Networking for innovation. The case of ANSPA

How an informal network created a sustainable seed potato production system in Albania

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Introduction

Freed from one of the most repressive communist regimes ever, in the 1990's Albanians faced the challenge of a complete re-organisation of their society. Drastic changes were needed in the relation between the state and its citizens. New types of organisation and cooperation had to be found while at the same time people had to adjust to new economic and technical realities. Although the country, and with it the whole world, witnessed the severe 'pyramid' crisis in 1997 which lead to a mere status of anarchy, also positive experiences were gained. This paper presents an example of how a new form of organisation was created which successfully assists Albanian farmers and agro-businessmen in grabbing new opportunities offered by the market oriented economy.

The concrete issue at stake is the development of a sustainable seed potato supply system. Many actors need to co-operate in such a system, not only farmers, government officials and agro-businessmen but also researchers and projects. Until 1995 these actors worked mostly independent of each other. In the period 1996-2001 the present authors played a key-role in facilitating the actors to join hands in developing a sustainable seed potato system. The preliminary crown on this work was the establishment of the Albanian Seed Potato Association (ANSPA) in 1999. In this paper the process of creating ANSPA is analysed and policy lessons are formulated.

Albanian farming in transition

In the transition from a centrally planned economy to an open market economy, Albanian farming underwent dramatic changes. In '92-'93 the land of the former agricultural co-operatives and state farms was given to the former workers. The other assets were sold to them. Until today the land distribution remains a sensitive issue; in thousands of decisions taken by local land committees are contested by former land owners (who want either want their land back or a better compensation) and by people who feel they got a poor deal (poor quality land, a smaller piece of land than officially registered etc).

After the quick privatisation of land the main bottlenecks for the nearly 400.000 newly created farms are: small farm size (1.4 ha/family), fragmentation of the holding, poor input supply, lack of marketing opportunities, poor functioning of the irrigation system and lack of knowledge and skills (specially on plant disorders).

There are considerable differences between the highlands (mainly in the North and East) and the lowlands in the Southern coastal areas. In the latter, land was equally divided between all families. The quality and accesability of the land is better, as well as the opportunities to earn additonal income through migration (legally or illegally) to Greece and Italy. In most parts of the highlands, land was given back to its former owners (against the law). Due to the high population density (the former regime prohibited free movement of people) the average farm size is 0.5 ha, with some families having near to nothing. Infrastructure is very poor, leading to isolated villages and great difficulties in input supply and marketing.

During the 1990's the role of the Ministry of Agriculture changed dramatically as well. Central planning and the accompanying strong orienation to statistics had to be replaced by facilitation and the related extension activities. Some good progress was made with this, specially through the semi-private Regional Agricultual Advisory Centres (RAACs) in the coastal plains where farmers become more and more commercially oriented. In mountainous areas a public extension service focusing on rural development is called for (Tarelli and Holtland, 2000).

The need for quality seed potatoes

In Albania three principle potato production areas can be distinguished: the lowlands in the western part of the country where early potato production with short term varieties is attractive as these fetch high prices. After an early harvest in May/June a second crop can be grown after the summer. In the highlands of the North and the Sout East, mid term varieties are planted with a high yield potential. The Korca plain in the SE is the largest single area for these potatoes which can be harvested from September onwards. The third area to be distinguished are mountainous areas above 1200 meter a.s.l., where seed potatoes can be grown. Cool summers at these higher altitudes limit the aphid population and hence the possibilities for viruses to spread.

During the communist era potatoes constituted an important part of the cropping system. Yields were very low, often below 10 ton/ha. A major bottleneck was the lack of good seeds. Often the same genetic material was used for 10 years or more, leading to heavily infested- and degenerated seeds. Seed multiplication took place in the highlands, mostly in the North. After the transition the demand for potatoes increased but on the market only very poor Greece seed potatoes were available. Several actors identified the import of high quality seed potatoes as a way to secure higher yields and incomes for farmers. They started to import Dutch seeds and initiated demonstrations and on-farm trials in '94-'95. These actors were to constitute the primary actors in the network which finally lead to the formation of ANSPA.

