Oecologia Montana 2015, **24,** 21-24

TECHNIQUES AND STRATEGIES

Nature protection and protected area financing

Workshop on current problems of high mountains protection in Norway and the Slovak Republic, Bø, 27.4.2015 - 1.5.2015

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Introduction

There is an urgent need for intensive and effective nature conservation. The main areas of concern regarding the protected areas in Slovakia are the socio - political situation, current legislation and a general lack of interest in nature protection (Pogányová and Hatala 2012). To improve this, changes must be made to existing laws. Although those responsible for the protected areas at present are expert organizations, unfortunately they have no direct impact on nature and landscape protection. A study of Kluvánková - Oravská (2002) suggests that the most appropriate model for the National Parks and Protected Landscape Areas in Slovakia is a public institute - as used to great effect in the running of universities. New legislation is needed which will transfer legal powers from the Ministry of the Environment, county and district offices and the Slovak Environmental Inspectorate to the administrators of all our protected areas.

Ecosystem services

According to the Slovak Republic Ministry of Environment, the definition of ecosystem services are the benefits provided by ecosystems. For example water, food, timber, soil formation, pollination, clean air and water, flood and drought, pollination of crops etc. Human activity is destroying biodiversity and reduces the strength and ability of healthy ecosystems to provide this wide range of goods and services (www.minzp.sk 2015). According to Melichar (2010) biodiversity and ecosystem services affect the well-being of all of us and provide society with many direct and indirect benefits. For example Nunes et al. (2003) divides the economic value of biodiversity into four categories. The first category sets out the benefits of ecosystem services that support life including flood control, protection against erosion, binding CO_2 and maintaining biodiversity. The second states the advantages of protecting natural habitats related to the demand for recreation. The third examines the indirect value of biodiversity reflecting biological resources in terms of inputs used in the production of goods traded on the market. For example the pharmaceutical and agricultural industries which use plants and animals in the development of new drugs and products. The fourth category is the passive or utility value of biodiversity, which evaluates how we see others species from a humanitarian point of view.

Furthermore, society has had a huge impact by significantly decreasing the level of biodiversity and ecosystem services through a wide variety of economic activities and an ever increasing population and use of natural resources.

Decentralization in nature conservation policy

Decentralization means a systematic and rational distribution of power and responsibility from central government to institutions at lower levels. The main purpose of decentralization is increasing local autonomy. Thanks to decentralization, people at lower levels are more involved in the decision making process and it can help to promote community and economic development (Pomeroy and Berkes 1997). Certain authors (Hind *et al.* 2010; Jones *et al.* 2012; Vasconcelos *et al.* 2013) believe that the active involvement of communities and other local stakeholders in the environmental management of protected areas increases environmental awareness, minimizes social conflicts and reduces state costs during policy implementation.

In the case of nature protection in Slovakia, legal status was given to the Slovak Republic State Nature Conservancy but not to the administrations of the protected areas. These administrations are financially dependent on a budget distributed by the State Nature Conservancy. The consequence of this is that the State Nature Conservancy head office located in Banská Bystrica can increase its own budget with a wide range of activities such as projects, ticket sales, business income etc. but organizations actually in the protected areas aren't able to reap the rewards of such ventures. Fig. 1 shows the rapid increase in the State Nature Conservancy budget between 2006 - 2008 but also the stagnation of resources redistributed to the protected area administrations.

Giving legal status to the administrations of all protected areas is the first step to ensure their diversified financing (Mahút and Chudivaniová

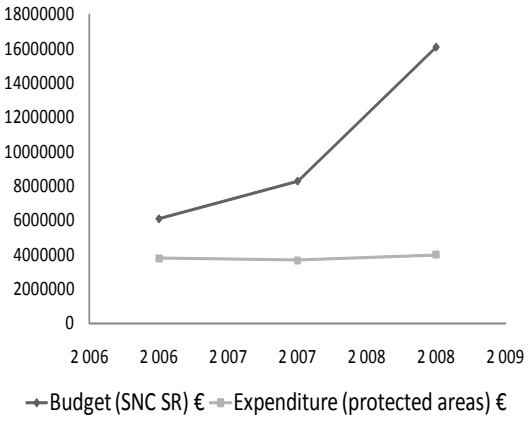

Fig. 1. Comparison of the SNC SR budget and NPs and PLAs expenditure (Mahút and Chudivaniová 2008).

