can be implemented to help remove barriers and constraints confronting the fruit and vegetable industry at each level of the value chain and help the sector achieve the sector strategy.

In the Scope of Work a key set of tasks to undertake to complete the audit included tasks at the production, processing and marketing level. This first piece of work did not include all tasks but two of the four tasks and those tasks are set out as the specific assignment objectives.

2. Assignment Objectives – Key Tasks

Task 1: Review and understand the accomplishments of the KCBS effort in the fruit and vegetable sector

Since the fruit and vegetable sector was a target sector under the KCBS program the work of that program should be examined and understood because it can provide a valuable base for this on-ward PEP program. Therefore, reports that were produced under KCBS that indicate what was done and accomplished would be obtained and reviewed. Key persons that were involved in leadership roles under the KCBS program should be identified and interviewed to hear more about the accomplishments and challenges that were faced by the program. This will help determine concerns and issues that need to be clarified under this new initiative.

Task 4: Conduct a competitiveness audit of marketing practices employed by the Kosovo fruit and vegetable sector

This audit would be conducted to determine the nature of fruit and vegetable marketing practices in Kosovo. For example, how do farmers market their product now, do they sell their fresh produce as individuals on a regional or local wholesale market to various buyers; or, do they join forces with other farmers to sell in larger quantities to larger buyers? Do wholesalers work the markets and assemble quantities that can be sorted and packed for distribution to large buyers domestically or internationally? What market information do farmers have available to them? What PHH requirements do local markets seek?

As an aside, it should be kept in mind that PHH practices which add value is not always fully valued by retail chains in developing countries. It simply becomes a cost that they would expect suppliers to pay for if they would like to sell via the retail chain. Thus, visits to retail chains to identify how large the volumes are that are being sold through each chain would help determine opportunities. For example, in Ukraine supermarkets usually paid 5-10% more for the cleaned and packed products, which would usually cover only 20-40% of the costs to clean and pack it. Thus, firms, that did it as a business needed to control production to make any money. If the chain charged 50% more, which would cover the costs, sales usually dropped very sharply and volumes sold were not sufficient to justify improved PHH. However, as the chains grew and offered farmers possibilities to sell very large volumes, they simply said that if you would like to use this channel, you must supply the product in cleaned and packed form year around. Some farmers actually invested to do this. If farmers can work together as groups they have a much better chance of serving these demands of the retail chains.

These and other questions would be asked and answered in an effort to determine whether marketing practices used in the Kosovo fruit and vegetable sector are competitive with those whom Kosovo industry players must compete against. To accomplish this work it would involve interviewing all key retailers, wholesalers, processors and exporters to determine how much and what type of produce is being moved through the various channels. This would help us determine how much and what kind of produce needs to be supplied to meet available demand. This will help provide guidance to producers by helping us build a market driven approach to the development of the fruit and vegetable sector.

The result of this market and marketing audit would be the identification of alternative approaches used to market fruits and vegetables in Kosovo. For producers it will help to identify the products on which they should place production priority. For processors it will help orient producers to the production of raw materials required by them. For marketers it would help identify a set of constraints that will need to be addressed to improve competitiveness of market and marketing practices. The importance of these market and marketing constraints will be assessed against those identified for producers and packers/processors to determine a priority set of action steps that will need to be undertaken by PEP to help improve fruit and vegetable market development and marketing in Kosovo.

Task 5: Report preparation

Upon completion of the work under Tasks 1 & 4 the consultants will develop a written report that will include:

a. Major findings of the work detailing strengths and weaknesses as well as key constraints to development of the marketing sector.

b. A set of recommendations that will spell out steps necessary to implement to remove constraints in the marketing sector.

c. A detailed plan for the completion of work set out under Tasks 2 & 3 when we undertake these next two Tasks.

d. The consultants will present the findings, recommendations to the management of the PEP project.

e. The consultants will be prepared to conduct a debriefing with USAID/Kosovo officers in Pristine upon completion of the assignment.

C. Background F&V Sector in Kosovo

Agriculture has always been a key sector for the economy of Kosovo. After World War II, substantial investments were made, productivity increased and the number of people working in the sector declined. During the 1990s this trend reversed: investments plummeted, productivity dropped and the share of the working population in agriculture doubled from one quarter to well over half. Following the break-up of former Yugoslavia, the agricultural sector in Kosovo had essentially returned to subsistence farming.

Then the civil war between 1997 and 1999 virtually halted all commercial agricultural activity in Kosovo, as well as much of the household subsistence activity in the main conflict zones. It was only about mid-1999 that confidence and investment in Kosovo agriculture re-started, but even this was still under extremely adverse conditions. Employment opportunities started to increase after the war with the influx of donor-funding for reconstruction, especially housing. Since the war economic growth in Kosovo has been poor and the performance of the agricultural sector has been below average. Both the area under cultivation and the yield per ha declined. So the share of agriculture in the overall economy dropped quickly; currently it is some 15%, with still 40% of the people officially employed in the sector. Productivity is very low and two-thirds of the poor live in rural areas. In 2006, 49% of the rural households were classified as poor; and, 18% extremely poor (below $2/month).

By 2001, the influx of monies for reconstruction started to decline and the agricultural sector was seen as the main source of sustainable employment in Kosovo. Given extremely high levels of food import-dependency (Around 80-90%), significant “market” opportunities were identified to reinvigorate local agricultural production. In addition, with a large area of uncultivated land and around 60% unemployment, there was considerable potential for new agricultural projects that could provide employment. Promoting horticulture (mainly fruits and vegetables) was seen as a very good means of creating rural jobs.

Fruit and Vegetable farmers in Kosovo used to be part of the Yugoslav “command economy” that grew a limited range of products for a captive market of 22 million people.

State cooperatives bore much of the responsibility for the input supply, machinery services and marketing, leaving farmers to concentrate on production. However, this former situation changed dramatically after 1999. The "local" market declined to just 2 million people who required a wide range of products throughout the year but, much of it was being supplied by imports from neighboring countries.

Locally produced product often found it difficult to compete with the quality and prices of imports. Producers found that cultivating crops was no longer sufficient; they had to start taking responsibility for marketing. However, local production had to compete with the good quality of imports and often at prices that made production unattractive for Kosovo farmers. In addition, the commercial environment under which F&V farmers had to operate changed dramatically in just a few years leaving many of them ill-equipped and unprepared. As the market had changed abruptly – so too had the sector's resources. The troubles decimated the sector's equipment and planting resources, and what survived was often out of date or extremely inefficient and wasteful. Much of the "state-owned" land and infrastructure (including some processing plants) were destroyed or abandoned and were still waiting for legal procedures to be finalized so that the properties could be released for possible sale and privatization allowing them to become productive again.

Historically, it is claimed that Kosovo had a regional comparative advantage in F&V, and it was assumed that it could regain this position in the future. However, there have not been many attempts to prove this claim. Certainly, it is a logical assumption that it should have a comparative advantage to serve the local market; however, exports to the regional market would be more difficult as some of the neighboring countries have been able to modernize and become much more competitive than Kosovo.

And, a key factor in determining future agricultural policy aimed at enhancing competitiveness must take into consideration the fact that Kosovo is a small territory with a significant rural population (60% of the total population) involved in agriculture and rural activities. Policies that are not sensitive to this could result in many people being displaced from work exacerbating the employment and economic situation in Kosovo.

Rural and farming areas are based on family units in village communities with a strong history of, and focus on, village committees and family/clan solidarity. With the size of holdings in Kosovo averaging 2.23 ha per family, and with over 90% of agricultural farming units with no more than 2.5 ha the average producer is very small and a user of significant family labor.

Many rural households still live off the land as subsistence farmers, and consider agriculture and farming not a business, but a way of life. However, subsistence is mitigated, to some extent, by the fact that rural households receive remittances from relatives working abroad.

Kosovo has been a tree fruit growing area for centuries – benefiting from favorable agro-climatic conditions as well as from traditional varieties with good pest and disease resistance. The basis of a modern commercial industry was established in 1957 with the introduction of new varieties and cultivation techniques and, by 1984, over 12,000 ha were in production – of which 84% were privately owned. Apples were dominant, followed by plums, pears, cherries and walnuts. Kosovo has the right temperature, right soil, sufficient rainfall and sunshine for orchards with temperate fruits and nuts.

However, the growing season is slightly shorter than its southern competitors, such as Macedonia and Albania.

The main fruit growing regions are found in the Dukagjini plains, where the average temperature is 1.2C higher than on the plain of Kosovo and which has 25 more days of vegetative growth. Late spring frosts present a risk, especially sensitive are the phenol-phases of fruit-crop blooming. Extremes occur once in 25-30 years during the period 20 April-20 May. In Dukagjini Plain the first autumn frost, on average, occurs from 22 October (Gjakova) to 11 November (Prizren) whilst on the Plain of Kosovo timing is from 12-27 October.

Total annual rainfall of 750-850 mm is good, but the distribution is not favorable. During the vegetative growth period (April-Sept.) with high temperatures, rainfall is insufficient (340-350 mm). This means additional water via irrigation is required. However, relative humidity is supportive of good growth. The highest values are recorded in winter whilst it is lowest in summer (July-August). Average annual values for relative humidity on the Dukagjni Plain are 70%, whilst in Pristina and Ferizaj it is slightly higher (72-76%).

Half of the production of fruit comes from the backyards of 186,000 families with an estimated 7 trees on average. All together this is slightly over 6,000 ha with a total fruit production of 18,000 t. All is used for home-consumption. Generally trees are poorly maintained, if at all, and productivity is very low (estimated at 3 t/ha).

Kosovo land is fertile and well-suited for agricultural production. According to the statistical office of Kosovo in their 2005 Agriculture Household Survey, agricultural land, owned or operated by households, accounts for 73 percent of the total land area of agricultural households. Agricultural land includes utilized arable land plus kitchen gardens, orchards, vineyards, greenhouses, meadows, pastures, and land left fallow. Major bottlenecks in agriculture production include non-optimal land productivity, outdated farm technology, fragmentation, and lack of access to markets.

In ex-Yugoslavia vegetable production was based around homogeneous production centers so as to supply a large-scale processing sector. Now the cooperatives and large scale processors have collapsed and the old Yugoslav market of 22 million people, taking vast quantities of a limited range of vegetables from Kosovo, is replaced by a market of 2 million people demanding the whole range of vegetables.

In 2005, vegetable production was estimated at 221,850 tons: 202,500 from 14,500 ha of open fields and 19,350 from 470 ha of greenhouses. Average yields from open field production are estimated at 14 t/ha, and from greenhouses 55 t/ha1.