The primary actors

Private traders

In 1994 farmers in Divijaka region in the lowlands were provided with high quality Dutch seeds by a private Dutch investor. The area has the best micro-climate for potatoes in Albania, the produce being some weeks earlier on the market than elsewhere. Yields were good, but the organisation of the harvesting was very poor and the financial returns for the investor as well. Yet, the interest of farmers was raised and in 1995 a local trader capitalised on this and sold some "Dutch seeds". As it turned out these proved to be poor quality (Bulgarian?) seeds. In 1996 a new, young Albanian trader stepped in this market (farmers were still willing to try!). At the end of 1997 a trader from Fier started to import Dutch seeds on request of farmers who had worked with FAP (see below). Both traders became important actors in establishing ANSPA.

AGRINAS, a local NGO supported by an Dutch NGO

In 1994 a Dutch NGO, AGRINAS, provided a group of farmers in a highland village in SE-Albania with 25 tons of Dutch Class A seeds, as a credit in kind. The aim was to produce seed potatoes. AGRINAS trained farmers to improve the crop husbandry, to rogue their fields and to select the seeds. In the first few years the project secured a market for the seeds, but later farmer sold directly to traders or other farmers. The number of farmers increased from 22 in 1994 till 80 in 1997, after which it declined and stabilised around 50.

Tthe extension service of MoAF, supported by IFAD

In 1995 the Northern District Rural Development Programme (a project of the MoAF and IFAD), started on farm trials with subsidised Dutch seed potatoes in the NE-districts. The trials were done in co-operation with the (research) Institute for Vegetables and Potatoes (IVP). Later the so called "IFAD II" project joined in with similar activities in adjecent districts. These activities are very important for these areas, as potatoes are more or less the only viable cash crop in the highlands.

FAP, a bi-lateral project of the Dutch and Albanian government

In 1995 the Fier Agricultural Programme (FAP), in cooperation with the extension service of MoAF, responded to the demand for Dutch seeds in Fier district in the lowlands (near to Divijaka). Seeds were given at subsidised rates (40%) and partly on credit, to members of two Village Seed Potato Associations. Technical advice was given, yields were recorded and arrangements made to secure a market abroad in case the local market could not absorb the production. This proved not necessary; prices on the local market were good and farmers sold their produce individually.

The initial results and conclusions of the primary actors

The results of the initiatives of the primary actors were positive. With imported Dutch seeds and good crop husbandry, yields of 35-45 tons/ha were obtained with mid-term varities in the highlands and of 20-30 ton/ha with short term varieties in the lowlands (details can be found in various reports of AGRINAS by P. Vogli and K. Menksi, of FAP by J. Heestermans and F. Selaci, of IFAD by G. Holtland and S. Mata and of the IVP by A. Salceni).

With ware-potatoes being more expensive in the lowlands (off-farm price 0.35 USD/kg against 0.2 USD/kg in the highlands), gross margins were between 7 and 9 thousand USD/ha in both areas. Fixed production costs are about 1500 USD/ha both in the lowlands and in the highlands. Variable costs ranged between 30 and 40 USD/ton in resp. the lowlands and the highlands. With Dutch seeds costing 1 USD/kg and a seed ratio of 3 tons/ha, producing ware-potatoes from imported seeds gave a profit of 30% in the highlands and 75% in the lowlands. Yet, if one looks at the details, several bottlenecks become apparent:

1. the investments needed are very high: 0.1 ha of imported seeds costs half a year salary of an extension worker and exceeds by far the purchasing power of most farmers, specially those in the highlands;
2. farmers are not only interested to see if growing potatoes with imported seeds is profitable, they also want to assess whether it is usefull to use their limited cash for buying this particular input or would it be better to expand their production in another way. Compared to potato production with traditional seeds, the *extra* return on the *extra* investments in the highlands were only about 33% (Holtland, 1995). This is not enough to induce spontanous investments from resource poor farmers; for this generally an *extra* return on *extra* investments of about 100% is needed.
3. marketing any produce is very difficult in the highlands; in 1995 several farmers were forced to exchange valuable second generation seed potatoes for consumption potatoes on a one-to-one base;
4. drought (and lack of irrigation) and crop disorders (Colorado beetles in the highlands; Phythopthora in the lowlands) make the exercise risky. Although the average income is positive, not all farmers managed to make a solid profit (e.g. in 1995 in the NE-districts 30% farmers did not make more profit with Dutch seeds than with local seeds). Also in Fier and Pogradec some farmers did not continue potato production after one or two years.

The above constraints could be adressed by importing Elite seeds from the Netherlands, multiply them in the highlands and sell the second generation seeds to the lowlands. The potential for such a system are huge. In total nearly 12.000 ha of potatoes are grown in Albania. Assuming that ware-potato producers renew their seed once in two years and that they plant 2.5 ton/ha, some 15.000 ton of seed poatoes are needed. With Elite yielding 15 tons of seeds/ha (shor term varieties), 1000 ha of seed producers are needed which requires an annual importation of up to 4000 ton of Elite seeds.

