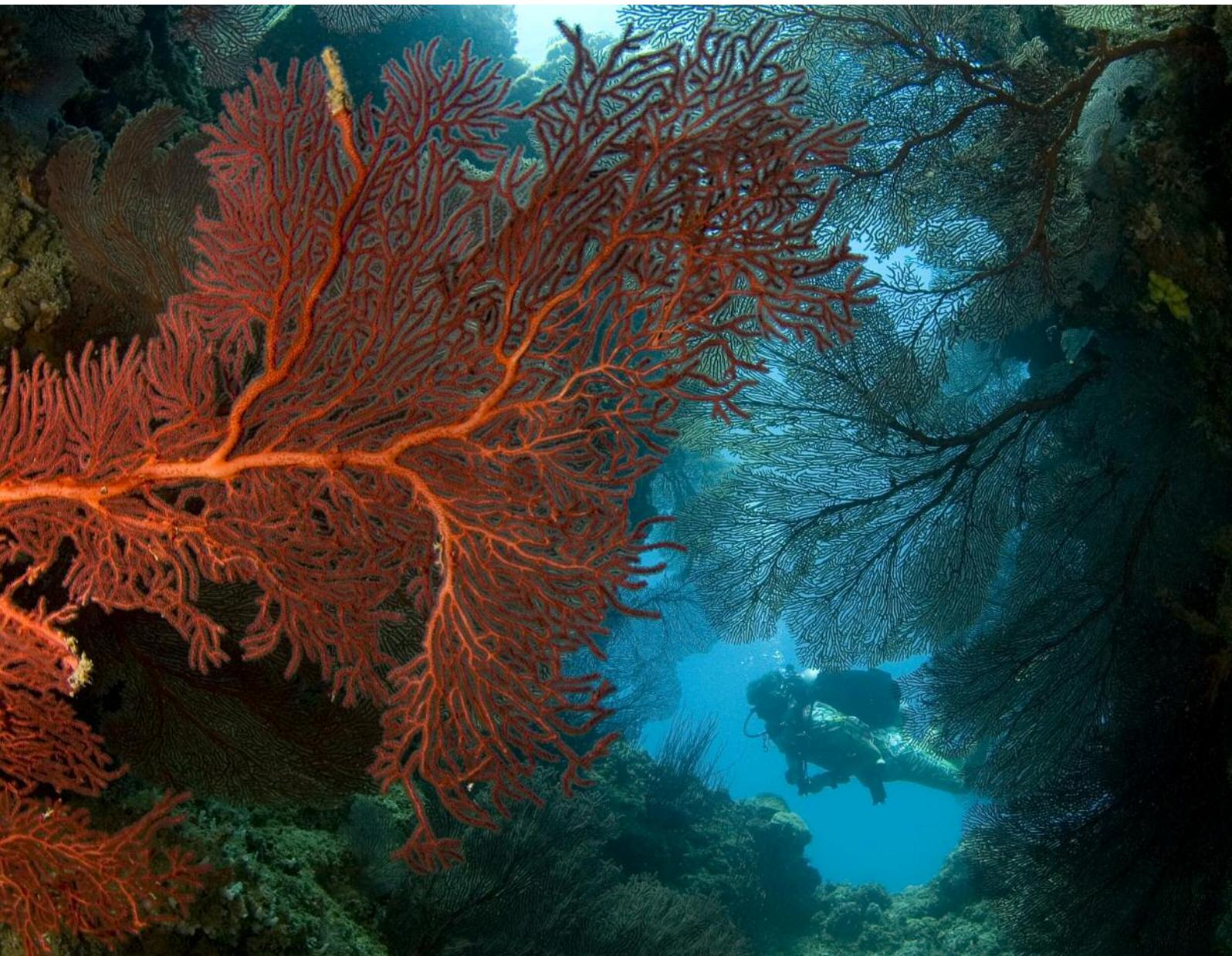




Fishing and Tourism in the Fijian Economy



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TABLE OF CONTENTS

Introduction	4
1. Fiji's Economy	5
1.1 Economy Composition	5
1.2 Primary Sector	6
2. Fishing Industry	7
2.1 Industry Overview	7
2.2 Offshore Fishery	8
2.3 Artisanal Fishery	9
2.4 Subsistence Fishery	10
3. Tourism Industry & the Economy	11
3.1 Tourism Industry Overview	11
3.2 Tourism & Multipliers	11
3.3 Tourism by Sub-Industry	12
3.3.1 Hotel and Restaurant Sector	12
3.3.2 Transportation	13
3.3.3 Sales: Retail & Wholesale	13
3.4 Tourism and Natural Resources	14
4. Conclusion	15
Resources Cited	16

