The balancing act of creation a cooperative
The role of outsiders in a Kyrgyz case

Gerrit Holtland

Supporting farmers in developing countries in forming a cooperative requires a two-fold balancing act. Outside support must be balanced with local initiatives, while, at the same time, organisational development must go hand-in-hand with business development. Often outside support comes from the most powerful actors in this process, and, therefore, they are primarily responsible for maintaining these balances. The case study shows that in so doing, cooperatives can become powerful vehicles for economic development and empowerment.

Introduction

Although in an ideal world agricultural cooperatives are created by farmers, using their own ideas and resources, in reality outsiders are heavily involved in this. In the past, in the Netherlands, these outsiders were local leaders (teachers, doctors, and pastors) who contributed ideas, knowledge and skills. These days, in the South, the outsiders are often development experts paid by donors. Next to intellectual support, they often offer financial support as well. Considering the many difficulties farmers in the South are facing, such comprehensive support is justified, but it bears some risks as well. Outsiders, first of all, lack knowledge on local facts, opinions and relations. Secondly, large donor budgets and pressure for projects to show quick results can easily lead to too much attention for tangible, short-term results at the detriment of long-term social processes. It can also make the players insufficiently cost-conscious. Lastly, power difference between in- and outsiders can lead to blurred responsibilities and miscommunications. Farmers are tempted to tell donors and project staff, what they think they want to hear, in order to secure the (short term) financial support. Often the final result is a lower level of ownership felt by farmers.

Outsiders have positive roles to play as well; next to providing farmers access to skills, knowledge and money, they can facilitate sensitive socio-political discussions between farmers and acts as brokers between farmers and other, often more powerful, stakeholders. So creating a new coop in developing countries is a balancing act between local initiatives and outside support. At the same time, another crucial balance has to be struck: between social inclusion and democratic principles on one hand (organisational development) and economic, technical and market issues on the other (business development).

This paper describes how these balances were maintained as the Naukat Seed PotatoGrowers Cooperative (NYNOK) in the South of the Kyrgyz Republic was created. Despite a rather short period of support (1999-2002), a robust cooperative of 200 small farmers was created that does not only secure its members an additional income of 25% but also provide a large number of other farmers high quality seed potatoes.

After a short description of the context, we will first pursue the organisation and business development lines before presenting the main achievements of the coop. Lastly we will analyse the role of the outsiders (a project) and formulate the Lessons Learned.

The context

Naukat is situated forty km south of Osh, the capital of the Southern part of the Kyrgyz Republic, which lies at the head of the Fergana Valley. This valley offers fertile lands that can yield bumper harvests if it is irrigated with water from surrounding mountain ranges. The valley has been over-populated for centuries. The city of Osh is among the oldest continuously inhabited places in the world. It has a mixed population of Kyrgyz who are originally nomads living from grazing horses and sheep at high altitudes, and Uzbeks
who are agriculturists and traders. The relations between Kyrgyz and Uzbeks, who constitute a major share of the population in towns, is tense; e.g. in the early 1990’s clashes between the two ethnic groups in Osh took hundreds of lives.

Naukat lies at the foot of a mountain range, at mid altitude (ca. 1.200 m.a.s.l). It combines the advantages of sufficient (irrigation) water, an attractive climate and fairly fertile, accessible land. It is, naturally, among the most densely populated areas. Its production system at the turn of the century characterised by:

- small unit size (most families have less than 1 ha.)
- low levels of mechanisation
- low level of input usage
- dysfunctional irrigation system.

The support system is weak as well. Farmers market their agricultural production either directly to buyers at the farm gate, or through bazaars in Naukat and Osh. Much agricultural production, particularly the potato crop (65 %), is finally sold in Uzbekistan. This trade is conducted through an informal system of independent wholesalers. Credit is very difficult to access due to high interest rates, long and complicated procedures, high requirements on immovable assets as collateral and credit products not well geared towards farmers’ needs. The average income is very low, 200 US Dollar per capita per year.

