

SUSTAINABILITY, MANKIND SINGLE CHANCE

Marius BĂCESCU, Ph.D. Prof.

Titular founder member ASR Association of Scientists in Romania

Abstract

Starting from the conception of Norway's ex-prime minister Gro Harlem Brundland about "Sustainability" (1987) and from "Rio statement" (1992), the paper analyzes both the complexity of this concept and economy-environment ratio. Starting from the pattern of sustainability, it is presented the strategy of this type of development, as the only chance of mankind evolution, which should assure the balance between the environment preservation and economic development.

Key-words: *sustainability, human system, environment system, pattern of sustainability, strategy of sustainability*

JEL Classification: Q01

1. Concept of sustainability (D.D.)

Sustainability (D.D.) is development corresponding to present needs without compromise for the possibility of future generations to meet their own "necessities".¹

This message is found as **principle 3** of **Rio Declaration** regarding Environment and Development (June 3-14, 1992) according to which "right to development should be exercised so that needs for environment and development of present and future generations should be equally met".

D.D. concept supposes **interaction and compatibility of four systems** (fig.1).

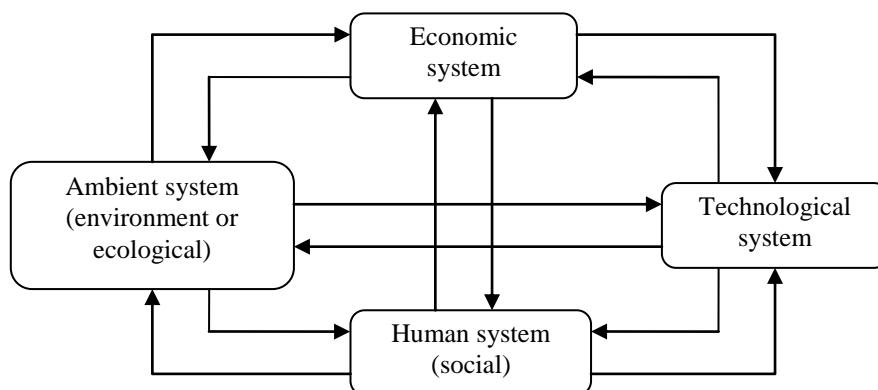


Fig. 1. *Interaction and compatibility of four systems*

¹ Report „Our common future” presented by Norway’s ex-premier **Gro Harlem Brundland in 1987** as president of World Commission for Environment and Development.

D.D. concept was born from actual world reality characterized by: accelerated economic growth and accelerated demographic growth

This development should be accompanied by severe measures of environment protection and saving the resources.

On the contrary, *Earth risks to become non-habitable*.

2. Economy – environment relation

There are two main directions to approach this relation:

- a) *technocentrism*, supposing the wide possibility to substitute the production factors;
- b) *ecocentrism*, supposing the existence of restrictions to substitute the production factors and severe limitation of production level, consumption level and demographic growth level.

3. Model of economic sustainability

This model presents the following *characteristics*:

- a) *optimization* and not maximization of economic objectives;
- b) universality of *constraints imposed by physical laws* in the manipulations of substance and energy;
- c) recognition of *ecological rarity* (abandon the principle of ecological abundance);
- d) underling the economic models by *exhaustible finished resources* and by finished rates of renewable resources;
- e) improving the methods of *quantifying the ecological impact* and resources, assuring the proecological character of all the economic decisions (internality of negative externalities);
- f) assuring the proecological character of all the economic decisions (internality of negative externalities);
- g) subordination of economic micro liberty, economic and ecological macro constraints;
- h) resetting up the ecological taxes for rare resources.

4. Strategy to achieve the sustainability

Because development of a country depends on 5 factors mutually influenced: population, natural resources and environment; industrial production; agricultural production; and pollution, it results that sustainability has 3 dimensions (fig. 2).

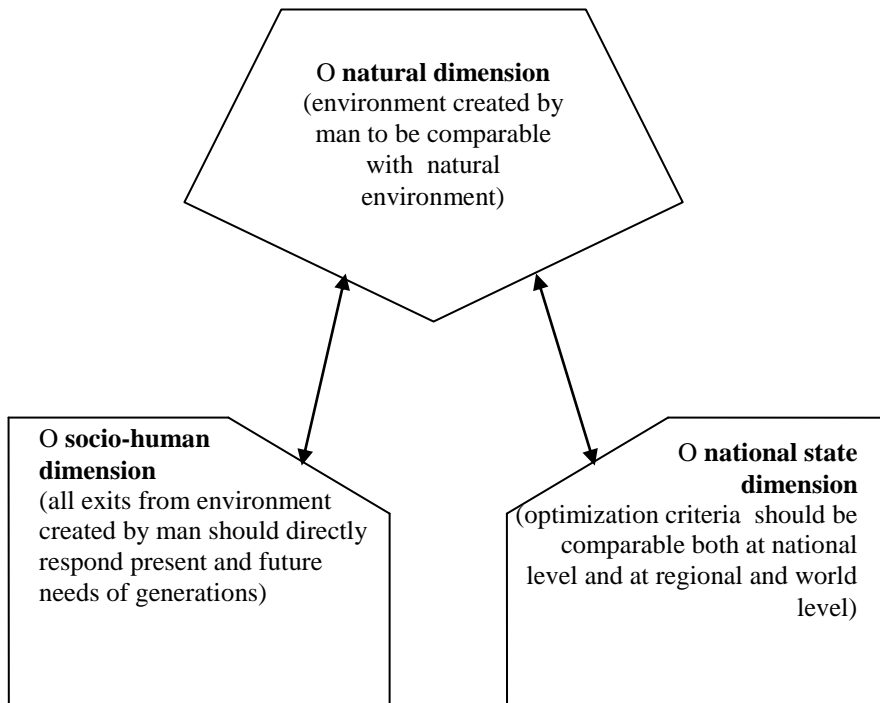


Fig. 2. Sustainability dimensions

Elements to be taken into account to achieve economic sustainability are:

1. Obligation to keep or **increase inherited natural resources**.
2. Long term consequences of **diminishing the natural resources** and higher pollution.
3. More and more international and even global characteristic of environment issues.
4. Dependence of **general welfare** not only on economic growth rate, but also its quality.
5. Welfare depends on **3 types of capital** we should leave inheritance for future generations: **natural** capital, capital **created by man** and **human** capital.
6. Possibility to achieve the **substitution between various types of capital**.

Therefore, it is necessary to find a **way of development** to mix: economic interests, social interests and environment interests.

It supposes to cross **two stages**:

- **improve actual technological systems**, to stop negative effects amplifying;
- carry on the researches in the field of **future technologies** to assure the sustainability.

Strategic components and actions to be developed from one stage to another are given in fig. 3.

