The Albanian Agricultural Knowledge and Information System in transition^{*}

Institutional development and organisational changes in the Albanian AKIS during the 1990's.

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Introduction

For Albania the 1990s was a decade of transition from a Stalinist regime to a market oriented democracy. In 1990-1991 the political transition from a one-party state to a multiparty democracy took place in an atmosphere of severe turmoil. In 1992 a start was made with the privatisation of land and small enterprises. The period 1993-1996 saw an economic growth of about 10% p.a.. But in 1996 the transition process proved to be fragile: the new democratic institution were too weak to prevent irregularities during elections while 'pyramid schemes' showed that the general public had a very poor understanding of the functioning of a market economy and that the privatisation and modernisation of the banking sector was far from complete. The resulting crisis of 1997 threw the country in anarchy and economic growth plummeted. In the last two years the economic growth has been reasonable. The next table gives the basic economic data on this turbulent first decade of transition.

	1990	1991	1992	1993	1994	1995	1996	1997	1998
Total GDP	- 10	- 28	- 7	10	8	13	9	- 7	8
Agriculture	- 5	- 24	18	10	8	13	3	1	
Industry	- 14	- 38	- 51	- 10	- 2	6	13	-6	
Agric. as % of GDP	40	42	54	55	55	55	53	56	54
Inflation (%)	3	104	237	31	16	6	17	42	9
Ex. Rate Lek/USD	9	24	75	102	95	93	104	149	
GDP/cap. (1990=100)	100	73	69	76	82	90	98	90	96
GDP/cap. (USD)	573	211	212	388	608	762	819	686	891

Table 1: The role of agriculture in economic development of Albania in the 1990s.

Source: 1990-1997: Tables in the Albanian Human Development Report 1998. For 1998: FAO, 1999. Note: other sources give sometimes other data.

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Table 1 shows that throughout the 1990s the GDP/cap. in real terms remained below the 1990 level. At present it will be on the same level as in 1990. The poor functioning of the legal system remains a severe bottleneck to future growth. Much remains to be done to regain the trust of the public (both domestic and foreign) in Albania's potential to develop into a stable and prosperous civil society.

The agricultural sector in the 1990s

Agriculture has been a major stabilising factor in the transition period. Nearly half of the working force is employed in agriculture and over 50% of the GDP is generated in this sector (UNDP, 1999). Since the privatisation of land started, agriculture production has risen every year; sometimes with more than 10% p.a. (see table 1).

The main constraints in agriculture are: small farm size (average 1.4 ha), fragmentation of the holdings, poor functioning of land market, lack and low efficiency of agrarian credit, low level of mechanisation, poor infrastructure, poor input supply, lack of marketing opportunities, a lack of processing capacity, dysfunctional irrigation system and a lack of practical knowledge and skills.

The highlands (mostly in the North and the North East) differ considerably from the lowlands (the Southern coastal zone). In the latter the land was equally divided between all families. The quality and accessibility of the land is better, as well as the opportunities to emigrate (legally or illegally) to Greece and Italy. In the highlands, due to the high population density there (caused by the former regime which prohibited free movement of people) the average farm size is 0.5 ha, with some families having near to nothing. Infrastructure is very poor, leading to isolated villages and great difficulties in input supply and marketing.

In the 1990's the structure of the agricultural sector changed considerably, as can be seen in the next table.

Tuble 2. Trends in agricultur sub sectors, 1996 1996					
	1985-90	1994	1995	1996	1998
Area wheat (1,000 ha)	203	166	114	107	120
Area alfalfa (1,000 ha)	51	68	78	89	94
Area maize (1,000 ha)	62	89	100	72	60
No. of cattle (1,000 head)	633	797	863	761	720
Yield of wheat (ton/ha)	2.9	2.3	2.6	2.4	3,0
Yield of maize (ton grain/ha)	3.9	1.8	1.7	2.9	3.4
Yield of potatoes (ton/ha)	6.4	11.1	10.6	11.0	12.7
Milk production (litre/cow)	1350	1600	1720	1870	1710

