

Sustainable Development of Tourism: Research and Policy Challenges



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Sustainable Development of Tourism: Research and Policy Challenges

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Abstract Substantial conceptual and empirical challenges face tourism researchers, practitioners and policy makers in articulating the concept of sustainable development and in formulating strategies to achieve and maintain sustainable development of the tourism industry. These challenges include better understanding of the dynamics of the sustainability concept and its essential interconnection with human well-being; better appreciation of the complex nature of well-being pertaining to present and future generations of destination residents; improved understanding of the role played by changing quantities and qualities of capital stocks in well-being transmission; and the extent to which capital stocks are substitutable for each other. Addressing these challenges can inform useful directions for future research on theory and good practice in the area of sustainable tourism development.

Keywords sustainable development; tourism industry; well-being; capital stocks

1. Introduction

The standard definition of sustainable development offered in the Brundtland Report describes a process that “meets present needs without compromising the ability of future generations to meet their own needs” [1]. Sustainability is a long-term issue, posing both intra- and inter-generational equity problems. *Intra-generational equity* addresses the needs of the present generation—between different groups within one destination as well as their distribution between destinations. *Inter-generational equity* addresses the needs of future persons that (potentially) could be affected by development activity [2]. Sustainable development involves the integration of economic, socio-cultural and environmental concerns into industrial decision-making processes, *ex-ante* and *ex-post*.

An important initiative to achieve sustainable development globally is the United Nations (UN) Sustainable Development Goals (SDG) 2030 Agenda [3,4]. This initiative comprises a global partnership between all destinations and stakeholders within the public and private sectors, to contribute to achieving economic, social, and environmental objectives in harmony with current and future needs [4]. Major stakeholder groups in tourism include tourism businesses, local communities, tourists, and government agencies such as destination management organisations (DMO). The United Nations World Tourism Organisation (UNWTO), affirms the great potential of the tourism industry to contribute to the achievement of the SDGs, directly and indirectly, and has developed partnerships with various actors (other UN agencies, national governments, development banks, private sector actors) in order to strengthen this contribution [5].

Given the vagueness of the concept of “needs”, a growing number of researchers now argue that the primary goal of sustainable development is to enhance human well-being, now and into the future [2,6–11]. Well-being is now regarded as the appropriate concept to judge human progress. Sustainability and well-being can, in fact, be perceived as twin concepts, and a sustainable world as one where the planet is protected and people have opportunities to pursue flourishing lives [12,13].

Debate over the conditions for social progress has resulted in intensive indicator development undertaken within the perspective known as the *Beyond GDP* approach, enjoying the widespread support of researchers and policy makers worldwide [14,15]. Recognising the inadequacy of standard economic measures such as GDP for capturing critical dimensions of people’s well-being, researchers are developing measures of progress that capture broader aspects of people’s living conditions and quality of life [15–17]. Proponents of the *Beyond GDP* approach recognise that standard economic growth measures do not capture important sources of intra- or inter-generational well-being, such as education levels, leisure time, health status, economic and physical security, social connections or the quality of the working environment. GDP does not

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distinguish between economic activities that enhance social well-being and those that reduce it, nor does it identify inequalities in income, wealth and opportunity that characterise different communities of people [9,14,18]. This recognition has stimulated researchers and policy makers to develop new metrics of human progress that go beyond production-related measures to determine the sustainability or otherwise of alternative industry development paths employing well-being criteria [14,19].

Despite the attention given to refining the *Beyond GDP* approach and associated indicator development, the reality is that industry and economic development world-wide seem to be far removed from the ideal in respect of its sustainability. There is mounting evidence of irresponsible planning with potentially irreversible deterioration of important ecosystems; land and water acidification; excessive greenhouse gas emissions; destruction of the ozone layer; desertification and soil loss; an alarming rate of biodiversity loss, with growing numbers of species facing extinction; and a change in global climate, many of which are associated with human activity [2]. Meanwhile, a high proportion of persons on Earth live in poverty. Each of these and related phenomena pose severe systemic risks to the well-being of current and future generations, particularly lower socio-economic households that are globally the most vulnerable, economically, socially and environmentally. Further, economic growth, continued at currently unsustainable rates, and exemplified by the extent of “overtourism” globally threatens to further erode the planetary supply of fixed resources [2,20].

Several issues may be highlighted which, although widely discussed in the social science research literature, appear to be relatively neglected in tourism study. Substantial conceptual and empirical challenges face tourism researchers, practitioners and policy makers in articulating the concept of sustainable development and in formulating strategies to achieve and maintain sustainable development of the tourism industry. This paper adopts a critical exploratory stance to identify these challenges to tourism study and to analyse possible responses to them. This involves an examination of theoretical concepts and ideas, comparing and contrasting assumptions, issues and perspectives offered in the sustainable tourism research literature. Some important challenges are as follows.

The first challenge is to better understand the nature of “sustainability”. Tourism researchers in general apply a “static” conception of sustainability focussed on the impacts of policies on the present generation. “Sustainability” is an essentially dynamic concept relating to the maintenance or enhancement of capital stocks that transmit “well-being” over time [21]. Tourism studies purporting to address “sustainability” issues, tend to focus on the current rather than potential future effects of development projects [22–24]. Consequently, inter-generational well-being estimation, essential to determining whether or not a destination is proceeding along a sustainable development path, has been relatively ignored. Recognition of the dynamic nature of the sustainability concept implies a need for tourism researchers to develop more future-directed sustainability indicators.

