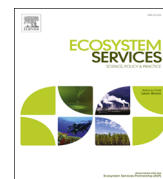




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# Tourism in Zanzibar: Incentives for sustainable management of the coastal environment



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## ABSTRACT

Tourism was identified in the late 1980s as a sector with major potential for driving economic development in Zanzibar and has since grown enormously from roughly 19,000 annual visitors in 1985 to well over 200,000 by 2007. Although tourism is now one of the most important sectors of the economy, contributing roughly 25% to GDP, the impact of tourism on poverty reduction and the environment has been decidedly mixed. The rapid expansion of tourist infrastructure on the coast, combined with a population growth rate of over 3%, has put great pressure on coastal areas. In some areas local villages have seen their access to the beach and sea greatly restricted with resulting loss of livelihoods, while relatively little of the economic benefit from tourism has gone to local communities. The coastal and marine environment is seriously degraded due to both human and natural causes. The paper explores the reasons for this, focusing on the role played by the distribution of benefits from tourism and the (dis)incentives this creates for sustainable management, especially among local communities that steward the marine ecosystem. It does this by estimating the incomes (wages, profits and taxes to local government) generated from five major categories of tourism found in Zanzibar, and quantifying the distribution of incomes among five different stakeholder groups. The resulting recommendations are relevant not only for Zanzibar, but for all developing countries that rely on international tourism.

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## 1. Introduction

Tourism is one of the fastest growing economic activities worldwide and nature-based tourism is a major component of the industry. Nature-based tourism can contribute to economic development and create strong incentives for sustainable management and conservation of ecosystems when it generates income and employment to the local economy; Costa Rica and Mauritius are often cited as successful examples. But maintaining tourism and the income it creates for future generations requires sustainable management of the natural capital underpinning tourism, and this will occur only when all key stakeholders have a strong stake in sustainable management.

Broadly speaking, there are two groups of key stakeholders (1) those directly involved in tourism like the private sector, line ministries, local communities and civil society organizations; but also (2) agencies responsible for macroeconomic management, like the Ministry of Finance and Planning or others which control the national budget and make decisions that may indirectly affect tourism such as infrastructure development, business regulation, and investment in education of the labor force. They need to understand what tourism

contributes to the economy, how to increase the benefits, and what can potentially be lost under mismanagement of natural capital.

Measuring the distribution of benefits is a critical for sustainable management of an ecosystem. Many studies have shown that incentives for sustainable management are strongest when benefits accrue to those who steward natural resources. In developing countries (both middle-income and low-income), much of the tourism business is controlled by foreign operators and much of the income from tourism may accrue to them rather than the domestic economy. And even when the domestic economy provides much of the labor, it may be the case that workers and business operators from large urban areas benefit, while local communities are left out.

At the macroeconomic level, policy-makers in many countries face a challenge of job-creation and poverty reduction; these goals are as important as the traditional macroeconomic goals of economic growth and stability. Furthermore, there are always competing uses for land areas, especially coastal areas where the majority of the world's population lives. Understanding the contribution of tourism to the domestic economy, employment, the balance of payments is necessary to determine how much to invest in tourism and supporting activities.

Zanzibar is a small, densely populated island archipelago off the coast of Tanzania with many endangered and rare species of

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corals, fish, seagrass, mangroves, and other flora and fauna. The average per capita GDP was only \$415 in 2007 and roughly 50% of the population falls below the poverty line (Office of the Chief Government Statistician, 2006, 2008). Its population of 1.1 million is highly dependent on the marine ecosystem, which accounts for 30% of GDP, 25% of which is from coastal tourism (Lange and Jiddawi, 2009). Poverty reduction and economic development will depend on sustainable management of its natural capital, especially the coastal ecosystem (Grootenhuys and Lopez, 2003; Revolutionary Government of Zanzibar, 2007; Ruitenbeek et al., 2005).

In the Zanzibari economy of 30 years ago, there was very little tourism; local communities had free access to the coastal ecosystem and received all the benefits, almost entirely from artisanal fishing.<sup>1</sup> International tourism<sup>2</sup> was identified in the late 1980s as a sector with major potential for driving economic development in Zanzibar. Since then it has grown enormously, from only 19,368 visitors in 1985, when the promotion of international tourism by the government began, to an estimated 219,047 in 2007. Its spectacular beaches and coral reefs, combined with a rich cultural heritage, make Zanzibar a unique tourist destination and it has been declared a World Heritage Site.