Table 2: Trends in agricultural sub-sectors, 1990-1998

Sources: World Bank, 1992, MAF statistical yearbooks, Jaehne and Schinke (1994), Civici and Lerin (1997). Other sources give (sometimes considerably) different data

The area under wheat decreased by about 40% and only in 1998 yields did recover to the pre-transition level of 3 ton/ha. The number of cows rose with one third until 1995, after which it declined. The area under fodder increased simultaneously. Initially much more maize was planted but due to disappointing yields (40% of the pre-transition level) farmers shifted to alfalfa. Low yields were caused by bad seeds and poor functioning of the irrigation system. Since part of this system has been rehabilitated, on a much reduced area, yields are approaching again the pre-transition level of nearly 4 ton/ha. Of the smaller crops, potato yields have increased twofold in the 1990s. Extension has plaid a major role in this as will be discussed later. The yields of beans increased with about a quarter. Total vegetable production remained the same, but there was a shift from open field vegetables to greenhouse vegetables.

Despite the fact that crop-yields have not reached pre-1990 levels, total factor productivity of agriculture increased by 35% in the period 1989 -1995 (Kodderitzsch, 1999). Of this 20% was caused by using less inputs and 15% by a higher value of the output. The first confirms that much less fertilisers are used (see Hall, 1994 and Civici and Lerin, 1997) and more work is done by hand (in stead of by machines). The second confirms that livestock production (with a higher added value) has increased and that in the process of price liberalisation agricultural products have become more expensive.

Kunkel and Skreli (1998) measured in 1995 an average income of Albanian farming families of about 400 USD/cap./year. About two third of this derives from agricultural production; one third from off farm income. The latter provided 70% of the cash income. Litschauer (1997) showed that in 1996 the cash income distribution was very skewed: 42% of the farmers had a negative cash income from farming activities, while 23% of the farmers earned 87% of the total cash income in agriculture. The latter group had an average gross cash income from the farm of 1.200 USD/- year. So specialisation has taken place: one part of the farmers is able and willing to invest in agriculture and they make a reasonable profit; most however are not able or willing to invest and remain subsistence oriented (and employ other livelihood strategies, like migration)

Agricultural extension: the organisational set up

Mission

After the formal transition to a market economy, agricultural specialists no longer could order workers (farmers) what to do. Many of them were dismissed and few people had a sense of what the remaining staff should do. Through studytours abroad and through foreign projects the idea of setting up an extension service was born. In 1993 the Extension Service was created in the Ministry of Agriculture and Food (MAF). In 1995 a first medium term policy was formulated which opted for a public extension service offering services free of charge to all farmers (MAF, 1995). In 1998 a new policy was

formulated (MAF, 1998), in which free of charge services were complemented by semicommercial (aiming at cost recovery in the long run) services for commercial farmers.

Structure

In 1993 the Extension Service, headed by an Extension Unit, was created in MAF as a section of the directorate of Crop and Animal Production. It was supported by a project of EU-Phare. In 1994 this project continued as Albanian National Extension Project (ANEP), sponsored until 1997 by EU-Phare and ever since by the Dutch government.

The Extension Unit has a decentralised structure with a relatively small staff of one coordinator, a monitoring- and gender officer, a agro-economist, a mass media specialist and 7 regional managers, each covering about 4- 8 districts. The unit initially worked with 6 districts and gradually expanded to all (36) districts (1999). In each district a chief of extension is responsible for extension. He has a staff of 1-3 subject matter specialists at district level and up to 40 extension workers at commune level. Over time the number of extension workers was reduced from over 700 to less than half of this at present. Education and specialization of extension staff: Agronomists and Livestock Specialists, about 25% of total number of staff are female.

