

Fruit and vegetables of Albanian smallholders



A sub-sector analysis

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Table of Content

Abbreviations	4
1 Albanian agriculture in transition.....	1
1.1 The transition process	1
1.2 Poverty.....	6
1.3 Donor interventions.....	7
1.4 Lesson learned.....	9
2. Present situation in the fruit and vegetable sub-sector.....	10
2.1 Mapping: the actors and the flow of products	10
2.2 Benchmarking: the performance of the sub-sector	19
2.3 Distribution of the added value in the sub-sector	21
2.4 Vertical Inter-firm linkages in the sub-sector	23
2.5 Horizontal (inter-firm) linkages	24
2.6 Commercial support system	25
2.7 Non-commercial support: AKIS	27
2.8 Policy environment	29
3. Improvements in the fruit and vegetables sub-sector	33
3.1 Chances for primary actors	33
3.2 Improvements in cooperation and coordination.....	34
3.3 Better (non-) commercial support systems.....	35
3.4 Improved policies.....	36

Abbreviations

AAC	Albanian Agriculture Competitiveness Program
ADAD	Association for Agricultural Development for the Dibra district
ADFTD	Albanian Foundation for Training and Development
AFADA	Albanian Fertilisers and Ag-input Dealers Association
AKIS	Agricultural Knowledge and information System
ALL	Albanian Lek
ANSPA	Albanian National Seed Potato Association
AUT	Agricultural University of Tirana
CATT	Centres for Agricultural Transfer of Technology
EDEM	Enterprise Development and Export Market Services
EU	European Union
FAO	Food and Agriculture Organisation
FAP	Fier Agricultural Program
GDP	Gross Domestic Product
GTZ	German organisation for Development Cooperation
HACCP	Hazard Analysis and Critical Control Points
HL	Hecto Litre (100 Litres)
LAG	Local Action Groups
LCB	Local Capacity Builder
IPA	Instrument for Pre-Accession Assistance (EU)
IPM	Integrated pest Management
ISO	International Standard Organisation
MADA	Mountainous Area Development Agency
MAP	Medical and Aromatic Plants
MAFCP	Ministry of Agriculture and Food and Consumer Protection
MAFF	Mountainous Area Finance Fund
MFI	Micro Finance Institutes
MoU	Memorandum of Understanding
MT	Metric Ton (1.000 kg)
NGO	Non Government Organisation
PIE	Production, Income and Employment
PPP	Public Private Partnership
RAAC	Regional Agricultural Advisory Centres
RNE	Royal Netherlands Embassy
SASA	Sustainable Agriculture Support in Albania
SCA	Saving and Credit Associations
SCAU	Saving and Credit Associations' Union
SDC	Swiss Development Cooperation
SME	Small and Medium Enterprises
SNV	Netherlands Development Organisations
TA	Technical Assistance
WB	World Bank
WUA	Water Use Association

1 Albanian agriculture in transition

1.1 The transition process

Privatising the asset: land and livestock

When the Stalinist regime collapsed in 1991 the first priority was to privatise the assets of the cooperatives. This was done quickly and in a radical and simplistic way: all members received an equal share of land and livestock, based on the number of family members. In many cases one could hardly speak of ‘privatisation’ as the initiative was as much with the people than with the state. Sometimes officials could only sanctify afterwards what people had done. Doing so, in 1993 over 430.000 small farms were created; on average having 1.17 ha in more than 4 parcels (average parcel size is 0.25 ha). Farm size differs enormously; in the coastal zone and Korca plains it is 1.5 ha; in the North (East) it is less than 0.6 ha..

By 2007 some 370.000 farms are remaining. The average farm size has not changed and is still 1.14 ha, and the average parcel is still only 0.27 ha. This means that nearly 70.000 ha or one sixth of the total area, has been withdrawn from agricultural use (and turned into urban areas and built up rural areas). The stagnation in the development of the farm size was not expected. A FAO report from 1999 estimated that although by that time only 7% of the farms were bigger than 2 ha, in 2010 this would be 40% and 10% would be even bigger than 8 ha!¹

According to the law, land was to be equally distributed among all members of the cooperatives. In most area this was indeed done, yet in some (mountainous) areas each family (or better each clan or ‘fis’) simply took the land that traditionally was theirs. This led to many conflicts over land ownership as well as to some families having virtually no land. The limited capacity of relevant institutes like the cadastre and the judicial system means that many of these conflicts go unresolved. About 15,000 ha agriculture land is used by farmers without “land ownership act”. This occurs most frequently in Shkoder, Kukes and Fier.

The 370.000 farms with 4.8 family members constitute a population of 1.75 million people or more than 50 percent of the total national population. For them agriculture is a main source of income and employment.

Most Albanian farmers are farmers by default. They have no other option than to make the best out of the land they have been given. It is a minority that tries to create a future for themselves and their children farming. As we have shown they can make good returns to investment if they would have sufficient land. If they do not have sufficient land, migration will be the best next option for them. Let us compare the income from fruits and vegetables with the income via migration.

Farmers work on average 422 days on their farm and 131 outside the farm. On average farmers earn a cash income from farming of 206.565 ALL/year or about 500 ALL/day. Vlore has the highest income per family: 400.000 ALL; followed by Gjirokaster and Berat (270.000). The lowest are Kukes and Diver with some 96.000 ALL/family. With 4.8 members per farm family the average farm income is 30 Euro per month per capita. The division of this income is skewed. Some 8% of the farms earn virtually nothing. Nearly 50.000 (or 13%) earn substantially more: 100 Euro per month per capita.

Income from migration is another source of income. About one quarter of all families have a permanent migrant and some 40% a seasonal migrant. In total some 225.000 people are involved in migration. Some 60.000 families received more than 200.000 ALL in remittances from them.

¹ Prifti, C and A. Tanku, 2001. Country review on agriculture and trade policies. The case of Albania. FAO.

These data from the MAFCP statistical yearbook seem an underestimation. The Bank of Albania² estimates the number of migrants to be 800.000 or about 25% of the estimated population of 3.1 million. In 2005 they brought in 1.16 Billion USD. This represents 14% of total GDP and one should not be surprised if these data still underestimate the importance of remittances. A BoA survey showed that (in 2004) remittances reached 33% of disposable income of an average family recipient and almost 40% in rural areas. The recipients of remittances are from all social groups, including middle income class (60 percent) as well as the low income class (27 percent). Off farm income in Albania is also important. Nearly 30.000 farming families earn more than 200.000 ALL/year from this.

Unfortunately the available data do not present a full picture of the choices farming families have to make. For example we can not deduct how much farmer earn per day in off-farm employment and migration. This needs to be improved if we want to fully understand the choices they have to make. Yet for the time being it is well known that income from agriculture is low and with a very small farm size this means that virtually all farming families need additional income from migration and off-farm income.

Growth in stages: vegetables, livestock, processing and fruits

As the starting point was very low, the growth in both agricultural production and productivity has been reasonable in the first decade. On average some 5% p.a. in the 1990's; however as the total economy was growing with some 7-10%, the share of agriculture dropped. While in 1992 the share of agriculture in the economy was 54%, ten years later this had dropped to 27%. In the last few years the sector grew with some 2.5- 3 % p.a. and its share in the GDP had dropped to 21% in 2006.

In the first decade of transition the growth was mostly in the production of field crops and livestock. In the second half of the 1990's the first intensification took place in the coastal areas: open field vegetables in Divjaka, low cost greenhouses in Lushnja and watermelon in Saranda. The growth in livestock was slower; as the marketing was more difficult and because many animals were sold and slaughtered in order to put the money in pyramid schemes.

In the communist era 47.000 people worked in agro-processing but privatising the large factories with obsolete equipment proved very hard. In some cases the state kept running large scale factories but it proved equally difficult to make them profitable. While most state owned factories sunk into oblivion, some cautious new investments were made. Throughout the 1990s the number of employees dropped until it stabilised at ca. 10.000 at the end of the decade. Since 2001, annual growth in the processing industry has been good: 15 percent. Yet the absolute numbers are very small. Most investments went into a few factories processing milk, meat, beer, mineral water and fruit juice³. Some investments were successful (e.g. the privatised beer company); others seem less profitable (e.g. large milk processors). The positive cases are responsible for the growing contribution to the processing industry to the total agricultural output, and particularly to the export, as we will see later. The actual number of enterprises in the food industry is 2053⁴. Most are involved in bread and sweets (47%), in dairy processing (18%) and flour processing (13%).

The last sub-sector to get off the ground were perennial crops. Investments in grape production started to already in the late 1990's, followed by fruits like apples after the turn of the century. The table shows the growth process since 2000.

² Bank of Albania , 2006. Remittances Statistics: First Meeting of the Luxembourg Group.

³ Prifti and Tanku, 2001

⁴ Again statistics are complicated and confusing; e.g. Xhepa and Agolli states that there are only 513 SME the in agriculture sector in 2004. See: Xhepa, S. and M. Agolli. 2004. Small and Medium-sized enterprises development Albania. Institute for Contemporary Studies/ Albanian Center for International Trade (ISB/ACIT). Page 14.

Growth in agricultural production (2000-2007; 2006 constant prices)

	2000	2005	2006	2007
Livestock	100	118	121	123
Arable crops	100	100	99	95
Tree crops	100	128	151	158
Total	100	112	116	117

Source: MAFCP Statistical yearbook (draft)

Declining government support

The attention of respective governments and donors for agriculture has been limited and decreased rapidly after 2000. As a share of the total public spending, the budget allocated to agriculture is very low: 2-3%. Typically it is 6-8 percent for developing countries and 3-5 percent for industrialized countries. An alternative measure of spending in agriculture is to show spending as a percentage of GDP. In Albania, total public budget spending in agriculture represented only about 0.5 percent of GDP in 2005 (down from 1 percent in the early 2000s). Similar other countries spend (much) more on agriculture: 1 – 2% of GDP.

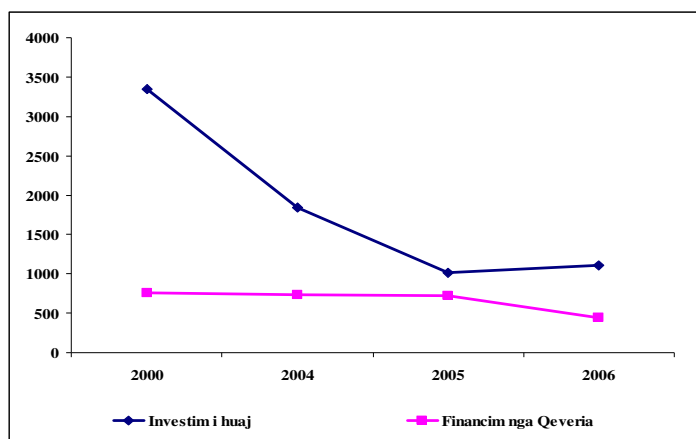
As a percentage of *agricultural* GDP in Albania, public budget spending in agriculture is 3 % in recent years (down from over 4 percent in the early 2000s). Also this is relatively low in comparison with other countries, who often invest between 6-8%.

While expenditures on agriculture go down, the budget used to run MAFCP increases, as the table shows:

	2000	2001	2002	2003	2004	2005	2006	2007
Investments (million ALL)	5371	3925	4602	4731	4550	2263	3098	2791
Running cost (million ALL)	1283	1429	1597	1732	1993	1955	2626	2473
<i>TOTAL BUDGET</i>	<i>6654</i>	<i>5354</i>	<i>6199</i>	<i>6463</i>	<i>6543</i>	<i>4218</i>	<i>5724</i>	<i>5264</i>
Running costs as % of total	0.19	0.27	0.26	0.27	0.30	0.46	0.46	0.47
Investments as % of total	0.81	0.73	0.74	0.73	0.70	0.54	0.54	0.53

Source: Statistical Yearbook MoAFCP, 2005, 2006 and 2007 (draft)

So effectively the state investments in agriculture have been nearly halved since 2000. On top of the dwindling government budgets, several donor projects have been closed done since 2000, as the next graphs shows. This is caused by disappointing results of projects, as well as new donor priorities. In 2007 the biggest donor, with over 80% of all foreign funding (!) is the WB with 1 billion ALL in irrigation and 0.13 billion ALL in the Agricultural Support Project. Bilateral projects like those of USAID, GTZ and SDC are not included in these figures as they are not consolidated in the MAFCP budget. Also their contribution to the agricultural sector is declining.



Source: Statistical yearbook MoAFCP, 2006

Investment climate

The foreign direct investment (FDI) in agriculture are next to zero. In 2006 it was 0.02% of all investment⁵. In concrete terms: less than 4.000 Euro. The limited role of FDI count for the whole Albanian economy; it remains the lowest in the region at less than 3 percent of GDP. The main reasons it the very poor business climate. The WB sums up a large number of problems. Its Administrative and Regulatory Cost Survey (ARCS) in 2005 indicates that:

- the most significant constraint to business development is unfair competition from businesses that do not comply with the legal and regulatory framework or/and are favoured by politicians. Unfair practices arise from the significant size of the informal sector (40 to 45 percent of official GDP).
- inefficiencies and corruption in the judiciary and unclear property titles enormously increase the time (4 years) and costs (38% of the estate) required to resolve bankruptcies.
- the most problematic constraints to create a competitive business environment are: anti-competitive practices (79%), electricity (70%), tax rates (72%), corruption (69%), macro-economic instability (68%), economic and regulatory policy uncertainty (59%), and information on regulations (53%).