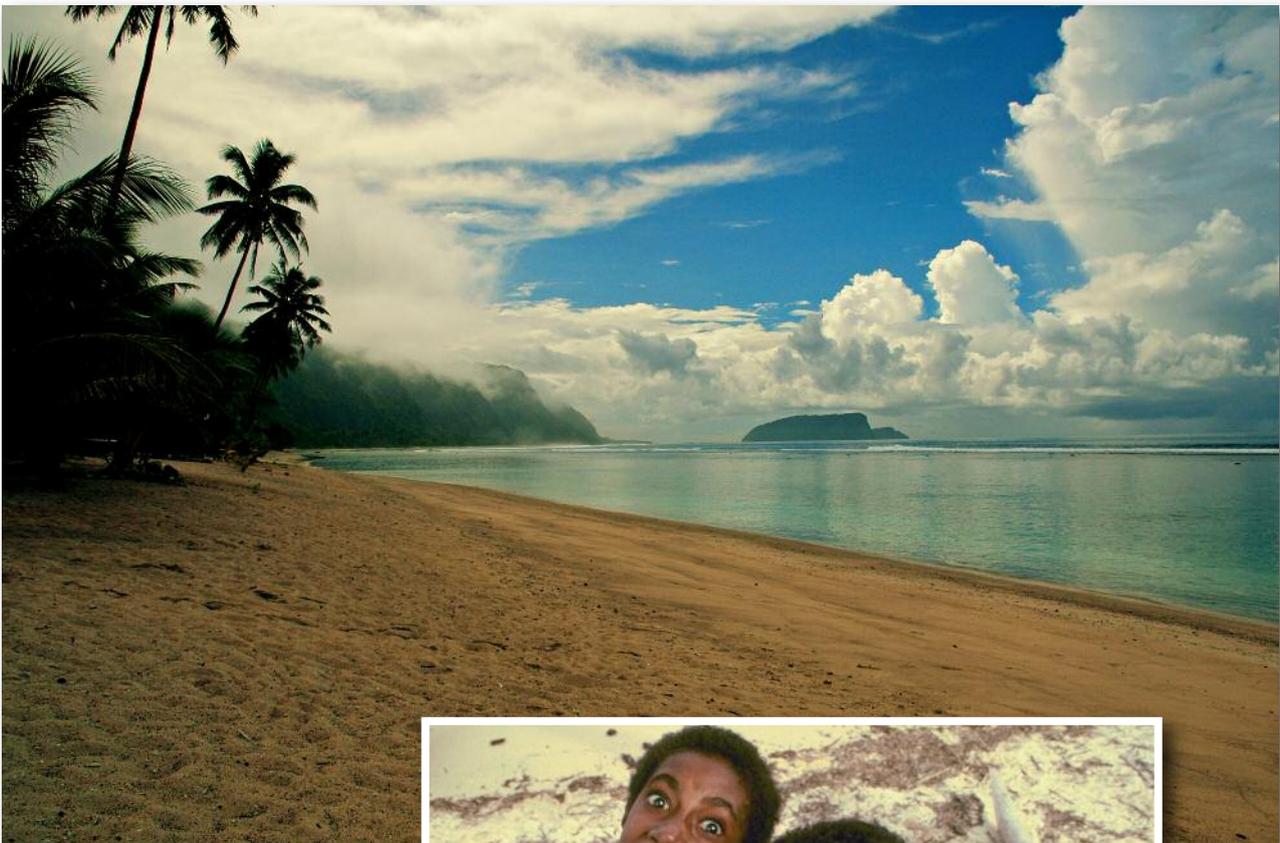
Figures

Figure 1: Fiji's Annual Economic Growth	5
Figure 2: Fiji's Economy by Sector	6
Figure 3: Primary Sector Revenue by Industry	6
Figure 4: Fishing Industry Revenue and Catch	8
Figure 5: Fishing Industry Employment	8
Figure 6: Fish Catch by Industry	9
Figure 7: Fiji Urban and Rural Populations	10
Figure 8: Fiji Tourism Arrivals by Country of Origin	11
Figure 9: Tourism Arrivals and Expenditures	12
Figure 10: Tourism Expenditures by Region	13
Figure 11: Primary Vacation Activities	14

INTRODUCTION

This report presents an overview of the economy of Fiji with an emphasis on the fishing and tourism industries and their contributions to the broader economy. The fishing and tourism industries, whose productivity depends on natural capital and efficient resource management, make significant contributions to Fiji's national economy. Maintaining those resource stocks through efficient resource

management is therefore important to the national economy of Fiji. This study highlights the important role natural resources fulfill not only in the tourism and fishing industries, but in the broader economy, in order to inform local policy making and improve the focus and policy relevance of subsequent environmental economic research in the country.



1. FIJI'S ECONOMY

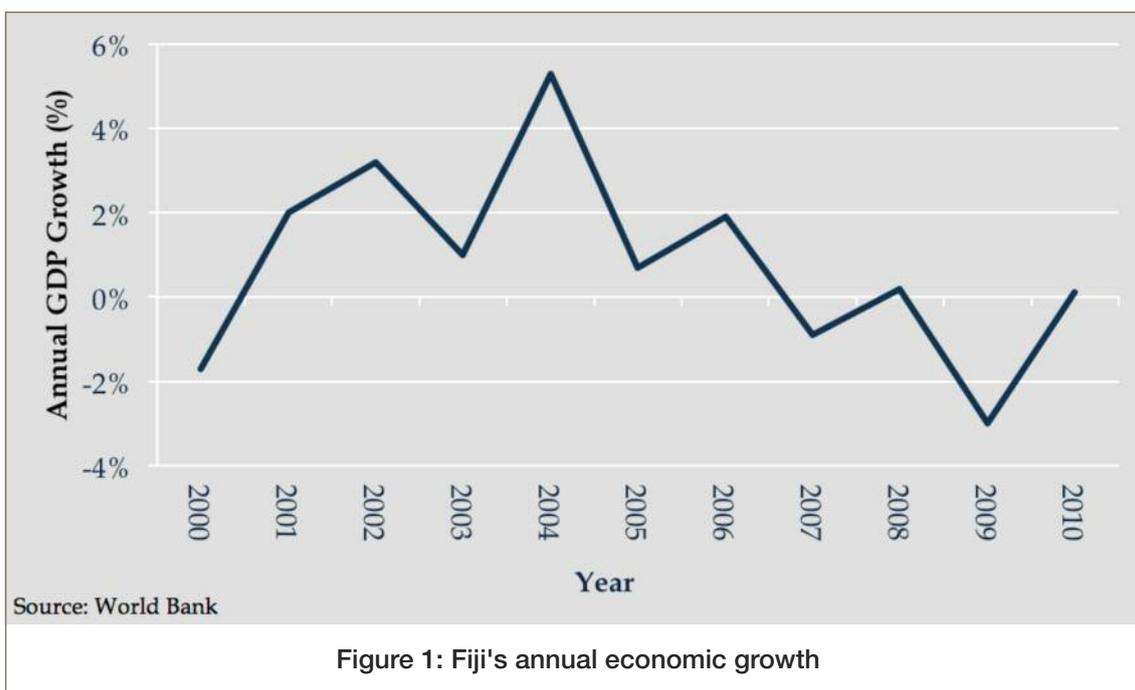
Fiji has the largest¹ and most developed economy in the South Pacific. The country has strong trade relationships with larger economies such as Australia and the EU, contains a diverse array of industries from textile production to film making, and benefits from a rich endowment of natural resources that range from pristine coral reefs to tropical rainforests. However, political instability and natural disasters have created challenging conditions for maintaining economic growth (Narayan *et al.*, 2007).

Fiji's economy has been affected by an unstable political system for the majority of the past three decades. There have been four coups during that time, most recently in 2006. Rapid, and unpredictable changes in the political structure create institutional instability, reduce investor confidence, and generally disrupt economic activity. As a result, GDP growth has been erratic

and volatile, but the high demonstrated growth rates in relatively stable times reflect the country's substantial potential (Narayan *et al.*, 2006; see Figure 1).

1.1 Economy Composition

Fiji's formal economy is composed of three sectors (see Figure 2): the service sector², the primary sector³, and the secondary sector⁴. The composition of Fiji's economy has been relatively stable over the past three decades, but there have been some minor changes. The secondary sector has increased in economic importance. Manufacturing's share of GDP increased from 12% in the late 1980s to 15% in the 1990s, with growth sustained by new hiring. The service sector has also become a more prominent contributor to the economy, increasing from 63% to 67% of GDP by 2009 (World Bank, 2011).