A local multiplication system would secure highland farmer with a good market with much higher off-farm prices, while the investments for lowland farmers would be reduced considerably. In order to be able to do this, several obstacles had to be overcome (se also Holtland, 1995):

1. highland farmers needed training to select their seed potatoes;
2. highland farmers needed to trust that they would get higher prices for the seeds;
3. highland farmers had to grow the varieties requested by lowland farmers;
4. lowlands farmers had to trust the seeds from the highlands;
5. local traders had to develop good relations with both sides;
6. in the lowlands subsidies on imported seeds had to be phased out gradually;
7. highland farmers needed a source to pre-finance their seed production;
8. as a last step, the subsidies to highland farmers had to be reduced to zero.

The three key-elements needed are (a) knowledge and skills to multiply seeds poatoes (b) co-ordination on subsidies between the donors and (c) trust between highlands farmers, traders and lowland farmers. In the next paragraphs the progress made on these issues in the period 1996-2001 are explained on a year-to-year base.

1996: Starting the linkages and reducing subsidies in the lowlands

Activities and results in the field

In Divijaka the trader imported Dutch seeds on a commercial scale and provided this (partly on credit) to a group of farmers. He did some on-farm-trials as well, supported by FAP. The trader became the only offical dealer of seed poatoes in Albania for one of the two major Dutch seed potato producers (Agrico).

AGRINAS asked farmers to pay a greater share of the price before delivery. The project kept on pressing for high quality for which the it secured a market. The group formation process was not yet completed and some farmers sold seeds directly to the market (incl. some poor seeds).

In the IFAD area the subsidies remained officially 50% and this had only to be paid after the harvest. In general few farmers actually paid. Yields were good, but marketing remained difficult.

FAP reduced its subsidy of Dutch seeds from 40- to 20 percent. The sale of seeds was no longer restricted to members of the Village Associations. Due to frost in early spring yields were not good and yet prices were disappointing. Some technical problems became apparent as well: the time of planting seemed to be too early (frost); the fertilisation was not optimal and Phytophthora control was poor. This underlined the need for training and on farm trials. It also became clear that the micro-climate of Fier was less favourable than in Divijaka and potatoes were two to four weeks later on the market, too late the profit from the top prices of 'new potatoes'. Therefor farmers wanted to try medium term potatoes, with a higher yield potential.

Starting the linking

In 1996 the first link between the main players was established. Before the season FAP requested farmers of IFAD to produce not only medium term varieties but also short term variety wanted by lowland farmers. This request was granted and during the growing season FAP organised an exchange visit of lowland farmers to highland farmers of AGRINAS (Pogradec) and IFAD (Diber and Kukes in NE-Albania). Since the need for the involvement of traders was recognised, traders of AFADA (Association of Fertilisers and Agricultural input Dealers in Albania, a NGO created and supported by the International Fertiliser Development Centre with USAID funds) were asked to join. Highlands farmers were invited for a return visit, and they did so.

1997: Second generation Albanian seeds as a serious option

Activities and results in the districts

In Divijaka, the import of Dutch seeds continued on a commercial base. Farmers were well organised; in cooperation with the trader they employed an agronomist who worked together with FAP and IVP on demonstrations and on farm trials. The farmers started to grow potatoes very early and planted a second crop after the summer, with seeds retained from the first crop.

In Pogradec the AGRINAS' farmers paid the full costs price of imported Dutch seeds; although partly they got them on credit. The project still secured a market for the second generation seeds.

In the Norht East, IFAD imported Dutch seeds again. Political pressure made a more commercial approach impossible and subsidies remained high. The same political pressure made that the number of villages involved in potato production increased.

In Fier, FAP continued to import Dutch seeds but decided that farmers had to buy these at cost price. With the relatively poor financial results of 1996 in mind and with the good impression of the exchange visits, several farmers decided to buy 18 ton of seeds from AGRINAS and IFAD areas. Assisted by FAP and the IVP they did on farm trials with short and medium term varieties. Result were positive: the second generation seeds yielded only 10% less than the Dutch seeds. FAP continued with a large number of on farm trials on planting dates, pre-sprouting, Phytophthora control and fertilisation.

