

Enhancing positive impacts at tourist destinations through local participation: New directions for sustainable tourism

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Abstract | This article presents the interplay of community-based tourism (CBT), local supply and carrying capacity by focusing on how to decrease leakages related to goods and services in tourism (such as food and drink, construction material for accommodation establishments and tourism services). It is a conceptual paper whose aim is to present a new direction in tourism carrying capacity to enhance local impacts. It advances a different approach to carrying capacity linked to the concept of CBT, where a company's Corporate Social Responsibility also contributes to the local economy in pursuit of tourism linkages. A new approach to carrying capacity is suggested steeped in local resources, both human and natural, supply capacity and the concept of CBT. The article argues that communities must define their own development trajectories based on their capabilities, capacities and context.

Keywords | Tourism, carrying capacity, local supply, corporate social responsibility; community-based tourism

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1. Introduction

Tourism is of fundamental importance to many countries and localities around the world. However, negative impacts with social, economic, environmental and cultural aspects resulting degraded destinations and ultimately losses for the tourism sector and associated beneficiaries (Caday-Fillone & Villanueva, 2019; Dłużewska, 2018; Dłużewska & Giampiccoli, 2020). Its positive effects do not happen automatically but are predicated on the strength of the linkages existing between tourism and other sectors of the economy (Terzioglu & Gokovali, 2016). Negative effects include economic leakage which is widespread in the tourism sector in many countries (Wiranatha et al., 2017) but especially in developing ones where there is increased evidence that most of tourism receipts “have no impact on local economies because they are spent on imports or earned by foreign workers or businesses, resulting in high leakages” (Chirenje et al., 2013, p. 9; see also Garrigós et al., 2015). Various countries must buy goods and services to please their tourists. Leakages can vary but the numbers are important, thus in developing countries leakages of gross tourism earnings can vary from 10% to 70% and up to 80% (Wiranatha et al., 2017). The Hotel sector uses many products that can to be imported and cause significant leakages, such as imported goods and intermediate products. Food imports represent a very relevant cause of leakage in the hotel sector (Terzioglu & Gokovali, 2016).

Three issues are mostly significant. Firstly, it has been observed that the greater the leakages, “the lower the multiplier effects and the lower the linkages with other sectors, the less likely economic benefits are dispersed throughout the destination economy” (Cheer et al., 2018, p. 450). When goods and expertise are imported, foreign currency and jobs are lost to the local economy. Secondly, leakages in the tourism sector are prevalent in weak (local) economies which cannot produce

enough quantities and quality of products required by the sector particularly in small developing countries (Chirenje et al., 2013). Thirdly, conversely to leakages, linkages represent the use of goods and services in the sector from other sub-sectors of the economy such that if this is predominant, then there is bound to be low level of leakages (Spinrad et al., 1982). The UNWTO (2002) well present the main issue explaining that financial leakages “reduce the development impact of tourism” contrarily to linkages which “results in the creation of more jobs and opportunities for small and medium sized businesses” (UNWTO, 2002, p.11). Thus, the “practical strategy is to work for local linkages, fair revenue retention and integrated development” (UNWTO, 2002, p. 11). For example, the tourism-agriculture linkages have, amongst others, the potential to prevent leakages (Thomas et al., 2018).

From a company level perspective, Corporate Social Responsibility (CSR) is also relevant due to its possible role in increasing the positive impact of a business both locally and globally (Mtapuri et al., 2021). CSR which can be defined as “the responsibility of enterprises for their impacts on society” is a current trend in the tourism sector (Farmaki, 2019, p. 2297). Since the 1990s, hotels have recognized the value of CSR and its adoption for sustainable tourism (Farmaki, 2019). Currently, Sustainable tourism should be viewed as the general overarching aim in any tourism setting because it is the right thing to do which is good for everyone. In a context that aims to decrease leakages and increase linkages, alongside CSR and CBT, matters of carrying capacity (CC) become fundamental.

Carrying capacity “is one of the key principles of sustainable tourism” (Sabokkhiz et al., 2016, p. 105). The concept of CC has evolved from essentially environmental concerns to become “a multidimensional approach combining simultaneously social, economic and environmental dimensions” thus, including physical, social and economic CC

(Pasko, 2016, p. 166). Whereas the concept indicates “a maximum number of tourists for a sustainable tourism activity, this number may not be the optimal level as visitors bring costs as well as benefits; the optimal level of visitors should be related to securing optimal environmental, social and economic gains for the location being visited” (Marsiglio, 2017, p. 633). This implies that in such a context, the benefits must outweigh the costs.

While the debate around issues of CSR and CC are pertinent (for some CSR debate examples see Farrington et al., 2017; Idahosa, 2019; Lund-Durlacher, 2015) the ambition of this article is not to debate these concepts, but to utilize them to advance a new CC model where the role of CSR is prominent.

It is on this basis that this article advances a different approach to CC linked to the concept of community-based tourism (CBT), where a company’s CSR can become a fundamental tool in pursuit of tourism linkages for local development. This is the function that this new model aims to fulfil.

