

Ecosystem services versus wellbeing – implications for sustainable tourism: the host perspective

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Abstract

This paper aims to compile red flags appearing at the interface of hosts' wellbeing, ecosystem services (ES) and tourism, which have already been described in the literature. We focus on host communities in developing countries, as poor and disadvantaged people much more often depend directly on ES. We start with a description of the concepts ES and wellbeing. The second section describes prominent gaps and challenges in the ES–wellbeing interface, with special focus on those that can be relevant to tourism (such as the establishment of protected areas, the concept of paying for ES, poverty reduction, endowments vs entitlements). The third section is devoted to a discussion of the identified gaps and challenges. The last section contains conclusions and implications. These recommendations are global and fairly general indications that should be considered at the interface between ES, tourism and wellbeing policies, whatever the context.

Keywords: *ecosystem services, cultural ecosystem services, wellbeing, sustainable tourism, community wellbeing, paying for ecosystem services*

Rezumat. Serviciile ecosistemice versus bunăstare – implicații pentru turism durabil din perspectiva comunităților gazdă

Lucrarea își propune să întocmească un inventar al semnalelor de alarmă la interfața dintre bunăstarea comunităților gazdă, a serviciilor ecosistemice (SE) și turismului, care au fost deja semnalate în literatura de specialitate. Ne-am axat pe comunitățile gazdă din statele în curs de dezvoltare, întrucât persoanele sărace și dezavantajate depind într-o măsură mult mai mare de SE. Începem printr-o descriere a conceptelor de SE și bunăstare; cea de a doua secțiune prezintă principalele discrepante și provocări în relația SE-bunăstare, cu un accent special pe elementele relevante pentru turism (ex. înființarea unor arii protejate, conceptul de a plăti pentru SE, reducerea sărăciei, înzestrare vs drepturi). A treia parte cuprinde discuțiile referitoare la discrepantele și provocările identificate, în timp ce ultima parte este dedicată concluziilor și implicațiilor acestui studiu. Acestea sunt recomandări globale și indicii generale care ar trebui considerate în politicile privind relația dintre SE, turism și bunăstare, indiferent de context.

Cuvinte-cheie: *servicii ecosistemice, servicii culturale, bunăstare, turism durabil, bunăstarea comunității, plata pentru serviciile ecosistemului*

Introduction

The guidelines for sustainable development assume decent behaviour by all actors. Equilibrium between the economic and environmental pillars, and retaining the “goods” for future generations, in general are not subject to formal criticism by decision makers or most stakeholders. In practice, these notions remain at the stage of rhetorical declarations, often because of actual conflicts between actors, the discrepancy of their interests or lack of strategic thinking. The difficulty of implementing sustainable development goals with reference to the environment was the main reason for creating the term “ecosystem services” (ES). This economic valuation allowed ecologists to express some of the values of ecosystems in metrics (dollars) that are better understood and have a more powerful meaning in public, policy and decision-making contexts (Chan et

al., 2012; De Groot et al., 2010). Using the language of ES, it was easier to calculate the long-term cost of losses resulting from the devastation of specific ecosystems – in other words, the price of a lack of sustainability. The ES concept was established by the Millennium Ecosystem Assessment (MEA, 2003, 2005).

The necessity to transform ES issues in monetary value to push for greater environmental sustainable awareness and practices can also demonstrate how the commodification of the environment (as much as of everything else) advanced by the current political-economic system has outdone or obscured what should be obvious not for merely economic reasons but for the obvious well-being of people and the earth.

Another term popularised by MEA is “wellbeing”. The MEA perspective links wellbeing directly with the quality of ES. Sustainability is conceptualised here as the efficiency of human wellbeing (Cummins et al.,

2003; Knight & Rosa, 2011; Schleicher et. al., 2018). Still, obviously the wellbeing of people depends not only on the ecosystem and services. It also involves material means, good social relations, a sense of agency, subjective feelings and many other factors.

MEA (2005) draws attention to the great importance of ES in reducing world poverty. It highlights that poor people's wellbeing and livelihoods depend directly on ES (Cavendish, 2000; Daw et al., 2011; Fisher, 2004; Fisher et al., 2014). Poverty is defined as an extreme deprivation of wellbeing. Poor people are also more vulnerable to natural hazards (TEEB, 2010).

Since the MEA publications (2003, 2005), ES and wellbeing have received tremendous attention in the academic literature and have featured in a huge number of strategies at supranational and national level, including the Sustainable Tourism Development Goals (UNWTO & UNDP, 2017). For example, the first and foremost directive goal is "no poverty" and "zero hunger". However, despite the growing popularity of the terms ES and wellbeing, there is no agreement on basic questions, such as what wellbeing actually is, how it should be measured for individuals and nations, and what the contribution of specific ecosystems to the wellbeing of specific people might be. The ideal is a situation of win-win outcomes where ES are used for human wellbeing. Still, a meta-analysis of 1 324 potentially relevant reports from different countries shows that there is little understanding of what is required for these outcomes to be achieved (Howe et al., 2014).

Many supranational organisations and governments are engaged in projects and policies dedicated to improve human wellbeing derived from ES. However, The situation becomes vastly more complicated when feedbacks are considered among regions, across spatial extents from local to global, or across time horizons as when short-term decisions affect long-term flows of ecosystem services (Carpenter et al., 2009, p. 1308). It is also recognised that different groups benefit differently. In poor countries, an inadequate ES policy may result in the violation of almost all components of wellbeing – security, freedom of choice and action, and even existence.