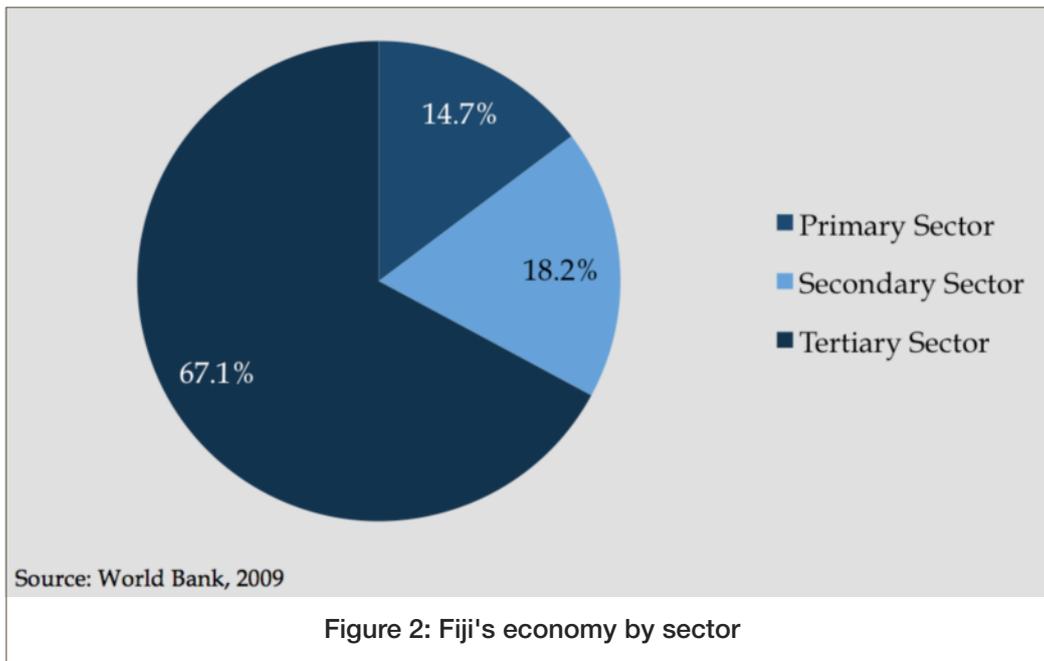


¹ Fiji has the largest economy in the South Pacific as measured by revenue.

² The service sector contains all of the industries that provide value-added services (e.g. transportation, hotels, restaurants, and education).

³ The primary sector is composed of industries that use raw natural resources as a primary input (e.g. fishing, mining, logging).

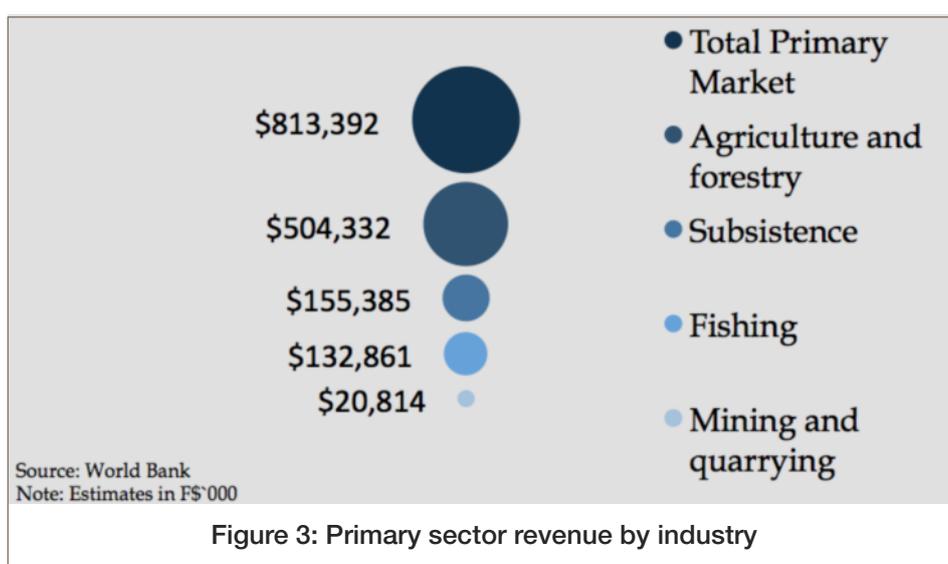
⁴ The secondary sector contains all of the industries that use processed natural resources to produce output (e.g. construction).



1.2 Primary Sector

In 2009, the primary sector produced 14.7% of Fiji's GDP with large contributions from the agriculture and forestry industries (See Figure 3; World Bank, 2011). The primary sector produces 70% of Fiji's exports, providing an important source of foreign exchange (ADB, 2005). Inside Fiji, the sector generates economic activity in the service and secondary sectors through the purchasing and selling of goods and services. Without the inputs provided by the primary sector, the service and secondary sectors would have to find substitute inputs or import inputs at higher costs. Primary

production is not always recorded in the national accounting and statistics and this obscures important activities occurring within the sector. Fiji has a large subsistence economy whose activities are often overlooked or under counted in measures of national productivity and of human well-being. Subsistence workers can participate in a number of different activities, although most subsistence activities involve agriculture and fishing. In Fiji, subsistence activities are estimated to be worth approximately 4% of GDP and more than 21% of the primary sector's value⁵.



⁵ Subsistence activities take place outside markets and are therefore not captured by GDP. Any effort to quantify their value is necessarily an estimate.