Although tourism is the most important sector of the economy, there has been very little economic analysis of its contribution to the national economy or impact on the lives of Zanzibaris. While the potential to contribute to economic development is great (e.g., 'pro-poor tourism' (Ashely and Mitchell, 2007)), foreign tourism has also been a powerful force for environmental degradation, social change and disruption (Gossling, 2003). The impact of tourism on poverty reduction and the environment has been decidedly mixed. The rapid expansion of tourist infrastructure on the coast, combined with a population growth rate of over 3%, has put great pressure on coastal areas. In some areas local villages have seen their access to the beach and sea greatly restricted with resulting loss of livelihoods, while relatively little of the economic benefit from tourism has gone to local communities. The coastal and marine environment is seriously degraded due to both human and natural causes: uncontrolled tourism development, rapid population growth, overfishing and destructive fishing practices, overharvesting of mangroves, dumping of untreated wastewater from urban areas and periodic coral bleaching.

Economic analysis provides a powerful tool for decision-making about the role of tourism in Zanzibar's future development. This paper assesses the extent to which Zanzibaris benefit from tourism, the (dis)incentives created for sustainable management of the coast under current management, and identifies ways to increase participation and benefits for local communities.

Tourism is not a single, homogeneous activity—it has many different segments with different economic, environmental and social impacts on each set of stakeholders in Zanzibar. This paper disaggregates tourism into five different market segments and five different stakeholder groups. The economic analysis then estimates (1) the incomes from coastal tourism contributed to the macroeconomy (wages, profits and taxes to local government); (2) the distribution of economic benefits from each tourism segment among different stakeholder groups; and (3) the impact of tourism development on the access of local communities to the coastal ecosystem for livelihoods.

The paper is organized as follows: the next section describes the overall methodology and data sources used. Section 3 describes the economic value of coastal tourism,

and the distribution of benefits among five different stakeholder groups in Zanzibar and outside Zanzibar. Section 4 discusses the access of local communities to the coastal and marine ecosystem and how this is impacting on livelihoods. The final section integrates the valuation of tourism ecosystem services with the national income accounts, and discusses the policy implications for marine conservation and sustainable development, as well as priorities for further work. While the data available for this study date from 2007, the analysis and recommendations are still relevant to Zanzibar, and to all developing countries that rely on international tourism.

## 2. Measuring and valuing international tourism in Zanzibar

### 2.1. Definitions and methodology

This paper estimates the economic contribution from international tourism to the Zanzibari economy. The economic contribution is defined in terms of contribution to national income, which is based on market transactions and (largely) observed prices, rather than a measure economic welfare. Contribution to national income is useful to measure income and employment, revenue received by government and the balance of payments.

Income in the national accounting sense is called 'value-added,' and is calculated as gross revenue (the value of output) minus the cost of intermediate inputs (goods and services) used for production. Value-added can be disaggregated into two main components:<sup>3</sup>

- Compensation of employees—wages and salaries plus benefits and in-kind payments.
- Gross operating surplus or Mixed income—a residual income that remains after paying for all other production costs. This component of income is a mix of several things: the earnings of the self-employed who are not paid an explicit wage; the 'surplus' to cover the cost of capital and depreciation; and resource rent that may occur when natural resources are the basis for economic activity.

Value-added accrues mainly to the private sector as employees and owners of businesses. The government of Zanzibar, like all governments, also benefits from economic activities, as the recipient of taxes and fees that are paid out of value-added. Relatively little information is available about all taxes and fees in Zanzibar. Such revenues are only included in this analysis if they are either reported or can be reliably estimated. Reliable sources of estimation include (a) visa and airport departure fees paid directly by tourists in Zanzibar, and certain taxes and fees paid by businesses which include tourism-related levies (hotel bed night levy, restaurant levy and tour operator levy) and part of the VAT, income and other taxes and levies. This represents a lower bound estimate of taxes and fees paid to the Zanzibar government. There is no estimate of additional taxes and fees that may be paid to the mainland government.

#### 2.1.1. Key stakeholder groups

In an economy, different agents receive income by providing labor or capital to production. Given the importance of income distribution for development, poverty reduction and sustainable management of coastal ecosystems, the agents are differentiated into five groups: Beneficiaries in local communities where coastal tourism occurs:

<sup>1</sup> Fisheries operated as an open access resource with no management. This was sustainable at that time because the population and fishing capacity was low relative to the resource.