In 1996 the Extension Unit became part of the directorate of Research and Extension. Extension workers however continued to report to the directorate on Crop Production and Livestock Production. In their reporting they focused on what is called "evidence", a remnant of the old practice to inform the ministry periodically on how far one has managed to implement the "production plan". In general the tasks of extension workers have only slowly became clear over time. Inspection issues and collecting statistical data continued to ask a considerable part of the time of the extension workers. Next to the fact that extension is a new concept for the people involved, profound changes in the organigram and the staff of MAF after the 1996 and during the crisis of 1997 are one of the main reasons for this. Only in 1999 the structure and tasks have become clear to all.

Considering the poor communications, spreading the limited staff over all communes with a similar, rather vague task description makes it difficult to create a critical mass of experiences and near to impossible to adjust the staff to the specific needs of different agro-ecological zones. Mata and Holtland (1995) suggested to create small district teams in mountainous areas which at least could have an impact in areas near to local markets. In the coastal areas, in 1999 the agricultural department in Fier developed, in co-operation with the Fier Agricultural Programme (FAP), an alternative structure. The field staff of 40 people, were grouped in 7 teams of about 6 people, working in one agro-ecological zone. This allowed for a certain degree of specialisation in the team: one concentrates on on-farm-research, another on plastic greenhouses etc. One is responsible for the co-ordination. Several other districts copied this model.

General Approach

Each district makes its own extension plans in a participatory way. Rapid appraisals are done during which priorities for extension are established in dialogue with farmers. The plans are presented in a logical framework (Teenstra et.al. 1995). They are approved at national level (to check for overlaps and to identify possibilities for co-operation).

From 1992 onwards extension workers organised field demonstrations in co-operation with several projects: first in 1992 with the Albanian Fertiliser and Agro-input Dealers Association (AFADA; established in 1992 by the IFDC in an USAID financed project). In 1993 the extension service was created and the PICU project of EU-Phare initiated demonstrations in 6 of the most potential districts. At the same time FAP started in Fier, AGRINAS (a Dutch NGO) in Pogradec and IFAD in four districts in NE-Albania.

Major issues for demonstrations were the use of fertilisers in wheat and maize, the use of concentrate for livestock, the use of herbicides in wheat and new varieties of potatoes, beans, wheat etc. Since the input supply was difficult in the initial years and farmers very poor, most inputs were given free of charge. Over time the amount of inputs given has been reduced to zero (in 1998). Next to field demonstrations, leaflets, local fairs, individual advise, group meetings and seed multiplication activities are uses as extension methods.

Considering the very large number of small farms, any form of co-operation between them could be advantageous for input supply (incl. knowledge) and marketing. Therefore the extension service assisted farmers in organising themselves. Since farmers are poor and (for obvious reasons) reluctant to co-operate the assistance was often a combination of direct support (subsidies, seeds, etc.) and advise on organisational issues.

Financing extension activities

All districts received a car from ANEP and a set of equipment (computer, printer, copier). The budget for extension activities is fixed at national level: per district between 500-1000 USD/year is available for extension activities (excl. salaries and the costs of the car). The approximate amount is available for training. Until now, these have been paid by donors.

Van de Ban (1995) estimates that MAF had a budget for extension of 0.8 million USD in 1995, of which 75% was salaries. This represented 0.35% of the Agricultural Gross Domestic Product. In 1999 the Worldbank estimated that the Albanian government paid 0.5 million USD as salaries of MAF extension workers. At present, a part of the budget for extension activities (next to the salaries and travel cost) is paid by MAF.

Impact monitoring

In 1997 a monitoring system was installed. The evaluation report of the EU-Phare project states that before 1998, 200.000 farmers had been contacted by the extension service and of these 90.000 even had regular contacts (EU-Phare, 1998). These data can not be taken serious. As long as claims of extension workers to have given individual advice to 350 farmers in one month are accepted, the system will not yield relevant data. Recently the system is reviewed and more qualitative data are included in it.