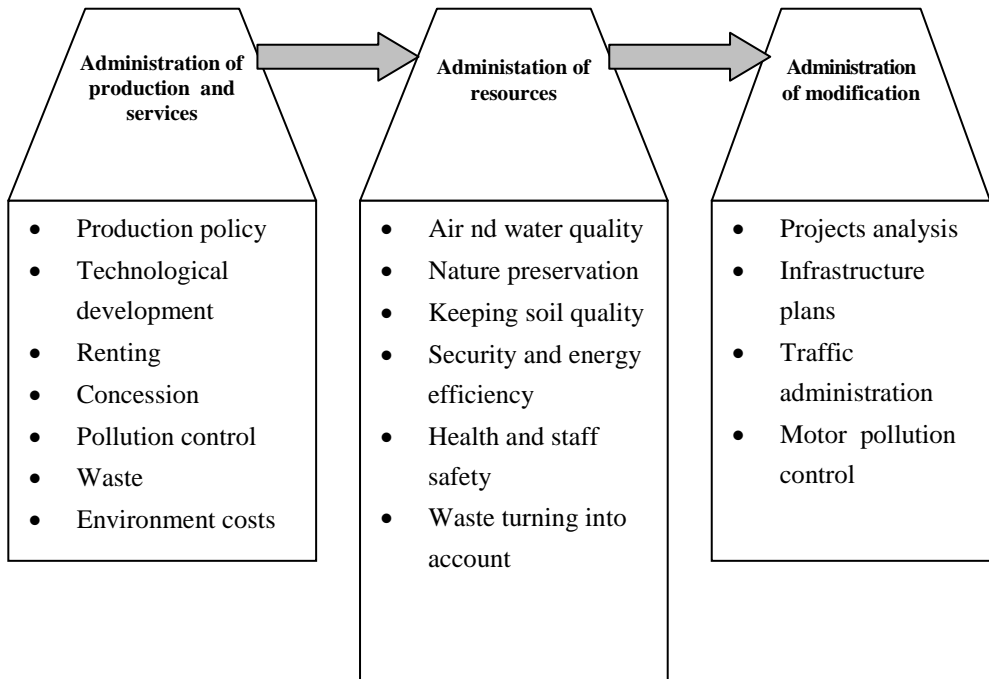


Fig. 3. Strategic components and actions

Conclusions:

- economy and environment are closely related, while development planning should integrate ecological elements to reach sustainability;
- it is necessary economic and ecological international cooperation;
- sustainability strategy becomes operational by adequate national policies, able to achieve compatibility of systems inter conditioned in time and space, regional or international collaboration and cooperation.

5. Economic sustainability – the only chance

Taking into consideration the etymology of words development – economic – sustainable, Earth population and of each country should have in view: ***Earth production capacity and quality of wished life.***

It results the necessity of ***family planning***, which supposes: control of population number, increase in population quality, keeping the population health, family care, keeping the health of social environment and less illiterates.

It is necessary to create jobs *not export of jobs and import of unemployment* from developed countries, as well as application of *comparative theory of social and ecological advantages*.

There are not standard models as development level to be taken as examples (Swedish, Chinese, Finish, Korean, Japanese, American etc.). If today average consumption in the world is aligned to the *level of North-American one*, we would assist the disparity of fossil natural resources, and food production should increase four times (practically impossible).

Solving the problem – build up a *sustainable economy* based on a *new model of industrialization* less desolating and savage, on intermediate technologies, man holding the first place. Therefore, “to think globally and to act locally”.

It should be found a *balance between environment preservation and economic development*, to benefit of economic growth, without significant degradation of natural resources base, which in fact supports economic activity as well.

Economic sustainability supposes administration of economic life to limit dysfunctions taking place in the economy (crisis, unemployment, inflation) harmonizing the economic growth with evolution of social issues.

Environment should be considered itself a production factor because its exploitation effectively takes part in economic growth, increasing the production potential. Improving the environment situation supposes at the same time *efficient exploitation of resources* resulting in *positive consequences over economic growth*.

There is no conflict of objectives between sustainable economic growth and environment protection. Economic sustainability supposes the *coordination in time of policies* of economic growth and those of environment protection.

European Union considers that economic sustainability wished a *sustainable and non inflationist economic growth, observing the environment*. *Economic sustainable growth* should stop to be an objective to be followed by all means. It should be extended the principle “*who pollutes, should pay*”, by *internality of negative externalities*.

Limitation of natural resources besides *demographic explosion* creates special problems for sustainability.

Economic sustainability supposes to eliminate destructive effects over the environment, such as: climatic changes; ozone stratum destruction; acidification; biodiversity; waste; noxious effects of chemical substances; soil degradation; inward waters; marine and coast area; natural and technological risks; urban area etc.

Sustainability supposes economic growth keeping the jobs, with the possibility that future generations could meet their own needs.

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ECONOMIC SUSTAINABILITY: CONCEPTS AND INDICATORS

Dr **Arthur DAVIES**, PhD, M.Ed, BA, PGCE, MICPM, MIOD
University of Cardiff; Business Adviser to Welsh Assembly Government
Director Crownford Group UK; Arthur.davies@crownford.co.uk

Abstract

When confronting fundamental challenges such as climate change, population growth, human rights and resource constraints – businesses and public sector organizations face a daunting new imperative. It is an axiom of current business thought and practice in most Western European enterprises that they must use fewer resources to produce their goods and services – a responsible use of those resources that benefit society and the environment and still meet their traditional demands: from customers and citizens for price, quality and availability; from shareholders for outstanding performance and returns; and from politicians for economic growth and prosperity in both developed and developing economies.

Key-words: *system analysis, economic sustainability, drivers for change, Strategic options, high performance, performance anatomy*

JEL Classification: Q01

The imperative for sustainable production and consumption builds on the principles of reduce, reuse and recycle, but it requires much more than that. It requires innovative thinking and fundamental alterations in business models. It requires making the most of fast-changing regulations, leading-edge technologies and shifting consumer expectations and demands. Above all, this new imperative requires that sustainability be woven into the core strategies of companies and public sector organizations.

As sustainability moves from the periphery to the heart of business and the public sector, organizations are finding that it comes with a price and a prize.

- The **price** is the fundamental transformation that fully integrated sustainability requires in the face of an aggressive social, environmental and economic agenda.

- The **prize**, however, is tantalizing: the opportunity for organizations to outperform their peers and achieve high performance.

So what are top executives to do? I believe opportunities abound to both preserve and create value by integrating sustainability into business strategy and operating models.

- New and differentiated products and services can increase revenue and generate market-leading innovations and technologies for a renewed path to profitable growth.

- Higher resource efficiency and lower emissions can reduce cost.

- Proactive responses can better manage regulatory and operational risk.

Together these opportunities also can build the intangible – and invaluable – assets of brand and reputation.

So how can sustainability be defined in terms related to this article?

Sustainability affects all industries and governments. Issues encompass an integrated agenda of environmental, social and economic impact – sometimes referred to as “planet, people and profit.” In this context I define sustainability as the way a company or organization creates value for its shareholders and society by maximizing the positive and minimizing the negative effects on social, environmental and economic issues and stakeholders to:

- grow revenue;
- reduce cost;
- manage risk and;
- build intangible assets.