<sup>2</sup> There is a very small domestic tourism sector; international tourism dominates and is the only sector discussed here.

<sup>3</sup> A certain category of taxes, taxes on production, is also part of value-added, but is not significant in most of Zanzibar's marine-based economic activities.

1. Zanzibari villagers in coastal areas where most beach hotels are located and other coastal livelihoods activities occur (fishing, seaweed farming, and mangrove harvesting),
2. Urban Zanzibaris involved in tourism businesses in Zanzibar Town and its suburbs,

Beneficiaries in Zanzibar, but not in the communities where tourism activities occur:

3. Zanzibaris from outside rural villages involved in coastal tourism, often as business owners but also employees, especially managers,
4. Zanzibari government, and Beneficiaries outside of Zanzibar:
5. People from mainland Tanzania or other countries as (part-) owners of businesses, or employees in tourism.

For each of these stakeholder groups, Compensation of employees and Gross operating surplus/mixed income (including rent), is calculated. For government various taxes and fees are calculated as described above.

### 2.1.2. Major segments of the Zanzibari tourism industry

Tourism is not homogeneous in Zanzibar, and this provides opportunities for different stakeholders to participate and benefit from tourism. There are five categories of tourism, which vary in terms of economic and environmental impacts and the relationship with local communities:

1. *All-inclusive package tourism* based in large, foreign-owned hotels known as 'clubs' constructed to serve this market exclusively. The 'clubs' target mainly European tourists with a mid-range budget, have little or no interaction with local communities, and do not make environmental responsibility a priority. Average per capita spending by tourists in this segment is \$123/day.
2. *Large-scale, up-market tourism* based in large hotels, mostly foreign owned, serving mainly middle-to-high-end travelers, both package and independent travellers; average per capita spending in Zanzibar is \$173/day. Their impact on the local economy and environment is mixed: some hotels reach out to local communities while others wall themselves off, similar to the 'club' hotels. Some operate in an environmentally sensitive manner, while others do not.
3. *Small-scale, up-market tourism* based in small, mostly foreign-owned hotels, including a few eco-lodges targets the high-end tourists, package or independent, who spend the most money; average per capita spending in Zanzibar is \$225/day. They generally operate with the greatest environmental awareness. More of these hotels see themselves in a long term partnership with local communities and are willing to increase local hiring, and invest in improving local education, water and health, and other aspects of community life.
4. *Mid-range tourism* targets both package and independent tourists with a mid-range budget; average per capita spending in Zanzibar is \$118/day. But in contrast to the 'club' tourist sector, the hotels serving this segment are often locally owned and generate a greater share of benefits to the local community.
5. *Budget tourism* consists almost entirely of independent travelers staying in low-cost hotels that are usually owned by local Zanzibaris and hire most of their staff from local communities, or from Zanzibar town. Average per capita spending in Zanzibar is \$77/day.

## 2.2. Data sources

To construct tourist accounts data is needed about the international tourist arrivals, tourist expenditures ('demand' side) and

the tourism industry ('supply' side). The 'supply' side includes businesses supplying the goods and services for tourists such as accommodations and snorkeling trips, and the 'demand' side includes spending by tourists on these goods and services. Surveys of the demand side, called Tourism Expenditure/Exit Surveys, typically ask tourists how much they have spent and how long they have stayed. Together with Tourist Arrival Statistics collected by government, total spending by tourists can be calculated. While Tourist Expenditure Surveys can provide estimates of total spending, or total output of the hotel industries, they do not show how much income is generated and how that income is distributed between the domestic economy and foreign operators. Surveys of the supply side, mainly of hotels and tourism related activities, are needed to determine how much income is generated.

Using methods established by the World Tourism Organization (WTO, 2000), several surveys were carried out in 2007 and 2008 to gather this information, described below. Additional data sources include unpublished databases for tourism obtained from government agencies and the private sector.

### 2.2.1. Tourist arrivals

An important step in the analysis of tourism was to obtain an accurate figure for the total number of international visitors to Zanzibar. Arrival statistics are compiled by the Zanzibar Commission for Tourism, but the official statistics only record international visitors arriving by ferry from the mainland, or by air from another country. They do not record international visitors who arrive by air from mainland Tanzania. However, the number of international visitors flying to Zanzibar after touring mainland Tanzania or other parts of East Africa is significant because of the importance of multi-destination tourism, so this is a major gap in tourism arrival statistics.

