REPORT OF EXPERT CONSULTATION

AGRICULTURAL INFORMATION MANAGEMENT

IN CENTRAL AND EASTERN EUROPE

10-13 November 2004

FAO Sub-Regional Office for Europe (FAO SEUR), Budapest, Hungary

1. Introduction

Participants focused on the issues of improving agriculture-related information management in Central and Eastern European countries, sharing professional experience of web publishing and distance learning, developing agriculture and sustainable rural development-related information and educational networks using the AgroWeb platform as well as drawing on the IMARK (Information Management Resource Kit) initiative to support capacity building.

In particular, practical steps towards the further development of the AgroWeb Network were discussed, including the establishment of a Russian language platform, as well as the strengthening of the AgroWeb professional community.

Participants presented activities of the Global Forum on Agricultural Research (GFAR) IT/IM; LandNet, Central European Land Knowledge Center (CELK); European Information System on Agricultural Research for Development (EIARD InfoSys); and CENTAUR Network in the CEE region.

As a part of the consultation, a videoconference was organized to share the views of the participants with the management of FAO's Library and Documentation Systems Division.

2. Findings

The findings of the Consultation can be summarized as follows:

2.1 AgroWeb

2.1.1 Description

AgroWeb is a network based on human relations and commitment. Following the decentralized nature of the internet, the network has been developed on the principle of shared responsibility and ownership of the members. In an interactive process, the members of the network have developed a template that provides a frame for structured content management, shapes the corporate identity of the community, facilitates navigation through the different AgroWeb pages and covers in a very practical way the different dimensions of agricultural development (thematic, cultural, education, historic,…). Moreover, an interesting model for vertical integration is emerging that would link the community level to the national and regional levels.

2.1.2   Systems concept and design

Presently, the systems design of AgroWeb is based on ASP and HTML. An evaluation of the architecture and toolset is necessary in order to assess the risk of collapse during up-scaling. It is also necessary to renew efforts to promote interaction among actors, to facilitate decentralized content management by members and to offer additional services for improved decision making at the various levels, such as easy access to relevant content management and planning tools.   The evaluation may reveal that it will be necessary to develop an alternative systems concept to reinforce the vital principles of shared responsibility and ownership that keeps the network alive.

2.1.3 Lesson learning

AgroWeb has grown organically. Members have contributed on a voluntary basis. It would be interesting to document the evolution of the network and to analyze the motivation of the members in an attempt to understand the factors that favour networking. A comparison with other regional agricultural networks could provide valuable information and understanding from which all the regional networks could benefit.

2.2. Networks

2.2.1 Purpose of ARD networks

The task of contributing to agricultural and rural development can be labour intensive and complex. Organizations that facilitate and promote networks should aim to mobilize and enhance existing resources (human resources, skills, information content) by encouraging members' active involvement in information exchange and co-operation, rather then trying to centralize the management/dissemination of information. In other words, they should play a catalytic role for independent action rather than creating dependency on one resource centre.

2.2.2   Types of networks

In principle, two different types of networks can be distinguished: centralized (hierarchical) and decentralized networks. Centralized networks are organized similar to the web of a spider. Content and activities are managed by a central unit that defines a common interest. Usually, centralized networks are the result of projects supported by organizations and formal agreements. Decentralized networks are mainly the result of informal initiatives that operate on the basis of voluntary participation and are driven by a shared vision, responsibility and ownership, and by individual interests. Following the considerations under 2.2.1, decentralized networks appear to be more appropriate to mobilize existing resources then those using a more top-down approach to retrieve and disseminate information. At a later stage, organically grown, decentralized networks often face the problem of formal recognition that is required to develop their full potential to contribute to change.

2.2.3 Cross fertilization

AgroWeb and the Rural Universe Network (RUN) are two distinct networks that have a similar decentralized vision that depends on the mobilization of existing resources. They emerged following a process during several iterative cycles of experimentation, feed-back, evaluation and adaptation. The two networks are characterized by voluntary participation of

members who share responsibility and ownership of content and jointly contribute to the further development of tools and services in a process that is driven by demand of the productive agricultural community. The main goal of the two networks is to mobilize available resources for agricultural and rural development by facilitating information exchange among members. Although they developed independently, the two networks have a similar simple organizational structure but have distinct systems concepts. It appears that an exchange of experiences, concepts and technology will be of great benefit to the two networks and their members.