It is now widely accepted that the over-arching goal of sustainable development is to enhance human well-being [7,25]. This implies that the ultimate goal of social policy, including tourism policy, should be to achieve human well-being [26,27]. Human well-being covers the full range of economic, social and environmental factors that affect individual and social quality of life [19, 28–30]. A second challenge involves formulating the particular concept of “well-being” used in analysis and policy-making to achieve sustainable tourism development. Tourism research has estimated subjective measures of resident well-being in various development studies [28,29]. However, objective, as well as subjective measures are required if the analyst is to capture those broader aspects of resident well-being necessary to better formulate policy to achieve sustainable development [30]. Determining the sustainability of alternative development policies requires that tourism researchers go beyond subjective estimates of resident well-being outcomes.

A third challenge involves understanding the mechanisms by which resident well-being is transmitted intra- and inter-generationally to achieve and maintain sustainable tourism development. Industrial development affects resident well-being through the depletion or creation of different types of capital stocks—economic, human, social and natural—that must be managed efficiently for sustained intertemporal well-being [21,31,32]. Curiously, despite growing attention to well-being issues in tourism research generally [33,34], little effort has been made to analyse the links between resident well-being outcomes and capital stock changes associated with tourism development.

A fourth challenge concerns the extent to which different types of capital stocks are substitutable for one another in achieving sustainable development. Researchers continue to debate whether sustainable development requires the total stock of capital to be maintained, with substitution between various types of capital, or whether some types contribute to well-being in a unique way that cannot be replicated by other capital stocks. Two major positions have evolved—“weak” vs “strong” sustainability. Weak sustainability allows full substitutability between capital stocks, whereas strong sustainability argues that the need to maintain critical thresholds of some stocks (particularly natural capital) necessary for human well-being and even human existence itself [35]. Tourism research displays very little awareness of the relevance of this distinction to the sustainable development process [30].

Since well-being outcomes provide more comprehensive information for tourism decision-making than standard key performance indicators of the impacts of growth, the question arises as how standard impact measures may be converted to well-being outcomes [30,36–40]. A fifth challenge thus concerns the role of well-being measures in tourism policy formulation, implementation, and assessment. It is argued below that tourism stakeholders should employ a “well-being lens” to convert changes in the quantity and quality of capital stocks to changes in resident current and future well-being. The potential composition of such a lens can be informed by tourism research.

Despite being relatively neglected in the tourism research literature, the aforementioned challenges are crucially relevant to sustainability theory and practice in tourism development. Tourism research must acknowledge advances in sustainability theory and practice that are taking place in the wider social science literature if it is to be more relevant in the effort to achieve and maintain sustainable tourism development. Each of the identified challenges will be addressed in more detail below.

2. The Nature of Sustainable Development

The concept of sustainable development derives from the *triple bottom line* concept, emphasising intra- and inter-generational equity anchored on three distinct but interconnected pillars—economic sustainability, social sustainability, and environmental sustainability [35,41]. Sustainability is a dynamic concept involving the interactions between these pillars. Sustainability implies the capacity to maintain some entity, outcome, or process over time while conserving the resources on which that capacity depends [42]. For tourism to develop sustainably, a suitable balance must be established between these three dimensions. Measurement problems present substantial challenges to establishing any “ideal” balance, however. Three paths to sustainability may be distinguished:

- *Economic sustainability* involves maintaining the capital stocks required for generating income and improving living standards, ensuring viable, long-term economic operations, with opportunities for residents to gain decent employment and fair earnings;
- *Social sustainability* involves respect for human rights and equal opportunities for all persons in society to enjoy a quality life. This requires an equitable distribution of benefits to persons in the present and in the future, with a focus on poverty alleviation. Important issues concern the well-being of local communities, preservation of cultural identity and traditional values, respect for cultural diversity, gender, race and religion, maintaining and strengthening social relations, and high levels of trust between individuals and towards public institutions;
- *Environmental sustainability*: conserving and managing resources needed for economic activity and quality of life, especially non-renewables essential to life support. It involves maintaining essential ecological processes, reducing emissions of pollutants, and preserving biological diversity and natural heritage for the present and future generations.

Ecological economists regard this division as problematic since it implies a certain independence of economy, society and nature [43]. Ecological economists argue the need to replace the static, linear model associated with Figure 1, with more dynamic, integrated, systems models incorporating the dynamics of stocks, flows, trade-offs, and synergies comprising the full range of variables affecting sustainable well-being [6]. Nevertheless, the concept of sustainability, depicted in Figure 1, is widely accepted among tourism researchers [44]. The economic aspect involves tourism businesses generating goods and services that are valued by society and by visitors, and produced through provision of decent work opportunities that provide income to households.

The social dimension requires tourism activities to respect and preserve local culture and heritage. The environmental pillar requires tourism-related consumption and production activities to respect planetary boundaries, through efficient and effective management of natural resources. Each aspect raises challenges for good governance. Tourism governance involves an increasingly networked set of inter-relationships between actors in the public, private and NGO sectors, bringing together tourists, host communities, businesses and government institutions of the state with an interest in tourism, to enable sustainable development [45]. Since effective governance is a fundamental condition for the sustainable development of tourist destinations, the policy issues to be discussed below link closely with the concept of “good governance” of the tourism destination.

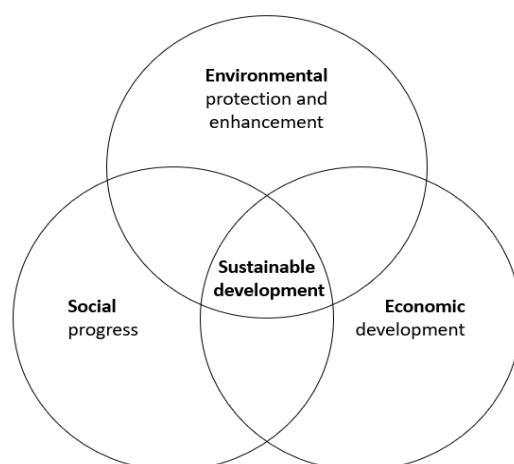


Figure 1. The relationships among social, environmental and economic sustainability.

