THE DEVELOPMENT OF ELECTRONIC ADVISORY SYSTEM AND THE ROLE OF LAND USE PLANNING COMMUNITY IN THIS

Tetyana Kalna-Dubinyuk[1], Alexander Isachenko[2],
[1]National University of Life and Environmental Sciences of Ukraine, Kyiv
[2] State University of Land Use Planning, the Russian Federation, Moscow

Abstract
Eelectronic advisory system is an interactive learning environment that provides access to the best, most accurate knowledge of the most competent professionals across the country. Eelectronic advisory system connects consumers' knowledge with those who provide them experts who know their subject inside out. The paper concentrates on experience of creation electronic advisory system at the National University of Life and Environmental Sciences of Ukraine and its using for the developing of land use planning community electronically. The purpose of this paper is to analyze and identify the importance of the development of electronic advisory system and. the role of land use planning community in this. The main goal of this paper - identify ways on creation of land use planning community for new technologies transfer and education to provide accurate, up-to-date information for use anytime, anywhere. The designed system will increase the efficiency of work of land use planning team specialists to provide qualified answers to questions, and interact with users through advanced information technologies (video conferences, instant messaging, and social networks) to simplify and speed up work on make decisions.
Keywords: *electronic, advisory system, land use planning.*

Introduction

The mission of advisory system is continually changing to adjust to the new conditions for agriculture and the rural economy. The global, national, and local economies, the natural resources environment, demographics, and community and family structures, values and available resources are all factors in these changes. Advisory services also differ more locally than in the past, depending upon the level of infrastructure and the availability of competitive sources of knowledge, the economy, priorities for development, and developments of within complex of knowledge generation and delivery systems.

At the core of advisory system is the drive to provide objective, scientific information to the public to answer questions and guide decisions by creating an interactive national repository of high-quality, non-duplicated, research based information.

The electronic advisory system is capability to achieve effective linkages by connecting geographically dispersed people and develop communication, managing large volumes of data, and rapidly collecting, processing and dispersing information in a variety of forms. It consists of two fully-integrated and inter-dependent components: the human and the technological. The human component consists from a network of policy-makers, research and advisory workers, academics, NGOs and farmers, committed to collaboration, communication and supporting agricultural producers. The technological component includes 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.

One of the key principles of the electronic advisory system is the creation a practical communities. Practical Communities is defined as a virtual network of subject matter content providers consisting of faculty, professional and para-professional staff, county educators, industry experts, clientele and government agency representation who share knowledge or competence in a specific content area and are willing to work and learn together over a period of time to further develop and share that knowledge in forms of educational products and programs.

The purpose of the article is to reveal the role of land use planning community, its characteristics and prospects in land use planning development. Considerable contribution to the understanding of the advisory theory and its electronic service programs have made many foreign and domestic scientists, including William Riviera, Rolker Hoffman, Van Den Ben, Stanley Johnson, Valery Koshelev, Tetyana Kalna-Dubinyuk, Mikhailo Kropyvko, Mikhailo Shvydenko, etc. However, electronic advisory services requires further practice communities development in various areas of activities including land use planning for further development and knowledge sharing in the form of educational products and programs.

Methodology of research and materials

The methods of information search, systemising, analysis of land use planning material and statistical data as well as scientific and methodological literature analysis, comparative analysis, and generalization were employed to reach the aims and objectives of the paper. The main data for the research was obtained in Ministry of Agrarian Policy and Food of Ukraine, National Association of Advisory Services of Ukraine, Ukraine State Service of Geodesy, Cartography and Cadaster, Universities, Academy of Sciences and Academy of Agricultural Research of Ukraine, business and public organizations, international programs. Cartographic data was used for analytic research and data bases and together with others constituting land use planning community information system.

The creation of land use planning community on a base of electronic advisory system is a platform for new technologies transfer and education to provide accurate, up-to-date information for use anytime and anywhere.

Ukraine is now an independent country in Eastern Europe and is one of the largest of the European countries. Ukraine has "black soil", of the richest type in the world. About 40 % of the world's black-earth soils are concentrated there (Shmidt, Kalna-Dubinyuk, 2008).