2. FISHING INDUSTRY

2.1 Industry Overview

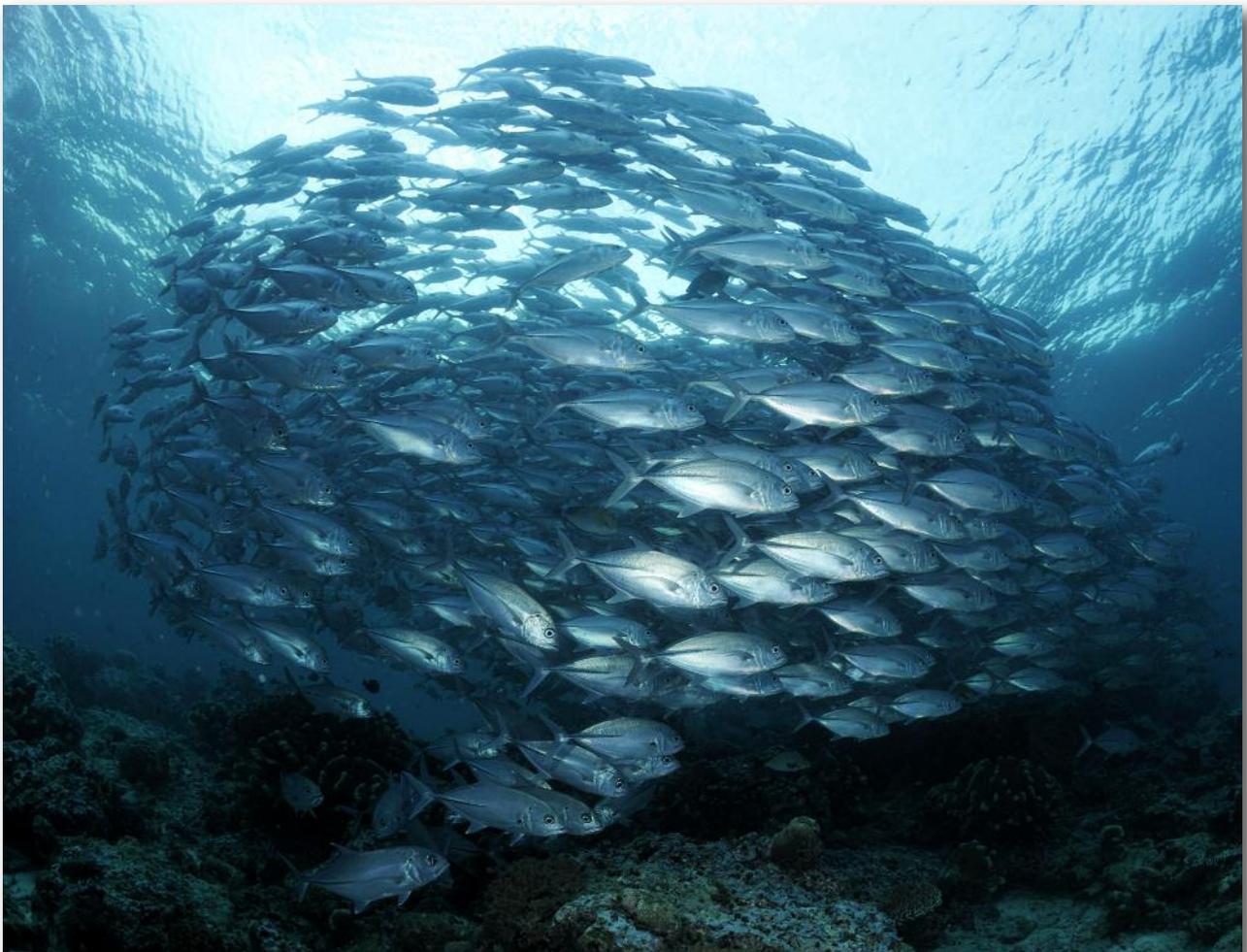
The offshore commercial, artisanal, and subsistence fisheries make up Fiji's fishing industry and make important social and economic contributions to the national economy. The importance of the fishing industry to Fiji and other South Pacific nations is increasingly well documented as evidenced by Bell *et al.* (2008), who note:

"The extraordinarily high consumption of fish by many Pacific Island Countries and Territories underscores the vital contribution of fish to...the Pacific."

Historically, Fiji's fishing industry has created a significant amount of economic activity, but it has also filled an important role in the lives of many Fijians. Artisanal and offshore-commercial fishing activities accounted for 3.16% of Fiji's GDP in 2009 and while it is not officially recorded as GDP,

some estimates suggest that subsistence fishing activities produce as much as 4% of Fiji's annual GDP (ADB, 2005). Subsistence fisheries employed approximately 3,000 people in 2003, and the fishing industry as a whole employed 9,144 people, or 3.8% of the country's workforce, in 2003 (ADB, 2005).

The fishing industry is maintaining its role as a significant generator of economic activity, but it is undergoing structural changes, most notably in the offshore commercial fishery. Figure 4 shows that the fishing industry's contribution to GDP grew over the period 1995 to 2002 while labour data from 2000–2006 shows that the industry reduced employment numbers while increasing revenue. This suggests that productivity gains were made with capital investments that compensated for the reduction in labour.



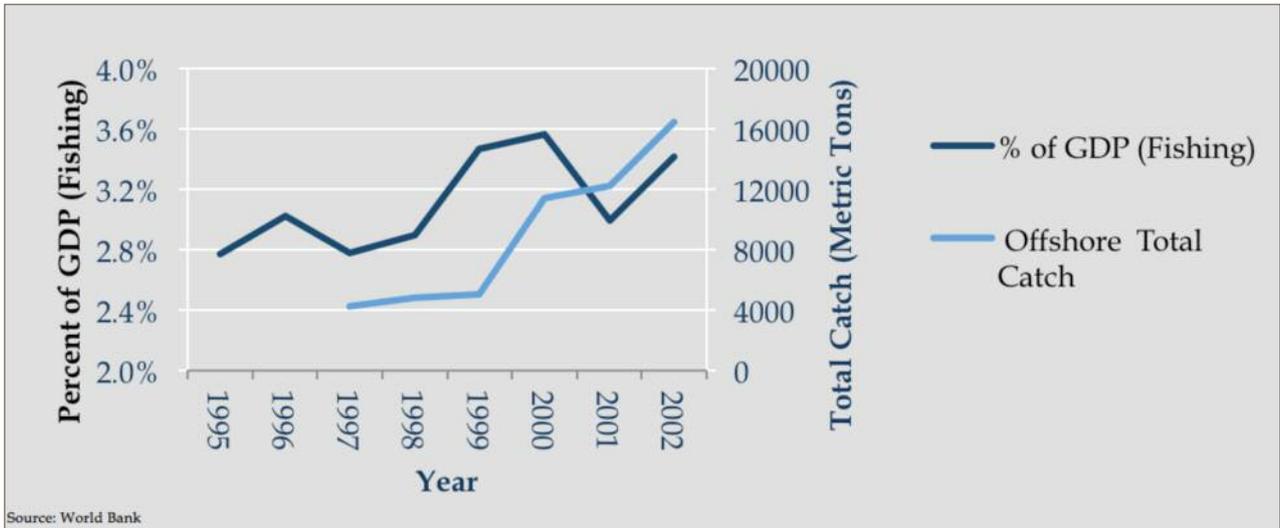


Figure 4: Fishing industry revenue and catch

2.2 Offshore Fishery

The offshore commercial fishery is the largest producer of revenue in the fishing industry and in 2003 it produced approximately 26% of the industry's revenue (ADB, 2005; see Figure 5). When indirect revenues are accounted for (e.g. canning and processing) the fishery is responsible for approximately 40% of the industry's revenues. Although the fishery employs fewer people than the artisanal or subsistence fisheries, it landed 26% of the country's marine catch in 2003 because of its relatively high use of capital (ADB, 2005).