Thus, the article presents a new direction in tourism CC that will enhance local impacts. The new approach to CC is steeped in local resources, both human and natural, supply capacity and the concept of CBT in which the role of CSR can be catalytic. New directions that promote the inclusion of incentives to tourism companies (such as hotels) that engage in local linkages are also presented. Thus, it focuses on decreasing leakages related to goods and services in tourism. These goods and services include, food and drink, construction material for accommodation establishments, tourism services (such as travel agencies, guiding) and so on. The article suggests that tourism businesses, have an opportunity to link their CSR to this new model. Thus, the CSR will guide the hotel management based on local CC – this can also be facilitated by local government by providing incentives to hotels that adhere to the CC model in line with available local resources.

2. Methodology

This article is a conceptual/theoretical paper which is based on existing literature and documents available in the public domain, commonly called secondary data. In that regard, peer reviewed journal articles and books were used. In terms of organization, a literature review covering leakages/linkages, CC and CBT is presented in the next section. Thereafter, a model linking a new conceptualization of CC with CBT and local resources and supply capacity is presented. This is followed by a discussion and conclusion.

3. Literature review

Leakages and linkages in tourism

Leakages are negative to the extent that they impede economic growth and sustainability (Alzoun et al., 2016). There are three types of common leakages, namely, majority stakes held by foreign multinational firms, imports and jobs being held by non-residents (Terzioglu, & Gokovali, 2016). The other forms of leakages include construction of infrastructures, transfer pricing, the use of foreign factors of production, tax exemptions and promotional expenditure (Wiranatha et al., 2017). The size of the leakages depends on size of the hotel where larger hotels bring managerial labour whereas small hotels tend to buy local agricultural produce (Terzioglu & Gokovali, 2016). Hotel ownership, whether local or foreign is an important matter. In Jamaica, foreign owned and luxury hotels use less local food than low class and locally owned hotels. In Indonesia “non-star accommodation establishments, compared to four- and five-star hotels, purchase almost all their food locally” (Terzioglu & Gokovali, 2016, p. 718). Thus, the pattern in the accommodation establish-

ments is that there is a combination of large size, foreign owned and high-end which are more luckily to induce greater leakages while the locally owned, low-end and small size tend to provoke less leakages.

A typical and important example of a leakage is food supply. The lack of linkages between tourism and agricultural enterprises results in increases in imports due to the forces of supply and demand particularly in cases when local products are not available (Terzioglu & Gokovali, 2016). The problem is related to the unviability (in any combination of quality and quantity) of local products (or services). Unavailability of local food products can happen because of three main reasons: firstly, the local geographical context of climate, soil and so on may not practically allow growing products such as bananas in Greenland; secondly, specific human capacities/expertise is needed for the production of certain goods and/or services; and thirdly, for specific products that require huge capital investment outlay, a lack of local available finance can become a major obstacle. Furthermore, in the presence of the above factors, the size of available land is an important issue. For a very small island such as Maldives, even if they could grow some specific agricultural product, its land size will limit the quantity of such product to be produced. From a local agriculture perspective, it can be said that everything that can be produced locally for the local tourism market should be produced locally. Local supply can be improved to strengthen tourism sustainability at local level through working with local farmers who practise sustainable farming for the supply of fresh produce including the introduction of government incentives that favour local products. Local production should be favoured to avoid imports. At the same time human conditions, can also be improved through the education system. The UNWTO (2002) argues that tangible linkages can be achieved in circumstances where product quality, reliability and competitiveness are high.

Deliberate measures must be taken to assist the informal sector to intensify the linkages that exist between it and the formal sector which they both gain from working together. The effect of sustainability practices on financial leakages in the hotel industry showed that community participation in management is important to curb leakages (Alzboun et al., 2016). As such, community involvement is more and more being regarded as essential for the effective planning and management of the tourism sector, and for sustainable tourism. Sustainability has also been linked to other issues such as to ensure the preservation of the CC and consequently the environment (Sánchez-Cañizares et al., 2018). At the same time, inequitable distribution of resources, privatization of the commons and the accumulation of wealth in specific social groups can be obstacles to sustainability. These issues make leakages possible accentuated in foreign-owned, high-end and larger establishments leading to unequal concentration of wealth and increased ownership of the commons through privatisation. This, in turn, entrenches the social inequalities.

New tourists also favor local experiences and products linked to sustainability allowing for closer engagements between tourism firms and local communities in mutually beneficial ways (Chilufya et al., 2019). It can be deduced that CBT is important for those who prefer sustainable tourism (Arintoko et al., 2020). However, requests for local activities do not necessarily translate into positive outcomes as in slum tourism where the results have been mixed (Chilufya et al., 2019). The question of who controls, owns and manages the tourism sector is a fundamental matter in power discourses. In this context, a more decisive approach is needed towards a tourism that is based on CBT principles so that local community members become the controllers and champions of the tourism sector for their benefit and self-determination. It can be surmised that leakages undermine sustainability in the long run and it is CBT that opens

opportunities for community ownership of CBT facilities – these are crucial elements of the proposed model.

