

HPK INTERVENTION REPORT

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VEGETABLE NURSERY INDUSTRY IN KOSOVO



Background

Horticultural Promotion in Kosovo (HPK) commenced in 2001 with the funding of the Swiss government through the Swiss Agency for Development and Cooperation (SDC). From 2008, the project has been co-financed by the Danish Ministry of Foreign Affairs. The project will run until the end of 2012.

Kosovo has favorable agro-ecological conditions for growing vegetables, and the nursery industry is generally recognized as offering considerable potential to generate income and employment in the rural areas of Kosovo.

The collapse of the former Yugoslavia and associated wars and crises affecting the region did not leave the vegetable sector unscathed. Production had previously been closely linked to cooperatives, focused on the industrial processing sector as well as machinery rings, but was pushed towards subsistence with the collapse of these cooperatives. The old Yugoslav market of 22 million people that had taken vast quantities of a limited range of vegetables from Kosovo had disappeared, to be replaced by a market of just 2 million people in Kosovo demanding the whole range of vegetables. In 2001, this demand was being rapidly supplied by neighboring countries unaffected by years of civil disturbance and war.

The rebuilding of the vegetable sector was a priority from the inception of the Project and the latter was faced with the task of providing actors with the knowledge and skills to successfully make the transition from a planned economy (where access to inputs, equipment and the market was a state responsibility) to an open market economy (in which the producer had to take responsibility for a much wider range of activities).

After the war, most vegetables production took place with individual producers selling their products on market day in nearby towns. Under this system, locally produced vegetables are often available in surplus during the peak season, to be replaced through imports out of season. For retail markets, the inconsistent supply and quality of local products meant imports are often a more attractive alternative to local production.

By 2005, vegetable production was estimated at 228,850 tonnes: 203,000 from 14,500 ha of open fields and 25,850 tons from 470 ha of greenhouses. Average yields for open fields are given at 14 t/ha, and for greenhouse 55 t/ha.

The area in Kosovo has seen a remarkable expansion of protected cropping and open field over recent years – albeit first with a low level of technology and evolving during the years with more advanced technology.



Intervention Road Map

The project's intervention was built around the hypothesis that the foundation of a sustainable vegetable sector is based on a sustainable nursery sector, and that improved skills and new technologies would enable producers to better compete in quality, price and continuity of supply with imported products.

In 2001 and 2002, the Project undertook market surveys with the objective to select vegetable subsectors and regions, and to plan the introduction of new crops and varieties. To achieve these aims, 160 varieties of 25 vegetable species were introduced and tested by the Project. After three years it was realized that the Project's intervention was too diverse to be effective

and from 2004, intervention was focused on just six vegetable that were considered to have the highest market potential. Training courses, technical advice and documentation were conducted from beginning of Project and they are still ongoing.

There were many links missing in the vegetable value chain prior the Project entry to the sector. There was a need for the intervention in development of all links of the chain, making this intervention complex but attractive at the same time. There were strong indications that for the vegetable industry rehabilitation to occur, the nursery sector would need to respond on quality and quantity of planting material.

Activities	2001-2006	2007	2008	2009	2010	2011
Training courses and study tours	x	x	x	x	x	X
Technical advice to nurseryman	x	x	x	x	x	X
Technical leaflets for producers	x	x	x	x	x	
Provision of inputs for nurseries	x	x	x	x	x	
Information on market opportunities & establish linkages with producers		x	x	x	x	X
Advice on business / management		x	x	x	x	
Direct investment (Competitive Found for Horticulture or grants)		x	x	x	x	

Table 1: Support provided by the project to the vegetable nurseries producers 2001/2011

In 2003 to 2005, five vegetable nursery producers were supported with inputs: seeds, fertilizer, pesticides. With technical assistance at the end of 2005, the input system showed its strength in involving more dynamic and innovative farmers and making technical information available from HPK. From 2006 to 2010, the Project gave importance to participatory evaluation and planning of activities, promoting the best technolo-

gies identified in the sector. In this phase the system developed into a business service system allowing the development of technologies and building up sustainable business linkages between actors. In this system, service providers (advisers) have been identified as the leverage for diffusion of technologies.