Open field vegetable production is concentrated in Anadrini valley; a triangle in the Dukagjini plains between Rahovec, Gjakova and Prizren. Some 3,000 ha of peppers is grown in this region (out of the total 5000 ha). Farmers know rotation is needed, but land is lacking. In this area, the rent for one ha is 1,000-1,500 Euros per year. All land is irrigated via a gravity system owned by a public company. The annual costs of irrigation are 100 Euro /ha.

[1] Indeed dividing the total production of 19.350 t in greenhouses by 470 ha leads to 41 t/ha.

The Kosovo agriculture and food sectors are losing the regional competition for markets. Nearly all of the processed food products sold in Kosovo, and even much of the fresh produce, are imported. Exports are negligible and limited to small quantities of fresh produce sold at low prices to importers, primarily buyers from Macedonia and Albania who travel to Kosovo with their own transport to purchase produce during peak season.

Within the value chain, the state of food processing is especially bad. Processing capacity is all but limited to state-owned enterprises awaiting privatization and there are a few private investments in new processing capacity. There is minimal progress toward meeting quality and safety standards, and in fact minimal understanding of the requirements necessary for proper quality control, and ultimately quality certification.

In addition to the issues that characterize the production and processing sectors the marketing of F&V also requires substantial improvement. Some of the main problems of marketing relate to the lack of good Post Harvest Handling (PHH) practices (proper picking, sorting, and packing) that permit top presentation of the product. It is difficult for small farmers to bring their product to market as local collections centers are not sufficient. Also, storage at collection centers is lacking; and, facilities for proper handling during transport to market centers is lacking.

In summary, there is a lot to do all along the value chain if the F&V sector of Kosovo is to be raised to levels that are truly competitive with neighboring competitors. There is plenty that KPEP can do to be of help to the sector.

III. Review and Understanding of KCBS in F&V Sector

Since it is important to build on what has gone on before the team made an effort to review and understand what the KCBS project carried out and accomplished because the initiatives that were implemented did provide lessons learned that could influence what KPEP should undertake. In fact, KCBS implemented several grant programs that introduced new technology to the Kosovo F&V sector. Some of the equipment that was introduced by KCBS could be used by KPEP to provide demonstrations to more farmers. Thus, this section summarizes many of the activities that KCBS undertook which can be built on under KPEP.

When KCBS was initiated and during the first year of the project, the KCBS team determined that Kosovo's comparative advantage in agriculture was in the sale of several niche products that, while small in current production figures, have the largest potential for future profits. These include blueberries, wild mushrooms, rosehips, juniper berries, and similars. Several contracts were signed between buyers and collectors of wild mushrooms and blueberries. Under KPEP this area of focus continues to be important and is the focus of the component dealing with non-wood forest products.

The KCBS consultants also assisted in finding export opportunities for existing Kosovo vegetables. The project identified an Albanian processor, Alcred, willing to buy up to 3,000 tons of peppers, worth approximately €450,000. But, the vegetable association Anadrini was too weak to organize such a shipment. The export was realized to a very small extent (approximately 200 tons). To realize such a contract something needed to be done to improve the farmer's ability to supply the volume and quality of product available at the time shipment is to occur. One thought was to produce more greenhouse vegetable transplants and perhaps give free samples to some better organized farmer groups (could be from Perdrini association as well as Anadrini). Also, it was thought that a field person should be engaged to monitor the whole process through to realization of the export commitment, providing careful attention to ensuring payment. It was thought that if the project succeeded it would foster a positive working relationship between producers and processors through facilitation of contract growing agreements with the buyers from Albania or Macedonia. Unfortunately, as indicated, this effort was not fully successful but, it did provide lessons that should be built on.

The KCBS F&V cluster team examined several other products (strawberries, sweet corn, and okra) during the first year thinking they might offer potential but, later it was determined that it would be too expensive or impractical to produce these products in Kosovo. It was decided by project management that it would be better to halt assistance for these products rather than to continue spending project funds supporting activities that were felt to be too expensive and likely to have limited impact.

The KCBS project introduced new processing varieties of potatoes and tomatoes via test plots and they showed promise. But, the results were not as hoped; especially for tomato varieties tested because while the tomatoes grew well farmers didn't embrace the crop because they were concerned that few buyers would exist for the product. On the other hand some of the potato varieties were used by farmers that were growing processing potatoes because the potato processing sector was in a state of expansion.

KCBS engaged two technical specialists in juice processing and food processing equipment for production of value-added fruit puree, frozen French fries and vegetable products. It was concluded that frozen French fried potatoes and IQF frozen blueberries offered excellent opportunity for market development. The KCBS F&V cluster team identified sources of new and used processing equipment and fruit and vegetable quick-freezing tunnels. One group (PESTOVA) did go ahead and implement French fried potato production as well as potato chip production. Another group (APV) did establish an IQF unit to use in quickly preserving some of the wild berries they harvest each season.

A cost-benefit analysis for the production of juice concentrate was carried out and it indicated that the production of juice concentrates in Kosovo was not economically viable. However, the analysis did conclude that there was an opportunity for the production of fruit puree. The puree could be used in the production of fruit juice blends and other drinks. With this in mind the KCBS F&V cluster team advised client companies interested in producing fruit juice concentrates to consider instead processing fruit into purees because it had more uses under present Kosovo conditions.

To support the contracts mentioned above and to improve relationships throughout the marketing chain, KCBS started PHH training courses and grading with blueberries and then continued during the fruit harvest season with training related to apple grading, packing and storage. With improved storage and PHH practices, growers and fruit handlers have been able to extend the storage life of fruit and this resulted in higher grower returns for quality fruit. KCBS implemented packaging improvements in the F&V sector through the use of perforated plastic bags used to export peppers, appropriate shipping containers for blueberries and, the use of corrugated packing cartons for apples. It was learned that these kinds of activities were successful and they should be continued under KPEP.

KCBS was engaged in several activities to increase linkages between Kosovo traders, processors and, regional fruit grower associations. The F&V Cluster team and some client companies attended some trade fairs like Novi Sad Fair in May 2005. Participation resulted in increased contact with regional F&V importers and processors, the introduction to new production technologies and, new types of food processing equipment for the F&V sector. In this context a logical next step would be participation in “Fruit Logistica” in Berlin. It is too late for 2009 but, this should be something that KPEP tries to organize for 2010.

Later in the KCBS project it was decided that highest priority activities for KCBS in the F&V sector should be PHH and marketing. Farmers in Kosovo are very capable of producing high-quality F&V, but for the average farmer there is no economic incentive to increase the percentage of production meeting high quality standards. Farmers were not hearing the ever-increasing shout of the market demanding higher quality with a willingness to pay for it. The most fundamental disconnect between economic expectations on the part of the farmers and the market buyers is that most F&V are not graded, sorted and packed into proper packages. Thus, the farmer asks, why should we spend more to meet higher quality standards? This is an area that needs more support and a good target area for KPEP.

The KCBS F&V cluster team completed implementation of a grant through a local NGO, Kosovo Association for Development (KAD), to five fruit tree nursery owners who are all members of KAD. In all cases these nurseries received new drip irrigation systems, including pumps, elevated reservoirs, and fertilizer injection systems. This technology is relatively new to Kosovo, and under the grant, KAD conducted four field-day training sessions, under KCBS supervision, explaining the installation, cost, use and maintenance of nursery drip irrigation systems. This is an activity that KPEP could build on since the equipment has already been put in place.

Two groups of farmers were assisted in forming modern (for profit, non-communist type) agricultural cooperatives. Unlike an association (an NGO), members of these cooperatives will be able to buy inputs together, own land and facilities for post-harvest handling, and do marketing together, including exporting. A group of 10 in Rahovec formed Cooperative Agro-vita and 20 farmers in Qyshku – Peja formed Cooperative Agro-Qyshku.

The Kosovo food processing industry is small but, is moving to improve the quantity, quality and diversity of its output. Among the several impediments it faces is an inability to meet modern food safety standards under HACCP. HACCP certification by an internationally licensed authority is required for entry into the markets of most neighboring developed nations of the EU. As most processing enterprises world-wide embrace HACCP standards, it is imperative for Kosovo food processors to do likewise or face the progressive loss of all but the most meager export opportunities.

KCBS launched a program to implement Good Manufacturing Practices (GMP) at agribusinesses engaged in food processing. And, GMP is the foundation of all food safety programs and is the starting point for HACCP certification. The two participant clients from the F&V Cluster were Pestova Company in Vushtri, a maker of potato chips and French fries, and Agroproduct (APC) Commerce in Podujeve, a processor of mushrooms and other wild forest fruits. Agroproduct and Pestova Company implemented all phases of GMP. Another four-month duration food safety program was started in March 2007, during which APC completed all requirements for HACCP and passed its certification inspections. It thus became the first food processor in Kosovo to become HACCP certified. Pestova put its program on hold pending installation of a new processing line. Pestova, too, started a final four month food safety program in September 2007, and achieved full HACCP certification by December 2007.

The most direct path to increased incomes and employment, generated by increased prices for products, is for farmers or groups of farmers to offer their products to the market after they have been graded, sorted and packed (G/S/P) so that they are uniform or standardized. A major thrust of KCBS in the later period of the project was on the use of cost-sharing grants to procure equipment for Grading/Sizing/Packing (G/S/P) to improve product uniformity and thereby improve sales opportunities both for domestic and export markets. Agro-company Association in Qyshku - Peja obtained a semi-automated potato and onion G/S/P line, for the nearly 80 hectares of product grown by its members. Pema Association in Kovrage – Istog obtained a semi-automated apple G/S/P line that will be used for the 21 Ha of apples cultivated by its members. APC in Podujeve received a cleaning and calibrating machine for blueberries. Demonstrations of this new technology, using in-plant visits by other farmers to these installations, were a feature of the KCBS F&V Cluster’s work in Year Four. The groups that received this equipment via help from KCBS and USAID may still be willing to have the equipment demonstrated to new groups of farmers under KPEP.

Another method of improving product quality is through the use of refrigeration to preserve freshness, whether by freezing or keeping the products cool (above freezing). Again, cost-sharing grants were used. At UVB Association in Blagaje – Peja four common farm storage rooms were converted into refrigerated chambers for storing apples from harvest in the fall until early spring, by which time prices nearly double. At Scardus Company in Strpce and at Promet Company in Leposavic, facilities have been built for handling, freezing and storage of frozen blueberries, mushrooms, and other wild forest fruits.