The links getting stronger and a first national seminar

Throughout the year farmers organised exchange visits (paid by FAP) and a trader from Fier strated to join. When FAP initially offered to pay the transport for any exchange visit farmers eagerly took this opportunity, but soon visits continued without financial support of FAP. Some farmers from NE-districts came to Fier, a two days trip, just to exchange some information and to make sure they did not loose contact.

At the end of the year, FAP organised a national seminar on seed potato production in Albania. The results of all trials in the country were presented. In the seminar farmers and traders offered their produce. Representatives of lowland farmers bought all available second generation seeds. Some farmers painfully realised that to do business, one has to be well organised. Farmers from Kukes could only offer their own small amount of seeds while representatives of farmers groups from Diber offered and sold much more. On the other side the same happened: the villages where FAP started, the Village Potato Associations had disappeared after FAP stopped the provision of subsidised seeds, but now again the same (informal) leaders did business on behalf of others.

1998: Full competition between Dutch and local seeds

Activities and results in the districts

The trader in Divijaka continued to import Dutch seeds as did AGRINAS. IFAD started to reduced its subsidies to 30% and continued to expand to other areas (this time even to other districts). They continued with on farm trials.

In Fier a local trader took over the import from FAP, working on a commercial base. Initially, farmers put pressure on the project by not ordering any seed from the trader (who was afraid to buy Dutch seeds without any gaurantee for a market). Time to order seeds passed by, and all efforts to stimulate potato production seemed to have been in vain. Only after one month the farmers and the trader came to terms.

First spreading of activities outside the primary actors

Total commercial import doubled compared to 1997. The two traders represented the two main Dutch seed suppliers and started to proliferate their activities. The Korca plain in SE-Albania became an interesting market. Medium term varieties are needed there, since the climate does not allow for early production. Farmers of Korca had seen some seeds of the nearby AGRINAS area, but the surface available there is not enough to provide enough high quality seeds. Therefore imports of Dutch seeds started to flow into Korca. Another important development was that the Dutch seed companies started to supply Elite seeds.

The positive economic results of the Albanian second generation seeds of 1997, made that the request for these seeds was growing quickly. In response the trader from Divijaka hired land in the North of Albania (near to Montenegro) to multiply Elite seeds.

The need for training and for close cooperation in the network

At the time of harvesting, the yields of the second generation seeds in the lowlands were very disappointing. As a result of the great demand for local seeds, highland farmers had sold poor seeds. The positive side of this was that everybody could see the difference between good and bad second generation seeds. All actors (farmers, projects, researchers, extension workers) understood that the available skills were insufficient to guarantee good quality seed potatoes. Therefor FAP organised a training on field inspection in the Netherlands. Eight people from different organisation took part (FAP, IVP, AGRINAS,

IFAD, two farmers and one seed inspector of MAF). Next, a Dutch field inspector came to Albanian to train the Albanians in their own fields.

At the end of 1998, FAP, in cooperation with IFAD and AGRINAS, organised again a national seminar to exchange results of trials and other information. For the first time in agricultural development in Albania, participants of a seminar had to pay to take part; still 30 people turned up. The poor results of the second generation seeds was the main issue. There was a fear that this was the end of the story. But farmers and traders showed their vision and perseverance. They had seen the possibilities and they would not let the fish off the hook. All agreed action was needed and it was decided to establish a National Seed Potato Association.

1999: institutionalising the network: the creation of ANSPA

Activities and results in the districts

All actors proceded along the lines of the previous years. The market for both imported Dutch seeds as well as second generation seeds expanded. The commercial import grew with another 50% over last year. Only IFAD still used subsidies. The Divijaka trader sold his second generation seed produced in 1998 in the North of the country at 75% of the price Dutch Class A seeds. The Fier trader bought seeds from selected fields in the IFAD area and sold for 50% of the Dutch seeds. He also sold seed of not inspected fields for 35%, equal to the price of Greece ware-potatoes which still constituted the most sold seeds in the lowlands.

In Fier district a committee of farmers, traders and extension workers was formed before the 1999 season which proposed on a series of on-farm-trials. All actors took a reasonble share of the costs; farmers paid all inputs except those under trial and traders supplied about half of the extra inputs needed for the trials (in total over 1000 USD; FAP paying the other remaining). The MoAF budgeted for the extension materials needed to dessiminate the results.

The creation of ANSPA

In March 1999 the Albanian National Seed Potato Association (ANSPA) was established. The objective of ANSPA is to create a sustainable seed potato production system through the certification of seed potatoes based on field inspections and through the establishment of a transparent market of seed potatoes in the country.