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Taking into consideration the need for better quality and higher production, in 2007 major improvements were registered in the businesses of greenhouse producers. The introduction of a wide range of new technologies including seedling growth rooms was realized. Many of these ideas had been adopted as a result of a series of study tours to Greece, Macedonia and Albania by leading producers.

From 2007 the Project supported six nurserymen with seedling growth rooms. HPK also supported improved advisory services to farmers, with around 200 producers from main production regions supported from 2008. The objective was to increase the impact of improved quality of seedlings produced with farmers, by using the advanced growing technologies for main vegetable crops. During 2010, nursery producers were supported by the Project with seeding trays and substrate to further improve the quality of vegetable nurseries. They had traditionally been broadcasting

seed onto hot beds. Through these activities, the Project has managed to raise awareness of farmers of the need to use improved quality of seedlings to increase production of vegetables.

After ten years of the Project's interventions, the combination of introducing new technologies, capacity building of actors and improving market information has contributed to increase the number of producers involved, to introduce new varieties and crops and achieve earlier production, higher yield and quality. In 2011 HPK has significantly reduced its direct support to the nursery sector. Direct financial support from HPK for years 2008, 2009 and 2010 was €15,550, €6,370, €13,336, respectively for a total of €35,256. These figures do not include support on technical advice directly with farmers.