In 1997 the Dutch ministry of development cooperation formulated NADPO: the Naukat Agricultural Development Programme. The Dutch wanted to support the Kyrgyz government with its agricultural reform program that was much more advanced than those of neighbouring countries in Central Asia. The purpose of NADPO was to improve the institutional framework to facilitate the improved production and profitability of potato (and maybe other crops). The strategy was to create a Private Development Organisation (PDO) that would offer support services to the farmers, after the phasing out of the project, in the area of marketing, input supply, credit, irrigation and knowledge.

Due to delays in designing a cooperation agreement between the Kyrgyz and Dutch governments, the actual implementation, by Stoas International, started only in April 1999. By then it was too late to work on potato production, so it focused first of all on improve the marketing by storing potatoes during winter and by setting up a Price Information System. It also explored different options for credit lines. Parallel to this it started to work on the creation of the PDO. The founders were to be development organisations, private farmers’ organisations and individual farmers. The assets of the project would be handed over to the PDO, which could to use these to generate profit that would be invested in agricultural development. It would engage as well in lobbying as well. At the end of 1999 a committee was created to prepare the creation of a foundation. Members were representatives of the regional administration, of the Kyrgyz Agricultural Finance Cooperation (KAFC), of a private (TES) and a public extension services (RADS), of each of the three Village Councils where the project was to work and of the Dutch Embassy and of the project itself.

People were elected or appointed and Working groups were created to identify income-generating activities. Options were seed potato multiplication, potato storage, advisory/information services, input supply (fertiliser and chemicals), contracting and mechanisation, apple grading, packaging and marketing and, lastly, small scale food processing. In practice, neither the Working groups nor the committee ever met. People and organisations were not interested and did not see the profitability of most activities.

In spring 2000, the trial with potato storage proved to be a loss making exercise and the number of options for credit lines proved to be very limited. NADPO shifted its attention to potato production, yet the imported Dutch Elite seed potatoes were twelve times more expensive than local seed potatoes and farmers were not interested to buy them. So the project had to contract 30 farmers to grow the seeds; the
project covered all costs and paid the farmers for their labour. It was at this stage, in summer 2000, that the present author came to the project and initiated the process that lead to the creation of NYKOK.

**Organisation development**

At this point, a radical farmers’ orientation was adopted. Farmers had to have a direct say in all decisions leading to the creation of a Producers’ Organisation (PO). First NADPO-staff was trained on how to communicate with farmers. Secondly an inventory was made of all factors and actors affecting a possible creation of a PO. Thirdly informal meetings were organised at village level to discuss the options for any form of cooperation. Farmers had little, if any, experience with organising themselves, except for traditional communal working parties (‘ashar’). Yet, they were able to articulate the potential constraints and opportunities for a PO. They pointed out the shortcomings of the village administration and said that Farmers Leaders should not be members of the Village Administration. Leaders should be good, respected and mature people. This meant, farmers from the age group 45 - 55, who were still actively farming, although their sons might do most of the work. The real elderly (those above 55) who were normally involved in leadership roles were thought to be too much oriented to village- and religious politics and too far away from field realities as most of them spent considerable time at the local mosques. People also clearly expressed that they wanted the PO to be composed of three ‘independent units’ at village level. A very important process result of the informal discussions was that farmers felt they were taken serious. Since at the time of the meetings, farmers had already seen the good performance of the Dutch potatoes in the fields, they wanted the PO to focus on seed potato production.

In November 2000 these issues were discussed in formal meetings in each of the three villages. Farmers voted to create a PO and per village two preliminary leaders were elected; based on the selection criteria described above. The mediating role of the project was crucial; as it presented the list of criteria that were elicited during informal talks and meetings, nobody could be blamed to have urged for the exclusion of village-administrators and (religious) elders.