When it comes to tourism, the discussion becomes even more difficult. In fact, analysing the impact of tourism on the wellbeing of host communities is more complex than holistically studying dependencies between wellbeing and sustainable development (Helne & Hirvilammi, 2015). This may be because tourism functions as an adjunct to other sectors of the economy in relation to national policies and is connected to the environment (Hopwood, Mellor & O'Brien, 2005; Raudsepp-Hearne et al., 2010).

That tourism impacts ecosystems and wellbeing is self-evident. Tourism is based on ecosystems (they

are often the main tourist attraction), uses them and changes the form of their use. The main goal of developing tourism (from the destination perspective) is to generate income; therefore, theoretically, tourism should lead to increased wellbeing for the receiving or host community, at least from a monetary perspective.

The United Nations General Assembly declared the year 2017 the International Year of Sustainable Tourism for Development. Tourism is seen as a driver of development and peace, promoting the harmonious co-existence of people from all countries (Beijing Declaration, 2016). It is assumed that tourism is something positive, conducive to the development of areas in which it takes place and thus improving the wellbeing of their inhabitants.

On the other hand, many researchers in the field of tourism proved the negative impact of this sector on the environment and local culture (e.g. Akama, 2004; d'Hautesserre, 2004; Hall & Tucker, 2004; Deery et al., 2012). Tourism can be predatory or dysfunctional, leading to the opposite of wellbeing, also in relation to ES. Tourists create additional competition for the same services and can hinder, limit or prevent access for locals. Even if the terms wellbeing and ES themselves are not used, they are what the researchers deal with.

As regards tourism, the focus of MEA (2005) is on the contribution of ES to the wellbeing of the final consumer only – that means the tourist. But, as underlined by Daw et al. (2011, p. 374), for ... local communities, tourism is effectively a provisioning service for income and employment, allowing their material needs to be met.

This paper aims to compile red flags appearing at the interface of hosts' wellbeing, ES and tourism, which have already been described in the literature. We focus on host communities in developing countries, as poor and disadvantaged people much more often depend directly on ES.

We start with a description of the concepts ES and wellbeing. The second section describes prominent gaps and challenges in the ES–wellbeing interface, with special focus on those that can be relevant to tourism (such as the establishment of protected areas, the concept of paying for ES, poverty reduction, endowments vs entitlements). The third section is devoted to a discussion of the identified gaps and challenges. The last section contains conclusions and implications. The article has no ambition to exhaust the issue – it is a voice in the discussion.

Concepts and terms

First we discuss the theoretical background of the concepts and terms ecosystem services (ES) and wellbeing.

Ecosystem services

The concept of ES was established by the Millennium Ecosystem Assessment (MEA, 2003, 2005). Since then, the number of publications about it and the efforts to put it into practice have increased drastically (Daily & Matson, 2008; De Groot et al., 2010; Fisher et al., 2009; Tallis et al., 2008). MEA (2005) divides ES into provisioning, regulating, cultural and supporting services and defines them with reference to their material or non-material values. Material values are attached to provisioning, regulating and supporting services, whereas non-material values are associated with cultural ecosystem services (CES) (Chan et al., 2012, p. 9). MEA (2005, p. 894) describes CES as non-material benefits people obtain from ecosystems through spiritual enrichment, cognitive development, reflection, recreation, and aesthetic experience, including, e.g., knowledge systems, social relations, and aesthetic values.

Until now, MEA has provided the most comprehensive overview and categorisation of ES; yet, the definition has been criticised (Boyd & Banzhaf, 2007, Chan et al., 2012; Wallace, 2007) because it does not clearly separate the welfare of human beneficiaries from the notions of services, benefits and values (Milcu et al., 2013). An interpretation gap in the notions of ES and CES is also the assumption that certain goods are “generally accessible”. This may be true for air quality but not, for example, for drinking water or a beach. The problem with limited resources is particularly noticeable on small islands. Surveys regarding the use of common pool resources (CPR) carried out in different parts of the world prove that exploitation by one user reduces resource availability for others (Ostrom et al., 1999; Polman et al., 2016).

CES listed by MEA also include recreation and ecotourism – recognising that people often choose where to spend their leisure time based on the characteristics of the natural or cultivated landscapes in a chosen area.

ES approaches have become a significant basis for planning and management policies (Chan et al., 2012). Major contributions brought an understanding of the monetary aspects – costs and benefits – of ES delivery (Berkel & Verburg, 2014). Much attention was devoted to landscape studies (Bills & Gross, 2005; De Groot et al., 2010; FAO, 1999; Hein et al., 2006; OECD, 2001; Wilson, 2004), including the mapping of ES, which offered policymakers suggestions about the best locations for service delivery (Egoh et al., 2008; Willemen et al., 2008).

The integration of ecological and economic analysis contributed to payment for ecosystem services (PES) programmes and policies (Eigenraam et al., 2007; Engel et al., 2008; Muñoz-Piña et al.,

2008; Turner & Daily, 2008; Turpie et al., 2008). A meaningful contribution to the discussion regarding PES followed the Deepwater Horizon ecological disaster caused by British Petroleum in the territorial waters of Mexico, with the ensuing questions about the cost and who should pay for the damage.