For human society to progress, and to achieve the sustainable development of any industry over time, there must exist transmission mechanisms for development strategies enacted today to affect future generations of people. In the absence of these mechanisms, there is no reason to assume that positive economic, social or environmental effects of development policies enacted today will generate lasting positive well-being outcomes into the future. Following upon the Brundtland definition, economists have conceptualised sustainability as an essentially dynamic concept achieved by preserving or enhancing the total stock of capital that maintains “well-being” over time [21]. Sustainable development requires that the *per capita* stock of capital—the productive base for well-being that is bequeathed to the next generation—be at least as large as the stock that the current generation itself has inherited [21,46]. Unsustainable development occurs when present progress is at the expense of the well-being of future generations. Estimation of future (inter-generational) well-being is thus essential to the assessment of the sustainability of alternative development paths for all industries including tourism.

This discussion highlights two challenges that tourism researchers must face at this point.

- (1) Given that human well-being is an essential element of the sustainability concept, tourism researchers need to understand the nature of well-being and its role in tourism development and policy analysis. Given their role in identifying sustainable paths for tourism development, well-being measures used by tourism researchers must be credible with a sound basis in theory.
- (2) For several decades, economists have understood that the mechanism for transmitting well-being outcomes from the present to future generations consists of changes in the quantity and quality of capital stocks [21,47,48]. This implies that an understanding of the relationships between capital stocks and well-being outcomes is essential to interpreting and evaluating the sustainable development of the tourism industry [18,36]. By and large, tourism researchers analysing sustainable development, have ignored the connection between changing capital stocks and resident well-being outcomes.

These issues will be addressed in the following two sections.

3. Accounting for Well-being

Human well-being covers the full range of economic, social and environmental factors that affect individual and social quality of life [49]. It is regarded as a multidimensional concept comprising variables relating to material circumstances, physical and mental health, psychological state, freedoms, opportunities, capabilities, flourishings, sense of meaning or purpose in life, thrivings and functionings, self-acceptance, social relationships and their relationship to diverse features of the environment [7,10,19,33,50]. The well-being concept is informed by a range of disciplines, including economics, psychology, sociology, theology, biology and philosophy, providing a wide variety of perspectives relating to well-being study [9,17,26,49,50].

To date, where tourism researchers have analysed well-being they have tended to focus on subjective rather than objective measures, tourists rather than residents, and current rather than future well-being. As will be argued below, this focus has limited the relevance of much tourism well-being research to the topic of sustainable development.

3.1. Subjective vs Objective Measures of Well-being

Subjective well-being (SWB) includes individuals' emotional and cognitive evaluations of their lives, happiness, need fulfilment and life satisfaction [51]. SWB is widely regarded as comprising three elements: life evaluation—a person's reflective assessment on their life or some specific aspect of it; hedonism—personal feelings or emotional states typically applying to shorter time experiences; and eudaimonia—a sense of meaning and purpose in life, involving flourishing and thriving [52,53]. SWB is measured through surveys whereby individuals report directly on different aspects of their well-being.

In contrast, objective measures of well-being relate to externally verifiable sources of individual, and societal well-being. Objective determinants of well-being include material living standards (income, wealth, quality of housing), physical and mental health status, education and skills working environment, work-life balance, social connections, cultural identity, opportunities for civic engagement, good governance, environment quality, and personal and financial security [27,54,55]

With some exceptions [34], tourism research has focused on subjective measures of well-being, based on relatively easily collected survey-based data relating to “perceptions” and “attitudes” of tourists and residents [28,56,57]. In tourism studies of resident well-being, measures of resident “life satisfaction” tend to be emphasised [29], disregarding the fact that SWB comprises different elements and the most appropriate SWB measure will differ according to context. Not only are individuals often poor judges of their own present and future well-being, but they tend to give inter-generational well-being outcomes relatively little weight in decision-making compared to their current well-being. Indeed, inter-generational well-being, dependent as it is on changing levels and qualities of capital stocks, cannot be addressed in detail in the absence of objective measures to complement subjective measures [36]. Since SWB measures used in tourism research typically fail to capture the various complexities of the well-being concept, the policy relevance of numerous study findings is limited. A broad dashboard of well-being indicators, based on a mix of subjective and objective sources of well-being, provides a sounder basis for the design and appraisal of tourism development policies than does a focus on a single source of well-being [10,55,58].

3.2. Current vs Future Well-being

Tourism studies of “sustainability” have tended to focus largely on the effects of tourism development for the current rather than future generations [22,23]. Current well-being applies to the present generation within or outside of a particular destination. Intra-generational studies address the distribution of current well-being between different groups in society. Inter-generational well-being studies explore levels of resident well-being that (potentially) could exist in the future as a result of development activity. A comprehensive account of changes in resident well-being associated with sustainable development requires that indicators of current well-being be complemented by indicators of future well-being [9,43]. Not surprisingly, various uncertainties pervade estimates of the effects of developments on inter-generational well-being but recognition of the potential effects of present development activity on future resident well-being is an essential element of sustainability research and practice [9,11,36]. Failure to adequately distinguish the

sources of current and future well-being has prevented sustainability considerations to be properly addressed in tourism study.

