CAPEX

CAPITALIZATION OF EXPERIENCES

FROM PROMOTERS TO SERVICE PROVIDERS

The extension service system adopted **in vegetable production** by SPHP - Kosovo

JANUARY 2005

Swiss Project for Horticultural Promotion - **KOSOVO**

DEZA
DDC
DSC
SDC
COSUDE

inter cooperation

Time Frame	2001- today
Implementation	SPHP-K[1]/ Intercooperation
Financing	Swiss Agency for Development and Cooperation SDC
Localization	Kosovo
Target Population	Farmers, promoters, pilot farmers, service providers

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CONTEXT

For the last two decades, Kosovo's marketable agricultural production declined steadily, suffering particularly when the support for cooperative farming and public enterprise was withdrew contributing to the breakdown of important agricultural production linkages and market relationships.

After the war, most vegetables production takes place with individual producers selling their products on market day in nearby towns; where locally produced vegetables (potatoes, cucumbers, tomatoes, peppers) are often available in surplus a the end of the season- and then replaced through imports. In this context advice and services are currently provided through: public sector advisers; NGO advisers; the private sector which includes farmers associations and cooperatives; and in a large extend by input suppliers in an embedded manner.

Since 2001, in this context SPHP-K has facilitated the implementation of more than 350 trials with around 70 farmers for development and validation of technologies. This project intervention has been primarily based on the hypothesis that improved skills, new technologies, will enable producers to better compete in quality, price and continuity of supply with imported products and therefore create more income in the rural areas.

After three years of project's intervention, the combination of Participatory Technology Development (PTD) trials, capacity building and market information contributed to increase the number of producers involved, to introduce new variety/ crops and demonstrate all year round production of vegetables.

1. SPHP-K is the Swiss Project for Horticultural Promotion in Kosovo. It is executed by INTERCOOPERATION (IC) and financed by SDC
2. Chief Technical Adviser, SPHP-K
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6. Horticultural adviser, SPHP-K / Intercooperation
7. Marketing specialist, Intercooperation

Five categories of actors participating in the introduction and validation of technologies have been identified and subsequently involved:

*1) **Kosovo vegetable producers** can be classified into three types: traditional rural family, mixed / transitional one and horticultural enterprise. The majority vegetable producers participating in experimentations were members of a farmer association. Only a minority were so called poor farmers. Their main*

motivation to collaborate with the trial program, were the inputs provided and not primarily the innovation to be tested out.

*2) The initial approach was to work with **Group promoters** (leading farmers) as the linkage between farmers and the Project. The intention was that they shall participate in the planning, monitor and evaluate, provide advice, and exchange experiences during field days for demonstration purposes. During the first two years, 7 **group promoters** participated in the exercise. In the evaluation workshop in November 2002, it turned out that the technical support of group promoters to farmers was in most of the cases poor and that very view monitored trials implemented by other farmers. The lack of clearly binding conditions and financial stimulation might have been the main reasons.*

*3) Out of this experience, 12 **pilot farmers** were involved for 2003 and 2004, the majority of them implementing co financed PTD experiments in their own farm only. There are quite some cases where PTD-experiments gave good results. Their main motivation to collaborate with SPHP-K was the technical advice provided and the forum provided for exchange of experiences with other pilot farmers.*

*4) Because of weak links existing between group promoters and farmers, **service providers** were gradually involved in the implementation of PTD experiments. Service embedded within the supply-chain like nurserymen offering better advice to farmers on varieties and techniques to strengthen their relationship with them. Or, from the perspective of processors/distributors, offering advice to farmers on varieties and techniques may improve quality.*

*5) Besides technical and marketing support provided by **project's staff, local specialists** have been gradually involved in project's experimentations. In most cases local consultants worked on a task oriented basis with a limited contract. Agreement of cooperation was signed in 2003 between MAFRD and SPHP-K for exchange of information. During 2004, a local input supplier participated in variety demonstration trials with his own varieties. At the end of the exercise it turned out to be an excellent way to stimulate the private sector in implanting trials.*

INTERVENTION OF SPHP-K

Approach, planning and set up

Every year SPHP-K carries out a participatory planning and evaluation workshop with group promoters and pilot farmers. Within a project phase the yearly plan of operation is prepared. Three main questions are discussed. First an assessment of the ongoing program, second suggestions what topics have to be added for the next year and third which ones to be skipped off.