The ES perspective is also evident in the Sustainable Tourism Development Goals (UNWTO & UNDP, 2017), where most categories are described in the language of ecosystems, for example life on land, life below water, climate. The exception is the category of CES, which is not evident here, and cannot be, because of oversimplifying tourism.

Wellbeing

The term wellbeing was first used in economics in the 1930s in relation to the newly coined Gross National Product (GNP) index, which soon evolved into Gross Domestic Product (GDP). According to GNP and GDP indices, the higher the income and expenditure of a given country, the higher the wellbeing of its citizens (Shea, 1976). At the time, economic sciences were seen as most applicable to the study of wellbeing, as the quality of life of any individual or community can in a direct and simple way be related to income (Wilson, 1972, p. 131). Limiting wellbeing only to economic indicators is obviously not enough. The result was a search for new indices adjusted to measuring, mapping and describing differences in culture, social and economic development, including local knowledge (Sheppard et al., 2009). Still, most interpretations were limited to economic sciences, for example the Human Development Index (HDI), which includes longevity and level of education (UNDP, 2003), and the Genuine Progress Indicator (GPI), which differentiates between positive and negative expenses (Halstead 1998; Hamilton, 1998). A more holistic view of wellbeing was introduced by Sen (1985) in his concept of capabilities. The concept encompasses political, social and economic factors.

In more recent papers, any positive correlation between economic factors and human wellbeing (especially subjectively experienced) is often contested (Gardner & Oswald 2007). Surprisingly, it was found that citizens of most Western countries, where GDP is relatively high, do not experience higher subjective wellbeing (SWB) than those of poor countries (Cummins et al., 2003; Eckersley, 1998, 2000a; Shea, 1976). Studies conducted by the University of Bath Research Group on Wellbeing in Developing Countries (WeD), prove that some of the poorest countries, such as Ethiopia and Bangladesh, are characterised by very high SWB among their citizens (Blackmore, 2009; Copestake, 2009; Copestake & Campfield, 2009; Deneulin & McGregor, 2009; White, 2009). The findings can be contested

with Appadurai's (2004) concept of capacity to aspire – arguing that poor people do not have enough aspirations and are thus not even aware of their low wellbeing – still, the findings prove that indices of wellbeing, used in a global context, need to be re-evaluated.

Also, Easterlin's (1974, 1995) research shows that (1) within the same community, the SWB of the wealthy is higher than of the poor, but (2) citizens of wealthy societies do not show a higher SWB than citizens of poor countries at all. What is more, (3) if countries increase their wealth, this does not improve the SWB of their inhabitants at all. The results are explained with hedonic adaptation and social comparison. The whole process is known as the Easterlin paradox (Knight & Rosa, 2011).

Cummins and Nistico (2002), in their theory of subjective wellbeing homeostasis, point out the key importance of "expected value". People make comparisons that make them feel worse, better, happier, etc. The key question is, who do they compare themselves to? The importance of relative weights in the wellbeing framework, such as paired comparisons (Saaty, 1980), the expected value method (Janssen, 1994) or the incorporation of community values (Olusoga et al., 2010), is highlighted by many authors.

The MEA (2005) document defines wellbeing as a multivariate state comprising five dimensions: basic material for a good life, health, security, good social relations, and freedom of choice and action. The key challenge is the eradication of global poverty, defined as the extreme deprivation of wellbeing (Carpenter et al., 2009). Poverty is considered to be related to environmental degradation (Raworth, 2012).

The broad categories related to MEA (2005), Maslow (1943), Max-Neef (1991) and Costanza et al. (2007) are developed by Maynard et al. (2010) into the following constituents of wellbeing:

- Existence (E): Basic materials for life – access to water, soil, biota and air
- Health (H): Capacity to cope with change
- Security (S): Coping with constant change at variable rates
- Good social relations (GSR): Achievement of collective benefits at acceptable costs
- Freedom of choice and action (FCA): Ability to choose who, where, what, when and why (Maynard et al., 2010, p. 9).

In research into the connection between wellbeing and tourism, just as for wellbeing itself, various conceptual backgrounds depict wellbeing according to different indices (Dłużewska, 2019).

For example, social science and psychology focus on social change and subjective statements. Here the discussion does not deal with the question "if" tourism has an impact on SWB, but with the role of

specific factors in the personal evaluation of the increase or decrease of SWB in host communities.

Economics focus on the percentage of GDP coming from tourism, with the automatic presumption that the higher the GDP, the higher the wellbeing of communities. GDP is the main, official indicator used by WTTC and UNWTO for the impact of tourism on local economies. However, the GDP approach does not consider the distribution of profits or the social stratification caused by tourism. Economists also consider the Quality of Life Index (QoL) as central to research (Huh & Vogt, 2008; Kayat, 2002; Sirakaya, Teye & Sonmez, 2002; Yen & Kerstetter, 2009). According to Derry et al. (2012, p. 66), tourism development influences QoL and so perceptions of tourism growth can be seen as an antecedent of QoL.

Consequently, wellbeing is regarded as increasing thanks to tourism, when employment in this sector is growing and when the material status of communities is rising (Kusluvan, Kusluvan 2000; Tosun 2000, 2006), but also when tourism leads to reduced poverty in host communities (Cole 2004; Dłużewska, 2019; Ghimire 2001; Harrison 2001; Scheyvens 2007).