3.3. Well-being Indicators

Given the need for well-being estimates to inform tourism analysis and policy for sustainable development, the well-being measures employed by tourism researchers must firmly be based on theory. Theory-based well-being indicator selection helps to ensure that the development assessment process is strategic and consistent, and facilitates benchmarking and inter-destination comparison. However, with only some exceptions, tourism researchers have tended to “cherry-pick” indicators from varied data sources rather than base them upon established well-being frameworks such as the *Better Life Initiative* [55], Planet Happiness [59], Bhutan’s Gross National Happiness Index [60], and the Happiness Alliance [61]. Of these frameworks, the *Better Life Initiative* is perhaps the most comprehensive, making a clear distinction between indicators of current well-being (with a mix of subjective and objective sources) and indicators of sustainable well-being relating to changes in the quantity and quality of capital stocks [9,27,55,62]. While some tourism research has recently employed the Human Development Index (HDI) comprising indicators of income, health status and educational attainment as proxies for resident “well-being” [63,64], this measure is overly narrow, excluding several important dimensions of resident well-being identified in the established frameworks. The national statistical offices of a growing number of countries, including New Zealand, UK, Canada, Germany and Ecuador are now routinely collecting and publishing national dashboards of well-being indicators [65,66]. Unless tourism researchers adopt or develop the types of well-being measures employed by theorists and policy-makers, their findings will have little relevance to the wider public debates on appropriate resource allocation to foster sustainable development.

4. Capital Stocks and Well-being

On the widely accepted “capitals approach”, the condition for sustainable development is that the present generation must bequeath the next generation a stock of productive capacity supporting well-being *per capita* at a level at least as large as that enjoyed by the present generation [8,21,36]. The systemic resources that underpin future well-being comprise four types of capital—economic, human, social and natural [48,67].

Economic (manufactured) capital includes physical infrastructure as well as the financial assets of governments, businesses and households. Tourism-related economic capital includes hotels, restaurants, cruise terminals, airports, shopping and entertainment facilities, transport and telecommunications networks, as well as the financial capital funding tourism support services. The larger the stock of economic capital, the greater is the productive capacity of a destination to attract tourist visitation and expenditure, generating GDP and employment growth, with potential to enhance resident material well-being.

Human capital is the stock of knowledge, skills, competencies, creativity, physical, emotional and mental health of individuals basic to the productive potential of the labour force including the ability to develop, innovate, and employ new technologies to create personal, social and economic well-being [37,68]. Education can play an important role in enhancing the quality of human capital available to the tourism and hospitality sectors.

Social capital comprises public and private sector networks supporting social cohesion with shared norms, values, social ties and understandings, creating opportunities for individuals and groups to trust and co-operate with each other for mutual interest [66,67]. Social capital in the tourism industry includes civic organisations, business networks, neighbourhood associations, voluntary associations, joint ventures, strategic alliances, community centres, festivals and events, that help to foster a community spirit of sharing and collaboration to drive valued forms of tourism supply [69].

Natural capital comprises renewable and non-renewable environmental resources that support all forms of life, and human activity directly or indirectly, for biological, cultural, spiritual or economic reasons. Ecosystem services in particular, supplying provisioning, regulating, cultural and supporting services, are closely linked to various forms of human well-being current and future [44].

Lack of attention to the role of capital stocks in achieving and maintaining sustainable development has led tourism researchers to neglect study of the mechanisms necessary to transmit well-being from the present to future generations.

4.1. Links between Capitals and Well-being Outcomes

To assess tourism's success in supporting sustainable development, researchers must analyse the links to resident well-being of changes in each of the four types of capitals driving tourism growth [32].

Economic capital and well-being. Increases in economic capital lead to growth in tourism GDP and tourism employment and productivity [37], increase resident material well-being [55,70]. Increased income and wealth, equitably distributed, provides greater opportunities for individuals to achieve well-being outcomes [71,72]. A variety of stock, flow and risk-related indicators of present and future well-being are associated with the destination stock of economic capital. These include investment in R&D, destination net financial position, financial net worth of government, level of household debt, extent of leverage of the destination financial sector and exposure to risk and cyclical downturn [36,55,70,73].

Human capital and well-being. Two major sources of human capital influencing well-being outcomes from tourism development are the health and education systems [17]. The health status of individuals provides opportunities for social and leisure activities that enhance well-being, as well as job access [74]. A range of medical conditions can result in premature mortality, reducing the level of human capital available to tourism and other industries. The education system, including tourism education, contributes to present and future well-being through the development of knowledge, skills, productivity improvement, and the ability to innovate [61,75]. By transmitting knowledge currently and into the future, education has a major impact on resident well-being. Education is also associated with better health, lower crime rates, higher levels of trust and civic engagement, volunteering and philanthropy, good social relationships and deeper personal fulfilment [76].

Social capital and well-being. Social capital is strongly influenced by the degree of fairness in the distribution of resources. Different types of social capital—bonding, bridging and linking—support tourism development as well as generating various well-being outcomes to people, individually and socially [77]. Well-being indicators include the extent of networking activity, levels of trust between individuals and towards institutions, co-operation, information sharing, volunteerism, ethical behaviour in business, effective governance, gender parity in civic engagement, and sense of belonging [60,74,77,78]. Of these indicators, the forging of trust resulting from social interaction, is seen to be particularly important across all industry sectors including tourism [79].

Natural capital and well-being. Various benefits to humans are associated with the natural environment and healthy ecosystems. Ecosystem services comprise four sources of well-being: *provisioning services* (supplying food and materials), *cultural services* (providing opportunities for scientific, educational, recreational, aesthetic and spiritual enrichment), *regulating services* (carbon sequestration and climate regulation, air and water purification) and *supporting services* (carbon storage, nutrient cycles, waste assimilation), essential to the biodiversity necessary for the health and survival of all species [15]. Natural capital has particular relevance to tourism in attracting visitation while also connected with other types of capital (economic, human and social) that generate well-being, present and future [71]. Indicators relevant to natural capital and well-being in the context of tourism development would include the stock, flow, risk and resilience indicators relating to phenomena such as hazard reduction, changes in land cover, size and significance of protected areas, material and carbon footprints, soil and water stress, climate change, and threats to biodiversity, which pose formidable threats to future human health and well-being [36,43].