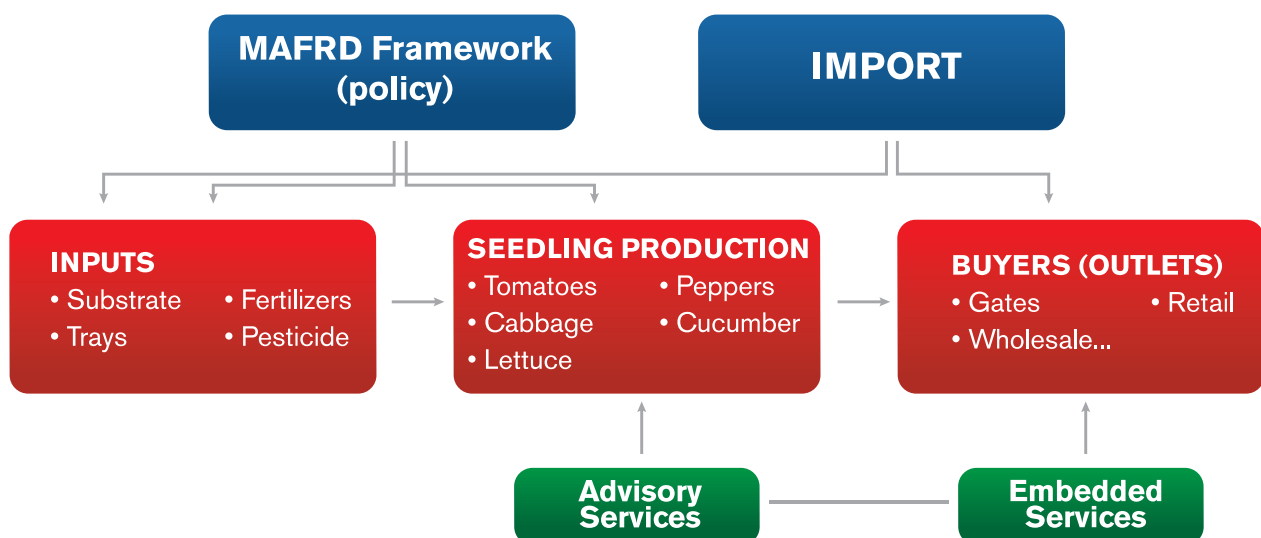


Figure 1: Vegetable nursery marketing channels in Kosovo

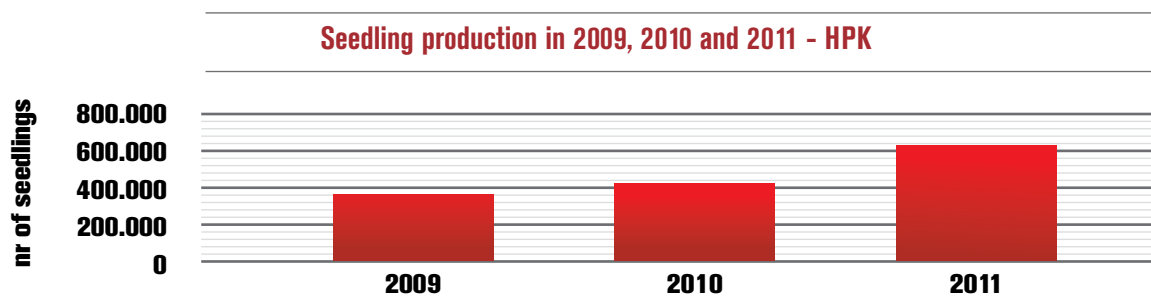


Figure 2: Production of vegetable seedlings in Kosovo 2009-2011

Results & Achievements

1. Increased production capacity

■ IMPROVED BUSINESS LINKAGES

The project facilitated the establishment of new business linkages between the input suppliers, nurseries and growers. Growers obtain their seedlings from local nurseries and nurserymen obtain their inputs from local companies (including domestically produced compost) or importers (see figure 1). Nurserymen generally provide embedded advice/technical support together with their product. MAFRD provides support to the sector through registration and the policy framework, although this is still relatively weak in Kosovo.

■ INCREASED SEEDLING PRODUCTION

Two imported growth (or germination) rooms co-financed by the project and established in Ferizaj and Mitrovica in 2007 produced a total of 250,000 seedlings. The experience gained with the two growth rooms confirmed the expectation of being able to provide higher quality seedlings of greater uniformity at lower cost than by traditional methods. From 11 nursery farmers visited in 2011, seedling production estimated at 1,337,000 from which 1,059,500 are sold to the market. During the

intervention period, the production progressively increased for the supported nurseries, from around 402,000 seedlings produced in 2009 to more than 707,000 seedlings in 2011. Main factors enhancing the positive development have been new investments and technical advice, plus the acceptance by farmers of the need to use quality seedlings to maximize production.

2. Development of new technology

Seedling production is considered to be a profitable business for producers. Two different technologies (traditional and new) used during recent year's shows clearly the advantages of adopting new technologies. Traditional methods are still common in some places

of Anadrini region, but with some improvement during these years. New technologies are now well accepted from different localities - producers especially from Anamorava and Mitrovica region.

Use of growth room increased germination to more than 98% as well as the uniformity of produced seedlings, compared with less than 85% without growth room. Ardian Hoxha, a nursery owner from Ferizaj,

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The difference of production between nurseries supported and not supported by HPK

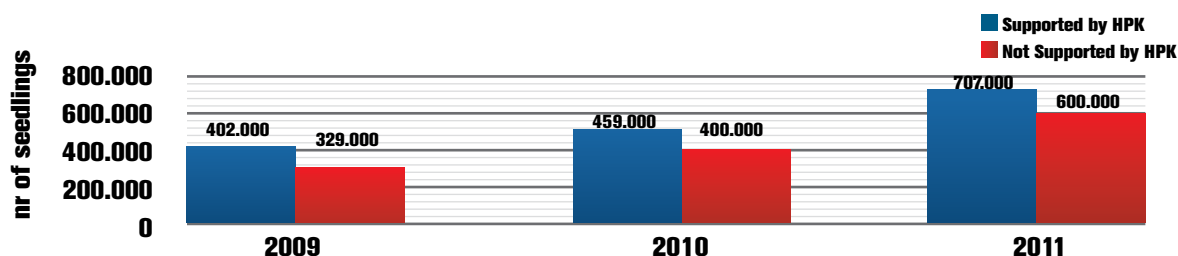


Figure 3: Production by nurseries supported and not supported by HPK

stated that 'I couldn't imagine seedling production without a growth room'.

During 2009-2010, five more growth rooms were supported by the Project. Mr. Fehim Shala, producing around 300,000 seedlings per year, stated that he is using growth room for two purposes i) for germination of seeds and ii) during summer for storing tomatoes.

Data in Figure 3 indicates that production from both supported and not supported nurseries increased significantly in 2011. This due to the replication of activities based on the interventions by HPK with the supported nurseries, driven by HPK and supported

nurseries sharing information. It is also a direct result of HPK working on the demand side by encouraging farmers to use improved seedlings.

3. Higher income and improved knowledge

Production of seedlings shows a very positive progress and higher income for supported nurseries. Compared to three years before, the sale increased more than 86%. Employment generated per nursery was almost 200 days on average per year (seasonal).