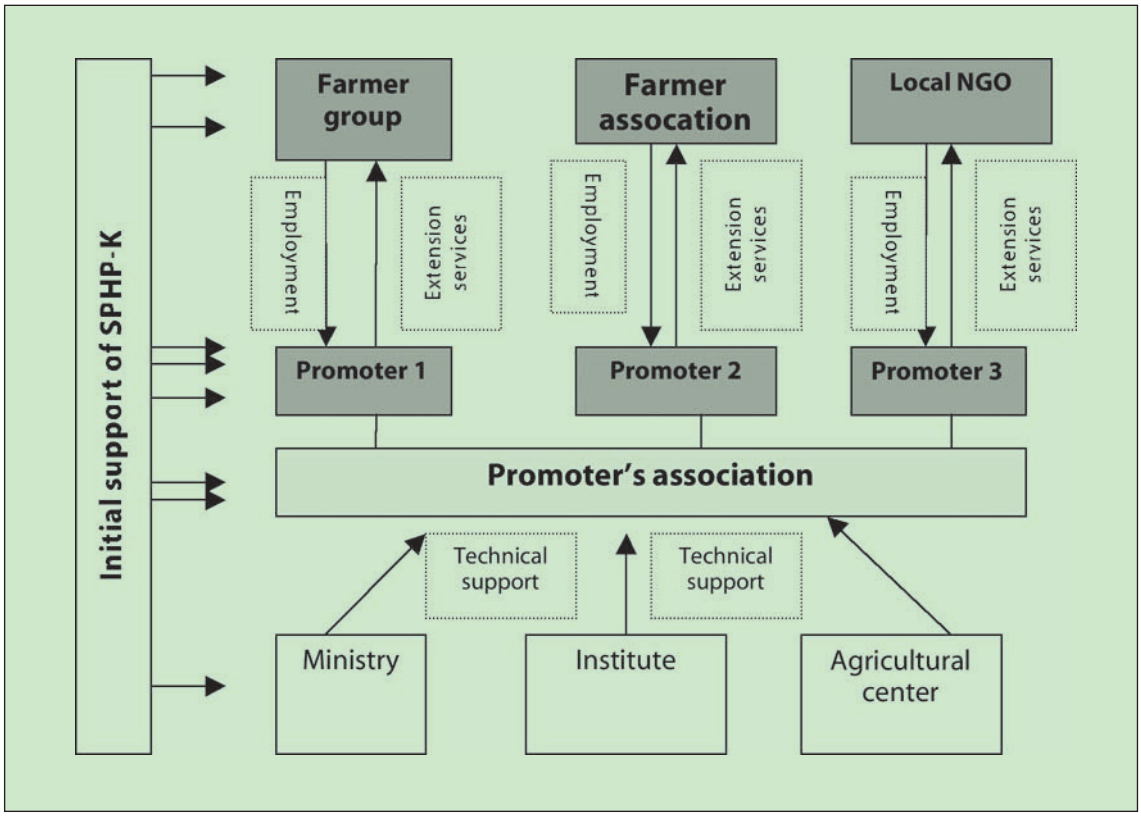
After these exercises it was then up to the project's staff to decide which extension system might be most indicated to attack the problem. This rather flexible approach has the advantage on carry on need based research and development and involves a broad range of actors in facilitation and support.

In 2001 and 2002, the Project adopted a promoter approach (fig. 1) with the objective of building up a sustainable extension system meeting the needs of the farmers developing a

network of extension worker (promoters) paid by their associations. During this phase promoters implemented trials within their associations with project's support. At the end of 2002, a SWOT analysis showed that the lack of experiences in leadership and transparent procedures, a history of donor driven organizations would not allow the system to be sustainable.