Community-based tourism

Community-based tourism (CBT) is “a strategy for social organisation for the local community itself” (López-Guzmán et al., 2011, p. 1609). CBT is linked to underprivileged community members, and is concerned with inclusion, and control of the tourism industry and the equitable distribution of benefits and its immersion in local culture (Strydom et al., 2017). In CBT, local people have the right to control tourism developments (Wijaya et al., 2020), such that the “ownership, management, operation and supervision” of tourism businesses belongs to community members (Arintoko et al., 2020, p. 399; see also Karacaoğlu & Birdir, 2017). Community-based tourism is participatory and empowering through confidence and knowledge building so that communities can chart the developmental trajectory that they wish to take (Tasci et al., 2013; Mutanga, 2022). As such, development must be paced by the communities based on their capabilities and capacities for their current and future benefit.

The above various definitions or characteristics of CBT indicate the link of CBT with the local context (such as natural resources), the local economy (the local systems) and the objectives to improve local people (especially the disadvantaged section of the community). CBT implies that communities control and manage their local resources for their own benefit (Karacaoğlu & Birdir, 2017). The objectives of CBT include conservation of natural and cultural resources, local community socio-economic development, and more ownership of tourism businesses in local hands and the enhancement of the tourist experiences (López-Guzmán et al., 2011). In unison with this line of thinking, Wijaya et al., (2020, p. 2) note that CBT “has a res-

ponsibility to tourists to provide products that care for the natural, social and cultural environment”. Mutanga (2022), citing two cases of CBT in the Caprivi Strip in Namibia and Mahenye in Zimbabwe, observes that CBT is a form of ‘bottom-up’ development which empowers communities by reposing voice to them in matters that involve them as they participate in decision-making, designing and planning for projects. In Botswana, through their participation in the Community-based Natural Resource Management (CBNRM) programme, communities are managing natural resources and conserving wildlife which has empowered them, provided them with employment opportunities as well as the ability to support their livelihoods (Mogomotsi & Mogomotsi, 2022).

To enhance community participation, Gohori et al., (2022) suggests implementing policies that encourage home stays for short term visitors, the institutionalisation of land tenure rights, the devolution of power to grassroot levels and the passing on of indigenous knowledges to next generations as is done by the Basarwa in Botswana, the Sengwe community in Zimbabwe and the Makulele community in South Africa.

In general, tourism is dependent on the same resources it consumes, therefore special attention on the use of such resources needs to be put in place. Mason (2003) observes that “natural, man-made and cultural resources that tourism relies upon are liable to be overconsumed.” In other words, “it is generally agreed that tourism needs to protect the very resources upon which it depends” (Dodds, 2020, p. 2; Cater, 1995). Local community members know better their resources and needs thus, they can make better decisions in relation to tourism development (Karacaoğlu & Birdir, 2017). In CBT, it is the duty of the community to conserve resources in their neighbourhood, to maintain and care for their resources for their own sake and for the sake for those to come after them. (Martini, 2020). This implies that communities must be proud of the legacy that they leave

behind, and the present is as much as important as the past.

One of the enablers of good CBT development is to limit visitors to the CC of the environment and community (Asker, et al., 2010). Okazaki (2008, p. 511) is of the view that a community participation “can increase a community’s carrying capacity by reducing tourism’s negative impacts while enhancing its positive effects.” Thus, in a CBT approach, it is possible to attain CC of a locality without having detrimental and/or irreversible damages to both the community, and the environment as well as to local artefacts.

When external entities direct tourism development, a large proportion of the benefits are likely to leave the community (Tasci et al., 2013) thus going against the concept and role of CBT. Community-based tourism is generally considered to be more sustainable than traditional mass tourism because communities have command over their resources as opposed to when it is in the hands of outside tour operators (Prasiasa, et al., 2020). For Ceylan, et al. (2021, p. 4) mass tourism is distinct and characterized by ‘mass production, mass consumption and its connection to mass tourism centres’, while for Theng et al. (2015, p. 31), it is defined by ‘the volume of tourists compared to the concerned territory and to the local population density’. Ceylan, et al. (2021) also observes that mass tourism involves standardized, mass-produced packages popularly marketed to tourists and often disregards local norms and cultures during consumption. Mass tourism also influences the local environment and context as it involves high concentration of tourists in a locale. “Saturation of a place, and therefore its degradation and its loss of attractiveness are the result of massification” (Theng et al., 2015, p. 31).

CBT attempts to alleviate poverty by breaking the hegemonic control of tourism by rich elite and outside tour operators (Chaudhary & Lama, 2014). In this context in CBT should ensure participation of communities in tourism development in enter-

prises which they own, run and manage that is to say, self-participation (Giampiccoli & Saayman, 2018).

When locals have control, this may mean less leakages. A study on Bali by Wiranatha et al. (2017, p. 10) found out that “a reduction in tourism leakage will lead to a more equitable distribution of income”. Wiranatha et. al. (2017) observes that increasing the level of leakages would reduce economic development, decrease employment in productive economic sectors and broaden inequality among social groups.

CBT is meant for disadvantaged community members with the aim of establishing equity and redistribution; local control of tourism development as well as local resources; it is about control, ownership and management of tourism structures, services and facilities such as accommodation establishments, tourism agencies, and restaurants; encouraging local economic linkages; the sustainable use of local recourses; and facilitating interaction between hosts and guests. Community-based tourism by its nature should shun leakages and strive to sustainably exploit the local resources through supporting tourism linkages in a given local context in pursuit of holistic, local community development - CBT represents a fulcrum or space for wider community participation and hence permeates the proposed model.