SKENDER RAMADANI, a nursery producer from Shtime, established a growth room with his own financing in 2010. By using this growth room, he has been able to produce 100,000 seedlings, achieving 98% germination. Without a growth room, he would achieve less than 90% germination, meaning he would need to sow an additional 15,000 seeds to achieve the same number of seedlings for sale.

Taking in consideration the cost for preparing the land, planting seedlings, transplanting, care and inputs (substrate, energy and seeds), price of production for tomato sapling is €0.15, cucumber €0.09, green salad €0.03 and pepper €0.14. The price tomato seedlings are sold at ranges from €0.15 – 0.25 per seedling.

Nurseries that are supported by the Project have income in the range of €6,300 to €46,000. This shows that most nursery farmers that are producing seedlings at the same time are dealing with the production of the other crops in order to survive. A part of the seedlings production they use for the own use.

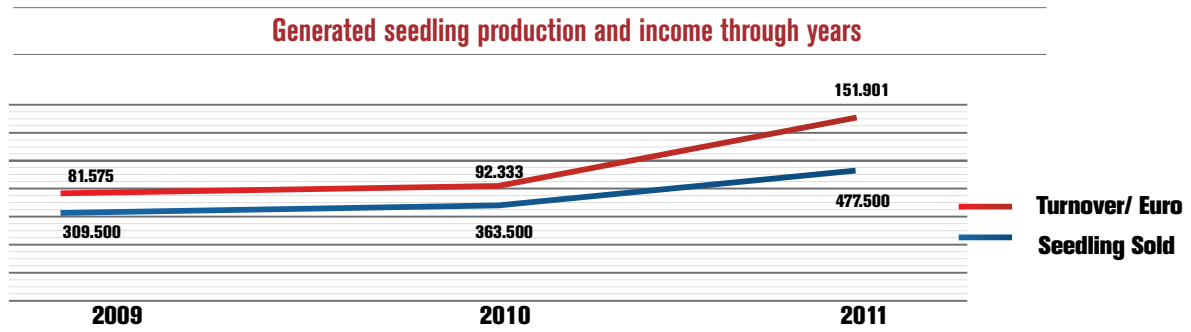


Figure 4: Generated income through years for supported nurseries

Main Findings

The nursery sector has been supported by the Horticultural Promotion at a time when the industry faced significant challenges from a shortfall of local production. The legal framework and supporting services for planting material propagation and marketing did not exist. The nursery market was dominated by poor quality planting material from neighboring countries.

The Project supported strategies to improve vegetable seedling production through co-financing growth rooms, supporting nurserymen on crop management, record keeping, study tour, field visits and advisory services to farmers. The Project provided information directly to farmers demonstrating improved production through the use of high quality planting material.

During the period of intervention, the Project has had a mixed role involving both direct provision of services (e.g. training, technical advice, networking, product development) and facilitation of market access, as well as direct investments.

The results from the Project's strategy include:

- Six nurserymen supported by the Project produced a total of 707,000 seedlings in 2011, of which 477,500 were sold and the remainder used for own production.

- The quality produced from the nurserymen was good, and the germination was very high and uniform based on the use of growth rooms.
- Farmers' demand for locally produced high quality seedlings is increasing. This has led to investments in growth rooms and improved production from nurseries that were not directly supported by the Project.
- Good collaboration is continuing between nurseries and input dealers to supply the nurseries with appropriate trays and substrates for specific crops.
- The nursery sector is now developing on a sustainable basis, as evidenced by the increased production of seedlings in 2011 at the same time as HPK has reduced its direct support.

Despite this very positive outcome, some risks still remain that must be addressed by the industry itself, as well as the Government of Kosovo. These include;

- The quality of seedlings produced is still low from nurseries without growth rooms.
- Still is missing centralized nursery production; many farmers continue to produce lower quality seedlings for themselves.
- The diversification of the nursery vegetable production is very limited, with only a small number of crops produced by each nursery.
- Technical advice is still weak; more training is needed for nurseries and advisors.
- There is no legal framework established by the relevant institutions to improve the categorisation of planting material.

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Implemented by:



HELVETAS
Swiss Intercooperation

KOSOVO

HPK
HORTICULTURAL PROMOTION
IN KOSOVO

Founded by:



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra
Swiss Cooperation Office Kosovo

Ministry of Foreign
Affairs of Denmark



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