The capitals approach provides a robust theoretical framework for identifying and evaluating the well-being outcomes of sustainable tourism development [11,67]. However, many capital-related indicators remain absent from sustainability indicator lists compiled by tourism stakeholders [22,23] despite their relevance to the resident well-being outcomes of sustainable tourism development. The opportunity exists to remedy this neglect as part of the UNWTO initiative *Statistical Framework for Measuring the Sustainability of Tourism* (SF-MST), an organizing structure for integrating statistics on the economic, environmental and social dimensions of sustainable tourism [80]. Development of the MST needs to be more informed by indicators relating to each type of capital stock. Tourism researchers should attempt to incorporate well-being measures into the MST as essential data for policy-making affecting both present and future

generations of destination residents. Further effort is required to move from the conceptual framework of the capitals approach to a practical set of tools for policy to enhance current and future resident well-being outcomes associated with tourism development [36]. Tourism stakeholders have the opportunity to provide a “tourism spin” to generic well-being indicator sets, estimating the effect of tourism development on the resident well-being outcomes associated with changing capital stocks.

4.2. Substitution between Capital Stocks

To achieve sustainable tourism development, important decisions must be made about the types of capital that can be used up in the present and the types that must be preserved for the future [36]. According to the “weak sustainability” view, changes in the different types of capital can be substituted for each other—any one form of capital can be depleted provided “proceeds” are reinvested in other forms of capital [21,81]. In contrast, proponents of strong sustainability apply the “precautionary principle” to development projects whereby the only acceptable compensation rule for protecting inter-generational well-being is to maintain “critical” capital stocks above threshold levels, especially those functions essential for human life support, which are irreversible, and make a unique contribution to resident well-being [40,82]. The practicality of this position depends on the formulation of acceptable notions of “criticalness” and the measures adopted to estimate threshold levels of capital stocks [83,84]. The standard “triple” bottom line view of sustainable development seems dynamically incapable of addressing this issue [36,40].

The “criticality” of each type of capital stock depends on ecological, economic, political, social, and cultural criteria [85]. Although strong sustainability research has tended to focus on levels and flows of critical *natural* capital, any component of any type of capital stock may be regarded as critical to human well-being if it contributes to well-being in a unique way. Consistent with strong sustainability, if valued sufficiently by society, threshold levels of different types of capital stocks should be maintained, [84,86]. This involves widening the scope of “critical capital” beyond natural capital to embrace aspects of those economic, human and social capital that are irreplaceable, are subject to uncertainties, are valued for symbolic, heritage, spiritual, cultural, and related reasons, and which make a unique contribution to present and future resident well-being [85]. Extending the scope of the components of “critical capital” to relate more closely to resident values has substantial implications for the use of the capitals approach in determining the direction of sustainable development of the tourism industry. For any particular tourism development context, stakeholders can identify which critical capital thresholds may be exceeded and debate the extent of change that might be permissible.

The explicit consideration of critical thresholds should give policy makers a better opportunity to improve development decision-making and to avoid developments that lead to unsustainable outcomes. Accounting for critical thresholds in policy-making would enable tourism decision-makers to identify circumstances where trade-offs between capital stocks are unacceptable given that minimum amounts of a number of different *types* of capital (economic, ecological, social) should be independently maintained [31,85,86]. Certain trade-offs may be “acceptable” at a local level, but not at the destination level, or vice versa. Further research is required to develop indicators of critical levels of different tourism-related capital stocks, where the notion of “criticalness” and associated stock threshold levels may differ between different tourism communities in different tourism planning and development contexts.

By informing decision makers about the substitution possibilities between capital stocks and the consequences for overall social well-being, the capitals approach can help to prioritise alternative tourism development paths. Despite their relevance to the study of sustainable development, weak and strong sustainability perspectives on the potential substitutability between types of capital stocks have largely been ignored in the tourism literature. While tourism researchers appear implicitly to adopt a strong sustainability view [87], the theoretical and practical implications of applying strong sustainability conditions to promote sustainable tourism development have generally been ignored by tourism researchers. Ultimately, permissible substitutions between the different types of capital stocks cannot be determined without reference to the outcomes for current and future well-being [88].

5. Policy Challenges

Estimation of resident well-being outcomes associated with tourism development help to inform policy trade-offs and provide more relevant information for decision-making than standard performance measures. Well-being measures can also be used to identify policy gaps and issues that are not receiving sufficient attention by policymakers.

5.1. Tourism Policy through a Well-being Lens

In several papers [30,36–40], Dwyer has argued that a set of well-being indicators can be employed to act as a “lens” to convert destination performance indicators into resident well-being outcomes, present and future. On this approach, well-being outcomes do not merely *complement* key performance indicators, but instead form the ultimate assessment criteria for estimating the level of progress associated with tourism development. The suggested well-being lens, comprising a broad multidimensional indicator set, based on established well-being frameworks [27,55,70] can act as a “filter” or “prism” through which tourism development impacts must pass in order to identify and measure the present and potential future effects on resident well-being. While the challenges for sustainability are mainly global, the effects of policy on well-being should be measured at the destination level. At the grassroots level, residents can engage in a visioning exercise with public surveys, workshops and consultations to determine those well-being outcomes that are valued most highly by the community [59,66]. Lists of suitable well-being indicators, reflecting present and future well-being, have been developed by international agencies and tourism researchers [18,36,39,48,66,70]. The well-being lens is thus consistent with a community-based approach to tourism development, helping to foster public debate and engagement to ensure that tourism development meets the collective needs of host communities. Composition of the lens can be refined over time as improved measures are developed and as the links between tourism development impacts and resident well-being outcomes are better understood.