According to the Albanian Centre for International Trade⁶, Albania scored 119th out of 121 countries on a Business Competitive Index. It identified as the major problems: Infrastructure, Corruption and Inefficient government. This makes Albania, in the eyes of foreign investors, less attractive than other countries in their neighbourhood, especially those that joined the European Union (EU) in 2004. On the positive side: Albania is more innovative than its neighbours, it markets as more efficient and its' business as more sophisticated. Also the readiness for technology and its infrastructure are assessed favourably compared to others in SEE.

Another side of the story is that imports have been and are about a factor four higher than exports⁷. This means that the country has huge trade deficit. This can only be sustained by the enormous influx of remittances from migrants. The Bank of Albania⁸ estimates the number of migrants to be 800.000 or about 25% of the estimated population of 3.1 million. In 2005 they brought in 1.16 Billion USD. This represents 14% of total GDP. Imports were 2.49 Billion and exports only 0.66 Billion. So remittances were nearly twice as much as exports and covered two thirds of the trade deficit. One should not be surprised if these data still underestimate the importance of remittances.

The BoA survey showed that in 2004 remittances had become a critical source of income for households, reaching 33 percent of disposable income of an average family recipient and almost 40 percent in rural areas.

⁵ MoAFCP Statistical Yearbook 2007. Digital version.

⁶ Belortaja, S. (2006). Albanian Foreign Trade 2006: Achievements and Challenges.

⁷ In 2006 export grew slightly quicker than imports (20 versus 17%)

⁸ Bank of Albania, 2006. Remittances Statistics: First Meeting of the Luxembourg Group.

The recipients of remittances are from all social groups, including middle income class (60 percent) as well as the low income class (27 percent).

The huge influx of remittance has made the ALL a very strong currency. Even in the last few years is appreciated some 10% vis-à-vis the Euro (so even much more against the USD). This reduces the competitiveness of the Albanian agriculture: imports are cheap and exports expensive. To reverse this, remittances should be used to import machines to improve the productivity in those sectors where Albania does have a comparative advantage. Unfortunately remittances are mostly used for imported consumer goods, services, and for the purchase or construction of houses.

Import- Export

The value of imports of agriculture products was 546 Million USD in 2006, 18% of total imports. Compared to 2005 agricultural import increased by 16%. The most important items were grains, fruits, drinks (alcoholic and non alcoholic) as well as tobacco, vegetables, and oils products. Relatively high increases in import were noted for live animals (heifers, pigs), meat, sugar and sunflower oil. Some of the products for which the import decreases were chicken meat (frozen), some sea products (conserved anchovies), fruit juice, apples, flour, biscuits and pasta.

Agricultural export started to pick up after 2000. Export of livestock products remains very low while export of crop products increases slowly. The share of processed products increases rather quickly. In 2006 the value of agriculture exports was 63 Million USD, an increase of 17% over 2005. Crops were responsible for 31% of the value. Herbs took the lion share (22%), followed by watermelon (2%) and fruits (2%). Agro-processing provided 66%: tinned fish (29%), raw leather (19%) and mineral water (8%).

Agricultural exports are only 8% of the total exports, and even this share is shrinking slightly. Agriculture is also worse than the rest of the economy in terms of the ration between im- and export. While for the whole economy this is around 4, for the agricultural sector it was 9 in 2005 and 8.3 in 2006..

The latest data on 2007 show that agricultural import increased to nearly 800 million USD while exports reached 95 million USD. As most trade is in Euro these data are distorted by the weaker USD. The most important export products are tinned fish (25 million USD) and MAP (22 million USD).

According to the SSAF, the main reasons for the limited export are:

1. Low production level of agriculture and agro processing sectors
2. Lack of trading facilities (stores, processing, packaging of products)
3. Low control level on the products quality and safety
4. Low competition capacity of domestic agriculture products in the market because of their poor quality and relatively high production cost.

Other factors seem to be: a lack of experience on export markets; difficulties to guarantee sufficient (and continuous) supply and difficulties in transport. Often exporters find it difficult to combine the transport for their export with bringing back other merchandise.

Albania is pursuing a double track strategy for export promotion. The first is to sign Free Trade Agreements with neighbouring countries; between 2002 and 2006 FTAs were signed with Macedonia, Croatia, UNMIK-Kosovo, Serbia and Montenegro, Moldova, Bosnia-Herzegovina and Turkey. The quality and food safety requirements of these countries are less strict and Albanian products can enter their markets. The main obstacles are packing, a lack of business networks and finding merchandise for trucks on their return route.

The second line is to develop the systems to be able to export to the EU. An interim Agreement was signed between the Albania and the European Communities on trade and commercial cooperation, and Stabilization and Association (Law Number 9591 published on 27.07.2006).

Unfortunately the export promotion agency (Albinvest) does not pay special attention to agriculture. Considering the fact that it represents only 8% of all exports, this is understandable. Yet, at the same time, major export items like medicinal herbs do deserve special attention.

1.2 Poverty

Although the average economic growth in Albania can be considered as satisfactory, disparities in terms of income and Human Development are considerable, as the next table shows:

Table: Poverty level in 2002 and 2005 (poor means < 50 USD per month/cap.)

Stratum	2002			2005		
	Urban	Rural	Total	Urban	Rural	Total
Total	19.5%	29.6%	25.4%	11.2%	24.2%	18.5%
Mountain	24.7%	49.5%	44.5%	17.1%	27.7%	25.6%

Source: INSTAT - LSMS 2002-2005

So while poverty levels are coming down, in mountainous areas still one quarter of the population lives below the poverty level of US\$2 a day. The poorest of the poor, who comprise about 5 per cent of the population, struggle to put adequate food on the table each day.

The reduction in poverty is both due to economic growth and large inflows of remittances from migrants. However, the distribution of benefits was uneven. Real per capita consumption growth in urban areas was twice as high as that in rural areas. As a result the gap in poverty rates between urban and rural areas widened in absolute and relative terms. Low productivity of small family farms partially explain the slowdown in poverty reduction in rural areas and without the large inflow of remittances, living conditions would certainly be worse.

While rural poverty rates have come down, the gap between urban and rural has widened in absolute and relative terms. Consumption of urban poor grew by 19% during the period, the growth for the rural poor was only 6 %. Furthermore, consumption growth for even the lowest percentile rank of the urban population was higher than the growth for the highest percentile rank in rural areas. So poverty rates in rural areas declined much more slowly than in urban areas. As a result in 2002, rural poverty rates were 50 percent higher than urban poverty rates but 118 higher in 2005. Poverty has developed a more rural profile: in 2005 three quarters of the poor live in rural areas; in 2002 his was only two thirds.

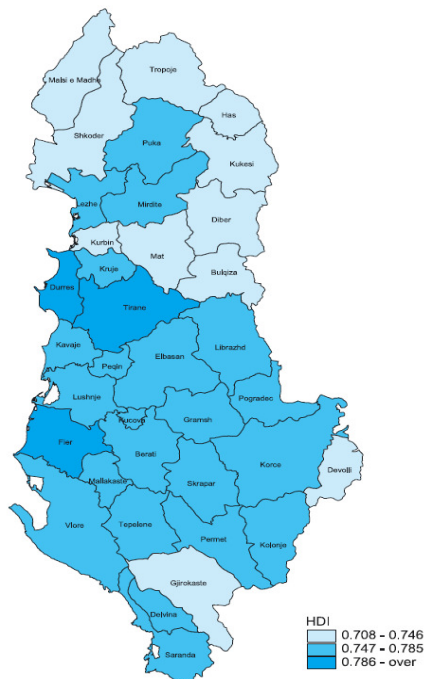
Poverty in Albania weighs particularly on women and young people. Women, who were guaranteed employment under communism, were disproportionately affected by the mass unemployment that set in when state-owned farms and enterprises closed and people found themselves with no alternative source of income. Faced with a lack of wage-earning jobs, women took a more active role in subsistence farming to support their households. Yet, women who are heads of households cannot maintain living standards as high as those in households headed by men. Discrimination and violence against women are serious problems.

Almost half the poor people in Albania are under 21 years of age. Larger families tend to be poorer. Fifty per cent of families with seven or more members live below the poverty line. The effects of poverty among women and young people in Albania are closely related to the problem of human trafficking across national borders.

Rural, northern and mountainous areas are the poorest areas in the country. The incidence of poverty is highest in the north-eastern districts of Kukes and Dibra, where in 2002 almost half of the population was poor and 80 per cent of families' income comes from social protection schemes, economic assistance and

disability payments. Migration is one of the solutions. Almost 30 percent of *internal* migrants come from the Northern mountainous areas, even though it has only 11 percent of the country's population. A quarter of people born in the Mountain have moved internally and half of them live in or within the vicinity of Tirana. While the flow of *international* migrants has declined in all the other parts of the country, it has continued to rise for the Mountain areas.

The next graph of the Human Development Index shows the geographical spreading of poverty. The mountainous North Eastern districts are the poorest and have least access to social services like education, health, clean drinking water. Even access to primary education seems to have been reduced in the last years.



1.3 Donor interventions

Since the early 1990's the WB has been the major donor for the agricultural sector. The total amount invested in irrigation rehabilitation will have bypassed the 100 million USD mark. Much of it was lost as both the infrastructure and the WUA are still functioning very poorly.

USAID is the second major donor. From the beginning it stressed the need for private initiatives. It has run a series of projects; most of them supporting agro-businesses. An conservative estimate of the budget would be 20 million USD. The most recent programs are EDEM and AAC. They have a budget of 10 million USD between them. All these projects created many agro-business (and some farmers) associations and tried to set up private consultancy firms. Most of the former failed and all of the latter.

GTZ has probably been the third largest donor in agriculture. It run a number of projects; mostly working on policy development (in MoAFCP) and on marketing (market infrastructure, standards and priced information systems). Lushna and Shkodra have been priority areas for them. The impact has been limited.

Smaller donors, usually focused on either a geographical area or a very specific sector or even a combination of both. So in the second half of the 1995 a range of projects started to assist farmers more directly with technical assistance and other practical support. The most well known bilateral projects have been: French support for Korca, Swiss support for Puka, Dutch support for Fier and later to Gramsh, Germans support (GTZ) for Lushna and Shkodra.

NGOs initiated some large projects as well. Looking only at the Dutch support only we can identify: ICCO supported Agrinas (Pogradec), Dorcas (Korca), AFTD (Shkodra), Diakonia Agape (Elbasan), Agrinet (Korca) and the Myzeqe Farmers Federation (Lushnja). Novib supported grape growers via a credit for orchards. The Dutch embassy also sponsored several business to business projects (via PSO), mostly in the coastal plains: setting up a greenhouse to produce (grafted) vegetable seedlings; a store for seed potatoes; setting up a production and marketing system for cauliflowers.

Both authors have been involved deeply in many donor initiatives. It seems that the single most important key factor for success has been a strong focus on the transfer of technology by specialised (foreign) experts to the final beneficiaries. Dutch experts working in the Fier Agricultural Program (FAP 1995-1999) or in PSO projects introduced several new technologies: grafted vegetable seedlings, exporting cauliflower and assisted potato farmers, traders and researchers on modern potato production systems. In a similar vein British experts (from CABI) are presently assisting apple growers in Korca to improve the quality and quantity of the apples. Guided study-tours to countries like Greece, Italy and Macedonia and occasionally to Western Europe are another key-element in the methodology.

It seem the olive sector had the same experience. A quote from the SNV-olive value chain study in 2004: "It is very important to underline that because of several years of experience in the processing, trainings, technology transfer, exchange of experiences with Italian producers applied successfully by some foreign organizations, the farmers and olive oil processors try their best to collect the olives in the right time, transport it within the same day in adequate containers to the processors, and the later try to process it the same day too, paying attention that the olives, in the worst of the cases should be processed within 48 hours from their collection. This kind of treatment of the olives is very important if you want to produce quality olive oil."

The key to innovations is access to foreign experts and expertise. Unfortunately few projects that brought such expertise to Albania managed to institutionalise their innovations by linking new technologies to the Albanian AKIS. So far the Regional Agricultural Advisory Centre (RAAC) was most successful in institutionalising innovation. It combined public and private funds, yet it ultimately failed. Its' failure is an illustration of the difficulties in getting Albanians to cooperate. The direct cause of the closure was a corrupt high ranking official of MAFCP, who used RAAC for personal gain. The deeper problem was that all other actors allowed him to do so. In the board of RAAC both farmers and the input suppliers were represented (among others via the Farmers Union and AFADA). They did not try to stop the misuse of funds. Also MAFCP did not continue with RAAC (after terminating the corruption), although it was a prominent element in their extension strategy.