To fill this gap in the tourist statistics, a survey of the five major airlines serving the routes between mainland Tanzania and Zanzibar was carried out. The key was to distinguish foreign passengers from domestic passengers on the airlines. It was possible to do this because the airlines distinguished passengers either as (i) residents or non-residents (with a price differential) or (ii) by currency of payment, either local currency or US\$. International visitors were defined as those who either purchased a non-resident ticket or paid for their ticket in US dollars.<sup>4</sup> The official figure for foreign tourists arrivals to Zanzibar in 2007 was 143,283; the additional 'missing tourists' obtained from the airline survey were 75,764 for a total of 219,047, about 53% higher than the official statistics.

### 2.2.2. Tourism exit/expenditure survey

Using methods established by the World Tourism Organization (2001), a Visitors' Exit Survey of 1840 foreign visitors was carried out at both the airport and seaport in February and July 2007, two high periods for tourism. Total spending by tourists was estimated by scaling up the survey data weighted by nationality and mode of arrival (international air, domestic air, or ferry).

The Visitors' Exit Survey was based on a standard questionnaire that covered various personal characteristics such as nationality, age, purpose of visit, and so on. The survey added two sets of detailed questions about (i) length of stay, accommodations were used, purchases made in Zanzibar and before arriving; and (ii) the frequency and location of nature-based activities (e.g., diving, snorkeling, visiting a Protected Forest, etc.). The first set of questions allows mapping of tourists into one of the 5 segments

<sup>4</sup> Three airlines charge different rates for residents and non-residents; the other airlines do not charge different rates but keep separate records for tickets paid for in local currency and in US dollars. Non-residents pay in US dollars.

of the tourism market in Zanaibar, as well as quantification of expenditures made in the domestic economy vs expenditures made elsewhere. The second set of questions support spatial mapping of activities to indicate both the pressure on different resources as well as incomes generated by different sites.

### 2.2.3. Tourism industries' survey

A Survey of Tourism Industries was carried out to identify how much income was generated by tourist spending and how that income was distributed among the stakeholder groups. The survey covered hotels, restaurants, package tour companies, tour operators offering local trips such as dolphin viewing, dive operators and others. The primary focus was on the 236 registered hotels, because accommodation is the main component of spending. A long version of the hotel survey with face-to-face interviews covered 20% of hotels (measured by capacity); a shorter version covered an additional 30% of hotels. All segments of the tourism industry were surveyed. The surveys asked for detailed information about ownership and other characteristics of the hotel, revenue and cost structure,<sup>5</sup> occupancy rates, sourcing of food and other purchases, employment and wages, and several environmental issues (water use, wastewater disposal and beach erosion). Most of the dive operators were also interviewed for similar information. Several tour operators specializing in travel from each major market were also interviewed to determine how to breakdown the cost of package tours into those components spent in Zanzibar and those outside (e.g., airfare, tour company commissions).

## 3. Tourism contribution to GDP and distribution of income

There is great variation among the five tourism segments in terms of average length of stay, number of visitors and spending (Table 1). Budget tourists comprise the largest number of visitors, 33%. Average daily expenditures range from a low of \$77 (Budget) to \$225 (Small up-market). 'Club' tourists have the longest average stay (8.4 days), followed by Budget tourists (7.4 days).

Tourists spent US\$184.9 million in the Zanzibar economy in 2007 (Table 2), but spending is not the same as income or contribution to GDP. Total contribution of tourism to GDP is calculated as the value-added (compensation of employees plus gross operating surplus) generated by each industry that produces an item that tourists buy. Incomes are then distributed among the five stakeholder groups based on data from the industry surveys about their participation in production. Tourism generated incomes of \$119.6 million in 2007, or 25% of GDP, and a large amount of foreign exchange earnings (balance of payments is not calculated for Zanzibar independently from the United Republic of Tanzania).

For both poverty reduction and the coastal environment, a key issue is the extent to which Zanzibaris, and especially people living in coastal communities—who are partly responsible for its management, dependent on it for survival and often in competition with tourism—are benefiting from tourism. Overall, Zanzibaris obtain 47% of tourism GDP, but only 20% accrues to local communities; most goes to government in the form of fees and taxes (15%), and to Zanzibaris from outside the local communities (12%) Non-Zanzibaris (from mainland Tanzania and other countries) obtain 53% of tourism GDP but this distribution varies a great deal among different categories of tourism.