The well-being indicators identified for each capital type provide the opportunity to enrich policy discussion by estimating resident well-being outcomes associated with sustainable tourism development. The proposed well-being lens can inform analysis of the well-being outcomes of alternative development paths and identifying policies that enhance social well-being. It can be applied at different stages of the policy cycle, covering policy formulation, implementation and evaluation [89].

5.2. Overcoming Barriers to Change

Incorporating resident well-being outcomes into policy assessment involves two major challenges for destination managers—overcoming institutional resistance, and expanding the capacity to generate well-being outcomes [62,66].

A formidable barrier to developing improved measures of destination progress is the neoliberal view that GDP growth is the primary goal of industrial development [14]. Neo-liberalism focuses on short-term profitability from industrial developments rather than long-term social benefits [9,15]. Decision-makers in different industries and different government departments also tend to focus on performance indicators for which they are directly accountable, without reference to the wider impacts of their actions in areas not directly under their responsibility [65]. Within the neoliberal perspective, private and public sector organisations, and statistical agencies responsible for collecting, reporting and managing, standard economic indicator sets have a vested interest in maintaining the *status quo* or “business as usual” [89]. Unequal power positions in society may prevent the development and use of well-being indicators for policy assessment. Attempts to develop and employ well-being measures for government agencies may also be accorded low priority in order to meet economic goals, particularly in developing economies. Given that much of tourism activity globally occurs in the informal economy, the development of well-being measures with a tourism focus will be particularly challenging in destinations where well-being data are not collected routinely or else outside the scope of institutionalised data collection channels.

As a complementary strategy, policy makers should strive to expand civil service capacity to employ well-being measures, influencing cultures of practice within existing institutions, and putting new institutions and structures in place to generate well-being outcomes from tourism development [62]. Installing social well-being as a common policy objective can enhance dialogue and cooperation among different government agencies and can help to achieve stronger strategic

alignment across public agencies and between public, private and civil society organisations [66]. As noted above, several national governments have acted to increase destination capacity to pursue resident well-being as the major policy objective [61]. Specific strategies include: legislative measures to ensure well-being outcomes are addressed in policy formulation and assessment; incorporating indicators of social progress into systems of national accounts; improving the well-being evidence base available to policy makers; creating new agencies responsible for monitoring resident well-being; and engaging with residents on their needs and values [62,66,90]. These initiatives allow public and private sector organisations to invest in types of economic, human, social and natural capital that will best promote sustainable development. The well-being lens can also inform public and private sector strategies directed towards “designing for well-being” [91]—involving investments that expand residents’ capabilities for creating and sustaining well-being [7].

Initiatives to reduce barriers to applying well-being measures and to enhance destination capacity to incorporate well-being measures into policy making are unlikely to be successful unless driven by a transformative shift in values away from neo-liberalist thinking [89,92–94]. Serious application of a well-being lens in tourism policymaking requires embedding well-being into the culture and machinery of government decision-making [66].

5.3. Tourism Participation in the 2030 SDG Agenda

A large research effort is being devoted to measuring progress to achieve the SDGs [3,4,95,96]. In much of the extant literature, progress towards achieving each SDG is assumed to generate positive well-being outcomes. This (false) assumption has led tourism researchers to neglect analysing how well-being outcomes, positive or negative, can be incorporated into assessing SDG achievement. As the above discussion makes clear, however, the evaluation of tourism’s progress towards the achievement of each SDG is incomplete without a full accounting of the outcomes on present and future resident well-being.

Different destinations may prioritise particular SDGs over others depending on their expected outcomes for resident well-being [6,39]. Since initiatives to advance any one SDG will likely affect the achievement of some others, more information is required concerning the interactions between SDG achievement and resident net well-being outcomes. Importantly, a better understanding is needed of the nature of the links between tourism progress in respect of SDG achievement and well-being outcomes for different segments of the resident population particularly the poorest members of society and other disadvantaged groups including women [97]. Trade-offs must also be made between well-being outcomes achievable at the present time and for future generations, requiring an explicit ethical stance to be adopted.

Tourism policy making to achieve sustainability objectives consistent with the 2030 SDG agenda, must be informed by estimates of the resulting well-being outcomes for residents [39]. This requires studies of the effects of changing capital stocks on both current and future well-being, and the links with the different SDGs, a relatively neglected research area to date.

5.4. Well-being at the Industry Level

Given their impacts on employee well-being and because of the way their products and services affect societal well-being outcomes [37,38], tourism businesses play an important role in helping to achieve sustainable development at the destination level.

The workplace environment affects job satisfaction, personal recognition, social support, greater productivity, reduced absenteeism and reduced job turnover [98]. Employment provides workers with opportunities to acquire skills, form friendships, integrate into the community, and achieve self-realization [99]. In contrast, unemployment causes erosion of self-confidence, health problems and social exclusion [100]. Choice of an appropriate work-life balance depends importantly dependent on the extent of gender equality and the availability of decent work [101].