1. The Drivers of change

So, what are the drivers for the necessary change? The challenge is getting from here to there and delivering the benefits. In a rapidly changing business context, gaining competitive advantage can be daunting. I believe there are **six key drivers of change** on which executives should begin acting now.

1.1. Changing Supply

1.1.1. Natural resources

Robust economic growth in emerging economies, combined with the high requirements of Western economies, has caused fierce competition for natural resources, particularly energy and water. It also has increased carbon dioxide (CO₂) emissions, which contribute to global climate change. The UN Framework Convention on Climate Change estimates that the private sector will need to invest more than 400 billion Euros every year through to 2030 to stabilize CO₂ emissions. The **price is huge, but so is the prize**. Dealing with climate change can galvanize an extraordinary wave of technology, service and business model innovation and drive coordinated global action on a scale not seen before. The level of venture capital investment in clean and “green” technologies is already significant, on a par with the early phases of the dot-com boom. Cleantech investments in the United States rocketed from US\$500 million in 2005 to more than US\$4 billion in 2007. European growth is slower but still significant, more than doubling to US\$1 billion in the same period.

1.1.2. *Employees*

In the face of an aging workforce and global competition for talent, organizations that take sustainability seriously are well positioned to attract and retain the most qualified employees, studies indicate. In developing countries, companies that offer above-average working conditions and health care benefits can have an easier time finding skilled employees in areas with limited educational systems. But benefits for companies go beyond employment. As a number of global human resources executives have commented, leadership and performance on sustainability also can directly contribute to productivity and to customer sales and satisfaction by increasing employees' motivation and commitment and their propensity to go beyond what is expected of them.

1.1.3. *Capital markets*

Investors have begun to consider sustainability performance as an indicator of business performance – and a new lens through which to scrutinize the quality of management. Banks and pension funds are starting to view the longevity of a business and its environmental, social and governance impact as part of their financial rating process. Increasingly they are willing to praise – and punish – sustainability performance. JPMorgan, Citigroup and Morgan Stanley have developed lending guidelines that make it tougher for investor-owned utilities to build coal-fired power plants because of the risks associated with CO2 emissions. We also see significant growth in sustainability reports and indexes from leading global financial institutions like Goldman Sachs, Lehman Brothers and Morgan Stanley, which weigh the impact on valuation and investment decisions.

1.2. **Changing demand**

1.2.1. *Consumers as citizens*

Changing consumer expectations and behavior have a material impact on value creation, profitability and growth. Nine out of 10 consumers around the world say they are ready to switch to energy providers offering products and services that help reduce carbon emissions – and two-thirds are willing to pay on average 11 percent more for the privilege. Consumers read labels more avidly than ever, scrutinizing not just a product's content but also the process required to put it in their hands. They pay more attention to ethical and environmental concerns, including the use of child labor, the procurement of conflict diamonds, the spread of HIV/AIDS, human rights abuses and the rising amount of non-recyclable waste. Sustaining high performance means meeting these rising consumer expectations and competing for trust to secure growth, reputation and brand strength. In the area of climate change, this is no small task. Consumers have little faith in government and business to advise them on ways to address climate change. Asked who they most trust, 43 percent of consumers "always" believe academics and nongovernmental organizations (NGOs) and 37 percent believe consumer associations, but less than 15 percent believe governments and energy companies.

Nonetheless, 18 percent of consumers believe that the responsibility for tackling climate change lies primarily with government and business.

1.2.2. Stakeholder influence

Businesses and public sector organizations must answer to an expanding group of stakeholders, including NGOs, the media, academia, and influential individuals and celebrities. All of them have fresh demands and increasing power to threaten a company's commercial viability. Their perception is your reality, regardless of the facts. Social capital can determine a company's license to operate. Companies today must take responsibility for both the social and environmental impact of their operations or leave themselves open to retrospective legislation and stakeholder backlash in the future. If you want to do business in Africa, you must contend with HIV/AIDS and its effect on the health of your workforce and the communities in which you operate. If you want to establish a presence in a developing country but do not have on-the-ground connections to local people, your chances for success are diminished.

However, companies' reactions to stakeholder pressure can demonstrate leadership in sustainability. Global Witness lobbied De Beers to stop trading in conflict diamonds in 1998; today the company leads advocates of the Kimberley Process Certification Scheme to ensure that rough diamonds are conflict-free. Nike suffered consumer boycotts in the 1990s over the use of child labor in its contractors' sweatshops; today the company is viewed as a sector role model for human rights policies because it implemented changes.

1.3. Changing rules of the game

National or global regulation on sustainability creates winners and losers. While it can disrupt and even destroy existing business models and industry structures, it also can create a positive platform for change by reducing business uncertainty and creating new market opportunities. In the area of climate change, four out of five business leaders want governments to take a central role in tackling the issue. They feel this way even though there is no agreement over how best to standardize requirements across countries and incentivise businesses and consumers to change their behaviour. Proactively partnering with policy-makers, stakeholders and even industry rivals in shaping regulation and policy solutions that benefit business and society makes sense in managing healthy competition. Increasingly this will be a feature of smart strategy.

1.4. Difficult trade-offs

In the face of these changes and pressures, organisations must grapple with difficult trade-offs and major changes to business models.

Electric Utility Companies, for example, must meet ever-increasing demand and still find ways to reduce emissions from generating electricity. The industry is responding not only with investments in renewable energy and clean-coal

technology but also with new business models that make energy demand management a core component of the business and a competitive advantage. Companies in extractive industries still need to grow despite scarce resources, so they are moving deeper into remote locations and frontier geographies where they are unaccustomed to operating. These moves demand new levels of corporate responsibility – since their revenues can equal the entire gross domestic product of the host country – as well as higher costs.

When BP led several consortia of petroleum companies to develop oil and gas fields in Azerbaijan, Georgia and Turkey, the company opened an Enterprise Center in Baku to help develop an effective local supplier base and strengthen the Azerbaijani economy.

The center, run on behalf of BP's international oil and gas partners in the Caspian region, offers training in management, finance, IT, quality control and marketing. Experts also provide technological assistance to improve engineering and manufacturing know-how.

BP's local supplier development program benefits BP and local Azerbaijani firms alike. More competitive local firms offer BP a greater choice of cost-effective suppliers. Building local skills encourages improved business practices, staff development, technology investments and better safety performance.

1.5. Complex conditions

Facing sustainability challenges isn't easy. It is important not to make the wrong choice of policies and technologies. Early regulation, for example, can unexpectedly handicap business for the longer term. Germany decided in the late 1990s to close all its nuclear power reactors by 2020. As a result, renewable energies grew too slowly, and the carbon footprint of German electricity remains very high. Meanwhile, numerous other countries today are considering major investments or reinvestments in nuclear facilities to reduce their carbon emissions. It is also important to understand the full impact of sustainability up and down the supply chain and the expected extent of responsibility now and in the future. Timberland was surprised to discover that its major carbon impact occurred before the company even got involved in the making of shoes. It was the manufacture of the raw materials, not the manufacture and transportation of the final product that caused the greatest impact. To understand the full vulnerability – and opportunity – that supply chains represent, companies must develop new relationships with their suppliers to influence them effectively.