A draft charter with the basic organisational principles was approved as well. The key issue was that the board, elected by farmers, would appoint and control the manager, who would appoint his staff. For the rest farmers were not interested in statutes or formalities. They wanted to talk about practical issues like: how many seeds can each member get? Can we get inputs on credit? How many staff will the PO have and what will be their tasks, etc.? The leaders had to think over all these topics, together with NADPO, as project support was needed on many issues. The PO did not yet formally exist but in order to create a maximum feeling of ownership and opportunities for learning, the preliminary leaders were empowered to co-decide on the use of all NADPO resources, immediately after their election. And the relations between NADPO and the farmers were shaped in such a way, as if a PO already existed.

As a result the preliminary leaders took their responsibilities very serious. They ensured that the contract farmers of the 2000-season delivered all seeds they produced to NADPO; of course this was in their own interest, as the PO would get these seeds later. Next they selected farmers for the 2001 season. Some 150 were needed to grow the seeds multiplied. During the 2001 season they collected membership fees, inspected the fields (to ensure high quality seed potatoes) and organised credit groups to buy fertilisers and chemicals (most leaders offered their houses as collateral for the group-loans from KAFC). NADPO assisted them with training (in field inspections, crop husbandry, storing techniques and marketing) and with a guarantee fund for the KAFC-loans.

---

1 Naukat was known as a centre for Muslim fundamentalism. The prevailing poverty and the extreme shortage of land offered a fertile ground for recruiting young men for idealistic aims like the restoration of the Caliphate of the Fergana Valley.
Throughout 2001 the preliminary leaders and NADPO ironed out all legal aspects. This took nearly a year as the legislation was very confusing and nobody had experience with creating a coop. Finally, in autumn 2001, the Naukat Seed Potato Growers Cooperative (NYKOK) was created. In their first meeting the leaders appointed the crop and storage expert of NADPO as its manager. This was an interesting move as he was an Uzbek, while all members were Kyrgyz. The NADPO co-manager, a Kyrgyz with ambitions to become manager as well, was bypassed. The new NYKOK manager, on his turn appointed three of the leaders as Village Coordinators to assist him in the work at village level. Next he selected the chairman, who was a bookkeeper by profession, as bookkeeper. This was frowned upon by some (‘they appoint each other’), but in this way the hard voluntary work of the elected, preliminary leaders was rewarded, their experience was retained and the farmers realised even more that this was their organisation. With four of the six preliminary leaders now employed by NYKOK, the general assembly elected a new Board; this time, a permanent one.

In December 2001 the Kyrgyz Ministry of Agriculture, agreed that the project assets would be handed over to NYKOK, rather than to governmental organisations (as was initially agreed between the two countries). In January 2002 a contract was signed to stipulate that the project would hand over its assets to NYKOK in three stages: in March, July and October 2002 (at the end of the project).

In 2002 NYKOK was fully operational. It purchased the seeds NADPO had multiplied and imported new Elite seed potatoes from the Netherlands. At the end of 2002, NADPO phased out and its assets were handed over to NYKOK (see below).

**Business development**

The discussions on the business development started in summer 2000 as well. In spring 54 tons of Dutch seed potatoes had been imported. Yet, these were twelve times more expensive than local seeds and no farmer was willing or able to buy them. Most farmers were not even able to pay for local seeds; often they simply used their own small tubers and many needed a loan to buy the seed for their small plots (usually between 0.1 and 0.2 ha; no farmer had more than half a hectare).

Therefor NADPO hired both the land and the labour from 30 farmers and grew the potatoes on its own account. The farmers were trained in pre-sprouting of seeds, planting distances, timing and quantity of fertilisation and proper use of crop protection chemicals. The yield was rather disappointing, only 22 ton per ha, partly due to poor irrigation practices. Yet, it was sufficient to impress farmers, as local seeds yielded much less (16 ton/ha). So the question was: ‘Would it be possible to import such expensive seeds on a commercial base?’ A simple economic simulation model was made (in Excel) to see how the cost price of the seeds would decrease over the years. The model proved that after three years of multiplication the costs-price would be low enough to be profitable.