The sustainable tourism guidebook prepared by the World Tourism Organization (UNEP & WTO, 2005) uses the term wellbeing only once, in relation to society, when community wellbeing is discussed. According to the text, community wellbeing comprises: social infrastructure, access to resources, quality of life, quality of environment, as well as a lack of corruption and human-by-human exploitation. The definition comprises environmental and economic components. Although it theoretically stems from the social pillar, its real extent is wider (Dłużewska, 2019).

In the newer guidelines by UNWTO and UNDP (2017), wellbeing is also used only once – this time to support the description of health. However, although wellbeing is scarcely used as a term, its defining features are easily found in nearly all guidelines presented in this document. Here the environmental pillar prevails.

Ecosystem services vs wellbeing

The first message of early ES literature (Daily, 1997) and MEA (2005) was that ES significantly contribute to the wellbeing of people. Changes in ES will automatically translate into changes in wellbeing, meaning that an increase in ES will lead to poverty reduction. MEA (2005) also emphasises that different ES contribute to different aspects of human wellbeing. Since then, many authors have underlined the trade-offs between different ES. Increasing the value of one ecosystem service can lead to lowering the value of other ES (Carpenter et al., 2009; Rodriguez et al., 2006).

It is also emphasised that different groups of people derive benefits from different ES (Daw et al., 2011). In the same place, for some people, wellbeing can be derived from provisioning services, such as fishing. For others – more affluent – it can come from the aesthetic values of the landscape. Dunn (2010) and Fisher et al. (2013) coined the term ecosystem “disservices” – environmental factors that harm human wellbeing.

Benefits exist to different extents. They are related to the individual context and specific mechanism of access. As noted by Daw et al. (2011, p. 371), First ... different groups derive well-being benefits from different ES, creating winners and losers as ES change. Second, dynamic mechanisms of access determine who can benefit. Third, individuals’ contexts and needs determine how ES contribute to well-being. Therefore the trade-offs between different ES will lead to trade-offs in the wellbeing of different people and communities (Daw et al., 2011; Rodriguez et al., 2006). The dynamics through which people interact around ES are related to “access” and “control” (Fisher et al., 2013; Ribot & Peluso, 2003). None of this is included in the framework created by MEA (2003, 2005).

Important human characteristics of individuals and groups that mediate the relationship between ES and wellbeing are “preferences” (Fisher et al., 2013; Narayan et al., 2000; Sen, 2001) and “capital” (physical, social and human) (Fisher et al., 2013 p. 38):

- Physical capital refers to infrastructure and physical goods that support livelihoods and access to ES (e.g. boats) (Brown et al., 2008).
- Social capital is understood as rules, knowledge, expectations and norms shared within a group – everything that creates activities and interactions perceived as normal (Coleman, 1988; Ostrom, 1990; Ostrom, 2001; Putnam et al., 1993).
- Human capital refers to individual knowledge and skills brought to an activity (Ostrom, 2001, p. 175), which influence the individual’s access to ES (Paudyal et al., 2006; Thoms, 2008). Fisher et al. (2013, p. 39) note, As with social capital, human capital differentials have implications for representation in groups controlling resource access.

We can also add financial and natural capital, as in the Sustainable Livelihoods Framework for Rural Development (Scoones, 1998).

Fisher et al. (2013), using the earlier work of Leach et al. (1999) and Sikor and Nguyen (2007), highlight the distinction between “endowments”, which are the rights and resources actors have (Leach et al., 1999, p. 233) and “entitlements”, which are the means to use a resource. Endowments can be proximity to a forest, for example, or legal, statutory rights to forest products. Entitlements legitimate effective command over the access. To understand

this distinction, it may be useful to think about endowments as what can be given (for instance, by a state to its citizens), and entitlements as what can be done with an endowment (Fisher et al., 2013, p. 38). The model proposed by Fisher et al. (2013) also highlights the use of ES by external actors (e.g. during land appropriation).

A common form of ecosystem protection, deemed a type of entitlement, is the creation of legally protected areas (e.g. national parks and reserves).

A specific type of entitlement is payment for ecosystem services (PES), which implicitly recognize[s] the unequal distribution of the costs and benefits of maintaining ES, through monetary compensation from “winners” to “losers” (Daw et al., 2011, p. 371). PES attempts to prevent the formation of socioeconomic disproportions caused by the use of ecosystems. Still, it should be emphasised that ES literature refers to the PES concept to a very limited extent. Also, most attempts to model and quantify ES do not take into account the division into various groups of beneficiaries, thus ignoring the distribution of benefits between groups and individuals in society (Daw et al., 2011). Sometimes very general divisions are adopted, for example social versus private benefits (Polasky et al., 2010) or broad divisions between stakeholders at different scales (Hein et al., 2006).

Poverty is characterised by a lack of choice; therefore we cannot apply “preferences” in this case (Fisher et al., 2013; Narayan et al, 2000; Sen, 2001). As highlighted by Fisher et al. (2013, p. 40):

Households with land endowments (implying collective-choice rights) are more likely to be able to access payments. In contrast, poorer people, if they have access, will tend to rely directly on non-commodified services, more likely through “access and withdrawal”, or “management” rights, than through higher order collective-choice rights. Furthermore, those with only operational rights may lose access to the resource when the service is commodified, particularly in “use-restricting”. This all serves as caution against assuming that, on the establishment of PES, those who benefit from uncommodified services will automatically benefit from payments for commodified services. Instead, we must pay attention to the mechanisms of entitlement for different ecosystem services.