Carrying capacity

The issues related to CC have been mentioned since the 16th century (see Butler, 2020). It is stated that in 1964, the exploration of the concept of CC vis-à-vis recreation was done. For Caday-Fillone and Villanueva (2019, p. 4), CC “was contingent on the values and needs of the people in relation to some management objectives”. The concept of CC has evolved from a purely qualitative and normative concept to a more quantitative interpretation that involves a finite number of vi-

sitors such that strategies, indicators and targets related to CC have emerged (Caday-Fillone & Villanueva, 2019). Other concepts 'similar' to CC such as Limits of Acceptable Change (LAC), Visitor Experience and Resource Protection (VERP), Visitor Impact Management (VIM) are found in literature (Kennell, 2016). These measures illustrate the importance of sustainability and the need to limit volumes of visitors in the interest of the environment and communities.

CC and sustainability should be considered together as "useful concepts and frameworks for analysing the impacts and limits of development" (Saarinen, 2006, p. 1125). Navarro Jurado et al., (2012) argue that 'carrying capacity is an operational tool to achieve sustainability'. Definitions of both CC and sustainable tourism are abundant because of different opinions on culture, nature and their use as resources (Saarinen, 2006). Sustainability and CC both "refer to the scale of tourism activity that can occur in a spatial unit without doing any serious harm to the natural, economic, and sociocultural elements at destinations" (Saarinen, 2006, p. 1126). However, while sustainability is more a global concept, CC focuses more on the local context (Kennell, 2016). Thus, "carrying capacity does not rhetorically imply global or intra- and inter-generational solutions but aims to offer more time/space-specific answers at the local level" (Saarinen, 2006, p. 1125). CC is about the current location and present use and present generations. In other words, it is more about the here and now.

CC has been defined from a supply side as "the capacity of the destination area to absorb tourism before the negative impacts of tourism are felt" whereas from a demand side, CC is "the levels beyond which flows will decline because tourists believe there are too many tourists" (O'Reilly in Caday-Fillone & Villanueva, 2019, p. 5). Thus, the CC of a destination takes six types - physical, economic, perceptual, social, ecological, and political (Saarinen, 2006; see also Massiani & Santoro,

2012; Kennell, 2016).

Socio-economic CC "may be defined as the total number of visitors that can be allowed without hindering the other functions that the city performs" (Massiani & Santoro, 2012, p. 143) or alternatively the economic CC has also been given as "the maximum use of the resource that can take place by tourists before leading to an unacceptable level of economic dependency on tourism in the area of the resource" (Kennell, 2016, p. 133). In the context of capacity planning and management techniques, the WTO (1983) maintains that studies must be done in communities to ascertain available capacities to maximize the benefits without disrupting local economies and cultures. In this context, the same document mentions that studies should include issues of economic benefits, thus, "the correct size of development to bring economic benefits to the community that can be supported by the local community in relation to their numbers, skills and training, without the need to disrupt the community by the excessive importation of labour from outside or existing economic activities" (WTO, 1983, p. 19).

This article found it imperative to formulate and advance a new model related to CC that goes beyond the 'simple' negative impact calculations based on the number of tourists, but one linked to local resources and context to increase local benefits, in line with the WTO approach.

Corporate Social Responsibility

The concepts of environmental sustainability, CSR, and responsible tourism are interlinked. They mainly overlap and sometimes are embedded within each other (Idahosa, 2019). Idahosa, (2019: 961) opines that responsible tourism can claim to be CSR for the tourism sector as it borrows a lot from the sustainable tourism movement which arose from the global call for sustainable de-

velopment.

The concept of CSR – largely linked to private sector voluntary actions – is also comprehensive by including tourism stakeholders and environmental, social, cultural and economic issues (Baniya et al., 2019; see also Lund-Durlacher, 2015; on the volunteerism of CSR). “CSR is typically integrated into organizations’ mission and vision to cover financial, environmental and social aspects” (Smith & Ong, 2015, p. 488). The implementation of CSR practices in hotels has been guided by several factors including cost savings, societal pressures, profit maximisation and brand positioning (Farmaki, 2019). The CSR in the hotel sector ideally is expected to promote the ‘triple bottom line’ ap-

proach in which socio-economic and environmental issues are given equal weight in firm strategies (Farmaki, 2019). Besides positively contributing to society, CSR should be valuable to businesses while avoiding damages to the firm’s image when clients perceive CSR as opportunistic or prompted by self-interest rather than the common good (Randle et al., 2019).

We argue that carrying capacity, CSR and sustainable tourism (sustainability) are interrelated and, this interrelation, within a hospitality context includes social, cultural, economic and environmental dimensions in a supportive format (Figure 1 graphically show this relationship).

