ELKANA/FAO Workshop

on

EFFECTIVE COMMUNICATION AND INFORMATION MANAGEMENT AMONG AGRICULTURAL RESEARCH, EXTENSION AND FARMERS FOR RURAL DEVELOPMENT IN GEORGIA

organized by

the Biological Farming Association “ELKANA”, Georgia

and

the Food and Agriculture Organization of the United Nations

1-3 February 2005
Tbilisi, Georgia
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EXECUTIVE SUMMARY

The workshop on ‘Effective communication and information management among agricultural research, extension and farmers for rural development in Georgia’ was jointly organized by the Biological Farming Association (ELKANA), Georgia and the Food and Agriculture Organization of the United Nations (FAO) and held 1-3 February, Tbilisi, Georgia. The workshop was a follow-up to the study ‘Georgia: ICT Infrastructure and Use in Agriculture, Agricultural Policy, Research, and Education Organizations’ (Temel, T., and Maru, A., 2003), commissioned by the Sustainable Development Group (REUS) of the FAO Regional Office for Europe (REU). Thus in follow up to this study and in response to current developments in the IC sector this workshop was needed to bring together not only stakeholders from the research institutions but also their constituents and clients, including farmer organizations; the objectives were to discuss the study, assess the IC needs of the participant organizations, formulate recommendations for the improvement of the information and communication system to better serve farmers’ needs and rural development and, based on the gaps identified, draft a project proposal aiming at the improvement of communication and information systems in the agrarian sector.

Altogether 40 representatives of 22 local organizations, including agricultural research, education, extension, non-governmental and farmer organizations, and media, participated in the workshop. Ten representatives provided papers on information and communication systems of their respective organizations. Ms Mariam Jorjadze and Ms Keti Nemsadze from ELKANA, Ms Karin Nichterlein, Research and Technology Officer, and Mr Riccardo del Castello, Communication Officer, from FAO moderated the workshop and carried out an analysis of strengths, weaknesses, opportunities and threats (SWOT analysis) of information and communication of the represented organizations.

Some of the strengths identified were the availability of databases, technologies and information technologies on the institutional level. However the limited ability to disseminate these information and technologies on the local level to the benefits of farmers was also identified as the major weakness.

According to the workshop participants, there is an urgent need to improve the information and communication system among rural institutions and organizations. This will increase farmer participation in developing appropriate agricultural policies, bring scientists, extension workers and farmers closer together, improve relevance of research and quality of extension and advisory services, thus contributing to the development and the sustainability of the agricultural farms in Georgia.

An outline of a draft project proposal entitled “Improvement of information and communication system for agricultural sector development in Georgia” was developed by the workshop participants. Its goal is to improve market access and agricultural production through improved ICTs. The major objectives of the proposal are: strengthening the consultation centres through information supply and retraining of staff at district level; improvement of information and communication systems at all levels through advanced technologies; and the establishment of a platform for discussion of agricultural issues to influence state agricultural policies.
A project formulation team, consisting of representatives of research and education institutions, as well as farmer organizations, has been nominated by the workshop participants and requested to further elaborate the project proposal with the involvement of representatives of the Ministry of Agriculture.
ACKNOWLEDGEMENTS

The excellent organizational support from the Biological Farming Organization (ELKANA) is greatly appreciated, especially the excellent efforts made by Ms Mariam Jorjadze, Director of ELKANA, and her team, who compiled the current report. Moderators facilitating the workshop were Ms Karin Nichterlein and Mr Riccardo Del Castello from FAO, and Ms Mariam Jorjadze and Ms Keti Nemsadze from ELKANA. The FAO officer involved in the workshop preparation and editing of the report was Karin Nichterlein.
1. **INTRODUCTION AND BACKGROUND**

The workshop on ‘Effective communication and information management among agricultural research, extension and farmers for rural development in Georgia’ was jointly organized by the Biological Farming Association, Georgia and the Food and Agriculture Organization of the United Nations (FAO) and held 1-3 February, Tbilis, Georgia. The workshop was a follow-up to the study ‘Georgia: ICT Infrastructure and Use in Agriculture, Agricultural Policy, Research, and Education Organizations’ (Temel, T., and Maru, A., 2003), commissioned by the Sustainable Development Group (REUS) of the FAO Regional Office for Europe (REU). The study assessed the needs of national agricultural research institutions and their relevant partners, altogether nine organizations, for innovative, appropriate, and efficient information and communication systems and linkages in Georgia. The study noted that there is an official recognition at the institutional level that the establishment and relevant use of an information and communication technology (ICT) infrastructure should be one of the country’s critical tools in the promotion of economic development. However, for the agricultural sector, an ICT strategy has still to be developed and priorities need to be set. The ICT infrastructure and usage in most of the assessed organizations and the agricultural research system is very limited, with a few noticeable exceptions. Available scientific and technical information related to agricultural research and development is largely obsolete. Most of the organizations do not have electronic research data management system. Thus in follow up to this study and in response to current developments in the IC sector, this workshop was needed to bring together not only stakeholders from the research institutions but also their constituents and clients, including farmer organizations; the objectives were to discuss the study, assess the IC needs of the participant organizations, formulate recommendations for the improvement of the information and communication system to better serve farmers’ needs and rural development, and based on the gaps identified to draft a project proposal aiming at the improvement of communication and information systems in the agrarian sector.

2. **PRESENTATIONS**

2.1 **Participants**

Altogether 40 representatives of 22 local organizations, including agricultural research, education, extension, non-governmental and farmer organizations, and media, participated in the workshop (see Annex 1 - List of Participants). Mr. Mamuka Meskhi, Assistant to the FAO Country Representative, took part from the local FAO office. Ms. Mariam Jorjadze and Ms. Keti Nemsadze participated as ELKANA Facilitator. Ten representatives provided papers on information and communication systems of their respective organizations. Ms. Karin Nichterlein, Research and Technology Officer, and Mr. Riccardo del Castello, Communication Officer, facilitated the workshop from FAO.

2.2 **Programme of the workshop**

**1 February 2005 (Day One)**

According to the agenda (see Annex 2 - Workshop Programme), the workshop was opened by Mariam Jorjadze, the Director of ELKANA, who welcomed the participants. She drew the attention to the study on the infrastructure of information and communication technologies and use in Georgian agriculture sector commissioned by FAO, from which a Georgian
translation was distributed to the participants. She presented the workshop program to the participants and introduced the guests from FAO.

Karin Nichterlein spoke in her introduction about FAO’s activities in the European region. In particular she mentioned the support given to the countries of Central and Eastern Europe to reduce poverty and contribute to food security during the transition period to market economies. Despite the information revolution, the majority of rural people has no or only limited access to information needed to improve their situation and develop the rural sector, due to the limited availability and use of information and communication technologies in rural areas. The Workshop would address this issue.

Riccardo Del Castello spoke about the role of information transfer in agricultural development. He noted that information and communications are two sides of one issue – exchange of information between people. He stated that for effectiveness of the workshop the exchange of ideas and experiences between participants played the most significant role.

Afterwards the participants briefly introduced themselves and shared their expectations from the workshop, which included among others getting new and closer contacts to colleagues during the workshop, share knowledge and experiences including on farmers needs, assess the current situation of ICT use in agriculture and identify new strategies (Annex 3).

This was followed by the election of chair persons and rapporteurs under the chair of Mariam Jorjadze. David Bedoshvili, David Maghradze, Rostom Gamisonia were elected as chairmen for the sessions when participants gave their presentations. Amiran Kvantaliani and Nana Zubashvili (day 1), Vakhtang Shelia, Nino Kishmarishvili (day 2) and Givi Mosashvili, Irma Babunashvili (day 3) were elected as rapporteurs, to summarize the workshop results.

Mariam Jorjadze presented the goals and objectives of the Workshop (Annex 4). Karin Nichterlein reported on the needs assessments of agricultural research systems in information and communication technologies conducted by FAO in countries of Central and Eastern Europe, emphasizing on the results of the in-depth study conducted in Georgia (Annex 5). Riccardo Del Castello presented a paper on information and communication for agricultural and rural development, and FAO’s experience to assist farmers in developing local communication processes through the use of media tolls such as community radio, video and new ICTs (Annex 6).

Discussion: The presentation of FAO’s study results and experiences were of special interest to the participants. The participant representing the management of the Georgian State Agrarian University found the evaluation of the ICT infrastructure of the university too negative. He said the results would not reflect the actual situation and the university has some up-to-date information facilities. FAO representatives stated that the results of the study were based on interviews with the employees of organizations and views of interviewed people, conducted in 2003, and one of the purposes of this workshop was to discuss the results, and update the information.
2.3 Summary of presentations and discussions

Chairmen: David Bedoshvili, David Maghradze, Rostom Gamisonia

- Georgian State Agrarian University (GSAU) – Amiran Kvantaliani reported on the role of the university in training agricultural professionals and future plans to create an information and consultation centre (Annex 7).
  
  Discussion: With regard to the ICT infrastructure, information was provided that the university has about 60 computers available for the students, though contacts with the farmers and consulting services need improvement. Although, the university offers retraining for farmers, is has no training programme for extensionists.

- Georgian Academy of Agricultural Sciences (GAAS) – Givi Mosashvili reported on the role and activities of the academy and plans to establish an information centre at GAAS (Annex 8).
  
  Discussion: The participants considered future plans of GAAS, in particular, the establishment of an information centre (on the third day of this Workshop, a presentation of the project for establishing this centre would be made). To the question how research results will be communicated to farmers, participants were informed that GAAS regional offices would be supplied with computers to deliver research results produced by GAAS institutes to farmers. It was emphasized during the discussion that there is need to translate scientific results in a format understandable to farmers. The Institute of Horticulture, Viticulture and Winemaking was given as example on how to do it, since the institute is currently developing a system for identification of farmers’ needs and for the ‘translation’ of scientific information to information understandable by farmers.

- Research Institute of Horticulture, Viticulture and Winemaking (RIHVW) – Vakhtang Shelia reported on the research priorities of the institute which has been reformed since 2002 as part of a World bank project that included research priority setting, reorganization, reduction of staff, and provision of research equipment; in this context a centre for planning, extension, consultation and training has been established and in future the establishment of a computer centre is foreseen (Annex 9).
  
  Discussion: The questions basically dealt with the centre of the institute responsible for extension and training. The centre provides paid services from which currently only large farmers and firms benefit. Expansion of the services is hindered by imperfect communication facilities and lack of finances for advertising.

- Farmer Association ‘Farezi’ – Nana Zubashvili presented the strategies and activities of the association focusing on support to farmers in the Samtskhe-Javakhety region in the field of biological farming and conservation of traditional varieties and farming methods (Annex 10).
  
  Discussion: The activities of the farmer association attracted the interest of the participants, specifically the ability to have direct contacts with farmers and deliver consultation services.

- Georgian Business University (GBU) – Nino Damenia informed on the main research priorities of the Institute of Globalistic and Strategic Development of Georgia that are focused on various aspects of development (Annex 11), and its search for research partnerships.
Discussion: The discussion dealt with the wide spectra of the services, provided by the institute, the priority, given to agricultural sector and potential of this institution to provide services to different target groups.

- Ministry of Agriculture and Food of Ajaria (MAF Ajaria) - Vakhtang Goguadze presented current problems of the agricultural sector in Ajaria, plans of the ministry to provide services to farmers to assist them with the transformation to a market economy and informed on project proposals prepared for submission to donors (Annex 12).
  Discussion: The participants were interested in the problems of Ajarian farmers. The discussion centred about the problem of farmers who own land and often do not know how to manage successfully their farms. The establishment of local extension services would be required to provide farmers with information and training on new improved technologies and with management skills needed to become successful entrepreneurs.

- Research Institute of Farming (RIF) – Zurab Jinjikhadze informed on the objectives of the institute which are focused on development of improved cropping systems and improved varieties of major field and vegetable crops, its activities, international cooperation, and constraints in receiving information on research and markets (Annex 13).
  Discussion: The presentation did not cause any discussions, just a question was asked to clarify the issues of yields and zoning of the new wheat variety – Mtskheta-1.

- Guria Agribusiness Centre (GAC) – Aleko Mameshvili informed on the two major activities of the centre, the support to farmer associations and the training of youth on agricultural issues during their school education through agrarian youth clubs (Annex 14)
  Discussion: The presentation raised interest and revealed the need of farmers for assistance. It was found that farmers should not receive financial support, without proper consultation through special extension services. Information systems need to be developed or strengthened, to make new approaches and technologies accessible to farmers.