Failure to link to the AKIS means a failure to disseminate the impact of innovations introduced by projects. Two examples are given here. FAP worked for four years to create the Albanian National Seed Potato Association (ANSPA). Based on on-farm trials the economic viability of Dutch seed potatoes was proven in 1995. In the next years the actions of different stakeholders (incl. donors subsidising seeds) were increasingly coordinated and a commercial seed supply system was set up. ANSPA was the vehicle for this innovation. Potato yields increased by one third in three years. After 1999 the technical support was stopped and so did the increase in yields. The Albanian AKIS and the private stakeholders did not manage to continue the increase in yields.

Also the impact of the RAAC seems to have weaned after it was 'terminated' in 2005. The next table shows the area under different types of greenhouse since 2000.

	2000	2001	2002	2003	2004	2005	2006	2007
Heated greenhouses	17	13	13	19	28	35	48	62
- with glass	15	13	12	14	18	11	19	15
- with plastic	2	0	1	5	10	24	29	47
Greenhouses without heating	445	424	496	533	612	615	627	621
- with glass	114	85	70	88	79	81	65	75
- with plastic	331	339	426	445	533	534	562	546
Total	462	478	524	552	640	650	675	683

Source: MAFCP-statistical yearbook 2007 (draft)

In 1990 Albania had 1000 ha of greenhouses; of which 370 ha was with glass. In the 1990s many greenhouses were destroyed but in the second half of the decade farmers started to invest in low costs, plastic greenhouses; often 0.1 ha small or even less. In 2005 the 2KR project subsidised farmers to invest in high-tech heated greenhouses (glass and plastic). This explains part of the increase in heated greenhouses in the last years.

What is relevant for our analysis here, are the low tech, plastic greenhouses without heating. They are overwhelmingly concentrated in Fier prefecture. In 2007 there were over 2500 farmers there that have in total 300 ha of these. On average they have 0.12 ha. In Berat over 800 farmers have some 125 ha; also 0.125 ha per farm. These small farmers were the primarily target group of the RAAC. Between 2000 and 2004, some 15-20 advisors supported them with training and advise. The table shows a rapid increase in the area with low tech greenhouses in that period. Yet this increase stagnated when the RAAC was closed down (troubles started in 2004 and the financial support of MAFCP was stopped in 2005).

1.4 Lesson learned

After transition the agriculture sector has shown great resilience. First of all vegetable and potato production improved, then livestock, then the processing industry and lastly the perennial crops. In all cases the growth was based on initiatives from the private sector. Government institutions did not manage to contribute much; actually in some cases they obstructed progress.

Most growth stems from using more inputs; the growth due to innovations (=making more efficient use of resources) has been limited. Only when foreign project provide (inter-)national experts and expertise directly to farmers, innovation occur.

Unfortunately few projects managed to institutionalise innovations by linking new technologies to the Albanian AKIS. So the dissemination of modern skills and knowledge to the Albanian farming community at large is still very limited.

The Albanian AKIS itself started from a very weak base and is still in need for more support. Next to the very small farm size this is the biggest constraint for further growth in the sector. Ongoing innovation is needed to make Albanian agriculture competitive. This is particularly urgent for mountainous areas where poverty is wide spread. As transport costs in these areas will remain a constraints, the innovations in those areas should focus on high value products.

2. Present situation in the fruit and vegetable sub-sector

This chapter deals with the general situation in the fruit and vegetable sub-sector. This is a clearly distinguished part of the Albanian agricultural sector:

- it has its own input supply system; particularly seeds and seedlings
- it has its own specific production systems (greenhouses; orchards; open field vegetables) that require specific equipment and it has a specific labour profile (more labour intensive)
- it has its own marketing channels.

Within the sub-sector we can distinguish a number of key-commodities. We focus on those commodities/ value chains on which SNV has been working until now and on which SNV provided us information.

Most have a specific geographic spreading; with a core area where most of the innovations are taking place and a secondary production area..

Commodity	Core area	Secondary area	Studies
Apples	Korca	Coastal plain, Diber, Kukes, Berat	Apple Farmers Value Chain (AAC Korca)
Greenhouse vegetables	Southern coastal plain	Tirana- Dures, and near Shkodra	Value Chain Assessment on Vegetables (AAC-Lushnja)
Open field vegetables	Divjaka	Northern coastal plain Korca plains (esp. for beans)	Value Chain Assessment Vegetables (AAC-Lushnja) Protected vegetable production in Albania. Balliu 2008. Studim per perdorimin e fondit Kunderparti 2KR
Olives	Vlora, Berat, Saranda, Fier,	Elbasan, Tirana	Olive Value Chain Assessment (AAC). SNV draft report on olive value chain (2005)
Watermelon	Saranda, Divjaka	Northern Coastal plains,	Melon Value Chain Assessment (AAC study)
Medical and Aromatic plants	Peshkopi	Northern Albania and part of Korca area	Analysis of the Value Chain for medical and aromatic plants in Diver region. (SNV; Febr.2007)

Next to these studies, the mission will use its own extensive knowledge and experience of the sub-sector.

To analyse the functioning of the sub-sector we will analyse the functioning and performance of the main Value Chains. It is based on a fairly common definition of a Value Chain:

A Value Chain is an alliance or strategic network between independent enterprises, within a (vertical) chain of activities, that competes on a specific market, defined by consumers and outlet.

The vertical chain of activities refers in our case to all activities from input supply, production, processing, wholesale and retailing to the final consumers.

2.1 Mapping: the actors and the flow of products

Agriculture input suppliers

In the first decade of the transition quality of input was one of the main constraints in the sub-sector. Farmers were cheated by dealers who were sometimes even cheated by international dealers. At one time a complete shipment of P-fertiliser was below standards. Some locally produced cucumber seeds only produced male flowers and the state owned seed enterprise sold 'Dutch seed potatoes' with falsified certificates.

Farmers complained and rightly so. Over time however the situation improved much. Many dealers have direct contact with top-quality international suppliers. And especially in the coastal area the competition is fierce, so prices are acceptable. The main players are Agroblend and Bruka, general suppliers of seeds, seedlings and agro-chemicals for the sub-sector. In the coastal area and also in the Korca plains, they have a network of dealers working for them. They compete with a number of medium and smaller niche players; mostly specialised seed suppliers for crops like potatoes, tomatoes, cucumbers, watermelons and fruit saplings (e.g. apples). In the area of fertilisers they compete with a number of rather large national players as well. Input supply in the mountainous areas is less well developed.

The input supply industry has been able to support a series of major innovations in the sub-sector. The changes in the greenhouse sector are most spectacular. Now a range of materials is available: all kind of plastic, water pumps, drip-irrigation systems etc. In the future the emphasis will be more on labour saving technologies. Another trend seems to be that cheaper inputs (e.g. from China) get a second chance on the market as the productivity in the sector (and so farmers' willingness to invest) is under pressure.

Farmers

The next table gives some data on the chosen commodities from the last (draft) statistical yearbook of MAFCP. It shows the areas of the crops, the number of farms involved, the yields and the total production.

Commodity	Area	No. of farms	Surface (ha) or no. of trees (1000)	Yield (ton/ha or kg/tree)	Total production
Apples <small>(data on fruit-trees, most are apples, but surely not all)</small>	Korca,	21.980	Trees 1.747	16.2	28.331
	Diber	25.929	565	24.1	13.631
	Fier	37.738	721	16.6	11.993
	Elbasan	30.079	669	15.4	10.298
	Berat	24.146	581	21.0	12.212
	<i>National level</i>	<i>303.565</i>	<i>6.762</i>	<i>17.8</i>	<i>120.032</i>
Greenhouse vegetables	Fier	2550	Ha: 326	88.6	25.867
	Berat	852	150	95.4	12.050
	Elbasan	613	64	78.1	4.009
	<i>National level</i>	<i>4.984</i>	<i>683</i>	<i>86.8</i>	<i>47.017</i>
Open field vegetables <small>(data per districts; not prefect)</small>	Lushnja	Virtually all farmers have some vegetables On average 1 dynym	Ha: 2.759	Ton/ha 31.2	91.743
	Tirana		2.530	14.8	39.960
	Shkodra		2.396	21.8	55.581
	Kavaja		2.301	18.7	45.822
	Fier		1.785	22.9	43.481
	<i>National level</i>		<i>273.028</i>	<i>28.074</i>	<i>22.4</i>
Olives	Vlora,	15.226	Trees in prod. 978	8.3	8.080
	Berat	16.309	689	9.1	6.257
	Fier	24.779	836	5.6	4.702
	<i>National level</i>	<i>96.839</i>	<i>3728</i>	<i>7.4</i>	<i>28.120</i>

Source: Draft MAFCP statistical yearbook 2007

Apples

Fruit production has increase from 65 thousand ton in 2000 to 120 thousand ton in 2007. This increase was mainly achieved by the increase in the number of trees from 4.1 million to 6.7 million. The yield per tree has risen from 15.5 to 17.7 kg/tree.

Greenhouse vegetables

There is a marked geographical concentration of greenhouses. The most advanced greenhouses (heated and with glass) are found in Durres. Glass houses without heating are mostly found in Fier (23 ha), Elbasan (12

ha) and Durres (10 ha); most of these are rather unproductive remnants from the communist era. Heated plastic greenhouses are found in Berat (15 ha), Tirana (8 ha) and Vlore and Fier 97 ha each).

Open field vegetables

The area under vegetables is decreasing; in 2000 it was 32.800 ha. This remained stable till 2005, after which it started to decline till 28.000 ha in 2007. The largest declines stem from Vlore, Tirana and Lushnja; all losing some 6-700 ha in the last two years. Lehze, Fier, Elbasan and Shkodra lost some 4 to 500 ha. Only Mat gained about 200 ha, and Berat some 60 ha. Total production has increased with some 10% in the early 21st century but is now more or less stable at some 680 thousand MT per year. This means average yields have gone up.

Olives

Olive production is not stable. Since 2000 total production fluctuated between 27 and 40 thousand ton. The number of trees *in production* is increasing over this period (from 3.2. to 3.7 million) but the yield per tree changes from 7 till 12 kg/tree. Production will increase in the near future as the number of trees that is not in production increased from 0.4 to 1.0 million. This difference must be caused by new plantings which mean that production will increase by some 20% in the next five years.

Olive oil production is concentrated in Vlore (10 thousand HL in 2007) and Berat (59 thousand HL). Together they produce over 60% of total of 25.7 thousand HL.

Medical and Aromatic Plants

In the past about 100.000 people were involved in the MAP business. Today it is estimated to be only one third of this. The amount they collect is 8 times less than in communist times. This means that the productivity can be nearly tripled if the same productivity can be reached as before 1991. About 10% of the total production of 8.000 MT is from cultivated plots. None of these is in Diber.

Intermediaries (incl. cold stores)

Most Albanian farmers sell their products directly on the local market. Yet, the specialised ones, like many farmers in our sub-sector sell to regional markets, either via intermediaries or by bringing it their themselves.

There is a need for some form of consolidation of the production in order to ensure that traders get access to sufficient quantities of good quality products. There is only one well known cooperative who does this: the Muzeqe Farmers Federation. In 2007 they marketed 770 MT of vegetables for their 140 members. Mostly (630 MT) via one trader. They do however also sell directly to some supermarkets. They still have problems of getting sufficient quantity (and quality and diversity) for supermarkets and exports. For example during the mission they were exporting 3 ton to Macedonia. Yet the truck could carry much more.

It was mentioned to the mission that one or two private actors in Duvjaka are operating like consolidators; buying vegetables from farmers, cleaning, sorting and packing them. Last year some 300 MT of carrots was handled this way and found its way to export (mostly Kosovo). The mission could not get this confirmed in Divjaka.

One key-element in a well functioning value chain are cold stores. Losses of the produce which goes through a cold chain system are estimated to be 5-10% while generally losses of the produce at the ambient temperature are 35-50%. Next to that a cold chain system ensures a higher quality of the produce and an optimal timing to enter the market, both of which is translated in a higher price for the produce.

In an EDEM study (2006?) the researchers were able to identify only 12 companies with a cold store. Seven of them did their main investments after 2001. Four companies, namely Frigo-Food, Alcred⁹, Campo-Frio, and Konda representing more than 75% of the total storage capacities. Post harvest system was found to be rather rudimentary with only two cases – Alcred and Large Refrigeration of Korca - having almost complete post harvest chain. The rest of companies have only parts of the post harvest chain.

Despite the many nice words on the need for cold storage, the EDEM report states: “The reality is that the vast majority of the cold storage capacity is used for other products such as Meat products, Dairy products, ice cream etc (seen at Frigo-Food, Campo Frio, Frigoriferi Korca). Casually these companies use their storage capacity also for fresh fruits and vegetables. Even in this case they prefer imported produce because this produce comes to them ready to be stored, in better conditions and cheaper price.”

The most remarkable on the EDEM study is that it is not clear whether storing fruits and vegetables is a profitable activity or not.