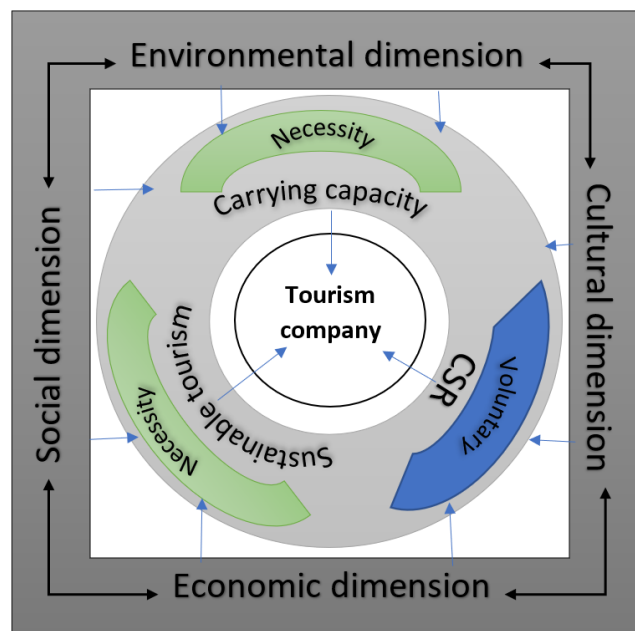


Figure 1 | CSR, carrying capacity and sustainable tourism framework
Source: authors' elaboration after Mtapuri et al. (2021).

Results of CSR are scant (Martin-Rios, 2020). Instead, CSR has been conceptualised as an important element for sustainable tourism in tourism (Moral Moral et al., 2018). Tourism and hospitality, as major global and fastest growing sectors, have the responsibility to advance suitable initiatives such as CSR which are not mere image

making marketing gimmicks associated with minimal societal impact in a 'business as usual' approach but must impact radically in transforming the firm's operations (Martin-Rios, 2020; Idahosa, 2019). That transformation must be seen in how the firm interacts with its employees, communities and the environment for mutual benefit.

Tourism companies use environmentally friendly methods when they lead to cost savings and the creation of competitive advantages (Lund-Durlacher, 2015). Owners of accommodation establishments implement tokenism when they do not honor labor conditions and use grey water on their garden as a sign of their engaging in environmentally friendly practices (see Scheyvens, 2007). For Farrington et al. (2017) CSR is concerned with profit maximisation, it is propaganda to hide power imbalances and maintain prevailing social inequalities. In many cases, the reason for this can be attributed to a lack of honesty by business owners, invigorated by the capitalist model of profitability at any cost (Idahosa, 2019). Instead, del Baldo (2018) is of the view that CSR is no longer a luxury for firms but a necessity which includes the tourism sector. The marketing gimmicks are not enough, 'charity' is not enough, radical and consistent change is necessary (Idahosa, 2019). CSR is necessary and should have impact in communities upon which the firm relies for its profit that sustains it. Ploughing back into communities is good for the firm not for showing off its philanthropic position but to enrich community life, lest, it represents plain grandstanding.

In such a context, voluntary actions alone are not enough as they remain voluntary and based on free-will. There is need for more strict and binding conditions to CSR practices, or sustainable tourism strategies which are enforced by government to ensure improvements in the material conditions of communities. It is noteworthy that private sector lobbyists push for voluntary approaches to CSR, yet voluntary CSR is "without any real potential to change the structures of the tourism sector for social justice if it is not legally enforced" (Mtapuri & Giampiccoli, 2020, p. 10). Practice has also shown that self-regulation does not guarantee the implementation of best practices by industry (Sayman & Giampiccoli, 2016). Dodds et al. (2009) argue that to ensure a more sustainable form of tourism, legislation is needed to make this possi-

ble. Governments must step up to the challenge of guaranteeing the sustainability of tourism, which is re-assuring to investors that such a thrust has the support of Government (Trong Tuan, 2011; Bramwell & Lane, 2010). CSR can be used to transform tourism development, and enhance community participation, hence it commands a place in the proposed model.

Economic incentives and tax credits are necessary to induce action among tourism firms to implement CSR projects (Baniya et al., 2019). In this context, Investment Redistributive Incentive Model (IRIM) (see Giampiccoli & Mtapuri, 2020) can be an option that encourages companies to implement measures that result in positive local impacts such as ownership and management remodeling including the application of other strategies that enhance local development (Giampiccoli & Mtapuri, 2020). IRIM is incentives-based and could be embedded in the CSR itself, so that incentives prompt firms to implement specific CSR strategies.

4. Proposing a tourism carrying capacity model

A United Nation Commission on Sustainable Development document (UNCSD NGO Steering Committee, 1999) observed that there is a need for those running tourism projects to introspect and buy local inputs to curb foreign exchange leakages. Botswana resents an example where money spent by tourist leaks because of the inability of the local tourism sector to promote local linkages (Mbaiwa, 2005). In the same country, while the sector purports to be 'a huge driver of pro-poor tourism', but the firms still import building materials from other countries as well as employing many foreign employees resulting in leakages (Manwa & Manwa, 2014).

The level of leakages is associated with the ca-

capacity of countries to supply goods and services to the market. High economic leakages jeopardise local participation in, and benefiting from, tourism (Garrigós et al., 2015). The expansion of capacity can be achieved through innovative ways. It is necessary to balance the locally available tourism products and services with the number of tourists coming and staying in a destination. Any imbalances are not sustainable and threaten the destination country.