Then came the question: how to organise these three years? Farmers lacked the money to purchase imported seeds so a cooperative was needed where the necessary capital could be accumulated. To assist the decision making process a complex economic simulation model was develop that could predict the profitability of both the coop and its members, based on assessments of production costs, inputs, yields, market prices and the costs of running a cooperative.

The model showed that it was possible to create a viable seed potato coop. The coop had to multiply the seeds in the first season on its own account. This brings down the cost price for second generation seeds, to four times the local seed price. In the next two years these seeds are then given as credit in kind to members: in the second year members repay every kg of seed with 2.5 kg at harvest time; in the third year with 2 kg. As the coop does not incur any costs in these two years, the cost price after three years is
roughly the same as for local seeds. Yet, their yield potential is bigger and so is their market price: roughly some fifty-percent above the price of local seeds.

Farmers were very enthusiastic about the credit in kind approach, as it circumvents the need to purchase expensive seeds. The money saved can be invested in fertilisers and pesticides. As the quality of the seeds was very high, yields were much higher than with local seeds. In general the returns to cash investments in the NYKOK seeds was at least double the return to cash investments in local seeds. The system solved another major issue as well: marketing expensive, quality seeds. As members repaid the coop in kind, they already marketed most of their surplus. And in this way the coop was able to guarantee the quality (including a proper grading), could offer sufficient large quantities and had a store in the centre of Naukat town that was always able to satisfy the demand of major clients.

In the system the long-term profit on imported Elite seeds is shared between the coop and its members. It is a precarious balance: if one of the two does not profit enough the system collapses. The balance can be regulated by the amount of seeds farmers have to repay to NYKOK. If the coop is in a difficult financial position members have to repay more for each kg of seeds taken. If the coop is doing well, but the profit for members low, the repayment can be reduced.

The simulation model was permanently updated with actual data. It was the base for all major economic decisions; during the project period and even thereafter. The leadership of NYKOK was trained in using it. This gave them an in-depth understanding of the long-term underlying economic principles of the coop.

The model showed that NYKOK was economically viable in the long run, yet to get it going substantial investments were required in fixed assets, especially in stores. NYKOK needed working capital as well, as in the three years that the multiplication system had to be built up, it would have no income. NADPO provided both assets and working capital in three trances in 2002, based on clear contracts stipulating the rights and obligations of both parties. The support of the project in the second and third trance depended on the performance of NYKOK.

First, in spring 2002, NADPO sold the 540 tons of seed potatoes it had produced in the previous two years to NYKOK. NYOK did not have cash, so this was done on credit. NYKOK marketed two-thirds of this part and one-third was given as credit in kind to members. A small amount (the best seeds) was used to multiply on NYKOKs own account. The economic simulation model was used to determine the price. The guiding principle was that NYKOK would be able to make some profit, but not so much that it would become loose on its finances.

The seeds allowed NYKOK to start operating, but the long-term cash flow predictions of the economic simulation model showed that this was still insufficient to finance the coop in the first few years after the phasing out of NADPO. So the project availed three tractors and a small truck (to haul potatoes from far away fields) to the coop on the condition that these were leased to private contractors. By extending the lease contract over a period of five years, the coop secured itself a basic income until 2007. Next to this, the leasing arrangements reduced the management burden of the coop and it nullified the risks of (prominent) members defaulting on paying for the services.

Lastly, NYKOK needed sufficient storage capacity to store at least 1000 tons of seed potatoes. NADPO handed over the two stores it owned, including the necessary ventilators and grading equipment. This was only done in autumn 2002 when the coop had shown that it had fulfilled all agreed pre-conditions.

The results and the impact
The final result of all efforts is a robust cooperative that serves its members with all necessary services:
- high quality seeds
- other inputs (fertilisers/crop protection chemicals)
- mechanisation services
- loans (for inputs but also for issues like livestock)
- quality control system
- a marketing channel.

