

TIMOR-LESTE ECONOMIC DIVERSIFICATION ANALYSIS:

CANDLENUT, MOBILE FINANCE MARKET & TOURISM ASSESSMENTS



REPORT #20

August 2015

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EXECUTIVE SUMMARY

Less than two decades after achieving its independence, Timor-Leste is grappling to secure its place in the regional and global economy, while stabilizing the livelihoods of its populace. The recent petroleum discovery brings new wealth and opportunity but also demands caution in managing the resources for long term sustainability. To address this, the government has undertaken broad efforts including building its admistrative and regulatory capacity, creating social support programs and deploying widespread infrastructure upgrades and diversifying its economy.

This assessment informs USAID/Timor-Leste on the opportunities presented by candlenut exports, tourism, and mobile banking to support economic growth and diversification in the country. While the candlenut and tourism sectors examine both the domestic factors and international expansion, mobile banking was examined as an economy-wide financial service, as well as a conduit for financial inclusion for under-served populations.

CANDLENUT SWOT

Candlenut offers positive opportunities as an environmentally positive income generator for poor, rural populations in Timor-Leste. However, despite currency fluctuations which made the Indonesian export market a possibility recently, Timor-Leste is largely at a competitive disadvantage for exporting basic candlenut products to the global market. This is due to the lack of market development, poor infrastructure (roads) and small-scale, subsistence-oriented production.

Table 1: Candlenut SWOT Analysis

Weaknesses Strengths Widely grown by low-income groups Lack of market knowledge, skills and ex-Positive environmental impact perience Farming small-scale, subsistence oriented Supply chains already established Transport challenges – poor roads One processor successfully exporting **Opportunities Threats** Continuing high demand from Indonesia Unfavorable USD/IDR exchange rate Processing into oil can increase value-add Timor-Leste market relies on two market channels and three buyers Diversifying market channels for oil Non-tariff barriers, such as Sanitary and Reduce labor time and cost with new tech-PhytoSanitary controls nologies Climate change risk Producing final products (soap, shampoo, skin creams) will add further value

Despite these challenges, there are several further strategies which can be explored for intervention which would build upon Timor's strengths. Two action areas are recommended. The first involves improving efficiencies of existing supply chains, particularly processing technology - this will benefit farmers and increase incomes from product sales. There are also particular benefits to women as they are the main laborers in candlenut processing. The second action area is to develop new higher value products and diversify the export markets, rather than competing on the lower value Indonesian spice market, where Timorese candlenut exporters are reliant on just two buyers in Atambua. The development of a wider natural oils industry in Timor could include coconut and groundnut, for example, as the same processing machinery can be used for all the oils. Coconut and candlenut are also both used in the cosmetics industry

to produce soaps and shampoos. As coconut is grown by farmers in the lowlands, a wider natural oils industry in Timor-Leste would benefit other farmers, in addition to candlenut farmers in the uplands. This proposed value escalation could also explore markets for soap, shampoos, skin creams and other specialty items.

MOBILE FINANCE SWOT

The government of Timor-Leste has made new strides of late which set the base for the growth of mobile finance, while maintaining cautious efforts to manage risk. The deregulation of the telecommunications industry has brought new competition and expanded the channels available to reach the under-served. At the same time, it has maintained stability through its dollarized monetary policy and focus on building regulatory regimes such the Central Bank, while also supporting the transition to a market economy such as the ongoing transformation of the largest microfinance instutition into a more full-service commercial bank.



BNU Mobile has launched

Led by a cautious and slowly maturing banking sector, mobile financial services are still at a nascent stage with only one product currently in limited use (BNU Mobile). The young and technically equipped population, even in the rural areas, stands ready to join the digital revolution.

Recognizing the real risks that could compromise growth of the sector, USAID is advised to work with active donor and government partners to support digitization efforts of key payment streams such as the large volume government payment are the income source for nearly half of the Timorese population. Integrating mobile finance, both as pilots in USAID projects and in USAID operations, will catalyze widespread adoption of mobile finance, including both mobile payments ('mobile money' and in promoting more advanced mobile banking services with access to accounts and products such as insurance, savings and credit.

Table 2: Mobile Money and Mobile Finance SWOT Analysis

Table 2: Mobile Money and Mobile Finance SWO1 Analysis						
 Strengths High 74% mobile use, 20% smart-phones Young population BCTL supportive of MM/MB Budget support available G2P payments demand new 	 Weaknesses Small economy, hard to scale models commercially Weak regulator capacity Telecom operators constrained Low technical/financial literacy Subsistence mentality 					
 Opportunities G2P payments on-ramp to scale use USAID pilot mobile ag finance Digitize USAID project operations Payments as pathway to savings/credit 	 Threats Potential avenue for money laundering Multiple donors potentially overlapping Fear of fraud Past instability dampens trust 					

Banks have also explored delivering their services not just via mobile technology operators but also in other 'mobile' methods such as by van with officers carrying Point-of-Sale devices. The opportunity to grow this services may be more immediate than through mobile technology, although it will still not reach the most remote areas.

Table 3: Mobile Banking SWOT Analysis

Strengths Weaknesses Less technical maintenance needed to Still dependent on human factor as bank manage low-technology mobile banking officers are still key intermediaries Banks currently open to exploring inno-Not economical still to reach the most revative mobile options Does not require functional network in-Less automated than pure mobile-phone frastructure delivered services; heavy human input needed Threats **Opportunities** Banks currently open to exploring inno-Security still a factor as mobility does not vative mobile options decrease cash usage May become outdated once mobile tech-BNCTL already deploying mobile banking option nology enabled transactions take up Both MFIs already exploring mobile Telecommunications companies may bebanking with field officers come significant competitors to deliver basic bank services Can synch with mobile money and mobile finance solutions in the future

The current mobile finance providers are stalled in their efforts to scale or even introduce products. This is largely due to the start-up risks and challenges in launching a new service to market. There are also systemic barriers that are holding this back including on the demand-side: low consumer awareness of mobile banking; low technical and financial literacy; and on the supply side: high perceived risk, low technical and operational capacity (see BNU Mobile's current challenges) and also a small market overall with low effective economies of scale (as determined by the UNCDF's 2013 assessment of the G2P opportunity for a mobile finance service provider).

These challenges can and may be overcome on their own if certain market factors come into play such as 1) investment from a big player (such as a big push by ANZ or such), or 2) the active conversion of large payments streams (such as the G2P); however, it is likely that these big first movers will need help to hedge their risk. Otherwise, global technology players such as Facebook may innovate and introduce new payment tools.

However, to jumpstart the use of mobile finance, some additional incentives (from USAID or others) may be needed for these types of companies to even consider exploring the Timorese market opportunity.