As stated long ago by Sen (1981), the underlying causes of poverty are social differentiation and social inequality (related to rights, access and entitlements). It cannot therefore be presumed that diversification (in services) will improve the wellbeing of the whole population. It can be exactly the contrary: especially for the poorest, least affluent, it may lead to a decline in wellbeing (Frayne et al. 2013; Coulthard, 2012; Fisher et al., 2013).

The original rationale of ES was to convert ecosystems to monetary values, thus proposing adjusted market prices (Bateman et al., 2011). Such valuations could also help PES policies and pro-poor actions. Still, as pointed out by Daw et al. (2011, p. 375), although cash and employment are clearly an (perhaps the most) important mechanism for poverty alleviation, much of the ES literature has surprisingly little emphasis on these.

To create policies, it is also crucial to distinguish different "groups of poor", depending on people's functional relation to ES and PES schemes, such as sellers, final consumers (users) and non-participants (Daw et al., 2011; Wunder, 2008). Improving the wellbeing of some groups is not achieved by increasing the quality or flows of ES, but through facilitating their access (Daw et al., 2011, p. 373).

The perspective of wellbeing – as being derived from and dependent on the environment – was later supported by many academics in the field of tourism (Hall, Scott & Gössling, 2013; Tuula & Tuuli, 2015). However, a vast body of research encompasses consequences on a more global scale (Hall et al., 2013), for example studies calculating gas emissions produced by air carriers (De Bruijn et al., 2010; Dwyer et al., 2010; Pearch-Nielsen et al., 2010; Gössling, & Peeters, 2007; Scott et al., 2008, 2010). As Dłużewska states (2019, p. 517), As a result we start perceiving air travel as not sustainable, as negatively impacting wellbeing of the whole planet, because pollution is increasing due to overabundant jet propulsion.

Gaps and challenges

Analysing the role of ES in the wellbeing of tourism destination hosts can definitely not be limited to cultural ecosystem services (CES) only, within which tourism was placed in the MEA document (2003, 2005). The analysis must also include provisioning, regulating and supporting services, thus – in practice – the whole spectrum of ES listed in the MEA document. Below we discuss the most frequently noted gaps and problems caused by tourism, which concern ES and affect the wellbeing of the host community, such as environmental destruction, common pool resources (CPR), social capital and social change.

Tourism and environmental destruction

In many places the prospect of a fast return on investment in tourism leads to overexploitation and even to irreversible destruction of ecosystems, for example by municipal waste disposal and dumping into the sea, devastation of coral reefs by free anchoring around islands, and off-road activities contributing to erosion (Honey, 1999).

In destinations where ecosystems are an important tourist attraction, the risk is twofold. The

destruction of ecosystems not only deprives the hosts of the benefits of these but also reduces the attractiveness of the place to tourists. Tourists give up visiting such a destination. As a result, the hosts are also deprived of income from tourism. The problem was already recognised in 1986 in the Caribbean and is called "self-destruction by tourism" (Shaw & Williams, 1996). Bearing in mind that the number of international tourists multiplied from 25 million to 1,5 billion between 1950 and 2019, and the number of domestic tourists is now 6 billion a year, we can see that the risk is much greater.

The literature also proves that environmental destruction is not only related to mass tourism, but practically to any type of tourist activity. Exceeding the destination's carrying capacity and straining inadequate access mechanisms are the critical factors. For example, it is now recognised that ecotourism, which for long was perceived as the most sustainable, can have a worse impact than stationary leisure tourism (Duffy, 2013; d'Hautesserre & Funck, 2016). In principle, ecotourism is based on ecosystems; as such it inevitably disturbs their balance (Duffy, 2013; Dłużewska & Giampiccoli, 2020). Another finding is that ecotourism can be a part of mass tourism, not necessarily its opposite (Duffy, 2013). Also, it often occurs in destinations where tourist infrastructure does not exist, so tourists are not able to spend money there. Consequently, the potential income "leaks out" (Gibson, 2010).

Tourism and social capital

Tourism can be harmful due to undesirable behaviour by stakeholders, tourists or the host community (Russell & Wallace, 2004; Wu et al., 2020). Harm done by the hosts is largely determined by their level of knowledge and economic condition. Aref and Redzuan (2009), Calanog et al. (2012), Manyara (2007), Suansri (2003, 2005), Giampiccoli and Mtapuri (2020) recognise the problem of limited capacity at community level, and therefore the requirement of capacity building. Giampiccoli et al. (2020) point out that capacity building should be the first step in community-based tourism (CBT) projects. Thus, before developing CBT ..., it is necessary to prepare and build the capacity of the host community (Suansri, 2005, p. 12). Although the discussion is about CBT, it can largely be extended to developing tourism in general.

Social capital is expectations and norms shared within a group and perceived as normal (Ostrom, 2001). It has important implications for policies on ecosystem services (ES) and tourism, even in areas with high levels of economic development. An example is Nordic countries (Norway, Greenland, Iceland, Sweden), where the conviction is culturally rooted that access to ecosystems is a human right.