NYKOK provides an additional annual income of 50,000 USD to its members and 100,000 USD for the coop. In addition the clients who buy the quality seeds get an additional income of about half a million USD due to the higher yields they obtain. Actually NYKOK transformed the seed potato market. While before farmers simply used small left over tubers as seeds (which were even cheaper than consumption potatoes), now they see the use of selecting proper seeds and readily pay a fifty-percent higher price.

Until today NYKOK proves to be robust. After NADPO phased out in 2002, NYKOK continued to import Dutch seeds in 2003 and 2004. In 2005 they tried to reduce the costs by importing Dutch seeds that were multiplied in Russia. Yields were reasonable but the quality was still found to be too poor; so in 2006 they reverted again to Elite seeds imported directly from the Netherlands.

NYKOK proved to have gained sufficient social maturity as well and it was able to muster considerable socio-political clout. In 2003 it managed to be recognised as state seed farm which gave it a tax advantage. The state forestry department leased some land at high altitude to NYKOK (see below). On top of that the board and staff managed to convince the three Village Councils to allocate 25 ha of land to NYKOK as well. This meant that its members had more land available for the necessary crop rotation. In return NYKOK assisted the local government when a rural road in the area had to be renewed.

NYKOK also started to invest; the first profit was invested in a new, large store. The paid work that had to be done was equally divided between craftsmen of the three villages. The growing confidence of members was tested when in 2003 the former-NADPO project manager tried to gain control over the coop by bribing some members to oust the manager and propose him as new manager. The attempt failed and in the general assembly he was openly accused of corruption. The meeting decided that neither civil servants, nor anybody known to be (or to have been) corrupt, could ever become member.

**The role of outsiders**

Initially NADPO was the driving force behind the creation of NYKOK; in the end farmers had taken full responsibility and control. We have already seen that NADPO plaid a number of roles. It assisted as a mediator in the initial stage when anonymous members indicated in informal talks the type of leaders they wanted. It also developed the economic simulation model that was the base for most of the business decisions. Here we will expand on some other roles as well.

NADPO plaid an important role in technical matters. It had an irrigation component as well, so it assisted Water Use Association with improving (the functioning of) the irrigation system. Next it set up a series of trials on fertilisation, pre-sprouting, use of pesticides, variety trials, storage systems and irrigation frequencies. Since all this was done via on-farm trials the knowledge generated was immediately available to farmers. The project backed this up with extension services and training courses. In three years, a system of producing high quality seed potatoes was developed that was well adapted to local circumstances. This complex innovation allowed NYKOK to enter the market with a unique product.

In general NADPO was very strict on quality matters; at one point it came into conflict with the leaders of NYKOK. In autumn 2001 it was clear that the quality of the seeds was good, but could have been better if the Elite seeds were multiplied at a higher altitude (at 2000 m.a.s.l.) where there are no aphids to transmit...
the viruses that infect the potatoes. This advice was given to the leaders, but field visits showed that they still intended to plant the seeds on their field near the villages (at 1200 m.a.s.l.). Probing into the reason for this, revealed that the leaders did not have land at this higher altitude. NADPO then formulated a clear pre-condition for further support: if NYKOK would not identify fields at higher altitudes the support would be stopped. Since it was very late in autumn, this was a very tough demand. With great difficulties NYKOK staff and leaders managed to find suitable fields; some of it was even outside their own villages. These proved very fertile as well, because they had only been used as pastures during the Soviet era. So in 2002, the seeds were not only virtually virus-free, the average yield increased to 38 ton/ha as well.

Another role of NADPO was to link farmers to third parties. For example NADPO had a staff member who organised informal credit groups (for which leaders pledged their assets as collateral) and it placed a guarantee fund at KAFC for these loans. Over the years this system was expanded and the loans could also be used for other purposes than potato production. At the end of the project, the staff member was taken over by KAFC; initially he was still paid from funds that NADPO had given to KAFC, but after one year he continued as a normal employee of KAFC.