The principle location of vegetable production in Kosovo is in the Dukagjini Valley, particularly around Peja. In order to create better linkages between producers and traders, KCBS initiated a pilot program by having 12 manual G/S/P tables built and distributed through traders to farmers who grow products for those traders. Data collected thus far is inconclusive about enhanced price advantages which may accrue for this effort, but all users report the tables are an amazing labor-saving (and back-saving) device, increasing the rate at which tomatoes and peppers can be packed by 50%.

To test the concept that improved packaging and labeling will improve sales volumes and prices, KCBS conducted another pilot program by providing 5,000 sturdy cardboard cartons to farmers in UVB and Pema associations of apple growers. While the study proved the cost of the apple cartons could easily be covered by the 20% increase in price gained, a more important discovery was that post-harvest grading prior to winter storage had a more pronounced effect on prices than using only post-storage grading of apples that were not graded prior to storage, and that the combination of post-harvest and post-storage grading had a bigger impact on price than the use of the cartons. This vindicated the labor-intensive but worthwhile methods employed by the farmers at UVB while clearly showing the farmers at Pema that they could do much better.

KCBS concluded a grant to Fruti Association in Kravarice – Gjilan which resulted in their acquisition of an in-row cultivator and pneumatic pruning equipment. In both cases this technology was, and remains, new to Kosovo. Unfortunately, due to its relatively isolated location, few orchard operators outside the Gjilan area have had an opportunity to see this equipment in use. KCBS organized two training sessions in the use of the equipment acquired under the grant by Fruti Association. In order to attract a large number of participants, one training session was conducted in the Dukagjini area and the other in the Anamorava area. Attendees were members of other fruit growing associations, independent orchard owners, MAFRD and specialists from other donor projects. This equipment that was purchased via KCBS and USAID assistance may be possible to use by KPEP to help further spread the experience of using this new technology.

KCBS has made significant progress in fostering new value chains for Kosovo products, especially berries. Cold chain facilities, especially those resulting in freezing, will allow products to be exported anywhere in the world. These facilities can also form the nexus for stimulating the production of new crops in Kosovo, especially cane berries such as raspberries, blackberries, and red and black currents.

Raspberries and blackberries have extremely high rates of post-harvest respiration, which leads to very rapid deterioration of quality after harvest. For export purposes, berries need to be frozen within an hour or two after harvest. Rather than planting berries and then constructing a freezing facility, as some development projects advocate, KCBS used a more pragmatic approach that was more achievable. Berries can be planted near the existing freezing facilities, with the farmers assured that their PHH problems are already solved. To support the marketing of new berry products, KCBS conducted a study of the international markets and marketing of berries that can be grown in Kosovo, including the varieties that best fit the environmental conditions**.** This study and experience is another good lesson on which KPEP can build some targeted activity.

IV. Competitiveness of Marketing Practices

A. Overview

The competitiveness of Kosovo's F&V market and understanding it helps to determine whether; and, in what products, Kosovo may be able to compete with neighboring producers and sellers on the Kosovo market as well as neighboring markets. The Kosovo F&V market exhibits characteristics that suggest it is quite competitive. This is not only the opinion of our team but, also the opinion of the Intercooperation HPK team. And, the HPK team has substantial experience working with the F&V sector and market of Kosovo. Economists argue that several characteristics of a market can help to suggest how competitive it is and the Kosovo market exhibits several of these key characteristics that include:

1. There are large numbers of sellers and buyers & few can influence price
2. Goods traded are homogeneous
3. Barriers to entry & exit are negligible
4. Supply & demand determine price

Each of these characteristics is examined below to determine how the Kosovo market relates to them.

1. Large numbers of sellers and buyers & few can influence price

Kosovo agriculture is characterized by many small farmers with the average size farm land holding being about 2.3 hectare. Thus, the number of sellers is large and no one farmer has sufficient market power to influence the selling price. If farmers become organized in joint marketing efforts they could improve their market power but, even then it is not likely that enough farmers could come together to really dictate price. Also, at each level of the marketing chain – green markets (local and regional), wholesale traders, local small and medium processors, village retailers, and supermarket chains - there are many buyers and none are large enough to set prices. Even supermarkets compete with buyers from green markets and shopkeepers to buy from the wholesale market. And, the government does not appear to be setting price minimums for F&V products. Thus, with respect to this characteristic the Kosovo F&V market is quite competitive.

2. Goods traded are homogeneous

Fruits and vegetables as a group are not generally characterized as homogeneous but, within product categories products should be homogeneous. For example, tomatoes come in different varieties and some are slicing and eating varieties while others are processing varieties. Within the slicing tomato class the tomatoes offered should be homogeneous and the differing factor may be how well the farmers and/or traders have graded, sorted, and packed the product for sale. And generally, if buyers are looking for a specific popular slicing tomato variety they likely have many sellers to buy the properly packed homogeneous product from. Thus, goods traded are often homogeneous and this encourages competitiveness in the market.

3. Barriers to entry & exit are negligible

The small farmer can buy seed, plant his crop, harvest the crop with family labor, and take the product to market and sell it via a street stand or at the local green market for a non prohibitive rental fee. The local trader can buy the products from local farmers, grade and sort them and take them to a local or regional green market for limited expense. In both cases the barriers to entry are not high and the cost of exiting is basically free. However, if farmers want to produce under greenhouse conditions the investments can be large and prohibitive. Or if a trader wants to distribute product to markets all over Kosovo and to neighboring countries the cost of obtaining the transportation fleets could be prohibitive. But, for the average farmer and trader it is still relatively easy to enter and exit the F&V market of Kosovo. Thus, with respect to this characteristic Kosovo markets exhibit competitive conditions.

4. Supply & demand determine price

As mentioned earlier Kosovo farmers are too small to set prices - they are price takers. Also, the majority of traders are too small to influence price in the market. In our visits to markets there was little sign that any one group of traders was able to collude to set prices. And, the government is not setting minimum prices. Therefore, the price is largely determined by forces of supply and demand. Thus, with respect to this characteristic the market in Kosovo is competitive.

In summary, the Kosovo F&V market has many of the characteristics for being strongly competitive; it has many buyers and sellers, it can offer homogeneous products, there is very low entry and exit barriers to trade, prices are determined by supply and demand and no actor in the market is able to unduly influence prices. This competitive market situation will likely dominate for several years to come; but, the expansion of supermarket trade could impact on competitiveness because these players could potentially dictate conditions and price.

B. Strengths & Weaknesses Impacting on Kosovo Fruit & Vegetable Markets

Another aspect worth discussing in relationship to competitiveness are the comparative strengths and/or weaknesses of Kosovo as a place to produce F&V's. The observations the team makes with respect to the strengths and weaknesses are set out in this section of the report.

1. Factors Arguing for Fruits & Vegetables in Kosovo

Several factors have been identified as strengths or positive reasons for the support of the F&V sector in Kosovo. The list is not exhaustive but focuses on some important reasons. These factors are listed and then each is explained in an effort to indicate why each is felt to be strength.

- *a. Good irrigated land is available to small farmers*
- *b. Small farmers need high value products to produce*
- *c. Small farmers in Kosovo are familiar with F&V production*
- *d. Kosovo agriculture can supply many of the F&V Kosovo consumers demand*
- *e. Kosovo can produce export quantities of some products*

a. Good irrigated land is available to small farmers

During the course of the interviews made by the team it was learned that in several areas the former governments of the region had invested in the development of water supply systems, based around dammed rivers that created lakes, for both drinking and irrigation water. Some of these developments were assisted by the World Bank. After the breakup of the Soviet Union small farmers gained access to this land and benefit from the former irrigation development projects. This land is desirable for the growing of F&V so it offers a good and positive base on which to build the F&V industry.

b. Small farmers need high value products to produce

The growing of F&V's is generally a much higher return agricultural activity than growing extensive crops like wheat, barley, corn, and the like. Thus, for farmers that only control on average 2.3 hectares of land (much of which is irrigated) F&V make a good choice for the farmers to grow as it may allow for the generation of incomes that support many rural people.

c. Small farmers in Kosovo are familiar with F&V production

Many farmers of Kosovo have a history of growing F&V's and have learned how to manage their lands for effective production. While there are always new technologies to be learned, having the basis and understanding of the business and its risks is a positive, and farmers will more easily adopt the new technologies and improve their businesses. Thus, being familiar with the industry is a positive and something on which it can be expanded and developed.

d. Kosovo agriculture can supply many of the F&V Kosovo consumers demand

Kosovo consumers include as many rural people (farmers) as it does urban people. And, as such farmers are very familiar with the production of the products (potatoes, cabbage, carrots, tomatoes, cucumbers, to name a few) that are most commonly eaten in the country. All of these products are grown quite well within the country during the normal growing season. And, farmers who grow in tunnels or greenhouses can provide product many additional months of the year. Thus, with exception of the deep winter months, the farmers of Kosovo can provide most of the F&V eaten in the country. And, in today's age of high transport costs the Kosovo farmer should be competitive with imported product.

e. Kosovo can produce export quantities of some products

For some products (potatoes, peppers, cabbages, and similar traditional crops) Kosovo farmers produce in excess of local demand and product is exported to neighboring markets. Thus, if the markets are properly studied and the windows of opportunity for sale into neighboring country markets are identified the F&V farmer of Kosovo does have an export opportunity. For example, we learned that early potatoes could be exported to Albania during a two week window from mid June to early July. Other such opportunities exist so producing F&V can not only help substitute for imports but, also be produced for export if the farmers are properly organized to deliver graded, sorted, high quality, packed product to buyers when they need them.

Yes, there are strengths that support the development of the F&V sector in Kosovo and these strengths should be built on.

