Fishing and Tourism in the Vanuatu Economy
About IUCN

IUCN, International Union for Conservation of Nature, helps the world find pragmatic solutions to our most pressing environment and development challenges.

IUCN works on biodiversity, climate change, energy, human livelihoods and greening the world economy by supporting scientific research, managing field projects all over the world, and bringing governments, NGOs, the UN and companies together to develop policy, laws and best practice.

IUCN is the world’s oldest and largest global environmental organization, with more than 1,200 government and NGO members and almost 11,000 volunteer experts in some 160 countries. IUCN’s work is supported by over 1,000 staff in 45 offices and hundreds of partners in public, NGO and private sectors around the world.

www.iucn.org
Fishing and Tourism in the Vanuatu Economy
TABLE OF CONTENTS

Introduction .....................................................................................................................................4

1. Vanuatu’s Economy .....................................................................................................................5
   1.1 Three Sectors of Vanuatu’s Economy ...................................................................................5
   1.2 Urban vs Rural Economy ......................................................................................................6

2. Vanuatu’s Fishing Industry ..........................................................................................................8
   2.1 Industry Overview .................................................................................................................8
   2.2 Offshore-commercial Fishery ................................................................................................8
   2.3 Artisanal and Subsistence Fisheries ....................................................................................10

3. Tourism Industry ........................................................................................................................ 12
   3.1 Tourism Overview ...............................................................................................................12
   3.2 Tourism and the Urban Economy .......................................................................................12
   3.3 Tourism and the Rural Economy .........................................................................................13

4. Conclusions ............................................................................................................................... 15

Resources Cited ............................................................................................................................ 16

Figures

Figure 1: GDP and Population Growth Rates .....................................................................................5
Figure 2: Source of Vanuatu Household Income .............................................................................6
Figure 3: Vanuatu Subsistence Employment ......................................................................................7
Figure 4: Households Receiving Income from Commodity Sales ...................................................7
Figure 5: Fishing Revenue as a percent of GDP .................................................................................8
Figure 6: Vanuatu Fishing Industry Revenue as a percent of GDP .....................................................9
Figure 7: Vanuatu’s Fishing Fleet by Country of Origin .................................................................9
Figure 8: Tourism Industry’s contribution to GDP ............................................................................12
Figure 9: Vanuatu Tourism Arrivals by Country of Origin ............................................................13
Figure 10: Tourism Expenditure by Industry ..................................................................................14
Figure 11: Tourism Employment by Industry .................................................................................14

List of Acronyms

ADB    Asian Development Bank
DTIS   Diagnostic Trade Integration Study
EEZ    Exclusive Economic Zone
GDP    Gross Domestic Product
GRT    Gross Registered Tons
HIES   Household Income and Expenditure Survey
NSO    National Statistics Office
TBS    Tourism Business Survey
USD    United States Dollar
INTRODUCTION

This report focuses on the role and importance of the fishing and tourism industries in Vanuatu’s economy. The report begins by presenting an overview of the country, its economy, and the fishing and tourism industries. It proceeds by discussing the importance of each industry to the urban and rural economies. The report concludes by summarizing the evidence presented and discussing possible future growth paths for each industry.
1. Vanuatu’s Economy

The Republic of Vanuatu is an archipelago of 82 islands in Melanesia that is inhabited by approximately 224,000 people. The country recognizes French, English, and Bislama as its national languages, but there are more than 130 distinct languages spoken by different members of the Ni-Vanuatu. Vanuatu is governed by a parliamentary democracy but village chiefs also have an important role at the village level. Vanuatu’s economy has had a turbulent history as the country struggled to establish sound economic policies. In 2003, the government passed a series of institutional reforms, including deregulating the airline and telecommunication industries, designed to encourage economic growth. The reforms were successful and GDP growth averaged approximately 5% annually from 2003 to 2010. The country’s economic growth has been sustained by strong contributions from the tourism, services, construction, and real-estate industries (ADB, 2011). The country’s population growth rate is amongst the highest in the Pacific (ADB, 2011), but the growth of the economy still outpaced population growth, increasing per capita GDP (see Figure 1).