TOURISM SWOT

Timor-Leste currently offers a limited tourism product, mainly focused at present on business and expatriate needs. There are several excellent diving sites, some cultural sites and some high profile events such as the *Tour de Timor*. But it is difficult for the country to compete both price-wise and quality-wise with tourism superstars such as Bali and other island tourism destinations. Furthermore limited air links, poor internal transport, limited accommodations and low human resource capability deter leisure tourism at

present. An inconsistent tourism strategy to date has not helped matters; however, there is a renewed interest in government to support the industry which sparks some hope.

Opportunities do exist and the industry and tourism employment is likely to grow over time. Training and quality issues need attention however. The possibly negative post-conflict image could be turned around as Timor-Leste emerges as a "new" destination, experiencing a rebirth on the world stage with undiscovered cultures and landscapes to explore. Additional tourists could be targeted as product expands and improves. These must be reached with quality product development and improvement to the marketing approach and reach; namely strengthening the country's online presence and partnerships with operators, and focusing more on nearby regions. There are many intervention opportunities to assist growth.

Table 4: Tourism SWOT Analysis

Strengths	Weaknesses			
 High concentrations of excellent dive sites Handful of good quality hotels in Dili A "new country to discover" Some unique cultural aspects Tour de Timor event Government interest in tourism 	 Weak environmental awareness No national tourism training strategy No effective regulation or master plan Limited accommodation, attractions Poor rural roads, no internal air services Negative image (conflict)/or none 			
Opportunities	Threats			
 Improve hotel standard/service quality Strengthen environmental protection Strengthen and focus marketing Marketing partnerships with airlines, on line tourism, tour operators Improve business climate & target investors Develop responsible tourism with focus on local benefit 	 Increased competition and rising US\$ Natural hazards – floods, landslides, earthquakes, storms and sea level rise Political instability Isolation if air services reduce Overfishing/oil pollution 			

All three sectors offer growth opportunities and increased livelihoods for the target Timorese populations.

PART I: CANDLENUT ASSESSMENT

ACRONYMS

ACELDA Company (local exporter)

CFG Candlenut Farmer Groups

CIFOR Center for International Forestry Research

CMA Collective Marketing Associations

CRS Catholic Relief Services

DOCE Development of Candlenut Enterprises

GiZ Deutsche Gesellschaft für Internationale Zusammenarbeit

IDR Indonesia Rupiah

MAF Ministry of Agriculture and Fisheries

SDP Timor-Leste Strategic Development Plan 2011-2030

SPS Sanitary and Phytosanitary

USAID United States Agency for International Development

USD United States Dollar

I. INTRODUCTION

USAID commissioned an Economic Diversification Analysis on the opportunities presented by candlenut exports from Timor-Leste. In recent years, candlenut, a non-timber forest product, has shown an interesting dynamic in which prices and demand significantly increased from neighboring Indonesia. It was thought the primary constraints to the expansion and growth of candlenut included limited market and price information and significant institutional complications involved in the candlenut trade. Therefore, the objective of this assessment was to examine the current situation of the candlenut market and identify opportunities to improve export.

The consultants focused their entry-point of enquiry on candlenut traders in Dili and widely in the other districts of Timor-Leste, as they provide the important upstream and downstream linkages between farmers and end markets. Candlenut farmers were also interviewed in Baucau and Suai, representing the two main production clusters in Timor-Leste. Experiences and lessons learned were gained from discussions with the government including the Ministry of Agriculture and Fisheries (MAF), as well as organizations active in supporting the sector such as Catholic Relief Services (CRS) and Deutsche Gesellschaft für Internationale Zusammenarbeit (GiZ) as well as key value chain stakeholders.

Candlenut is widely grown across Timor-Leste, with two production clusters centered around Baucau in the east and Suai in the west. It provides a cash income for subsistence farmers in the uplands and the collection and sale of candlenut is a common coping mechanism for poor and food insecure households in rural areas.

There are two market channels for candlenut. The main channel is as a food ingredient in Indonesia, whereby candlenut kernel is exported overland to Atambua and enters the Indonesian supply chain. The second smaller channel is provided by a processor in Baucau who produces high quality, organically certified candlenut oil for export to a cosmetics manufacturer in Hawaii. The cosmetics manufacturer processes the oil into soap, shampoo and skin creams.

Prices for candlenut destined for the Indonesian market are falling due to the Indonesian rupiah/United States dollar exchange rate, which is at a seventeen year low. Timor-Leste is at a competitive disadvantage producing candlenut for the Indonesian spice market, as it is a small producer with comparatively high costs, when compared with Indonesian producers. Although costs could be reduced through improving processing and storage technologies, there is little scope for increasing income, as farmers and traders in Timor are paid a standard price for mixed grade candlenut without any premiums for quality. Traders are concerned that if prices fall below a certain level, farmers will divert the time spent collecting and processing candlenut to other income generating activities.

Due to its small size Timor-Leste needs to produce high-quality, value-added products for niche markets, rather than competing in mass markets based on volume and price. The oil processor is a good example of this, and there are opportunities for new processors in the western cluster of districts. There are also opportunities to add further value by producing final products such as soap, shampoo and skin cream in Timor-Leste.

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¹ USAID (2013) Accelerating Inclusive Economic Growth in Timor-Leste

A diversification of market channels is required to access other end markets, such as the hotel and spa market in Bali and Australia. However, external assistance is necessary for new product and market development, as these skills and experience are not available in Timor-Leste. Also, as previously seen with the oil processor in Baucau, much time and financial resources had to be invested before the business became viable and sustainable and this is unlikely to be forthcoming from the private sector.

It is unlikely investments in candlenut will have a large scale impact for farmers if applied in isolation as candlenut is a minor crop and constitutes a small proportion of household income or food security. To achieve impact, a systemic approach must be undertaken, such as the development of a wider natural oils industry. The same candlenut oil processing machinery can also produce coconut and groundnut oil. Furthermore, coconut oil is also used in the cosmetics industry to produce soaps and shampoos. As coconut is grown by farmers in the lowlands, a wider natural oils industry in Timor-Leste would benefit more farmers, in addition to candlenut farmers in the uplands.

II. CURRENT STATUS OF THE CANDLENUT MARKET IN TIMOR-LESTE

Candlenut (*Aleurites moluccana*) is native to the Indo-Malaysia region and has been introduced throughout the Pacific Islands. It is most widely grown in Indonesia, where an estimated 205,532ha of candlenut is planted, mainly in North Sumatra and East Nusa Tenggara (which includes West Timor).²

Most candlenut is used as a spice in Indonesian cooking. Traditionally, it is has been used as a medicine and previously Timorese candlenut oil was used to light the streets of Lisbon, due to its flammable nature. Currently, the processed oil is used by the cosmetics industry as an ingredient in soaps, shampoos and skin creams. In East Timor, candlenut is mostly produced for export, and as the prices become too low, farmers stop harvesting and divert labor time to other activities such as small livestock.

A. PRODUCTION

Candlenut is widely grown across Timor-Leste. Farmers collect and sell candlenut as one of a limited number of cash income sources in rural areas. Candlenut thrives in most tropical regions between 500 and 1,200m above sea-level with a pronounced dry season. Candlenut grows under a variety of conditions and tolerates rocky slopes with poor soils. It is drought tolerant; pest and disease resistant and requires little maintenance.