For their part, suppliers can gain first-mover advantage in some cases by making the shift to more sustainable production and influencing their customers. Integrating sustainability into business strategies is further complicated by the speed, intensity and aggressiveness of globalization, which many business leaders still struggle to address or even understand. Fast-moving globalization is one reason execution is especially difficult in global organizations with critical global processes and complex operating models and organization structures. Add to the mix the unprecedented change and complexity that organizations face with the

advent of the multi-polar world – a world characterized by multiple centres of economic power and activity. Established global companies now compete with emerging-market multinationals for natural resources, capital and talent as well as for consumers and innovations. In the future, they might also contend with hybrid organizations such as public-private partnerships or social enterprises, which operate as for-profit businesses with social or environmental missions. In the face of such sweeping changes, little wonder that senior executives say their biggest challenge is shifting from strategy to execution.

1.6. Seizing competitive advantage

Despite the complexity of the issues, sustainability can create substantial value and innovation – a point validated by the world’s largest research study to date on corporate responsibility.(7) Companies with the highest levels of social performance view social and environmental challenges as drivers to innovate and unlock new opportunities. The study also found that businesses excelling in their approach to corporate responsibility tend to be those that integrate the principles of sustainability into both their everyday business processes and their strategic decision making. Leading companies already are demonstrating how integrating sustainability into their business helps them achieve high performance. UK Supermarket giant, Tesco measures 60,000 suppliers on their ability to develop environmentally friendly packaging and conserve natural resources. Local products are sourced in every UK region to reduce “food miles”, save transportation costs and increase product freshness. The company projects that reducing product and logistics packaging by just 5 percent will yield a savings in its supply chain of £5 billion by 2013, including £1.4 billion flowing directly to Tesco. Sustainability labelling is also emerging as an opportunity for companies to differentiate and grow market share.

Fair-trade is a fast-growing, multi-billion Euro annual global markets for coffee, chocolate and other agricultural commodities. In the United Kingdom – where Fair-trade is already estimated to be worth £400 million in 2007, up from £290 million in 2006 – significant competition is emerging among retailers and consumer goods companies. Tesco already stocks more than 140 Fair-trade products. Tate & Lyle intends to move its entire line of retail cane sugars to Fair-trade by 2010, the largest switch to Fair-trade by any major UK food or drink brand.

2. Strategic options

Organisations that effectively weave sustainability into the fabric of their core strategy and operating model can drive new capabilities and innovation with far-reaching effects in four areas:

- revenue growth from new or differentiated products and services;
- cost reduction and efficiency improvements;
- better risk management;
- brand and reputation enhancement.

To achieve these benefits, it is important to prioritize and leverage core strengths and opportunities in the short term and execute accordingly. Businesses generally employ four types of competitive strategies.

- **Go it alone.** Some companies differentiate based on sustainability by virtue of having a first-mover advantage and a clear way to profit from a new market segment or consumer preferences. Philips invested 400 million Euros in “green” lighting technologies from 2001 to 2005. By 2006, the company’s total portfolio of “green” products had grown to 4 billion Euros, accounting for 15 percent of its total turnover.

- **Collaborate in partnerships and clusters.** Other organizations partner with NGOs, development agencies or across their value chain with suppliers, distributors and new business partners to develop new technologies and solutions or win stakeholder and consumer trust. Lafarge, the French cement and building materials producer has a long-standing partnership with the World Wildlife Fund to better understand and manage its environmental impact. Demonstrating credible performance makes it easier for the company to secure access to land and resources. UK retailer Marks & Spencer works with supply chain partner MAS Holdings in Sri Lanka on a broad range of sustainability initiatives, from sharing best practices and co-investment in environmental management systems to a “Go Beyond” label that supports women’s issues and diversity. Joint efforts like these play an important part in raising performance and underpinning credibility in the battle for consumer trust.

- **Collaborate at an industry level.** Leading players in an industry can voluntarily band together to regulate themselves, setting and agreeing on voluntary codes of conduct. This is critical where there is a first-mover disadvantage or collective action problem and little chance of formal regulation. The long-standing Forest Stewardship Council, set up to avoid unsustainable forestry, is an example. Begun in partnership with leading NGOs and UK retailer B&Q, it now includes many leading industry players worldwide.

- **Shape regulation and policy.** Companies can proactively engage in efforts to shape regulation that benefits business and society, particularly when they are well placed to take advantage of new markets. Alcoa, DuPont, Duke Energy, GE and others have teamed with Climate Action Partnership to lead lobbying to limit carbon emissions and introduce cap and trade mechanisms at the regional and National levels.

- **Combine options.** None of these strategies are mutually exclusive. Companies often implement more than one at the same time. GE is going it alone to develop its Ecomagination suite of “green” industrial products while it actively works to shape regulation for its future markets. To make the right choices, organizations considering their options should ask themselves the following questions:

- Is there a first-mover advantage or disadvantage?
- What is the chance for formal regulation and policy support? How can we attempt to influence and shape it?
- Do we have the capabilities ourselves to succeed?

➤ Who are the right partners, and what are the most effective forms of collaboration?

3. Adopting an Integrated Approach

It is also critical to take an integrated approach to action. Organizations that create value from sustainability exhibit two features:

- Sustained and public leadership commitment – absolutely necessary for symbolic, financial and motivational reasons.

- An integrated framework across their organization and value chain.

True integration is essential, as opposed to random, isolated efforts with narrow impact and little measurement. Integrated sustainability means:

- Integrated into core business strategies based on a rich understanding of industry trends, with execution based on deep industry insights.

- Integrated across environmental, social and economic issues.

- Integrated and aligned across business segments.

- Integrated into strategy and execution across the value chain from design to operation

- Integrated into performance management measures so sustainability indicators can help manage stakeholder expectations and deliver both direct and indirect business benefits.

To achieve sustainable value creation for shareholders and society, sustainability must be integrated throughout an organization's strategy and operating model, and the enabling effects of innovations and technologies. True integration will require new tools, technologies, processes and metrics, as well as changes in human behaviour, to align strategy and operations.