2. Factors Arguing Against Fruits & Vegetables in Kosovo

Several factors have been identified as weaknesses or negative reasons for the support of the F&V sector in Kosovo. The list is not exhaustive but focuses on some important reasons. These factors are listed and then each is explained in an effort to indicate why each is felt to be weakness.

a. Good irrigated land is high cost, driving down competitiveness
b. Small farmers are difficult to organize into effective working groups
c. Market infrastructure – wholesale markets, regional collection centers, storage facilities – are weak
d. Financial credits for agriculture are not sufficient

a. Good irrigated land is high cost, driving down competitiveness

While having irrigated land is a positive the cost €1,000 to €1,500/ hectare is quite expensive for a country such as Kosovo. The cost is such that it makes it imperative for farmers to find high value crops they can grow. And, the cost of this land may be substantially higher than in some neighboring countries, driving down the competitiveness of agriculture in Kosovo.

b. Small farmers are difficult to organize into effective working groups

Efforts have been made to establish associations of farmers in different areas of Kosovo but, it was reported that these efforts have not been as successful as is necessary to help farmers build their market power. We did meet one group (Agro-Qyshku) of 10 farmers that seemed to be working reasonably well together and this group has continually grown their sales over the past few years and to the benefit of their members. Where the farmers do work together effectively they are doing much better than the farmers that insist on marketing on their own. Because the farmers are hard to get organized it has a negative impact on their competitiveness because they do not gain savings on the purchase of inputs and on shared equipment usage, nor do they make the gains realized from larger sales of well graded, high quality, packed product.

c. Market infrastructure

Based on visits with farmers, and traders at several local and regional market centers, it was noted that much needs to be done to improve the way product is being handled and stored. A few traders had cold storage facilities at the market but, most did not as they sold their products directly from their non-refrigerated trucks. Generally at these market centers there was little being done to try and consolidate product, grade it, select for quality, and pack it in a way that would attract large buyers from supermarkets or neighboring country trading firms. Thus, much can still be done to improve the market infrastructure and improve the competitive environment for the F&V sector.

d. Financial credits for agriculture are not sufficient

Wherever visited the need for financing was a general concern. The government via MAFRD has a few programs of support to farmers – one planned for €800,000 of which maybe 60% may get to F&V farmers and another for €1,200,000 which goes toward the consolidation of lands so as to make them more productive units. Even if all of these funds went to F&V production it would not cover very many hectares so funding is insufficient at present. If the funds going to support production agriculture and its supporting infrastructure were more accessible it would help to improve competitiveness of Kosovo agriculture and the F&V sector.

Yes, there are weaknesses which need to be overcome to support development of the F&V sector in Kosovo and if they are overcome competitiveness of the sector will be improved.

C. Marketing of Fruits & Vegetables in Kosovo

1. Overview

The Kosovo F&V market is characterized by a number of players – farmers, traders, processors, and retailers. Within each of these categories different scale operations exist but they will be grouped for the sake of this brief description of the market and its key players. The discussion is started with a summary of the markets size and trade activity which takes into account estimates of production, imports and exports. We cannot vouch for the quality of the data but, it is data reported by the Statistical Office of Kosovo and the Customs Office. Also, it is data that other groups working in the F&V sector cite. From the understanding developed in this section observations and conclusions about the effectiveness of marketing in the sector will be made.

The primary source for comprehensive data on F&V production is reported by the Statistical Office of Kosovo (SOK). These data show that total F&V production in the country was about 270,000 metric tons (mt) in 2006 and slightly more in 2007. Potatoes and peppers dominated vegetable production with 134,000mt, 55% of the total. Plums and apples account for 21,000mt of fruit production, 65% of the total. Other important crops for Kosovo farmers are cabbage, water melon, tomatoes and onions.

According to data of the customs department imports in 2007 of vegetables were estimated at 45,000mt and, of fruits 61,000mt. When compared to 2005 these data show vegetable imports to be down by 1,000mt; and, fruit imports up by 4,000mt. This implies that the vegetable growers of Kosovo have been able to replace some of the vegetable imports but, that because many of the fruits imported can not be grown in Kosovo imports of fruit have gone up.

Further, according to data of the customs department exports of F&V were much less than imports. In fact, vegetable exports in 2007 were 23,000mt while fruit exports were about 680mt. Exports of vegetables in 2007 jumped significantly from 2005 when they were 7,000mt as did exports of fruits when they were only 70mt. The substantial jump in exports of vegetables was likely mainly potatoes because two or three groups we met had recently exported substantial quantities of potatoes.

Thus, while not large, the market for F&V in Kosovo is active both domestically and internationally. Ties between sellers and buyers are being developed in the domestic market as well as in the neighboring international markets. The strongest trade ties seem to be between Turkey, Greece, and Macedonia.

2. The market structure and main players in the F&V chain

Like most F&V markets, there are many different players who interact with each other at different points in the market chain. Most of the market trade revolves around four key groups – farmers, traders (wholesalers), processors, and retailers (small and large). In Kosovo generally farmers bring product to local and regional markets and traders buy from farmers and take products to the larger central wholesale market of Pristina, the dominate market and the one where most prices are established. And, other markets use Pristina as the basis and prices in regional and local markets reflect the prices in Pristina adjusted for the costs of transport and marketing. The four key groups in the market chain are discussed below.

a. Farmers

The many small and medium size farmers in Kosovo are the most important players in the marketing chain because they dominate the F&V market. Without these farmers and their production, markets would not function as they do because there would be no real need for central, regional, or local wholesale markets. The farmers are classified into two distinct classes. First, there are subsistence farmers who produce for family needs and sell a little surplus via local green markets. Second, there are the commercial farmers who produce primarily for sale via local and regional green markets to the general public but, mainly to traders.

While the F&V industry has conditions that allow for competitiveness our review of the industry uncovered things that impact on the competitiveness of the market place. Several points related to farmers are discussed below.

- Most farmers are too small to individually serve major buyers and/or export traders, which creates a niche for farmer groups (if they can work together) or wholesalers to organize an infrastructure (storage, PHH, and the like) to serve retailers, exporters, small shops and hotel, restaurant, and cafeteria (HoReCa) facilities. For example, for a farmer with 1 ha of apples (around 20-40 tons output) it is not economical to construct a storage facility and sorting lines, while if there is a region where around 1000 tons of fresh market apples are produced, a CA facility with sorting lines could be economical for a group of organized farmers. Thus, if the farmers can get themselves organized it could improve substantially their competitive position on the market.
- It was observed that there are, in some regions of Kosovo, a few larger growers who do produce enough to justify investing in their own PHH and processing infrastructure, which would later also be used to procure products from smaller farmers. Pestova Potato Company is a good example of this. Also, several other private initiatives by larger investor groups were identified where they were ready to develop medium to large scale fruit & vegetable production operations and support them with infrastructure (grading lines, packing facilities, and cold as well as CA storage) able to help improve the competitiveness not just for themselves but, for the small farmers that would work under contract arrangements to join them.
- Also, it was observed; and, learned via discussion, that often farmers produce good quality products but, they do not work hard to sort and pack products as required by buyers to meet quality standards. This is because farmers to not see the additional gain from the sorting and packing efforts when small quantities are being dealt with. The small farmer is more interested in moving the product quickly before substantial deterioration occurs. Thus, in the case of small farmers, unless they are organized into groups, it is probably best to develop selling centers where the farmers can bring their product and let traders buy it and then do the grading and packing. If this could be accomplished it would make sales to large domestic supermarket buyers as well as international buyers much more likely and it would improve market competitiveness for the small farmers and traders.
- As mentioned small farmers are difficult to organize for working together to serve markets without close supervision and guidance but, commercial farmers-leaders are beginning to realize the need for working together to build market negotiating

power. For example, the Agro-Qyshku group of potato farmers is a good example of where some joint success is being realized. Our team believes it would be much more efficient to build PHH and processing infrastructure on the basis of private initiative. That is, instead of supporting a large group of smaller farmers to develop storage, which will not be able to use and manage it efficiently, it might be better to help a large trader or farmer develop it, who would agree to buy produce from small farmers, and grade, pack and handle the product through the marketing chain.

- While effectively organizing many small farmers is a hindrance to improving the marketing system and its competitiveness, sometimes the small farmer finds being small an advantage. Their small scale allows many of these farmers the time it takes to go to wholesale and retail markets and sell their produce on their own and, this often gains them a higher price. But, this is still not in the longer run the way to build overall competitiveness of the Kosovo F&V industry.
- Market information is being collected and distributed via LIT-M a small NGO. LIT-M was initiated by the "MPS" EU project but when MPS was closed the MIS was shifted to the hands of the NGO which is receiving support from Raiffeisen Bank and MAFRD. Generally the small farmers do not have easy access to the market information but, they can obtain information from local newspapers where it is printed once per week. There is little analysis done that provides guidance with respect to what and where to market, as most market information is either too general or too local. Thus, while there is a base of information being gathered more work needs to be done to help make it more useful to the end users, particularly farmers. Doing this will help to improve competitiveness in the F&V sector.

Thus, the team suggests that several efforts can be made to help farmers experience a more competitive market but, two key efforts seem to be most important. First, figuring out ways that help to organize small farmers into stronger joint marketing groups; and, second working with traders to help get them to be the focus for bringing farmers together at strategically located collection centers, or wholesale markets.

b. Traders

Many traders, mostly small, but some larger importers, are active in Kosovo and play a very important role as consolidators of F&V from small as well as large farmers. To accomplish this traders are generally based in wholesale (central, regional, and local) and rural green markets. To operate on these markets rents are paid for areas, or stands, to owners of the market; normally municipality Governments. Rental costs are not prohibitive, quotes of €150 to 200 per month were provided for space at the Pristina wholesale market.

Domestic traders, generally buying from farmers, are based at the wholesale markets. Also, importers generally base themselves in the wholesale markets where they sell the majority of their produce to other traders, supermarket buyers, or restaurant buyers. Domestic traders buy some products (particularly those not grown in Kosovo) from importers or import the products themselves. Traders based in the wholesale markets will sell to other retail outlets, i.e., small shops and sometimes supermarkets and restaurants; they also sell direct to retail traders and to the ultimate consumer. Generally the traders based in the retail markets will buy from wholesale market traders and sell on to the ultimate consumers. As mentioned earlier, since there are large numbers of traders whom farmers and importers can sell to, it is unlikely that collusion is happening between traders to set prices.

It seems, based on interviews and reading available materials that most importers specialize in sourcing from a single country where they get to know the suppliers well. When the particular suppliers dealt with cannot supply Kosovo competitively they revert to being just traders. Normally imports occur when local production is insufficient to meet demand or is of poor quality because if possible local consumers prefer domestic product.

While the F&V industry has conditions that allow for competitiveness our review of the industry uncovered things that impact on the competitiveness of the market place. Several points related to traders are discussed below.