In Ukraine, the role of the Advisory service has become clear and more important. It is being increasingly recognized as an organization that can help people and communities solve problems and improve their lives by improving agricultural productivity; creating new products; protecting animal and plant health; promoting human health and nutrition; strengthening children, youth, and families; revitalizing rural life; and maximizing the effectiveness of the use of limited resources (Kalna-Dubinyuk, Beschstna, 2015). Advisory services or so called Extension Services have been created in all regions of Ukraine. There are 70 certificated Advisory Centres at oblasts of Ukraine.

Ukraine's strategy today is to create electronic advisory system. The best its model is a dynamic model designed to function in a market economy, with public, private, donors and state sources of funding and interactive approach to make decision in extension (Kalna-Dubinyuk, 2013). At the core of advisory system is the drive to provide objective, scientific information to the public to answer questions and guide decisions by creating an interactive national repository of high-quality, non-duplicated, research based information.

Electronic advisory system: will better serve the needs of the anywhere-anytime generation of users, giving them quick access to the organized, customized resources they need to make informed decisions; will use modern Internet technology to harness the power of extension system on a national level, giving users best-of-the-best information from across the country, but also fostering community through discussion groups, local contacts, and interaction with experts; will be available for access on any Internet-ready device, bringing the benefits of the extension system to an increasingly web-savvy clientele. Users will be able to access educational resources anytime on various subject areas; users will find objective, science-based information that is aggregated, not duplicated, from universities, research centers, and industry experts throughout the extension system (Volkov, Isachenko, 2012) .

Fact sheets, frequently asked questions, ask the experts, topic discussion groups and educational modules, all created by experts from extension system and related industries, will help users quickly find the information they need, when they need it.

Figure 1 illustrates the model of e-Extension in Ukraine (Kalna-Dibinyuk, Kozary, 2013).

E-Extension expects to establish Practical Communities (PC), experts and specialists who will consult and teach by interests (forestry, land use planning, horses its.) and Communities of Interest (PI) or users of information. A main team each of the PC include representatives from extension services, governmental structures, business, international organizations, grants and programs, educational centres and public organizations, research institutions. The PC deal with: educational programs, curricula, syllabi, and methods for training and retraining experts, advisers, farmers, and other individuals; to develop of communication services and continuing education; database and data knowledge, innovations; distance education; constant and efficient cooperation with programs, projects, organizations, and universities from different countries (Kalna-Dubinyuk, Isachenko, 2013).

A Community of Interest is an identified group of individuals sharing similar interests, concerns, and educational needs around a subject area. It is important that the description of the CI is clear, relevant and includes a definable set of audience needs, as well as an explanation of how the CI audience will be served by the proposed PC (Kalna-Dubinyuk, Sokol, Rogoza, Bass, 2015).

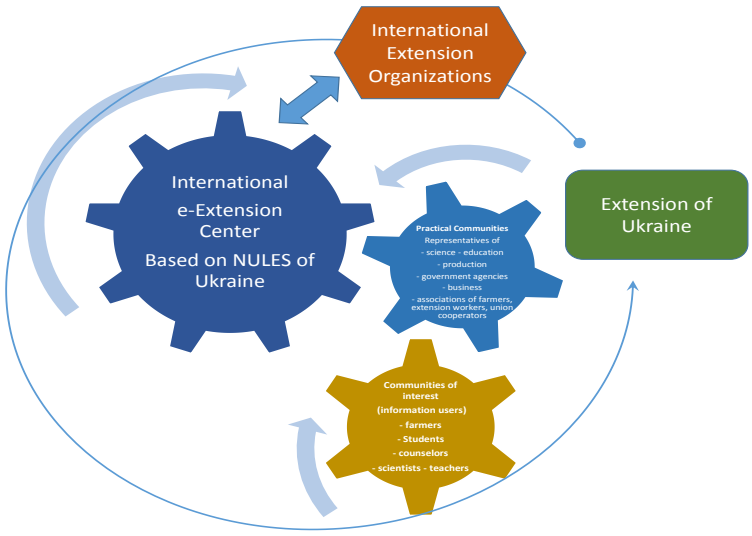

Fig. 1. The model of electronic advisory system (e-Extension) in Ukraine

Discussions and results

Specific functions of the PC include:

• Helping to meet the needs in the knowledge of their members or customers.