- Farmers Union of Georgia (FUG) – Irma Babunashvili spoke about the consultation and training activities and supply of seed and agrochemicals offered by the union and further plans to expand their activities. It has several information-consulting centres established and provides information through a monthly journal (Annex 15).
  Discussion: The discussion was centred on the identification of farmers needs for information and support. The union uses various methods of needs identification including contacts at information stands, face-to-face meetings during consultations, and surveys.

- Research Institute of Plant Protection (RIPP) – Eka Tabatadze presented the activities of the institute, which are focused on research on plant pests and their control in agro-ecosystems and forestry (Annex 16).
  Discussion: The questions and answers showed that the institute has lot of interesting and relevant information, but lacks an efficient information system, though it has no database yet and its website functions only for a week.
Radio ‘Mtsvane Talgha’ (Green Wave) – Ramin Meladze presented the objectives and activities of the association and radio ‘Green Wave’ paying special attention to promotion of the NGO sector and to raising awareness on environmental issues (Annex 17).

Discussion: Participants showed great interest in the presentation and considered the opportunity to cooperate for the agriculture sector. The radio station representative expressed interest in agricultural issues, considers cooperating with professionals of various agro-sectors for the production of special casts, and using the radio for advocacy on agricultural issues. Participants requested an information meeting at the radio, to inform on and discuss rural issues.

Georgian Association of Professional Bee-Keepers (GAPB) – Temur Ghoghoberidze spoke about activities of the association involving 250 professionals, who meet monthly. The association issues quarterly a newspaper “Putkari da Meputkreebi” (Bees and Bee-Keepers), organizes biannually an exhibition, where tools for bee-keeping, honey, and queen-bees are exhibited. The association has also breeders, who produce queen-bees for local bee-keepers and export (Annex 18).

2.4 SWOT Analysis
Introduction of Methodology for SWOT Analysis
Riccardo Del Castello presented the methodology for SWOT analysis (Strengths, Weaknesses, Opportunities, Threats), as a flexible tool in strategic planning to stimulate new ideas and to enhance interaction between participants (Annex 19). At the end of the first day the participants were divided into two groups, for the next day’s group work on identifying the SWOT issues. A description of the SWOT methodology was distributed to all participants.

2 February 2005 (Day Two)
Summary of previous day
Amiran Kvantaliani and Nana Zubashvili summarized main issues presented and discussed at the previous day.

SWOT Analysis - internal analysis of strengths and weaknesses (SW)
Karin Nichterlein emphasized the need to analyze the internal situation of the organizations and institutions by identification of strengths and weaknesses to develop strategies for their improvement. Participants should reflect on the questions: What can their organization do well or badly to provide support to agricultural development via communication and information management. Strength of one organization could cover weaknesses of another one, and collaboration of the various organizations can help to make better use of their potential strengths. If gaps remain and were identified, they could be addressed by a technical assistance project.

For the identification of their strengths, the organizations should answer the questions: What are their strong points? What are their strengths? For the identification of the weaknesses, it is important to apply a realistic and self-critical approach. Participants should evaluate their organizations using an external point of view, considering the claims of clients, are other organizations better, what could be improved?
The following team work (in two groups) and plenary sessions on the analysis of SWOT were facilitated by Mariam Jorjadze and Keti Nemsadze.

**Team work – Identification and categorization of SW**
All participants received cards of two colours (one for strengths, one for weaknesses) and wrote down what they considered to be the strengths and weaknesses of ICTs in their organization (one idea per card). With assistance of the facilitators, the team members categorized the cards.

**Plenary Session – Presentation of team work results and their consolidation (SW)**
Results of the team work were presented to the plenary, and a consolidated list of strengths and weaknesses was prepared with support of the facilitators (Annex 20).

**Team Work – Identification and Categorization of Opportunities and Threats (OT)**
As done for the SW, participants received cards of two colours (one for opportunities, one for threats) and wrote down what they thought to be the opportunities and threats for ICTs in their organization (one idea per card). Together with the team facilitator, the cards were categorized.

**Plenary Session – Presentation of team work results and their consolidation (OT)**
Results of the team work were presented to the plenary, and a consolidated list of opportunities and threats was prepared with support of the facilitators (Annex 20).

**Plenary Meeting – Priority setting by categories**
The workshop participants considered the results of the SWOT analysis and identified priorities by voting (Annex 21).

Mariam Jorjadze resumed the results and made brief comments. She emphasized that the availability of databases, technologies and information technologies, identified as priorities are indeed strengths, though if they serve the farmers or not, is an issue for separate consideration. This was clearly reflected in the voting of the weaknesses – the limited ability to disseminate information on the local level was identified as the major weakness. With regard to the external factors of the SWOT analysis (e.g. opportunities), it turned out that no one relied on the government assistance; organizations represented rather rely on own resources and foreign assistance. In connection with the threats, Mariam Jorjadze welcomed the approach of participants to the issue who did not regard financial problem as a major threat.

**End of day 2**

**3rd February 2004 (Day Three)**
Before continuing with the workshop, participants paid their last respects to Mr. Zurab Zhvania, the deceased Prime Minister. They learnt the tragic news of his death in the morning.

**Resuming of the Previous Day**
Vakhtang Shelia and Manana Gigauri summarized the results of the previous day before the workshop continued with the next session.
Formulation of the List of Basic Strategies and Activities – Introduction

Riccardo Del Castello spoke about the formulation of strategies to improve the information and communication system for agriculture and rural development. He noted that the results of the SWOT analysis provided a good basis, to identify the main problems and formulate strategies to solve them.

Team Work: Formulation of the List of Basic Strategies and Activities

The team work was facilitated by Mariam Jorjadze and Ketel Nemsadze. Participants decided to continue the work in one team. First participants identified basic problems of poverty in rural areas (Annex 22). Then a discussion followed on how communication and information management can contribute to the poverty reduction through improvement and development of agriculture sector in Georgia. Basic strategies and actions discussed were used for the formulation of a draft project proposal during one of the parallel session.

2.5 Developing ideas for cooperation

Plenary Session: ‘Market place’

Karin Nichterlein explained to the participants the purpose of the ‘Market place’ session and its working methodology. She experienced during this workshop strong interest of participants in cooperation and relevant opportunities, and proposed as a first step to identify areas of common interest for possible cooperation and further follow-up after the workshop. Participants with interest in collaboration and concrete service offers/proposals were requested to write this on a card and pin it on the board. Others interested to collaborate on these issues, were requested to write his/her proposal and place this card below the original one. Participants got actively involved in ‘marketing’ and eight institutions/organizations presented their service/collaboration ideas (Annex 23).

Parallel Sessions:

After the Plenary Session ‘Market place’, participants of the workshop continued their work at two parallel sessions.

2.6 Session A. Drafting a project outline by group representatives

Participants of the workshop nominated five representatives from education and research institutions, and farmers associations, to work as a team on the formulation of a draft project proposal. The formulation team consisted of Amiran Kvataliani (GSAU), Raul Babunashvili (FUG), Nana Zubashvili (FAREZI), Ekaterine Tabatadze (RIPP), and Mariam Jorjadze (ELKANA).

Session B. Presentations of three participants

Facilitator: Tamaz Dundua

Three more participants gave presentations on their stakeholder organization:
- Association of Biological Farming ELKANA - Zura Karbelashvili (Annex 24)
- Institute of Agricultural Information Sciences and Telecommunications – Leri Gigineishvili (Annex 25)
- Georgian Academy of Agricultural Sciences (GAAS) – Givi Mosashvili (Annex 8)
Presentation and consideration of a project proposal

Mariam Jorjadze presented the draft project proposal. She proposed that based on the workshop results, two project types could be developed – a project covering the whole country or a model project focused on one or two regions. Since the probability to find donor support for a large project is minimal, the formulation team proposed to prepare a model project version, which complies with FAO requirements. The project should address critical gaps (‘white spots’) of the ICS in agriculture and would have to be submitted by the Ministry of Agriculture to FAO. Mariam Jorjadze presented the outline of the draft project proposal entitled “Improvement of information and communication system for agricultural sector development in Georgia”. Its goal is to improve market access and agricultural production through improved ICTs. The objectives of the proposal are: strengthening the consultation centres through information supply and retraining of staff at district level; improvement of information and communication systems at all levels through advanced technologies; and the establishment of a platform for discussion of agricultural issues with the purpose to influence state agricultural policies (Annex 26). The presentation of the draft proposal did not cause any further discussion and participants agreed that the formulation team nominated by them would continue working on the preparation of a final version of the project proposal. In addition it was decided, to involve the representative of the Ministry of Agriculture as member of the formulation team.

2.7 Conclusions and Recommendations of the Workshop

According to the workshop participants, there is an urgent need to improve the information and communication system among rural institutions and organizations. This will support farmer participation in developing appropriate agricultural policies, and bring scientists, extension workers and farmers closer together. As a consequence the relevance of research and the quality of extension and advisory services will be improved, with positive impact on the development and sustainability of the agricultural farms in Georgia.

The participants agreed on the following recommendations for immediate action:

- the report of the workshop (English/Georgian version, deadline for preparation 31 March, 2005) should be disseminated among the workshop participants, the Ministry of Agriculture, the Parliamentary Committee on Agricultural Issues and FAO;
- the full project document for submission to FAO should be developed by the project formulation team nominated during the workshop with active consultation of other workshop participants and representatives of the Ministry of Agriculture;
- to inform the Ministry of Agriculture about the results of the workshop, and obtain its support for the involvement of their representatives in the formulation of the proposal and for the official submission to FAO by the Minister for Agriculture;
- information on the workshop objectives and results (press-release) should be disseminated through the information media of the participating organizations, mass-media and information network;
- the project formulation team should take into consideration ongoing agricultural projects and aim at achieving the maximum synergy among stakeholders;
- the project formulation team should consult the Land Cadastre Department for inputs of the proposal;
- the Government of Georgia should be requested to pay more attention to agriculture and to the organizations involved in the agricultural sector.
2.8 Evaluation and closing of the Workshop

For the workshop evaluation participants were requested to write down what they liked and what they thought could be improved (Annex 27). The evaluation was rather positive. It was found that the workshop was very well organized, the working atmosphere business-like, the subject actual and relevant, participants taking responsibility for active participation, and that actual results were achieved. It was criticized that the nominated representative of the Ministry of Agriculture was not attending the workshop. It was found that time allocated for team work was not sufficient, that the workshop materials should have been provided in advance and that presentation materials of participants should have been prepared better and more focused on the subject. It was proposed that in future, similar events should be held in one of the regions.

After the workshop evaluation participants expressed their gratefulness to FAO and ELKANA representatives for their high professional skills, good organization and benevolence.

FAO representatives made brief assessment. They cordially thanked the participants, organizers, translator, and the secretariat and noted that the issues considered at the workshop were timely and necessary. For the full three days of the workshop there was a very good working environment and in addition to the communication process initiated among the stakeholders a practical result – a draft project outline was in place. Work on this project proposal should be continued with the purpose to submit it for funding.

Mariam Jorjadze closed the workshop. She thanked all, who were present and she specifically pointed out FAO’s role in organizing this workshop. She expressed her hopes that the cooperation, initiated during this workshop would be continued and yielded in results contributing to rural development.