The association concentrates on four activities:

- field selection of seed potatoes and certifying seeds;
- on farm trials with Albanian and foreign seed potatoes;
- training in field inspection;
- organise annual meetings on the supply and demand of seed potatoes.

Twenty-two members (incl. two farmer's associations) elected a board of eight: 2 seed multipliers, 2 ware potato producers, 2 traders and 2 researchers (the one of the IVP and his pre-decessor). An employee of FAP who had worked on potato production since 1995 was elected chairman; the researcher of the IVP became the secretary.

The crucial task of field inspection was given to a special committee, consisting of the people who had been trained in 1998 in the Netherlands and in Albania.

The following tabels shows the agreed task-division between the different actors in the Albanian seed potato supply system:

Tasks / Actor	Production Elite seed	Registra-tion of varieties	Import Elite seed	Seed multi-plication	Inspection/certification	Trade local seeds	Produce ware potatoes	Applied research	Subsidy/lobby-ing	Advise farmers
Dutch seed producers	XXX	XXX		S	S					
Seed Institute		XXX		S						
Research Institute (IVP)		XX			S			XXX		XXX
Local Traders		XXX	XXX	(XX)	S	XXX		XX		XX
Seed Inspectors					XXX					
Highland Farmers				XXX		XX				
Lowland farmers						XX	XXX			
ANSPA		S	SS	SS	XXX	SSS	S	SS	X/S	SS
Extension Service					S		SSS	XX		XXX
Projects			(T)	(T)			(T)	(T)	(T)	(T)

Legenda: X= concrete action; S= supportive action; (T)= temporarily action or support

In the first meeting the invited representative of the Seed Institute objected to the idea that ANSPA would certify the seed potatoes as this is the mandate of seed inspectors of the MoAF. Indeed ANSPA issues only 'etikets' which show the value of the seeds according to ANSPA norms. These function as quality gaurantee and as a trademark and *not* a health certificate of the MoAF. With this the Seed Institute agreed. As some seed inspectors of the MoAF had been involved in training activities, the Seed Institute and the MoAF recognised that ANSPA was serious and that is was better to cooperate constructively with them than to enter in a struggle on formal compentencies. In the Albanian context of the 1990's this is a remarkable achievement.

The activities of the ANSPA should be cost-recovering, so all agreed that:

- participants of the annual (exchange) meeting have to pay for this;
- farmers who have their field inspected have to take care for the visiting inspector and to pay 1 Lek/kg of certified seeds;
- seeds for on farm trials are availed by the farmers and traders concerned.

Membership-fees have to cover some small expenditures of the association. All was kept very low-profile: ANSPA did not have an office, board members were not paid for their efforts etc. Some costs remain uncovered: eg. DSAs and transport for field inspectors. IFAD pledged to cover these expenditures for their area in the next 3 years.

Activities of ANSPA

In 1999 the two major Dutch seed potato companies (Agrico and HZPC) paid for a two weeks training on field inspection by a Dutch expert in Albania. Based on international norms and on the experience gained in 1998, the Inspection Committee developed a system of ANSPA norms for field inspection and certification. Seeds can be classified as Albanian A, B or C. In the summer of 1999 ANSPA inspected the fields in the highlands twice (once with a Dutch trainer and once alone). Detailed visit report were written and 350 tons of second generation seeds were certified.

Under the auspicien of ANSPA on farm trials with new varieties and with types of seeds were initiated. Farmer from five highland districts (Kukes, Diber, Pogradec, Erseka, Tirana) offered their seeds free of charge for trials in the lowlands. The Dutch seed potato companies did the same, as well as the local traders. The trials showed that well selected seeds yielded between 75-80% of the Class A seeds from the

Netherlands. For not selected seeds this was 50%, similar to the yields of Greece potatoes which still flood the southern part of the country every year.

2000: Consolidation of the seed potato market and of ANSPA

The seed potato market matures

The seed potato market proved to be mature; although 300 tons of Dutch seeds were provided at subsidised prices in Nothern Albania (in the aftermath of the Kosovo cirsis), 450 tons were commercially imported. Again a nearly 100% increase over the previous year. The amount of second generation seeds sold, increased as well. Price differentation between selected and non-selected seeds continues. ANSPA developed good contact in Kosovo where it became involved in advising local farmers in potato production. The local traders also sold some seed potatoes to Kosovo. A third trader imported a reasonable amount of Dutch seeds as well. He had done this before, but always as a side activity to his work with vegetable seeds. He joined ANSPA from the beginning and supported some on farm trials. In 2000 he joined forces with another investor to be able to play a major role on the seed potato market. They imported seeds from France.