4. Integrating sustainability throughout an organization

Sustainability is an engine to drive high-performance businesses and public sector organizations by:

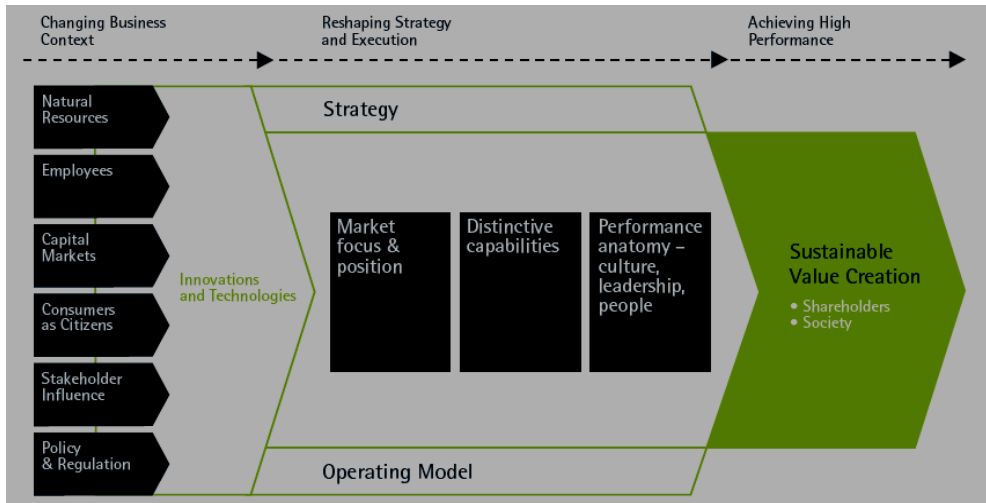
- Focusing on business imperatives – growing new business, optimising assets and protecting long-term business value.

- Creating value through appropriate levers; emissions reduction, materials safety, waste reduction, land sustainability, water use optimisation, energy reduction and social value

- Applying levers to core business areas – value chain, products and services, physical assets, operational execution and stakeholder influence.

- Guiding organisation moves toward sustainability – through rigorous strategic analysis, programme management, performance measurement and leadership.

It is recognised that the most efficient and effective way to achieve these objectives is through the three building blocks of high performance:



Source: David, L. (2006), *Strategic Management*

Fig. 1. Turning Sustainability into a Lever of High Performance

Market focus and position: Market focus and position define the best business strategies on where and when to compete. Activities to integrate sustainability include stakeholder analysis, enhanced customer analytics and business intelligence, best practices for internal and external benchmarking, new product development, strategic portfolio management and considerations on how to win in both high-value and high-potential markets. Market focus and position enable top management to consider such key questions as:

- Are our strategies aligned with strengths, and are they realisable? In particular, where are the opportunities for sustainable growth?
- Do we have the right governance structure to deal with changing environmental issues, public agencies and stakeholders?
 - Are we in the right businesses for the future?
 - Are we making the right investments in the right areas of our business? What is the right pace? The right level?
- Does a shareholder/stakeholder value perspective permeate our metrics and decision making?
 - Are we at risk from a specific stakeholder's point of view? Do we systematically map and prioritise stakeholders and issues?
 - Do we manage to multiple horizons or do we focus excessively on one time frame?

Distinctive capabilities

Distinctive capabilities in sustainability allow managers to manage and integrate stakeholder expectations across a social, economic and environmental agenda, either working alone or in partnership. They produce actionable insights,

optimised supply chains, smart technologies, product life-cycle innovation and optimal customer segmentation.

Distinctive capabilities provoke action on such key questions as:

- Do we monitor external developments in the political, economic, social and technological arenas and act accordingly?
- Do we set, communicate and measure long-term sustainability goals that guide and motivate our actions and behaviours across all functions and processes?
- Do we measure and manage integrated performance? Do we track qualitative and quantitative key performance indicators and their impact on core business performance?
- Do we plan for multiple scenarios – and do we have the organizational capability to adapt to a changing business environment?

Performance anatomy

Performance anatomy drives a flexible, scalable and integrated sustainability business model. It promotes long-term competitive advantage by multiplying talent and rewarding activities that support the organization's sustainability agenda. Above all, performance anatomy creates a culture of sustainability consciousness and strengthens new processes and activities. It helps executives support sustainability and communicate regularly on the progress they make.

Performance anatomy inspires deep insights into such questions as:

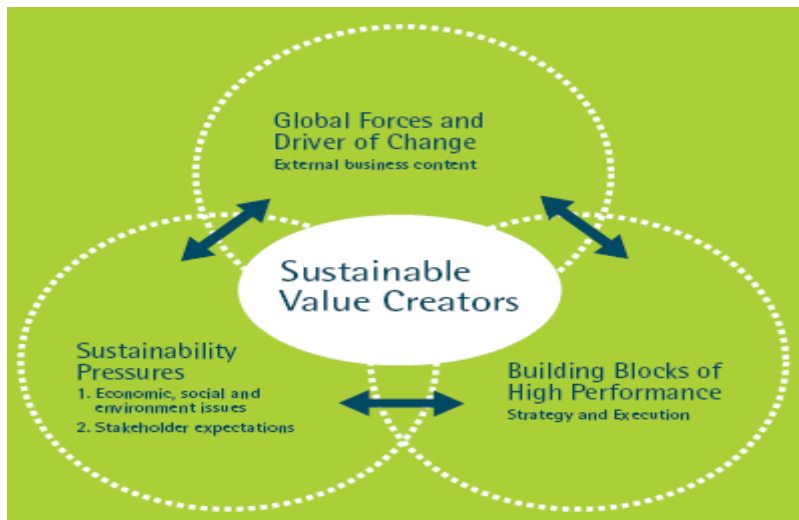
- Do we have the right balance between making markets and executing effectively?
- Do we get more from our employees than our competitors get from theirs? Are our employees committed to delivering the discretionary effort that drives higher productivity? Are they personally engaged with our organization's strategy? Are we giving them the right training and development on sustainability to drive business performance?
- Do we use IT as a strategic weapon across the enterprise?
- Do we adequately balance intangibles that drive long-term success against financial measurement?
- Does our organization demonstrate the required agility in the face of uncertainty?
- Do we know – in real time – how we are performing against our targets?
- Do we have the operational data available to understand our challenges and opportunities in enough time to adjust for them?

5. Achieving high performance through sustainability

There is no doubt that sustainability can and will drive dynamic change for industries and companies. In France, more than eight in 10 companies consider sustainable development to be a differentiating factor and believe their customers will demand new sustainable products and services. Most respondents also expect an increase in customer expectations over the next three years. The market shifts that make sustainability a pressing issue today will continue to evolve. They

require companies to address sustainability's most immediate demands and also develop the ability to enable additional change as new sustainability driven market shifts emerge.

To achieve high performance in the short term, companies must understand their existing risks, competencies and opportunities across their supply and value chains. They must consider strategic options and develop new competencies to move from strategy to execution. Creating high performance for the long term will require more than new processes or technologies or regulatory compliance. It will entail new strategies and a transformation of organizational structure, culture and behaviour to thrive, not just survive, in a complex and fast changing landscape.



Source: Morgan, B.J. (2008), *Sustainable Value Creators*

Fig. 2. *Integrated view of sustainability and value creation*

Future sustainability leaders will align their strategies and operating models and the drivers of internal performance with the key building blocks of high performance. They will recognize that the way they create value is changing, and they will redefine what value means for their company and their industry. The imperative is daunting, but the prize is worth it – the opportunity to integrate sustainability into a repeatable formula for high performance, competitive advantage and value creation that benefits both shareholders and society at large.