The workshop was finished with the banquette, arranged for the participants by ELKANA.
ANNEXES

Annex 1  List of participants

<table>
<thead>
<tr>
<th>Name, Surname</th>
<th>Organization</th>
<th>Position</th>
<th>Telephone/Fax</th>
<th>E-mail</th>
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<tr>
<td>National participants</td>
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Research and Technology Officer
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Annex 2 Workshop Programme

1 February, 2005 (Day One)

09.30 Registration of Participants
10.00 Opening of the workshop, welcome speech and introduction to the workshop
   *ELKANA Director, R. Del Castello, K. Nichterlein*
10.15 Introduction/expectations of participants (3 min each)
   Election of Rapporteurs
   *ELKANA Director*
11.10 Goals and objectives of the workshop
   *Chairperson*
11.20 Overviews on FAO’s ICT needs assessments for agriculture in Eastern Europe and activities in communication for development
   *K. Nichterlein, R. Del Castello*
12.00 Coffee/Tea Break
12.15 Presentations of 6 major stakeholders (10 minutes each plus 5 minutes of questions)
   *Chairperson*
14.00 Lunch Break
15.00 Presentations of 6 major stakeholders (10 minutes each plus 5 minutes of questions)
   *Chairperson*
16.45 Coffee/Tea Break
17.00 Discussion: additional remarks from other participants and general discussion
   *Chairperson*
17.45 Introduction to SWOT analysis and splitting into 2 groups
   *R. Del Castello, ELKANA facilitator*
18.00 Closure of the day

2 February, 2005 (Day Two)

09.30 Summary of day 1
   *Rapporteur*
10.00 Internal Analyses – introduction by K. Nichterlein
   Group work - Identification and clustering of Strengths and Weaknesses
   *FAO staff and ELKANA Facilitators*
10.45 Plenary: Presentation of group work and its consolidation (for Strength and Weaknesses)
   *Group representatives and ELKANA Facilitators*
12.00 Coffee/Tea Break
12.15 External Analyses – introduction by R. Del Castello
   Group work - Identification and clustering of Opportunities and Threats
   *FAO staff and ELKANA Facilitators*
13.00 Plenary: Presentation of group work and its consolidation (for Opportunities and Threats)
   *Group representatives and ELKANA Facilitators*
14.00 Lunch break
15.00 Plenary: discussion of group results and setting priorities by categories (voting)
   *K. Nichterlein, ELKANA Facilitator*
16.45 Coffee/Tea Break
17.00 Formulate major strategies and list of actions (introduction)
   *R. Del Castello, ELKANA Facilitator*
   Group work: Formulate major strategies
   *FAO staff and ELKANA Facilitators*
18.00 Closure of the day
3 February, 2005 (Day Three)

09.30 Summary of day 2
   Rapporteurs
10.00 Group work: Formulate list of actions
   FAO staff and ELKANA Facilitators
10:45 Plenary: discuss and consolidate group results and set priorities for strategies R. Del Castello, ELKANA Facilitator
12.00 Coffee/Tea Break
12.15 Plenary: Market Place - developing ideas for collaboration
   K. Nichterlein, ELKANA Facilitator
13.45 Election of group representative to make gap analyses and develop draft project outline
14.00 Lunch Break
15.00 Parallel Sessions:
   A) Drafting a project outline by group representatives
   B) Presentations of 3 major stakeholders
      Discussion
16.45 Coffee/Tea Break
17.00 Presentation and discussion of components for a draft project proposal
   Group representative
18.00 Summary and short evaluation of the Workshop
18.20 Summary of day 3
   Rapporteurs
18.30 Closing remarks
19.30-21.30 Closing Dinner
Annex 3  Workshop Expectations

- Awareness of global experiences
- Opportunities of new contacts
- Methods of effective communication with regional agrarian centres
- Farmers’ linking with the scientists, businessmen, NGOs etc.
- Extension of innovative technologies in the agricultural sector
- Improvement of internal communications within the organizations
- Awareness in improved communication means between Georgian centre and the regional level
- Current situation analysis and identifying of the future strategies
- Improvement of effectiveness of advisory services for biological farming
- Introduction of new technologies into the curricula
- Closer contacts between the organizations
- Sharing of knowledge and experience
- Training in existing communication network improvement methods
- Development of the project for introduction of communication technologies in the agricultural sector of Georgia
- Awareness (e.g. better understanding) of the farmers’ needs
- Awareness of problems in the agricultural sector, obtaining more information on farmers’ life in Georgia and using this information in the radio-project.
Annex 4  Goals and Objectives of the Workshop

Goals
1. Familiarization and analysis of the results of the study on information and communication technologies (ICT) infrastructure and use in agriculture conducted in Georgia in 2003

2. Development of a shortlist of needs of participant organizations of the agricultural sector

3. Development of a national project for improvement of communication infrastructure in agriculture

Objectives
• Provide forum for various participants of the agricultural sector (scientists, consultants, farmers union representatives etc.) and assuring their equal participation

• Support to more effective use of information and communication resources in agriculture

The Workshop is intended to contribute to orientation of agricultural research and consultations towards the needs of farmers for agricultural development.
Annex 5

Information and Communication Technology (ICT) needs assessments of the National Agricultural Research Systems in Central and Eastern European countries

Karin Nichterlein
Research and Technology Officer, FAO Regional Office for Europe (REU)

The information revolution has completely bypassed nearly one billion people. They are the rural poor, who constitute 75 percent of the people in the world who live on less than one dollar a day. On average the CEE/CIS region has a lower level of poverty and smaller percentage of rural population than other regions of the world. However, it is often not recognized that a number of countries of the Balkans, the South Caucasus and Central Asia are as poor as some of the poorer countries in other regions and there has been a dramatic increase in poverty rates over the past decade. The advent of information and communication technologies has served only to widen the gap between the rural poor and others who have access to such technologies.

The Food and Agricultural Organization (FAO) and its partners are working on an integrated set of activities to bridge the rural digital divide by strengthening human and institutional capacity to harness information and knowledge more efficiently. The Research, Extension and Training Division of the FAO (SDR) is involved in assisting member states in strengthening national agricultural research, extension and education systems. This is done through assistance for the development of integrated approaches to the information needs of rural people and to the testing and application of innovative and sustainable applications of information and communication technologies in support of research, extension and education systems, for better management of farms, and to contribute to rural development.

Starting these activities in the CEE/CIS region, SDR together with the FAO Regional Office for Europe commissioned three studies to gain an overview of the ICT status and needs in National Agricultural Research Systems (NARS). More than ten years after the political changes started, the CEE countries have made varying progress in re-organizing their NARS. The management of information and communication plays a prominent role for the efficient functioning of NARS and their partners and clients like extension services, NGOs, producers and processors and their associations and Government.

In view of future programme development, the three studies had a slightly different focus:

1. One in depth review of one country, i.e. Georgia:
   “Georgia: ICT Infrastructure and use in agriculture”

2. One overview of ICT status and needs of the whole NARS and its partners for improved agriculture in Croatia, FYR Macedonia and Romania
3. One overview of ICT status and needs of a thematic sector of the NARS and its partners in Bulgaria, Serbia, Kosovo (sector: ecological and organic agriculture):
The report will be available from April 2005 in SD Dimension: http://www.fao.org/sd/

As a follow-up on needs assessments in the agricultural information and communications systems conducted in the region, the FAO Regional Office for Europe and FAO’s Research, Extension and Training Division organized workshops with national key stakeholders of research institutions, universities, extension and advisory services, farmer and rural organizations:

a. The workshop on “Information, Communication and Knowledge Systems for Sustainable Agriculture in Lithuania”, 17-18 June 2003, jointly organized by the Lithuanian Institute of Agrarian Economics (LAIE), and FAO produced clear priorities and a list of desired outputs for the development of an Information and Communication System (ICS) for sustainable agriculture with a major focus on organic agriculture as a model sustainable system. During the follow-up, a draft project proposal for support under FAO’s technical cooperation programme (TCP) was prepared and approved by FAO for support. http://www.fao.org/sd/dim_kn4/kn4_050101_en.htm

b. The workshop on “Information and Communication Systems for Agricultural Research and Rural Development”, jointly organized in 2004 by the Romanian Academy of Agricultural Sciences with FAO identified and further specified some of the key elements for future action, such as raising awareness of policy-makers to allocate adequate resources/funding for the improvement of information and communication systems in agriculture, formulation of a coherent national information and communication strategy with the identification and involvement of all actors from the Romanian Agricultural Knowledge and Information System, development of an efficient and systematic feedback mechanism from farmers and their representatives to knowledge and information providers.
Annex 6

Information and Communication for Agricultural and Rural Development: bringing together research, extension and farmers

*Riccardo del Castello*

*Extension, Education and Communication Service*

*Food and Agriculture Organization of the United Nations*

Current Trends in Agricultural Research and Extension

**Agriculture is undergoing a major crisis and rapid change**
- Dismantling of public structures serving agricultural and rural sectors, privatizations, decentralization, outsourcing, partnerships
- End of top-down agriculture (entrepreneurship and management capabilities)
- Farmer driven agricultural and livestock activities
- Diversification and restructuring based on market signals
- Increasing demands for information, skills and multi-stakeholder participation
- Increasing demands for new communication methods and tools

**Knowledge and Information for Rural Development**

Sustainable agricultural development is based less on material inputs (e.g., seeds and fertilizers) than on the people involved in their use. Knowledge and information are essential for empowering rural communities to more effectively influence local development. This calls for new technologies, skills, practices and ways to collaborate and, most of all, it requires that farmers have access to relevant information and knowledge.

The Information Age
- New communication tools and channels
- Information economy
- Dramatic expansion in information technology and services
- World-wide increase in the reach of mass media and electronic communication
- New forms of social interaction, new relationships, new types of transactions
- New economic opportunities and challenges

The Information Age: Threats and Opportunities

**Rural Development in the Information Age: some issues**
- Building the information technology infrastructure
- Social impact of Information and Communication Technologies on the lives of people
- Content relevance and reliability, language, format
- Access - technological, educational, cultural
- Training
- The knowledge gap between rich and poor communities
- What about rural communities?
Harnessing Knowledge for Development
Need for new strategies involving different technologies and building on existing strengths. Information must be available in appropriate languages and formats, up-to-date and communicated through appropriate channels.

**Information intermediaries:** a bridge between the information providers and the community members.

Good intermediaries include proximity, trust and knowledge (extension workers, educators, radio broadcasters, community leaders)

The AKIS Triangle

Agricultural Knowledge and Information Systems (AKIS)

Unhelpful assumptions about AKIS:
- It is a national system
- The elements are research, extension and education
- It deals with technological knowledge
- It exists in the real world

An AKIS emerges when:
- The complementary actors see THEMSELVES as forming a system and are aware of their complementary roles
- An AKIS facilitator manages the process, not the content

Information and Communication for Rural Development, the FAO Experience

- **A Communication for Development Approach: starting with the communities.**

Main objective: assist farmers in developing local communication processes through the use of media tools such as community radio, small format video and new ICTs. The communication for development approach provides development planners with a conceptual tool that puts rural people and rural organisations at the centre of any communication strategy design and in control of communication and information network development.
Communication for Development

The planned use of different strategies (media and others) to help people become aware of and articulate their position, exchange knowledge and skills to take control over their lives, reach consensus and manage conflicts, and improve effectiveness of organizations.

Successful rural development calls for the conscious and active participation of the intended beneficiaries at every stage of the development process.

Communication for Development
• Moving from information dissemination to community participation
• The development practitioner as a communication actor and facilitator
• Collecting data or co-producing knowledge?
• Influencing or implementing Policy?

Information and Communication for Rural Development, the Tools

Rural Radio
Functions:
• Rapid diffusion of development information to remote geographical areas
• Channel for interactive communication, dialogue and debate on major rural development issues.
• A tool for cultural expression, entertainment.
• A platform for democratic expression of opinions, needs and aspirations of rural communities

Linking Rural Radio to ICTs
Information and knowledge systems are extremely effective when they are built on existing information systems and complemented by community intermediaries, institutions or individuals, who may act as a bridge between global networks and the communities.

Radio is the most pervasive, accessible and affordable mass medium

Information and Communication for Rural Development, the Tools

• Farmers’ network operated in collaboration with support services.
• Mixed-media approach
• Facilitates interactions for generating, gathering, adapting and exchanging agricultural information and knowledge
• Facilitate transactions for better, more productive farming.

Information and Communication for Rural Development, the Tools

The Virtual Extension, Research and Communication Network (VERCON)

A conceptual model that employs Internet-based ICTs to strengthen linkages among agricultural policy, research and extension institutions and individuals.
Two integrated components:
Information and Communication for Rural Development, the Tools

The human component
A network of policy-makers, research and extension workers, academics, NGOs and farmers, committed to collaboration, communication and supporting agricultural producers

Information and Communication for Rural Development, the Tools

The technological component
The tool which allows members of the network to communicate and develop, share, store, retrieve and disseminate information. It relies on the network of people to contribute, update and create knowledge and information

Information and Communication for rural development, the Way Forward
• Influence ICT/media policy/regulatory environment and ensure affordable access
• Involve all stakeholders and promote bottom up local participation and demand-led approaches
• Encourage decentralized and flexible control of resources
• Build on and strengthen on-going initiatives
• Promote the generation of local content
• Remove barriers to rural access and increase access by women and youth
• Support training in communication technology and other innovative media networks and applications networks
Annex 7  Georgian State Agrarian University (GSAU)

Amiran Kvantaliani

Georgian State Agrarian University (GSAU) was founded in 1930. It is the basic higher education institution, for training of highly qualified professionals for various agricultural branches. GSAU and other higher education institutions in agriculture trained tens of thousands of professionals in agriculture. In addition GSAU is a strong scientific organization, staffed with highly intelligent professionals and well developed agricultural basis. GSAU is equipped with up-to-date computer basis including the most recent personal computers. It plans to create an informational training-consultation centre with its independent computer basis (about 30 computers) in the nearest future. Altogether, the future computer network will involve over 100 computers, linked to local and global networks. GSAU cooperates with similar education and research institutions through participation in students’ exchange programs, and collection and sharing of materials and information.