A sign of the maturity of the market was the failure of the local (state owned) seed enterpise in Fier to sell poor seeds as imported seeds. They falsified Dutch certificates, but farmers recognised that the potatoes were different. After alarming the National Seed Institute, inspectors came and took the potatoes from the market. This was a landmark victory for all serious actors in the Albanian seed potato supply system.

A considerable amount of real Dutch Elite seeds was imported. One trader contracted farmers for seed multiplication in three districts. He supplied Elite seeds partly (20%) on credit. The farmers repay with second generation seeds which the trader sells in the lowlands. In this way the cash flow problems of the highland farmers are reduced. Some contract farmers are in the IFAD area: they prefer the commercial deal with a trader above the limited amount of subsidised seed potatoes which they could get if they would join some political games. This deal reflects the ultimate dream of highland farmers and corresponds to the last of the 8 steps referred to above. The trader who multiplied seeds himself in 1997-1999 stopped this as it was too difficult to transport the seeds from the isolated mountainous areas in the far North in spring.

In 2000 representatives of both Dutch seed companies visited Albania. The trader from Fier became the sole representative of HZPC for the next two years. Although this is against the general policy of the company, they recognised that the trader invested very much in building a good network and in improving the production technology. Making him their representative enabled him to continue such long term investments; without this he would be forced in a very sharp price competition with short terms gains for some farmers, but a long term constraint to the further development of a sustainable seed potato supply system.

The number of varieties planted increased and (groups of) farmers start to specialise in certain varieties. On farm trials on a range of issues continued in several district. The researcher who was involved from the beginning in 1995 has collected enough materials to do his PhD on seed potato production. It will be the first PhD in Albania based on results of on-farm-trials.

The functioning of ANSPA

Also in 2000, field inspections were done. Unfortunately the results less then in 1999: only 240 ton was ‘certified’ as seeds. The strict application of its own norms, proved that ANSPA is a healthy organisation with a clear long term vision of what is needed for a sustainable seed potato supply system in Albania.

The internal organisation of ANSPA was improved; five regional branches were created and the number of members increased till 125. In order to reduce the travel expenses, the regional branches will be responsible for the field inspections, supported by the national level. In the highlands more and more (informal) farmers groups are formed under the pressure of traders who can deal with a few people only.

Although the first sponsor of ANSPA, FAP, ceased to function at the end of 1999, ANSPA proved to have dveloped strong enough linkages to survive. A new USAID-project aiming at strengthening associations in agricultural development, supported ANSPA with some equipment and a salary for an executive director. The ex-FAP staff member and chairman of ANSPA was selected as executive director. IFAD continues to pay for the DSA and transport of the field inspectors. With AGRINAS a contract was signed for further collaboration in both Albania as well as in Kosovo. As part of the contract AGRINAS pays the running cost of the office (mostly telephone bills). The MoAF offered office space (free of charge) in the Fier district department of agriculture.

2001: New initiatives: growth and diversification

Growth

In this latest season ANSPA grew to 200 members in 9 districts. In April over 100 farmers from all over Albania came to Tirana for the annual meeting. In total 17 farmer's groups are member. They vary from well established groups who do their own selection of seeds to informal groups around a few larger farmers. More than 10 farmer plant more than 1ha of imported seeds; that means they invest some over 3000 USD in potato production. Some plant more than 3 ha.