There is a striking contrast among the tourism sectors in the share of benefits accruing to local communities (Fig. 1). Nearly two-thirds (63%) of all income from Budget tourism goes to local communities while only 4–6% goes to local communities from the 'Club' tourism and Large-scale up-market tourism. Mid-range tourism (25% of income)

also generates significant benefits for Zanzibar. The comparison of Mid-range and 'Club' tourism is useful because the tourists in both groups spend a similar amount, but have quite different economic impacts on Zanzibar, especially the local community.

Employment is an important way to participate in the tourism economy. It was only possible to estimate employment for the hotel industry. A significant number of jobs are also Employment, which was only calculated for hotels, is also significant; roughly 40% of jobs in hotels are filled by women. However, the coastal communities are often least able to benefit from tourism employment opportunities. Their relatively poor education makes local villagers ill-equipped to work in large hotels serving a sophisticated, mainly European clientele in all but the least skilled positions. The majority of hotels prefer to employ people from Zanzibar Town, mainland Tanzania or foreigners in skilled jobs, especially those which involve interaction with tourists. Tourism in Zanzibar has triggered a migration from mainland Tanzania which has been socially disruptive (Gossling and Shultz, 2005).

Government has a powerful role in the tourism industry by setting tourism policy, so it is critical to understand how it benefits from tourism. Most government revenue is obtained from the 'Club' and Large-scale, up-market segments of the tourism industry. As a share of total income, 'Club' tourism is most valuable for government—18% of income generated goes to government. This is due, in part, because virtually all these tourists arrive from overseas and leave on international flights, generating the highest revenue for visa and airport departure fees.<sup>6</sup> A large number of tourists in the other segments arrive and/or depart on domestic flights or the ferry, having obtained their visa in mainland Tanzania and paying very low departure fees.

Resource rent accrues to two groups: government in the form of taxes and levies, and the private sector in the form of profits above the opportunity cost of capital. It is not possible to calculate rent accruing to the private sector without more extensive information about tourism businesses finances, particularly their capital costs and taxes. However, the government levies reported here can be viewed, at least in part, as a form of rent capture. Hotel levies, restaurant levies and tour operator levies are rent capture instruments and account for 3% of tourism value-added. This is a lower bound for rent capture by government. At the other extreme, all the taxes and fees reported here—which do not represent all the revenue government received from tourism—can be viewed as a form of rent capture; these account for 15% of tourism value-added.

### 3.1. Multiplier effects from tourism

The figures reported above measure only the direct income and employment generated by tourism businesses. But tourism has the potential to generate substantial additional local benefits through the 'multiplier effect'—income and employment created when goods and services needed to run tourism businesses are produced locally instead of imported from mainland Tanzania or elsewhere. A multiplier analysis of international tourism in mainland Tanzania showed significant employment and income benefits beyond the direct impact of tourist spending (Kweka et al., 2001). It is not clear that a strong multiplier effect holds true for tourism in the Zanzibar economy. The hotel surveys indicated that although hotels and restaurants bought most of their fish (except prawns) and seasonal fruit from local sources, most vegetables and other food items were sourced from mainland Tanzania, a finding supported by value-chain studies of tourism by Coles (2007) and Ellman (2007). However, this

<sup>5</sup> A few hotels were willing to give actual figures for revenues and costs; the other hotels were willing to identify the shares of turnover for major categories: employment, purchases of goods and services, and gross margin.

<sup>6</sup> The departure fee for international flights is \$30/person; for domestic flights it is Tanzania shillings 5000/person, less than \$5.

**Table 1**

Tourist arrivals, length of stay and expenditure by type of tourist in Zanzibar, 2007.  
Source: Lange and Jiddawi, 2009 and author's calculations.