Processing

Fruit and vegetable processing

For fruits, home processing is still the norm (esp. in mountainous areas); e.g. drying (apples and other fruits), making jams and compotes and, most importantly, producing *raki*. For vegetables some small scale processor make pickle from cucumber and peppers.

In the past fruit processing was an important industry, e.g. in Peshkopi and Korca. In the 1990's this industry collapsed. In 1992 the total amount of jam and compote was 2.776 MT. In 2001 this has dropped to 116 MT (or less than 5% of the original). Since then it increase again till 881 MT in 2006. The amount of tinned vegetables dropped from 1.861 in 1992 to 105 in 2000. Then it re-bounced to 1.143 in 2006. The collapse of the fruit and vegetable processing industry has been much more dramatic than for other sub-sectors (e.g. wheat, milk and meat) processing¹⁰.

The next table shows the development of the number of fruit and vegetable processors, their number of staff and the investments since 2000.

	2000	2001	2002	2003	2004	2005	2006	2007
Number of fruit and veg. processors	16	15	19	20	19	22	26	20
Number of staff	121	82	145	123	125	123	181	176
Investments (1.000 Euro)	28	134	6	26	67	118	62	101

Source: Statistical Yearbook MAFCP, 2006

Of the 20 fruit and vegetables processors, 10 have less than 5 staff; 6 have between 5 and 10, 3 have between 10 and 20 and one has more than 20 staff.. The data on investments must be incomplete. Large scale factories require substantial private (foreign) investments and recently some rather large processors occurred; experts estimate the investments at least a few millions USD.

According to the latest EDEM report at present the main constraints for the processors are:

- a poor legal framework for businesses;
- small and fragmented land holdings;
- lack of market information;

⁹ At the time of writing the present report Alcred left the business

¹⁰ Data from Prifti and Tanku, 2001

- illegal competition;
- a complex, ever changing taxation system;
- weak inspection and regulatory enforcement;
- lack of capital for investments and access to low/affordable interest loans from banks;
- high cost of the packaging material and sometimes the difficulties to get them on time, considering that they all come from import;
- poor level of the processing technologies and high rate of depreciation;
- lack of storing capacities for raw material, which needs better storage conditions until processed
- Difficulties in finding the raw material at sufficient quantities and adequate quality for processing.

The next table, from EDEM, shows the need for raw materials of fruit processors that are client of EDEM:

Company	Peaches	Apples	Figs	Plums	Cherries
Sejega (Tiranë)	10	10	20	10	20
Sidney (Berat)	50	150	50	50	20
Amarilto (Lezhë)	25	-	20	15	10
Shpiragu (Berat)	80	10	35	25	50
Kampion (Shkodër)	50	150	50	50	50
Çuliqi (Shkodër)	35	20	50	20	30
Hado (Mallakastër)	30	-	-	20	30
Total Needs (estimation)	280	340	225	190	210

Source: EDEM, personal communication

In this table we see that e.g. for apples, the two biggest factories only need an equivalent of 2.5 ha of production when modern methods are used (or 5 ha with traditional technologies). Indeed even medium scale fruit processors in Korca who make jams and compote of cherries/plumps, import 20% of their raw materials from Greece¹¹.

Vegetable processors that are client of EDEM need:

Company	Red Pepper	Green Pepper	Hot Pepper	Cabbage (white)	Cucumber	Green Tomato	Tomato - Paste	Egg-plant
Sejega (Tiranë)	500	5	100	10	300	10	-	10
Sidney (Berat)	400	50	10	100	150	50	2 000	10
Amarilto (Lezhë)	60	5	5	40	40	5	-	-
Alfa (Lushnje)	50	150	20	120	50	70	-	100
Shpiragu (Berat)	200	5	5	100	50	5	-	-
Kampion (Shkodër)	200	50	10	100	100	25	-	20
Fani Food (Shkodër)	-	-	-	-	-	-	6 000	-
Çuliqi (Shkodër)	60	20	5	100	35	10	100	
Hado (Mallakastër)	100	20	5	50	20	10	2 000	-
Total Needs (estimation)	1 570	305	150	620	745	195	10 000	150

Source: EDEM, personal communication

These needs again show the extend of the supply problems. Albanian farmers can neither produce the quantity nor the quality to satisfy the demands of even a medium sized processing company. Collecting these raw materials is such a big problem that foreign projects are needed to help to locate the supply..

Also prices are often not competitive as productivity is too low. Large scale processors with modern processing equipment (dry-freezing, cutting, deep-freezing storage facilities) able to export to the EU use mostly imported raw materials from Macedonia and Greece.

¹¹ Apple study: page 8. The companies are: A&A company; Haba Ballkan; Leopardi; Babasuli; Bulgarec Processing Unit

The supply problems are most likely the reason for the decline in the number of processors in 2007. Not only small factories face problems. The company with modern equipment and export contracts that dominated the market for some years went bankrupt in 2007. Its large refrigerated stores (in Tirana) seem to be owned by a supermarket now. So for the time being the best strategy is to assist medium scale processors to using modern technologies and improve the quality/reliability of the supply.

Olives

In the early transition period farmers continued the ('illegal') tradition of home processing of olives by feet. In the transition the large factories collapsed and slowly small, village level processors came to the market. MAFCP statistics show that of the 120 vegetable oil processors; 114 have less than 5 staff.. Two have more than 20 staff; at least one is a sunflower oil factory.

The next table shows the need for raw materials for the oil processors supported by EDEM (which is not all):

Company	Table Olives
Sidney (Berat)	50
Amarilto (Lezhë)	100
Shpiragu (Berat)	150
Çuliqi (Shkodër)	100
Çuedari (Berat)	200
Hado (Mallakastër)	100
Total Needs (estimation)	700

Source: EDEM, personal communication

Indeed again fairly small amounts. Most olive processors have a very limited capacity and produce only for local markets. Many olive press owners actually rent their press to farmers most of the time, so that they can work on their own account (costs: 700-1300 ALL/quintal; often paid in oil). Often second hand machineries (but not only) are used. Hygienic and other standards are very low. Few processing companies comply with the EU food safety standards; therefore export to the EU is not feasible. Some processors have developed their own brand and/or are involved in wholesaling and distribution. In this way they capture a large share of the total value added.

The last few years, thanks to the awareness of associations and interventions with crediting, technology-transfer etc. of several international organizations, there is an increase in the production of olive oil. Although total olive production does not increase (FAO data show that it is rather erratic), the amount of oil does; in 2003 some 1.200 tons was produced, in 2004 it was already 4.000 tons and in 2006 this

Recently, the Organic Agriculture Association and interested producers, started to produce organic olive oil, mainly destined to foreign markets. For this one producer is already equipped with organic certificate by international organizations, and another one is on the process.

Medical and Aromatic Plants

The processing here consist mainly of cleaning, drying and packing. A few large players dominate this activities. They are powerful players in the chain as they have access to export markets.

Marketing structure

In general Albanian farmers market only 30% of their production. In the vegetable sub-sector this is much higher, but still substantial amounts are produced for home consumption and processing. In fruits the share of the production marketed might be even less than the average 30%.

There are several types of markets:

- Road side sales: in bigger villages and in towns and along the main regional roads
- Retail markets in regional towns
- Wholesale markets near production areas like field vegetables in Digvijaka and greenhouse vegetables in Lushnja. Others are in Shkoder and Korca.
- Wholesale consumer markets in a few main towns (Korca, Fier, Durres, Shkodra)
- Wholesale market in Tirana where imported products meet local production.

A new development is the coming of supermarkets in Tirana (esp. Euromaxx, Conad ect.) and Durres. They need a diverse assortment of fresh fruits and vegetables and they generally buy this from wholesalers. The Muzeqe Farmers Federation did manage to deliver directly from its members to a supermarket in Durres; considering the amount of work involved (to collect 15 different products in fairly small amounts from different farmers) the margins are quite small.

In many cases Albanian farmers lack virtually everything needed to offer attractive products:

- (quality) standards are not used (although GTZ published quite some of them)
- There is only a kind of visual/quick sorting or grading of products
- Packaging is very poor; although a new packing industry is developing. Boxes are often too large; there is no circulation/ recycling of packing materials etc.
- The opportunities for cooling and storage are very limited. Cold stores outside Tirana are very hard to make profitable as there is not sufficient produce to be stored the whole year
- Physical market infrastructure is poor and some of the better ones are very badly managed
- Cooled transport is hard to get and expensive
- Labelling is not common
- Hygiene and food safety standards are not respected/enforced. So producers/processors who invest in more safe food are not always rewarded. This is a particularly severe problem in the case of milk and cheese.

So the marketing agriculture products and food is still very poor. On the other hand the market in the Durres-Tirana corridor is a growing market and there is some progress in using logo and brand-names. In virtually all cases assisted/pushed by outsiders. In Olives several brands have been created. The Myzeqe Farmers' Federation has its own logo that is visible on its boxes of tomatoes and cucumbers. Some companies use a logo as well; e.g. Agrokon. Some niche markers are also developing in Tirana and Durres, e.g. during the tourist season. One niche market is organic production.

Organic production

In recent years a growing demand for locally produced organic products in Albanian markets has been observed. Today about 13,700 hectares, including wild collection areas, are managed organically and certified. According to MOAFCP there are about 90 farms certified organic, producing medicinal plants, olive oil, fruit (apple, pears, grapes and peaches), vegetables (tomatoes, paprika, cucumber, spinach and aubergines). Smaller quantities of eggs, cheese, honey, wine and meat are also produced. The largest number of farms are located near the bigger cities (Tirana and Durrës), which also have the biggest markets for organic products.

To a certain extent Albanian products have been available in international markets for some years now, and growers are using Albania's potential for organic production to access new markets. Producers/traders have been participating in international fairs, steadily enlarging their buyers network. One successful pioneer is the organic olive oil produced by Shpresa Shkalla. It was selected as the best quality oil among 200 countries in two international competitions in Italy in 2005 and 2006 (PremBiol). Albanian organic herbs and spices

are also increasingly in demand, and an initiative to supply Western markets with winter vegetables was successfully launched. Albanian organic essential oils are exported to EU countries as well as to the US¹².

This is the positive side of the story; however the mission also met with some farmers who have been certified as organic growers but who have to sell their products on the regular market as they can not find organics customers.

Export

Fruits and vegetables and watermelon

The next table gives the latest data on export of fruits and vegetables

	Quantity (MT)			Value (1000 Euro)		
	2004	2005	2006	2004	2005	2006
Medicinal plants	8,647	8,238	8,041	11,575	12,607	12,959
Fruits	57	86	1,023	9	31	990
Watermelon	4,223	10,380	11,295	302	515	919
Legume-vegetable	745	658	649	1,739	743	761
Seedlings	513	727	1,128	363	553	773
Vegetable	811	427	1,093	228	162	277
- tomato	317	123	204	78	29	43
- cucumber	89	16	26	16	2	5
- fresh onion	94	18	32	1	6	3
Potatoes	12		4	1	-	3
Total fresh crops				15,252	15,944	18,130
Olive oil	22	1.6	54	23	11	171
Vegetable oil	290	264	360	225	214	202
Tinned vegetables	1045	1148	563	867	970	1,088
Tinned fruits	30	3	0.1	27	10	0
Fruit juice	1032	1467	372	379	67	40
Total process F&V				1,521	1,273	1,501
Total agric. Export				42,189	45,632	58,643
Fresh F&V as perc. of total agricultural export				36	35	31
Processed F&V as perc. of total agricultural export				4	3	3

Source: Statistical Yearbook MAFCP, 2006

The data are hard to interpret because:

- The fortunes of single companies can make a huge difference. One company is responsible for the cauliflower export to the EU. It stopped in 2006. In 2006 one transaction with Chestnut lead to a dramatic change in the general trend. Etc.
- Although the data /statistics are improving, it is not sure whether all transaction are included.
- Some export is hardly related to Albanian production as raw materials are imported and the final produce exported.

¹² All information on organic issues is from an article of Mr. Anula Guda, manager of SASA, on the internet

Anyway, some basic conclusions can be drawn:

- medical plants are the far the most important export product, with some 13 million Euro per year (some claim the actual figure could be three time higher)
- the export of water melon is rather stable
- the export of white beans (from Korca to Greece) collapse, due to certification problems, but discussion in the field suggest this is overcome and the export could increase again
- the vegetable from the greenhouse sector are struggling. Discussion in the field suggest export to Balkan countries increased in 2007.
- the export of fruits increased dramatically in 2006, but the mission could not find out whether this concern Albanian production or not; most likely not.

The main export destinations in 2006 of fruits and vegetables and of MAP can be found in the next table.