Proposals to introduce any restrictions on access to ES (whether via PES or entitlements) are met with great resistance here. With the current level of world tourism, this poses a serious risk of ecosystem destruction for two main reasons: first, there is the danger of exceeding the limits of tourism capacity and inappropriate behaviour by tourists, who do not share the instilled respect for ecosystems that the local population has. Second, the universal access for “strangers” (tourists) does not make it possible to generate an economic return based on the main “tourist” attraction in these destinations.

Tourism and social change

As stated before, a crucial aspect of subjective wellbeing is individual expectations and the capacity to aspire (Appadurai, 2004). As a result of comparing themselves to others, people feel rich or poor, socially accepted or not, etc. It is widely recognised that tourism radically changes the reference point for comparisons in many fields. Especially in developing countries, where there is a large material gap between tourists and the local population, the comparison leads to a lowering of self-esteem in locals (Middleton, 2004; Peake, 1989; Tosun, 2001a, b).

Tourists – even if they are disliked – are seen as “rich, successful people”; therefore their behaviour is considered an indicator by many host communities (Peake, 1989). This can lead directly to imitation of tourists’ behaviours by their hosts. Sometimes these behaviours are positive or completely neutral, but many times negative cultural behaviours (such as alcohol abuse, sexual freedom) are copied. Also included is their attitude towards the environment. An example is the increased consumption of water (even from 8 litres to 500 litres per day) by inhabitants of desert areas in Tunisia and Morocco (Dłużewska 2008, Dłużewska et al., 2013). As a result of observing the behaviour of tourists, many locals had the false belief that water resources were inexhaustible, and that in the past the technology to use them had simply been lacking. Moreover, the local population wasted water to a much greater extent than tourists, for example by using potable water to irrigate fields, or – in the case of tourism – building hotels with swimming pools in desert areas, and even making daily water changes in these pools (Dłużewska, 2008).

Tourism and common pool resources

Tourism increases the number of ES users, sometimes very considerably – to the extent that it limits or even deprives locals of access to ecosystems. Tourism introduces significant competition for common pool resources (CPR). The financial capacity of the hospitality sector, especially in poor countries, is higher than the local community’s financial means.

As a result, competition for the most attractive – limited – space (e.g. access to the beach) generates the risk of fraud and corruption.

Tourism, through severe competition for use, changes the policy of access to ES from endowments to entitlements. This carries a high risk of depriving the poorest of access. Examples of such a process are visible in many areas around the world (Cohen 2010, 2011). Even ecological disasters can be a pretext for abuse; for example, after the tsunami on 26 December 2004, expropriation affected the poorest inhabitants on the coasts of Thailand. The official explanation was the failure to regulate the legal issues of land ownership (Cohen, 2011).

Discussion

In many destinations, especially in developing countries, increasing economic indices of wellbeing occurs at the cost of culture and the environment. Better financial possibilities for locals often lead to replacement of thatched roofs with corrugated metal sheets, abandoning traditional dwellings for modern houses, and overexploitation of ecosystems. Numerous studies prove that an increase in income of ecologically unaware societies leads directly to an increase in the volume of waste, overexploitation of natural resources, and so on (Dłużewska, 2019, p. 517). Tourism is an important incentive for harmful behaviours, such as the creation of golf courses to meet the needs of tourists, even at destinations with an extreme lack of water. Such negative behaviours were the reason for introducing “responsible consumption and production” in UNWTO guidelines for sustainable tourism.

Facing such environmental destruction, supranational organisations and governments of receptive destinations take various steps to protect ecosystems. Most initiatives involve the creation of protected areas (Fisher et al., 2014). In practice, numerous problems occur with regard to the governance of them and intense competition about the options for their use (Bass & Dalal-Clayton, 1995; Polman et al., 2016). Protecting areas in principle restricts access to common pool resources (CPR). This leads to social conflicts, especially at a local level, with a clash between individual and community, local and global, short-term and long-term interests (Bonaiuto et al., 2002). Sometimes it deprives local people of their livelihoods, alters their lifestyle and, hence, reduces their wellbeing. Negative effects of creating protected areas are usually borne by the poorest. And this, in turn, undermines the fundamental goal of MEA and sustainable development – the fight to reduce poverty. Surveys regarding the impact of tourism on poverty reduction confirm that the creation of (Marine) Protected Areas in places that are attractive to tourists can actually

undermine local wellbeing and impoverish sectors of the population as they lose entitlements to resources important for maintaining their livelihoods (Scheyvens & Momsen, 2008, p. XX; Stonich, 2003).

Similarly, in Kenya, the establishment of a marine protected area reduced the overall number of fishers in the area who benefited from fisheries (McClanahan & Kaunda-Arara, 1996), while likely improving opportunities for tourism revenue. Some fishers lost their livelihoods, while others who had skills and opportunities to benefit from tourism improved their well-being through new employment opportunities." (Daw et al., 2011, p. 372)

We should also refer to an important paradox, indicated in the same MEA (2005) document: despite the large global declines in most ecosystem services (ES), human wellbeing has increased. This contradicts the claims of environmentalists, and MEA itself, that ecological degradation will lead to declines in wellbeing (Raudsepp-Hearne et al., 2010). Knowledge of the reason for this paradox is of primary importance when talking about the ES–wellbeing relationship. It could initially be explained with the use of incorrect measures. However, Raudsepp-Hearne et al. (2010) assess more explanations for these divergent trends. First, well-being is dependent on food services, which are increasing, and not on other services that are declining (p. 576). Second, technology has decoupled well-being from nature, and finally, time lags may lead to future declines in well-being (p. 585).