2.2.4 Inter-link networks

Other networks have evolved in the CEE region in thematic areas that are closely related to Agro-Web (e.g. CELK and the University Network initiated by the Eastern Europe Centre of the University of Hohenheim). It is recommended to explore opportunities to inter-link networks by providing simple shared tools on the web pages of the various networks. Such an approach would:
a) facilitate the extension of existing networks and the establishment of new networks;
b) provide refined services to the members of the various networks, such as automated news and literature feeds:
c) provide tools to carry out simple surveys across networks in the framework of an early warning service.

2.3 E-learning and Knowledge transfer

E-learning should include distance learning for various stakeholders. The existing capacities of educational institutions, especially agricultural universities and research centers involved in AgroWeb Network should be used in this regard.

2.4 Bottom-up approach

Farmers manage natural resources and produce food, and are the major actors in achieving the 2015 goals agreed at the UN Millennium Summit. Farmers make decisions based on their individual resource base. Information, the capacity to use it, and market opportunities are the main driving factors for change. Initiatives that try to catalyze a change in the way farmers produce and manage resources need a clear understanding of decision processes at the farmer's level and must define the logic of their activities accordingly. In order to develop this understanding, and thus assure the efficient investment of scarce resources, the involvement of farmers at the very early stage of project planning appears to be paramount. In simple words: Farmers have to get in the driving seat. The logic and mechanisms that relate project/networking activities to decision-making at the farmer's level must be clearly defined in both qualitative and quantitative terms.

3. <u>Action oriented steps</u>

Participants defined the following practical action oriented steps aiming to strengthen the functioning of the AgroWeb network, and support the effective information exchange and knowledge transfer in the region in general.

- Implement appropriate tools for content management of AgroWeb pages, taking into account the existing methodologies and tools developed by FAO WAICENT (Michal Demes).
- Ensure the visibility of the experts involved in AgroWeb Networking activities through timely updates of the Contact Database (Marcel Kovac, Arman Manukyan).
- Continue the implementation of the strategy of sub-regional gateways to National AgroWeb Portals (NAWPs) as it is done in South East Europe (SEE) and Central Asia and Caucasus (CAC) region, in close cooperation with GFAR (in line with GLOBAL RAIS initiative) (Jean-Francois Giovanetti, Arman Manukyan).
- Undertake a mission on promotion of AGORA to selected countries in the sub-region (Tomaz Bartol).
- Improve the functioning of Depositary Libraries through the active communication with FAO National Correspondents and respective Ministries of Agriculture, as well as by using AgroWeb platform for reaching the experts and increasing visibility of DL in the Internet.(Michal Demes, Ildiko Pocza).
- Continue the implementation and further promotion of the I-MARK module on Management of Electronic Documents (Michal Demes, Karel Hruska).
- Organize a workshop in Balkan region with special focus on capacity development (Michal Demes, Cosmin Salasan).
- Develop AgroWeb pages in Tajikistan (Arman Manukyan) and Bosnia and Herzegovina (Cosmin Salasan) in collaboration with experts in respective countries.
- Undertake an expert mission to Kazakhstan to support the development of agricultural information management, with special focus on the AgroWeb Kazakhstan portal (Marc Bernard, Henning Knipschild).
- Develop networking standards for the following sub-portals in the AgroWeb structure:
    a. Information Centers (Program coordinator: Tomaz Bartol, Agricultural Faculty, Ljubljana)
    b. Education in Agriculture (AgroEdu) (Program coordinator: Cosmin Salasan, Agricultural University, Timisoara)
    c. Research Centers (In collaboration with EARD Infosys: J.F. Giovannetti, GFAR, Marc Bernard, ZADI Bonn)
    d. Animal Genetic Resources (Program coordinators: Arunas Svitojus, Baltik Genofond, Vilnius, Pal Hajas, FAO HQ).
    e. LandNet/GIS (Program coordinator: Vladimir Evtimov, FAO SEUR, CELK)
    f. Forestry (Program coordinator: Volker Sasse, FAO SEUR)
    g. Fisher and Aquaculture, program coordinator Laszlo Varadi, HAKI, Szarvas
    h. FarmNet (Program coordinator: Stjepan Tanic, FAO SEUR.
- Implement AgroWeb standards for the presentation of agricultural information at sub-national level and at the level of farmers associations in two pilot countries (Slovakia and Georgia).
- Continue the development V4 initiative and prepare the strategy for e-farmer project (Michal Demes, Laszlo Papocsi).