	Weight (MT)	Value (1000 Euro)	%
Medical plants	8,041	12,959	
Germany	3,382	5,797	45
USA	1,013	2,126	16
France	715	1,116	9
Turkey	711	829	6
Italy	565	1,074	8
Watermelon	11,295	919	
Kosovo	6,156	403	44
Jugoslava	2,274	241	26
Greece	1,072	97	11
Italy	681	58	6
Vegetables	1,058	277	
Macedoni	123	28	10
Jugoslavia	72	44	16
Kosovo	275	15	6
Italy	36	110	40
Suisse	26	50	18
Fruits	1,023	990	
Germany	513	685	69
Itali	337	216	22

Source: Statistical Yearbook MAFCP, 2006

Olive oil

The import of olive oil increased six-fold from 82 MT in 2004 till 504 MT in 2006 (mostly from Greece). So the market is there. The price of the import increased over that time from some 400 to 700 ALL/kg. In 2006 for the first time a sizable amount of oils was exported: 54 MT. Nearly 90% of it went to Croatia at a price of 390 ALL/kg. Two MT of organic extra virgin oil was were exported to Switzerland, as the price of 1125 ALL/kg. This shows the potential; yet also the need to work on quality.

Small bottled quantities of olive oil are imported from Greece and Italy, and you can see that they are present especially in supermarkets and any restaurant. Until late, almost all traders used to sell olive oil without specifying its category. Now they are making endeavours to trade it as per categories: Extra Vergine, Vergine and normal one, paying more attention to the market requests. There are several brands traded all over Albania, Tirana being the biggest market.

2.2 Benchmarking: the performance of the sub-sector

Comparative advantages

Albania is supposed to have a long comparative advantages for most of the commodities discussed here. The idea is that both land and labour are relatively cheap in Albania compared to the EU and to most neighbouring countries. Next to this the commodities discussed here profit from specific circumstances in their respective areas of cultivation.

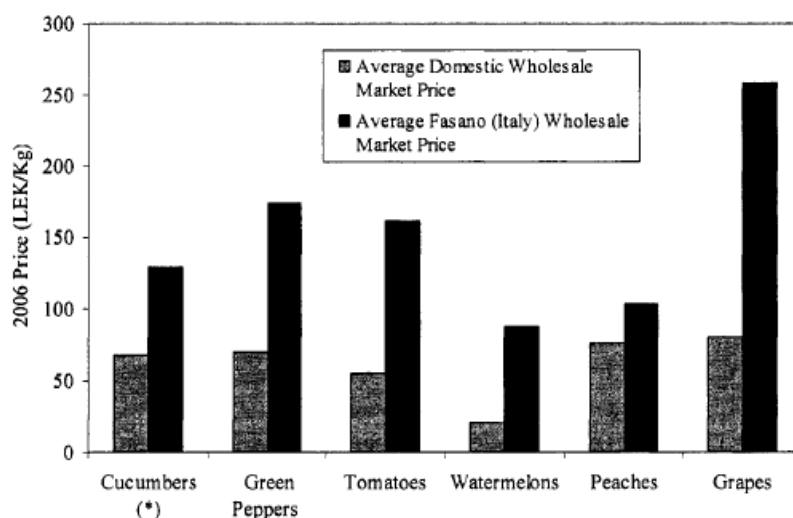
- Apples are grown in mountainous areas with an appropriate climate and reasonable good soils. Coming from rather poor areas, the labour is even cheaper than average.
- Olives can be grown in hilly areas and on rather poor soils that can produce little else.
- Open field vegetables and watermelons are grown in areas that are relatively warm, especially in spring. In practice: the Adriatic coast. In this way they can be early on the market. This counts especially for Saranda, but also for Divjaka and even the Northern coastal area near Shkodra.
- Greenhouse vegetables thrive in areas that receive a lot of sunshine and warm spring temperature. This can be found just off the coast, mostly in the southern plains.
- Medical and aromatic plants can be found in mountainous areas. Labour is cheap there. And as the price per kg is high, transport costs are not so relevant.

Competitiveness on the markets and trends

Whether these long term advantages can be made to work depends on the efficiency of the value chains. Land can be cheap per hectare, but if yields are low, the costs for land per kg of produce can be still high. The same can be said about labour.

So while many farmers, policy makers and project claim that Albania's agriculture can be competitive, this is not sure. Actually the debate is often quite confused, as many people use export- and import data as a prove that there is an 'unmet demand' or an export potential. It is not always as simple as that. We take tomatoes here as an example of the debate. It can be used as an indicator for the *potential* and of the *constraints* in exports. It can also be used as an illustrative of the use of import data. Let us first look at a graph from the latest WB report:

Figure 4. Albanian producers will gain significantly if they can meet standards for export to the EU (Domestic vs. EU Wholesale Market Prices 2006)



Note: (*) 2005 Average Wholesale Market Prices
Source: MAFCP, 2006.

The conclusion is already given in the title: Albanian producers will gain significantly if they can meet standards for export to the EU. Logically this is not correct as two different things are compared. The wholesale price of tomatoes in Albania might be half of that in Italy, yet these tomatoes are totally different. The Albanian tomatoes they are not graded; not (or poorly) packed, not certified etc. And, probably most crucially, the price is very low in summer when the market in Albania is flooded with poor quality produce. So to conclude from this table that Albania has an export potential is too simplistic.

A second flawed reasoning stems from the SNV Sub-sector analysis. It uses import data to show that Albania imports tomatoes with a value of 2.6 million Euro. This is then translated as an indicator for 'unmet demand' and as a 'potential to increase household incomes'.

The next table show a different picture. It gives the prices of tomatoes in 2007.

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AV.
Farm gate price (a)	101	108	97	83	46	42	25	40	73	59	44	44	50
Wholesale price domestic (b)	120	126	123	122	66	61	40	61	95	80	67	64	77
Wholesale price import (c)	149	150	145	144	85	69	55	69	107	96	78	73	131
Retail price (d)	161	173	167	164	88	79	57	80	116	102	88	83	115
Whole sale margin (b/a x 100)	19	17	27	47	43	45	60	53	30	36	52	45	39
Retail margin domestic (d/b x 100)	34	37	36	34	33	30	43	31	22	28	31	30	32
Retail margin on import (d/c x 100)	8	15	15	14	4	14	4	16	8	6	13	14	11
Premium wholesale for import (c-b)	29	24	22	22	19	8	15	8	12	16	11	9	16
Retail price / farm gate price	1.6	1.6	1.7	2.0	1.9	1.9	2.3	2.0	1.6	1.7	2.0	1.9	1.8

Source: MAFCP Draft statistical yearbook 2007

The table shows that wholesalers pay 16 ALL/kg more for imported tomatoes than for locally produced tomatoes. So Albanian tomatoes are beaten on their home markets. In spring this is much higher: 22-29 ALL/kg. In summer and autumn it is between 8 and 19 ALL/kg. This can be attributed to better packing, better quality, better sorting etc. The difference between the margins that retailers make on imported tomatoes (11%) versus the domestic production (32%) is a good indicator of the problems the supply chain is causing. Apparently retailers need 21% more margin on domestic produce as they have to (re-) sort and pack them and have to disregard the poor quality ones.

We saw that the premium on import is highest in spring. The next graphs shows that virtually all imports take place in March/April.

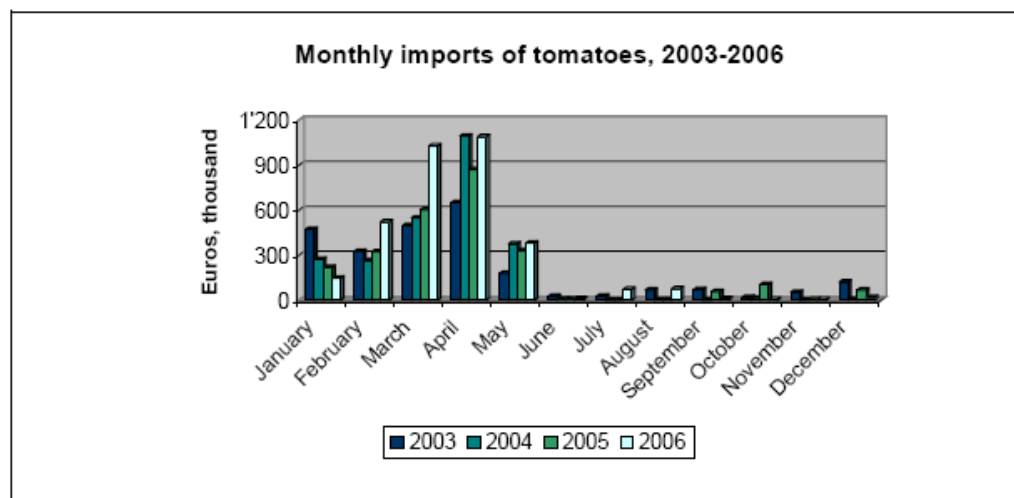


Figure 2 Source: Albanias, ACIT

The reason for this is simple technical/economic one: in spring Albanian greenhouse owners can not produce tomatoes at competitive prices as the light intensity is too low at time (compared to more Southern locations in Greece, Turkey etc.).

So the final balance of the analysis is that:

- Albania will continue to import tomatoes in spring.
- Albania will be able to stop the (limited) imports in the other months in the near future
- As local markets get saturated export to Balkan countries is an opportunity, mostly in early summer and late autumn. In 2007 the export doubled from 204 MT to over 482 MT. Still the price is rather low: 35 ALL/kg (in 2006 only 26 ALL/kg). This could be due to underreporting of the value at the customs, but also an indication that only at the peak of production, prices are sufficiently low to export. Just to give an idea of the potential size of the market: the value of tomato imports in Croatia in 2006 was 11 Million Euro; in Bosnia 7 M, in Serbia 8 M and in Slovenia even 15 Million.
- On the EU-market Albania could profit from its low cost for labour and land and a rather favourable climate. Yet in practice these advantages can only be 'cashed in' when productivity (in terms of quality and quantity) on farms is improved as well as post-harvest handling.

For other products the situation differs: e.g. apples compete with imports from Macedonia that has a similar climate. So there is no principle reason why Albanian apples could not substitute the imports.

2.3 Distribution of the added value in the sub-sector

The main question here is: how does the price change as the product moves up the value chain. For a good Value Chain analysis it is crucial to know where the main costs are made and what the profit margins are of the different players. Unfortunately none of the studies on the Value Chains is clear on this. Working with the data the mission had from a range of other sources, it was possible to compile the following general picture for the costs structure on farm with four crops with extensive (traditional) and intensive husbandry.

Costs	Plastic greenhouse		Apples		Water melon		Pepper	
	Extensive	Intensive	Extensive	Intensive	Extensive	Intensive	Extensive	Intensive
Labour	11.5	9.7	10.9	7.5	4.1	3.2	14.7	12.4
Operational costs	9.7	8.3	9.3	11.2	7.8	6.7	18.5	21.5
Fixed costs	13.9	12.0	14.3	9.7	7.2	6.7	13.3	10.5
Carton boxes	5.0	4.3	6.7	3.3	0.0	0.0	0.0	2.5
Farm gate price	49.1	51.3	45.2	44.7	19.0	21.7	46.5	52.0
Farm margin	9.0	17.0	4.0	13.0	0.0	5.0	0.0	5.0
% profit of farmer	22	50	10	41	0	30	0	11

Source: mission own calculations

The tables show that with extensive husbandry (low tech) the profit margin for farmers is limited to max. 10%. Only in the case of greenhouses it is better: 22%. With a more intensive, high tech approach margins are much better: from 30-50% (only for peppers in tunnels it is 11%). The study on olive comes with similar data: the costs price for olives is 27 ALL and the farm gate price 33 ALL/kg. So a profit of 23%. An annex in the study on value chains of MAP indicates that the profit for collecting wild plants is 20% and for cultivated plants between 30 and 50%; yet those data are not substantiated.

A similar difference can be found in the next table where the income per day is calculated, taking into consideration the investments (and related depreciation). So while in the table above the labour is valued against a fixed price of 800 ALL/day, here we divide the financial profit by the number of days worked, to see what the return to labour are with the different systems.

Costs	Plastic greenhouse		Apples		Water melon		Pepper	
	Extensive	Intensive	Extensive	Intensive	Extensive	Intensive	Extensive	Intensive
Yield (t/ha)	190	230	30	60	40	60	23	40
Farm price (ALL/kg)	49.0	51	45	45	11	22	38	52
Investments (Euro/ha)	54,700	54,700	6,400	19,200	3,300	4,400	0	1,100
Labour days/ha	2360	2560	400	560	190	230	400	600
Income: ALL/day	2,633	3,126	2,048	3,000	608	3,414	1,024	1,633
Net profit (Euro/ha)	16,300	29,300	3,650	10,100	- 2,500	3,900	1,000	5,400
Net profit/dy/month	136	244	30	84	-21	33	8	45

Source: mission own calculations

The most important conclusion here is that the more farmers invest the higher their income per day is; even after taking into account the depreciation on investments. With extensive husbandry the income per day for 'simple' crops like watermelon and pepper that require very little investment is 600 to 1000 ALL. Indeed the price of rural labour. The olive study shows an income of 1.170 ALL/day; an indication of the limited investments in this crop and the lower value of the resources (particularly land) used for it.