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ECOTOURISM FOR SUSTAINABLE DEVELOPMENT

Cristina BARNA

Spiru Haret University, Romania
e-mail: cristina.barna@spiruharet.ro

Abstract

The concept of ecotourism is widely misunderstood and it is often used as a marketing instrument in order to promote tourism businesses related to nature. It is well-known that from all sub-sectors of the tourism industry the ecotourism has experienced the fastest growth in the recent years, but we have to see beyond the appealing and fashionable “eco” label and “green-washing” of the travel industry. The true ecotourism represents only “responsible travel to natural areas that conserves the environment and improves the well-being of the local people” (TIES, 1990). This paper clarifies the definition of the ecotourism concept versus related concepts as “sustainable tourism”, “responsible tourism”, “nature based travel” or “green travel”, presents the principles and benefits of ecotourism, the relation between ecotourism and sustainable development, and the challenges for Romania as an ecotourism destination at international level.

Key-words: *ecotourism, business biodiversity, sustainable development*

JEL Classification: Q01, Q26, Q57

1. Ecotourism – conceptual framework

The International Ecotourism Society (2009) defines ecotourism as *responsible travel to natural areas that conserves the environment and improves the well-being of local people*. (TIES definition from 1990). Considering its logo *uniting conservation, communities and sustainable travel*, The International Ecotourism Society (2009) states the following ecotourism principles:

- Minimize impact.
- Build environmental and cultural awareness and respect.
- Provide positive experiences for both visitors and hosts.
- Provide direct financial benefits for conservation.
- Provide financial benefits and empowerment for local people.
- Raise sensitivity to host countries’ political, environmental, and social climate.

Another definition of ecotourism and ecotourist is that of Ziffer, K.A. (1989): “A form of tourism inspired primarily by the natural history of an area, including its indigenous cultures. The ecotourist visits relatively undeveloped areas in the spirit of appreciation, participation and sensitivity. The ecotourist practices a non-consumptive

use of wildlife and natural resources and contributes to the visited area through labour or financial means aimed at directly benefiting the conservation of the site and the economic well-being of the local residents. The visit should strengthen the ecotourist's appreciation and dedication to conservation issues in general, and to the specific needs of the locale. Ecotourism also implies a managed approach by the host country or region which commits itself to establishing and maintaining the sites with the participation of local residents, marketing them appropriately, enforcing regulations, and using the proceeds of the enterprise to fund the area's land management as well as community development."

Honey, M. (2008) defined ecotourism as travel to fragile, pristine, and usually protected areas that strives to be low impact and (often) small scale. It helps educate the traveler; provides funds for conservation; directly benefits the economic development and political empowerment of local communities; and fosters respect for different cultures and for human rights.

Efforts for conceptual framework of ecotourism were also made by our country, where Association of Ecotourism in Romania (2009) adopted and promoted the following ecotourism definition: *Ecotourism is a form of tourism in which the main motivation for the tourist is the observation and appreciation of nature and local tradition in natural areas, and which must fulfill the following conditions:*

1. *contributes to nature conservation and protection;*
2. *supports the well being of local people, stressing local ownership, as well as business opportunities for local people (especially in rural areas);*
3. *has an educational component that creates awareness about nature conservation, both for tourists and local communities;*
4. *requires the lowest possible negative impact on the environment and on the socio-cultural component.*

Untamed Path (2009) focuses over the main characteristic of ecotourism: *the trip will help "conserve and improve" the places the tourist visits.* Also, Untamed Path (2009), trying to define the experience of ecotourism, presents on its web-site the definitions of other related concepts: sustainable tourism, responsible tourism, nature-based tourism and green-tourism. In its view:

- *Sustainable tourism* represents any form of tourism that does not reduce the availability of resources and does not inhibit future travelers from enjoying the same experience. For example, if the presence of large numbers of tourists disturbs an animal's mating patterns so that there are fewer of that species in the future, then that visit was not sustainable.
- *Responsible tourism* represents tourism which operates in such a way as to minimize negative impacts on the environment.
- *Nature-based tourism* is a more generic term for any activity or travel experience with a focus on nature. These types of trips may or may be not environmentally sustainable or responsible.
- *Green tourism* is a term often used inter-changeably with eco-tourism and sustainable tourism but more accurately described as "any activity or facility operating in an environmentally friendly fashion". The core of this concept is

where resources are coming from and where wastes are going, solar powered lighting etc.

It is very important to mention that ecotourism can be (but it is not automatically) a form of sustainable tourism. Achieving sustainable ecotourism involves a balance between economic, environmental and social goals, and ethical values and principles. The principles of a real sustainable tourism are: using resources sustainably, reducing over-consumption and waste, maintain diversity, integrating tourism into planning, supporting local economies, involving local communities, consulting stakeholders and the public, training staff, marketing tourism responsibly, undertaking research and monitoring the industry.

The *global importance of ecotourism* is highlighted by several international agreements including: The UN Commission on Sustainable Development, 7th Session 1999; the UN World Tourism Organization Code of Ethics (1999); The Guidelines on Biodiversity and Tourism Development issued by the CBD (2003); The Quebec Declaration on Ecotourism (2002); and the World Summit on Sustainable Development (2002). Guidelines and standards relating to sustainable/responsible tourism (including specific reference to biodiversity) are also being developed by the Tour Operators' Initiative for Sustainable Development which has created environmental guidelines for hotels, resorts and tourist attractions.

2. Ecotourism – a successful Business Biodiversity model

We can define Business Biodiversity concept as *commercial enterprise that generates profits through production processes which conserve biodiversity, use biological resources sustainably and share the benefits arising out of this use equitably* (Building Biodiversity Report 2008). The business case for biodiversity is easy to make when a company depends directly on biodiversity to operate (the case of nature-based tourism), but examples can be found in other business sectors too, where greater biodiversity is associated with lower costs, increased productivity and higher profits. The concept of Business Biodiversity is related with *Potsdam Initiative – Biological Diversity 2010* (G8 Environment Ministers Meeting, Potsdam, 15-17 March, 2007), when it was initiated the process of analyzing the global economic benefit of biological diversity.

Also United States Agency for International Development (1995), in Synthesis Report Stemming the Loss of Biological Diversity: An Assessment of USAID Support for Protected-Area Management) identified ecotourism as an enterprise with potential positive contributions to the conservation of endangered biological resources. Ecotourism is seen as a win-win solution and its contributions include the raising of local awareness about the value of biological resources, the increasing of local participation in the benefits of biodiversity conservation, and the generation of revenues towards the conservation of biologically rich areas.