Lastly we come back to the radical farmers orientation. Initially the project was supposed to work with government seed inspector. They proved to be incompetent and not motivated. So NADPO decided to train the farmers in field- and seed inspection. This meant that farmers were taken to the Netherlands for a thorough training in recognising virus infections in potato fields. This lead to a clash with the vice-minister of agriculture, chairman of the NADPO-board, who insisted that he should be part of any study-tour to the Netherlands. The fact that both Dutch and Kyrgyz project staff fought for priority for farmers to participate\(^2\), and that they won this battle, gave a great moral boost to the farmers.

The training in the Netherlands was indeed taken very serious by the participating farmers. They did not only learn to identify infected plants in a very early stage, they also saw the importance of a proper quality control and certification system. Back home they designed a similar system for NYKOK: field inspector were appointed and members had to follow their advice. It was quiet a struggle to get farmers accepting the fact that they have to remove any infected plant. It was only after the general assembly in 2002, where ordinary members insisted that those who did not follow the advice of field inspectors should be excluded as member, that compliance was enforced. This expulsion of some members was probably the most significant indicator of the level of ownership exercised by members. The leaders were actually hesitating to criticise non-compliance of members in public, but the ordinary members forced them to do so.

There were also some things NADPO did not do. It never entered in any dialogue with government agencies like the tax department or the seed inspection department on behalf of NYKOK. Nor did it secure any deal for them on the market. The coop had to find its own way in dealing with socio-political pressure; including corruption. Indeed it did manage to do so. In 2003 NYKOK won a local World Bank tender to supply seed potatoes and it needed to provide some local officials a kickback. It did so with the consent of the leaders. And as we have seen above, it successfully used it considerable socio-economic power to strike some interesting deals with local administrative organs.

**Lessons learned**

At the start of the project farmers did not have any idea on the value of quality seed potatoes, nor of the notion of an agricultural coop. Still in a few years the managed to master the complex innovations involved and they developed a very high level of ownership. The lessons learned are many. Most are already mentioned before. The most general lesson is that many aspects have to be balanced. Progress in the area of organisation development should be accompanied by progress in business development. And

\(^2\) As a vice-minister would only spoil the program of the visit and would never use the skills trained
outsiders have to respect the ideas of farmers on the design of the organisation, while farmers should be open to technical knowledge from outsiders.

Although many aspects played a role, we can summarise a number of elements that have been crucial for the final success:

- the project made very well use of the strong social fabric; especially in the election of the preliminary leaders
- the radical farmers orientation and a permanent and open dialogue between the project and farmers’ leaders. In this dialogue the responsibilities of both parties were clearly spelled out and the project was tough on the farmers when it needed to be.
- the use of a detailed economic simulation model in shaping the internal economic relations in the coop as well as, shaping the support of NADPO to NYKOK.
- the strong focus on quality issues and on training (both on technical matters and on organisational and economic aspects)
- the commitment of the farmers to NYKOK is fuelled by the huge increase in income. Farmers increased their annual family income by 25%, by becoming member of NYKOK and planting better seeds on 0.15 ha of land! Such a strong incentive can never be generated by merely economics of scale (e.g. negotiating cheaper inputs or better prices on the market for a large number of farmers). It was the introduction of a complex but viable innovation that allowed NYKOK to take such a unique position in the market. Interestingly enough, it seems that the way NYKOK is organised might be the only way to make this innovation viable. Several other projects tried to set up seed potato multiplication schemes in the Kyrgyz republic, but so far none managed to come up with a sustainable system.
- the fact that the farmers were involved in all activities before the organisation was formally established provided them with some room to experiment (both on technical and social issues). It made the whole exercise more natural. The organisation became a formalisation of things people knew made a lot of (economic) sense. In many project this is not the case: often the creation of a cooperative is a precondition for support. This can easily lead to ‘fake coops’ created to secure short-term donor support rather than to organise an economic process of well motivated members.

Finally all this boils down to creating trust between out- and the insiders. In this case NADPO managed to gain the trust of farmers by carefully listening to them, by empowering their elected leaders, by using an economic simulation model as a transparent tool for decisions making and by maintaining very high professional standards in working on technical, economic and social issues.