- Because it is difficult for traders to assemble required product of consistent quality properly sorted and packed from local small farmers larger traders tend to focus on buying product from local smaller traders who are prepared to work with farmers and consolidate product or from traders importing products. This situation further enforces the importance of taking actions that will help bring together product at central points where it can be properly sorted and packed to serve either the domestic or export markets. The accomplishment of this will help to improve the competitiveness of locally produced product and reduce the need for as much dependence on imported product.
- Traders do not often provide farmers help in obtaining necessary sorting, packaging assistance to improve their product for sale. Again, this is because farmers are too small and too much bother to organize. It is difficult to deal with many small farmers too obtain consistency in product quality. For traders to work effectively with the farmers significant investments in infrastructure at central collection points or strategically located new wholesale market centers is required; and, these are long term investments as opposed to quick money from trading imported packed produce. Thus, to get traders interested in helping with these longer term projects it will require coordinated efforts between farmers, traders, processors, retailer’s donors and the government. But proper action at this level could help improve significantly efficiencies across the sector and help make the industry much more competitive.
- Traders do sometimes buy from farmers in season to move the product to a higher priced market and make gains for both the farmers and the trader. The traders could but, rarely do, sort and pack the product for their own gain when reselling on other local or export markets.
- The village wholesale traders do not actively think beyond domestic markets due to their small scale. But, if larger traders were to work with these small traders and helped orient them toward sorting and packing product it might help the farmers as well as themselves because they could potentially move more product to higher value markets.
- The larger national and regional traders could be catalysts for bringing farmers together at regional collection points since few farmers are big enough to have market power on their own. A large trader or a small group of traders could develop, with minimal investment, facilities to permit collection of product in quantities large enough to move to facilities where they could be sorted and packed for further on-ward shipment. Therefore, traders could fill a niche

between farmers and buyers in the other countries, local supermarkets and/or institutional operations.

- To help improve the competitiveness in the F&V sector a properly placed (say, along the new road between Pristina and the Albania coast) wholesale market in a good production zone (somewhere within a 50 kilometer radius of Prizren) where many farmers and traders would gather, both to trade domestic and imported product, will stimulate the F&V industry of Kosovo. At this market, infrastructure would be developed to promote PHH facilities around the market. It would help discover and stabilize prices in the country, decrease prices to consumers and promote exports.

Thus, the team suggests that several efforts can be made to help traders develop a more competitive market but, two key efforts seem to be most important. First, is to develop a strategically located wholesale market that will support both the import and export trade and help small farmers be more able to assemble their products to a central point. And, second work with traders and farmers to develop low cost collection centers (perhaps like those used by APC for collecting wild berries) that become feeder links to the new strategically located wholesale market. Both of these efforts will help improve competitiveness of the Kosovo F&V sector.

c. Processors

Presently there of few processors of significance and most of those that do exist process canned product into pickled vegetables, sauces such as tomato paste and Ajvar, various flavors of marmalades or jams, potato chips, and French fries. The quantity of product (F&V raw material) going into these goods is probably not over 20,000 mt representing about 7% of total F&V production. While not large it is still very important and could become a growing sector of the business. There is a small but vibrant cottage industry based mainly on preserves. It is possible that as Kosovo increases production and gets more regular market surpluses, processing may become more important. However, this will only happen if raw material is produced at a competitive advantage. It will likely be quite some time before Kosovo will have a large export potential for its processed products and then it will probably be for specialized products or ethnic products going to Kosovo Diaspora in other countries.

To improve the competitive advantage for processing in Kosovo it means encouraging more production on an industrial scale and, as was noted under the discussions related to farmers and traders, this will require organizing small producers into effective suppliers, not an easy task. The actions already suggested for farmers and traders will also be positive for the development of the process sector of the industry so keep the focus on the actions detailed above for farmers and traders.

d. Retailers

The retail sector of the F&V market chain includes several participants – retail (green) markets, small corner store shopkeepers, and a growing supermarket sector. The green markets are the traditional place where most F&V are bought by consumers. The small shops sell F&V generally as a part of a full line of other products. And, supermarkets are a relatively new entrant to the F&V retail trade but, a growing part of that trade, with particular emphasis on the consumer that can drive to the market.

Some observations of the team related to retail marketing include:

- The green markets will continue to be a strong part of the market for many consumers because they believe that products from these markets are fresher and less expensive than from the small shops or newly emerging supermarkets. However, as convenience becomes more important to the consumer the green markets will give way to more sales via the supermarkets. Thus, as the market changes the suppliers to the markets will need to keep abreast.
- The small corner shops are perhaps a threatened entity as they have been in most countries where the growth of supermarkets has gained a foothold, and supermarkets in Kosovo are well established and a growing force for marketing. Thus, it will be difficult for the local corner shop to survive because they will not have the ability to keep produce in top condition and the supermarkets will.
- Presently the retail trade in F&V is a trader/green market/small retailer market. The large retailers (supermarkets) presently do not represent more than 5% of the F&V market volume (and even that number is very doubtful) but, within two to four years this will likely increase to 10% and as this changes the suppliers of retailers will need to develop new practices to remain competitive. Thus, much training will need to be provided to F&V marketing people.
- The large retailers; i.e., ELKOS and similars handle large quantities of product through their stores and like to work with truck load lots if possible. And, few Kosovo farmers, unless well organized or large, can supply truck loads of assorted products. Thus, buyers like Elkos prefer to go to sources (importers or large local traders) for their product. They do not deal with many small farmers. Elkos is planning the construction of a new F&V distribution center and when complete it could facilitate the buying from local farmers that get organized to serve their needs. The team suspects the case is similar with other supermarkets similar to Elkos. So again, this retail development is arguing for better organization of the farmers, better collection centers for produce, and properly equipped wholesale markets.
- The traders (some) can help organize larger lots so retailers (large & small) will deal with them or import on their own. Retailers, particularly the smaller retailers, would prefer where possible, to buy products within the country and not have to deal with imports. Obviously, this is not possible for products that can not be grown in Kosovo. Therefore, imports will always have a role and it is a good idea for retailers to select a couple of trusted importers and work with them closely to give them most of the orders and a fixed margin for their services.
- Large retailers would work with local farmers if organized to meet the needs of the buyer but more likely this would happen via local traders. In fact, it is probably a good idea for the larger retailers like Elkos to work with a couple local traders that can effectively assemble product from local farmers ensuring proper deliveries of quantity, quality, and packaging. Also, well designed and equipped wholesale market(s) could be a very attractive place for the large retailers to develop their distribution centers.
- Store displays are basic point of sale and stores that do not do a good job of removing spoiled product from the shelves in a timely manner will drive customers away. If the store is going to offer F&V they must be presented well and if they are customers will be attracted. To do the right job of merchandizing it will require training the people who manage the F&V section in the whys and

wherefores of merchandizing fresh produce. To help develop these people and their skills it would be good to conduct in store competitions between the various supermarkets produce management teams. This is very important to helping the local product replace the imported product on the shelf.

Thus, there are actions that can be taken to help strengthen the marketing of F&V at the retail level of the value chain. One idea stems from what has been a thrust of the teams recommendations, the improvement of assembly of product from farmers through better organization of the farmers or through more effective development of ties between the traders and the farmers. Also, as the retail market for F&V transitions from the trader/green market/small shop to the supermarket the management of the F&V displays in these stores will need to learn much more about the whys and wherefores of merchandizing F&V's. These efforts will help improve competitiveness of the Kosovo F&V sector.

D. Market Development Actions

Based on the marketing level examination of the F&V value chain in Kosovo several areas where action can be taken to enhance marketing competitiveness and industry sales were observed. Several priority market development actions are set out below in bulleted format.

- Make lead farmers (commercial) aware, jointly with buyers, of the PHH actions that need to be taken at the farm level to ensure properly sorted, and packed products.

  Because farmers, particularly small farmers, do not do a good job of picking, sorting, and packing their products buyers often avoid purchases from individual farmers. And, because most individual small farmers do not see a substantial benefit from carrying out proper PHH practices they will accept lower prices rather than present their product properly. To improve the situation and enhance sales and revenues the farmers need to understand that if they assemble their product jointly at central collection points and carry out proper PHH practices it will help them gain buyers attention and very likely increased prices for the product they sell.

- Conduct market development seminars where commercial farmers and buyers are brought together to ensure they understand the concerns and demands of each other. These could be conducted around field days during the harvest season.

  It is often the case that farmers will not enter into contract relationships with buyers because they do not trust the buyers. They think buyers are trying to take advantage of them by paying a price much less than what they observe in the market. Also, buyers often do not want to make contract relationships with farmers because farmers have been known to not honor contract agreements. Thus, mutual trust does not exist between farmers and buyers and this creates marketing ineffectiveness. Thus, by bringing the farmers and buyers together in sessions that help them understand each others businesses better can help to create stronger trust relationships.

- Conduct marketing training programs for commercial farmers that help them better understand how markets work and how they might be better able to enhance their positions on the markets

  The basic goal is to help farmers better appreciate the role of marketing and why it is important. If this is understood farmers will be in a better position to appreciate how certain market development efforts can benefit them and be more willing to take the actions suggested.

- Conduct workshops where commercial farmers and processors/buyers are brought together to review information related to the implementation of HACCP, and Global Gap standards.

  As the F&V industry of Kosovo grows and becomes more export oriented it is necessary for the players in the industry to understand why certain food safety regulations are important and how these regulations can directly impact on their businesses. It is fast becoming the case that if certain food safety regulations are not met it will not be possible to export, particularly to the more sophisticated higher priced markets of the EU. Thus, this training is seen as necessary.

- Establish collection points with proper facilities that bring together traders (buyers) and commercial farmers to assemble marketable shipments of product for both fresh and processed markets. One of these collection points could be built around a new wholesale market on the road between Pristina and the Albanian coast in a production zone within 50 kilometers of Prizren.

  This point has been emphasized throughout the marketing and market development discussion in this report. The team believes that because the Kosovo F&V industry is dominated by small farmers and small traders it is extremely necessary to work on activities that will help to enhance the bargaining power of these players. One of the best ways to accomplish this is by getting farmers to work together to market their product but, if this is not possible the establishment of proper collection centers where traders and farmers can meet to trade, grade, sort, and pack product for onward sale to buyers of product for either fresh and/or processed markets will be a significant gain for the farmers and small traders.

- Carryout one-on-one supplier/buyer linkages (meetings) that help to initiate sales contracts between sellers and buyers. This should be especially done with supermarkets because they represent the distribution outlet of the future (within 2 to 4 years)

  Basically this involves helping the farmers to prepare their product (via collections centers) to be of interest to the large supermarket buyers. And, before the farmers invest to prepare their product action can be taken to bring the supermarket buyers together with farmer leaders to discuss each others interests. The buyers can explain what they need from the farmers and why. The farmers can explain how they will try to organize the farmers to meet the requirements. Then contract forms can be shared and explained to both sides in an effort to help formalize the marketing relationship to quantity, quality, and price. Success with this will open expanded markets for the farmers and will provide the supermarkets with local product which they would like.