A next step would be to monitor the impact of the activities. An impact study done by FAP in 1996 (Selaci and Thanasi, 1996) on the impact of the demonstrations in 1994-1996 is the only known field study. The main conclusions were that:

- demonstration farmers and farmers visiting them knew more of the demonstrated technologies and apply these more often than farmers of the control group;
- lack of cash often prevented farmer to apply the technologies demonstrated;
- 12% of the demonstration-farmers stopped farming; most migrated;
- some demonstrated inputs were not in the market or of very poor quality;
- there was a general lack of knowledge and skills on plant protection issues. Farmers want extensionists to visit their field and advise them on how to control pests/ diseases; but most extension workers do not have the required skills.

Since no impact study has been done into the attempts to assist farmers in organising themselves, again the experience of FAP with so called Private Farmers Associations (PFAs) is taken as an example. The analysis of Vorage (1996) and Holtland (1999) on these can be summarised as follows:

- direct support to groups leads to opportunistic behaviour of farmers;
- all groups suffered from a lack of feeling of ownership;
- often local conflicts popped up and some decisions seem politically motivated;
- communication between the members of a PFA often proved to be difficult;
- statutes adopted, or even developed, by the groups were not implemented even when the situation required this;
- none of the PFAs managed to collect membership fees or saved any money.

One is inclined to see this as a reaction to the enforced co-operation in the communist era. Yet, a field study of FAP showed that in the pre-communist era, farmers also had little or no experience with strategic forms of co-operation (Vorage, 1996). The impact study revealed that the close link between the project (FAP) and the government was identified as one of the main problems: it was felt that autonomous organisations could and should be supported by an autonomous organisation. A second problem was that farmers did not really grasp the reality of a market economy; specially they did not accept any risk. In response FAP created an independent association of farmers and agro-businessmen which runs an office (QABI, see below) which provides all kind of information and advise to groups of farmers, but no direct support. This resulted in several effective forms of co-operation; the most successful one being the Albanian National Seed Potato Association (ANSPA) in which farmers, traders, researchers, extension workers, projects and inspectors co-operate in order to encourage the multiplication of imported Elite seeds of potatoes in mountainous areas and sale of these in the lowlands. Main activities are inspection during multiplication, establishing a "brand mark", on farm trials with the seeds produced, training and exchange of experiences.

At present, a team with local and foreign experts is doing a impact assessment of extension activities (Beijer et. al). A simple survey done by Regional Extension Coordinators (MAF, 1999) showed a clear added value of extension activities in terms of production and quality improvement.

Agricultural extension: institutional developments

Research-extension linkages

Research received less attention than education in the communist era. The Agricultural University of Tirana was established in 1951 and the teaching was very much theoretically oriented. Most agricultural research institutes were created in the 1970s. Field research was poorly organised. Researchers made a protocol for a trial and sent it to some state farms where field technicians implemented the trial and collected the data. At the institutes the data were analysed by a mathematician before the researcher would draw conclusions and write an article. Researchers had very few contacts abroad. A typical result of this isolation is the Albanian soil classification system, which was made with little assistance from outside. The system hardly uses any measurable criteria while those which are used are not always in line with international standards (Zdruli, 1997). Research was more or less synonymous with breeding, both for livestock as for crops. New breeds and varieties were seen as the key to any improvement of production. A second point of attention was pests and diseases. Less attention was paid to husbandry issues and new technologies. However, during this period many research findings were successfully implemented into practise.

The importance of a good link between agricultural research and extension was recognised in an early stage (Bicoku and Beijer, 1995). Since there was limited experience with agricultural research in Albania and only very few means were available, it is logical to focus on applied research via on farm trials. In 1995 the National Research Council (NRC) was established to stimulate the use of on farm research, to set priorities for this and to co-ordinate the different efforts. All research institutes appointed a research-extension linkage officer who was trained in participatory planning of on farm research. Problem identification was to be done by farmers, extension workers and researchers together. Research proposals were elaborated by the research institutes and submitted to the RNC for approval. ANEP provided the funds. In practice few proposals were submitted. The NRC only met twice

in 1995 and once in 1998. In 1999 it was reformed into the National Research Extension Advisory Committee (NREAC). Wouters (1998, 1999) concludes that most research proposals are still 'supply driven': farmers as well as extension workers hardly play a role in the formulation. Despite, in several cases the results of the trials have been translated in extension messages (Wouters, 1999).