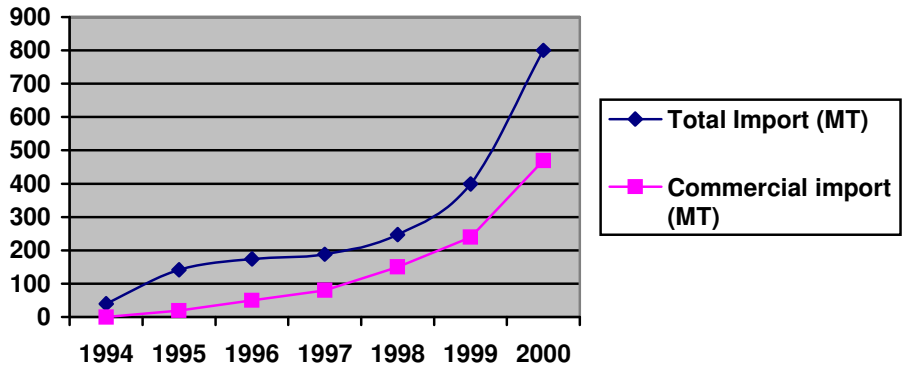
Diversification

In the beginning of 2001 private investors established three chips factories in different districts; they need hundreds of tons of potatoes of special chips-varieties whih until now are not grown in Albania. The seeds for these are supplied by a German company, unknown with the Albanian market. ANSPA played a key-role in the their entrance on the market: the linked them to farmers interested farmers to grow the potatoes, they set up on farm trials with the new varieites and they assist in the process of registration of new varieties. The company paid for these service of ANSPA.. This lead to some dissatisfaction from the tarders who were involved in ANSPA from the very beginning, as they are of the opinion that this payment will lead to a biased position of ANSPA. Hopefully, this will turn for the better: all importers should pay a small percentage of the value of their import to ANSPA in order to garuantee its financial sustainability. In any case the divesification meant a re-newed competition between seed potato suppliers, which can only be advantagous for the Albanian farmers.

In the 2000-2001 season, ANSPA got more involved in the marketing of potatoes. A Croatian firm contacted ANSPA with the request to assist them in buying 1.000 ton of ware-potatoes for export to Croatia. Also donors use ANSPA as a vehicle to support Albanian farmers. A project on self-help promotion of GTZ is considering to help ANSPA to obtain a potato store in Fier district. Similar ideas are developed by the trader from Divijaka with support from its Dutch seed supplier and the Dutch government. He wants to re-vitalise the seed multiplication in the mountains, this time in a more accesible area (near Diber where the farmers have gained some positive experiences through IFAD and ANSPA). Lastly an USAID supported project started to support farmers groups who are member of ANSPA with setting up of a Saving and Credit scheme.

Final results

Imported Seeds
A direct measurement is the import of (mostly Dutch) seed potatoes, as shown in the next graph:



Sources: data from Dutch seeds suppliers(: AGRICO; HZPC) and well informed estimates by authors

The graphs show that total- and commercial imports have increased tremendously in the 1990s. The graph shows the effect of networking. At the end of 1997 the first national seminar was held and the commercial import doubled in 1998 –1999 and more than doubled again after the creation of ANSPA in the beginning of 1999. At present no subsidised seed potatoes are imported any more. The present imports of some 500 tons, represents only 12.5% of the potential estimated above. With chips factories and exports coming up, there is still ample room for further increase of imports.

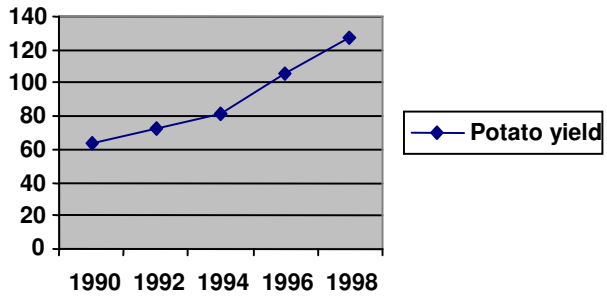
Price of imported seed potatoes
Through economics of scale, increased efficiency (specially in transport) and pressure from competition, the Dutch seeds have become cheaper over time. While initially they equaled about 1 USD/kg, presently they range from 0.7 till 0.9 USD/kg, depending on quality and size.

Local second generation seeds
As for the local seeds the picture is also positive. While in 1996 second generation seeds were sold in mountainous areas at ware-price of 0.2 USD/kg, in 2001 this ranges from 0.35 USD/kg for a farmer's group in Diber, 0.4 USD/kg for a private farmer in Tirana district and 0.5 USD/kg for the well established farmer's group in Pogradec. Actually the difference are even biger: autum 2000, the off-farm price of a ware-potatoes in mountainous areas was 15 Lek/kg; second generation seeds certified by ANSPA fetched four times as much: between 50 and 70 Lek/kg. In the lowlands the second generation seeds were initially sold for ware-price of 0.35 USD/kg, but currently they can fetch between 0.6 USD/kg (from Diber) and 0.7 USD/kg (from Pogradec and seeds multiplied by the trader himself).

Group formation
Group formation is an extremely difficult process in Albania (see also Holtland, 1999). Through ANSPA activities new groups are formed spontaneously, since only well organised farmers groups can offer a considerably amount of seeds and can get the best prices for these. In practice this means that the strong farmer groups in Diber and Pogradec dominate the second generation seed market, in the future they will face more and more competiton from the seventeen groups who are member of ANSPA at present.