With respect of ongoing changes and reformation of the education system GSAU requires significant financial funds for equipping the training and scientific basis with modern technologies and integrate into the world education system. GSAU makes all efforts to attract material and financial resources, through competing for grants, attraction of partner organizations, assistance of international organizations and long-term credits. The objective of the reorganization of GSAU, is to train skilful professionals that can help to solve current problems of agriculture in the country.
Annex 8 Georgian Academy of Agricultural Sciences (GAAS)

Givi Mosashvili

Georgian Academy of Agricultural Sciences (GAAS), and its scientific research institutes and centres implement their scientific research plans. They are involved in elaboration of main research directions and parameters (indicators) for the state research programs and also in development of technology related projects. Georgian agricultural scientists participated in development of various draft legislative acts, which were adopted by Georgian Parliament after relevant corrections (Laws on ‘Agricultural Land Parcels’, ‘Vine and Wine’, ‘Georgian Tea’ etc.). The Academy system has been developing research projects, conducted research and developed new technologies. As a result GAAS owns a number of economically and environmentally justified competitive innovations.

GAAS requires further development and improvement of information and communication system for research priority setting, coordination and cooperation among agricultural research institutes, for training and consultation of farmers based on the needs of the agricultural producers and markets through linking science, production and markets. It is foreseen, to gradually equip the GAAS departments and subdivisions with computers and to establish an information centre, for connecting GAAS departments, research institutes and regional centres via intranet, and providing external links to the Ministry of Agriculture and Food, to the Parliament, to the World Bank Representation and also to agricultural organizations and universities abroad. In addition, the information centre would transform agricultural research products of the GAAS system into technologies and create technology databases. The information centre will start with three units: 1) Unit for Internet services; 2) Unit for Information Technologies; and 3) Unit for Communication with agronomists, farmers and regional centres. Two more units will be established: Statistical-Analytical Unit and Unit of Advertising. The preparation of websites of GAAS and its research institutions has been initiated.

Constraints

Adoption of scientific innovations by farmers is still a problem, and lacks a mechanism, for integrating agricultural science, agricultural production and other related economic structures. Main reasons why information and communication technologies are not sufficiently used are lack of funding and equipment. In order to improve the supply of scientific and technical information, there is need to:

- Acquire relevant equipment and human resources;
- Provide software and hardware support for the information network;
- For participants to cooperate through internet;
- Creation of major units of innovation process (projects, firms, staffing, resources, products, market opportunities etc.), data banks (including scientific-technological);
- Undertake statistical and analytical research in science and technology for decision-making;
- Advertise and present activities.
Links

- Georgian State Agrarian University;
- Georgian Academy of Sciences;
- Georgian Ministry of Agriculture, Plant Protection Department;
- Georgian Department of Protected Areas, Reserves and Hunt Preserves;
- Georgian State Department of Forestry;
- Association of Biological Farming ELKANA;
- ‘Kva’ (Stone) - international organization in Caucasus;
- International organization for plant protection ‘Agro techniques’;
- JSC ‘Amaltea’
- Laboratory of biologically active compounds ‘Lile’;
- Union of Georgian Landowners ‘Chemi Mamuli’ (My Estate)

Clients

Farmers, agronomists, agrarian economies, food and processing enterprises, farms, private structures

Current situation

The main function of GAAS involves management of its 16 research institutes and coordination of priority directions of research activities. Currently GAAS system employs about 880 scientists. Main staff at the academy involves 36 members, among which 21 people have scientific degrees in various fields.

GAAS has a Department for International Relations responsible for relations with national and international organizations. Foreign research institutions and donors provide funding for joint projects. E-mail and fax machines are used for communication with them.

Currently GAAS has six Pentium-IV computers, four printers, three scanners and one photocopying machine; in addition one computer has access to internet in dial-up mode. It is planned to link the equipment through a local network. Software used is MS Windows-98, MS Windows-XP, and MS Office. Currently GAAS has no finances for acquisition of additional hardware. It is necessary to provide training for five employees intended to work with computers, as they do not speak foreign languages, and cannot use computers efficiently.

GAAS itself has not yet established a website, but is developing one, though some GAAS institutes have one. Access to scientific information is limited to hard copies in the library. The library has no computer and researches have no access to necessary information. The library only receives selected scientific material, its access to international information services is very limited, and there is not even knowledge on how to obtain electronic versions of scientific publications and journals. GAAS scientists contact the GAU library on a personal basis, but this is not sufficient.
Annex 9 Research Institute of Horticulture, Viticulture and Winemaking (RIHVW) of Georgia

Vakhtang Shelia

The Research Institute of Horticulture, Viticulture and Winemaking of Georgia is an institute of the Georgian Agricultural Academy of Sciences, which is involved in research and extension in horticulture, viticulture and winemaking. Research priorities of the institute are:

- Selection, introduction and extension of high yielding species and clones of grapevine and fruits with wide adaptability; improvement of germplasm and variety collection; production of the healthy seed planting material;
- Systematic research on utilization of natural resources; development and extension of appropriate, ecologically safe, advanced technologies for the sustainable management of fruit gardens and vineyards;
- Improvement of the processing technologies for grapes, fruits and berries to maintain good taste, medicinal and nutritional quality of various wines and non-alcohol beverages.

In 2002, an institutional reform started as a part of the World Bank agricultural research, extension and training project consisting of staff optimization, re-organization of research and networks, formulation of national priorities and research programmes, infrastructure rehabilitation and provision of new scientific and technical equipment to research departments, and field stations including the establishment of a computer centre. As a result, the institute remains with 105 scientists, ten departments and laboratories, including four experimental stations and farms. As a part of the institute, a centre for planning, extension, consultation and training, was established to provide assistance to farmers. This is done in collaboration with regional extension and consultation offices and stations of the centre (Kakheti, Kartli, Imereti, Racha, Samegrelo, Guria, Adjaria, Abkhazia).

Partners

- International Plant Genetic Resources Institute, Rome, Italy - Cooperation in studying vine species, included in world vine collection, through molecular genetic methods and ampelography
- Fruit Tree Research Institute, Rome, Italy - Cooperation in improvement of fruit crops through introduction; together with FAO, provision of more than 100 saplings and seedlings to the Institute
- Oregon State University, USA - Cooperation in improvement of hazelnut germplasm collection through introduction; 16 hazelnut varieties were received including descriptions
- Northern Caucasian Horticulture and Viticulture Zonal Scientific-Research Institute, Russia -
  - Cooperation through germplasm exchange of various species and their evaluation
- Nikitin Botanic Garden, Ukraine - Cooperation through germplasm exchange of fruit crops

In future international cooperation is foreseen with:

- Institute for Viticulture and Grapevine Breeding, Geisenheim, Germany
- Institute of Grapevine Breeding Geilweilerhof, Siebeldingen, Germany
• Agro - National Higher Education School in Agriculture, Montpellier, France
• INRA Bordeaux - Fruit and Vine Research Station, France
• East Malling Research, Great Britain
• University of California Davis, Institute for Wine, USA

Clients
The clients of the Planning, Extension-Consultation and Training Centre are large farmers and companies, in need of planning and development of large vineyards.

Information and Communication Systems (ICS) and Strategies
Currently the Institute has two computers. Only the Planning, Extension-Consultation and Training Centre has access to the internet. Staff of the institute includes one programmer and one computer operator, foreseen is further recruitment of a network administrator. Currently, employees of the institute are trained in use of computers. As a part of the institutional reform the establishment of a computer centre is planned, to establish a databank for the germplasm and variety collection, to supply information for agro-environmental monitoring, and to modernize the library management.

Constraints in implementation of the ICS Strategy
Current constraints are the low remuneration of staff due to the public funding of the institute, thus making it difficult to recruit IT experts; the lack of joint international projects; and lack of internet access.

Proposed activities

• Strengthening of material-technical basis
• Setting-up local computer network
• Provide wide access to the internet
• Establish close contacts with international organizations and research institutions
• Improve access to information
• Update the library with the most recent literature
Annex 10 Farmer Association ‘Farezi’

Nana Zubashvili

Agriculture, focused on horticultural production and cattle breeding has a long tradition and is of high priority in Samtskhe-Javakhety Region. Agriculture remains the main source of employment for the rural people. At the same time, environmental and social problems have been identified, which include no sustainable use of land resources; erosions and wilderness; loss of biodiversity and genetic resources; poor environmental education; and high level of poverty. On the other hand, villages in the region have human resources, long traditions and are high potential areas for raw materials. A rich biodiversity has been found, such as local varieties of grapevine. In this context and as a result of farm surveys, the regional farmer association ‘Farezi’ was established in April, 2003. ‘Farezi’, an ancient Georgian word, means ‘support, tender treating’. ‘Farezi’ became the associative member of Biological Farming Association ‘ELKANA’ in 2003, with who it established a fruitful collaboration.

Strategies
The goal of the association ‘Farezi’ is to support the farmers and individuals who are employed in agriculture in Samtskhe-Javakhety Region by assisting them to solve their problems thus contributing to poverty reduction. The strategy includes:

- Promotion of biological farming, and development of ecological production systems and products;
- Collection of information on regional biodiversity, its dissemination to the public; consultation on biodiversity;
- Preserving traditional agricultural methods and their use in local community organizations.
- Protecting farmers rights and informing rural people on changes in legislation;
- Establishing nursery-gardens and distribution of plant material to farmers;
- Attracting investments in the rural sector;
- Training in agriculture and environmental issues.

Activities
During last year, ‘Farezi’, as a partner of “Elkana”, participated in the implementation of Agricultural Diversity project financed by Global Environmental Facility through the local UNDP office. In the frame of this project Akhaltsikhe ‘Red Doli’ wheat was sown on two hectares; 27 varieties of old Meskhetian white and red grapevines were collected and planted on the collection plot in the village Tsnisi; 800 wild apple root-trees were prepared to graft local, endangered varieties of apple. In addition, ‘Farezi’ supports member farmers providing useful agro-techniques, seeds and medicines for farm animals, helps with information provision and development of business plans.

Immediate Strategic Plan (2005)
- to create four nursery-gardens for local species;
- to create a nursery-garden of local varieties at Land Use Chair at Tbilisi State University (TSU) Meskheti Branch for students’ training;
- to establish a special spot in local market-place for advertising and selling of regional organic farming products;
- to organize training on traditional agricultural practices of the region (terraces, irrigation system, land cultivation).

**Long Term Strategic Plan**
- to create two service-offices of agricultural machinery
- to promote on-farm conservation of local agricultural diversity
- to develop agricultural training at TSU Mekheta Branch;
- to publish periodicals on development of agriculture and biodiversity;
- to reach sustainable development of agriculture and production of safe food.

**Partners**
- Biological Farming Association of Georgia ‘ELKANA’ (e.g. training and extension for farmers);
- Association of Protect Rights of Landowners of Georgia (e.g. problem solving connected to the BTC pipeline project – land compensation);
- NGO AgVANTAGE (e.g. marketing of farmers’ products; in future planned supply of blackberry and raspberry to international markets);
- TSU Mekheta Branch

**Organizational structure**
Farezi has an office, a car, a computer and consultation, information, finance, and courier departments. The staff consists of specialists in the field of environment and agriculture, which are members of the Gamgeoba (board). Currently, 85 farmers are members of the association. Dissemination of information, communication and visits to villages is provided through partners and personal contacts. For the implementation of the longterm strategy, an information service centre is needed.
Annex 11

Research Institute of Globalistic and Strategic Development of Georgia, Georgia Business University (GBU)

Nino Damenia

The institute is the first private research institute in Georgia, established under the Georgia Business University (Rector Dr. Omar Keshelashvili), with the aim to organize progressive, strategic directions, global theoretical and applied scientific, multi profiled activities. It should assist in the development of trans-national scientific researches and innovational economics, using the rich intellectual resources in Georgia and mutual co-operation with foreign partners, to strengthen the economic, social and scientific potential. Currently, the institute is searching for local and foreign partners for mutual co-operation and creation integrated institutions. A website is under construction, communication is done through e-mail (businessuniversity@hotmail.com or businesssun@gol.ge).