	All-inclusive, 'club'	Large-scale, up-market	Small-scale, up-market	Mid-range	Budget	Total
Number of visitors	44,410	60,463	16,077	26,194	71,904	219,047
Share of total visitors (%)	20	28	7	12	33	100
Average length of stay (days)	8.4	6.0	6.0	4.5	7.4	6.8
Average daily expenditure per person, US\$	123.27	172.84	225.47	118.49	76.66	124.97

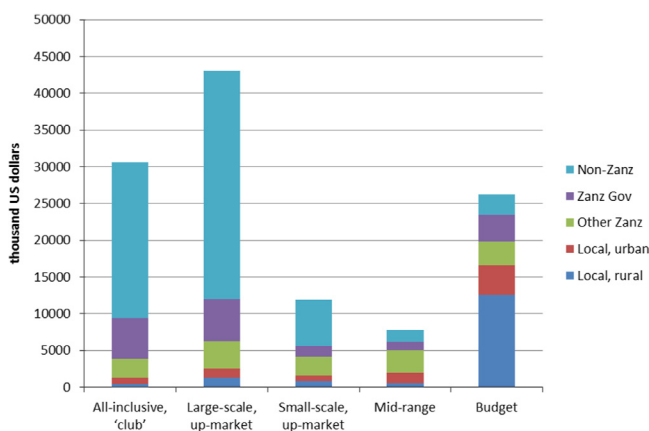
Note: expenditures include only items purchased in Zanzibar, including visas and airport departure fees. Items such as transportation to the island, tour agent commissions on packages and hotel reservations, and pre-travel expenditures are excluded.

**Table 2**

Contribution to the macroeconomy and distribution of value-added from tourism activities in Zanzibar, 2007 (values in thousand US\$).  
Source: Lange and Jiddawi, 2009 and author's calculations.

A. Contribution to the macroeconomy	All-inclusive, 'club'	Large-scale, up-market	Small-scale, up-market	Mid-range	Budget	Total
Expenditures	46,164	62,598	21,692	13,840	40,636	184,929
GDP, Total incomes generated	30,655	43,015	11,934	7790	26,242	119,636
Percent contribution to GDP (%)	6	9	3	2	6	25
Foreign exchange earnings	46,164	62,598	21,692	13,840	40,636	184,929
Employment						9351
Male						5535
Female						3817
B. Distribution of income	All-inclusive, 'club'	Large-scale, up-market	Small-scale, up-market	Mid-range	Budget	Total
<b>Zanzibari beneficiaries</b>						
Local communities, rural tourism	472	1301	804	533	12,523	15,633
Local communities, urban tourism	847	1238	754	1388	4044	8270
Zanzibaris outside local communities <sup>a</sup>	2534	3745	2614	3067	3250	15,211
Zanzibari government	5567	5677	1449	1171	3631	17,495
Subtotal, Zanzibaris	9420	11,961	5621	6158	23,448	56,609
<b>Non-Zanzibaris</b>	21,235	31,054	6313	1632	2793	63,028
<b>Total</b>	30,655	43,015	11,934	7790	26,242	119,636
<b>Zanzibari share of total income</b>						
All Zanzibaris (%)	31	28	47	79	89	47
Local communities (%)	4	6	13	25	63	20

<sup>a</sup> Mainly urban Zanzibaris involved in rural, coastal tourism as business owners and employees.



**Fig. 1.** Distribution of income from tourism by stakeholder and type of tourism in Zanzibar.

Source: Author's calculations based on Lange and Jiddawi, 2009.

provides an opportunity for increasing local benefits from tourism, which is being actively pursued by the hotel industry.

#### 4. Access to the shoreline

Coastal communities generate a significant amount of their income and livelihoods from non-tourism activities that require

access to the shoreline, mainly fishing and seaweed farming, and to a lesser extent, mangrove harvesting. Although these activities contribute only 5% of GDP, they are critical for the livelihoods of coastal communities. Fishing requires the beach as landing sites, and for the building and repair of boats and fishing equipment. Seaweed farming takes place in the shallow waters directly off the shoreline, and also requires use of the beach for seaweed drying.

While often least able to benefit from tourism employment opportunities, coastal communities are also in danger of losing access to the shore for traditional livelihoods. The promotion of international tourism has led to rapid expansion of hotels, with the most rapid growth occurring in coastal areas. In 1985, only 50 beds were located on the coast; by 2007, there were 7640, 81% of the total (Fig. 2). The rapid expansion of tourist infrastructure on the coast, combined with a population growth rate of over 3%, has put great pressure on coastal areas. In some areas, particularly the northeast, local villages have seen their access to the beach and sea greatly restricted (Gossling, 2003; Mustelin, 2007). The 2007 fishing census found that the number of landing sites for fishers had declined in the previous decade, in part due to the appropriation of beach sites for tourism (Jiddawi and Khatib, 2008).

