

**Kalna-Dubinyuk TETYANA, Sokol LESIA,  
Rogoza KONSTYANTYN, Bass OKSANA,<sup>1</sup>**

## **USING E-EXTENSION SYSTEM FOR RURAL TOURISM DEVELOPMENT**

### **SUMMARY**

Article is devoted to perspectives of use of electronic e-Extension system for the development of rural tourism in Ukraine. The concepts of rural tourism and problems of its formation in Ukraine are examined. There are different kinds of rural tourism representative in Ukraine such as sustainable tourism, agrotourism, ecological tourism ecoagrotourism, apitourism etc. The importance of advisory service with its e-Extension as a driving force for its development is determined. There were used methods: abstract, logical, system analysis, dynamic series, grouping, graphical, target-oriented. E-Extension as a thematic agrarian website of Ukraine concentrates much diverse agricultural information by Communities of specialists. The possibility (efficiency) of the use of e-Extension system and Community of specialists created on its base for consulting support for rural tourism in Ukraine is proven. E-Extension is a new tool for agricultural producers and to other people who are interesting in knowledge and information.

**Keywords:** e-Extension system, rural tourism, agriculture, development, consulting, market, interactive information system, environment.

### **INTRODUCTION**

Rural tourism development needs to pay attention to extremely important advisory service which was organized in Ukraine by the Law «Developing Agricultural Advisory Activities», adopted in 2004.

The green rural tourism is a specific form of recreation in private households in rural areas. The green rural tourism involves the use of demesne and human resources, holding and farming, natural recreational and cultural features of places, historical and ethnographic heritage of the region. In world nowadays the concept of three «S» («Sun-Sea-Sand») are changed by the concept three «L» («Landscape-Lore-Leisure») - landscapes, traditions and entertainment. The travels to rural areas are becoming more popular and where tourists are received exotic: agricultural and rural landscapes, traditional rural and peasant lifestyle, livestock, organic products and more. Today tourism

---

<sup>1</sup> Kalna-Dubinyuk Tetyana, prof., ph d in economics, Sokol Lesia, ph d in economics, Rogoza Konstyantyn, ph d in economics, Bass Oksana, ph d student, (corresponding author: tatiandk@yahoo.com National University of Life and Environmental Sciences of Ukraine, KIEV.

Paper presented at the 6<sup>th</sup> International Scientific Agricultural Symposium "AGROSYM 2015".

Notes: The authors declare that they have no conflicts of interest. Authorship Form signed online.

industry in Ukraine is not a major part of budget revenues. But its share should be increased in accordance with such objective conditions: favorable geopolitical location of Ukraine in the center of Europe, the presence of significant tourist and recreational potential, favorable climate, rich flora and fauna, numerical cultural and historical monuments of world value. These kinds of rural green tourism are developing in Ukraine now: sustainable tourism, agrotourism, ecological tourism (green tourism, natural tourism) ecoagrotourism, apitourism etc. (Figure 1.) (Kalna-Dubinyuk T., 2008; Malska M., Hudo V., 2012; Byrkovych V., 2008).

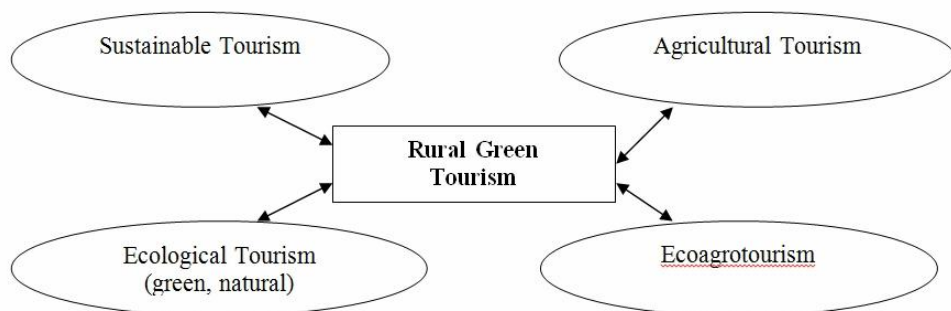


Figure 1. Kinds of rural green tourism in Ukraine

**Sustainable tourism** is a modern concept of tourism development that based on the global sustainable development principles. Sustainable development is a process for meeting human development goals while sustaining the ability of natural systems to continue to provide the natural resources and ecosystem services upon which the economy and society depend. Such tourism provides all human needs today and guarantees the similar opportunities of future generations.

Sustainable tourism is based on the following principles:

- 1) Environmental protection, minimizing ecological damage in the tourism, environmental surveillance tourism development activities;
- 2) The controlled using of technology tourist services, especially transport, energy, drinking water etc.
- 3) Social justice for local communities, the income and other benefits from tourism must be distributed on the local population interests;
- 4) Aesthetic harmony of natural resources using in tourism, the tourism activity and infrastructure must harmonically integrate into the unique history of each location.