Corporate social responsibility practices of tourism businesses can have a supporting role to carrying capacity strategies by following a similar approach. For example, for a hotel, CSR should link the number of guests to available local resources. In this case, because the hotel looks to having the maximum number of guests, the carrying capacity approach should include two issues:

- first CSR can be linked to local projects to increase the availability of services locally or the products required by the hotel, and
- secondly the CSR practitioners can work, with the hotel management, to find alternative locally available products and services to substitute with the ones that are not available locally.

This CSR approaches can be facilitated with the use of government incentives as enunciated in the IRIM (see Giampiccoli & Mtapuri, 2020). In circumstances where many hotels adhere to this carrying capacity approach in their CSR practices, they gain some incentives of various types. It is conceded that incentives could negatively affect local development, however, the linkages created in the local system through this CSR/carrying capacity approach will eventually absorb the costs of implementing the incentives.

From a community-based perspective, “the setting of limits of growth through negotiations and participation can be termed a community-based tradition of sustainable tourism, in which the host

and the benefits that it may gain from tourism are in a central position in the process” and this participatory approach includes practices that enhance local bases while satisfying the needs of local people (Saarinen, 2006, p. 1129). Sustainable tourism implies that practices must enhance the local base rather than degrade it.

Using a supply side perspective of carrying capacity, it can be suggested that when local people control, own and manage tourism (such as in CBT) by providing accommodation, or other products and services to the tourism sector - carrying capacity can grow. It is possible to have more tourists without damaging the environment and the community and its artefacts. When there is a decrease in the number of tourists to a locality, a CBT approach can rebalance it by ‘increasing’ the profit from each tourist (by decreasing leakages and increasing linkages and the multiplier effect). This will make carrying capacity link to sustainability. UNWTO (2002) opines that growth can be achieved by reducing leakages while maximising linkages. Thus, for tourism to drive economic development, tourist flows have to be controlled while balancing the environmental costs and economic benefits of tourism (Marsiglio, 2017).

A correlation between leakages and linkages with specific types of tourism can be proposed as a substratum upon which a model related to carrying capacity, local resources and CBT can be suggested. Table 1 shows the dominant characteristics of mass tourism and CBT. These are general observations which vary by context and the types of tourism companies prevalent. Foreign ownership, large company sizes and high-end type of establishment is more likely to be associated with leakages. Whereas a type of tourism which is based on community participation in tourism and CBT principles and characteristics, such as local ownership, which is not necessarily high-end and usually of smaller size, is usually aligned to linkages found in the local context.

Table 1 | Relationship between leakages and linkages by type of tourism

Characteristics		Tourism type	
		Conventional/mass tourism	CBT
1	Ownership	Foreign ownership/management	Local ownership/management
2	Segment	High-end segment	Low-end segment
3	Company size	Large companies	Small companies
4	Leakage/linkage perspective	Leakages	Linkages
5	Level of community participation	Weak	High

Source: Authors' elaboration after Dłużewska & Giampiccoli (2020); Giampiccoli & Mtapuri (2020), Mtapuri et al. (2021).

The characteristics shown in Table 1 do not mean that CBT should always remain small. Community-based tourism should grow while retaining its core principles and characteristics. Thus, it should not change its relationship with the local community and territory. CBT should also work to establish itself not necessarily as a 'low' end form of tourism but to become also involved in high-end market segments. The CSR initiated through the IRIM can also encourage the shift by a firm towards implementing CBT principles and characteristics (see Giampiccoli & Mtapuri, 2020).

The new tourism carrying capacity model we propose in this paper is related to the capacity to supply services, facilities and products to the tourists. In other words, the model is about the carrying capacity represented by the number of visitors that a destination can support and manage based on its own resources, human, infrastructural, agricultural and so on. The model includes specific strategies that have to be put in place to increase the resources of the destination in order to have adequate services, facilities and products in the event of an increase in tourist numbers.

Monitoring and evaluation (M&E) is important in CBT (George et al., 2007; Govender & Giampiccoli, 2018; Twining-Ward, 2007). In such a context, monitoring and evaluation become important activities because it reveals the effects and contribution of tourism to the community, and the community's sustainability goals including areas where improvements are needed and where change

is taking place (Twining-Ward, 2007). Importantly M&E should involve the participation of all stakeholders in gathering data, in their analysis, and in the implementation of the necessary actions post the evaluation (George et al., 2007).

We propose that carrying capacity should be associated with what is locally available and, simultaneously, strategies should be put in place to increase what is available thus this implies increasing the supply base (that is increasing the carrying capacity). It is not only important to understand carrying capacity with respect to how many visitors can a specific geographical area sustain before having irreversible damage but also connecting carrying capacity with what is locally available to sustain the requirements of the local tourism market, namely, the supply side of the tourism sector. Mihalic (2020) argues that tourism management and over-tourism are affected by tourism growth, impact levels and the socio-psychological carrying capacity of communities and the point at which to stop depends on stakeholder perceptions on preserving their socio-economic, cultural and environmental interests. Tokarchuk et al., (2020) are of the view that carrying capacity can be measured based on tourism intensity of a destination at a point where subjective well-being begins to wane. CSR by firms can have a supporting role to this carrying capacity strategy.