- Conduct market opportunity evaluations in target country export markets (Albania, Macedonia, Montenegro, etc.) so as to be able to identify buyers and their requirements for the export potential products, both for fresh and processed markets.

  This action is self explanatory.

- Identify and eliminate export constraints at borders where they are preventing expansion of sales. Specific actions will need to be taken and KPEP can help to determine who (government bodies) needs to take the actions.

  The team heard about problems affecting the industry that have been caused by Serbia when they imposed the restriction that does not allow Kosovo to transport product across Serbia. Also, the team heard that some of the neighboring countries – Albania, Montenegro, and Croatia – were becoming more restrictive about allowing Kosovo product to enter their markets unless proper sanitation certificates accompany the shipments. In other words these countries are beginning to enforce some non-tariff barriers that could limit exports. Thus, where these kinds of things are noted by KPEP they could take action and work with local organizations and government agencies to help ensure that these kinds of barriers do not become significant problems for the F&V industry as it works to expand.

It is believed that if many of these actions can be implemented by KPEP during the course of the project it will help to foster a much more competitive environment for the F&V sector of Kosovo.

E. Market Development Strategy

It is the opinion of the investigating team that many actions, as indicated above, can be taken to help improve the competitiveness and foster increased sales and development of Kosovo's F&V industry. But, it may not be possible for KPEP to undertake all the suggestions made in the previous section or in the next steps section of this report. But, the team would suggest a core strategy around which KPEP can focus its efforts on behalf of the F&V industry.

During the course of this report many observations have been made about things that impact positively and/or negatively the F&V industry. But, two key elements have been continuously emphasized and these two elements form a core market development strategy. The two elements include:

- First, the necessity of working to get farmers to market their products together to build market power; and,
- Second, establish a focal point center where product (both local and import) can be assembled for re-distribution to onward markets.

Lets start with the second task first as its development supports the first task. The establishment of a modern wholesale market on the primary transportation corridor between Pristina and the coast of Albania will be a major driver for increased competitiveness and expanded sales of Kosovo F&V products. The development is suggested along the new road being completed and in a F&V production zone where farmers, traders, and buyers can easily assemble their products. At first blush it seems that somewhere within a 50 kilometer radius of Prizren and, not to far from the new road would be a good location. This wholesale center would be equipped with the necessary truck loading and unloading facilities; cold and CA storage facilities; grading, sorting, packing facilities and other necessary infrastructure for a modern wholesale market. Not all these facilities would need to be controlled by the wholesale market but, they could be owned by private sector groups involved with the market. This market would provide a center where product from all over the country and, from import sources, would be traded and re-distributed. This market center would overcome things that make present markets less than fully competitive with those in neighboring countries.

The second major thrust, bringing farmers together into effective groups organized to meet market demands of buyers, will be accomplished via several coordinated actions that include:

- Conducting work shops with farmers and farmer groups to explain the necessity of working together to build market power and demonstrate benefits of working together at marketing.
- Help farmers who want to organize as associations or cooperative groups prepare the paper work to make it happen and, help them learn how to manage and administer their new groups successfully.
- Establish local collection centers where farmers can bring product together for grading, sorting, and packing to meet traders and other buyer's needs. These collection centers would become directly linked to traders and other buyers located at the proposed new central wholesale market. The APC collection centers for wild product might be good examples of how these collection centers could be established.

In addition to these efforts others will undoubtedly surface as work moves ahead but, these actions will provide a catalyst to bring farmers together for effective marketing of their product. To succeed farmers will need to realize benefits from their efforts.

This core strategy will aim to provide the thrust and basis around which KPEP can focus its action oriented initiatives to the benefit of the F&V industry. The project will not be able to do everything but the project team can help to push and promote the development of these initiatives with the organizations and groups that can help bring the initiatives to fruition. It will become a community and national effort.

V. Product Selection for KPEP Focus

A. Criteria for selection – Methodology

To set the stage and before making the selection it is necessary to point out that in general it is usually fair to categorize fruits as being global (broadly traded internationally) in their nature while vegetables are local (most heavily traded on local markets) in their nature. Several fruits are very popular worldwide and account for most of the fruit consumption but, they cannot be grown everywhere and require high start up investments, which makes them very tradable. On the other hand vegetables are generally traded locally, as often the more highly sought products (tomatoes, lettuce, cucumbers) are more perishable than many of the internationally traded fruits. Also, vegetable consumption patterns and taste preferences often differ widely depending on the country and, their usually much cheaper than fruits, which makes transportation costs too high to afford moving them long distances.

It is important for KPEP to focus its attention on products that have the most impact potential, which includes creation of new jobs, generating income for the farmers and other participants along the value chain. Therefore, a traditional ranking methodology was used to rank all products. Each product was ranked against a number of criteria that impact on their potential for having significant impact, using a scale from 1 to 10, with 1 being positive for the product selection and 10 being negative. Each of the key criteria used for the ranking is set out and discussed below:

Ethnicity - *is* a criterion, which would impact on the regional trade of the product. If the product is popular in the region and is considered ethnic it provides for good trade and production development opportunity and would score a low number near 1.

Traditional or new – new products usually need time to promote among consumers, which means that developing further production and trade of such a product would usually require higher investments, it would take more time to achieve results, would mean higher competition on target other markets and generally higher risks (market size risk). It does not mean that these products would not represent a potential but because they would take more effort to develop them it was decided to include new products offering the most potential under a separate category (New Products). Some of them might offer substantial potential and be worth taking a look at.

Infrastructure development – if infrastructure required for handling the product (storage, PHH, logistics, trade, etc.) were in place – the product is considered to offer natural advantages over the products without infrastructure support already in place. Thus, products that met this criterion would receive a more attractive score nearer to one.

Level of production technology **–** products with more highly developed production technologies (usually products which farmers have more experience growing) have a natural advantage over those where technologies still need to be developed or improved upon. Thus, products where much is known and farmers already do a good job of production receive a score nearer to one.

Importance of scale – the team thinks Kosovo, being a comparatively small country, would not have a natural advantage over larger countries that produce products where scale is considered important for competitiveness of production. Thus, this criterion would help us select the products with the higher level of competitiveness for the Project's focus.

Labor intensive – Considering the high level of unemployment in Kosovo, especially in the F&V production zones, it is thought that Kosovo would have some advantage in growing crops, which are more labor intensive, over countries which do not have inexpensive and ample supplies of labor. Thus, this criterion would help to focus on the more labor intensive crops.

Perish-ability – is an important factor, which impacts on trade opportunities. Infrastructure to handle perishable products is very expensive to build; therefore, we would consider high perish-ability as a negative factor for a product and at this time Kosovo is not well served by infrastructure to handle these products in a large way. Thus, highly perishable products for other than local markets were ranked down by giving them a high score.

Tradability – some products are naturally more tradable internationally than others. Considering the small size of the Kosovo internal market, the country should encourage its F&V industry to focus on products which can be potentially exported. This would seem to be where the greatest expansion opportunities exist for this industry. Thus, products that offer greater tradability were ranked with a low score to encourage their production.

Set out in Table V-1 is a table that show how the team ranked 45 products that could offer potential in Kosovo.

Table V-1 Product Ranking against Criteria for F&V of Kosovo

Products	Ethnicity	Traditional or new&	Infrastructure development	Level of production technology	Importance of scale	Labor intensivity	Perishibility	Tradability	Market size (opportunity)	**Total**
Canned products	3	3	2	4	2	2	1	4	5	**26**
Hot peppers	1	1	5	3	4	3	5	4	4	**30**
Sweet peppers (open field)	1	1	5	3	5	5	6	5	3	**34**
White beans	1	1	3	5	7	9	1	5	4	**36**
Jams, marmalades, etc.	10	5	2	4	3	5	1	3	5	**38**
Apples	10	2	5	7	9	3	2	1	1	**40**
Organic produce	10	5	6	6	1	1	5	1	5	**40**
Early vegetables (under cover)	10	4	7	7	3	2	5	3	2	**43**
IQF products	10	8	4	4	4	4	1	3	5	**43**
Potatoes	10	2	2	3	10	10	2	5	1	**45**
Grapes table	10	4	7	7	7	2	4	1	3	**45**
Greenhouse veggies	10	6	7	9	3	1	6	2	2	**46**
Pears	10	3	6	8	8	3	3	2	3	**46**
Watermelons	10	2	5	5	8	6	4	2	5	**47**
Melons	10	3	5	6	7	6	5	2	5	**49**
Fruit concentrate	10	9	4	6	7	7	1	1	4	**49**
Tomato paste	10	9	4	6	7	7	1	1	4	**49**
Cabbages	10	3	7	4	7	7	1	7	5	**51**
Garlic	10	3	7	9	5	8	3	2	4	**51**
Leeks	10	7	6	7	2	4	2	6	7	**51**
Celeriac	10	7	7	6	2	4	3	4	8	**51**
Parsley (herbs)	10	5	7	6	4	3	7	4	5	**51**
Plums	10	4	7	8	7	3	5	2	5	**51**
Onions	10	3	7	8	7	9	3	2	3	**52**
Strawberries	10	3	7	8	4	2	10	3	5	**52**
Blueberries	10	6	5	8	6	5	6	1	6	**53**
Carrots	10	3	7	7	8	9	2	5	3	**54**
Blackberries	10	7	5	8	5	2	8	3	6	**54**
Cauliflowers	10	6	7	6	6	5	6	4	5	**55**
Peaches	10	3	8	8	8	2	9	2	5	**55**
Raspberries	10	4	8	8	4	2	10	4	5	**55**
Sweet cherries	10	4	7	8	7	3	9	2	5	**55**
Chinese cabbage	10	10	7	7	3	3	3	5	8	**56**
Spinach	10	6	7	6	4	4	7	6	6	**56**
Apricots	10	3	8	8	8	2	9	3	5	**56**
Cucumbers (open field)	10	3	8	8	6	4	7	6	5	**57**
Broccoli	10	8	7	6	6	5	6	4	5	**57**
Red beets	10	5	6	5	8	9	2	7	5	**57**
Celery	10	7	7	6	5	5	5	4	8	**57**
Lettuce	10	8	7	6	4	4	7	5	7	**58**
String beans	10	5	7	6	6	5	7	6	6	**58**
Sour cherries	10	4	7	8	8	4	8	5	5	**59**
Brussels sprouts	10	10	7	6	6	5	6	5	8	**63**
Peas (green)	10	5	7	7	8	9	7	7	5	**65**
Tomatoes (open field)	10	2	8	8	8	10	8	8	6	**68**

B. Import Substitution Opportunities

Import substitution products are those that farmers can produce to replace imports. They may not be as classy as export products because they seem more mundane. However, they are just as important and help contribute to improving the trade balances, increasing jobs and incomes for the local rural community.