1.1 Three Sectors of Vanuatu’s Economy

Vanuatu’s economy is built around three central pillars: the service, industrial, and agricultural sectors. The service sector is the largest of the three sectors, accounting for approximately 75% of the country’s annual GDP, and it has also been the largest contributor to growth over the past decade (NSO, 2009). The wholesale and retail sales industry is the largest contributor to the service sector, although government spending and the transportation industry also make significant contributions (NSO, 2009). Agricultural production is an important part of Vanuatu’s economy. Kava and vegetable production generate 9% of the country’s annual GDP and the sector as a whole contributes 14.3% of annual GDP (NSO, 2009). The industrial sector is driven almost entirely by manufacturing and construction, which account for over half of the sectors contribution to GDP (NSO, 2009).

Figure 1: GDP and population growth rates
1.2 Urban vs Rural Economy

Vanuatu’s economy is segregated by the diverse geography of this island nation. The rugged landscape and sparse infrastructure have worked together to isolate the urban and rural economies (ADB, 2011). The country has 1,800 kilometers of roads, but fewer than 100 kilometers are paved and 400 kilometers have a gravel surface (ADB, 2011). The lack of infrastructure makes the cost of accessing urban markets excessively high for rural communities and vice versa. As a result, the economy has developed into two distinct and separate entities.

The rural and urban economies face different production constraints and consumer demands. As a result, the composition of economic activity is quite different in each economy. The urban economy is driven primarily by the service sector, which accounts for 75% of annual GDP (NSO, 2009), while the rural economy primarily relies on subsistence activities and home production. Rural residents earn most of their livelihoods through subsistence activities and agricultural production while urban residents earn salaries and wages (Figure 2). The urban economy is more diversified and monetized than the rural economy and transactions rely on the exchange of currency. Although it is likely that living standards are lower in rural areas, income and wage statistics only tell the story with regard to participation in formal market activities. Generally speaking, rural people have a higher dependence on non-market transactions and other contributions to their wellbeing, potentially reducing the ‘income’ gap between urban and rural people to a certain extent.

The largest point of contrast between the two economies is the propensity to rely on subsistence activities. An estimated 20,160 rural households receive 80% or more of their income from commodity sales (Figure 4) compared to 520 urban households. According to the HIES (2006), 97% of subsistence production is carried out by rural households (Figure 3). Subsistence activities provide food and income security for rural households when there are no alternative economic opportunities (DTIS, 2008). Agricultural production is the main subsistence activity (ADB, 2009), but rural households also exploit nearby marine resources to fulfill a large part of their nutritional and food security needs (ADB, 2000).
The rural and urban economies are more than geographically isolated. Their economies are also economically isolated. That is, economic activity is not easily shared between the two economies. As an example, the tourism industry is primarily concentrated in urban areas and creates jobs in the service industry. Rural communities lack the human and physical capital to compete in the tourism market, so tourism benefits are captured almost exclusively by the urban economy. In contrast, subsistence fisheries are not part of the urban economy because the high income of urban residents allows them to purchase food. As a result, subsistence-fishing activity is concentrated almost entirely in rural areas and the catch is sold in rural markets. In both cases, the economic activities do not transcend economic borders.
2. Vanuatu’s Fishing Industry

2.1 Industry Overview
Vanuatu has a large area of marine resources encompassing an exclusive economic zone (EEZ) of approximately 680,000 square kilometers. The fishing industry exploits the country’s marine resource through the offshore-commercial and artisanal-subsistence fisheries. Both fisheries make distinct contributions to the country’s economy while targeting different marine species. The offshore commercial fishery contributes to the urban economy and targets various species of tuna and deep-water bottom fish while the artisanal-subsistence fisheries contributes primarily to the rural economy and harvests reef fish.

2.2 Offshore-commercial Fishery
Vanuatu’s offshore commercial fishery is one of the least developed in the Pacific region and the fisheries contribution to GDP is among the lowest in the South Pacific according to estimates (see Figure 5). The most recent estimates suggest that the fishery contributes less than 1% to Vanuatu’s annual GDP\(^1\). The country lacked any value-adding processing plants until 2010, when two facilities were completed: one in Port Vila Bay and one in Mele Bay (ADB, 2009). At the time of this report there was no estimate of the economic impacts of the processing facilities.

Vanuatu’s offshore commercial fishery harvests the country’s tuna and deep-water snapper fish stocks with a fleet of 127 vessels (DTIS, 2008). Most vessels are foreign owned (see Figure 7) and the catch is processed abroad because the on-shore processing infrastructure is poorly developed, increasing processing costs. The fishery employs 60 people on vessels and in processing facilities\(^2\). As a result of the low domestic investment and employment numbers, the industry’s contribution to GDP is quite small. According to Figure 6, the commercial fishing industry contributed less than 0.2% to GDP in 2007, although its contribution has been steadily growing.