We define carrying capacity *as the number of tourists that a destination and its resources can sustain and satisfy. To achieve maximum local be-*

nefits, the local community should be able to use its resources optimally before irreversible damages can occur.

In this context carrying capacity is based on local environment/natural and human resources. These last resources include people (numbers), capacity, skills and training. Carrying capacity can also be linked to the social/cultural disruptions occurring in a given destination such as the importation of labor. Thus, import of labor, economic activities and or products and services for the tourism sector should be locally sourced or produced and based on local resources without causing irreversible damage locally or excessive dependency on tourism.

A number of issues are relevant in the carrying capacity model:

- It is based on locally available resources required by the tourism market;
- It considers, when possible, increasing through programmes and strategies the resources required and desired by the tourism market;
- It considers changes (diversification) to products and services for the tourism market, thus striving to find and exploit locally available alternatives (based on local resources) to substitute products and services not locally available in required quantities and quality.
- CSR can be supportive and enhance the model implementation.

Figure 2 presents a model of managing the carrying capacity of a specific tourism destination based on the above matters related to our definition of carrying capacity. An initial assessment of local human and natural resources serves as a base or

guideline with specific carrying capacity information. While each specific context will have its own specific information, this information can include:

- The participation of local people participation in tourism (to highlight the relevance of the CBT approach).
- Local supply of each tourism sub-sector (a survey of number and types of accommodation establishments, the number and types of restaurants, other tourism facilities and attractions);
- Local supply to the tourism sector of each general economic sector (each sector based on its relevance in the general economy. For example, the importance of agriculture and its potential to the economy in terms of output and employment and so on) to tourism supply and in the general economy.

This will assist in finding the current optimal carrying capacity, that is the optimal match between the possible numbers and types of tourists and the carrying capacity of the supply side for products and services for the local tourism sector. Successively, new strategies can be put in places to increase the optimal carrying capacity. These strategies can include tax breaks to companies increasing their linkages to local context (that is, CSR associated with IRIM), for example, purchasing local products or improving local human capacity by enhancing local education in tourism or improving natural resources management. Strategies can change based on each destination's initial conditions and requirements. In other words, strategies are destination specific. Importantly, strategies can also include changing tourism products and types of tourism developments (such as CBT) as required to better match the local resources to enhancing local linkages.