1. Products & Justification

The products that were selected as most important in this category included those set out in the table below. Also, some discussion of reasons why the team thinks some of these products are good for consideration is set out.

• Apples	• This is a traditional and well understood product for many producers and, it is quite tradable internationally. To obtain an immediate impact more storage facilities equipped with Controlled Atmosphere (CA), cooling, and smart fresh facility could help reduce wastage and increase supplies of quality product for sale over longer periods of the year. • From a production perspective this is not an immediate impact product because basically there is a need to grow more apples to replace imports and, this is a long-term and a very significant investment. And, most local farmers do not have funds available to afford it. Thus, if such activity could be supported with upgraded technologies (3300 or more trees per ha), eventually Kosovo could become self-sufficient in apples and could even export to neighboring markets.
• Early Vegetables	• Early vegetables (grown under cover) are a general category, which includes vegetables and berries grown in low and medium poly-tunnels and under agri-fiber. There seems to be a window of opportunity for many early vegetables and some berries when Albania and Macedonia close early season but Croatia and Serbia have not yet started. If production would be focused on this window, it could be profitable and some products, such as peppers, tomatoes, cucumbers, potatoes, could even be exported. • To begin to exploit this market some market development work needs to be carried out in order to determine volumes of products and potential buyers of off-season vegetables.
• Greenhouse Vegetables & Seedlings	• This category refers to growing in glasshouses and high poly-/plastic tunnels. Despite high start-up costs if oriented towards the production of crops and products that do not require significant energy these operations could help substitute some imports; i.e., herbs, lettuce and the like and, actually improve production of vegetables under cover and in the open field. • Demand for high quality seedlings is not being met and production of seedlings could extend the use of the greenhouses. However, closer look at this operation would be required. • Also, the same types of facilities could be used to grow early tomatoes, bell peppers and cucumbers, which would substitute imports and, possibly be exportable. However, a need exists to determine the size of export demand and the windows of opportunity on the domestic market before operations are launched.
• Onions	• Onions, although they did not rank high on the list, mainly due to the high level of international competition on this market could, with proper effort, become an important and profitable crop for farmers of Kosovo. It could replace imports and might have some limited export opportunities in

	the years when over production occurs. Although it could be mechanized almost fully and grown on large scale, high yields could also be achieved by private household growers. If grown from hybrid seedlings with drip irrigation, onions could yield from 70 to 120 mt/ha, which, at an average price of €0.15 euro per kg would provide around €13-16,000 of revenue, of which €5-7,000 could be net profit.
• Canned Goods	• Canned vegetables and possibly fruits seem to have a much greater demand than what is presently produced. Canned peppers and cucumbers are already being successfully exported but the variety of products produced is small and the domestic market is flooded with imported canned products. Production of these products creates a significant number of jobs and it is much easier to handle canned products than fresh produce. Several opportunities may exist, for example: o Increasing the variety of products and substitute imports. o Perhaps introduce IQF freezing and other ways to preserve raw materials during the season. o Increase capacity of existing plants to boost import substitution and exports. o Expand marketing efforts by identifying new customers.
• Instant Quick Frozen (IQF)	• IQF products – some facilities in the key wild berry and mushroom collection zones already exist. A careful study of what else could potentially be produced in these regions and use the IQF facilities need to be carried out. Some of the most desirable IQF products include: cauliflower, broccoli, brussel sprouts, and bell peppers. There is a need to study other opportunities for industrial use of IQF products, which could be used as one of the methods for preserving and storing products. These efforts could both support import substitution and exports.
• Pears	• This is a traditional and well understood product for many producers and, it is quite tradable internationally. To obtain an immediate impact more storage facilities equipped with Controlled Atmosphere (CA), cooling, and smart fresh facility could help reduce wastage and increase supplies of quality product for sale over longer periods of the year. • And, like with apples expanded production is necessary but, this is a longer term opportunity.

C. Export Opportunities

Export products are those that farmers can produce to expand their markets outside the country. Sometimes such products are considered classier than those that go only to serve the domestic market but, they are both important. They both provide jobs and incomes for the local rural community.

1. Products & Justification

The products that were selected as most important in this category included those set out in the table below. Also, some discussion of reasons why the team thinks some of these products are good for consideration is set out.

• Potatoes,	• This is a traditional and well understood product for many farmers; therefore, while potatoes are generally oriented towards larger scale production, they have good potential in Kosovo. Moreover, they are already exported on a large scale and further exports seem to be possible. Kosovo has a very good experience in growing and exporting potatoes and they use high quality Dutch seeds, which helps assure quality of the final product and exports. Some issues that need to be addressed are: o Improved potato storage and PHH facilities. Existing storage, in most cases, is relatively poor, which causes Kosovo to import potatoes in April-May. Support in building better quality facilities would help replace imports and improve chances of exports, as most demand from other countries comes during the Feb-May period. o Production practices seem to offer potential for improvement to get higher yields. Given the quality seed used yields should be much higher. Perhaps particular attention should be paid to drip irrigation and fertilization as well as IPM. o Also, production costs could be lowered greatly (by 25-30%) if Kosovo seed suppliers could develop their own seed replication programs for the Dutch company (using their elite and super-elite seeds) if suitable land can be found.
• Peppers,	• Peppers, both sweet and hot, are traditional and ethnic products, which are already exported and, local farmers have good knowledge about how to grow the crop. It is also a very profitable and a labor intensive crop, which could have positive impact on rural incomes and employment in several key production regions of the country. For this product the KPEP project could focus on: o helping farmers; and, traders working with farmers, find new markets and buyers both domestically and internationally; o helping install collection points and/or wholesale market facilities with proper facilities supportive of exports; o helping to expand processing (canning and, perhaps freezing) as processors interviewed seemed to have a very

	good potential for expanding their sales if they could produce more; o also, production support is needed to help extend the marketing season and improve yields and quality. Some particular areas of focus could include: developing further drip irrigation systems, IPM procedures, production of earlier crops using (agri-fiber, tunnels, seedlings, and other more advanced technologies); o packaging, not a major issue yet but, some effort to improve might be needed for peppers sold to the fresh markets.
• White beans	• White beans seem to be a crop that very few projects have paid attention to although it is an ethnic crop, which is very storable and tradable. It is a good crop in the crop rotation and does not need a lot of investment to handle. If grown on a larger scale it could become an exportable commodity but, further investigation of the market is required.
• Onions	• Onions – see the comments from the import substitution category.
• Canned Goods	• Canned goods – see the comments from the import substitution category.
• Jams and marmalades	• Jams, marmalades, and similars have some opportunity because fruit processing is limited and fruits, which are not good enough for the fresh market, are frequently underutilized or wasted. It is advisable to talk to bakeries and producers of confectionary product to determine the size of the market for different kinds of products and product specifications before investing substantially in this activity. And, as with canned goods several opportunities for improvement may exist, for example: o Increasing the variety of products and substitute imports. o Perhaps introduce IQF freezing and other ways to preserve raw materials during the season. o Increase capacity of existing plants to boost import substitution and exports. o Expand marketing efforts by identifying new customers.
• Watermelons & melons	• Watermelons and melons – are relatively easy crops to grow, farmers are familiar with their growth, and they can be profitable although they are not as high return/ha as some other crops. Consequently, they generally require a slightly larger scale of operation. However, there seems to be a good window of opportunity for exports of these products. Some opportunities for improvement may include: o Reviewing markets to determine the best window for exports; o Examining production practices to determine what can be done to improve technologies and store product during the period when it could be exported and the domestic market is well supplied.

• Organic,	• When considering these products the team generalized the situation although it can differ for different crops. But, organic production could be a very natural choice for Kosovo, where farms are small scale and labor is abundant. Also, it was discovered that there is plenty of land, which has not been cultivated for three or more years, and this land could be certified organic within the same year. Also, due to a lack of credit support for production many products are actually grown as organic. The team met the organic products association of Kosovo, which has worked hard to promote the idea of organics for consumer health reasons but, to date few commercial actions have been taken. Therefore, there is a need to hire good organic expertise from the EU countries to explore more fully the opportunity. This is because the EU has different and stricter organic standards than the US and it is the most logical target market for Kosovo growers. Some things that could be done include: o Identification of product and then focusing production, processing and handling around the targeted products. o Improving old orchards that have not been fertilized or protected by chemicals for 3 or more years. These orchards could certified organic and be brought into organic production quickly. o Also, native forests where wild products are gathered could be certified in the first year and brought into organic production quickly.

D. Immediate Impact opportunities

Immediate impact opportunities are those that can be developed quickly, within the next year or two but, certainly within the time frame of KPEP. Some of these opportunities can be import substitution or export opportunities as well; therefore, some of the same products already discussed are included in this category.

1. Products & Justification

The products selected (see below) as having immediate impact potential are generally products that are already being produced and are in excess on the domestic market or are already being exported and the primary initiative is to increase their sales and production. Of course several actions are required to increase sales and production and many have been spelled out in this report as initiatives for KPEP.

• Potatoes,	• Potatoes - see comments from the export promotion category.
• Peppers,	• Peppers, both sweet and hot - see comments from the export promotion category.
• Early vegetables and fruits	• Early products - see comments from the import substitution category.

• Onions	• Onions – see comments from the import substitution category.
• Canned Goods	• Canned goods – see comments from the import substitution category.
• Jams and marmalades	• Jams, marmalades, and similars – see comments from the export promotion category.

E. Longer term Impact Opportunities

Longer term impact opportunities are those that require substantial time to expand because there is either not enough production or it will require several years to increase production. For example, a case in point is apples, presently apple supplies are insufficient to serve domestic markets to say nothing of exporting and it will require several years to increase supplies. It is a good product but, it will take time to develop. Several of the other products in this category are of a similar character and it will take time for KPEP to realize results with these products. Eventually some of these opportunities can be import substitution or export opportunities as well; therefore, many of the same products already discussed are included in this category.

1. Products & Justification

The products selected (see below) as having longer term impact potential are generally products that are produced and, known to farmers but, in insufficient quantity to be able to serve the domestic fresh, and/or processed market. Of course several actions are required to increase production and many have been spelled out in this report as initiatives for KPEP.