The specific features of agricultural tourism region are: clean environment; low level of urbanization and industrialization, low population density, limited intensity of agricultural and forest products;

favorable agricultural structure; harmonious agricultural landscape; low income people; free home resources.

The rural tourism is often identified with the agricultural tourism but agrotourism is a form of rural green tourism.

**Agricultural tourism (agrotourism)** is a recreation type of tourism and concentrated in rural areas. Agrotourism uses farming for recreation, education or some activities in traditional forms of home keeping.

The rural green tourism is close in meaning to the ecological tourism. They often have the same kind of leisure.

**Ecological tourism** (ecotourism) is a cognitive and recreation type of tourism that focuses on nature (little modified by human) territories. Ecotourism includes classes in different forms of active recreation in natural landscapes without causing environmental damage. There are different forms of ecotourism as active (hiking, cycling, water, horse, gathering, fishing, hunting); faunal and floral tours (ornithological trips, photography, themed trips); cultural and ethnographic trip.

The difference features between traditional and ecological tourism are:

- 1) Natural advantage, not cultural tourism destinations;
- 2) Sustainable natural resources using;
- 3) Slight using of resource and energy;
- 4) Personal participation in socio-economic development of territory;
- 5) Environmental education of tourists.

Today the ecotourism is most dynamically developing in areas with natural value (national and landscape parks). Ecotourism is aimed at protecting the natural and cultural environment of the region which are visited by tourists. Ecotourism predicts the high environmental consciousness of participants in these trips.

**Ecoagrotourism** involves the use of guest houses without their owners or houses that located within or on the sides of biosphere reserves and national parks. Such proposes the ecological agriculture and a wide range of environmental and sport tourist classes (hunting, fishing, etc.).

Ukraine is rich in various natural tourism resources: climatic, biological, hydrological and landscape resources, mineral waters, mud and others. It is an important prerequisite for the development of green rural tourism. The total suitable land area for recreation and tourism using occupies 9.4 million ha (15.6 % of the total territory of Ukraine).

The important natural tourism resources of country are forests. The total area of Ukrainian forest fond of is 10 million ha (15 % of the

country). The mineral water sources are in all regions of Ukraine. Large reserves of therapeutic muds are concentrated in the south of Ukraine.

The various environmental objects locate throughout Ukraine: national and landscape parks, natural monuments and more. There are many rivers, lakes, some cliffs, canyons and the territory with wonderful views.

Using advisory service with its e-Extension gives wide possibilities for development of rural tourism in Ukraine and Worldwide.

E-Extension is developing on a base of the National University of Life and Environmental Sciences of Ukraine. It shows success when multiple actors such as government agencies, universities, nongovernmental organizations, international agencies and donors, as well as producers, workers, consumers, and private business work together. Associations (communities) of specialists by activity are established for this, and rural green tourism is one of them. E-Extension promotes coordination and consistency of green tourism's hosts efforts and possible actions in their local level to help navigate people to have a good rest in the rural area.

## **MATERIAL AND METHODS**

### **Survey and fungal isolation**

Theoretical and methodological basis of the study is the dialectical method of understanding of economic and consulting processes in their interconnection and development, fundamental scientific works and elaborations of domestic and foreign economists on problems of extension and rural tourism.

To realize the objectives of the research were used the following methods: abstract, logical, system analysis – to summarize theoretical and methodological provisions defining the essence of economic concepts and categories, substantiation of conclusions; dynamic series, grouping, graphical, – to study the current state and trends in rural tourism and extension; target-oriented – to develop of practical recommendations on ways to improve using of electronic extension.

The world practice of organization of information and consultation providing for agricultural producers shows the effectiveness of such activity, the need for its development in market conditions. Advisory services must be certified according to international standards (Kalna-Dubinyuk T., 2009).

However, the question of application of information and consultation methods and technologies in the extension needs further improvement to their innovative providing. An important problem of the national consulting system in Ukraine is a need for prompt and efficient access of the general public to various sources of information and services which is possible in conditions of preferential use of information systems based on Internet for collecting, recording, processing, distribution (cataloging) of information and consulting. Its solution is possible on a base of interactive information systems. Today there is a

need for practical implementation of electronic system of extension service in Ukraine. As part of an integrated information environment, it is possible a transition from simple informing to providing quality services to users based on technologies that can be implemented, particularly in the form of Web services and provide mobile access to information resources.

The main goal of the development of information technologies for agricultural consulting based on knowledge is the creation of modern information technology for support of processes of consultation and decision-making for agricultural extension services. The current paradigm of information technology in agriculture - is support on various agricultural issues at any time and in any place, by any means and in any applied agrarian sphere (Chaplinskiy U., 2003).