![Figure 5: Fishing revenue as a % of GDP](image)

\(^1\) The contribution of the subsistence fishing sector is not included in the GDP figures, but experts believe it makes a significant contribution to the rural economy. However, there are no accurate measurements of the sector’s value (ADB, 2000).

\(^2\) This estimate does not contain employment figures for the new processing plants.
in licensing and registration fees in 2008, but experts believe the fees are low by global standards (ADB, 2000). However, Vanuatu's tuna fishery lies outside most productive areas in the South Pacific and it is possible low licensing and registration fees are needed to make the offshore-commercial fishery competitive with other areas. Experts believe the area will never become a major tuna fishery (DTIS, 2008).

The offshore commercial fishery generates revenue by collecting licensing and registration fees from foreign owned vessels. The current arrangement charges licensing fees based on the tonnage of the vessel (DTIS, 2008). Vessels over 100 Gross Registered Tons (GRT) must pay 11,000 USD while vessels with a GRT of 100 or less must pay 9,000 USD (DTIS, 2008). The Department of Fisheries collected 1.4 million USD in licensing and registration fees in 2008, but experts believe the fees are low by global standards (ADB, 2000). However, Vanuatu's tuna fishery lies outside most productive areas in the South Pacific and it is possible low licensing and registration fees are needed to make the offshore-commercial fishery competitive with other areas. Experts believe the area will never become a major tuna fishery (DTIS, 2008).
The offshore commercial fishery generates a modest stream of revenue for Vanuatu and employs a small number of people. The fishery’s growth is constrained by a lack of infrastructure since it relies on large ports and processing plants to add value. The distribution of benefits is limited to urban areas because the fishery is reliant on infrastructure and operations that are located in urban areas. The opening of a tuna processing plant in 2010 could lower processing costs for producers and increase the industry’s contribution to Vanuatu’s GDP and also increase employment numbers. Moreover, according to Bell et al. (2009), urban and rural fish demand is expected to increase by 147% and 37%, respectively, by 2030. The impact of increased fish demand on Vanuatu’s urban and rural economies will depend on the relative production costs of domestic and foreign fisheries.

2.3 Artisanal and Subsistence Fisheries
Vanuatu’s artisanal and subsistence fisheries are important to the livelihoods and economies of rural communities. Estimates suggest that 80% of the country’s population live in rural areas, 70% of rural communities live near the coast (Hickey, 2008) and more than 66% of the rural population rely on marine resources to meet some of their nutritional and income needs (ADB, 2000; DTIS, 2008). Three-quarters of rural inhabitants reported that they were employed by the agriculture, forestry, or fishing industries (NSO, 2009). The fisheries provide rural populations with a high degree of food security (ADB, 2009). Both artisanal and subsistence fishers harvest the resources of Vanuatu’s reefs and lagoons and artisanal fishers are beginning to harvest lobsters as well (ADB, 2000).

The artisanal and subsistence fisheries are clearly understood to be important, but estimating the economic value of the fisheries is difficult because the catch is rarely sold in formal markets. However, the estimates that do exist show that the fisheries generate substantial economic value for rural communities. Recent estimates for the main island suggest between 60% and 80% of total catch is consumed while the rest is sold in informal marketplaces (Pascal, 2011). Dalzell (1996) estimated that the annual subsistence catch in Vanuatu was worth 1.95 million USD, which is more revenue than Vanuatu earns from the licensing fees charged to foreign commercial fishing vessels.

Artisanal and subsistence fisheries are integral to rural community’s food networks. Hickey (2008) found that rural Ni-Vanuatu communities living on
Recent research on Pacific fisheries has shown that women are involved in every artisanal fishing activity. Their participation is part of a household diversification strategy that allows men to pursue other income-earning endeavors while the women focus on harvesting and value-adding fishing activities (Hickey, 2008). Women also use their fishing income to contribute to household investments in food security and education while men often do not (Kronen and Vunisea, 2007; Hickey, 2008).

All of the evidence suggests that the artisanal and subsistence fisheries are important contributors to Vanuatu’s rural economy. The fisheries employ thousands of people in rural areas and facilitate trade between coastal and seaside communities, which helps diversify food consumption. Women participate in the fisheries to the advantage of their entire household. The nature of subsistence fishing and rural markets means that traditional economic measures (i.e. GDP) do a poor job of valuing the contribution of the resource. However, the estimates that do exist, in conjunction with the anecdotal evidence presented above, demonstrate that the artisanal and subsistence fisheries are important to the rural economy of Vanuatu.

