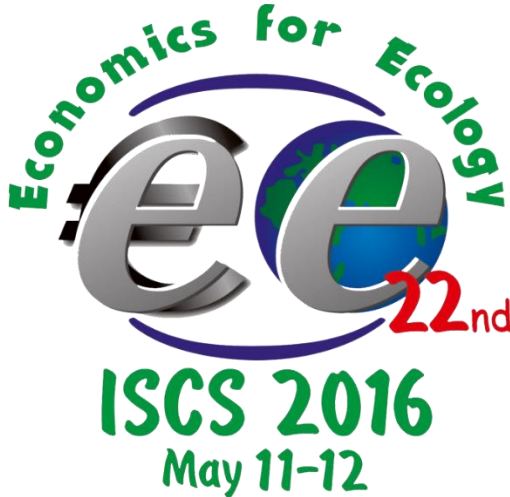


Ministry of Education and Science of Ukraine  
Sumy State University  
Oleh Balatsky Academic and Scientific Institute of Finance,  
Economics and Management

22<sup>nd</sup> International Scientific Conference  
**"Economics for Ecology"**  
**ISCS'2016**



**Економіка для екології**

Матеріали  
XXII Міжнародної наукової конференції  
(Україна, Суми, 11–12 травня 2016 року)



Суми  
Сумський державний університет  
2016

2. Гасанов С. Фіскальне регулювання землекористування: інституціональне підґрунтя та територіальна асиметрія / С. Гасанов, В. Голян // Економіст. – 2015. – № 11. – С. 7–10.

3. Децентрализация и налогообложение сельскохозяйственной недвижимости / ФАО исследования по вопросам земледелия 7. – Рим, Продовольственная и сельскохозяйственная Организация Объединенных Наций, 2005 [Электронный ресурс]. – Режим доступа: <http://www.fao.org/docrep/007/y5444r/y5444r00.htm>.

## **BUSINESS RISKS AND OPPORTUNITIES IN THE MANAGEMENT OF ECOSYSTEM SERVICES**

***Tetyana Gorobchenko, Denis Gorobchenko,  
Olena Kirichenko***

*Sumy State University, Sumy, Ukraine*

Issues connected with value of ecosystems got wide discussions during recent years in context of its goods and services providing, but also improving social and economic welfare. From an economic point of view, ecosystems provide economic agents with significant advantages, or so-called "ecosystem services". For example, forests provide raw materials for wood processing industry, genetic resources give materials for breeding and genetic engineering, rivers provide freshwater for household needs, and wetlands reduce the impact of flooding and enable the development of commercial fisheries. Therefore, the degradation of ecosystems entails not only a number of risks for business activities, but will also jeopardize the position of economic agents in the market.

Degradation of ecosystems and their natural potential are very important issues for business, as economic agents can not only affect ecosystem services but fully depend on their qualitative and quantitative composition. If we talk about the use of resources such as wood, coal, the value of these ecosystem services is obvious enough. If we consider ecoservices of water purification or reduction of consequences of floods, these benefits are not often accounted in the financial statements and become apparent as soon as the service becomes scarce or disappears.

The expert assessment of the losses of the banking system of the Netherlands from investments in the agricultural sector, which directly depends on pollination, may reach billions of euros, in case of extinction of

honey bees. This is an example of business risk from the indirect connection with ecosystem service [2].

On the basis of the research conducted by the authors [1; 4] five main business risks for the company (operational, regulatory, market, reputational, financial) were formed, as well as new opportunities for business, which provide a basis for development management of ecosystem services in the context of the economic activity growth were identified (table 1).

Table 1 - Business risks and opportunities associated with the ecosystems services management [1; 4]

<b>Risks and opportunities for commercial enterprises</b>	<b>The goal and purpose of the corporate assessment</b>	
Operating	Recording and calculation of new sources of revenue	Strengthening the effectiveness and financial outcomes
	Cost savings	
Regulatory and legal	Tax cuts	
	Income support	
Reputation	Revaluation of assets	Ensuring compliance with external requirements
Market and commodity	The valuation of liabilities and compensations	
Financial	Measurement of company value and shareholder value	
	Reporting on results and performance	

Each threat or risk are the prerequisite for the emergence of new opportunities. Any innovations, new technologies aimed at reducing losses or the elimination of existing ones, create new opportunities for entrepreneurial activities (e.g. new products, new markets).

Ecosystem services provide a wide range of opportunities that contribute to improving the financial condition of the company and therefore improve the efficiency of business administration. For example, today the financial flows of the international market of compromises and compensations of biodiversity are estimated in several billion dollars, while

the financial flows of the global trade quotas on emission of carbon dioxide can reach hundreds of billions of dollars a year. The flows of sustainable opportunities for commercial enterprises based on natural resources are estimated in trillions of dollars [3].

Unfortunately, business structures often do not fully understand and realize the consequences of their interference in the integrity of the ecosystem. The economic activity of enterprises aims at the elimination of risks, the creation of new administrative instruments of control, but it does not provide new business opportunities which can become new sources of income, projects investments and opportunities of entering new markets for ecosystem services.

The concept of ecosystem services assumes that ignoring the economic significance of natural resources is a major factor that leads to the destruction of ecosystems and loss of biodiversity that, in turn, determines economic and human losses. Therefore, economic agents should: reconsider traditional approach to business activity ("business as usual"), identify and assess its impact on biodiversity, learn how to manage and predict business risks, not miss new opportunities based on new technologies and models of doing business. One of the most important indicators of business management should be a synergistic effect, i.e. the maintenance of some ecosystem services should bring profits to other services or interested persons. For example, forest protection for the purpose of preservation of biological diversity can reduce the flow of carbon and increase their water conservation functions.

#### **References:**

1. Оценка экосистем на пороге тысячелетия, 2005. Экосистемы и благосостояние человека: возможности и испытания для бизнеса и производства. Институт мировых ресурсов, Вашингтон, округ Колумбии.
2. Заклячая "зелёные" договора: практическое пособие. Помощь бизнес-сектору в налаживании сотрудничества для бизнеса и биоразнообразия. ЕЧС – Европейский центр по сохранению природы, 2012. – 12 с.
3. Интеграция экосистемных услуг в планирование развития. Пошаговый подход для практиков, основанный на подходе ЭЭБ. – Метцгер Друк, Обригхайм/Баден, Эшборн, 2012. – 90 с.
4. Based on work by ERM and FFI, originally adapted from WRI et al. (2008) WRI, WBCSD and Meridian Institute (2008). The Corporate Ecosystem Services Review. Guidelines for Identifying Business Risks and Opportunities Arising from Ecosystem Change.