The offshore commercial fishery directly employs 6% of the fishing industry's labor force (ADB, 2005), but the fishery indirectly employs many more people by purchasing inputs and selling outputs to other industries. Fiji's tuna canning industry, which processes part of the offshore commercial fleets catch, employs an estimated 800 people (ADB, 2005). When forward and backward linkages are taken into account, the offshore-commercial fishery employs, both directly and indirectly, approximately 2,000 people (see Figure 5).

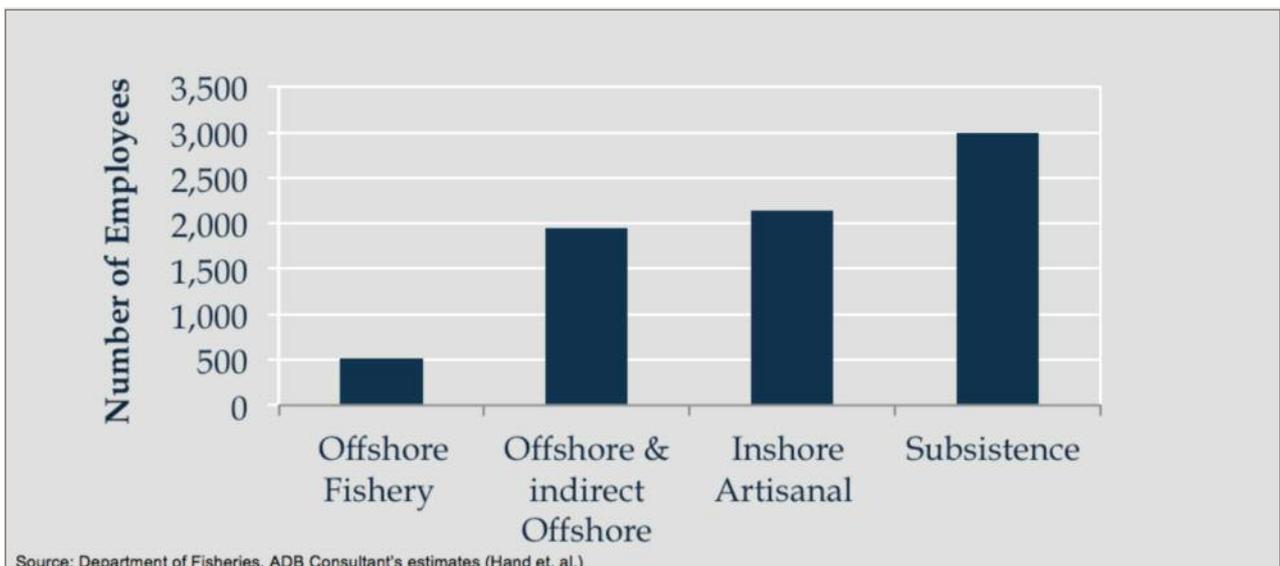


Figure 5: Fishing industry employment



2.3 Artisanal Fishery

No formal definitions are agreed for artisanal fisheries, but generally they refer to fishermen or women who practice small-scale commercial fishing with the goal of taking the catch to market. Artisanal fishers harvest fish from near-shore fisheries such as inland rivers, mangroves, lagoons, and shorelines (Singh, 2005).

Fiji's artisanal fisheries make important economic contributions to various levels of the economy. Nationally, Fiji's artisanal fisheries generate 14% of

the fishing industry's revenue and employ approximately 2,000 people (see Figures 5–6). Locally, the economic impact is likely to be important because artisanal fisheries generate economic opportunities in communities that have low participation rates in the formal economy and smaller, less diverse economic bases. Artisanal fishers sell their catch in local markets and spend large proportions of their earnings in local businesses (ADB, 2005), creating additional economic benefit⁶.