In 2002, a small to medium yield of soft fruit was successfully marketed locally. This event raised considerable local interest amongst neighboring villages. Consequently, during the period 2002-2004, SPHP-K supported the establishment of demonstration plots amongst more than 30 farmers, introducing new technologies in production and post harvest and facilitating market linkages.

Figure 1: Pilot phase, "The Promoter system"

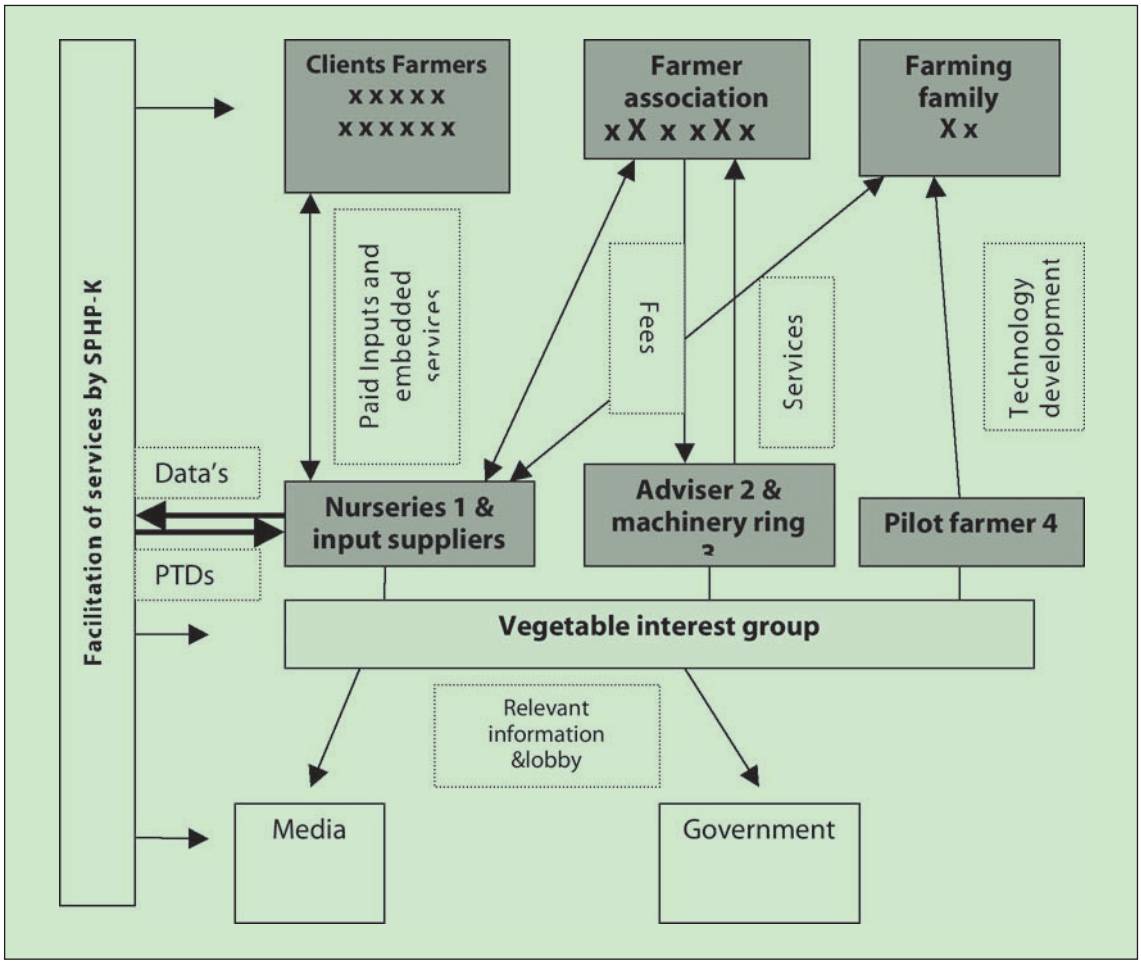


Consequently, in 2003, seven individual pilot farmers were directly involved directly in co financed trials for "on farm experimentation" in addition to 5 promoters. The methodology adopted was Participatory Technology Development (PTD).