With peppers in tunnels the income per day can be doubled: 1.600 ALL/day. With greenhouses and apples it is even higher: 2000 to 2600 ALL/day. The highest income is for intensive production of apples and greenhouses: 3.000 ALL/day. The high income per day for watermelons in tunnels seems an easy option as very limited investment are needed. To understand this we have to look at the last row: the income per dynym per month. This is very low for all crops. So a watermelon farmers can make 30% profit on his crops and get 3.400 ALL/day, but as this is a mechanised crop, the number of days per dynym are limited and the income is only 20 Euro/month. Indeed watermelon farmers usually have large farms of 10-15 ha. A similar analysis applies to all crops. Even when the profit margins are good, the income per dynym remains limited. We have seen that most greenhouse owners have 1 dynym; so their average income per month over the year is only 116 Euro per month.

If we compare the profit margins of farmers with those of traders, we see that the margins of high tech farmers (30-50%) is better than those of traders. We do not know the costs structure of the traders but we know their gross margin is 39% and 32% for respectively wholesalers and retailers (see table above). So their net margins are much smaller. Obviously their turn over is much bigger than for farmers.

So the often heard notion that traders make super-profits at the expense of farmers can not be substantiated. This fits in the general picture of Albania as a very open and competitive economy. If large profits could be made by simply bringing vegetables from Lushnja to Durres or Tirana, everybody would do it. Actually the FFM has sold directly to some supermarkets in 2007. A limited number of detailed data showed that the difference between the farm gate price and the supermarket ranged between 10 and 24%. If all costs (transport; collection) are include, the marketing exercise might well run a loss due to a lack of economies of scale. Another remarkable anecdote is that our field work shows that the largest vegetable wholesaler is investing in seedling production at the moment. Apparently this seems a better business prospect.

So traders do not make super-profits and the ongoing speculation among farmers about this is one of the most unproductive (if not damaging) notion in the sub-sector. If SNV wants to contribute to the improvement of the sub-sector it should distance itself from such notions.

MAP

The situation with the MAP is completely different. According to the Value Chain analysis in Dibra, families involved in collecting MAP earn more than those involved in farming. The income is estimated at 70.000 - 150.000 ALL per person. If this is for a period of 3 months this equals 1.000 - 2.500 ALL per day. Indeed a good income compared to the farm incomes we have seen above (as no investments are needed). However the same study claims that 3.000 people in Diber are actively involved. This means that they earn some 300 million ALL annually. Yet the study also says that the total income for Dibra is 150 Million ALL. If half of this would go to the collectors, this is only 75 Million. So somehow the numbers do not match. Probably most people are only part-time involved in the collection and most likely the income per day is more modest than claimed.

2.4 Vertical Inter-firm linkages in the sub-sector

Input-supplier - farmer

In most cases farmer are dependent on input suppliers. In more isolated areas there are few suppliers they simply have to deal with the inputs that are on offer. In more potential areas there is much more choice and the competition between input suppliers is fierce. Smaller farmers often depend on the input suppliers as well for technical advise and sometime also for credit. The latter practise seems to be diminishing as farmer understand that this is a expensive form of credit. Input suppliers from their side do not like it either, as too much of their working capital is getting absorbed in it.

These days it is possible to check the quality of inputs, but this options is hardly used. Indeed inferior inputs do reach the market. In chapter 2 several example have been given. Even nowadays inexperienced farmers fall victim to dealers offering cheap and bad inputs. In Korca farmers bought apple seedling for 2 Euro a piece while the 'normal price' for top quality is some 3.5 Euro. It will probably 2 -3 years for them to find out that this is a mistake.

Transparency in quality and prices is important. In practice farmers rely on each other and on independent experts for advice. Migration is one way through which farmers learn about high quality inputs.

Farmer- trader

This is the most complicated relation in the value chains. Farmers do not trust unknown people whom they meet for the first time. Trust is based on respect and long term relations; Albania is a real network economy.

Only if trusted people say that someone else can be trusted, this might work. On the other hand: once mutual trust relations are established, they are very strong and long term business relations can be maintained.

Due to the lack of (objective) quality standards and a lack of reliable market information, distrust can easily arise between sellers and buyers. A lack of standardisation on issues like delivery terms, packing, grading and sorting is problematic as well. We have seen how damaging all this is: retailers need a 215 higher margin on Albanian produce, compared to imported products.

2.5 Horizontal (inter-firm) linkages

With a huge number of very small farms the need to cooperate is obvious. Indeed virtually all donors emphasise the need to create farmers' associations or cooperatives. Here we will explain the more general picture, illustrated by the functioning of Water Use Associations and Business Associations that have been set-up and supported by donors. All efforts to increase the social capital via associations or cooperatives have met great difficulties. Initially the explanation was that Albanians are traumatised by the enforced cooperation under communism. This led to some cosmetic adjustments in the donor approach; e.g. in the mid-1990' efforts to create a cooperative were sold under the name of Private Farmers Association. The problem is however much more deep and profound and can only be found in the social texture of Albania.

Social context

Albania has been the most isolated area of Europe for centuries. Its proud inhabitants successfully defended their independence against many intruders; being it empires or ideas. The honour of their family is sacred and Albanians will defend it, regardless of the consequences. Honour is gained by an overwhelming hospitality. The same honour is also the basis for feuds on land, water and women (and any other property) between different clans ('fis'). Such feuds can continue for generations and blood revenge is practised till today. Although blood-related killings attract most attention, an equally severe problem is that Albanians hesitate to cooperate with each others as they understand that this might lead them into conflict. This makes any form of cooperation among Albanians very hard. For example if members of a Water Use Association do not pay membership fees this is a personal insult to the chairman and his family. This can easily lead to conflicts and therefore people are afraid to become member of a WUA.

The relation between the honour of the leader and the performance of an organisation is so tight that one can say that in Albania every organisation has an 'owner'; including farmers- and business associations and even government institutions. This makes most organisation ineffective: some people will support an organisation only out of respect for its leader, without having any economic interest to be member. Others however, who do have an economic interest to become member do not join as they are afraid of conflicts (or already have poor relations with the owner).

Poor cooperation is also observed within government organisations. It is very hard to get ministries or even departments within ministries cooperating as all have a 'owner' and this ownership is respected by all others. Altruistic behaviour is rare; and when it occurs it is not recognised as people do not expect it ("he must have some personal gain from this NGO as otherwise he would not work so hard for it). One is expected to defend the honour of the family, not the "public good". Even in science it can be found: every topic has one 'owner', an expert who's authority can hardly be challenged.

Business associations

Millions of dollars invested by USAID (via IFDC) over more than a decade in a dozen agricultural business associations hardly left a trace on the ground. The umbrella organisation KASH and the main pillar AFADA do function and do play a role in lobby and advocacy. Despite the strong rhetoric of KASH on 'private initiatives' the organisation is very close to the min, of agriculture and very much part and parcel of the political elite. One chairman was ex vice-minister of agric. and the previous chairman was employee of the

ministry as well. He was forced to step down after he was accused of being involved in a major corruption scandal with subsidies on diesel that was installed under pressure from KASh.

Most others business associations (more than a dozen) are an empty shell. Members do not pay membership fees and the managers, supposedly a paid job, are volunteers. While doing so they look more after their own private interest, than after the general interest of the organisation or the public good.

Farmer Union (BKShF)

The Albanian farmers union was created in the early 1990's and supported by USAID funds (via VOCA). From the beginning the organisation was captured by political interest. The first elected leader, who remained in power for a decade, was a close friend of the then-minister of agriculture. He was also an employee of the min. of agriculture (and even had a third job in a WB-project of the ministry). For years the Farmer's Union was actually dominated by extension workers. Some of them even complained that at a certain moment the membership fee was even simply deducted from their salary. The second chairman is again an employee of the min. of agriculture.

Cooperatives

Hundreds of farmers groups have been created since transition, virtually all under (subtle or less subtle) pressure from donors. Only very few of them are active and of those few the mission knows only one that really operates as an economic entity. The Muzeqe Farmers Federation in Kemistha commune, Lushnja. It has received donor support (in one way or another) for nearly a decade now. In 2007 it marketed 750 MT of vegetables for its 140 members (from 6 village level associations). Still it is struggling to recover about half of its costs. It faces a number of constraints:

- leadership issues. Dominant leaders from one village controlled the organisation for a long time and when they could no longer do this, they and their co-villagers virtually stopped to cooperate
- many farmers do not have a marketing problem. The best farmers (those who started early with greenhouses) have their own market channels; traders who collect the produce at their farm.
- donors interfered in the decision making process; often offering support that was not needed (e.g. a sorting machine is standing idle; a training room is not used etc.)
- they have too much staff (four people) who also have to be paid in periods that very little transactions
- farmers are reluctant to pay the necessary commission

The general conclusion is that dozens of farmers- and business associations have been created and supported by donors, but very few managed to survive once donor support is withdrawn. It will take a long time, (intellectual) energy, efforts and courage of many Albanians to overcome these constraints. In the last few years they started to work on creating balances of power; combining private and civil organisations and state institutions. One interesting example are the WUAs. As we have seen their performance as voluntary organisation has been very poor. So it was decided to tie them to local authorities as to ensure that farmers will pay for the water (so voluntary water fees become a tax).

On the positive side; farmers groups have been very useful in the dissemination of innovations and ideas. Like all adults, Albanian farmers learn most efficiently as a peer group. Many NGOs use group based extension method with good success.

2.6 Commercial support system

Credit

There are 17 banks in Albania and after the dramatic pyramid crisis in 1997, they are developing rather organically and prudently. For the agricultural sector loans from banks are of limited importance. Farmers

pay 25% interest and relatively large fees. Banks in mountainous areas do not lend money for production related purposes but sticks to consumer loans and deposit taking. Also SMEs face of lack of access to formal finance. The main source of finance for Albanian enterprises, (92% are SMEs) is informally generated capital. This results in a high level of capital enclosure hindering consolidation and growth, especially in the agro industry of fragmented micro enterprises in the rural areas.

Microcredit schemes fill some of the gaps. MFIs mostly finance farmers and SME's with agricultural and livestock investments but the shares of trade, tourism, and craft are increasing. There are five MFIs:

Opportunity Albania mainly provides individual loans to urban and rural micro enterprises and agricultural producers. A small part of the portfolio is allocated for solidarity group lending. It has branches in most parts of Albania, mostly in central and southern region. Since 1999, it served more than 10.000 clients with loans reaching a total of 28 million USD. Loans go to a maximum of 18 month and 4000 Euro.

Mountain Areas Finance Fund (MAFF) is a non-banking financial institution offering microcredits to SMEs and individuals with a focus on rural mountainous districts. It was created by the Council of Ministers in 1999 in the context of an IFAD rural development programme. Today it covers 23 districts and offers services in more than 850 villages.

Procredit is a development-oriented commercial bank with 26 branches in Albania (only two in the northern region). Its microcredit scheme is focused on SMEs in the area of production, trade, and service. Loans range from 200 to 10.000 Euros.

BESA Foundation provides credits for micro and small entrepreneurs in urban and semi-urban areas. NGO's can also obtain credits from BESA. It has 31 branches and nine regional offices, two of these in the north. It was founded in 1999 when the Council of Ministers decided to transfer the Urban Micro Credit Project from the Albanian Development Fund to the BESA Foundation.

ASC Union (Albanian Savings and Credit Union) provides financial and technical support to productive activities in rural areas. Financial services include both lending and savings. The ASC Union is lending through savings and credit associations. Individuals should be member of a licensed credit association. These associations normally have strong social roots in local communities. ASC Union activities were initiated in 1992 in the context of a national poverty alleviation programme. During the first few years, it operated as a Rural Development Fund. In 2002, the ASC Union was founded as a voluntary federation of Savings and Credit Associations. ASCU has saving and credit associations in eight districts; none of them in the north.

Although their assets amount to less than 1% of Albania's GDP, SCAs and MFIs have grown rapidly, doubling their assets in recent years. According to IMF these institutions have successfully serviced around 100.000 individuals. Still, access to financial services remains a major problem in the mountainous northern regions being little served by neither banks nor microfinance institutions. The biggest single problem in this respect is the lack of appropriate credit lines that serve the specific needs of farmers; e.g. to stimulate apple production long term credit is required with a low interest rate and a initial grace period. Such loans are hard to find in Albania.

Quality standards and certification

In Albania quality standard and certification are directly linked to export as the local market is not willing to pay for it. Farmers hardly see the need to invest in quality. To quote the vegetable study: "The majority of the farmers think that their products are of a very good quality. But when inquired if there are residues of insecticides or fungicides coming from the over use or overdose, they do not answer straight forward because they have no knowledge of it. But they still believe that the number of treatment in Albania is rather low compared to that of the other developed countries. While concerning the use of high doses they admit that there might be residues in the product."

For years donors are stressing the need to work on quality issues and to set up a certification body. With Dutch support ALCEBO was created, a private certifying body. It has not been (internationally) accredited yet due to the lack of external funding. At the moment it is not functioning due to a lack of clients. Often the certification for ISO and HACCP is done by foreign companies. However some of these offer sub-standard services for below-market price. MAFCP officials claim that they know companies advertising with a certain certification, while not fulfilling the criteria.