Main research priorities include:

- Development of an integrated strategic program for economic safety of Georgia;
- Development of an integrated strategic program for rational safety of Georgia;
- Research on global trans-national problems and technologies of globalization;
- Research on problems of evaluation and development of foreign economic relations;
- Research on problems of market globalization;
- Development of research on building and improvement of public institutions;
- Research on marketing strategies and development of marketing institutions;
- Development of strategies and integrated technological systems for agricultural development;
- Development of strategies for social-economic development of different regions including mountain regions, e.g. agriculture, food industry etc.;
- Research on problems of ecology and use of natural resources;
- Development of strategic programs for sustainable use of recreational resources (resort and tourism industry);
- Research on improvement of social services;
- Research on economic risks in material production;
- Development of strategic program on economic psychology;
- Research on social-economic problems of use of intellectual resources;
- Development of databank on intellectual products;
- Development of strategic programs of electronic operation;
- Research on legal problems, related to owner’s law, land and real estate;
- Research on other urgent theoretical and applied science problems.

Research activities will be focused on such priorities for which funding will became available and research partnerships can be established. The institute officially presented its objectives, priorities and planned activities to the Prime-Minister of Georgia; as a response it received a letter from the Ministry of Science and Education of Georgia in July 2004, with the consensus of the ministry on mutual collaboration with the institute. The institute is currently engaged
to identify funding for the implementation of its strategy and to establish cooperation with partners and institutions.
Annex 12  Ministry of Agriculture and Food (MAF) of Ajaria  

Vakhtang Goguadze  

1) Short review about roles and problems of the ministry.  
   • Transform and increase production of agro-industrial and food sectors  
   • Take into consideration national traditions and international experiences in the reform of the agricultural sector.  
   • Establish private producer sector and support their business.  
   • Access and use of international experiences in agriculture and food production.  
   • Gain and analyze information on national and international markets and tender.  
   • Support producers and consumers interests with the organization of ecological production and the establishment of food safety organizations.  
   • Support the development of market infrastructure.  
   • Establish services for farmers (loan reclamation, breeding, nursery, seed production, plant protection, veterinary, agro-engineering, etc).  
   • Organize the scientific consulting projects for the agricultural employees.  
   • Develop economical and social developing projects and participate in their implementation.  

2) The Ministry’s main partners are the agricultural regional managements of Kobuleti, Khelvachauri, Kheda, Shuakhevi and Khulo.  

3) The information and communication system involves 50 different specialists in the central ministry, 110 employees in subordinated organizations and 70 specialists in regional managements. The ministry has telephone lines, three fax machines, mobile telephones and computers.  

4) The ministry has financial constraints in providing support to the agricultural sector. Due to lack of support, even sectors which were once profitable such as tea production, silkworm breeding, and horticulture, are ruined. A five years project was formulated for the reestablishment and development of Adjara’s agricultural sector, with a budget of 25 million GEL. The ministry is currently approaching different organizations to contribute with funding to the project.  

5) The ministry sent more than 50 business plans on different subjects and projects for funding to potential donors. The ministry is interested to receive support from the World Bank, the International Fund for Agricultural Development (IFAD) and the Food and Agriculture Organization of the UN (FAO). Through support of a donor funded project, 1200 farmers received credits.
Annex 13  Research Institute of Farming (RIF)

Zurab Jinjikhadze

I. N. Lomouri Research Institute of Farming was established in 1956, on the basis of the Field Institute. Main objectives of the institute are the development of technologies and production systems for improved productivity of field crops:

- Development of scientifically justified agricultural systems for each production zone.
- Development of crop management recommendations for all commercial field and vegetable crops
- Breeding of improved crop varieties including hybrids.
- Production of elite seeds and implementation of crop rotation and renovation.

The institute cooperates with the international organizations, ICARDA, CIMMYT, World Bank and with ELKANA. This cooperation allowed the dissemination of improved technologies to farmers. In particular, employees of the institute received 13 grants that were used to purchase three computers and printers, to publish 20 methodical instructions, to conduct seminars and to visit experimental farms. With the assistance of ICARDA a depository for genetic resources was established in the institute, with the capacity to maintain about 10,000 specimens for 10-12 years.

The Institute has close relations with the Georgian Agrarian University by providing practical training to 20 university students and hosting their diploma research. The institute also cooperates with the Institute of Botany of the Academy of Sciences of Georgia, with the Krasnodar Scientific-Research Institute of Agriculture, and with CIMMYT for the improvement of the wheat. The institute is breeder of the best crop varieties in Georgia. Major clients of the institute are farmers, who are supplied with seeds and technologies for crop production.

One of the major constraints of the institute is the lack of an efficient information and communication system. The only existing three computers were purchased through grants. Only recently the institute gained internet access. Its webpage is currently under development. The institute has no fax machine. It lacks computer literate staff. The state budget only provides salaries and wages of employees, but no funds for equipment. In order to ensure up-to-date research works, through efficient networking with partners, access to research information and new technologies and market information, the institute needs additional funding for the establishment of a modern information and communication system. In this regard the institute is interested to cooperate with ELKANA, what would be mutually beneficial.
Annex 14  Guria Agribusiness Centre (GAC)

Aleko Mameshvili

The Guria Agribusiness Centre developed its Strategic Plan of 2004-2006 with participation of its members, the Board of Directors and a Peace Corps Volunteer. The strategy of the organizations’ activity includes the support to farmer associations to improve their activities; and to increase the participation of youth in agricultural activities.

Support to farmer associations
Civil Society plays an important role in political and economical development. In order to fulfil this mission it requires self-organizational and self-establishment process. Professionalization of agriculture is one of the main activities, which can contribute significantly for strengthening civil society. In other words, it means to give farmers the position in civil society, which they deserve, at the same time to ensure their participation in the economic process, to provide their access to markets, which they have lost during the last few years, and their activities’ integration in the general economy. The professionalization of agriculture is the long-term process of agriculture structuring and in its turn it includes formation and transformation of agriculture organizations, associations and other farmer groupings in to profitable, efficient and professional entities and on the other hand inclusion of farmers in formation and implementation of agriculture development politics, policies and programs.

Nowadays, there are six branch farmer associations in the Guria Region: the Guria Citrus Farmers Association, the Guria Regional Association of Kiwi, the Hazelnut Producing Farmers Association, the Bee Farming Association, the Vegetable Growers Association, and the Tea Producing Farmers Cooperative. The associations are mainly oriented on the experience and activities of their members. The services provided by them are limited to implementation of agricultures activities and to small-scale marketing. Each association consists of professionals in production of specific agricultural products, but it is not enough to ensure increase of income for member farmers, to solve general problems and to protect their interests on the local and regional level. The Guria Agribusiness Centre assessed the capacities of the farmers associations and identified the following constraints:

1. **Management** - lack of experience and knowledge in management of association, management of organizational structure imperfect, underdeveloped and inflexible;
2. **Innovation** - pre-established mechanisms to accept new farmers factually don’t exist that could help to attract new members and have more activities; identification of new types of services to farmers doesn’t happen.
3. **Limited processes of planning** – experience with and knowledge of strategic planning lacking, which causes spontaneous organizational development;
4. **Financial sustainability** - clearly defined foundation pillars for the formation of the association fund missing, thus currently no independent financial sustainability;
5. **Preparing of projects** - members lack skills and methods for project formulation and identification of funding sources.
Increased participation of youth in school, family and community activities
Eighty percent of the village population is employed in agriculture and the income generated is the main source of family income used for social, education, health and private activities. Pupils are participating in agricultural activities, such as sowing, taking care of livestock and irrigating. After leaving school a great part of the youth gets involved in agriculture, and the limited family resources, such as land and livestock are distributed among each family member.

In 2003-2004 Guria Agribusiness Centre, with financial support of CARE/WGCI implemented the project “Agrarian Youth Clubs”. In nine village schools of Guria Region, pupils’ volunteer unions-youth clubs were established. Each club has statutes, an elected board and a leader. Agriculture and business consultations and training courses were organized by qualified consultants. School plots were organized to develop practical skills among the participant. The experience with the youth club system showed, how existing resources can be effectively utilized to address needs, how the youth can acquire new skills, receive new information and develop new relationships that allows them to become professionals in agriculture during the school education. This is important since the major part of pupils get involved in agriculture when completing the school. There is need to develop a program, which can support the youth to have own resources for farming after completing their studies.
The Farmers Union of Georgia was established in 1992. The members of the union are 25,000 small farmers and about 500 agro firms, cooperatives, agricultural enterprises, farmer associations, large commercial farmers, producing on 10-500 ha rented land. The union is represented in almost all regions of the country. The union provides support to farmers in the development of different agricultural sectors and sales of production in Georgia and abroad. The FUG also assists local organizations in the creation of cooperatives, credit unions and agro service enterprises. The union protects the interests of the farmers and businessmen, and communicates their problems to the Parliament and Government. The union provides conditions to farmers to obtain knowledge in economics and law. It established the Farmers University that provides free education to farmers in different agricultural sectors.

The Research-Consulting Council of the FUG consists of representatives of different departments of the Ministry of Agriculture and Food, the Academy of Agricultural Science, different associations, the heads of foreign organizations and private sector specialists. The council provides recommendations to the agricultural programs and projects throughout the country.

The national office of FUG receives every day the visits of 150 to 200 farmers from nearby districts and from distant regions of Georgia seeking support. The union established there a consulting centre where the farmers can receive advice and information on different aspects of agriculture (crop production, cattle breeding, marketing, dealing with banks, corporation, credits, technical services, practice). The union often organizes lectures, scientific conferences and seminars to inform farmers on novelties and current developments in the country. It publishes the monthly agricultural journal ‘Chemi Mamuli’ (My Estate), which has become farmers’ favourite technical journal to receive information on foreign experience in agricultural sector, and on new technologies for production of different crops.

The union has close cooperation with foreign organizations and imports and disseminates agrochemicals and seed of wheat, maize, soybean, potato and vegetable varieties. It cooperates effectively with the German Agency for Technical Assistance (GTZ), the International Development of Agricultural Cooperatives (ACDI), CARE-Georgia, TACIS, and Israeli and British organizations.

In Georgia, the union cooperates mainly with local representatives of international organizations, the Ministry of Agriculture, the Agrarian University, the Scientific Research Institute of Horticulture, Viticulture, and Winemaking, agricultural organizations, farmers, agro firms and others. It cooperates with farmer houses of Ambrolauri, Batumi, Terjola and of other regions of Georgia, also with farmers organizations of Zugdidi, Gurjaani and other regions.
The FUG has implemented following projects supported by foreign organizations:

In 1996 - under the TACIS project ITAGA - information-consulting centres were established in Tbilisi, Kutaisi, Zugdidi and Tsnori. The goal of this project was providing information services to Georgian farmers and customers of agricultural products. Under the project the periodic bulletin “Agro business herald” was published, which plays an important role for development and production of agricultural products. The newly formed information centres systematically conducted market research, identified farmers problems offered new technologies for problem solving. Research information was shared between centres through the internet. The project helped the union to create a more complex communication system.

In 2001 - under the grant of British Embassy - consultation and technical assistance was provided to cattle-breeders in Tskhinvali region.

In 2003, a project was implemented funded by the ‘Opened Society-Georgia’ to create a consultative centre equipped with technique and office inventory and to organize seminars in the same region. Brochures about management production of fruits, vegetable and cereals were produced in Georgian and Russian languages, and distributed among villagers.

Every year the union provides material support (value about $100 000) to several villages of Dedophlistskharo region. It is planned to extend this project to other regions of Georgia, in order to create a wide net of consultative and credit services to farmers.

The union’s aim is to further develop the consulting centre system to offer continuous training and mutual learning opportunities for educators and farmers, and to create new centres in Zugdidi, Ozurgeti, Batumi, Kutaisi, Gurjaani, Gori, Akhaltsikhe and Marneuli. It is foreseen to equip offices with the necessary techniques, to be able to supply farmers continuously with agricultural information about innovations, researches, harvest forecast, and prices on local and international markets. The office could be run be a selected local farmer from the village, who could acquire the required skills through a short training.