At the end of 2003, the system showed its strength in involving more dynamic and innovative farmers and making technical information available for SPHPK. Nevertheless, the future after project's end was not ensured since most of the extension services were provided directly by SPHP-K.

Therefore, for phase 3, the system developed into a business service system (fig. 2) allowing the participatory development of technologies and building up sustainable business linkages between actors. In this system, service providers have been identified as the leverage for diffusion of technologies.

Figure 2: Phase 3, "The Business service system"



During this period, SPHP-K implemented PTD experiments with six service providers. Three were nurseries, one a machinery ring, one a washing unit for root crops and one an input supplier.

Direct financial support for PTD experiments for years 2001-04 were €19,990 representing 26% of the total costs. The highest number of trials was planned in 2002 under the supervision of promoters. The majority of the trials although were isolated ventures. The average cost per trial financed by SPHP-K was 30.1 € and the average value per farmer received per farmer per year for experimentation purposes was 110.4 €.

Table 1: : Recapitulation of PTD experiments and topics with costs (€)

PTD experiments	PTDsCosts	SPHPKPaid	2001	2002	2003	2004	Total
Variety trial plots	***(€)***	***(€)***					***(€)***
Introduction of variety trials (average 1 Are)	*30*	*10*		*300*	*20*		*320*
Adaptation of variety trials (average 5 Ares)	*150*	*30*	*30*	*60*	*100*	*10*	*200*
Validation of variety trials (average 10 Ares)	*300*	*20*				*70*	*70*
Cropping technology trial plots							
Seedling production	*400*	*200*		*7*	*7*	*1*	*15*
White bean training system	*600*	*200*		*7*			*7*
"Push how" trial	*30*	*30*	*1*	*7*			*8*
Hand seeders	*100*	*100*		*10*	*5*		*15*
Fleeces	*100*	*100*		*20*			*20*
Mulches	*50*	*50*				*5*	*5*
ICM trials	*300*	*200*				*5*	*5*
Total cost of trial plots (€)			*4,530*	*28,210*	*18,900*	*24,650*	*76,290*
% paid by SPHPK			*21%*	*38%*	*27%*	*13%*	*26%*
Average per PTD (€)			*30.0*	*26.3*	*38.6*	*34.6*	*30.1*
Value per farmer (€)			*93.0*	*140.4*	*82.3*	*98.4*	*110.4*

OUTPUTS, RESULTS AND IMPACT

There are four main results to be mentioned:

1. Strengthening of producer's capacity to implement trials
2. Adoption of new agricultural practices and new varieties and crops
3. Developing extension services providers for the vegetable subsector
4. Institutionalization

1. Strengthening of producer's capacity to implement trials

The trials implemented in an earlier stage of research had a lower rate of success, (51% and 59%) varieties than those implemented in a more advanced stage of research (76%) and those related to cropping technology (83%). The progress is shown in Table 2 below:

Table 2: Results of trials from PTD experiments

PTD trial plots per topic	Planned	Implemented	%
Variety trial plots	*590*	*332*	*56%*
Introduction of variety trials (average 1 Are)	*320*	*162*	*51%*
Adaptation of variety trials (average 5 Ares)	*200*	*117*	*59%*
Validation of variety trials (average 10 Ares)	*70*	*53*	*76%*
Cropping technology trials	***75***	***62***	***83%***

POSSIBLE REASONS FOR THE FAILURE OR SUCCESS OF TRIALS (AND SOME ACTIONS UNDERTAKEN):

Poor follow up of the promoters and advisors. Some promoters participated in planning workshops and showed lively interest for the new technologies. The Staff then often applied the standard procedure for a trial including replications amongst producers collaborating with promoters. Most of the time there was no time for the adviser to support promoters in establishing trials and promoters were not skilled enough to implement trials on their own.

During the last two years of implementation, the number of trials decreases from 411 in 2002, to 132 in 2003 and 91 in 2003, involving fewer producers without direct Project's supervision and more pilot farmers (trials in their own farm under project's supervision). That way, project's adviser were able to better monitor trials and therefore to strengthen farmer's capacities to implement trials.