An additional limitation is the lack of international recognition of the Directorate for Accreditation under the Ministry of Economy, which currently can only offer accreditation for national purposes, as it is not a member of the European Accreditation body.

For biological products Albinspekt (supported by SASA) does the local certification. Established in 2006 it provides inspection services of organic products according to Albanian and private (e.g. Bio Suisse) standards and to the European Regulation. It cooperates with bio.inspecta for certification of products for international markets. Foreign certification bodies operating in Albania include BCS, bio.inspecta, Öko Garantie, CERES, ICEA and Italian Codex.

2.7 Non-commercial support: AKIS

Already in 1993-94 the EU initiated a first extension project; and the Dutch government continued this for nearly a decade. The aim was to create an extension system. The first extension strategy was firmly based on the idea of a public, free of charge extension system. In the second half of the 1990's some 600 extension workers were employed. The second extension strategy advocated a dual-system: paid for extension in high potential areas and public extension in poor (mountainous) areas. In this period the Regional Agricultural Advisory Centres (RAACs) were created in Fier and Durres. It had some 15 extension workers who provided services on a contract base. It was a foundation, with a PPP (Public Private Partnership) with MAFCP. MAFCP paid about two-thirds of the costs and the farmers one third. The staff was selected on merit and their salary was more or less double, compared to extension workers of MAFCP. The income generated per advisor was equal to the salary of a government extension worker; so the net costs per extension worker for MAFCP were equal to the cost for a state employee. After 2004 the RAAC however went into decline as the official in MAFCP responsible for the government contribution and member of the RAAC board, misused the organisation for private gains. In 2005 MAFCP stopped its contribution and now the RAAC is ailing.

The third extension strategy made a distinction between potential areas where staff is spread over the area and less potential (mountainous) areas where only Information Centres are maintained: 2-3 staff members in an office in the main town. Over time the number of extension workers has decreased from 600 in 1995 to 240 in the last few years.

The agricultural research system inherited from the communist consisted of the Agricultural University of Tirana (AUT) and a number of specialised institutes for maize, vegetable and potatoes, plant protection, forage production, wheat, fruit and olives, animal production, small ruminants, etc. Most of the institutes were primarily occupied with plant breeding and seed multiplication. In the transition many institutes (incl. AUT) lost much of their resources (land and staff) and the markets for seeds (due to superior imports). The amount of quality research was next to zero for over a decade and is still very low. After protracted discussions, in 2006, finally the role of the research institutes was redefined: they became Centres for Agricultural Transfer of Technology. Their first tasks is: Identification, testing, adaptation and using of new methods and materials (inputs) in agricultural practices. Next to this they also have to train extension workers and to provide policy advice to the ministry. So they have to combine applied research with extension. They should be driven by market demand and regional priorities. They are no longer commodity based but area-based. Five CATT remained: Shkodra, Fush-Kruja, Lushna, Vlora and Korca. 'Original research' will only be done by the Agricultural University.

A crucial aspect of any AKIS is of course the quality of the available knowledge and the capacity to innovate. The Albanian situation is very special in this case. During the communist era, the level of expertise was very low. Or more precise: even at the AUT many technologies were taught that were outdated and in some cases simply wrong. Just to mention some examples:

The formula used to design irrigation system was wrong. It overestimated the amount of water that could pass through a field-channel with 30%. As less water passes, the last field along the ditch will not receive any water. Or the other way around: if you want to have sufficient water at the end of the channel you must increase the level of water at the beginning to such an extent that the first fields get waterlogged. In practice this means that farmers are reluctant to join a Water Use Association as they are afraid of conflicts. The wrong formula was introduced in the 1960's from Russia and although some (older) professors knew it was wrong, it was applied in all systems

The official planting dates for potatoes were too early; causing many too freeze. The reason was that planting was not mechanised and took a very long period. In order to ensure that the planting was right 'on average' the official planting date was forwarded. But for small farmers who can plant their small plot in a short period, it is too early.

The fertilisation scheme for cereals and other field crops was one-sided and wrongly timed. It was one-sided as there was no K-involved. The idea was that Albania soils had sufficient K. In many cases this is just non-sense. The N-that was given was applied too late. The standard approach was to provide 35% of the total N at milking stage of wheat. By that time however most roots of the wheat no longer take up nutrients.

Grafting of (water)melons was previously an underestimated technology for Albania. Experiments from 1997 and onwards showed this to be wrong. In a few years farmers and input suppliers took up the idea and now grafting is the standard 'best practice'.

These are all examples of how much the knowledge of Albanian agriculture experts needs to be upgraded. One can not underestimate the importance of this. It is the heart of the problem in the AKIS. First of all, very often extension workers do not know anything else more than many farmers and secondly (too) much of what they think they know is wrong. So innovative farmers know (much) more than extension workers. For example, experts of the wheat institute refused to accept the new N-fertilisation schemes for years, while farmers had already adopted the western method of giving N-much earlier. This undermines the authority of the extension system.

Both authors of this report have been deeply involved in several attempts to create an effective extension system. It has been less successful than anticipated. The low salaries, frequent changes of staff and political appointments in the public extension system make it less effective. On top of that the number of extension workers is low and the funds to undertake activities have been reduced to virtually zero. Yet as we will see later on as well, the opportunities to increase the income of small farmers via transfer of knowledge and skills is huge. Maybe among the highest in the world. So time and again new efforts are undertaken to create a viable extension system.

The RAAC has already been mentioned. In 2004-2005 both authors were involved in setting up a voucher based system via a Farmer's Organisation. Farmers could buy a voucher for 5.000 ALL. They could give this to an expert in exchange for one season of TA. The expert would deliver the voucher to the FO and get 10.000 ALL. It failed as expert started to 'buy' vouchers from farmers without delivering the TA. In 2004-2005 a Marketing Support Unit was set up in Lushnja to advice farmers and agro-business on marketing issues. It failed due to a lack of willingness of clients to pay for services. For some time (second half of the 1990's), USAID assisted input dealers to create private Transfer of Technology Centres. Despite substantial financial support, the idea did not flourish.

All in all, at the moment most farmers rely on advice from input suppliers. The best input suppliers do indeed engage some of the best specialists in the country and they do give good advice. Yet, others (most) do not

and farmers are often advised to use too much inputs. The lack of a viable system means that time and again NGOs create their own kind of system or ‘semi-private advisory service / training centre’.

2.8 Policy environment

Policies

The most important policy document is the Sector Strategy of Agriculture and Food (SSAF) of MAFCP. It stipulates that the government will consider the following priorities:

- Increase financial support for farms, agricultural and agro-processing businesses
- Improve the management, irrigation, and drainage of agricultural land
- Improve the marketing of agricultural and agro-processing products
- Increase the level and quality of technologies, information, and knowledge of farmers and agro-processors
- Increase the quality and food safety of agricultural and agro-processing products.

For the first time in the transition period, strategic sub-sectors were chosen:

- Fruit-growing (including olives) and viticulture
- Horticulture
- Livestock
- Industrial processing of fruits and vegetables
- Industrial processing of grapes
- Industrial processing of milk and meat.

Although the policy agenda is very wide, and although still many agricultural activities are considered a priority, one can notice that for the first time some products were not selected as a priority: e.g. cereals. What seems lacking is sufficient attention for the issue of farm size.

The direct payment scheme

In 2005 MAFCP started to support farmers financially to improve both the quantity and quality of production. Initially it subsidised the diesel, to be used in agricultural operations. Based on the surface of their land farmers could apply for a certain amount of cheap diesel. The 2KR project in the MAFCP was responsible for the administration. A high profile scandal developed, implicating both the political leadership as well as the director of the 2KR project (this implicated to a certain extent KASH as well, since the latter was their chairman).

In 2007 a new support scheme was designed: providing direct subsidies for farmers planting vineyards, fruit trees and olives. The administrative requirements to get support were more strict (including a cadastral map showing where the plot is situated etc.). One major advantage of the scheme was that the investments done by the farmers can be easily checked; not only at the time of allocating the subsidies but even several years afterwards. The total budget in 2007 was 5 million USD. In 2008 this has been doubled and the number of investments that are supported increased to 13:

- Extra virgin olive oil (100 ALL/litre).
- Plant protection in olive orchards (17.000 ALL/ha)
- Certification of agricultural products (max. 70.000 ALL/farmer)
- Drip irrigation (min. 0.5 ha/ max. 300.000 ALL/ha).
- To produce seedlings of ‘autochtone’ grape varieties (min. 0.3 ha/ 1.2 million ALL/ha)
- New vineyards (min. 0.5 ha and 500.000 ALL/ha).
- New fruit orchards (min. 0.4 ha and 300.000 ALL/ha).
- New olive orchards (min. 0.4 ha and 300.000 ALL/ha).
- To change the heating of greenhouses from gas to diesel (or solar energy) (1.5 million ALL/ha).

- For dairy farms with more than 10 cows of pure dairy breeds, that deliver to milk processors with VAT registration (10.000 ALL/cow).
- For migrating herds of small ruminants. For herds between 50-150 animal: 50.000 ALL/year and for herds above 150 heads: 100.000 ALL/year.
- Subsidise interest of credits taken of SME active in post-harvest issues (processing, storing). The min. loan is 10 million ALL and the interest at least 2 million ALL.
- Subsidise interest of credits taken of associations of farmers or others that are registered under the law of 'Association of reciprocal cooperation (Law 8088 from 21.03.1996)'. The minimum loan is 10 million ALL and the interest should be at least 2 million ALL.

The increase in the funding and eligible activities seems positive. At the same time, some items bear some risks again. Experience in other countries shows that direct financial support to 'associations' can easily lead to the creation of empty, paper cooperatives which further undermines the (public) support for real cooperatives. Also the number of cows or small ruminants at a certain moment in time is more difficult to control than the surface planted with trees.

The direct payment scheme is a major step forwards and it will be the cornerstone of the agriculture sector strategy for the short and medium term. Despite the increase in funding in 2008 it remains unclear what the underlying principles of the system are. The large and diverse number of activities that is supported and the fact that this can change every year, gives the impression that the system is influenced by the political winds of the day. Rather than supported everybody who plants something, the scheme could be used to improve key-issues like quality, efficiency and creation of critical mass. Subsidies should be more 'evidence based'.

MAFCP needs a more detailed insight in the economics of investments. Economic research is needed as there is a lot of confusion about what is feasible/profitable and what not. During the present mission several contradictory statements were heard:

- some claim "harvesting small cucumbers is too much work so the costs price is too high for processors". Others claim that a processor signed a contract with for 3 ha of small cucumbers
- some claim that the costs price for industrial tomatoes is 5 ALL/kg and the farm gate price 10 ALL/kg. Others prove that this cost price is based on some severe miscalculations.
- some claim that cool storage of apples is not economically viable; others invest in this. It is not clear what the source of the investment are.

There are several sources for this kind of confusions:

- Profitability is calculated based on 'imported data'. For example people assume that Albanian farmers can get similar yields than in more developed countries
- Some companies/projects put pressure on experts to use optimistic scenario's (e.g. to get a loan)
- Companies invest in uneconomic activities to "whitewash" money
- Many investors/farmers invest without knowing the actual profitability. They just copy the behaviour of others, or simply assume that modern technologies are always more profitable
- Some investors simply invest in order to secure a grant from donors. This grant can make the investment profitable; but this is not sure.
- Actors that might have the best insights in the economics of innovations are often not willing to share this. This can be for good reasons: banks and donors do not want to disclose the business plan of a private investors. This could mean that the best insights in agro-business opportunities are not open for public use, debate or scrutiny.

All this is damaging for the development of Albanian agriculture. Just some examples:

- several beneficiaries of the grant scheme for high-tech greenhouses of 2KR made a loss. The idea of these greenhouses was to use heating for early production. This proved not feasible.
- A large milk factory has been running for some years with a very small turnover. It must have made huge losses, although it still exist.

- Many large livestock farms (with up to 100 cows) have made losses and the majority of them went bankrupt.

Several of the most disappointing investments are linked to ill-conceived donor interventions or loans; but also genuine investors (e.g. using money earned in migration) make big mistakes. Such irresponsible investments are damaging in several ways. Farmers get insecure. What is a wise investment? If a high-tech greenhouse does not bring profit, will a low-tech one do this? Is it a co-incidence that when high-tech greenhouses were constructed, the growth of low tech plastic greenhouses stagnated? Secondly, in case of grants (or loans that are not paid back) or whitewash operations, these rouge investors caused unfair competition.

Thirdly there is a risk that also the government gets carried away and starts to support unfeasible high-tech activities while ignoring more profitable low costs innovations. In concrete terms: the state supports farmers who try to produce very early tomatoes in spring that proved uneconomical. At the same time farmers and traders who export tomatoes in autumn, when the Albanian tomatoes are competitive, get no support to get the necessary critical mass in terms of quantity and quality.