The Georgian Radio and Television Broadcasting Network covers the entire region, comprising of 17 radio stations with 2.4 million listeners and 45 television stations with 3.6 million viewers, but these media are not utilized for dissemination of information on agriculture and rural extension initiatives. It would be very important to develop and telecast agricultural programmes guided by agricultural experts to inform farmers and consumers. Internet is mainly affordable for organizations and firms, representatives of large and medium enterprises. However, internet access is unequal: from 60 percent of the population living in ten regions only 19 percent are internet users, while in Tbilisi 81 percent of the population uses internet. The fact that more than 80 percent of the information resources of the Internet are in English, deprives all people of access to this huge resources who do not speak English. There is need to develop websites with agricultural information in Georgian language.
Eka Tabatadze

The Kanchaveli L. Research Institute of Plant Protection (RIPP), an institute of the Georgian Academy of Agricultural Sciences, is a research and co-ordination centre for development of the fundamentals in plant protection and guidelines for the design of regional plant protection systems in Georgia. The main goal is the development of human and environmentally safe pest management systems for crops and forest trees.

The main activities include:
Research on development of harmful and useful organisms in different agro- and forestry-ecosystems;
- Research on effects of abiotic and biotic factors on population of major pests in agriculture and forests;
- Testing ecologically safe pest control (biological and microbiological agents, low-hazardous pesticides) and studying their effect on the agro-ecosystem;
- Development of integrated pest management systems (IPM), development of new technologies and study their effects on the agro-ecosystem;
- Development of new plant protection techniques based on local raw materials.
Annex 17  Association and Radio ‘Green Wave’

Ramin Meladze

Mission
The Association ‘Green Wave’ is a non-profit, non-governmental organization founded in 1995. Its main objectives are to promote the NGO sector and main principles of democracy in Georgia; to strengthen civil society and to raise environmental awareness. To realize its goals and objectives the association ‘Green Wave’ established the radio ‘Green Wave’.

Objectives
Development of civil society in Georgia
Promotion of NGO sector in Georgia
Raising environmental awareness
Popularization of NGO sector in Georgia
Promotion and support of co-operation between governmental, non-governmental and business sectors
Development of independent mass media in Georgia
Contribution to establishment of integrated information space in the South Caucasus region

Clients
The target groups of organization are:
− More than 2 million potential listeners living in the Radio “Green Wave” covering zone;
− Non-governmental organizations;
− Small and medium business;
− Prisoners and persons being imprisoned before trial;
− Religious and ethnic minorities;
− Self-government and central government;
− Socially unprotected population;
− Women;
− Youth

Partners
CENN (Caucasus Environmental NGO Network), Institute of Liberty, ISFED (Fair Elections Foundation), Research and Development Association, Caucasian Institute for Peace and Democracy, Radio van (FM103 Armenia) Radio Space (FM104 Azerbaijan) Radio Liberty, GRN (Georgian Radio Network), Radio ‘Dzveli Qalaqi’ (Kutaisi FM107.9), Radio ‘Atinati’ (Zugdidi - FM105.9), Radio ‘Harmonia’ (Poti - FM100.5), Radio ‘Hereti’ (Lagodekhi FM102.8), IFEJ (International Federation of Environmental Journalists), AMARC (World Association of Public Radios), IBSNN (International Black Sea NGO Network) and almost 60 other non-governmental organizations.

Since establishment ‘Green Wave’ was financed by following organizations:
Informational and Communicative Systems and Strategies Strategy

‘Green Wave’ strategy for information support of the Georgian agriculture includes the following:
- Creation of coalition with NGO and business sector working in agriculture;
- Creation of radio-programs to cover existing situation and future plans

The Infrastructure consists of the head office, located in Tbilisi, which includes live air and montage studios. The radio is supplied with all necessary professional computer-based specialized equipments. ‘Green Wave’ Batumi and Akhaltsikhe branches are supplied with montage and all other necessary equipment to organize radio-bridges. In order to exchange of audio materials between the radio ‘Green Wave’ offices and other partner radio stations internet support is used.

Constraints

Main problems for ‘Green Wave’ to provide information support to the Georgian agriculture sector are the following:
- Lack of qualification of journalists in agriculture;
- Lack of agriculture oriented program staff;
- Weak collaboration with NGOs working on agricultural issues;
- Weak collaboration with small and medium business representatives working in agriculture

5. Plans and ideas to overcome the difficulties

‘Green Wave’ ideas or plans to support Georgian agriculture through information provision include the following:
- Creation of coalition with NGOs and business sector working in agriculture;
- Establishment of staff working on agricultural radio-programs;
- Training of staff working on agricultural radio-programs;
- Creation of radio-programs dealing with current situation and future of agriculture;
- Preparation of reports from the place where farmers will be respondents;
- Put the farmers and their dialogues with the experts from the studio on the live air;
- Preparation and broadcasting of information rollers for farmers
Annex 18  Georgian Association of Professional Bee-Keepers

Temur Gogoberidze

The Georgian Association of Professional Bee-Keepers (GAPB) is a non-governmental organization, registered by Vake District Court in 1999.

Goal and Objectives of the Association:
1. Support to development of bee-keeping in Georgia
2. Protection of genetic fund of Georgian bees
3. Coordination of professional bee-keepers in Georgia, protection of their rights, assistance in production, processing and distribution of bee-keeping products.
4. Extension and advocacy of modern European and American technologies, scientific achievements and experience.

To achieve its goals, GAPB implements following activities:
1. Publishes quarterly newspaper ‘Putkari da Meputkreoba’ (Bees and Bee-Keeping), 1000 copies.
2. Provides free advisory-consultation services. Conducts for its members free lectures in the districts and monthly seminars in Tbilisi.
3. Assists its members to attract local and foreign business partners
4. Assists its members in resolving the issues with the state agencies and other legal problems
5. Actively participated in adoption of the Law on Bee-Keeping
6. Once per two years arranges exhibitions of bee-keeping instruments and products
7. Imports for its members high quality veterinarian medicines, materials and instruments.
8. Members of the association produce selected Georgian bee-moths, what contributes to protection and maintenance of genetic fund of Georgian Bee.
9. In 2000, the association implemented the project of ‘Monitoring of Georgian Professional Bee-Keeping’ funded by grant from Eurasia Foundation (# G00-056).
10. Within the framework of Farmer to Farmer Project Association cooperates with ACDI/VOCA. Three USA experts in bee-keeping were invited to Georgia within the scopes of this cooperation.
11. It actively and effectively cooperates with foreign organizations, within the scope of this cooperation two Georgian bee-keepers visited France for improvement of their qualification and several French bee-keepers visited Georgia.

Plan for nearest future:
Promotion of regional cooperation in Trans-Caucasian region and formation of stable links; at the first stage arrangement of regional conference in Tbilisi
Annex 19 Description of SWOT Analysis

SWOT analysis is an instrument for identification of the strengths (S) and weaknesses (W) and assessment of opportunities (O) and threats (T). It allows strategic planning with emphasis on the strengths, minimization of the weaknesses, taking into consideration the threats and taking advantages of the opportunities. The analysis allows objective consideration of information and communication systems in the agricultural sector.

This process is of significance not only for determination of where to use the resources and what is of primary importance, but also it would assist to identify the prospects for the issues of our organization. In our case other national systems or systems in various other sectors may compete with us (private sector, international trade, telecommunications ...)

Strengths:
**Questions to be answered:**
- What do we do especially well?
- What are our opportunities?
- What valuable assets and resources are at our disposal?
- What is considered by the clients as our strengths?

**Advices:**
- Be realistic ... and open!
- Think, of what do you have and what is not available to your “competitors”.
- Think of how your members/clients see your organization

Weaknesses:
**Questions to be answered:**
- What could we do better?
- For what are we criticized and claimed?
- What our particular weakness?

**Advices:**
- Adequately assess all opinions though be constructive and positive in presenting them
- Collect information about your competitors!

Opportunities:
**Questions to be answered:**
- What are our opportunities, in which we are aware, though we can not apply?
- Are there any trends, on which we could rely?

**Advices:**
- Consider changes in your sector: technological changes, state policies, socio-economic and demographic changes
- Be unbiased ... major opportunities may originate from the sources, which, in our opinion, are less relevant
- Think of how could you take advantage of your strengths and overcome the weaknesses to obtain additional opportunities.
Threat:
Questions to be answered:

• Do we have any of such weaknesses, which are of critical threat?
• What external factors hinder our success?
• Do our competitors or proposed competitors do things in other way?
• Are there any significant changes in our membership?
• Do the technologies make dramatic changes to our sector or relevant services?
• Does the economic situation impact our financial stability?

Advices:

• Be open and unconcealed. Adequately evaluate potential threats.
• Reveal all potential sources of relevant information.
## Annex 20  SWOT Analysis

### A. STRENGTH

<table>
<thead>
<tr>
<th>Education, training</th>
<th>Contacts/ links</th>
<th>Technologies and technical means</th>
<th>Advisory services</th>
<th>Promotion</th>
<th>Databases</th>
<th>Information dissemination means</th>
<th>Human resources</th>
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<tbody>
<tr>
<td>9</td>
<td>3</td>
<td>14</td>
<td>5</td>
<td>2</td>
<td>19</td>
<td>11</td>
<td>6</td>
</tr>
<tr>
<td>Computer lab globally connected and plan to expand it</td>
<td>Relations with scientific research and education institutions</td>
<td>Managing the panel on Animal Genetic Resources (AnGR) in AgroWeb, posting all relevant information</td>
<td>Providing information to farmers on time</td>
<td>Information dissemination possible to the local level through broadcasting</td>
<td>Agro technologies, crop varieties and elite/breeders seed available</td>
<td>Wide scale dissemination of information</td>
<td>Experienced researchers</td>
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<td>GNAAP</td>
<td></td>
<td>ELKANA</td>
<td>RIIHW</td>
<td>Radio Green Wave</td>
<td>GSAU</td>
</tr>
<tr>
<td>Training in ICTs</td>
<td>Ability to access relevant and required information for research and analyses</td>
<td>Technologies for plant protection available</td>
<td>Providing information to farmers on site</td>
<td>Farmers could be actively involved in programme making</td>
<td>Information on markets, on modern management systems and technologies for extension and farmers</td>
<td>Agricultural policy implementing agencies in all districts</td>
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<td>RIPP</td>
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<td>ELKANA</td>
<td>Radio Green Wave</td>
<td>MAF Ajaria</td>
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</tr>
<tr>
<td>Highly qualified professors/lecturers providing training in up-to-date ICTs to students (farmers)</td>
<td>Close links to foreign education and research institutions</td>
<td>Good knowledge and experience on beekeeping</td>
<td>Lectures and workshops to comprehensively cover requests/issues on beekeeping on farmsite immediately</td>
<td>Existence of AGROWEB forum, to discuss and eliminate problems between national coordinator and working group (WG)</td>
<td>Community based organizations network; good opportunities for information distribution</td>
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<td>GAPB</td>
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<td>GAPB</td>
<td>GNAAP, AnGR WG</td>
<td>RCDM</td>
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</tr>
<tr>
<td>Computer processing of information with modern software, developing textbooks and guidelines</td>
<td>Develop and introduce modern information management systems</td>
<td>TECHINFORMI</td>
<td></td>
<td>Information and consultation centre providing quality services to farmers</td>
<td>Dissemination of information and advice to farmers through newspaper</td>
<td>Qualification, experience</td>
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<td>FUG</td>
<td>FUG</td>
<td>ELKANA</td>
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<th>Education, training</th>
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<tbody>
<tr>
<td>Training centre for farmers</td>
<td>ELKANA</td>
<td>Well equipped office easily accessible for farmers FUG</td>
<td></td>
<td></td>
<td>Information (data) concerning the needs of agriculture and rural communities RCDA</td>
<td>High level of trust Radio Green Wave</td>
<td></td>
</tr>
<tr>
<td>Training in modern IT</td>
<td>TECHINFORMI</td>
<td>Modern 24h internet access</td>
<td></td>
<td></td>
<td>Database and short term strategy plan available MAF Ajaria</td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Development of websites and portals TECHINFORMI</td>
<td></td>
<td></td>
<td>Regularly updated information base GNAAP, AnGR WG</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Agro technologies RIHW</td>
<td></td>
<td></td>
<td>Good theoretical knowledge and rich practical experience GAPB</td>
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<td></td>
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<td></td>
<td></td>
<td>Complete information on the livestock sector in Georgia GNAAP</td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td>Wide range of scientists in the field of plant protection RIPP</td>
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</tbody>
</table>
## B. WEAKNESSES