• Apples	• Apples - see comments from the import substitution category.
• Pears	• Pears - see comments from the import substitution category.
• Other stone fruits	• Other stone fruit –this product group has many of the same opportunities and issues as discussed for apples and pears; therefore, see those discussions for more about what needs to be done as the comments will not be repeated here.
• Organic produce	• Organic produce – see comments from the export promotion category.
• Fruit concentrate production	• Fruit concentrate production – several groups expressed interest in the production of fruit juice and purees. But, before these opportunities can become viable opportunities a consistent abundant supply of raw material needs to be available at a very low cost. This is not presently the case and it will be some time before this situation prevails in Kosovo. Thus, in the nearer term it is best for processors to focus on jams and marmalades where sufficient raw material can be obtained.

• Table Grapes	• Table grapes is a good and well received product, widely traded on international markets, and a crop that can be grown well in Kosovo. It is longer term because it takes time for the vines to develop and produce

F. New Products

Exactly as implied new products are those which are unfamiliar to many farmers and will require time to introduce and teach farmers how to effectively produce. However, they are generally products which have the potential of being grown effectively in Kosovo, had wide acceptance in other markets and, offer both domestic market potential as import substitutable items and, export potential to neighboring countries. The key products included in this category include: leeks, lettuce, early greenhouse vegetables and herbs, cabbage family products – broccoli, cauliflower, brussel sprouts, pekinese cabbage, and red cabbage. Some berries that are relatively new to Kosovo and can be continued are cultivated blueberries, raspberries, and blackberries.

G. Conclusion & Short List of Opportunities

Finally, Kosovo offers conditions for the production of many F&V products that can serve the small farmers of the country well and make a positive contribution to increasing the countries GDP, employment, and rural income. The products can help by reducing imports and expanding exports. They can give farmers and processing companies new opportunities. In summary the short list of product opportunities includes:

1. Highest Priority

• Peppers	• Canned Products
• Potatoes	• Jams, Marmalades
• Early & greenhouse vegetables	• Onions

2. Second Priority

• White beans	• Apples
• Organic produce	• Pears
• IQF products	• Watermelons
• Table Grapes	•

VI. Suggested Next Steps for KPEP

Throughout this report several actions that can be taken by KPEP to help foster the expansion and development of the Kosovo F&V industry have been indicated. In this section of the report the team summarizes into a list of next steps that are felt to be the higher priority actions to take in the next year or two to realize the greatest impact from project efforts. To realize the objectives for the F&V sector it will require substantial follow-up by a dedicated team of people on the KPEP team in Kosovo. This team can be supported with STTA assistance but, the three person agribusiness team of KPEP should have one person that is full time committed to supporting F&V sector activities. The person responsible for the activity should be a person familiar with the technologies associated with producing and processing F&V but, his or her knowledge and experience should be strongest in marketing and market development work.

The next steps the team indicates as being important are grouped under three key headings – *further investigations, action oriented, and capacity building*. **Further investigation** next steps involve the conducting of further work aimed at refining the focus of specific action steps to be taken. For example, this first piece of work conducted was to help define actions KPEP could undertake in the F&V sector and was focused on marketing and market development issues. However, to complete work for the sector actions to take in the production and processing areas of the sector need to be identified and this additional recognizance is a further investigation oriented task. **Action oriented** next steps include actions that can be immediately undertaken to create a positive impact on something in the F&V sector. For example, identify and select key buyers that will be ready to work together with F&V farmers or traders and link them together to help foster sales. This is a very action oriented next step. And, finally **capacity building** next steps are oriented at identifying initiatives that will help to build the capabilities of people involved in the F&V sector all along the value chain. Thus, seminars, workshops, and formal training activities are capacity building activities. In the table that follows several key next steps are shared.

Next Steps: Marketing & Market Development Activities to Undertake Immediately:

Further Investigation	Action Oriented	Capacity Building
Conduct further value chain analysis on 5 to 6 of the priority products to complete identification of actions at production and processing levels.	Select key buyers [traders & retailers (particularly supermarkets)]; determine what they want/need; link product supplier groups (farmers or traders) to these buyers	Conduct buyer/seller market development workshops: • PHH [picking, sorting, packing (new plastic boxes), storage]. Build on what KCBS did but, augment the training • Quality Standards (HACCP, Global Gap, ISO, etc.)where needed
Analyze in more detail the prior successes of KCBS, Mercy Corps, Intercooperation, MAFRD, etc.	Assist the MIS NGO to improve quality of information provided; and, help with ideas for the implementation of a	Conduct buyer/seller market development workshops: • On how organized farmer groups and traders

and role these programs out to more farmers, traders or processors.	"bids & offers" system.	can gain market power • To familiarize growers (particularly apple) with CA storage and Smart Fresh practices
Conduct market opportunity evaluations for target country export markets (Albania, Macedonia, Montenegro, etc.) to identify buyers in export markets and their requirements	Provide Pestova Potato Chip Co. and other selected processors with food technology assistance (STTA person) aimed at helping to improve quality of products and in turn their competitiveness.	Conduct seminars: • On fruit & vegetable marketing practices • Train market players in how to implement product standards.
Assist the Widow Women's Group with their feasibility study that aims to help them build a proper processing facility. This would help to ensure it is feasible and help identify where KPEP can make its best contribution	Conduct retail merchandising competitions between key retail groups.	Conduct buyer/seller market development workshops: • Provide training and demonstrations on merchandising practices to retailers
Conduct work to delineate the barriers at borders of target market countries and, help eliminate the border export constraints in order to expand export sales	Provide targeted Grants to buyers (traders/processors) interested in establishing collection centers where traders, processors and, farmers can come together to fulfill sales agreements for products going to either fresh or processed end uses	Conduct buyer/seller market development workshops: • Demonstrate the use of new plastic boxes able to cut costs and improve quality for buyers.
Examine the feasibility of developing a modern full service wholesale market in a key production zone along the new highway between Kosovo and Albania	Conduct a specialized annual F&V conference (international, regional) that involves producers, traders, processors and marketers.	Conduct targeted (topic specific) study tours. To make best use of the tours require participants to be trainers when they return.
Obtain information about local industry recognized standards for various target products in target export countries and adopt similar standards for Kosovo products to be exported	Provide a Grant to the Widow Women's Group to help them build the processing facility they need. This would follow completion of feasibility work that confirms viability.	
Investigate WEB resources that could be used to help promote Kosovo F&V industry products and provide help in accessing and utilizing the WEB	Help potato growers/traders to improve storage facilities and PHH practices so as to extend the selling season and eliminate imports in April and May	
Identify opportunities on the EU organic F&V market and help develop production to meet this demand	Identify new investor groups interested in producing, processing and, marketing peppers. Help link them in a manner similar to what has been done with Etlinger by	

	Mercy Corps, in fact do it as a joint project with Mercy Corps	
	Conduct trade show visits to pre-selected venues – Fruit Logistica, and regional shows.	
	Assist organized farmer groups with good product (peppers, potatoes, other) to consider the implementation of branding their products.	

To implement many of the next steps suggested additional STTA will likely be required to help support the local team. Some of the STTA will be possible to hire locally but some international expertise will also be required. In reviewing the next steps listed above some possible areas where STTA assistance might b helpful are indicated:

- To conduct the work required to investigate the production and processing segments of the F&V value chain in Kosovo a second mission by Mr. Yarmak and Dr. Lee would need to be carried out as was indicated in the SOW. This mission would complement the marketing and market development evaluation mission and permit developing specific action steps for the production and processing areas of the industry.
- Help with developing materials for use in conducting seminars, workshops, and other training events could be very useful to the local team. This is also an area where Mr. Yarmak and Dr. Lee could help but, it would likely require as well help of specialists in specific fields of expertise. It is an area where local consultants like Mr. Disha could bring much support to the team.
- The NGO running the MIS system that was developed under the MPS EU project could use help in strengthening the system being used to collect and report data on prices. Also, the group could add a "Bids & Offers" service to their package which would be very helpful to both sellers and buyers of Kosovo F&V's. This is also and area where Mr. Yarmak or Dr. Lee have expertise to offer. Also, help could be provided to identify how the group could better use the WEB to promote the Kosovo F&V industry.
- Local consultants could help the KPEP team to evaluate markets for targeted products in the neighboring markets of Albania, Macedonia, Montenegro and others. These consultants might need help in preparing guidelines and survey forms to be used to carryout data collection as well as help in analyzing the information collected. This could be provided by Mr. Yarmak and Dr. Lee as well as several other marketing specialists.
- Help should be provided to the Widowed Women's Group in preparing a proper feasibility study for the processing venture that they want to implement. This help can be provided by local consultants like Mr. Disha. It might be that Mr. Disha would need some help with certain technological questions but, most of the rest of the analysis he should be able to carryout.
- Help with preparation of the SOW for a food technology specialist to assist processing groups like PESTOVA and some of the canned F&V processors with audits of their processes to ensure they are doing their best to produce quality that meets standards of their competitors is required. Also, the processors will need to be assured that the audits will be helpful to them not a threat.
- Help will be required to develop a full pre-feasibility study for the establishment of a modern wholesale market. It will likely require a team that brings together

the technical knowledge for organizing the market, logistical knowledge elated to moving goods in and out, and the financial knowledge needed to analyze the financial performance and feasibility of the proposed market. Mr. Yarmak is working closely with a wholesale market team in Lviv, Ukraine and he could help arrange for visits by leaders of a wholesale market movement from Kosovo. If Mr. Muhamed Disha is going to help KPEP with this wholesale market development work it would be good to have Mr. Disha travel to Ukraine and spend a few days learning more detail about how the market in Lviv operates.

- It appears that assistance is required to help potato growers improve their storage facilities in order to extend the length of time they can keep potatoes. Success with this will reduce imports required, and increase exports. To help with this it will likely require some potato storage expertise from Holland because the varieties of potatoes grown are pretty much all from Holland.
- Some groups may be interested in developing their own brands and to do so it may require professional help. It is possible that groups exist in Kosovo that do help firms develop brands. However, if not it would be possible to arrange for a STTA person to come to Kosovo and conduct a training session for groups that would be interested in the topic.

As the KPEP team gets into its work other initiatives may be identified where STTA assistance will be required. There are several next step actions to take and the team should be very well engaged. It is understood that other areas of the agricultural and agribusiness sector are included in the work of KPEP but, rest assured that there are many things to do in the F&V sector which can have high payoffs for Kosovo.