The selection of new crops and varieties was done without the farmer who finally implemented the trials. When the project started its activities in 2001-2002 there had been no research or development work in agriculture for the previous fifteen years and farmers were not well informed about techniques and varieties. It was therefore very difficult for them to express their priorities in terms of new technologies desired. For example, at this point of time farmers had little or no knowledge of winter varieties and techniques of successional sowings were not familiar to them. Consequently, in quite some cases the team failed to involve farmers in the selection of varieties and crops to be tested. Either the project's aimed to test new products for the first time or producers failed to express their priorities in terms of new technologies and were therefore not fully committed to the trials.

Inadequate level of subsidies led to low farmer's commitment in experimentation. As a way to increase commitment, the project gradually decrease the level of subsidies paid for trials. As an example, for variety trials, the "trial package" paid by the project in 2001 included seeds, fertilizers, agrochemicals, packages and part of the transport costs. In 2002, the "trial package" included seeds, fertilizers, 50% of agrochemicals and 50% of the packages. In 2003, only seeds and 50% of the package were provided for trials and in 2004 farmers paid 50% of the seedlings and only new varieties were provided for free.

Non commercial farmer's scarce possibilities to invest and to support risks related to experimentation. One of the main reasons why a lot of the PTD's failed is because the poor farmers (initial target group) are not commercial farmers, but subsistent farmers with other source of incomes (remittances) and scarce possibilities to invest and support risks.

2. Adoption of new agricultural practices and new varieties and crops

Out of the 160 varieties that have been introduced within vegetable crops, 51 or around 32% have been retained for further adaptation trials of which 33 or around 65% have been selected for validation trials. As a result, 19 varieties within 12 crops are in an early stage of adoption with at least three farmers continuing with the varieties (or similar varieties with same characteristics).

Concerning introduction of new crops, six crops (lettuce, broccoli, carrots, radish and garlic) which are well known but almost not produced in Kosovo have been adopted by at least three farmers. On the contrary, unknown crops like turnip, beetroots, celery, kohlrabi and parsnip have been abandoned by all the farmers after introduction.

Concerning cultural practices, out of the six simple technologies five are still being used. (see table 3).

Table 3: Results per technologies

Technologies tested	Introduction	Adaptation	Validation	Adoption (At least 3 farmers)
Total number of varieties	*160*	*51*	*33*	*19*
Total number of cropping technology	*6*	*5*	*5*	*5*
Total number of crops tested	*19*	*13*	*13*	*12*

POSSIBLE REASONS FOR ADOPTION OR NO ADOPTION OF TECHNOLOGIES:

New cropping technology spread more easily than new variety and crops. Not all producers see the potential of new crops and varieties. Introducing new crops like turnip, beetroot, kohlrabi are more complex issues than introducing new simple hand tools like hand seeder, mulches and fleeces. In the case of new crops, the market is not secured and needs to be developed during several years before adoption takes place.

Market access or linkages are an important factor of adoption of technologies. The fast adoption of lettuce, as a relatively new crop has been the result of newly established market linkages between nurseries, growers and distributors. As an example, two producers who started with the production of lettuces in 2002 and 2003, established contracts with several growers and therefore were able to fulfill the market demand.

Availability of the technology is a major constraint. Availability of high quality seeds is major constraint in the Kosovo post war situation. The lack of official representatives of seed companies, the high presence of fake products as well as difficulties to import products (high transport prices) make it difficult for producers to adopt up to date technologies. As an example, even if fleeces and hand tool were well accepted, the scaling up couldn't take place these tools are not available locally.

3. Developing service providers for the vegetable sub sector

Producers needs to have access to various types of extension services like advice, access to agricultural equipment, access to inputs, etc. On the other side, because of the long tradition of free extension services, they are often not ready to pay these services for their value. This is why embedded services have always been a private sector tool to attract new clients and to retain old ones.