Candlenut prefers full sun and is most often planted as a border tree or windbreak. Its ability to grow on slopes contributes to soil stabilization and reduces soil erosion. As such, candlenut fits well into Timorese agroforestry systems. Most trees are self-seeded wildlings, however, when they are in fact planted, they are

² Krisnawati et al (2011) Aleurites Mollucana: ecology, silviculture and productivity, CIFOR

planted as border trees and wind breaks (rather than primarily to cultivate). And if for instance, a candlenut tree grows randomly on land that a Timorese owns or has user rights for, they have the right to gather the nuts.

There are two varieties of candlenut found in Timor-Leste. The local variety is taller and produces bigger nuts with higher oil content, so is better suited for oil processing. A hybrid variety has also been introduced from Indonesia, which is shorter and produces smaller nuts. The hybrid variety has lower oil content and a whiter kernel, which is better suited for the Indonesian spice market.

Although candlenut is rarely cultivated under a plantation system, 250 trees per hectare (ha) can be planted under monoculture. Trees reach 20-25m high and start producing nuts at three to four years old. Peak production is reached after 20 years, decreasing after 70 years. Many of the trees in Timor-Leste now need replacing to maintain or increase yields. One tree produces approximately 80kg candlenut a year. Although candlenut bears fruit throughout the year, the main production season falls between September and February. Nuts are harvested once they have fallen from the tree.³ Very few new trees are being planted, so yields will continue to decrease as these trees age.

Production by district is presented in Table 5. There are two distinct production clusters with 63% of trees located in the eastern districts of Baucau, Viqueque and Lautem and 24% of trees located in the western districts of Ainaro, Bobonaro and Covalima. Manufahi district (4% of trees) sits between the two clusters. The coffee growing areas of Liquiça, Aileu, Dili and Ermera districts possess less than 1% of Timor's candlenut trees in total.

Table 5: Candlenut Production by District

District	Productive Area (ha)	% of total
Baucau	933	32
Viqueque	629	21
Ainaro	320	11
Lautem	307	10
Bobonaro	307	10
Oecusse	138	5
Manufahi	109	4
Covalima	94	3
Manatutu	92	3
Liquiça	10	<1
Aileu	5	<1
Dili	2	<1
Ermera	1	<1
Total	2,947	100

Source: National Directorate of Coffee & Industrial Plants, MAF, 2015

B. MARKET CHANNELS

There are two main market channels for candlenut. The majority is exported as nut or kernel over the border to Atambua in Indonesia, destined for large wholesale buyers in Surabaya. The Surabaya wholesalers then distribute the kernel as final product throughout end markets in Indonesia, where it is sold as a

³ Krisnawati et al (2011) Aleurites Mollucana: ecology, silviculture and productivity, CIFOR

spice for cooking. Timorese candlenut exports are tiny when compared to the demand from the huge Indonesian market. Buyers in Atambua have stated they are willing to buy all the candlenut Timor can produce. Export statistics for candlenut are shown in table 6 (though the reason for the swing in trade levels is unclear from the assessment findings).

Table 6: Timor-Leste Candlenut Exports (includes both nuts and kernel at 3-4kg nuts required for 1kg of kernel)

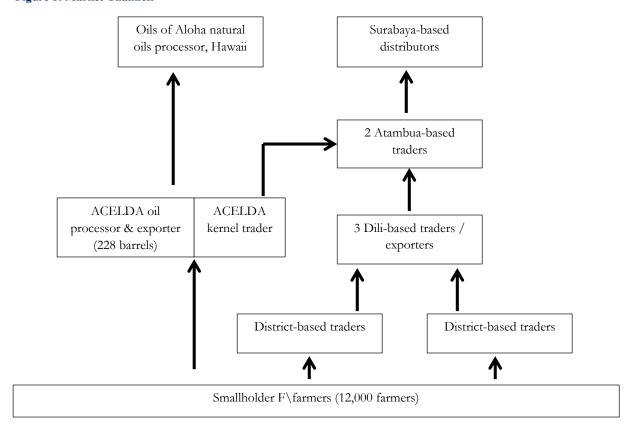
Year	2005	2006	2007	2008	2009	2010
MT exported	1,009	1,070	344	1,094	459	502

Source: Ministry Commerce, Tourism and Industry

The second smaller market channel is provided by 'ACELDA', a single processor in Baucau which processes kernel into oil for export to 'Oils of Aloha', a natural oils processor in Hawaii, USA. The owner of ACELDA has also gained 'Control Union' organic certification from the Netherlands for farmers from five villages who supply him with kernel for oil processing.

ACELDA has a contract to supply Oils of Aloha with 228 barrels (45,600 liters) of oil a year. Oils of Aloha manufactures skin care products, shampoos and soaps for distributors in USA, Japan, China, Taiwan and Switzerland. Figure 1 summarizes the main market channels.

Figure 1: Market Channels



The market channels are characterized by a large number of small farmers, producing small volumes of candlenut, which is aggregated by two to three small traders in each district. In Dili, the market becomes highly concentrated with only three buyers exporting to two buyers in Atambua. However, this is more an indication of the small export market and low volumes traded than an oligopoly, as traders compete with each other to source candlenut from farmers.

NDONES Production areas / District buyers Export oil to Hawaii via Singapore Oil Processor SOVU NDONES Dili buyers Atambua buyers ship nut & kernel to Surabaya Export nut & kernel to Atambua **EAST TIMOR** DEBIC MAIS
ADMINISTRATE CIVER
DEBIC ROMEMAIS

S 0 0

Figure 2: Spatial Chain Map

Figure 2 shows the geographical flow of candlenut in a Spatial Chain Map. Most candlenut is transported to Dili and the candlenut oil, processed in Baucau, is exported from Dili via ship. The nut/kernel, destined for the Indonesian spice market, is transported by road to Atambua via the international border crossing at Batu Gede. Candlenut from Covalima and Ainaro districts on the southern coast is exported through the second, southern international border crossing at Mota Masin, as the road to Atambua on the Indonesian side of the border is in much better condition than the road to Batu Gede via Bobonaro. All candlenut is then shipped to Surabaya from the port at Atapupu.

C. VALUE CHAIN STAKEHOLDERS

Most of the stakeholders involved in the candlenut value chain are intermediary traders/transporters. This is largely due to the fragmented production base and the need for cross-border trade. This section describes stakeholders in the main Indonesian spice market channel.

Farmers

Farming is the sole source of income for about 85% of rural households. However, the per capita farm holding is very small, with the average rural household owning less than 1.2 hectares, often located in a number of separate plots scattered in different areas of the villages.⁴

Low input/output subsistence farming forms the bulk of Timorese upland agriculture. Soils are generally shallow and poor in fertility and the terrain is often steep to very steep in the upland areas. Most subsistence farmers practice a mixed-cropping system of rain-fed maize, upland rice, root crops and legumes. Shifting cultivation, often based on 'slash and burn', is widely practiced.