Of a total coastline of 412 km, only 26% of the coastline consists of sandy beaches that are most suitable for economic activities: tourism, fishing, seaweed farming (Fig. 3). While it is possible to combine these activities, the expansion of tourism has led, in some areas to exclusion of livelihood activities by local communities. This often happens when hotels are designed and operated to separate tourists from local communities. Some hotels, particularly

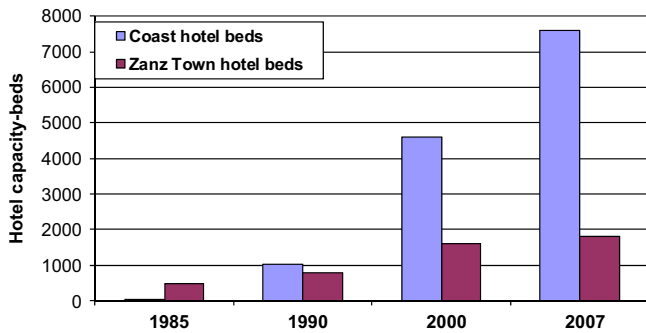


Fig. 2. Growth of hotel capacity in Zanzibar, 1985–2007.  
Source: unpublished database, Zanzibar Commission for Tourism.

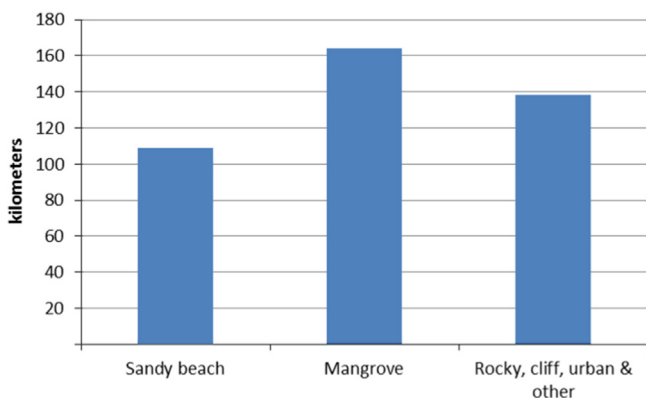


Fig. 3. Zanzibar shoreline by type of land cover.  
Source: author's calculations.

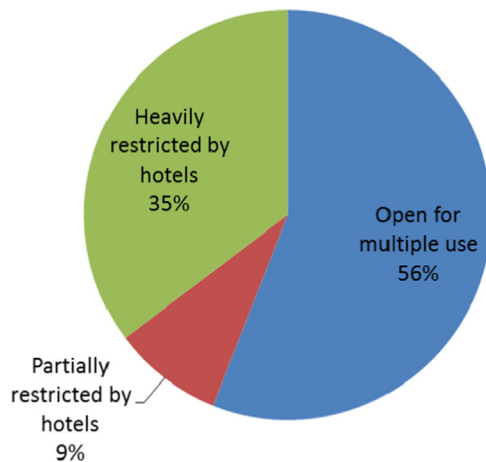


Fig. 4. Community access to the shore.  
Source: author's calculations.

the 'club' hotels, build large walls around the perimeter. In some parts of Zanzibar, a long line of hotels have been built with no space between the perimeter walls, blocking all access to the sea. In other instances, there may be no physical barrier, but hotel staff are posted on the beach and discourage the public from passing.

Of the 109 km of sandy coastline suitable for tourism and most livelihood activities, roughly half is freely open to the public, to be shared by tourists and local communities alike for fishing, seaweed farming, and other activities (Fig. 4). Fully 35% is heavily restricted with access by local communities all but impossible. Access to the shoreline varies greatly by region: in the Central and South districts, there are very few restrictions. It is an area where a lot

of seaweed farming takes place, and many of the Budget hotels are located. Most hotels are constructed without perimeter walls. In the North, by contrast, access is heavily restricted to most of the shoreline, and there is limited opportunity for multiple activities. Many of the hotels have extensive walls.

## 5. Conclusions and policy implications

### 5.1. The future of coastal tourism in Zanzibar and implications for other countries

Coastal tourism is the single largest sector of the economy accounting for 25% of GDP, but the coastal ecosystem is seriously degraded. Why has this happened and what can be done?