Yields

Data in FAO (1999) and in the 2000-statistical yearbook of MoAF show that although for most crops the yields in the 1990s did not reach their pre-transition level, for potatoes the average yield in 2000 was more than double the yields in the period 1985-1990. The next graph shows that most of this increase was realised after 1995.



Source: FAO (1999); Statistical yearbook MoAF (200), for 1992 an interpolation by the authors.

In general the local second generation seeds yield about 80-90% of the imported seed. This means that there is still room for improvement.

The income of farmers

The income for farmers in mountainous areas has increased substantially. With about 50% of the yield sold at a double price, their income increases with 50%. This means that the *extra* returns per *extra* investment is about 100%, indeed what is needed to induce spontanous investments from resource poor farmers in marginal areas. As explained above, the difference is sometimes even much higher. As important is the marketing effort as such. While it is difficult to market ware-potatoes and farmers themselves often have to organise the transport to the markets, the secong generation seed potatoes are eagerly collected by the traders.

Lowland farmers always had better margins than their colleagues in the highlands (see above); through ANSPA activities the price of imported seeds was reduced by 10-20%. Using second generation seeds reduced the cash expenditures for seeds with another 20%. As the yields are 10-20% lower, the profit per hectare is not affected, but with very positive financial returns to inputs like fertilisers (often 1 Lek invested leads to 5-10 Leks extra returns; see Holtland 1996), it is more attractive for lowlands farmers to use their limited cash for buying these inputs, than for buying imported seeds.

Policy Lessons learned.

Activities should be based on a *sound, long term, technical and economic analysis*. For this the technical and economic results of on-farm-trials were crucial and convinced farmers and traders. The open exchange of data and ideas supported this. Knowing nearly all trials, the researcher of the IVP plaid a key-role.

Once one is convinced that the basics are in place, the *responsibilities and risks* should as soon as possible be born by the right people and one should not be afraid of short term pressures or set backs.

Getting *the right people* was done by keeping a low profile. ANSPA did not try to 'buy' interest, it always stressed the own responsibility of farmer and traders. In this way only serious, committed people remained interested in the organisation.

Indeed the success of ANSPA is based on the total *commitment of individuals*. The chairman and secretary visit many farmers in all (isolated) parts of the country. At regional level IFAD coordinators and AGRINAS staff fulfilled similar, stimulating roles. The first sometimes even risked their jobs to ensure a future for seed potato production in NE-Albania. The two major traders fit into this picture as well: they know many farmers personally and they are open to exchange information.

Albanian farmers and traders proved very *innovative, pragmatic and ready to invest*. In a few years they were able to overcome the initial mistrust between North and South Albania which has plagued Albanian (recent) history too much. On several occasions farmers and traders took the lead. The often heard conclusion that their communist experience made Albanian farmers avoid all risks, should be read differently: they are ready to take risks but only when expected gains justify it. The Ministry of Agriculture on the other hand, remained inert. Although extension workers in the FAP and IFAD area took part in on-farm-trials, at national level little interest could be provoked, despite many efforts.

Clear, *visible results* are needed to get things going; for this a *flexible donor* is needed which can provide concrete support on all aspects and in all kind of forms (advise; training; subsidies; networking; exchange of experiences). FAP acted as such. Yet, such a donor should not go it all alone, but create a *network* with all relevant actors so that they have a voice in the process. AGRINAS and IFAD joined in quickly and eagerly, in the end also AFADA/IFDC joined, as well as GTZ. This made it much easier to continue the initiative after the withdrawal of FAP.

In networking *personal relations* are important. In 1996 the extension advisor of IFAD became Teamleader of FAP. AGRINAS and FAP are both Dutch projects and Dutch companies provided seeds. These links were very helpfull in troubleshooting. On the Albanian side the potato researcher of the IVP plaid a similar role: he built up a strong nationwide network related to potato production.

Aid organisations should *stop* to provide seed potatoes at heavily *subsidised* prices in Albania. In case NGOs want to deliver (very) small quantities to a (very) limited number of people, they should be connected to ANSPA for follow up.

Conclusions

The process of establishing ANSPA has been completed successfully. It took six years. In this period the willingness and ability of farmers to use high quality seeds has increased tremendously. Although still much remains to be done, the foundation are laid in technical, economic and organisational terms. Farmers and traders have passed the point of no return and a sustainable system is in place.

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