Farmers collect the nut and carry out primary on-farm processing which includes drying and shelling the nut to expose the kernel. Candlenut is a supplement to other income from cash crops such as garlic and livestock. It is estimated there are about 12,000 farm households selling on average 50kg of candlenut each a year in Timor-Leste. According to a survey carried out by CRS, farmers identified the following issues as the main constraints to candlenut production: i) prices can fall to levels when it is not worth their time processing candlenut; ii) the trees are often located on remote hillsides, far from the village; and iii) shelling the nut is labor-intensive.⁵

District-based traders

District-based traders provide an important function, aggregating small volumes of candlenut from individual farmers, which can then be transported to Dili-based traders with whom they have informal supply agreements. They also buy other crops such as copra and tamarind, which follow the same market channels. District traders have their own trucks, or rent 5MT trucks to transport the candlenut and other commodities to Dili. It is estimated there are about 20 district traders in Timor-Leste, selling about 30 MT of candlenut each a year.

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⁴ GoTL, National Commission for Research and Development; Timor-Leste – State of the Nation; September 2008

⁵ CRS (2009) Baseline Assessment: Development of Candlenut Enterprises in Timor-Leste II

Dili-based traders

The three Dili-based traderstraders (COMICO Timor Diak, Esmelia and Tuscany) have informal supply agreements with one of the two candlenut buyers in Atambua. As well as candlenut, they buy copra and tamarind, which is also exported to Atambua. Each trader, on average, exports 200MT of candlenut (nut and kernel) a year.

The Dili traders may send trucks to pick up supplies from the district district traders and also provide the transport to Atambua. They play an important role in aggregating supplies from several districts into shipments that are large enough to absorb export transaction costs to Atambua.

The Dili-based traders usually handle the export procedures, which include obtaining an export permit and quarantine certificate from MAF and a customs declaration (copy of export trading license, country of origin certificate, and a statement of the volume and value of goods to be exported). Quarantine certificates are available at the border; however customs declarations have to be processed in Dili. Nonetheless, none of the exporters complained about border procedures.

Atambua buyers

Gajha Madha and Paris Indah are the two biggest candlenut buyers in Atambua. They also buy other agricultural commodities such as copra, tamarind, garlic and groundnut produced in the Timor Tengah Utara and Belu regencies of West Timor. They have become adept at cross-border trading with Timor-Leste, and have long-established informal supply agreements with large buyers in Surabaya.

If volumes are large enough in Dili, the Atambua buyers may send trucks to pick up the candlenut and other commodities in Dili, while also bringing in consumer goods for sale in Dili. Otherwise, they will only receive supplies in Atambua, which is an effective barrier-to-entry for the smaller district-based traders supplying direct to Atambua.

The Atambua buyers handle the import arrangements on the Indonesian side of the border and ship the candlenut to Surabaya from the nearby port in Atapupu. Indonesia import requirements include a valid import permit, a customs declaration from Timor-Leste, payment of a customs fee per shipment, and an import duty of 5%.

Surabaya distributors

Primary wholesalers in Surabaya act as distributors across all of Indonesia. Approximately 25 wholesalers trade in candlenut, three of whom buy from the traders in Atambua. The Surabaya wholesalers will sort and repackage the candlenut before selling on. As the flow of candlenut from Timor-Leste is so small, compared with the volumes produced in Indonesia, Surabaya wholesalers are not interested in importing directly from Timor-Leste, with its associated import and customs requirements. This makes the Atambua buyers a key intermediary in the supply chain.

D. MARKET FUNCTIONS

Market functions describe the activities undertaken by value chain stakeholders to add value and deliver the product to the end market.

Storage

Candlenut can be stored in-shell for several months with little deterioration if dried to 10-12% moisture content. However, once shelled, the kernel must be kept in a clean, dry place with sealed floors. Kernel should not be stored longer than one month, otherwise it starts to blacken and rot.

Some level of storage is carried out by all actors in the value chain, mostly while aggregating enough volume for transport and selling on to the next buyer in the supply chain. However, quality is most affected by poor on-farm storage, for several reasons: i) the nut/kernel is not dried sufficiently during the rainy season, particularly at higher altitudes; ii) processing (shelling) is so time consuming, the kernel first shelled can start to rot while farmers shell the remainder of the candlenut; and iii) waiting for traders to visit or for prices to improve can also extend storage with corresponding decreases in quality.

Traders normally store candlenut on tarpaulin inside small warehouses and sometimes carry out extra drying if the moisture content is high. Traders store between five and ten tons of candlenut at a time, for up to two weeks.

Processing

Primary processing: Primary processing is carried out by farmers. During the peak season, candlenut fruits are collected once or twice a week from the ground, after they have fallen from the tree. The outer flesh is removed to expose the hard nut, which is sun-dried for two to four days. Boiling the nut before shelling is quicker than sun-drying but gives the kernel an undesirable yellow color. After drying, candlenut is sold to traders in-shell or undergoes further processing on-farm to produce kernel. Candlenut is traded in rice sacks weighing approximately 60kg.

Roughly 4kg of in-shell nut are required to produce 1kg of kernel and whole kernel is preferred. After sundrying the nut is left to cool before shelling. Each nut is shelled manually by placing it in a holder made of palm leaf and then hit on a flat rock. Variations exist where the holder can be made of old car tires or leather. This is very time consuming, typically taking one person two days to shell 50kg. The method also produces up to 60% broken kernel. Shelling machinery has been tested from Indonesia but none have been able to reduce the amount of broken kernel.

Although kernel receives up to four times the price of in-shell nut, shelling is labor intensive and if prices fall below a certain point, farmers transfer their labor time to other cash crops such as garlic or small livestock.

Kernel quality is judged by color and proportion of broken kernel; with whitish color and whole kernel preferred. However, no quality premiums are paid to farmers or traders in Timor-Leste for candlenut that has been sorted and graded. Surabaya traders carry out the sorting function as a means of increasing income from the low base price paid for mixed quality grade.

Secondary processing: Further processing of the kernel into candlenut oil is carried out by a specialist processor as it requires specific machinery, technical expertise, and links to the cosmetics industry, rather than the Indonesian spice trade.

It takes approximately 2kg kernel to make 1 liter of oil. The kernel is cooked briefly in an oven before going through a grinder and press. The 'cake residue' left over after the oil has been extracted can be used as a fertilizer.

The oil is then passed through a filter for purification. Quality control is carried out by testing the oil for free fatty acids⁶ before being poured into 200 liter barrels for shipping.

Final processing: Oils of Aloha, the natural oils processor in Hawaii, blends the candlenut oil with other oils (e.g., macadamia, coconut), fragrances (e.g., lavender, hibiscus) and chemicals (e.g., tocopherol, sodium sulfate) to produce soap, shampoo and skin creams.