2008). This is essential as relying on just one source of income is fraught with danger, according to the Conservation Finance Alliance (www.conservationfinance.org 2015). At present the only source for the protected area administrations is the state budget. In most countries the highest government priority is rapid economic development (De Oliveira 2002). Slovakian protected area administrations cannot generate any economic profit but many foreign national parks are able to generate significant incomes. It is clearly evident that they have the ability to raise funds independently by law.

Financing protected areas

At present many authors deal with the issue of effective, functioning and sustainable financing of protected areas not only in Slovakia (Füzyová *et al.* 2009; Kluvánková-Oravská *et al.* 2009; Mahút and Chudivanová 2009; Janiga *et al.* 2012; Pogányová and Hatala 2012) but also worldwide (Wilkie and Carpenter 1999; Burner *et al.* 2004). According to Baral and Dhungana (2014) financial sustainability is crucial for improving the effectiveness in conserving biodiversity. Most studies support fund raising for protected areas from all possible sources: government budgets, site-based revenues, and international grants and donor funds (Emerton *et al.* 2006; Bovarnick *et al.* 2010). All these sources are required for biodiversity management, including monitoring, controlling crime (e.g. poaching) and ecosystem rehabilitation, and for compensating local stakeholders for restrictions on ecosystem use (Laurance *et al.* 2012).

Although the main source of funding is provided by the government, protected areas could generate revenues locally which would reduce the dependency on government budgets: For example entrance fees, recreation and tourism permits, concessions, payments for environmental services, and other fees including scientific research (Baral and Dhungana 2014). In our developing world a major source of protected area financing are international grants and donor funds such as financial support from the international conservation groups (e.g., World Heritage Convention, Ramsar Convention), debt-for-nature swaps, conservation trust funds, or private donations. For instance marine protected area financing has been thoroughly investigated (Peters and Hawkins 2009; Reid-Grant and Bhat 2009; Edwards 2009). The most common sources of funding for marine protected areas are both local and international and include government support, international assistance agencies, foundation grants, donations, user fees, souvenir sales, concessions, debt swaps, trust funds, ecotourism and biodiversity enterprise funds (Geoghegan 1998).

Already several authors have put forward alternative financing models for the protected areas in Slovakia. For example Mahút and Chudivaniová (2009) proposes financing of the Malá Fatra National Park from three sources; state contribution, self produced income and the European union. One third of the NP budget would be covered by the state contribution which is currently €316, 400. The second third of the budget would be provided by a combination of a contributory fee together with a percentage of revenues from NP trading and self produced income.

Each contributory fee would be €100 and would be a payment for using the NP logo. Current legislation allows this sum to be offset against tax by businesses. In the Malá Fatra National Park there are approximately 300 businesses operating commercial activities within different fields of industry (hard tourism/soft tourism, forestry, mining, water resources etc.). Contributory fees paid by these entities would provide € 30,000 towards the Malá Fatra National Park budget.

A percentage of revenues from trading in the national park would be payment for using the services of nature protection. Total revenues from Malá Fatra National Park trading is €13,760,000 (Pogányová and Hatala 2012). 1,5% (€ 206,400) of this amount comfortably covers the running costs of the Malá Fatra National Park.

Self produced income can be generated by activities such as charges for preparing environmental impact assessments, guiding activities etc. It is anticipated that €80,000 would be raised by providing services and sales in the Malá Fatra National Park.

The final third of the Malá Fatra National Park budget would be covered by EU funds. Authors propose using it on particular projects within nature protection operations.

Nature protection financing from three sources is also proposed by Janiga *et al.* (2012). They emphasize that nature protection area administrative budgets have to be at least 3 times higher than at present to achieve effective nature protection. Also in this case one third of the budget will be covered by the state, the second third by ecosystem services users and the final third by capital raised by the protected area administrations. This low cost method of financing should be easily affordable by all stakeholders.