There are also numerous social benefits that flow from artisanal and subsistence fisheries. Subsistence production is able to provide many of the benefits attributed to modern growth, such as: wellbeing, stability, equity, social cohesion, and sustainable livelihoods (Beazley and Mullen, 2006). It is widely acknowledged that social goods such as those described above are difficult to value, but nevertheless, it is safe to assume the value of each attribute is positive and should be part of the estimated value of artisanal and subsistence fisheries. Recent research on Pacific fisheries has shown that women are involved in every artisanal fishing activity. Their participation is part of a household diversification strategy that allows men to pursue other income-earning endeavors while the women focus on harvesting and value-adding fishing activities (Hickey, 2008). Women also use their fishing income to contribute to household investments in food security and education while men often do not (Kronen and Vunisea, 2007; Hickey, 2008).

All of the evidence suggests that the artisanal and subsistence fisheries are important contributors to Vanuatu’s rural economy. The fisheries employ thousands of people in rural areas and facilitate trade between coastal and seaside communities, which helps diversify food consumption. Women participate in the fisheries to the advantage of their entire household. The nature of subsistence fishing and rural markets means that traditional economic measures (i.e. GDP) do a poor job of valuing the contribution of the resource. However, the estimates that do exist, in conjunction with the anecdotal evidence presented above, demonstrate that the artisanal and subsistence fisheries are important to the rural economy of Vanuatu.
3. Tourism Industry

3.1 Tourism Overview
Vanuatu is known for its unique island geography, relatively pristine environment, and its large endowment of cultural diversity. Tourists are drawn to the islands for many reasons, but the unique cultural and environmental resources make tourism one of the predominant industries in Vanuatu. Tourism is the country’s main export industry and offers good prospects for employment and growth in the future (ADB, 2009). The industry also contributes to both the rural and urban economies, especially compared to other South Pacific nations. Tourism is a larger contributor to Vanuatu’s economy in terms of GDP and employment than many other South Pacific countries (Figure 8).³

Tourism revenue and arrivals have increased over the past decade partially as a result of the institutional reforms passed by the government. The tourism industry benefited from the deregulation of the airline industry, which increased competition and lowered traveling costs. The industry still faces significant constraints to growth and this poses significant risks to an economy that heavily relies on the continued performance of tourism. According to a consultancy report from 2008, the tourism industry’s ability to grow is still limited by poor air access, shortages of qualified labor, high input costs, and poor infrastructure. Moreover, the bulk of the country’s tourists come from Australia and New Zealand, which together account for 75% of tourism demand, leaving the country vulnerable to the economic conditions of tourists from one region of the world (see Figure 9).

3.2 Tourism and the Urban Economy
The economic activity of tourism is predominantly concentrated in the urban areas of Vanuatu, principally the capital, Port Vila, and most tourists stay on the main Island of Efate (DTIS, 2008). The urban economy is the largest recipient of tourism dollars largely because tourists frequent urban areas for their amenities. Access to the country’s rural areas is poor or non-existent and most rural communities lack tourism infrastructure. Some estimates suggest only 10-18% of tourists travel to outer islands and even then Tanna and Espiritu Santo attract most of the tourist traffic.

³ The Cook and Islands and Palau were left out of Figure 9 to ease interpretation of the chart. Tourism contributes 47% and 49% of Cook Islands and Palau’s GDP, respectively.
and simply cannot supply the goods and services demanded by the tourism sector, which means businesses must import them from abroad. According to a report by Trip Consultants, 27% of gross tourism revenues are used to purchase goods and services in foreign markets (Trip, 2008). The same report estimated that as many as 46% of the hotels are owned by foreign shareholders, but gross operating profits only make up 18% of gross revenue, which means the profit leakage is smaller than the ownership numbers suggest. However, in total, the report estimates that 30% of tourism revenue leaves the country (Trip, 2008).

3.3 Tourism and the Rural Economy
Vanuatu’s rural economy does not have the infrastructure to support a vibrant tourism industry the way that the urban economy does, but it provides many of the natural and cultural features that draw tourists to Vanuatu in the first place. As a result, past estimates suggest that most tourists stay in urban areas on the island of Efate (DTIS, 2008), but Trip Consultants estimates that 60% of tourists travel to rural areas of the island. Unfortunately, tourism expenditure data reveal weaker linkages between urban tourists and rural communities than might be hoped for given the degree of dependence of the industry on rural stewardship of natural and cultural resources. The data shows that tourist expenditure occurs in urban areas and on transportation to rural areas, but very little economic activity occurs in rural areas because most tourists only visit for the day.