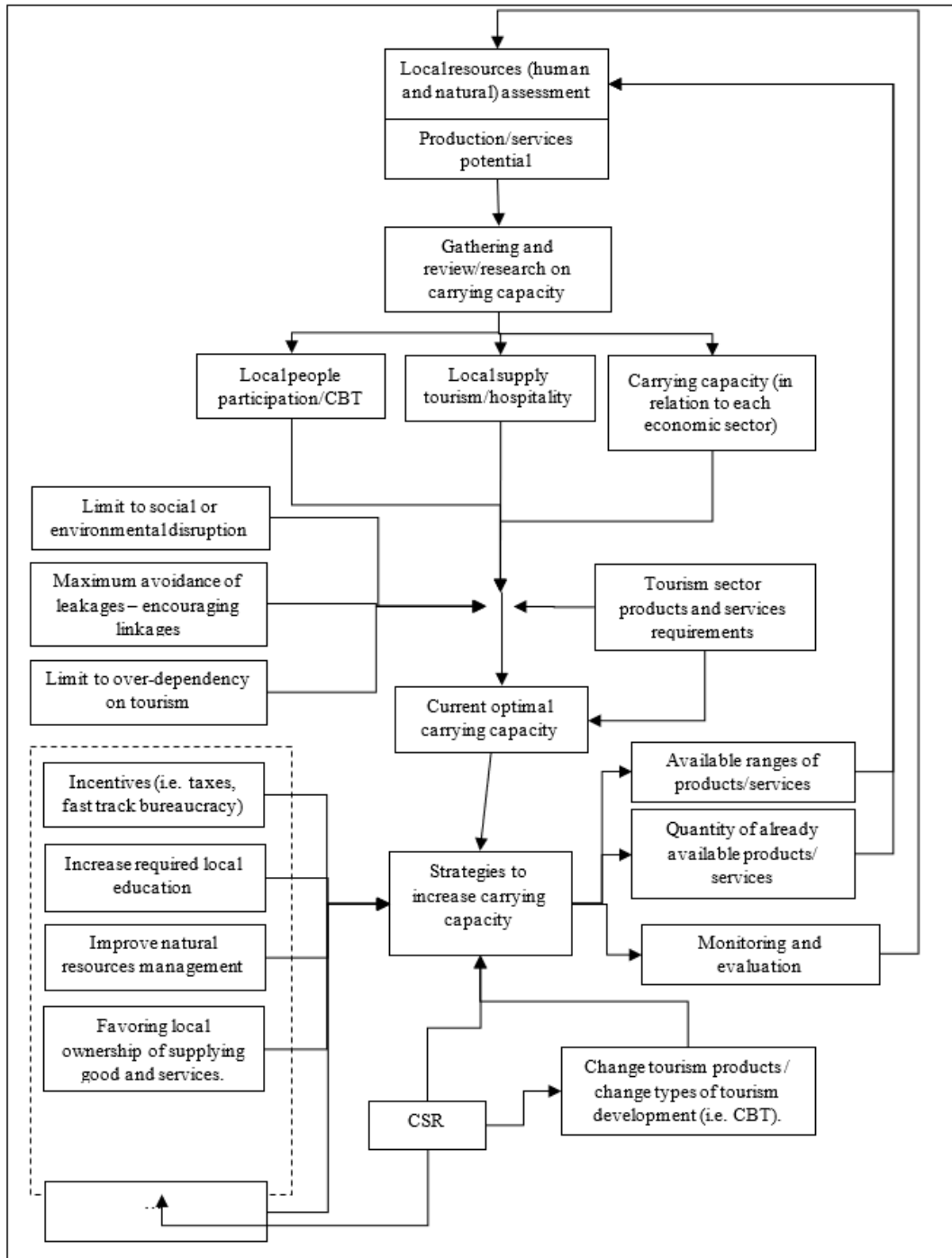


Figure 2 | Supply side carrying capacity model based on local resources
Source: Authors' elaboration

The model's practical contribution is to reconcile leakages and linkages by looking at what is already available and subsequently facilitating and favouring the enhancement of linkages and the

reduction of leakages. When a current situation is assessed, strategies can be facilitated to increase linkages based on the tourism sector's requirements. It also elaborates on drivers of carrying

capacity, including education, incentives, resource management and the promotion of local goods and services, and so on – making it possible for management to act on those factors proactively. It suggests to communities that they must define their own local economic development trajectories based on their capabilities, capacities and context. Its theoretical contribution relates to presenting relevant and plausible factors with an impact on CC in a logical, parsimonious way which are consistent with literature and events.

While there is a number of conditions that cannot be changed, such as climate, population size or land size each destination should adjust what is possible matching the requirements of the tourism sector and the availability of local resources. Importantly, this matching must also not become over dependent on tourism. Changes in favour of supplying to the tourism sector should also remain flexible enough to have a market beyond tourism itself. In as much as leakages are negative to the local destination, the benefits of an over dependence of the local context solely on tourism can also be detrimental to its growth.

Tourism has the potential to support local development, however leakages can jeopardize this potential by making destinations lose their benefits. While the degree and types of leakages will vary based on each destination's characteristics, it can be suggested that local resources, both human and natural, influence the degree and types of leakages. The type of tourism development promoted by a destination is another factor that can influence tourism leakages in a destination.

Destinations should adapt, and change based on the available local resources (both human and natural) and companies should adapt (also attracted by possible incentives) by using their CSR, together with company management, to foster local linkages and making local resources available. As such, the tourism sector in a specific locality should be built on available local resources and not the other way around - that local resources

must adapt to the tourism sector.

The CSR model can be a vehicle which various strategies can be adopted and to facilitate the shift to the adoption of CBT principles and characteristics in the company. While each company will adopt specific CSR approaches based on the company's ethics and policies, the government through a model such as IRIM can encourage the company to embrace this new carrying capacity model. While incentives can be key in this matter it is, also suggested that government should legally enforce some minimum requirements with respect to the adoption of this carrying capacity model based on local supply if real changes are going to take place. To leave tourism businesses to use voluntary and self-regulating approaches, will not yield the desired results with respect to carrying capacity unless legally enforceable laws are passed to achieve that end. In other words, legally enforceable requirements are necessary.

This model alone cannot provide a comprehensive structural change to the tourism sector, but it can provide the right direction towards a more just tourism. Any little step, towards a more just/redistributive, sustainable and locally connected and locally controlled tourism sector should be considered valuable. Thus, the proposed model attempts to go beyond the 'usual' carrying capacity which is related to mere 'damage' caused to local natural resources, attractions and local social context. Instead, it investigates the local context and its supply capacity in term of products and services to the local tourism sector, in order to achieve optimum use in relation to local linkages in the tourism sector. Local conditions vary and therefore specific information related to the model require further adjustments with elaborations. The overarching aim is to present a way to enhance local linkages based on carrying capacity supply side matters – products and services to the tourism sector – to increase local linkages, thus generating local benefits from within.

5. Conclusion

In summary, this article suggests a general theoretical model for carrying capacity based on local human and natural resources and in a context where community participation in tourism, specifically the CBT approach, is performed. It advances that carrying capacity should be matched with a destination's supply capacity to the requirements of the tourism sector in order to rebalance leakages with linkages. Strategies should be structured to increase linkages and reduce leakages. It is also necessary to avoid the over-dependence of the local context on tourism. The CSR practices of tourism companies can become a valuable, supportive and enhancing instrument to this carrying capacity model if adequately utilized. This model is innovative in combining elements of CSR, sustainability, and CBT in an amalgam that supports leveraging local resources and optimizing carrying capacity within a CBT framing. An area for further research would be investigating the use of Information and Communication Technologies (ICT) and Indigenous Knowledge Systems to increase Carrying Capacity.

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