Part of the answer lies in the distribution of economic benefits and the incentives or disincentives this provides for maintaining the coastal environment. The macroeconomic importance of tourism and the income it generates far surpass the value of other activities in the coastal ecosystem. But much of the tourism industry has excluded local communities, even as it claims more and more of coastal and marine resources. Local communities do not have much economic stake in tourism activities—as a whole, they obtain more income from fishing and seaweed than from tourism. Unless there are shared incentives for sustainable management, the future of Zanzibar's coastal environment is not promising.

Although local participation in tourism is currently low overall, it is the only sector with the potential to employ large numbers of people and generate large amounts of revenue. Fishing and seaweed farming will continue to be important livelihood activities but are not alternatives to tourism; they will never generate the large amounts of income to reduce poverty that tourism can generate. Economic analysis of tourism shows how local participation can be increased by promoting the appropriate segments of the tourism industry to achieve both poverty reduction and improved management of marine resources.

Many countries set their goal for tourism development in terms of a target number of visitors. A better approach would be to set a target revenue stream and employment goal for the domestic economy, identify the mix of tourism segments to meet that goal, and the steps needed to achieve it.

Budget tourism benefits local communities the most and often has a low environmental impact; Budget tourists also have a high rate of activities like snorkeling, diving and fishing that depend on a healthy ecosystem. Local participation is also significant in Mid-range tourism, and parts of the Up-market tourism segment that promote ecotourism also create incentives for sustainable management of the coast. But currently Budget tourism brings in the least revenue for the Zanzibari government, so it has not had the attention of government.

In Zanzibar, large hotels, especially those catering to all-inclusive package tours, currently dominate tourism. They generate the lowest benefits for local communities, and also have a weak incentive for promoting a healthy coastal ecosystem. Many of these tourists do not participate in any marine activities beyond a boat ride; they spend much of their time on the beach but not diving or snorkeling where the health of the reef and fisheries is essential. Under current arrangements, government obtains most of its revenue from this segment of tourism, so government also has less incentive to make ecosystem health a priority.

One of the biggest challenges for any developing country with a large tourism sector is how to increase participation and benefits for the domestic economy. Several steps are needed to achieve this: better education of the labor force, greater investment in basic infrastructure, promoting activities in the tourism value-chain, and better information for managing the tourism sector.

- The ability of local communities to participate in tourism is limited by poor education and training. The high-value, international tourism industry requires high levels of training and fluency in at least one foreign language. Many Zanzibaris do not receive adequate education at the primary and secondary levels, making them less able to take advantage of the tourism training programs offered by government and private organizations. Greater employment in more skilled, better paid occupations in tourism requires more investment in education as well as post-secondary school tourism training, so that it is equivalent to education obtained in mainland Tanzania, where many tourism workers presently come from (ACRA, 2008; Zanzibar Association of Tourism Investors, 2008).
- For tourism to grow, investment in basic infrastructure is needed. Many tourists express dismay at the state of the airport, roads, unreliable electricity supply, limited wastewater treatment and poor solid waste management. High-end tourism requires good infrastructure and maintenance of that infrastructure.
- There are many opportunities to expand activities in the tourism value-chain where Zanzibar has a comparative advantage, notably greater provision of fruits and vegetables for tourism. This has been identified as an intervention that can achieve results in the short term and is being supported by several projects (ACRA, 2008).
- Finally, there is a need for more accurate and timely information to manage the tourism sector, including accurate tourist arrival statistics, and accurate data about government revenues generated by tourism from all sources.

Tourism has been growing rapidly since 2007, when this study was started, so it would be especially important to update the surveys and analysis. The growth of hotels has continued, resulting in further loss of the shoreline to local communities and their alternative livelihoods. Consequently, the need to increase local participation in tourism is more important than ever. In addition, the opening up of neighboring Pemba Island, which previously had very little tourism, raises the same challenges for those communities, as reported in this paper for the main island of Zanzibar.

The recommendations from this analysis are also more broadly relevant to many developing countries that rely on international tourism. Some countries have taken steps in the direction mentioned, such as Mauritius, and are able to capture a significant share of tourism benefits. But even countries known for their far-sighted tourism policy, such as Costa Rica, do not always have

sufficient data to assess the contribution of tourism to local communities and poverty reduction.

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