Annex 1

Programme

10 November: *Arrival*

11 November: Presentations and discussion
09 00 - 09 10 Welcome speech
        Ms Maria Kadlecikova, SEUR Representative
09 10 - 09 45 GIL and WAICENT - Plans and Strategy and IM Progresses in CEE
        Mr Michal Demes, Information Management Specialist,
09 45 - 10 00 AgroWeb Network
        Mr Arman Manukyan, AgroWeb Network Coordinator, Armenia
10 00 - 10 15 CELK Activities
        Ms Marianna Posfai. CELK Hungary
10 15 - 10 30 Veterinary Medicine Network & CENTAUR Network,
        Mr Karel Hruska, Veterinary Medicine Network coordinator, Czech Republic
10 30 - 11 00 *Coffee break*
11 00 - 11 15 Web design and database solutions
        Mr Michal Demes, FAO SEUR
11 15 - 11 45 - GFAR IT/IM Activities in CAC region,
        Mr J.F. Giovannetti, GFAR Secretariat Manager, FAO UN
11 45 - 12 30 Discussion
12 30 - 14 00 *Lunch*
14 00 - 16 00 Consultations
16 00 - 17 00 Videoconference with GIL management
18 00 - *Dinner*

12 November: Presentations and discussion
09 00 - 09 15 EU INFO Network
        Mr Laszlo Papocsi, EU INFO Network Coordinator, GAK Kht, Hungary
09 15 - 09 45 Forestry Network
        Mr Volker Sasse, Forestry Officer, FAO SEUR
09 45 - 10 00 AgroWeb SEE Platform and Education Network
        Mr Cosmin Salasan AgroWeb SEE Platform and Education Network Coordinator
10 00 - 10 30 *Coffee break*
10 30 - 10 45 EARD InfoSys,
        Mr Marc Bernard, ZADI Bon, Germany
10 45 - 11 00 Agro EDU Net
        Mr Jochem Gierats, Osteuropa centrum, University of Hohenheim, Germany
11 00 - 11 15 GIS CEE Network
        Mr Walter Mayer, GIS Platform Coordinator, Progis, Austria
11 15 - 12 00 Discussion,
12 00 - 13 30 *Lunch*
13 30 - 16 00 Consultations
16 00 - 17 00 Conclusions and Recommendations

13 November: *Departure*

Annex 2

List of Participants

J. F. Giovannetti	GFAR, Italy
Marc Bernard	InfoSys, Germany
Jochem Gierats	Germany
Walter Mayer	Austria
Arman Manukyan	Armenia
Armen Khojoyan	Armenia
Narine Khourshoudian	Armenia
Oksana Sivurova	Belorus
Karel Hruska	Czech Republic
Laszlo Papocsi	Hungary
Marianna Posfai	Hungary
Zuzana Horvathova	Slovakia
Milos Homola	Slovakia
Tomaz Bartol	Slovenia
Cosmin Salasan	Romania
Michal Demes ,	FAO-SEUR - organizer
Michelle Schroeder	FAO-SEUR - Consultant
Constanze Schaff	FAO-SEUR - Consultant
Ildiko Pocza	FAO-SEUR - Technical support

Participants from FAO Headquarters (Videoconference)

Anton Mangstl	Director, GILD
Stephen Rudgard	Chief, GILF
Robert Portegies Zwart	Information Systems Officer, GILF