Transport

Farmers transport small amounts of candlenut in sacks from their homes to district district traders by horse, motorbike or bus. District traders own or rent 5MT trucks to transport the candlenut and other goods to Dili.

The overall condition of the 869km of district roads and 3,025km of rural access and feeder roads in Timor-Leste is very poor, with most rural roads being unsealed and little more than tracks. Transport is most problematic from villages located in the highlands along the central spine of Timor, especially in the wet season.

Traders carry out the transport function. Although transport accounts for only three to five percent of trader costs, it is their second biggest cost and can significantly affect profitability, because margins are so thin. Traders aim to reduce transport costs by only moving goods when the trucks are fully loaded and also trucking other goods for the return trip.

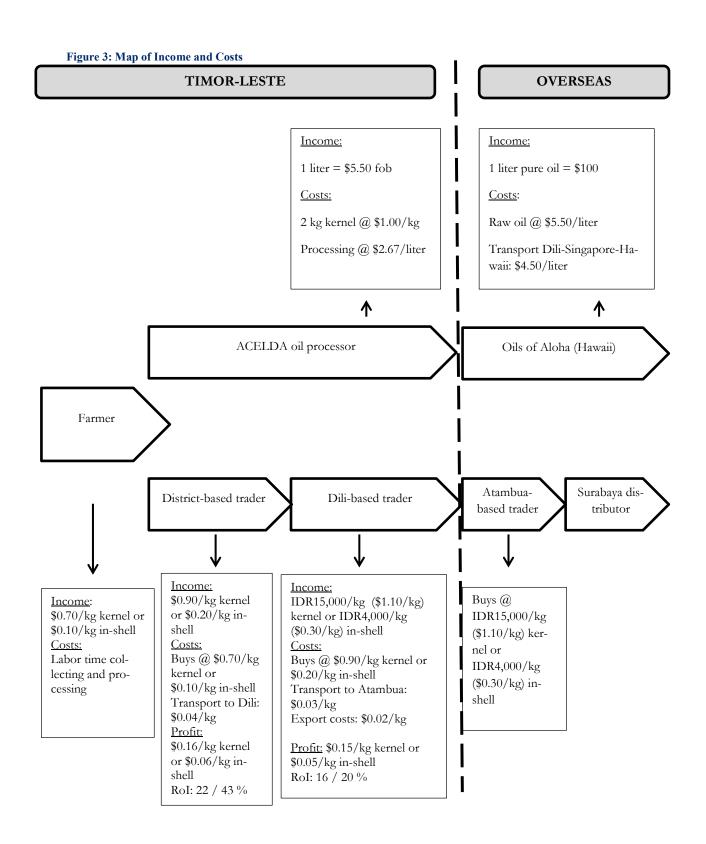
E. VALUE ADDITION

Figure 3 shows how value is created, shared and distributed amongst candlenut value chain stakeholders for the two main market channels. Prices received for in-shell nut is considerably less than kernel but considerably less labor time is required to produce it. District and Dili traders make margins of US\$ 0.15-0.16/kg on kernel with returns on investment (RoI) of 16-22%, which cannot be regarded as exploitative, considering the essential tasks and risks undertaken.

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⁶ Free-Fatty Acid fatty acid content must be less than 2%

⁷ Sendall (2009) Strategic Framework for Rural Development in Timor-Leste, EU/HTSPE



Although the profit per liter for the oil processor is high, the RoI is only 18%, as his costs are also considerably higher. Profits for overseas traders are not known. However, the profit margin for Oils of Aloha must be considerable, even allowing for processing and marketing costs, as the cif (Cost, Insurance and Freight) price for oil from Timor-Leste is US\$10.00/liter which they retail for US\$100.00/liter.

Figure 4 summarizes the value-added by each of the value chain actors. Unsurprisingly, the oil processor adds most value at US\$0.83/liter (roughly 1kg). Farmers also add considerable value through the harvest, drying and primary processing of candlenut at US\$0.70/kg. Traders add the least amount of value US\$0.15-0.16/kg, mainly through carrying out the transport function.

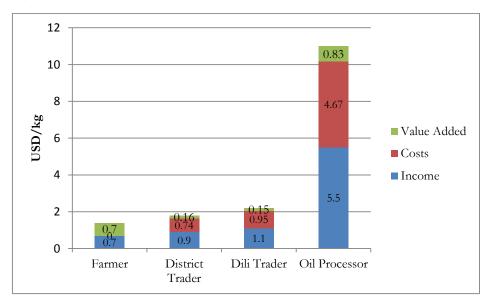


Figure 4: Value-Added Along the Chain

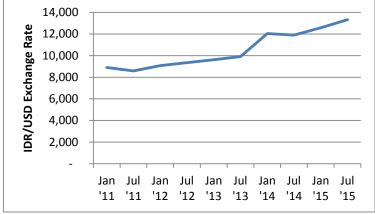
Source: Consultant interviews

F. PRICE DETERMINATION

Prices for candlenut in Timor-Leste are determined in Atambua, which in-turn is determined in Surabaya. As the majority of candlenut is exported to Indonesia and sold for rupiah, the USD/IDR exchange rate is very important and is the main reason for the recent fall in candlenut prices in Timor-Leste.

As the US economy recovers from the global financial crises, all Asian currencies have weakened against the USD. However, the IDR is currently at a 17 year low exchange rate against the USD because of a wide current account deficit. Even though Indonesia is introducing several measures to reduce the current account deficit, exchange rates are not likely to improve significantly in the near future. The IDR/USD exchange rate over the past four years is shown in figure 5, falling from IDR 9,000 in 2011 to IDR 13,000 in 2015, a 44% decrease.





Source: Oanda.com

Figure 6 shows the price paid by traders in Timor for candlenut over the same period. In 2011, Timor traders paid US\$1.30/kg, compared with US\$0.90 in 2015, a 31% reduction.

Figure 6: Kernel Price (Timor traders buying price)



Source: ACELDA

Dili and district traders are exposed to high levels of risk with unstable and decreasing exchange rates, as they pay farmers up to two weeks in advance of getting paid themselves. Traders are also concerned that if the price falls much further, farmers will no longer be interested in selling candlenut. Traders estimate the floor price for which farmers are willing to sell candlenut kernel is around US\$ 0.50/kg.

The oil processor is shielded from these risks by having an annual contract to supply a specific amount of oil at a pre-agreed price. He is also not affected by the IDR exchange rate as he is paid in USD from Hawaii.

III. CROSS-CUTTING FACTORS

Gender

Women face many challenges in Timor-Leste, such as lower incomes and fewer employment opportunities than men; gender-based violence; a high birth rate; and a lack of access to education. Within the agriculture sector, women provide more labor than men, and this is true for candlenut. It is mostly women that collect and dry the candlenut and most importantly, carry out the laborious shelling process into kernel; this is part of the woman's role in the household.