<table>
<thead>
<tr>
<th>Low level of computerization</th>
<th>Human resources</th>
<th>Few opportunities to disseminate information on the local level</th>
<th>Contacts/links horizontal</th>
<th>Technology transfer to farmers</th>
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<tbody>
<tr>
<td>18</td>
<td>13</td>
<td>28</td>
<td>3</td>
<td>12</td>
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<tr>
<td>Not enough computer available to train more students <strong>GSAU</strong></td>
<td>Lack of experts in information and consultancy due to lack of clients Techinformi</td>
<td>No resources to make information available <strong>RIF</strong></td>
<td>Weak cooperation with NGOs working in agriculture <strong>Radio Green Wave</strong></td>
<td>Information provision on modern agricultural and processing technologies <strong>RCIM</strong></td>
</tr>
<tr>
<td>Absence of regional computer network <strong>GNAAP</strong></td>
<td>Lack of experts in communications at local level <strong>ELKANA</strong></td>
<td>Information dissemination slow <strong>GAPB</strong></td>
<td>Sharing of experiences <strong>RIEM</strong></td>
<td>Applying research results in praxis <strong>RIEM</strong></td>
</tr>
<tr>
<td>Absence of communication in the region at local level <strong>ELKANA</strong></td>
<td>Weak network of correspondence, lack of journalists <strong>Radio Green Wave</strong></td>
<td>Lack of printed materials <strong>RCDA</strong></td>
<td>Lack of partners and contacts <strong>Radio Green Wave</strong></td>
<td>Relation with farmers <strong>RIHW</strong></td>
</tr>
<tr>
<td>Lack of ICT (computers) hampers establishing links between researchers and farmers <strong>ELKANA</strong></td>
<td>Lack of highly qualified experts in the regions <strong>FUG</strong></td>
<td>Information dissemination (advertising), study and introduce modern information technologies and programmes <strong>GSAU</strong></td>
<td>Joint research and projects <strong>RIHW</strong></td>
<td>Absence of service centres in the regions <strong>ELKANA</strong></td>
</tr>
<tr>
<td>Fully computerized system of database missing <strong>ELKANA</strong></td>
<td>Lack of experts in ICTs <strong>TECHINFORMI</strong></td>
<td>Large scale information dissemination in the region <strong>ELKANA</strong></td>
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<td></td>
</tr>
</tbody>
</table>

52
### B. WEAKNESSES (CONT.)

<table>
<thead>
<tr>
<th>Low level of computerization</th>
<th>Human resources</th>
<th>Few opportunities to disseminate information on the local level</th>
<th>Contacts/links horizontal</th>
<th>Technology transfer to farmers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lack of knowledge in agriculture</td>
<td>Unreliable communication means for rural communities (radio, TV, internet)</td>
<td></td>
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<tr>
<td></td>
<td>Radio Green Wave</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Lack of advertising the achievements RIHVW</td>
<td>Lack of equipment in consultation centres at regional level</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>FUG</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lack of experience in promoting of products and services TECHINFORMI</td>
<td>Absence of regional information networks</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>GNAAP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. OPPORTUNITIES</td>
<td>Government priority</td>
<td>Availability of funds</td>
<td>Increased demand for information and markets</td>
<td>Availability of new technologies for farmers and rural communities</td>
</tr>
<tr>
<td>------------------</td>
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<td>-----------------------------------------------------------</td>
</tr>
<tr>
<td>Improved/progress oriented governmental structures</td>
<td>ELKANA</td>
<td>8</td>
<td>Existence of large donor network to finance projects on development of communication and other systems in agriculture sector ELKANA</td>
<td>Clients requesting advertisement Radio Green Wave</td>
</tr>
<tr>
<td>Government policy</td>
<td>RIHW</td>
<td>16</td>
<td>International Organizations RIHW</td>
<td>Large farming community RIHW</td>
</tr>
<tr>
<td>Establishment of correct agro information system at MAF of Ajaria</td>
<td>MAF Ajaria</td>
<td>9</td>
<td>Foundations, partners Radio Green Wave</td>
<td>Ecological safe products available in the region to international markets FAREZI</td>
</tr>
<tr>
<td>More active work and cooperation with MAF of Ajaria</td>
<td>GNAAP</td>
<td>30</td>
<td>Support of establishment of rural community information networks by donor organizations</td>
<td>Development of agro business and agro tourism attracting foreign tourists RIEM</td>
</tr>
<tr>
<td>Correct economic policy</td>
<td>RIEM</td>
<td>6</td>
<td>Activated cooperation with donor organizations MAF of Ajaria</td>
<td>Demand on information in the regions ELKANA</td>
</tr>
<tr>
<td>Government priority</td>
<td>Availability of funds</td>
<td>Increased demand for information and markets</td>
<td>Availability of new technologies for farmers and rural communities</td>
<td>Civil society developed in Georgia</td>
</tr>
<tr>
<td>---------------------</td>
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<td>---------------------------------------------</td>
<td>---------------------------------------------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>Opportunity to participate in implementation of international projects <strong>RIPP</strong></td>
<td>Strengthening the NGOs in Adjara <strong>MAF Ajaria</strong></td>
<td>Create a web portal oriented on regional service centres</td>
<td><strong>MAF Ajaria</strong></td>
<td><strong>NGOs working in the agricultural sector RIHVW</strong></td>
</tr>
<tr>
<td>Increased support from international organizations to farms and development of agriculture sector <strong>GSAU</strong></td>
<td>NGOs working in the agricultural sector <strong>RIHVW</strong></td>
<td><strong>NGOs working in the agricultural sector RIHVW</strong></td>
<td><strong>NGOs working in the agricultural sector RIHVW</strong></td>
<td><strong>Share experiences with farmers <strong>RIPP</strong></strong></td>
</tr>
<tr>
<td><strong>Improve</strong>ment of technical means <strong>FUG</strong></td>
<td>**Establishment of organization system for information extension <strong>GNAAP</strong></td>
<td>**Develop relevant themes by using modern computer technologies (statistical, financial, mathematical modelling and other methods) to develop the farms <strong>GSAU</strong></td>
<td>**Establishment of organization system for information extension <strong>GNAAP</strong></td>
<td>**Develop relevant themes by using modern computer technologies (statistical, financial, mathematical modelling and other methods) to develop the farms <strong>GSAU</strong></td>
</tr>
<tr>
<td>Government priority</td>
<td>Availability of funds</td>
<td>Increased demand for information and markets</td>
<td>Availability of new technologies for farmers and rural communities</td>
<td>Civil society developed in Georgia</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------</td>
<td>---------------------------------------------</td>
<td>---------------------------------------------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>Improve computer training methods: introduction and automation of testing systems and training/exams</td>
<td>GSAU</td>
<td>Send/assign interested persons to successful beekeepers to share experience (apprenticeship)</td>
<td>GAPB</td>
<td></td>
</tr>
<tr>
<td>Distance learning methods requiring high capacity ICS available to increase farmers knowledge</td>
<td>GSAU</td>
<td>Create system of micro credit, leasing and insurance loans for farmers</td>
<td>IIT</td>
<td></td>
</tr>
<tr>
<td>Informational tool: prepare useful and interesting programs for farmers (which is hampered by lack of funds and experience)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# D. THREATS

<table>
<thead>
<tr>
<th>Weak Agricultural Policy</th>
<th>Instability within and outside the country</th>
<th>Psychological Factors</th>
<th>Availability of facilities and technologies to village farmers</th>
<th>Financial problems</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absence of staff policy related to restructuring of institutions Riem</td>
<td>Need to overcome separatist moods Maf Ajaria</td>
<td>Lack of trust (to NGOs/the government) Maf Ajaria</td>
<td>Absence of scarce technical means on regional level ELKANA</td>
<td>Bio pesticides are costly or not available ELKANA</td>
<td>Insufficient large scale promotion of different plant protection methods</td>
</tr>
<tr>
<td>Inability of the government Radio Green Wave</td>
<td>Existence of force (conflicts, etc.) ELKANA</td>
<td>Scepticism to new technologies and methods in the regions ELKANA</td>
<td>Equipment of farmers and farmers knowledge is poor Rihvw</td>
<td>Ecologically safe product certification is costly and not accessible for farmers Farezzi</td>
<td>Absence of bio pesticides and in some cases their ineffectiveness ELKANA</td>
</tr>
<tr>
<td>Inadequate agricultural policy of the government Rihwv</td>
<td>Unstable economical and political environment Rihwv</td>
<td>Agricultural sector is conservative and does not aspire to permanent changes Gap</td>
<td>Access to information resources for farmers is limited TECHINFORMI</td>
<td>Financial problems affect the normal functioning of the University Gsau</td>
<td></td>
</tr>
<tr>
<td>Absence of recording system of animals, absence of gene banks, elimination of local breeds Gnaap</td>
<td>Reduced numbers of farms (they become bankrupt, or merge)</td>
<td>Prioritizing agriculture has essential influence on the agricultural educational system Gsau</td>
<td>Difficulties in introducing new IT due to inadequate training of the communities Gsau</td>
<td></td>
<td>Unstable finding may hamper the business trips of reporters and live broadcasts Radio Green Wave</td>
</tr>
<tr>
<td>Lack of government interest in agriculture</td>
<td>Deterioration of criminal situation</td>
<td></td>
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</tr>
<tr>
<td>Agriculture sector of developed countries import cheap products Gap</td>
<td></td>
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</tr>
</tbody>
</table>
### D. THREATS (CONT.)

<table>
<thead>
<tr>
<th>Weak Agricultural Policy</th>
<th>Instability within and outside the country</th>
<th>Psychological Factors</th>
<th>Availability of facilities and technologies to village farmers</th>
<th>Financial problems</th>
<th>Competition</th>
</tr>
</thead>
</table>

- Import and distribution/sale of foreign, not locally tested varieties at low prices means an obstacle for sale of Georgian varieties
- Unexpected tax increases
- Wrong policy concerning the sustainable development of agricultural sector in the regions

*FUG*  

*FAREZI*
Annex 21  Results of Priority Setting through Voting

Strengths:

- Databases (information about agro technologies, varieties, breeds, markets) 19
- Technological and technical means 14
- Information technologies 11
- Education and training 9
- Human resources (experienced researchers, consultants) 6
- Advisory/consultation services at local level 5
- Contacts/links 3
- Means of advertising 2

Weaknesses:

- Little opportunities for information dissemination at local level 28
- Low level of computerization 18
- Human resources 13
- Technology transfer to farmers 12
- Horizontal contacts/links 3

Opportunities:

- Availability of new technologies for farmers and rural communities 30
- Availability of funds 16
- Increased demand for information/markets 9
- Government priority 8
- Trends of civil society growth in Georgia 6
- Strengthening of cooperation 6

Threats:

- Weak agricultural policy 23
- Unavailability of facilities and technologies to farmers in rural areas 17
- Instability within the country and abroad 10
- Psychological factor 7
- Competition 5
Annex 22  Problem Analysis

Poverty in Rural Areas

Unavailability of the market
- Market information
- Infrastructure farmer/market
- Quality, safety, quantity
- Standardization, certification
- Communication
- State policies (Sector development)
- Products diversification
- Marketing/consultations/training

Cooperation in rural areas
- State policies
- Flexible credit system
- Organization system
- Week consultation service
- Successful examples are not extended to larger scale

There are no alternative sources of income
- Infrastructure
- Alternative jobs
- Agro-processing enterprise
- Agro-tourism
- Primary processing
- Unclear policy on agriculture development at state level
- Lack of investments from private and public sectors

Low productivity
- Information vacuum
- Lack of awareness in technologies
- Unavailability of inputs
- Land fragmentation
- Consultation/training
- Lack of mechanisms for extension of research results to farm level
- Lack of financing of extension works
Annex 23  Information Presented at the Market Place

Guria Agribusiness Centre (GAC)
- GAC will deliver business consultations for farmers and future (young) farmers
- GAC require agro-chemicals (among them organic pesticides) for the member farmers
- Offering of demonstration plots in successful farms
- GAC has experience in market research

Georgian Association of Professional Bee-Keepers (GAPB)
- GAPB will direct persons, interested to acquire skills in bee-keeping to experienced bee-keepers; accommodation and food will be provided by the host bee-keepers (one week per month)
- GAPB invites interested people to the monthly bee-keepers seminar (third Wednesday of each month, 14:00h, 28, Gogebashvili Street)
- GAPB provides free consultation on all bee-keeping issues under 8 99 197588; 292136; e-mail: goober@geo.net.ge

Biological Farming Association ‘ELKANA’
- Can provide training in participatory methods (community mobilization, village development)
- Can provide training in consultations methodologies and various agricultural issues
- Offers to host an initiative group, and to arrange regional meetings at ELKANA to discuss agricultural issues, first issue proposed: Elaboration of the Strategy for Agriculture Development for submission to the Ministry of Agriculture

Georgian Academy of Agricultural Sciences (GAAS)
- Dealer services to the farmers
- Training of staff from advisory services at regional GAAS stations
- Training of computer operators for regional GAAS stations
- Training delivery by the professionals as locally, also in the head offices
- Offering of innovative technologies and their implementation for consultations
- Conduction of market researches in the district by professionals

Union of Landowners of Georgia
- Information-consultation centre for farmers, charging symbolic fee for services provided
- Strengthening of consultation and qualification courses at regional level

Georgian State Agrarian University (GSAU)
- Provide to the future farmers the skills, which would allow them applying of ICS systems
- Training in the area of communications and computer sciences, internet
- New specialties for improvement of farmers training
- Scientific researches for improvement of farmers activities
- Training and re-training of the farmers for improvement of agricultural production
- Establishment of the training centre in GSAU for training of future farmers and re-training of farmers and provide contacts with them

Research Institute of Economics and Management (RIEM)
- Development of scientifically justified recommendations for management systems (cooperation etc)
- Economic analysis of the economies
- Proposals for development of agro-tourism.