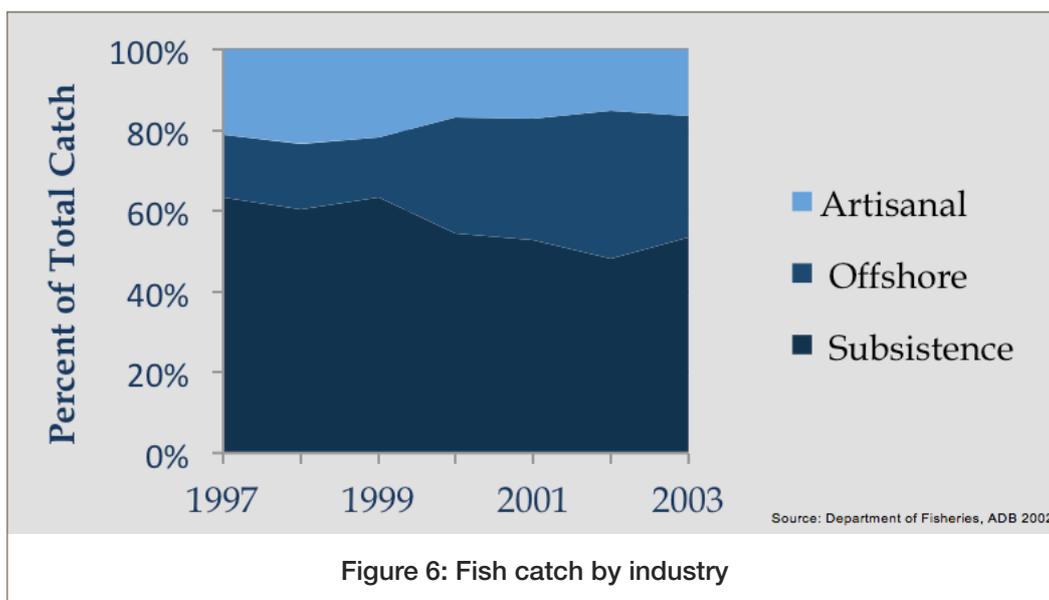


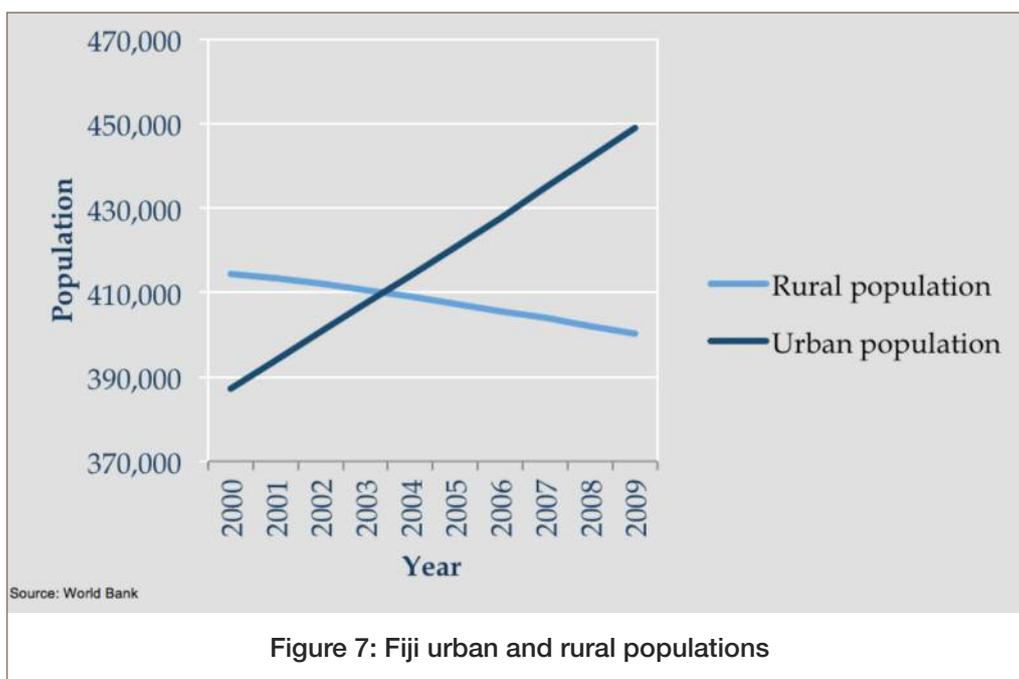
Figure 6: Fish catch by industry

⁶ Multipliers reflect the economic idea that money spent in one area of the economy will induce economic activity in other areas, increasing the net impact of a unit of economic activity.

2.4 Subsistence Fishery

Subsistence fishers are almost universally rural and rely on coral reef fisheries as their primary food source, livelihood, and income. Fiji's subsistence fisheries employ over 3,000 people (see Figure 5), many of whom have few transferable skills, making the fishery their only realistic livelihood option. In addition to providing employment, subsistence fisheries provide food security in the form of easy and reliable access to marine resources. Subsistence communities live hand-to-mouth and many rural communities in Fiji do not preserve their food, which means accessing the fishery is the first and only means of providing food security. The overall importance of the subsistence fishery is not reflected well. Current national accounting methodologies only measure revenue and as a consequence the fisheries can often appear less valuable than they are because non-tangible benefits, such as food security, are not taken into account.

The economic importance of the subsistence fisheries may begin to change as Fiji's rural population continues a decade-long decline (See Figure 7). As rural incomes decrease and urban incomes increase, rural inhabitants are both pushed out of rural areas and pulled into urban areas. As people move to urban areas and earn higher incomes they may begin to rely on aquaculture to support more of their protein needs and the importance of the subsistence fisheries may decline. Alternatively, Bell *et al.* (2008) discuss several scenarios where urban demand for fish increases to such a point that rural communities begin exporting their catch to urban markets, which would increase the importance of rural fisheries to both the urban and rural economies.



3. TOURISM INDUSTRY & THE ECONOMY

3.1 Tourism Industry Overview

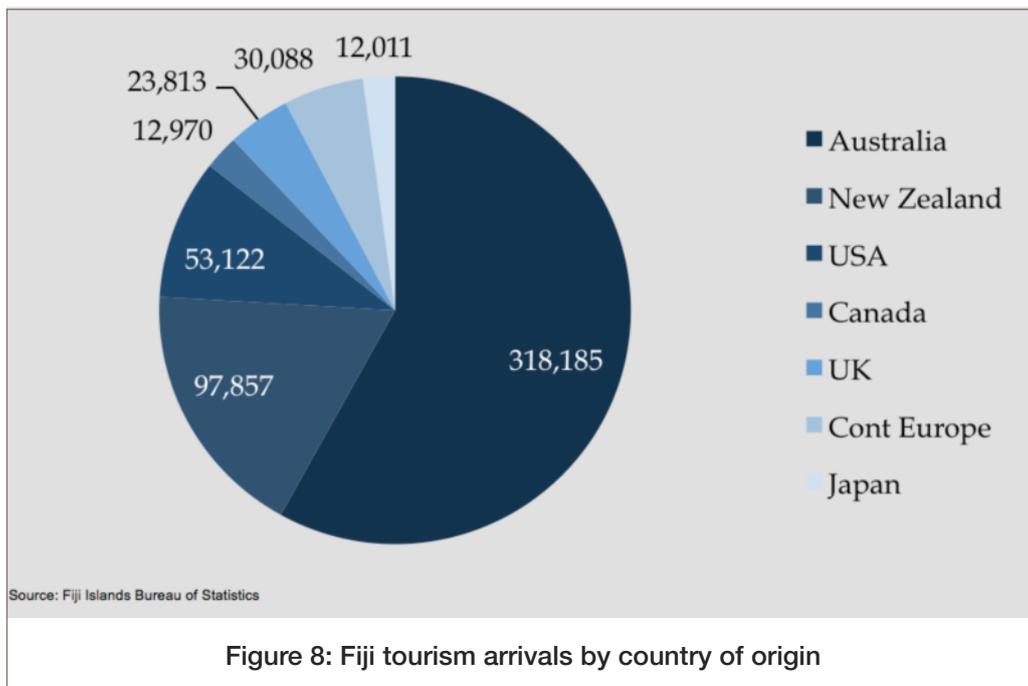
Fiji's tourism industry benefits from the country's rich natural resources and generates significant economic activity for the national economy. Tourism generates more economic activity, in terms of revenue, than any other industry and it is also the country's largest single source of foreign exchange⁷. Several thousand people are employed, either directly or indirectly, by the industry, creating economic activity throughout the country (FDE, 2010). The tourism industry's prominent position in the economy emphasizes how important it is to maintain Fiji's natural resources in order to maintain the tourism industry's economic contributions. Natural resources support the tourism industry by encouraging tourists to visit the country and the degradation of nature may cause tourists to consider travelling to other destinations.

3.2 Tourism & Multipliers

Fiji's tourism industry is heavily dependent on demand from Australia, New Zealand, and the United States, which account for over 74% of Fiji's tourist arrivals (see Figure 8). Changes in demand can reduce the revenue received by the tourism

industry as well as other industries that indirectly depend on tourism.