The EU-accession perspective

The perspective of EU-accession is the driving force for most of the policies, despite the fact that during the mission, the EU explained once more to the prime-minister that Albania needs to do much more on fighting corruption before even pre-accession talks can start. The actual impact of EU-accession is still a long way ahead.

The EU influence leads to:

- More direct payments and subsidies and increased competition on the Balkan with others doing the same. Many people look at the ‘Slovenian’ approach which is to increase subsidies to farmers in order to get more subsidies from EU later on. It remains to be seen whether it will work out this way.
- More resources to mountainous areas and cross border issues. This is still more wishful thinking than reality. A study on the mountain area strategies concluded that there is no clear focus on mountainous areas in the many policies and strategies of the GoA¹³. One of the constraints is the actual performance of the Mountainous Area Development Agency (MADA). It was created with support of a range of IFAD projects and it suffered severely from political interference, incompetence and corruption. Skreli concludes ‘MADA has rather failed in coordinating all investments in mountainous areas’.
- Import of EU-institutions. Some of the ‘hard institutions’, like a food authority, could very well be enforced successfully but other ‘soft institutions’ will take a very long time to get Albanian roots. One example is the import under EU-pressure to formulate a Rural Development Strategy. Written by outside experts mobilised by GTZ, these policies reflect indeed EU-wishes rather than Albanian realities. As the strategy has been implemented by the MAFCP and the Min. of Economic Affairs, MAFCP has no feeling of ownership over it. All stakeholders know how painful it is when two ministries have to share power. In the strategy concepts like ‘innovation platforms’ are used, of which nobody has any idea what they mean.
- Another example are the LAGs. SNV has organised a study-tour on their functioning to Bulgaria but the mission did not get the impression that it was very clear what LAGs could mean for Albanian farmers. It is doubtful whether they do fit the Albanian context, as it assumes functional institutions.

¹³ Skreli. 2007. Assessment of strengths and weaknesses of mountain policies in SE-Europe: National report of Albania

Since SNV has started to work on LAGs we will pay some more attention to it. To the opinion of the mission, there is a considerable risk that LAGs will not function as planned. In a LAG in Western Europe, most of the following stakeholders are represented:

- professional organizations and unions representing farmers; non-farming professionals and micro-enterprises;
- trade associations;
- citizens, residents and their local organizations;
- local political representatives;
- environmental associations;
- cultural and community service providers, including the media;
- women's associations;
- young people.

As we have seen, in Albania most of these organisations are not functioning well. It is very hard to find any farmer who feels that the national farmer federation represents his interests. Even worse: most farmers do not expect that. They expect a leader of an organisation to be first and foremost interested in their own, private benefits. And this is what most of them are, most of the time. Actually, most leading positions in representative organisations are captured by political interests. In this context the lack of accountability of LAGs is a problem. LAGs decide the direction and content of the local rural development strategy and decide on the projects to be financed. Yet, the actual payments are usually made by government institutions (like a Paying Agency) rather than the LAG itself. Experience with such divided responsibility in Albania shows that invites corruption (see the example of the RAAC). So the mission fears that LAGs will be less a voice for the poor, than a smokescreen to the governing elite to do what suits them best.

3. Improvements in the fruit and vegetables sub-sector

3.1 Chances for primary actors

Here we indicate per commodity the main way to invest and improve productivity.

Apples

The productivity in quantitative and qualitative terms, and the resulting income can be greatly enhanced by:

- New varieties
- Better rootstocks; much closer spacing
- New pruning methods
- Better pest management (towards IPM)

Also post-harvesting can be improved substantially

- Investments in low cost storage (some people claim that also cool storage is an option incl. a chain for washing, sizing, packaging)
- Harvest earlier. Maturity stage for harvest is not measured. Delaying harvest means storage life is shortened and quality is very poor since apples are softened.
- Improve transport from the field to the storage facility or to the market. Improve the collection of the produce via producer organisations to deliver in the refrigerated storage facilities.

Greenhouse vegetables

The productivity in quantitative and qualitative terms, and the related income can be enhanced by:

- Improve micro-climate
- Improve fertilisation (avoid salinity)
- Better pest management (towards IPM)
- Make use of economics of scale
- Farmers make good profits

Local markets get saturated but export to Balkan countries offer good opportunities. Above we have seen the import data on Croatia and several other neighbouring countries for tomatoes. Also cucumber is exported and has potential in this field. As mentioned earlier on, to substitute the main imports in spring is not feasible

Open field vegetables

We have shown above that innovative farmers make good returns on investments; but those using traditional husbandry have hardly any profit. Productivity (in quantitative and qualitative terms), and income can be enhanced by:

- Fresh market: innovate on earliness and quality. This can be done by using tunnels, by improving the quality of seedlings, introducing better varieties etc.
- Processing market: Improve the economics of scale by increasing the farm size and increase the level of mechanisation.
- In both cases better land preparation is a key success factor.

Better packing starts for export and storage (cooling) is coming up. As mentioned earlier on some people started to invest in a consolidation unit (for the fresh, export, market) in Divjaka where carrots and other products are washed, sorted and packed. Unfortunately the exact profitability of such post-harvest activities is unknown but such initiative should to be encouraged and supported.

Olives

Productivity in quantitative and qualitative terms, and income can be enhanced by:

- Increased planting with intense orchards
- Discussion on proper varieties not completed: compete on bulk or niche markets
- Pruning to avoid periodicity
- Better pest management (equipment/IPM) to avoid acidity
- Improved coordination with processors and/or exporters who can not get the quality/quantity/uniformity they need

Farmers (could) make reasonable profits but many have few trees

Many modern processors with active marketing strategy

Medical and aromatic plants

Productivity in quantitative and qualitative terms, and income can be enhanced by:

- Growing some of them (using local, wild seeds, “poor” lands, drip irrigation?). Sage and Gentiana.
- Improving quality / sustainable yields by good picking schedule
- Better coordination with processors / exporters who can not get the quality/quantity/uniformity needed (for export). Contracts are an option and PO’s. Chain integration coming up.

Good (export) market opportunities exist and the demand is expected to remain strong. The profit for ‘producers’ is limited; yet some 33.000 are involved. Can they go into processing/ more added value to ‘collectors’? Can land ownership be improved: who owns the wild plants?

Watermelon

The productivity (in quantitative and qualitative terms), and income can be enhanced by:

- Adjusting varieties to market demands (smaller; seedless)
- Better crop and pest management (especially in the Northern coastal area)
- Pollination via bees.

The (export) marketing can be enhanced by reducing the transaction costs in the chain. One way is to enter into contract farming; other options are to work on export promotion.

We see that in general the options for improvement focus on the production level. This reflects both the real chances that exist for producers to make profit, as well as a lack of clear information of the profitability of improvements in post-harvest handling and trading.

3.2 Improvements in cooperation and coordination

Many donors have tried to improve the cooperation and coordination in the Value Chains. One approach has been to stimulate the formation of formal producers organisations; others (especially GTZ) has been to set up a Market Information System and again others are focusing on match making and contract farming (mostly USAID projects like EDEM and AAC). All have had very limited success. Farmers nor traders trust formal institutions. Even not those created to serve themselves (like coops and business associations). Trust is rather a personal matter, related to respect and honour. All actors prefer to do business with people they respect; that is those that they know personally.

In some cases the coordination might be somehow better as a few business have an obvious key-role in the chain; especially the exporters of MAP. In these cases it is hard to know if they use their position to reap easy benefits or that they really optimise the income throughout the value chain. In any case, the way forward is not easy. There are no real alternatives to producers organisations and transparent markets.

Considering the tendency for farmers to work on personal relations, Value Chain excursion, that show to farmers what happens with their produce until it reaches the final consumer, could be very fruitful.

Next to that, the use of standards needs to be encouraged. In practice this means that more attention is needed for marketing at all levels. The first issue at most levels will be sorting and packing. Since the profitability of these kind of post-harvest issues are not very clear, economic research is needed.

Farmers organisations as such can be very useful for the transfer of technology. This is needed from an efficiency point of view, adult learn more quickly when among peers. Obviously such groups can gradually be transferred in informal marketing groups. This should be encouraged, yet without giving farmers the idea that the outsiders want them to create such a group.

Another way of creating trust and therefore coordination in a Value Chain is to establish a 'neutral organisation' trusted by all parties. NGOs can perform this task. Although they might not be financially sustainable, they can improved the coordination between farmers and between farmers and processors (or exporters) by "round table meeting" on the quality/quantity/uniformity needed on the final markets.

MAP

The MAP value chain is a very specific one as the collection of MAP in forest and pastures needs to be coordinated in order to prevent over-picking and other damage. Some species are already so over-exploited that commercial cultivation has become a need. The collectors deliver their produce to village level collectors/-middlemen connected to larger collectors/exporters. In Diber only one of these works with contracts. This turned out to be a success for him.

The critical question seems to be how the coordination can be improved. The exporters have the power in the chain; to which extend are they willing to share this in order to stimulate people to set up a sustainable and viable system? Are they willing to wield to power to (in-)formal local groups that control the harvesting process and manage collection points where the preliminary processing can be done? If so, how can this be made efficient? Is any link to FUAs possible/ desirable?

3.3 Better (non-) commercial support systems

Improve the AKIS

Despite many investment the public extension service is not functional in terms of assisting farmers to innovate or to invest. Recruitment is still dominated by political alliances, rather than merit. For most of their time extension workers are involved in collecting statistics and in assisting farmers in filling out application forms for the direct payments (the payment scheme as such will increase the pressure of political parties on getting their 'militants' in decision making positions). So in terms of (dissemination of) innovations the public extension service is not a viable alternative, and the funds invested in it could be re-allocated.

To ensure that farmers do get the support of good experts, the subsidies scheme could be used. For example: farmers who are subsidies should follow a training at the CATT. Or: farmers who get subsidies should have a contract with a licensed extension worker. Obviously this is a long term perspective. In the AKIS one will still find many 'old' experts who know less than innovative farmers. The CATT should be the key-institutes that could reverse the trend. In 2006 MAFCP the salaries of CATT staff was increased substantially; now it is time they deliver. MAFCP should insist that young scientists are employed there who should be forced to do on-farm trials (with an economic analysis; see above). A strong peer-review system is needed as well as a more direct link to the extension system. Each CATT should have an extension unit of at least 5 people. In Annex II one find the recommendation that the mission provided in 2007 in the national seminar on the

transfer of technology, organised by USAID and MAFCP. Many of the issues discussed there are still valid and provide an important background for the discussions on the AKIS.

Access to loans

A general option is to improve access to (long term) loans for farm consolidation. The direct payment scheme to farmers could be used to stimulate farmers to increase their farm size by taking long term loans and the government could then cover part (or all) of the interest rate.

Apples

The apple researchers at CATT admits that until very recently he knew nothing about modern cultivation techniques. Even as late as 2002 a new apple research plot was established at the CATT using outdated techniques. Now the Dutch funded KRISP program (implemented by Agrinet) has changed the situation, the researcher understands much more of intensive orchards. He needs to be assisted further in implementing new (of-farm) trials and experiments. Among others with low cost storage techniques.

MAP

The people collecting and processing MAP get very little, if any support from researchers or extension workers. This needs to be improved. Also the agricultural educational system is very weak. There are only two agricultural middle schools left to train young people from rural area basic farming skills. And even those have difficulties in offering practical training. The agricultural University as well is weak. So both levels of education needs further support.

3.4 Improved policies

Improve land consolidation.

People who have been given land in the privatisation process but who do not use it, should sell it to those who want to be farmers. People who see their future elsewhere (e.g. migration) and still cling to their land makes it very difficult for their neighbour to create a viable farm. Fiscal measures and re-allotment schemes can be used. And maybe even more dramatic methods (re-nationalisation and public sales). Fiscal measure might be the most effective in the medium term. Land tax could be substantially increased and then be waived for those who can prove they used the land productively. Farmers who buy the land could be given a tax holiday of 5 to 10 years. In this way people who do not use the land pay much more tax and land sales are encouraged.

Invest in irrigation and infrastructure.

Unfortunately much of the earlier investments in irrigation were lost, still the need is huge. The major roads have been (or are being) improved in the last decade. Now investments are needed in the smaller rural roads that suffered for nearly two decades of neglect.

Increase and improve direct payments to farmers

In order to improve the impact of the direct payment scheme, a public system to collect, analyse and disseminate reliable economic data in the agricultural sector is needed. It could be used by farmers, advisors, MFIs and banks. MAFCP publishes statistical yearbooks. This is very useful for national planning purposes as it provides data from an aggregate level. Yet there are no data available from a farmers' perspective. So it is known that all farmers have sold crops with the value of X million ALL and we know that they all had Y million of costs, but we do not know what each farmer spend on a particular crop and what he gets out of it. So what is needed is a Farm Management Handbook in which the economic aspect of each crop or livestock activity are carefully treated. In many countries such handbook are published annually or bi-annually. The CATT's, guided by the agricultural economy faculty of the AUT should take the lead in this process.