In respect of the effects of firms’ activities on the wider society, productivity growth drives living standards and social well-being [37]. Increasing numbers of management theorists now argue that in addition to generating revenues and profits, firms should strive to drive positive social/environmental change as an organizational objective, create mutually beneficial relationships with stakeholders, and interact progressively with the market, competitors, and industry institutions. Creating long-term value for all stakeholders implies that the social and environmental impacts of firm operations and well-being outcomes intra- and inter-generationally, should be

built into firms' mission statements and business models, rather than being addressed as "optional extras" [89,100]. Opportunities exist for tourism businesses to employ the well-being lens proposed above in formulating, implementing and assessing development projects, while exploring the benefits of the alternative business models that firms can adopt consistent with this approach [101].

6. Regenerative Tourism vs Sustainable Tourism

In recent contributions to the critical tourism literature, researchers have argued that the concept of "regenerative tourism" should replace "sustainable tourism". Regenerative tourism is that which replenishes, revitalizes and contributes to the long-term flourishing of destination communities and environments [93,94]. It emphasises systemic, long-term thinking, respect for human values and nature's laws, and opportunities for self-renewal in ever-changing conditions [102]. Claims in support of regenerative tourism include the elimination of over-consumption, the need for long-term perspective in decision-making, the need for a fundamental shift in values of all destination stakeholders, emphasis on the well-being of all living things, and a sense of stewardship, caring, respect, equity, transparency, inclusion, innovation, and collaboration, supporting the renewal and flourishing of social and ecological systems [94]. The principles underpinning a regenerative tourism perspective are based on the seminal work of Fullerton [103] and fashioned for tourism by Sheldon [93,94]. These principles include: *empowered participation* (tourism-related decisions should be community driven); *honours place and community* (tourism policy should honour the sense of place, culture and tradition); *views wealth holistically* (tourism is multi-faceted and interconnects many industry sectors/destination success measured in terms of well-being); *seeking balance* for net benefit (of economic benefits and social and environmental costs); *in right relationship* (between tourist and resident and tourist and biosphere); *innovative adaptive response* (encouraging entrepreneurial activity); *robust circulation* (of wealth and knowledge in destination); *edge effect abundance* (cross-fertilization of ideas between tourism and other industries). Analysis of the conceptual and practical implications of these principles characterizes much of the ongoing research effort on regenerative tourism [93,94]. Designing for resident well-being involves creating, maintaining and enhancing those attributes that enhance well-being outcomes through recreation, sightseeing, entertainment, and hospitality experiences [92,104]. These attributes include "creativity", "community vitality", "innovative culture" and various other components of human and social capital, as well as respect for planetary boundaries.

It is important to note that the capitals approach to tourism sustainable development is compatible with each of the listed "principles" of regenerative tourism. Both sustainable tourism and regenerative tourism are concerned with the long-term well-being of all stakeholders and with the quantities and qualities of capital stocks that transmit well-being from the present to future generations. Various initiatives related to regenerative tourism also involve efforts to improve the quality of capital stocks over time [94,95].

An important criticism voiced by proponents of regenerative tourism is that sustainable development focuses on minimizing adverse impacts of development (economic, social, environmental), while regenerative tourism emphasises the replenishment of a destination's resources to enable it to thrive in the long-term [92,93]. While it may be conceded that the focus of much of the sustainable development literature has concerned the minimization of social and environmental damage rather than developing a vision for a better world, this focus is not a feature of the capitals approach or strong sustainability *per se*. Rather, it relates to the preferred ethical basis to driving tourism research and practice. Ethical perspectives on human responsibilities associated with development processes are undergoing vigorous debate in the philosophical literature, primarily between forms of Anthropocentrism and various alternative types of Environmental Ethics [105,106]. The issues highlight the importance to make explicit the ethical perspectives underlying decision-making associated with pursuing the goal of sustainable development. The wider ethical debate has substantial relevance for sustainable tourism development in the process of identifying critical capital stocks and associated levels of well-being. At this time, it is fair to say that no clear ethical perspective has been developed as a basis for either sustainable tourism development or regenerative tourism [41].

What the concept of sustainability based on the capitals approach can offer the regenerative tourism approach is a theoretical core emphasizing the role of changes in the quantities and qualities of capital stocks in transmitting resident well-being outcomes intra- and inter-

generationally. In turn, what regenerative tourism can offer sustainability research and practice is the emphasis on the importance, not just of preserving the quantities and qualities of a range of resources, but of rejuvenating and regenerating assets and practices to foster social progress. Regenerative tourism can continue its focus on the conditions that enable this vision to be fulfilled including refining its ethical basis. In this respect, the two approaches may be regarded as synergistic rather than as alternatives. What needs emphasis is that the core thesis of sustainable development—that capital stocks and flows affect resident well-being currently and in the future—provides an essential basis for alternative tourism development approaches including regenerative tourism and its variants.

7. Implications for Tourism Research and Policy

This paper has flagged the importance of well-being estimates in assessing the sustainable development of tourism. With only some exceptions, tourism research has adopted a narrow and somewhat superficial approach to analysing well-being issues compared to the wider social science literature. More comprehensive measures of current and future well-being beyond resident perceptions are necessary if resident attitudes or perceptions are to link with the major sources of well-being and have policy significance [18]. Understanding the interconnections between different areas of well-being and how these differ for different people will ultimately result in more effective and better-targeted policy interventions for currently disadvantaged demographic groups within the destination.

Tourism researchers should devote greater effort to distinguishing the different dimensions of the subjective dimensions (life satisfaction, experience and eudaimonia) comprising resident well-being and include these dimensions into their analyses. They should also include objective dimensions of well-being in well-being study, while analysing the links between subjective and objective measures in particular tourism development contexts.

An additional issue is that studies of tourism and well-being have focused mainly on tourists, with a relative lack of research on the well-being outcomes affecting residents of local communities including tourism industry workers [107]. While studies of tourist well-being certainly have an important place in tourism study, especially in the area of destination competitiveness [38], progress in respect of articulating the conditions for sustainable development requires greater attention to be given to the implications of tourism development for resident well-being.