Research also indicates that people prioritise cash from the sale of ecosystem products over mere access to ES (see Brown et al., 2008 for coastal communities). This insight is very relevant to tourism. Sustainable tourism development policies should enable the host community to sell ecosystem products. This will not only increase the wellbeing associated with ES, but also improve their perception of tourists, who would be seen as a source of potential benefits, not competition for ES. However, this does not mean that ecosystem products should be allowed to be sold indiscriminately without any rules and/or limits, but that host community, including the disadvantaged members of society, should as anyone else also have the right – within specific (possibly enforceable) regulations consistently and comprehensively entrenched in sustainability strategies – to use and sell ecosystem products. Besides being embedded in the suitability approach these regulations could also make difference in usage and selling rights between local (permanent residents) and outsiders thus considering that host community members (the permanent residents), importantly with special attention to the poor strata of society, are the ones attached to a place in a long-term basis, not just for a 'holiday' time, thus the ones that will bear the possible cost of ES degradation.

Regarding the fact that wellbeing is based on material means and that, especially for poor people, the revenue from ecosystems (cash) is of great importance, the discussion leads to the payment for ecosystem services (PES) concept, which is the mechanism to protect ecosystems and support the losers through monetary compensation from winners. With reference to many ecosystems (e.g. coral reef, coast, water), this concept can have broad practical applications. What is surprising, in sustainable tourism literature, is that PES is almost not recognised, and yet this is the field where it could bring significant profits for locals. In tourism literature, the recommendations are basically about increasing taxes paid by stakeholders (De Blaeij et al., 2011; Polman et al., 2016). However, in the author's opinion, the effect of tax increases can be negative. First, in many destinations (especially developing countries) there is a huge group of actors who do not pay taxes at all. Second, some tourism actors (e.g. cruise companies) do not spend money at the destination at all, or just to a very limited extent. Increasing taxes would be an additional burden on stakeholders who are already paying them.

Undoubtedly, any policy intervention in the context of direct benefits from uncommodified services requires a holistic understanding of the implication of payment schemes. This makes clearer the trade-offs between gains in wellbeing from payments, versus possible losses of access to direct services that payments are contingent upon (Fisher et al., 2014; p. 40). Before implementing any PES policy, modelling and mapping of ES trade-offs are needed (Bateman et al., 2011; Daw et al., 2011; Nelson et al., 2009). Only Where income data of beneficiaries are available, financial benefits from ES can be put into individual context, by applying the rarely-used tool of equity weights to ES costs and benefits (Daw et al., 2011, p. 377).

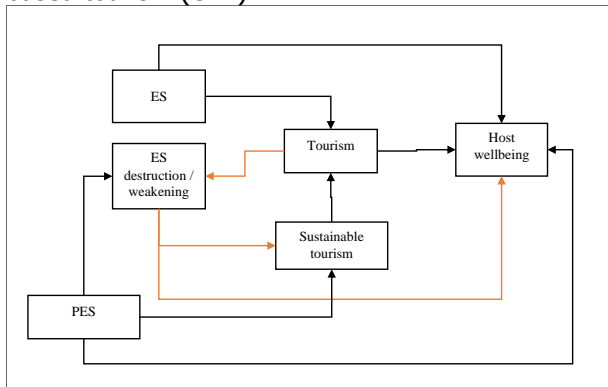
Still, implementation of PES in many destinations is difficult due to oligarchy and lobbying by tour operators. Implementing PES is associated with the risk of corruption. This is especially true for countries with high levels of poverty. In this case, PES may further restrict access by the poorest to the use of ES and thus aggravate poverty (Daw et al., 2011; Fisher et al., 2014; Kosoy & Corbera, 2010; Schlager & Ostrom, 1992; Wunder, 2007).

An additional complication is the already mentioned Easterlin paradox (1974, 1995). Thus, even if the material level rises, it does not mean that people's wellbeing will rise in the same way. Moreover, in developing countries – exactly where the problem of poverty is most evident – wealth as such does not play a key role in people's subjective wellbeing. Respect for tradition, good social relations and social respect play a more important role here (Blackmore, 2009; Copestake, 2009; Copestake & Campfield,

2009; Deneulin & McGregor, 2009; White, 2009). Moreover, as proved by the studies conducted by Wellbeing in Developing Countries (WeD), there are two juxtaposing planes for wellbeing:

1. Doing well means feeling good → typical for Western societies
2. Doing good means feeling well → typical for developing countries (White, 2009, p. 4)

WeD's founding shows that "doing" is a key component of "being" in developing countries (see also Tuula & Tuuli, XXX). "Feeling well" requires the freedom for "doing". In this context, any entitlement replacing endowments will reduce the capabilities and sense of agency. Therefore, the most advantageous policies for community development are those that will either enable traditional endowments or enable local communities, especially the poorest, to "participate" in tourism somehow. However, community development must be understood in an all-inclusive perspective – going beyond statistical poverty data (Giampiccoli & Saayman, 2017). Also, capacity building is first required. We should agree with Giampiccoli and Saayman (2017) or Shang-Pao and Fotiadis (2014) that the most advantageous type of tourism organisation in this context is community-based tourism (CBT).