Recently, communication between researches, extension staff and farmers is improved. Number of suggestions submitted to NREAC increased considerably. The general priorities are directed by the farmers problems and development possibilities as experienced by the extension service in the field.

In 1995/96 FAP initiated a programme of on-farm-trials for which annual contracts with research institutes were signed. The Institutes compiled research methodologies and processed the data. The extension workers selected the farmers and distributed the inputs. Monitoring and drawing conclusions is done together; special attention was paid to economic aspects and to a systematic collection of the opinion of the farmer. When appropriate conclusions are translated into extension messages by the district extensions workers In 1998 an internal evaluation showed some weaknesses in this model and in the way it was implemented:

- extension workers did not consider monitoring trials as their task;
- the selection of farmers was not always based on objective criteria;
- some farmers differed too much, leading to much variability in the results;
- not enough attention was paid to socio-economic aspects;
- the results of the trials were not systematically translated in extension plans;
- the selection of subjects for trials was still done by researchers and extension workers, after consulting the farmers.

In reaction to this, for the main issues (potatoes and greenhouse production) committees were created to select the subjects for trials, to decide on where- and how to implement the trials, how to spread the results etc. Members are extension workers (regional and district level) relevant researcher, some farmers, and some agro-businessmen. At the same time, in the re-organisation of the extension service at district level (see above) some extension workers were assigned a special task on on-farm-research. The co-operation on the research and the usefulness of the results improved much. Traders availed a considerable part of the inputs, farmers implemented the trials more careful, researchers and extension workers observed better and wrote better reports which were systematically translated in extension messages. The final results of these efforts are:

- the best varieties of wheat, potatoes, tomatoes, cucumber and (water-) melons are known;
- the husbandry of potatoes improved considerably: N, P and K-fertilisation, later planting, pre-sprouting and the use of ridges proved viable new technologies;
- the control of Phytophthora and Rhizoctonia in potatoes was improved;
- seed potatoes from several districts in Albania were tested and a market for quality Albanian seeds was created;

- greenhouse technology was improved via better measures to combat frost in early spring (micro-tunnels/wetting) and via the introduction on seedling production in modules (which is now commercially done);
- for some vegetables grafting proved to be successful (not for all); the pruning of melons was improved considerably;
- P-fertilisation of white beans is economically attractive; inter-cropping of maize and beans not due to high labour requirements.

In an effort to institutionalise the participatory approach to on-farm research, in 1998 FAP (together with the SARA project) assisted the Institute for Vegetables and Potatoes (IVP) to identify its priorities for research on greenhouse production in a workshop of a week with researchers, farmers, traders, extension workers and traders. Next to the variety screening, plant protection, technological and economic issues were seen as having a high priority. It was proposed to create a department for technological issues and one for applied research and extension (Balliu, 1998, Holtland 1998). However, since all staff members are specialised in breeding and since the institute was not able to attract extra staff members to work on technological or economic issues, not much has changed. Only when there is a request from outsiders (e.g. from ANEP) with money for on farm research, this is done.

As important as the results of the trials is the creation of networks for innovation of researchers, farmers, traders and extension workers. It is in such networks that the researchers get an incentive to observe trials well and to come to clear and reliable conclusions. The above mentioned ANSPA is an example of such a network.

Elements of privatisation

In the last few years more attention is paid to private extension. One can distinguish three forms of private extension: *extension by private firms*, *privately operating individual extension workers* and *independent private organisations*.