Youth

The population of youth is growing quickly and it is estimated 60% of the population is under 25 years old.⁸ Currently unemployment is almost 20% in rural areas and up to 40% in urban areas. High unemployment and the increasing number of entrants into the job market every year poses a major challenge to Timor-Leste, as approximately only 15% of school leavers are successful in finding employment.⁹

The ACELDA oil processor employs six full-time staff and traders employ unskilled laborers for loading and unloading candlenut at their warehouses. Due to the small amount of candlenut trading and processing, candlenut does not offer much opportunity for increasing youth employment.

Environmental Impact

Almost half the topography of Timor-Leste has slopes of 40 degrees or more, and landslides and flash floods are common. Environmental conditions in Timor-Leste are deteriorating due to inappropriate agricultural production practices, particularly annual cropping on steep slopes without the use of soil or water conservation techniques.

The key to overcoming this constraint is the application of crop and livestock production systems which recognize Timor-Leste's fragile agricultural environment and are based on conservation agriculture techniques. Candlenut fits well into sustainable agroforestry systems which can have a positive environmental impact.

Poverty and Food Security

Food security is worse in rural areas, with 79% of the rural population suffering at least one month of low food consumption, compared to 51% of the urban population suffering the same. On average, rural households suffer 3.8 months without enough rice or maize to eat, while urban households suffer two months. The incidence of poverty has increased over recent years with 50% of the population living below the poverty line, as compared with 36% in 2001.¹⁰

⁸ World Fact Book, 2010

⁹ Sendall (2009) Strategic Framework for Rural Development in Timor-Leste, EU/HTSPE

¹⁰ Sendall (2009) Strategic Framework for Rural Development in Timor-Leste, EU/HTSPE

Rural poverty and food insecurity in Timor-Leste will not be solved by a single intervention. Candlenut provides a cash income for subsistence farmers and the collection and sale of candlenut is a common coping mechanism for poor and food insecure rural households.

IV. PREVIOUS SUPPORT & LESSONS LEARNED

The government's economic growth priorities are detailed in the Timor-Leste Strategic Development Plan (SDP) 2011-2030. This document encompasses the government's strategic vision to transition to an upper-middle-income country with a healthy, well-educated and safe population by 2030. There are three pillars to the government's economic development plan: agriculture, tourism, and petroleum. The goals for the agriculture sector are to improve national food security; reduce rural poverty; support the transition from subsistence farming to commercial farming of crops, livestock, and fisheries; and promote environmental sustainability and the conservation of natural resources.

The SDP led to the development of the Ministry of Agriculture and Fisheries Strategic Plan (2014-2020) to improve food security and agriculture productivity. This plan focuses on five strategic objectives: i) sustainable increase in the production and productivity of selected crops, livestock species, fisheries and forestry products; ii) improve the enabling environment (legislations, policies, institutions, and infrastructure); iii) ensure MAF and related agencies are strengthened and appropriately configured and equipped to deliver on this Strategic Plan and the overall SDP; iv) enhance sustainable resource conservation, management, and utilization; and lastly v) enhance and improve market access and value addition. This last objective is the most relevant to candlenut and although it does not specifically direct support towards candlenut, six sub-programs will be implemented to enhance general market access and value addition for all agricultural commodities: i) improve capacity for regulation and enforcement, especially safety standards and quality assurance; ii) improve access to high-quality inputs, planting, and stocking materials; iii) value chain analysis and increased participation in value addition activities; iv) expand network of rural market infrastructure; v) strengthen farmer groups and farmer organizations for collective marketing; and vi) improve private sector engagement in input and product marketing and service provision.

The National Directorate of Industrial Plants and Coffee, under MAF, includes candlenut as one of nine priority crops. However there is no specific program of support, due to limited budget and MAF's general focus on food crops and food security. Although MAF has a Division of Agro-Commerce, the Ministry of Commerce, Industry and Environment (MCIE) is responsible for activities such as the commercial processing of candlenut oil.

In 2006, GiZ and MAF provided significant support to ACELDA, to initiate the processing and export of candlenut oil. Although much financial and technical support was lavished on one small company, ACELDA now continues to export oil on a commercially viable and sustainable basis.

USAID funded CRS to implement the Development of Candlenut Enterprises (DOCE) project. DOCE was implemented in two phases between 2006 and 2012 and covered the three eastern districts of Baucau, Viqueque and latterly Lautem. DOCE's main objectives were to establish Candlenut Farmer Groups (CFG), and Collective Marketing Associations (CMA). Technical support was provided to improve and expand production (nursery development), post-harvest quality improvement (drying, shelling and sorting kernel) and strengthened marketing linkages with traders (CMA collection centers).

The DOCE final evaluation concluded there had been mixed results.¹¹ The quality improvement innovations were widely taken up with the exception of grading, which was not practiced because there are no price incentives to do so. The nursery-oriented approach to planting trees was not widely adopted for a variety of reasons, such as land availability, cost of polybags, and other priorities taking precedence over candlenut production. Although 32 CFGs were established under DOCE in Phase II, no collective marketing took place. Collective marketing was inhibited by a variety of interrelated problems, including lack of financial, management and leadership capacity. Farmers in urgent need of cash would also sell their candlenut individually to traders, rather than wait to sell as a group.

The above experiences highlight the fact that developing markets in Timor-Leste takes a lot of time and resources. This was also the case with the USAID-funded Cooperativa Café Timor and Developing Agricultural Communities projects. The DOCE experience highlights the fact that candlenut is just one minor crop and income source for subsistence farmers. If prices fall below a certain level, farmers will quickly divert their resources to other income generating activities.

V. MARKET ANALYSIS: SWOT

A. STRENGTHS

- Candlenut is widely grown in Timor-Leste and is suited to the agro-climatic conditions prevailing in the uplands. Candlenut also has a positive environmental impact through slope stabilization and soil conservation.
- Candlenut fits well into Timorese farming systems providing a cash income for subsistence farmers.
 The collection and sale of candlenut is a common coping mechanism for poor and food insecure rural households
- Candlenut is grown without the use of agro-chemicals or inorganic fertilizers. Five villages in Baucau
 who supply the oil processor already have organic certification.

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¹¹ Braun (2012) Final Evaluation: Development of Candlenut Enterprises in Timor-Leste II, USAID/CRS

- Supply chains are already established with a network of district traders buying from farmers and supplying exporters in Dili. Export market channels to Indonesia have also been re-established. Considering the fragmented production base and logistical problems of the road network in Timor-Leste, these supply chains work well.
- One processor is successfully exporting value-added, high quality, organically certified oil to Hawaii.

B. WEAKNESSES

Low production & productivity

- Most candlenut trees are self-seeded wildlings with a low planting density. Many of the trees are now old with low productivity and need replacing.
- Farming systems are small-scale and subsistence oriented. For risk-averse farmers, candlenut is one
 of several minor crops used for cash income. As such, small amounts are produced by a large number of households (12,000 households producing 50kg candlenut each). This not only makes aggregating into tradeable quantities difficult but the national output, upon which to base an industry, is
 also small.
- Candlenut is not cultivated as a crop, as fallen nuts are gathered from trees. If prices fall below a certain level, farmers switch their labor time spent collecting and processing candlenut to another activity.