Recent research aside [36], the role of changing capital stocks as transmission mechanisms, linking current resident well-being with future resident well-being, continues to be relatively ignored in tourism research. A research effort is required to move from the basic theoretically ideal framework of the capitals approach to a practical set of tools for policy makers (DMO) to incorporate changes in capital stocks into well-being assessment generally, and to achieve and maintain sustainable development specifically. This research effort is underway in the wider social sciences [11,36,62,67] but has yet to engage appropriate attention from tourism researchers.

Tourism researchers need to systematically address the distributional impacts of tourism development for current and future generations. Since intra-generational well-being involves the ability of different groups in the population to access services provided by the destination's capital stocks, tourism researchers should examine the inequality of opportunities afforded by access to capital stocks [9]. A policy that has positive outcomes in one area—such as improving current income—may have negative effects on other dimensions of current well-being, e.g., health status, associated with the depletion of capital stocks. An important question often ignored in tourism research is whether the proposed policy improves well-being *now* (current well-being) or in the *future* (transmitted by changes in capital stocks). It cannot be assumed that a policy that achieves the current well-being objectives of residents will have positive future well-being outcomes. Additionally, major trends, such as global warming and loss of biodiversity, raise large questions for inter-generational equity. As argued earlier, tourism researchers must devote greater effort to analysing inter-generational issues and to develop frameworks, tools and institutions to ensure inter-generational equity is embedded in assessment processes and in policy advice.

The extent to which different capital stocks are substitutable also presents an ongoing problem for tourism researchers and practitioners. Issues to be addressed include developing criteria to identify critical thresholds pertaining to certain components of different types of capital stocks, and determining how such criteria can inform decisions regarding acceptable trade-offs between different types of capital. Tourism researchers can play an important role in addressing how

DMO's and regional development agencies can usefully integrate the concepts of critical trends and thresholds relating to different capital stocks to improve the tourism policy agenda.

A further challenge for the capitals approach is that of valuating the different types of capital. The quantity of capital may be measured either according to its *asset* value, or in relation to the resulting *flow* of benefits [11,67]. Valuation techniques, involving “shadow pricing” must correct for both real-world price distortions as well as situations where for many types of stocks, market prices are non-existent [21,47]. The dominant approach to measurement is the “hybrid capital approach” that employs both physical and monetary measures of stocks and flows [9,32]. This approach enables the application of the capitals approach in tourism development policy and planning. Meanwhile, participatory techniques to determine community values, such as deliberative monetary valuation, are gaining the favour of researchers and destination managers [108]. Participatory techniques have particular relevance where deep ethical/cultural convictions stand in the way of monetisation, an important issue in various tourism development contexts.

While this paper has had an in-country destination focus, the sustainability challenges highlighted are clearly of global as well as destination importance. Any destination attempting to enhance the well-being of its citizens will generate transboundary effects on the well-being of citizens elsewhere [76]. Researchers face the challenge of evaluating these impacts, and their relation to policies, at different levels—international, national, regional and local—and at different spatial scales. Ideally, internationally accepted concepts, classifications and methods should be used in data selection and analysis to promote consistency of use across all destinations [66]. As noted above, the MST represents an important step towards stabilising international standards in the measurement of tourism sustainability, capable of supporting the development of reliable, internationally comparable quality statistics that can be employed by DMO.

8. Conclusions

Much of the research on sustainable tourism development does not fully address the essential dynamics of the concept of sustainability. Since tourism development influences resident well-being through the creation or depletion of different types of capital stocks, the sustainability challenge for tourism stakeholders involves managing these stocks efficiently for sustained or increasing intertemporal well-being. Adopting the capitals approach to assessing sustainable tourism development, supports good tourism policy focused on enhancing the capacity of economic, human, social and natural capital to improve the well-being for destination residents.

Well-being measurement, extending beyond standard destination performance indicators, is required in order to provide a more detailed picture of social progress and its sustainability. Well-being measures can be used to prioritise tourism development strategies, identify inequalities across a broad range of well-being outcomes and opportunities, and identify policy gaps and issues that are receiving insufficient attention from destination managers. Strategy assessment employing well-being measures can also drive more meaningful participation of the tourism industry in progressing the 2030 SDG agenda. While various conceptual and empirical challenges still need resolution, the recommended well-being lens can represent an essential component of policymaking.

If tourism stakeholders are to give serious attention to well-being measures to guide destination development along sustainable paths, a number of other challenges must be met. These challenges include a better understanding of the dynamics of the sustainability concept and its essential interconnection with human well-being; an appreciation of the complex nature of well-being pertaining to its subjective and objective dimensions, with relevance to present and future generations of destination residents; an understanding of the role played by changing quantities and qualities of capital stocks in well-being transmission; and the extent to which capital stocks are substitutable for each other; and application of a well-being lens applied to standard impact indicators to estimate the associated resident well-being outcomes. Addressing the challenges highlighted can inform useful directions for future research on theory and good practice in the area of sustainable tourism development.

The issues addressed in this paper may be expected to drive sustainability theory development and policy making into the future. Adopting credible well-being indicators, and undertaking more detailed evaluations of the impact of specific policies on people's lives, will allow DMO and other tourism stakeholders to play a more substantive role in achieving and

maintaining sustainable development. The issues addressed have important implications for good governance of the tourism industry. Given the critical theoretical stance adopted, the next step is to engage in related empirical studies at both the destination and community levels. Hopefully, the discussion will help tourism industry stakeholders to formulate, implement and assess sustainable tourism development across all destinations.

Conflicts of Interest

The author has no conflict of interest to declare.

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