Extension by private firms is promoted by Albanian Fertiliser and Agro-inputs Dealers Association (AFADA) via Technology Transfer Centres (TTCs). Traders supply all inputs and cover all other costs for a farmers-demonstration field of 0.3 ha. The technologies demonstrated are mostly the same as those of the demonstrations in 1992. In the first year the costs are covered completely by AFADA, in the second year the trader has to pay 50% and in the third year he has to cover all expenditures. In 1998 the first TTC was established in Fush Kruja, in 1999 eight TTCs were established. Ironically in this private extension system subsidies are given for demonstration activities which the public extension no longer subsidises. Next to this several traders employ experts (with a salary 2-3 times higher than MAF-salaries) to:

- work in their store/shop and to advise farmers who buy inputs;
- visit their clients; e.g. a researcher identifies pests and diseases and advises the farmer and the trader on how to control these;
- manage a farm to produce seed (e.g. tomatoes; potatoes);
- to do some on farm trials, to organise a farmers group using inputs from the trader and to write leaflets on how to make optimal use of these.

Privately operating individual extension workers are agricultural specialists who are

hired by farmers for all kind of services:

- as a manager of a greenhouse, or a dairy farm. They get a monthly salary (1-2 times a government salary) and/or part of the profit;
- to take care for certain aspects of the production; e.g., health or feeding aspects of a poultry unit or plant protection for (plastic) greenhouses.

Several of them have other sources of income as well; e.g. as government employee or as guard of the farm on which they work.

The Centre for Agro-Business and Information (QABI), established by FAP in 1996 was the first *independent private organisation* offering knowledge and information against payment. It is an Association of farmers and agro-businesses. The 40 members elect a board of 6 which takes policy decisions and approves all expenditures of the QABI-office. The main activities of its four staff members are:

- publish a monthly bulletin with prices of inputs, technical information and advertisements of traders; in 1998 over 5.500 copies were sold;
- an Information Centre where traders display their products;
- individual advise of farmers on investment opportunities (plastic greenhouses, dairy cows, grape seedlings, seed potatoes etc.
- soil sampling and fertiliser recommendations;
- support to producer groups (milk marketing or the procurement of inputs)
- seminars to link actors (e.g. farmers, researchers, input suppliers and processors interested in grape production). Participants have to pay to take part.
- on request QABI does marketing studies. The latest example is one on olive oil, but also studies on tomatoes and potatoes have been done.
- studytours and exchange visits for which the participants pay;
- training: a group of farmers is trained in bi-weekly sessions of one day, during a period of few months; a NGO-pays the fees;
- mediate on inputs and markets. QABI links farmers and agro-businesses. A 2% commission is charged.

FAP supported QABI by paying the costs of the basic salaries and the transport. The contribution of FAP towards other running costs (office, materials, telephone, etc.) is related to the income generated: for every Lek generated, FAP contributes two Lek. In this way the staff is forced to generate income, since without it, it would soon be

bankrupt. Every half year this arrangement is reviewed. In order to stimulate the generation of income, 50% of the money collected, is for the staff. In 1999, QABI recovered about 10% of its costs. The income from fees for advisory services was limited which can be explained by the competition from privately operating specialists.

In 1998 the Government approved the restructuring platform of the extension service. The main factors that in actual conditions dictated the need for restructuring the public extension service and its orientation toward gradual privatization are:

- Lack of possibility from the state to keep in the future a completely public extension service, the cost of which is too high. This is also reflected in the continuing reduction of the number of budgetary employees;
- The fact private bodies or non-governmental organizations might carry out a more effective extension service and more than that: farmers pay less attention to the gratis extension service;
- On the other hand side, different donors like the Wordlbank recommend the Government to reform the non-very adequate systems for farmers' needs and with problems on the financial side.
- The working conditions of the extension staff are difficult, salaries are low, transport and communication is limited. There is also a limited access to new technologies, materials, and other sources of information.
- The number of extension staff is small compared to the duties and volume of work (1 employee per 1000-1500 farms). This is aggravated by the limited use of mass media and the low level of organization of farmers etc.

Based on the above, recently a national foundation was created by MAF, AFADA, the national farmers union and ANEP, which will establish a first Regional Agricultural Advisory Centre (RAAC) in Durres and very soon QABI will be transformed to a second RAAC in Fier Region. It will start with public and donor funding (Ministry of Agriculture and Food and ANEP) and it will provide advisory services against payment to farmers.