Poor quality

- The nut is cracked manually to produce kernel. This is labor intensive (one person takes two days to process 50kg) and produces a lot of broken kernel (60%).
- To speed up processing some farmers boil the nut, instead of sun-drying, which causes discoloration. The Indonesian market prefers a white colored nut.
- Inadequate on-farm storage facilities can cause the kernel to rot.
- Sorting is carried out in Surabaya and farmers in Timor are paid one basic price for mixed quality candlenut. As such, there is no incentive to improve quality.

Number of supply chain intermediaries

- The poor state of rural roads increases the cost of aggregating candlenut from small farmers into tradeable volumes.
- Several intermediary traders are included in the supply chain because of the difficult collection process from farmers and the necessary cross-border trade. For several reasons it is difficult to reduce the number of supply chain intermediaries and associated costs.

Lack of market knowledge, skills and experience

Marketing knowledge is limited in Timor-Leste. The small number of entrepreneurs have little
knowledge of the global candlenut or natural oils markets. Also, no organizations are carrying out
market research to identify new marketing opportunities. As such, farmers and traders are trapped in
traditional market channels, which are proving less and less profitable.

C. OPPORTUNITIES

- There is continuing high demand for candlenut in Indonesia as a food ingredient, which can continue to be met through increased planting of candlenut.
- Reducing post-harvest losses can improve on-farm drying, shelling and storage.
- Reducing labor time spent on shelling through the introduction of appropriate technology will also reduce the general work burden upon women.
- Value-added can be increased through secondary processing into oil.
- Diversifying market channels for oil and improving access to other end markets, e.g., Australia will decrease risk.
- Producing final products (soap, shampoo, skin creams) will add further value.

D. THREATS

- The USD/IDR exchange rate is the main factor influencing the fall in candlenut prices in Timor-Leste and this is unlikely to improve in the near future.
- District and Dili traders are at high risk from exchange rate fluctuations. Prices are determined in Atambua. District traders may pay farmers two weeks ahead of delivery to Dili or Atambua and prices can fall in the intervening period.
- The whole of the candlenut market in Timor-Leste is reliant on only two market channels and three buyers (two in Atambua and one in Hawaii).
- There are non-tariff barriers, such as sanitary and phytosanitary (SPS) controls, which may prevent
 access to new end markets such as Australia. Timor-Leste does not have internationally recognized
 SPS facilities and bio-security measures in Australia, particularly for raw agricultural products, are
 very strict.
- Timor-Leste is susceptible to climate change and droughts can reduce yields.

VI. INSIGHTS FOR FUTURE INTERVENTIONS

Timor-Leste is at a competitive disadvantage producing candlenut for the Indonesian spice market. It is a small producer with comparatively high costs, when compared with Indonesian producers. Although costs could be reduced through improving processing and storage technologies, there is little scope for increasing income, as premiums are not paid for quality and the IDR/USD exchange rate continues to reduce prices received in Timor. Rather than producing more quantity for lower prices, further market strategies need to be explored that build on Timor's strengths.

Two strategies are recommended. The first is low risk and focuses on improving efficiencies in existing supply chains. The first strategy mostly benefits farmers and also complements the second strategy. The second

strategy seeks to diversify into new, higher value products and markets at the industry level, rather than competing on the lower value Indonesian spice market.

Improve Efficiency of Existing Supply Chains

- As no premiums can be gained from improving quality, more candlenut trees are planted to increase quantity (extensification).
- The correct variety of candlenut is planted, based on the target market, i.e., local variety for oil processing or hybrid variety for food ingredient.
- Reduce post-harvest losses by introducing improved storage and shelling techniques.
- Reduce the labor time spent on shelling by introducing appropriate shelling machinery. As women carry out most of the shelling, this would reduce their work burden.

Diversification

- Increase secondary processing: The only oil processor in Timor-Leste is located in Baucau and covers the eastern cluster of producing districts. The western cluster of producing districts, centered on Suai, has no oil processing facility.
- Develop new end products: Add further value through additional processing in Timor-Leste to produce final products, e.g., soaps, shampoos, skin creams.
- Identify new end markets: Carry out market research to identify new end markets and market channels for the oil and finished product. For example, supplying processors and distributors for the hotel and spa market in Bali and Australia and the domestic tourism market as it expands.
- An additional benefit of the diversification strategy is that selling into non-Rupiah economies would overcome the current exchange rate problem.

Impact

The above recommendations are unlikely to have a large-scale impact for farmers if applied in isolation because candlenut is a minor crop and constitutes a small proportion of household income or food security. At the farmer level, the main opportunity is to increase the quantity of candlenut sold. However, even if the 12,000 farmers who sell candlenut increased output by 50% there would only be an increase in household income of US\$17.50/year¹²

Conversely, this is not true for traders and processors, as there are so few of them. For example, a district trader would increase his income by US\$2,400 if candlenut sales increased by 50%.¹³ Considering the inequity in benefit distribution, innovative value chain business models could be introduced whereby market research, new product and market development is carried out in return for traders and processors providing extension services to farmers.

To achieve impact, a systemic approach must be undertaken. Examples of this are:

• The promotion of candlenut planting within agroforestry systems, to encourage the wider use of sustainable agricultural practices in Timor-Leste's uplands.

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¹² 50kg x US\$ 0.70 x 0.5

¹³ 30,000kg x US\$ 0.16016 x 0.5

• The development of a wider natural oils industry in Timor to include coconut and groundnut, for example, as the same processing machinery can be used for all the oils. Coconut and candlenut are also both used in the cosmetics industry to produce soaps and shampoos. As coconut is grown by farmers in the lowlands, a wider natural oils industry in Timor-Leste would benefit other farmers, in addition to candlenut farmers in the uplands.

ANNEX: KEY REFERENCES – CANDLENUT

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ANNEX: MEETINGS HELD – CANDLENUT

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PART II: MOBILE FINANCE ASSESSMENT

ACRONYMS

ADB Asian Development Bank

AML/CFT Anti-money laundering and countering the financing of terrorism

ANC Autoridade Nacional de Communicações (The National Communications Authority)

ANZ Australia and New Zealand Banking Group

BTCA Better than Cash Alliance

BCTL Banco Central de Timor-Leste

BNCTL Banco Nacional De Commercio De Timor-Leste

BNU Banco Nacional Ultramarino

CGD Caixa Geral de De-positos

DIA Development Innovation Accelerator

G2P Government-To-Person

GSMA Groupe Spéciale Mobile Association (mobile technology association)

CGAP Consultative Group to Assist the Poor

IFC International Finance Corporation

INFUSE Inclusive Finance for Under-Served Economy

IT Information Technology

KYC Know-Your-Customer

CNCBC National Commission for the Implementation of Measures on the Fight Against Money

Laundering and Terrorism Financing

SEFOPE Sekretaria Estado ba Politika Formasaun Professional no Emprego

P2P Person-to-Person

POS Point-of-Sale

MSS Ministério da Solidariedade Social

MFI Microfinance Institution
MFS Mobile Financial Services

MM Mobile Money

MTO Money Transfer Operators

NGO Non-governmental Organization

SIM Subscriber Identity Module (for mobile phones)

USAID United States Agency for International Development

UNCDF United Nations Capital Development Fund

WFP World Food Program

I. INTRODUCTION

Mobile-enabled financial services, including products and services labeled as 'mobile money' and 'mobile banking', offer an unprecedented opportunity to reach under-served populations, improving livelihoods and enhancing USAID development outcomes. To this end, these can be valuable tools for donor and development practitioners to deploy in ongoing and planned programs.