Table 4: Development of a private service provider based extension service

	2001	2002	2003	2004
Promoter system				
Promoters & pilot farmers	*4*	*8*	*12*	*11*
Producers involved in trials (PTD)	*6*	*68*	*48*	*18*
Total trial plots (PTD)	*31*	*411*	*132*	*91*
Estimated area of trials (PTD)	*1.9ha*	*20ha*	*9ha*	*6ha*
Service provider system				
Service providers	*-*	*1*	*3*	*6*
Estimated number of clients		*80*	*2300*	*2400*
Estimated area with new technologies	*nd*	*nd*	*nd*	*nd*

During the last two years of implementation, six service providers have been supported by the Project. The biggest impact in terms of adoption of new varieties has been reached with vegetable nurseries with around 2000 clients. Concerning the validation and adoption of cropping technologies like fleeces and mulches, the biggest impact has been reached through an established input supplier with around 50 clients reached. Finally, only three producers have been reached by a newly establish washing unit for carrots.

4. Institutionalization

Building up, and formalizing, partnerships among organizations involved in the sub sector has been an objective of the project. Project's staff has frequent contacts with the Ministry of Agriculture and with Director of agricultures in Municipalities' where the project operates. Nevertheless, a formal agreement of cooperation with these institutions has not been signed so far. Therefore, Staff refers to individual researchers and contacts them if needed.

Another aspect has been the creation and development of a horticultural promotion group. The original concept of an extension worker association has not been possible for obvious reasons. Most of the association's members are not ready to pay for an adviser and therefore extension workers have difficulties to survive as such. In the business service approach, the informal "horticultural promotion group" has been seen as a professional forum where exchange of information and business relationships takes place. As a positive result, a group of producer's representative visited the President of Kosovo to discuss about the problems there are facing.

KEY LESSONS TO BE LEARNED

The advisory view

☺ Working with service providers increases impact in validation and adoption of technologies
☺ Working with pilot farmers is more indicated for introduction and adaptation of technologies
☺ There is an understanding about the PTD experiment concept

☹ Implementation of PTD experiments needs improvements in terms of monitoring, field days and recording.
☹ Lack of institutional body makes it difficult to diffuse a technology
☹ The demand for fee based extension services is very low

The producer view

☺ Market is the key for adoption of new varieties and crops (lettuce, broccoli)
☺ Many ideas have been generated
☺ All year round production of vegetables has been demonstrate
☺ Many contacts and linkages have been created

☹ Trial ownership was sometimes not by farmer
☹ Non commercial farmer's scarce possibilities to invest and to support risks related to experimentation.
☹ Insufficient technical support

KEY POINTS

for sustainability and scaling up

During the intervention period, the extension system adopted by the project progressively evolved from an extension worker approach to a more flexible business service approach. This was largely because agricultural innovations were not adopted by poor farmers as we expected. The overriding factor is that farmers in the vegetable growing sector are very traditional and are particularly risk averse. It is important to note that only in the last 5 years they have entered a free market situation competing with produce imported from neighboring states. Prior to this, the majority sold their produce through state owned enterprises. The concept of addressing consumer preferences, packing, grading and marketing their produce in an attractive way- also taking advantage of niche market opportunities- are all relatively new.

It is now more or less generally accepted that the reason for this is not farmer ignorance but the lack of awareness, thus creating more confidence so that the risk element is perceived in a more realistic light. This means that we must re-look at how we communicate with farmers and seek to present the facts in a clearer and more explicit way (e.g. simple factsheets, crop costing).

There are some opportunities and threats for scaling up:

Opportunities:
- Focus more on economic and marketing aspects
- Involve other projects and institutions
- Recording in simplified form the results
- Carry out more field days
- Publish and disseminate the results
- Make best use of the existing experience
- Involve more service providers
- Build up strategic alliances with input suppliers
- Improve the technical support

Threats:
- Too many various technologies
- Access to the technology
- Low quality of inputs
- Insufficient control
- Weak farmer organization

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References

• MORRISS, K. (2003). Final Report of the Horticultural Adviser. SPHP-K, Gjakova

Information about a range of SPHP-K publications can be found under

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