Education of the extension workers

In 1993 the Agricultural University of Tirana created the Department of Extension Education in Agriculture which (with TEMPUS funds) trained 91 extension workers and teacher in courses of 5-10 weeks in the period 1994-1997 (Veizi, 1997). In cooperation with ANEP some more courses were given in 1998/1999. Unfortunately, in 1999 the staff was moved to other departments. At present students in agronomy or livestock production do not follow extension subjects.

From the very beginning training was an important aspect of ANEP, initial emphasis was on participatory extension planning, on extension methods and on extension management. Also some technical issues were trained, specially farm economics and

marketing. Since 1998 gender issues receive due attention. Most training is done via the principles of Training of Trainers, whereby the regional co-ordinators play a key-role. At present they are well trained and are able to provide training themselves. Due to many changes in staff the training has to be repeated time and again.

Since initially all extension workers were supposed to be generalist but were trained in either agronomy or livestock production, some additional training on these issues was given to cover the gaps. Over time however it was realised that farmers asked for more specialised extension workers. Since most professionals in the Albanian AKIS are poorly trained when it comes to practical skills, in several cases the contribution of foreign experts as coach/trainer has been indispensable. In general training on technical issues remains an important priority (Annex I gives an overview of training provided).

Conclusions

Albania's macro-economic policies have indeed been fairly positive for the farming community. The very weak legal system is a severe handicap for the development of the Albanian agriculture.

In the AKIS, despite many short and medium term problems, much has been learned. Examples of successful networks for innovation are there. The central problem remains how MAF can adjust to its new role of facilitator, encouraging others to function better. The creation of the RAAC-foundation is a major step forwards, and hopefully in the future one can capitalise on this.

Organisations like QABI and RAAC can play a role in establishing at least a private mechanism to deliver information, knowledge and skills to these farmers. They can however not be fully private since Albanian farmers at present are not able to pay the full price for their services. Support of donors (including the MAF) remains needed.

In general the typical government attitude of evenly spreading its energy to all areas and on all subjects is not effective. At national level priority has to be given to a few potential sectors like vegetables, potatoes and milk production (possibly also grapes and small fruits). Budgets and human resources have to be focused on these issues. Critical mass and momentum can be generated through working in small (focused) teams and through networking.

At national level and in the coastal zone networks for innovation have to be created on these issues in which on-farm research, stimulating co-operation (e.g. for export) and possibly some subsidies (e.g. for the much needed processing capacity) have to be combined in one concerted effort, co-ordinated via the new to be established RAACs. These efforts can not yet be fully privatised, but they should rely on private mechanisms. Any interference of politicians should be avoided.

In the mountainous areas small teams of some 6 people, based in the main markets (towns) should focus on rural development issues; co-operating with donors (like IFAD and with NGOs) and other government organisations on removing the main bottlenecks of poor infrastructure, poor input supply and marketing.

There is also still much room to improve on the learning cycle in the AKIS: an improved monitoring system is needed as well as a better co-operation with the Ministry of Education, with the agriculture universities and with research institutes.

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Annex I

Programme delivery modes and farmer participation in Korca Region (1999)

Delivery mode	No of events	No. of farmers
On farm demonstration	365	2635
Exhibitions and fares	5	307
Field days	27	352
Group meetings	1224	8102
Individual meetings	15.178 (752 women)	

Training courses received by extension staff during last 2 years (1998/1999)

Extension management	General issues	Technical subjects
PEP (Participatory Extension	Marketing of agricultural and	Cultivation of vegetables in
Planning)	livestock products	greenhouse
RAAKS (Rapid Appraisal of	Farm economics	Fruit trees production
Agricultural Knowledge		_
Systems)		
Rural extension	Farm accounting	Livestock production
Monitoring of extension	Gender	Integrated Pest Management
activities		
	Computer knowledge	On-Farm Research
	Private Farmer Associations	