The Building Biodiversity Report 2008, analyzing the business biodiversity landscape, considers ecotourism a sector of potential business opportunities, together with other sectors as 'biodiversity-friendly' agriculture, sustainable forestry, business with non-timber forest products, sustainable fisheries and aquaculture, carbon

sequestration in biomass, watershed protection, bioprospecting, biodiversity offsets, biodiversity management services, recreational hunting and sport fishing⁵. Ecotourism, as a biodiversity business model, has already begun to have success in European economy.

Ecotourism is promoted as a means of achieving community development and preservation of natural environments. An ideal model of ecotourism is an integration of conservation and development, in which entrepreneurs, government and tourists create sustainable development while improving the welfare of local people. There are a lot of examples of how ecotourism is making direct, significant contributions to biodiversity conservation. One approach is through revenue generated to support protected areas. Some protected areas generate significant revenue from visitor fees collected at the point of entry or as user fees applied as, for example, part of an overall package cost (South Africa). In addition to the payment of fees, financial contributions may be generated through the sale of licenses, concessions and leases. Public authorities often delegate responsibility for managing tourism operations in protected areas to private businesses, NGOs, individuals or local communities (Indonesia). Many countries also impose indirect taxes on tourists and tourism facilities, with a proportion of the revenues earmarked for conservation (Belize, Caicos Islands).

In Building Biodiversity Report 2008 are identified the following investment opportunities in ecotourism:

- Invest in ecotourism companies that can then take on the management of tourism concessions in national parks. These companies could also create or invest in private ecotourism facilities in areas of important biodiversity. Such investments could range from joint partnerships with existing ecotourism or hotel management companies to the creation of new companies. Any tourism facilities/operations would need to be certified according to credible standards.
- Investment in joint ventures (public–private partnerships), particularly between communities and the private sector (and government), based on participatory and equitable negotiations.
- A variation on this theme would be to invest in and/or create a ‘chain’ of ecotourism hotels and related operations – with well-designed facilities, professional management, centralized ‘back office’ operations, and a common promotional strategy – to create a brand that is synonymous with the highest ecotourism standards. This goal could also be achieved by buying a number of leading ecotourism operations.
- Invest in existing eco-funds, and/or create new investment funds, that include ecotourism in their portfolios.
- In the generation of sustainable livelihoods via businesses that value biodiversity there are opportunities to improve marketing (from product development to distribution); performance indicators to measure conservation results and poverty reduction; improved procedures for knowledge transfer between different projects, and investment in small/community-based operators whose services and products can be integrated in the mainstream tourism industry.

3. Commodification and ecotourism – implications for local cultures and people

Generally, “commodification is the process of changing a cultural element, such as a household craft, or a natural object such as a native plant or animal community, into a commodity that can be exchanged in a monetary market: in essence, taking something that was not marketed and turning it into something that it is.” (King, D., Stewart, W., 1996). Commodification of local culture and environment is a widely reported social impact of ecotourism with implications over indigenous people, too. *Ecotourism can have both positive and negative effects on indigenous people.* Indigenous people are considered the descendents of original inhabitants, distinct in language, culture or religion from the dominant population, who see themselves partly in terms of their habitat, who have a subsistence economy involving direct dependence on their habitat, and who manage resources collectively, often by a consensus of elders.

The negative impact of ecotourism is determined by the injection of the contrasting, external cultural influences and by the commodification that accompanies ecotourism development. The commodification of nature implies a change in the meaning of indigenous people environment, from a source of direct sustenance with a use value to a commodity with an exchange value. (King, D., Stewart, W., 1996). This represents a shifting in the relationship between the indigenous people and their environment: now they are working for tourism, not for land anymore, what is in fact a shifting from traditional, life-sustaining activities to service activities. The process of commodification is facilitated by concepts as “national park”, “protected area”, “endangered species”, “virgin forest”, “intact ecosystem” that have become artifacts for the ecotourists of the developed world. The problem is that the ecotourism industry can produce contrasts in values of the local cultures, because not only does the indigenous people’s environment become commodified, but also their work: their lifestyle turns to serving the tourists, so, in consequence, the authentic aspects of their lifestyle become blurred.

Positive implications of ecotourism are likely to be the greatest when the indigenous culture is already in a state of decline as a result of natural resource scarcity. In such situations, the local people may realize that change is needed and may be prepared for it. Negative cultural impact of ecotourism can be reduced if indigenous people become decision-makers regarding the amount, location, timing and nature of tourist visitation to protected areas. In this way local people are empowered to control the direction of cultural change, and the commodification of some cultural events and places may be viewed as desirable. It is very important to be understood the fact that ecotourism does not represent a panacea, an instrument for financing the protected areas. It requires cooperation and even partnerships between government and indigenous people, and managers really involved in understanding the cultural issues that could arise from establishing protected areas.

The key of a successful ecotourism is the incorporation of local cultures and populations into the industry. In this way is reduced the local resentment to being cut-off from the benefits of ecotourism. (For example, there are well-known the cases of the Galapagos Islands of Ecuador, which suffered considerable socio-cultural conflict due to the fact that most of the tourism labor force was brought from mainland

Ecuador, and of Maasai nomadic pastoralists who considered inadequate the compensation paid to them for their displacement from traditional lands because of the establishment of national parks and killed the wildlife in protest.)

As conclusion, we can summarize the outstanding issues regarding ecotourism: risk (unregulated, ecotourism can damage the environment and corrode local cultures), distribution of benefits (the local economic impact may be reduced), perceptions (developing countries fear that their parks and protected areas will become playgrounds for tourists and their land will not be available for farming, to feed and employ their indigenous population), lack of information (more and better information is need about the actual and potential economic contributions of ecotourism enterprises and practices).

4. Romania's Case: discover *Eco-Romania*

Association of Ecotourism in Romania (AER) has the initiative to pave the way forward in ecotourism sub-sector, of course, together with Ministry of Tourism and all business stakeholders. This is facilitated by the fact that in 2009 the ecotourism area Marginimea Sibiului and the Danube Delta Biosphere Reserve have got the Golden Apple Award for tourism in 2009. Golden Apple is awarded every year by the World Federation of Travel Journalists and Writers. Since it was set up in 1970, Golden Apple went to 41 destinations, so, Romania having at present 4 trophies (1975 – Moldovița Monastery and an award for an air company this year) could be considered a tourism destination.