Accommodation, local shopping, and dining, making up 71% of tourism expenditure (Figure 10). All three activities take place in predominantly urban areas since rural areas lack most of the infrastructure that would make such activities possible.

The tourism industry is an important creator of urban jobs, although the exact number of jobs created by the industry is disputed. The most reliable estimate comes from the 2007/08 Tourism Business Survey (TBS), which estimated that the industry created 3,800 full time equivalent positions in 2008 (Trip, 2008). Hotels are the largest employer in the tourism sector, employing 49% of the labor force (Figure 11). Tour operators create 17% of the jobs in the tourism industry and the transportation and retail sales sectors create 10% and 7% of the industry's jobs, respectively.

The tourism industry also contributes to the country's foreign exchange and revenue earnings. The hotel sector generates most of the industry's revenue, generating 100 million USD in revenue in 2007. The second largest sector, food and dining services, generated 39 million USD in revenue. In total, the tourism industry earned 267.75 million USD in revenue, or roughly 20% of the country's GDP. In 2009, the hotel industry alone accounted for approximately 4% of Vanuatu's GDP.

However, the tourism industry's actual contribution to the economy is overstated by the revenue estimates. Vanuatu's economy is underdeveloped and simply cannot supply the goods and services demanded by the tourism sector, which means businesses must import them from abroad. According to a report by Trip Consultants, 27% of gross tourism revenues are used to purchase goods and services in foreign markets (Trip, 2008). The same report estimated that as many as 46% of the hotels are owned by foreign shareholders, but gross operating profits only make up 18% of gross revenue, which means the profit leakage is smaller than the ownership numbers suggest. However, in total, the report estimates that 30% of tourism revenue leaves the country (Trip, 2008).

Figure 9: Vanuatu tourism arrivals by country of origin
There is a robust link between the cruise ship industry and rural economies, however. Cruise ships visit rural communities more often, although the visitation data is limited. One estimate suggests that the cruise ship industry grew by 4.8% in 2010 and by 2013 the country anticipates hosting 140 cruise ships (NSO).

The revenue from increased cruise ship tourism must be balanced against the potential downsides. Increased visitation numbers can have negative impacts on nature as human disturbances increase and the traditional cultures of rural communities can also be negatively impacted.
4. Conclusions

Vanuatu’s economy continues to grow despite turbulent conditions in the global economy, continuing a trend of positive economic growth that has lasted since 2003. Continued prospects for economic growth depend on the country maintaining its stock of natural and cultural resources. Vanuatu’s main industries are all dependent, to various degrees, on the existence of natural resources. Tourism demand depends on maintaining pristine nature and preserving the diversity of cultures that continue to attract tourists to the nation. The fishing industry depends on the conservation of harvestable marine species.

Tourists visit Vanuatu to enjoy its natural and cultural resources. In order to maintain the resources which inspire tourist demand, the country must conserve its natural resources not only because of their direct impact on tourism demand, but also because they are partly responsible for maintaining the nation’s cultural diversity. Increased demand for tourism offers opportunities to improve the economic welfare of the country, but it must be managed in a way that conserves the resources upon which it depends.

This is especially important because of the role tourism plays in Vanuatu’s economy. Tourism is the largest revenue-earning industry in the country and economic growth will need to be at least partially achieved through the expansion of the tourism industry. This will create challenges not only for urban communities, which will need to make investments in infrastructure and labor while conserving natural resources, but also to rural communities who must protect their cultural and natural heritage.

Vanuatu’s fisheries are going to come under increasing pressure in the years ahead according to forecasts. The country’s demand for fish is expected to increase by 147% and 37%, respectfully, in urban and rural areas. Meeting this demand will require careful resource stewardship in order to maintain the health and resilience of fish stocks. This is especially important for rural communities who disproportionately rely on marine resources for their livelihoods.

The government can safeguard the country’s natural and cultural resources that are so important to economic success by emphasizing their value. Most degraded ecosystems became that way because their value was not taken into explicit account. If the values of nature are recognized and emphasized, decision makers can incorporate them into their planning, ensuring that the natural and cultural capital which Vanuatu’s economy relies on is maintained.
RESOURCES CITED