Hence the importance of e-Extension will be effective for the development of green tourism in Ukraine. Particular attention in this belongs to the development of interactive information and consultation support for the organization and development rural houses and its service.

Developed interactive consulting system for green tourism indicates its great advantages on quality and fast recommendations.

Consulting algorithms for interactive consulting systems provides dialogue between users and computer step by step; as a result, the display shows the necessary information for the user. In this case the following essential requirements for the formation of interactive solutions are provided: simplicity and ease of use; availability of consistency and continuity; completeness of forming solution, that is in a set of software functions should not be significant omissions; resistance to user errors; productivity and efficiency; economy, that is software should not be expensive (Rutynskyj M., Zinko Y., 2008).

Interactive e-Extension system and created on its base associations (communities) of specialists by activities where the Green Tourism is one of them should provide: accurate operative information on socio-economic development of agricultural production, agricultural market and ecology of rural areas; generating information and knowledge based on deeper integration of intellectual and information resources of agricultural research institutions, educational institutions, advisory services, and other members of the agrarian sector of Ukraine; tools and means for spreading of knowledge; participation of skilled consultants and expert- consultants; individual consultation; effective information search and comprehensive answers to requests; conditions for free access to information and knowledge at any time and in any place

## **RESULTS AND DISCUSSION**

For the priority development of green rural tourism in Ukraine and bringing to EU standards is considered appropriate:

- 1) Creation of the Law "About Green Rural Tourism" and the regulation acts according to the standardization of its activities;
- 2) Development of national and regional programs of green rural tourism;
- 3) Monitoring of developing and implementing these programs;

- 4) To complete the reform of the state statistics system for green rural tourism;
- 5) To create an infrastructure of state financial support of rural green tourism;
- 6) To organize the study market needs services of green tourism specialists;
- 7) To create the educational system for preparing specialist and retraining courses for the tourism sphere;
- 8) To create the Community of Green Tourism for information and analytical support of green rural tourism as part of the e-Extension information system. Users of the system are all agricultural producers and the public, the government of Ukraine, International Association for the extension and others.

Scientists and specialists of the National University of Life and Environmental Sciences of Ukraine develop e-Extension system ([www.edorada.org](http://www.edorada.org)) as a universal resource to meet the information needs of the agricultural areas. By this time e-Extension as a thematic agrarian website of Ukraine concentrate much diverse agricultural information by Communities of specialists. The portal is developing. It will contains a large amount of information by different communities such as on livestock, of Agricultural, Education and Science, Economics materials from agriculture, its legal security, fundamentals of business, analytical and statistical information and more. A growing number of users show the great interest in the existence of such information resource and the need for its development. Innovations in this regard will be to develop an interactive system for consulting assistance advisers and their clients on the site

## CONCLUSIONS

One of the most characteristic features of the present stage of our society is the growing influence of information and consulting technology to support innovative development of agricultural production, improving competitiveness of agricultural enterprises.

Objective need for innovation extension service requires a new interactive approach to spreading of knowledge and information in Ukraine through the creation of electronic educational and scientific advisory system for information support of agricultural producers, population and rural development.

The development of information and consultation technologies gives us a possibility to make decision in short terms at any time and at any place to increase sustainability in the agricultural sector. Electronic extension (e-Extension) service with interactive consulting system plays a main role in this. E-Extension is a new tool for agricultural producers and to other people who are interesting in knowledge and information. Today the rural tourism became popular in Ukraine as well as throughout the world. Different forms and service of this tourism needs to be improved through the use of best practices.

So the use of e-Extension as information and consulting system to the development of innovative consulting in rural green tourism will facilitate the development of green tourism in Ukraine and increase its competitiveness in the international tourism market.

### REFERENCES

- 1.Byrkovych V. (2008). Rural green tourism – priority of development of Ukraine tourism industry, Strategic priorities Vol.1(6), p.138 – 143.
- 2.Chaplinskiy U. (2003). Mobile information systems for decision making support, Scientific and technical information, Vol. 1, p. 22-26.
- 3.Kalna-Dubinyuk T. (2008). Application of interactive consulting systems in extension, Scientific Bulletin of National Agrarian University, Vol. 131, p. 239-242.
- 4.Kalna-Dubinyuk T. (2009). Theory and Practice of Advisory Work in a time of Turbulences, Proceedings of XIX European Seminar on Extension Education, University of Perugia, Italy [www.alienoeditrico.net](http://www.alienoeditrico.net) Accessed on 19/09/2009.
- 5.Malska M., Hudo V. (2012). Tourism Busines: theory and practice, Center of educational literature, Kyiv, Ukraine
- 6.Rutynskyj M., Zinko Y. (2008). Green Tourism, Knowledge, Kyiv, Ukraine.