Legend: Red line – negative impact, destruction
Black line – positive or potentially positive influence

Fig. 1 Ecosystem services - host wellbeing - sustainable tourism relationship model

Conclusions and implications

Tourism has an important influence on the wellbeing of host communities – their income, self-esteem and capacity to aspire. For hosts, tourism plays a role of provisioning service for employment and income. At the same time, tourism reduces access to ES for many groups (especially the poor); it uses ecosystems and often destroys them. The literature widely acknowledges case studies where improper management of tourism led to the self-destruction of the destination or had a negative impact on local culture and the environment. In many cases, tourism deepens social disproportions and

worsens the situation of the poorest (XXXX). Careful planning is crucial here, before the damage is done.

The role of planning is also underlined in regard to poverty (Angelsen & Wunder, 2003; Fisher et al., 2013; Mayers, 2007). As Fisher et al. (2013, p. 37) state, Poverty alleviation and human wellbeing ecosystem services are just as, if not more, likely to be associated with prevention than reduction.

The management of ES (protection or restrictions) is not easy in the face of the conflicting needs of different groups (Ostrom et al., 2009). A starting point is to define the level of ES access and benefits of different stakeholder groups. Knowledge in this regard is essential to evaluate management options and establish acceptable trade-offs. Tackling this gap means seeking to understand the diversity of stakeholders, why they use various ecosystem services, and the potential social conflicts that can arise from the use of specific ecosystem services by different individuals and stakeholder groups at different spatial-temporal scales (Bennett et al., 2015, p. 80). We should agree with Howe et al. (2014, p. 263) that Taking account of why trade-offs occur (e.g. from failures in management or a lack of accounting for all stakeholders) is more likely to create win-win situations than planning for a win-win from the outset.

The consideration of social differentiation in the access to ES is central in understanding what the contribution of ES to wellbeing is. We cannot talk about any contribution in cases where people have no access to the services (Fisher et al., 2013).

The MEA framework, introducing the "philosophy" of monetary value of ecosystems, and recognising the complexity of human wellbeing, can be very useful in tourism research and tourism policies. It requires, however, numerous clarifications. The concept has been criticised for overlooking issues related to the political economy and social differentiation (Daw et al., 2011; Fisher et al., 2013) and for oversimplifying the relationships between wellbeing and nature (Lele et al., 2013). Fisher et al. (2013) also point out that social trade-offs in ecosystem management strategies have been totally neglected.

Unfortunately, MEA (2005) did not consider definitions and findings elaborated by the United World Tourism Organization and did not take advantage of the abundant literature on tourism. As a result, the document generates much misunderstanding, which makes it difficult to properly manage the tourism sector on its basis.

As already stated, in the ES categories created by MEA, tourism is located among different CES (as recreation and ecotourism). However, these problems need to be looked at from a much wider perspective, even if we are talking only about tourists. First, the beneficiaries and recipients of ES are not only participants in ecotourism. Benefits are taken to the same extent by participants in most of other tourism

types (leisure, sightseeing, cruising, even partying – which is often done on beaches). Second, the approach presented in MEA does not distinguish the size of tourism (e.g. individual vs mass tourism), which is essential for the carrying capacity of any territory, even cities. When tourism is based on ecosystems, carrying capacity is crucial. Third, there is no distinction between tourism and recreation. The two categories have been mixed up and treated equally (also in many strategies and policies inspired by MEA). This makes a tremendous difference in the income of host communities. Participants in recreation do not stay at the destination even a single night. They can explore the place without spending a dollar.

Indeed, in order to implement adequate policies for ES in tourism (with due regard to host population wellbeing) researchers should acknowledge the wide background in tourism literature. In fact most ES researchers using the term “tourism” do so “outside” the mother discipline (e.g. with no recognition of what tourism or recreation is) (see Milcu, 2013; Dłużewska, 2016, for examples). This makes it impossible to introduce proper policies based on research findings.

On the other hand, in the tourism literature (and policies), there is still very little use of ES and CPR findings, which would help to consider the environment in a more market-related manner. In the author’s opinion, the PES concept, in particular, can be very advantageous for host destinations (both for ecosystems and communities’ wellbeing). PES could provide legislative solutions allowing all visitors to contribute to local economies. It could also incorporate differentiations; for example, fees for one-day visitors should be higher than for tourists who spend money at the destination for accommodation and meals.

In conclusion, in order to develop tourism that respects ES and host wellbeing, we suggest the following:

1. Modelling and mapping ES trade-offs coupled with stakeholder analysis to identify resulting distributional and financial impacts
2. Better acknowledgement of PES in the field of tourism literature and policies
3. Better acknowledgement of tourism literature in the field of ES literature and policies
4. Better acknowledgement of wellbeing literature in the field of tourism and ES research and policies
5. Recognising differences in wellbeing planes (e.g. for developing countries)
6. Giving priority to endowment policies (especially for the poor)
7. Giving – guaranteeing – poor people same rights/entitlement of sell opportunities of ecosystem products

8. Protecting host (permeant resident – specifically poor people) against outsiders in the usage/selling (entitlement) of Ecosystem products

9. Consistently and comprehensively entrench Ecosystem products entitlement within an enforceable regulative framework based on suitability.

10. Developing the form of tourism that provides and incentive to develop local capacities (such as CBT)

11. Investing in capacity building

These recommendations are global and fairly general indications that should be considered at the interface between ES, tourism and wellbeing policies, whatever the context.

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Conflicts of Interest

The authors declare no conflict of interest.

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