Tourism arrivals are sensitive to political unrest and the effect of unrest was seen when hotel occupancy rates fell by 25% following the 1987 coup and again by the sharp decline in tourism following the unrest in 2000 (see Figure 9; Narayan and Prasad, 2002). 'Sun and fun' tourism, where tourists choose amongst many potential locations, is particularly sensitive to factors one might find in the news like political upheaval and civil disturbance, violence, disease outbreaks, and natural disaster. The political situation has stabilized since then and tourism arrivals and expenditures are increasing once again. Interestingly, tourism expenditures have been increasing in line with tourism arrivals from 1995 to 2009, suggesting that the propensity to spend is remaining relatively constant. Fiji's tourism industry could benefit more from increased tourism arrivals if there were more of the revenue stayed inside the country. According to the Fiji Islands Trade and Investment Bureau, 94% of tourism projects started between 1988 and 2000 were foreign owned.



⁷ The combination of activities in the Primary Sector generates more foreign exchange in total, but no single industry generates more foreign exchange than the tourism industry.



3.3 Tourism by Sub-Industry

3.3.1 Hotel and Restaurant Sector

The hotel and restaurant industries generated approximately 4.4% of Fiji's GDP in 2009 and the industries grew at a good pace before the global financial crises began in 2008. The wholesale, retail, restaurant, and hotel industries employ over 27,000 people (FIBS). It is not clear what fraction of the workforce were exclusively employed in the

restaurant industry, but the hotel industry employed approximately 10,000 people as of 2009 (FIBS).

The hotel and restaurant industries are primarily located in areas frequented by tourists and as a result some communities are more sensitive to changes in tourism demand than others.

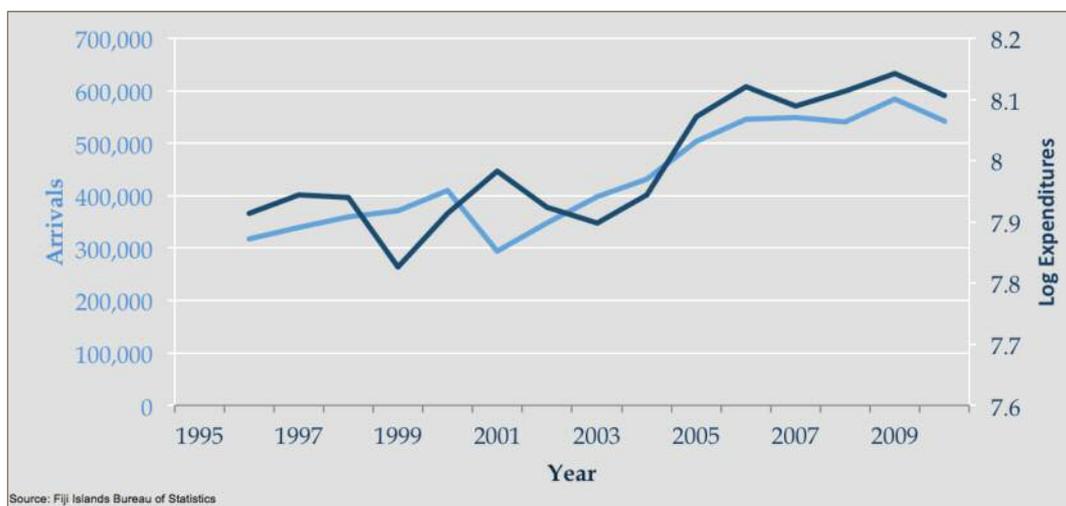


Figure 9: Tourism arrivals and expenditures

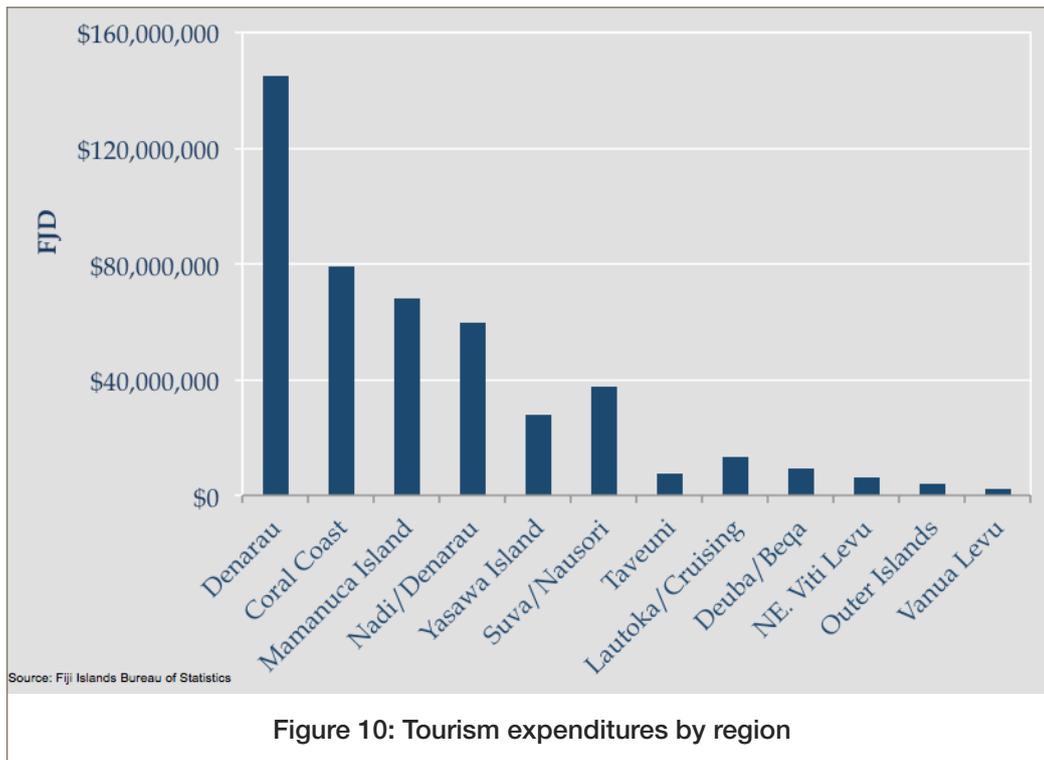


Figure 10: Tourism expenditures by region

Approximately 70% of visitors spend their time in two provinces, Ba and Nadroga and tourist expenditures are concentrated in a few areas (see Figure 10; FIBS). The figures reflect the vulnerability of tourism-based local economies to the performance of the hotel and restaurant industries and the benefit of planning for economic development that broadens the scope of economic activities, shields against risk, and avoids extreme variation in community economic health.

3.3.2 Transportation

The transportation industry facilitates the movement of goods from geographic areas of low value to geographic areas where their value is higher. The industry employed 9,184 people in 2005 and generated approximately 10% of Fiji's GDP each year between 2007 and 2009. Analysts forecast that the sector's contribution to GDP will increase to 20% by 2014 (Natuva, 2010).