• Strategic management of available knowledge in their specific subject area, including updating and maintaining data.

• Best practice development of educational products and programs.

• Innovation in the subject area knowledge and deliver them to users.

• Continuous interaction with users.

• Answers (hot line).

One of the problems of the electronic advisory system is to find a quick professional answer on a question exits into as a call or by e-mail. A special technology for each of PC includes fact sheets, frequently asked questions, ask the experts, topic discussion groups and educational modules, all created by experts from extension system and related industries, will help users quickly find the information they need, when they need it.

In the initial stages of the new community – land use planning community is important to first provide the following functionality:

• Supports "Ask an Expert";

• Creation of articles and content databases directly relevant industry, creating a list of frequently asked questions on topics and answers;

• Preparation of e–learning courses and manuals;

• Regularly conduct webinars (online meetings) on topical issues.

Benefits to provide land use planning community include:

• Extended range of services to users–e–Extension provides access to and interaction with customers 24 hours a day, seven days a week. Customers will have access to information and education programs when and where they need it.

• Better service to users – clients are served better information and educational products that are organized according aggregated, localized and presented as the "best of the best", and not duplicate, redundant and unorganized.

• Extended range of proposed content for customers - Customers will have access to a broader base of reliable information because of their convenience institution in connection with the general availability of national and regional information base. All institutions will offer high–quality expertise through the PC , including content of the relevant industry areas in which individual institutions may have limited competence.

• Improved identification of individual institutions and improve the marketing system–wide e–Extension.

• Effective development of educational products and programs - by reducing duplication of efforts and exchange of products for the institute abroad. Community's practitioners can focus on developing innovative, high–quality interactive products and be able to devote more of his time local developments.

• Resources for publishing, research and consultancy activities – e–Learning Extension will provide resources for academic programs will serve as a tool for applied research, providing feedback mechanism with a wide audience, and extension – providing a new tool that allows local teachers less focus on recurring problems solved and more on transformational learning.
• The effectiveness of cyber–infrastructure – allocating the cost of developing and licensing throughout the system, cyber infrastructure e–extension will allow for savings institutions, as these services and products no longer need to buy each institution that needs them.
The use electronic platform for development of electronic advisory system can significantly reduce the time to find the answer by addressing the ask to a PC that needs to answer.

Conclusions and proposals

The development a market economy system moves ahead many problems and in land use planning also that requires quick response and high quality specialists' service. We need to develop electronic advisory system that will be play a main role in collaboration across the globe. Creating the land use planning community electronically we can increase the efficiency of tasks, simplify and speed up work on make decisions. The land use planning community is an interactive learning environment that that will help to provide an objective, scientific, technical and training information from the best specialists, collect and create new educational and information resources on a wide range of topics and will help solve real problems in real time for best land use. People need it today and in the future.

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Information about authors

Tetyana Kalna-Dubinyuk – Professor in Economics, Doctor of economic sciences, Head of Extension Department, National University of Life and Environmental Sciences of Ukraine, Expert Advisor of Ukraine, 15, Geroyiv Oborony st., Kyiv, 03041, Ukraine, Office: (+38-044) 527-8061, Fax: (+38-044)527-8061,mob.+38-097-590-11-83, e-mail: tatiankd@yahoo.com

Isachenko Alexander – PhD, Associate Professor, Department of Land Use Planning, State University of Land Use Planning (Moscow), the Russian Federation, Corresponding Member of the Russian Academy of Natural Sciences (RANS), Honorary Doctor of the Institute of Agro ecology and Environmental of National Academy of Agricultural Sciences (NAAS) Expert Advisor of Ukraine on Land. 105064, Moscow, ul. Kazakov, 15, tel.: 8-916-831-96-11 mob. 8-499-261-20-51 – slave, e-mail: isachenk0@bk.ru