The Association of Ecotourism in Romania has achieved a partnership for nature conservation and tourism development among tourism associations, non-governmental associations acting in local development and nature conservation, nature conservation projects and travel agencies. Therefore, the innovative idea promoted by AER is to bring together the public and the private sector in a partnership for nature conservation and sustainable tourism development. Its main objectives are: the creation and promotion of a well-defined image of Romania as an Ecotourism Destination, at an international level, the development of ecotourism services and infrastructure at the level of the proposes Eco-Destinations in Romania, and nature conservation and sustainable development in Romania. AER adopted and promoted principles based on two international models: Nature and Ecotourism Accreditation Program, developed by the Ecotourism Association of Australia, and Nature's Best, the certification system of the Swedish Ecotourism Association. AER's approach is that these principles should be put into practice by those who offer ecotourism products as well as by those who plan the ecotourism-based development of an area. These principles are:

- ecotourism takes place in natural areas;
- ecotourism contributes to a better understanding, appreciation and enjoyment of discovering and protecting nature and traditional local culture;
- ecotourism offers the best tourism practices from the point of view of nature protection and sustainable development;
- ecotourism contributes actively to the protection of natural areas;

- ecotourism contributes to the development of local communities in natural areas; ecotourism must ensure the reduction of the negative impact on the local community and contribute to the conservation of local culture and traditions;
- ecotourism must respond to the tourists' expectations. Potential eco-tourists have a high level of education and expectations, so the degree of satisfaction in terms of the ecotourism product is essential;
- ecotourism marketing offers visitors complete and responsible information which leads to an increase in their respect for the natural and cultural environment of the areas visited.

AER considered of critical importance to create the *Ecotourism Certification System* as a mechanism for putting into practice the basic principles of ecotourism, in order to ensure nature conservation and sustainable development of local communities through tourism. This is an important step in the wider context given that since March 2003 the World Tourism Organization has recommended governments to support the initiatives that promote the certification in sustainable tourism. The Ecotourism Certification System developed by AER has adapted the international experience to the Romanian context. It is based on the *Nature and Ecotourism Accreditation Programme* promoted by the Australian Ecotourism Association (NEAP is the first accreditation system in ecotourism) and on *Nature's Best* developed by the Swedish Ecotourism Association (the first accreditation system in ecotourism in the northern hemisphere). The Ecotourism Certification System addresses three different categories of applicants: ecotourism programmes/tours provided by tour-operators or guides (i.e. eco-tours of maximum 15 participants), small-scale accommodation structures in rural and natural areas (eco-lodges and guesthouses of maximum 25 rooms), eco-destinations (one or several communities within natural areas). The Ecotourism Certification System has been developed in partnership with Green Cross Romania and co-funded by the Environmental Partnership Foundation.

It is remarkable the involvement of the *Environmental Partnership Foundation*, which was established as an independent foundation in 1998 and is member of Environmental Partnership. From its programmes and projects, we can mention (EPF 2009, selection from the web-site):

- *Strengthening partnerships for Nature Conservation and Tourism in Romania* – a grant-making and capacity building program that stimulates the development and promotion of ecotourism in Romania, through supporting sustainable initiatives. The goal of the program is to promote the concept and the development of ecotourism, in order to support nature conservation and local communities. The program has a grant-making component that aims to support pilot projects in the following counties of Romania: Alba, Arges, Bacău, Bihor, Bistrița Năsăud, Brașov, Buzău, Caraș-Severin, Cluj, Covasna, Dâmbovița, Gorj, Harghita, Hunedoara, Maramureș, Mureș, Mehedinți, Neamț, Prahova, Sălaj, Satu Mare, Sibiu, Suceava, Vâlcea and Vrancea and a capacity building component through training, technical assistance, information and support for the beneficiary and potential beneficiaries of the funds.

- *Green Spaces* – a grant-making program of the Environmental Partnership Foundation and MOL Romania which has a new component with the goal to promote the protected areas of Romania in order to increase the acceptance level of them through the involvement of NGOs, schools, local communities and administrators of the protected areas. Through this component there will be funded projects that intend to run the following type of activities: Junior Rangers, Day of Protected Areas, Biodiversity Day, Educational Trail development in protected areas, Permanent exhibition development in the visitors' center of the protected areas.
- *Living Heritage* – a grant and capacity development programme aimed at enabling local community development in Southern Europe through the promotion of sustainable culture and heritage initiatives. In Romania, the Living Heritage programme is implemented by the Environmental Partnership Foundation (Miercurea-Ciuc) and the Romanian Carpathian Foundation in partnership with the King Baudouin Foundation from Belgium. The programme's aim is the long-term support of local development through community involvement in the identification, conservation and sustainable use of heritage related resources.
- *Greenways* are successful and well recognized initiatives in Western European countries and in the United States. Greenways are routes, trails and natural corridors that are used in harmony with their ecological function and offer the opportunity for sports, tourism and recreation. Greenways offer plenty of benefits for our environment, improvement of the quality of life and presently an opportunity for sustainable economic activities for the local population in towns and the countryside. The "*Mineral Water Trail*" Greenway is one of the first initiatives of this kind in Romania. This trail was created in Harghita County in central Romania. The Romanian Environmental Partnership Foundation and the Csík County Environmental and Nature Protection Association took the first steps in 2000 in order to make this initiative a reality
- *Eco-Business* – a program which contributes to the sustainable economic regeneration in Romania. The method is to establish a framework for assisting Romanian small and medium size enterprises that wish to improve their environmental practices by promoting public/private sector partnerships. Romania will need to earmark larger financial resources in order to protect the environment, develop the administrative capacity required to implement the necessary measures, and to achieve proper legislation in accordance with EU regulations. The Eco-Business program can play a significant role in achieving the above-mentioned goals by increasing the environmental knowledge of SME's located in Harghita County, Romania. The success of the program will impact SME's attitudes towards the environment and at the same time increase their profits, therefore making it a win-win situation.
- *Transylvania Authentica* seeks to protect the region's unique natural and cultural heritage by promoting and developing sustainable livelihoods. The Transylvania Authentica project is seeking to establish ways in which to ensure the survival of

Transylvania's incredibly rich agrarian culture and its traditional foods and agricultural products, by bringing together the regions smaller producers and manufacturers. Transylvania Authentica is a joint project of the Romanian Environmental Partnership Foundation and The Prince's Charities Foundation.

Conclusions

Maybe the most suitable conclusion of this paper is the presentation of two eco-destinations, which can guarantee the success of Romanian ecotourism in the future. It is about two wonderful places of Romania: Retezat National Park and The Hațeg Country. *Retezat National Park* – “It is maybe the over 80 alpine lakes reflecting the beautiful blue sky like in the innocent eyes of a child... or the deep green of the superb forests covering the mountain sides... or maybe the peace you find when staying in this wonderful place that make Retezat special. It is here that you can find yourself, in that state of innocence from the beginning of time, and you can revel in the purity of nature, charging yourself with the positive energies released by this magic land.” (AER, 2009). The *Hațeg Country*, sometimes named “a small-scale representation of Transylvania” is another remarkable eco-destination of Romania. “To describe Hațeg Country best, try to picture mountains with high pastures grazed by flocks of sheep, beech and oak forests that cover the hills, with patches of orchards and valleys that host fields and small villages.” (AER, 2009). These examples, and also the unique ecosystems of Danube Delta, The National Park Nerei Gorges – Beusnita which is protecting the longest karstic mountains from Romania, Apuseni Nature Park, Putna – Vrancea Nature Park, Touristic Area of Natural Reservation Iron Gates and other nature wonders means eco-Romania: a huge potential for ecotourism in the context of sustainable development, with unique traditions and cultural heritage in the European context.

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