The transportation industry is responsible for moving tourists between the main arrival hubs and various tourist destinations throughout Fiji. Visitors arrive either by plane or ship and these

transportation services are rarely owned by Fijian companies. Tourism is moderately important to the public transportation sector since 34% of visitors use it for on-island transportation. Only 5% of visitors rent cars for transportation, but the industry's revenues rely almost exclusively on tourism. A survey by the Fijian government found that 84% of tourists use taxis for on-island transportation suggesting that the taxi industry relies on tourism more than other transportation industries⁸ (FIVS, 2009).

3.3.3 Sales: Retail & Wholesale

Tourism generates strong demand for retail sales in Fiji. Approximately 78% of tourists report making retail purchases while visiting Fiji, but the propensity to make retail purchases varied by the origin country. For example, 88% of Canadian tourists bought retail goods compared to just 59% of UK tourists (FIVS, 2009). Souvenirs are the most frequently purchased goods, but clothing and local handicraft sales also contribute to industry revenues. At the time of this report there were no meaningful tourism retail expenditure data available, but the evidence suggests that tourism has a significant impact on the retail sector.

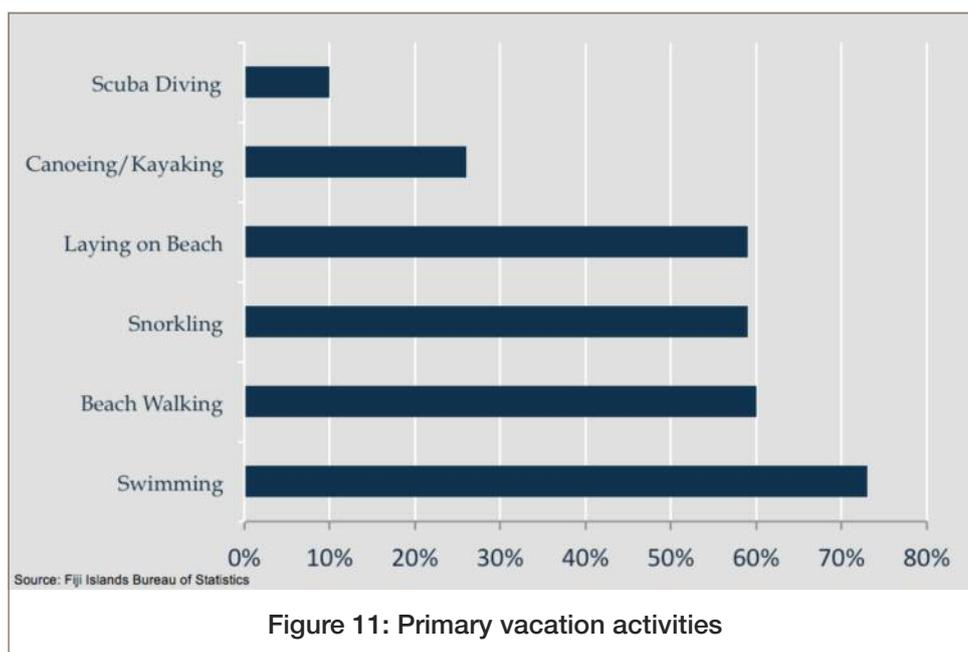
⁸ Expenditure data are aggregated to reflect the money spent during an entire stay and it is not known how much money was spent on each good or activity during the visit. This presents a data challenge to estimate the importance of tourism to each sector of the transportation industry. While tourists may use one mode of transportation with greater frequency, they do not necessarily spend more money on that mode.



3.4 Tourism and Natural Resources

Fiji's natural environment and unique marine resources attract large numbers of tourists (FDE, 2010). The Fiji Tourism Survey Report suggests natural resources are an important component of tourism demand and survey results demonstrate that most tourists participate in marine-related activities. More than 75% of tourists surveyed reported that swimming was one of the primary activities of their vacation, underscoring the importance of the marine habitat to tourism and thus to the economy (see Figure 11).

Fiji's government recognizes the important role natural capital plays in the tourism industry and as a result, the government introduced the 2007–2011 Tourism Development Plan to identify practices and policies that would help tourism develop sustainably. The country also drafted a policy document that outlines the five principles tourism operators must live by to be considered as eco-tourism operators (CBD, 2010).



4. CONCLUSION

Fiji is the largest and one of the most diverse economies in the South Pacific region. The country has significant trading relationships with Australia, New Zealand, and the EU, among others, and it benefits from healthy tourism demand, mainly from Australia, New Zealand, and the United States. Fiji's fishing industry is productive and supports subsistence, artisanal, and offshore fishing fleets, which generate significant economic activity.

The offshore commercial, artisanal, and subsistence fisheries each make their own significant contributions to Fiji's economy, but the nature of the contributions is changing. Employment opportunities in the industry as a whole have been in decline, while the revenues have continued to increase. Statistics that provide information on the changing composition of the industry apparently are not available. As a result, it is difficult to argue with confidence how the revenues are being maintained at the same time employment is shrinking, but one possibility is that the offshore fleet is using capital investment to replace labor. Most of the capital is foreign owned and many of the capital gains may not benefit the national economy to the fullest degree possible.

The subsistence fisheries are also changing as rural inhabitants move to more urban areas. The net effect of increased urbanization is difficult to predict, but some estimates suggest that increasing urban demand for fish will put more pressure on rural fisheries as they attempt to meet the demand. Moreover, rural fish demand is also expected to increase, adding to the pressure placed on the fisheries. If demand does increase

as forecasts suggest, the fisheries will increase in economic importance and the impact will be felt in both urban and rural areas.

The tourism industry is integral to Fiji's economy, but Fiji's tourism demand is concentrated in three countries. Australia, New Zealand, and the United States make up 74% of Fiji's tourist demand. Tourism is generally regarded as a luxury good, so its consumption is closely tied to discretionary income. Fiji experienced downturns in the tourism market as a result of poor economic performance in other countries and future tourism demand will depend on future economic performance of those key countries going forward. Australia's economy was in recession in the early part of 2011, the United States economy is stagnating, and only New Zealand's economy has been growing. This will not necessarily have a negative impact on the demand for tourism because poorly performing economies do not affect all people the same way. However, near term tourism could be weaker than previous years.

The government of Fiji can maintain the economic success of the fishing and tourism industries by conserving the natural resources that are so important to the continued success of each industry. One way this can be done is by incorporating the value of nature into national accounting and decision frameworks so that the economic contribution of nature is clearly known. If the value of nature is recognized and emphasized, decision makers can use that information to ensure nature remains a productive asset of the national economy.

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