A 3-fold budget increase is necessary also according to Poganyova (2009). She highlights the example of Malá Fatra National Park where the recent budget of this protected area is not sufficient to cover costs and proposes a budget increase from € 200,000 to € 600,000 per year. She also proposes dividing the method of securing the above annual budget into thirds as fol-

lows: The first third will be secured by subsidies from the state budget and with the proposed annual budget this equates to roughly €190,000. Annual receipts from businesses trading in the National Park would form the second third. In order to cover the proposed annual budget a levy would need to be set at 1% of the total annual receipts of all businesses, with annual receipts of around € 21,000,000 this is roughly € 210,000. The final third will be around € 200,000, secured by income from the NP Administration's own economic activities and from projects funded by the European Union. Self produced income from the Administration will be obtained by charging for the following operations and ventures of the NP Administration:

1. issuing of expert opinion, licenses and exemptions
2. the sale of the NP logo in tourism (guide services, accommodation, etc.)
3. receipts from providing services (seminars, guides, accommodation, etc.)
4. own product sales (souvenirs with the NP logo)
5. admission charges to the NP

Problems accompanying user fees

According to Baral *et al.* (2008) if the protected area can attract tourists, it can gather sufficient revenue to cover most of the protected area management costs. Numerous studies show that people are willing to pay higher entry fees to enter protected areas (Dharmaratne *et al.* 2000; Mmopelwa *et al.* 2007). For example a study by Baral and Dhungana (2014) set out the reasons why visitors of The Annapurna Conservation Area were not only prepared to pay, but to pay increased entry fees:

1. fair and reasonable prices
2. memorable lifetime experience
3. to support park maintenance and conservation
4. to support conservation and sustainable development of the area
5. to protect the local natural environment for future generations
6. to support economic development of the area
7. unique area that needs preservation
8. to support the ecotourism model implemented in the area
9. accept increased fees only if the extra income is used properly

The reasons why visitors were not willing to pay for increased entry fees were:

1. unaffordable entry fees
2. daily fees more appropriate
3. dissatisfied with services in the area
4. preferred to visit elsewhere
5. concerns about corruption, misuse and waste of income
6. current prices already too high
7. access to nature should be free
8. local taxes should be used for conservation

On one hand, user fees clearly demonstrate to the public the benefits stemming from resource conservation and on the other hand they can be used to reduce the number of visitors in areas which suffer from overuse and ecological damage (Chase *et al.* 1998). But designing effective pricing strategies for protected areas is difficult. Thorough research assessing the impacts of user fees and differential pricing are needed. The introduction of tourist entry fees may lead to a wide variety of predicaments. For example visitors to the national parks of Costa Rica have increased significantly during the past decade, resulting in overcrowding and environmental devastation in some parks. Therefore the Costa Rican National Parks Service increased the prices of national park access. In 1994, the daily entrance fee for foreign visitors to all of the national parks was increased from 1,25 U.S to 15 U.S. Soon after one particular community held demonstrations and took control of the local park entrance, refusing to allow fee collection. After protests from the tourism industry entrance fees were decreased to 5 U.S. for foreign visitors on tours.

Another example is from The Annapurna Conservation Area. Tourist entry fees covered a substantial proportion of ACA's budget but they dried up when the number of foreign visitors decreased as a result of the 9/11 terrorist attack in the US and the rise of the Maoist insurgency in Nepal (Thapa 2004; Baral and Heinen 2005; Baral *et al.* 2008).

The percentage of revenues from trading in the protected areas as a source of their financing

Reid-Grant and Bhat (2009) claims that one way to resolve the issue of financing protected areas is to identify funding sources from those who directly benefit from them. For example the studies of Janiga *et al.* (2012) and Mahút and Chudivaniová (2009) propose a new financial mechanism to secure part financing of protected area management. Both studies agreed that only between 0,3 – 2 % (depending on which protected area) of stakeholder total trading income covers the protected area administration budgets. New taxes or other stakeholder payments would not be welcomed because of a general lack of interest from businesses to adopt new mechanisms on a voluntary and individual basis (Hein *et al.* 2013). According to Dustin *et al.* (2000) we live in an era when the most commonly heard outcry is "No new taxes!". Therefore we aim to justify such a course of action for the following reasons. In practice, investors are more and more interested how businesses behave regarding the environment. Reports based on this have a real influence on the their reputation, their ability to raise new capital and to attract the best employees (Vlachynský 2006). It was proved that businesses can benefit financially by taking on board proposals aimed at improving the environment (Romančíková 2004). Protecting natural resources and services should not be considered a financial burden or an investment risk by businesses, but as an investment opportunity. A proactive approach by businesses towards protecting the environment should also include other ventures such as an emphasis on recycling, considerate extraction of natural resources and the use of non-toxic substances (Škorecová 2007). Stakeholder payments for ecosystem services provided

by the protected areas can form an integral part of this proactive approach. In return businesses would be allowed to use the protected area logos in their advertising and promotional campaigns.

Acknowledgements

Activity was supported from the EEA and Norway Grants BFENV14-002.

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