Farmers Association ‘Farezi’
- Has 87 members, including biological farmers
- Has an office, car; covers Ninotsminda, Aspindza, Adigeni, and Borjomi
Annex 24 Biological Farming Association ‘ELKANA’

The Biological Farming Association ‘ELKANA’, a non-governmental Georgian organization, was founded in 1994. Since 1996 ELKANA has been a member of the International Federation of Organic Agriculture Movements (IFOAM). ELKANA aims at the improvement if the socio-economic conditions of the population of Georgia and environmental protection through fostering the development of sustainable organic farming and increasing the self-reliance of the rural population. The association unites member farmers from different regions of Georgia. The association membership is open to any citizen of Georgia interested in the development of organic farming in the country, as well as the protection of the environment.

The program activities of ELKANA include extension service in organic farming, training and workshops in the field of organic farming, extension methodology and related fields (marketing, cooperation, product processing etc.), community mobilization and development of self-help processes in rural areas and raising public awareness on the importance of organic farming and traditional varieties.

ELKANA cooperates with governmental and non-governmental agencies. The information relating to agriculture and environmental protection is distributed among ELKANA employees and member farmers. Public relations department of ELKANA publishes various information leaflets, brochures and a biannual magazine – ‘Biomeurne’ (‘Biofarmer’) in order to increase awareness among organic farmers and population. Organization also cooperates with media - preparing articles, interviews periodically. Besides, ELKANA conducts organic fairs, presentations, etc.

ELKANA participates in legal initiatives, such as Law on Organic Farming and Certification; Biosafety Regulation, etc. In addition, ELKANA lobbies organic farmers’ rights – gathers information from farmers, conducts meetings with them, participates in international events and distributes related information.

ELKANA has a good ICT infrastructure, which includes 25 personal computers (PC), 6 printers and other equipment connected in the internal network. Telephone and mobile wireless are available and run satisfactorily. For information and data exchange and sharing, the organization has a special server. Internet access is through leased line connection and LAN, and also through dial-up connections. All computers have web access and e-mail facilities. All ICT hardware and software is imported. Some specialized software available in local language, including ORIS, Super Fin, etc. are used in organization. Upgrading software depends on the emerging needs and availability of funds. ELKANA has its own website (www.elkana.org.ge).

ELKANA has some scientific and technical information sources, and some of them are available electronically. Electronic information is stored in few PCs. ELKANA has a library. Several catalogues of the library are computerized. Around 25 staff members can make searches from international databases by using PCs. Some articles and data are sent to interested organizations mainly in Germany. As noted earlier, ELKANA has a special service providing such information and publishes a journal ‘Biofarmer’ which helps it to disseminate information to its members throughout the country. Published material of the organization is distributed to regional libraries through local association of libraries.
ELKANA works through aid of, and grants from, foreign organizations. Its current program is financed by the following donor organizations: Consortium of Donors – EED, MISEREOR – Germany, Cordaid – The Netherlands; GEF and UNDP; SDC, DFID; Novib - the Netherlands; Eurasia Foundation, WFP, Mercy Corps; Diakonisches Werk, GTZ – Germany.

Management information is available both electronically and in hard copies following set procedures and using ICTs to access them. Most staff is skilled to efficiently use internet, e-mail, and electronic sources for information exchange and documentation. However, meetings, publications, workshops, and seminary play a key role in facilitating information flow between partners and members. ICT tools are used for project preparation, coordination, and exchanging project results.

So far, ELKANA has been using ICTs especially in extension and consultancy services, developing contacts with international counterparts, and searching for scientific information. Future activities focus on broad agricultural development issues that will require development new content for ICT use (electronic data bases, electronic journals, national agricultural statistics and international agricultural news, computerization of library catalogues, etc.).
Since 1990, or in the Post-Soviet period assistance from the western countries and various funds to Georgian agriculture sector development amount to over 500 million US$. However, the production in the agricultural sector in 2001 was lower than in 1990.

<table>
<thead>
<tr>
<th>Year</th>
<th>Production</th>
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<tr>
<td>1990</td>
<td>100</td>
</tr>
<tr>
<td>1994</td>
<td>75</td>
</tr>
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<td>1995</td>
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<td>1999</td>
<td>93,3</td>
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<tr>
<td>2000</td>
<td>79,3</td>
</tr>
<tr>
<td>2001</td>
<td>85,8</td>
</tr>
<tr>
<td>2002</td>
<td>96</td>
</tr>
</tbody>
</table>

Reasons for the lower productivity include the lack of advisory services and organizational-technological services for the farm economies in agrarian sector. Traditional state structures – District Agricultural Departments lost their functions. Currently, pilot projects are being implemented to replace these by Centres of Complex Services for Farmers with the following organizational structure:

- **Head of the Centre**
  - **Agronomist**
  - **Zoo-technologist**
  - **Engineer consultant**
  - **Economist**
  - **Lawyer**
  - **Accountant**
  - **Software Specialist**
  - **Operator**
  - **Controller**

Main goals and objectives of such centres are also identified.

**Goal**
Support Agricultural Production
Provide information and analytical service to government and non-government organisations

**Tasks**
- Make register of farm resources by use of GIS
- Development of farmers’ register
- Technical equipping
- Training, consulting, studying basics of credits and financing
- Dissemination of new technologies through internet and distant learning
- Establishment of agrochemical, leasing, juridical, etc. services
- Provision of material-technical basis and establishment of farmers’ service “Universam”
As a result of the land reform, state agricultural land was transferred to private owners. Basis for this was provided by the creation of a Land Cadastre in Georgia, assignment of unified identification codes to land parcels and issuance of property certificates to farmers.

Cadastre information provided through geographical-informational technologies (GIS), together with relevant normative acts, are resources of critical significance for the district information-consultation centres. At the same time it is possible to establish the register of farm economies, based on personal data and issuance of relevant plastic identity cards (smart card) to the farmers. Unique identification codes of the farmers compose databases of the farm economies, which include information about the produced goods, production factors, household data.

GIS technologies provide a simple search system, which can produce an objective picture of the specific farm economy, exact cartography of the parcels and agricultural goods produced on these parcels.

All above ensure stable and renewable district information resources, which provide basis for complex services to the farm economies.

One of the most acute issues – the creation of a system, which provides credits, advisory services and technical farm inputs to farmers - may be resolved via ICT technologies.
After implementation of pilot projects in two districts of Georgia, they could be replicated in other districts.
Annex 26  Draft Project Outline for (FAO TCP Project)

1. **Project title:** Improvement of Information and Communication System for Agricultural Sector Development in Georgia

2. **Project Rationale:** Identification of problems to resolved (background and issues to be addressed) through the proposed project
   - to be provided by the Project Formulation Team, description based on Annex 22: Problem Analysis

3. **Project Objectives**
   Should provide definition of objectives

   **Project purpose:** Contribute to improvement and development of agriculture sector in Georgia through improvement of communications and information management

   **Project goal:** Improvement of market access and agricultural production through improvement of communications and information management along the knowledge chain

   **Project objectives:**
   1. Strengthening of the consultation centres through information supply and staff training at the district level
   2. Improvement of communication and information system at all levels through advanced technologies
   3. Development of a general platform with the purpose of influencing the State policies

   Should show the relevance of project to clearly defined national priority needs
   - to be provided by the Project Formulation Team: to which national priority needs the project has relevance

4. **TCP criteria to which the project responds**

   Project meets following criteria:
   a) It matches with national priorities
   b) Government, represented by MoA supports the Project
   c) The Project contributes to covering the critical gaps (‘white spots’) in the current information and communication system: the missing links between scientists, consultation services and farmers

5. **Project Expected Outputs:**

   I. Consultation Centres at district level strengthened through information supply and re-training
- Two pilot regions selected for the model project: capacities built in human resources and new technologies; development plan prepared and discussed for each region
- Four training courses organized and 30 people trained in each district (training content identified through background studies; considering gender issues).

II. Improvement of communication and information systems at all levels:
- Institutions selected with improved capacities (human resources, technologies, development plan prepared and discussed)
- Training courses: 40 people were trained (training profiles were identified through background studies, taking into consideration the gender issues).

III. Creation of general platform for influencing the state policies
- An advisory group of all stakeholders established on agricultural policy issues, which meets regularly
- Open days arranged of various stakeholder organizations (4-5) in Tbilisi and at regional level

6. Inputs
   - List major inputs (e.g. man month international expertise, national consultants etc., number/duration of training courses, number of trainees)

   - Planned overall project duration

     ➢ To be worked out by the Project Formulation Team

7. Total Budget Estimate (US$)
   also give estimated figures by major component, as applicable
   a. international experts
   b. national experts
   c. training, including related costs (eg. resource persons travel and DSA)
   d. workshop/meeting costs
   e. equipment

     ➢ To be worked out by the Project Formulation Team
<table>
<thead>
<tr>
<th>Objective</th>
<th>Actions</th>
<th>Actions</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Strengthening regional consultation centres</td>
<td>Selection of local organizations / persons</td>
<td>Select local organizations, which will join at the pilot stage</td>
<td>Establishing an advisory team on agricultural policy consisting of all stakeholders</td>
</tr>
<tr>
<td>II. Improvement of information and communication (IC) system</td>
<td>Conduct surveys to identify training needs</td>
<td>Conduct surveys to identify needs of these organizations</td>
<td>Establish a consultation-information network between participant organizations</td>
</tr>
<tr>
<td>III. Development of platform for influencing state policies</td>
<td>Identifying information needs of farmers</td>
<td>Organize workshops/meetings</td>
<td>Organize regular work meetings</td>
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<td>Actions</td>
<td>Selection of resource organizations, which would provide training</td>
<td>Develop a design for an improved IC system</td>
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<td></td>
<td>Arrange farmer fields schools or use existing ones</td>
<td>Make an inventory of existing information materials</td>
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<td></td>
<td>Training of local professionals</td>
<td>Setup common library and information system</td>
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<td></td>
<td>Training of staff of community radio/TV</td>
<td>Increase capacity of research institutes by using communication and information technologies</td>
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<td>Arrange ‘Days of Open Doors’ in various organizations</td>
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<td></td>
<td>Introduce of participatory methodologies in research institutions to identify research priorities</td>
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</table>
Annex 27  Evaluation of the Workshop

What did we like?

- The workshop was very interesting, timely and useful. We are grateful to the organizers (3)
- Actual issues (3)
- High level organization (7)
- The workshop was fruitful, organized at a high professional level (2)
- Business-like environment (4)
- Dedication and professionalism
- The workshop achieved actual results
- High level facilitation
- Responsibility from the side of the participants
- Well organized work and relaxation
- Contacts made with organizations of agricultural sector (2)
- The subject was fully implemented

What should be improved?

- Next field workshop in one of the regions
- General project draft
- We should take the representatives of the Ministry of Agriculture ‘on a leash’ (comment: nominated but did not participate)
- Team work requires more time
- Materials should be provided in advance
- It is desirable to continue activities in this direction through attraction of new members and to achieve stated goals
- There was too little spare time
- It would have been good to listen to the Lithuanian representative (comment: cancelled mission on short notice)
- It would be desirable to be prepared better and more accurate
- We should improve information provided by the participants