Declaration of commitment to "universal access" to digital transaction services

In October 2013, the World Bank Group stated the "global goal of universal access to basic transaction services as an important milestone toward full financial inclusion—a world where everyone has access and can use the financial services he or she needs to capture opportunities and reduce vulnerability." World Bank Group President Jim Yong Kim stated:

Universal access to financial services is within reach — thanks to new technologies, transformative business models and ambitious reforms...As early as 2020, such instruments as e-money accounts, along with debit cards and low-cost regular bank accounts, can significantly increase financial access for those who are now excluded.

As a follow up, in 2014 the World Bank's Consultative Group to Assist the Poor (CGAP) also produced an impact report assessing the connection between financial inclusion and development, Financial Inclusion and Development: Recent Impact Evidence. This report confirms how access to other financial services (e.g., savings, credit and insurance) benefits poor households. The section focused on mobile money cites the main benefits to poor households to date as: "reduc(ing) households' transaction costs and (improving) their ability to share risk." This impact report can be used to identify opportunities for integrating access to new financial tools into ongoing and planned USAID programs.

The government of Timor-Leste has also declared its support for financial inclusion and access to finance and even more specifically the pursuit of mobile-enabled finance to achieve financial inclusion for its people. Prime Minister Dr. Rui Maria De Araujo gave a resounding speech at the inaugural meeting of the Pacific Island Regional Initiative of the Alliance for Financial Inclusion, declaring:

Our small population and the geographic remoteness of many of our people, make it difficult for them to access even basic financial services. But these are challenges that we are determined to address. Without banking services our people cannot save for their future and provide financial security for their families. They cannot invest in small start-up businesses to provide them with economic empowerment and help drive our economy...

Timor-Leste is already moving to improve financial inclusion. Our Central Bank, supported by our financial sector, has launched a program of financial education to teach school children financial literacy and responsibility for their future finances...Our three commercial banks are also working on plans to introduce mobile phone banking in Timor-Leste. This will provide an extraordinary opportunity to bring basic banking services to people who are currently excluded and marginalized... innovative technology will be the best way to provide basic banking services to our people and

¹⁴ See press release at <u>Universal Financial Access Is Vital to Reducing Poverty, Innovation Key to Overcoming the Enormous Challenge Says (World Bank) President Jim Yong Kim.</u>

we will benefit from discussing the best ways to develop and implement e-money services. Technology can also allow banking models where schools, health clinics, local stores and even churches can provide basic financial and payment functions.

As Timor-Leste's Prime Minister declared in his speech, access to financial services is a key element of alleviating poverty and improving the livelihoods of impoverished people. Mobile-enabled financial services are one way to deliver these services to hard-to-reach, underserved Timorese citizens.

The impact implications are multi-fold including more efficient, safe and inexpensive delivery of government payments and services, as well as providing the population tools to help themselves out of poverty. In particular, mobile-enable finance can enhance the agricultural value chain and provide valuable and safe new links between actors in the supply chain.

A. BENEFITS OF DIGITIZING PAYMENTS

A 2014 study by the World Bank clearly lays out the impact benefits of digitizing payments as summarized in table 7 below. These are largely relevant for the Timor-Leste context. The table shows both the benefits and the challenges that must be overcome, most of which will be discussed in this assessment for Timor-Leste.

Box 1 contains three global learning stories that could be appropriate for the development of the Timor-Leste mobile banking ecosystem.

BOX 1: GLOBAL LEARNING STORIES

How Mexico Saved Billions of Dollars Converting G2P Payments to Digital:

Sustained Effort, Saving Billions: Lessons from the Mexican Government's Shift to Electronic Payments (BTCA)

How Mobile-Enabled Savings Can Work

M-Shwari: The Story so Far, 2015. M-Shwari is a savings and loan bank account exclusively accessed through M-PESA.

Mobile payments saved money and time for social transfers in Niger

In Niger, researchers from Tufts University found that administering social transfers by mobile transfer reduced overall travel and wait time to a quarter of the time required to collect manual cash transfers, reducing travel time to a cash-out point by 40 minutes compared to manual cash distribution. (Aker et al., 2013).

Source: The Opportunities of Digitizing Payments, World Bank 2014.

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Table 7: Factors to consider in digitizing payments

Benefits	Challenges to Overcome
For governments	Supply-side challenges
• Increased transparency and better governance	Safety and reliability
• Lower costs	Interoperability of bank and nonbank finan-
	cial service providers
For recipients	Physical infrastructure
• Lower costs	Increasing cash-out points
• Increased control	Building a digital ecosystem
• Increased incentive to save	
• Increased risk management	Demand-side issues
Improved speed and timely delivery	Customer experience
• Increased security	Product design
• Increased financial inclusion ¹⁵	Consumer education
• Increases in women's economic participation and em-	Ongoing usage of accounts
powerment	Gender disparities in mobile ownership
	-

This assessment of mobile finance in Timor-Leste provides first a set of definitions of key terms, followed by an overview of the providers and related stakeholders. Next, this section explains the impact implications including on key cross-cutting issues such as gender and youth and provides insights on how USAID should approach shaping interventions.

¹⁵ Digitizing payments is the recognized pathway to lead beneficiaries to access and eventually use a full suite of financial services such as savings, credit and insurance.

II. DEFINITIONS

This section clarifies some key terms and differentiates between certain concepts related to mobile financial services, including 'mobile money' and 'mobile banking.' Starting with the basic terminology, this section also offers an overview of the wallet versus account concepts. Lastly, a short review of devices reveals the foundational equipment and systems needed to run these services. The focus is specifically on the context and processes being undertaken in Timor-Leste.

The glossary developed by the GSM Association (GSMA) will be referenced as the source to distinguish between the various terms as defined below.¹⁶

A. MOBILE MONEY & MOBILE BANKING

These two commonly used terms refer to distinctly different forms of mobile-enabled financial services which are enabled by mobile technology. While mobile money involves an exchange between two parties, mobile banking refers to a suite of possible services offered by a bank to its customers.

Mobile money/mobile payments

This category refers to payments between two parties that are made electronically and transacted through mobile phones. The UNCDF defines an electronic payment as one "in which there is no direct exchange of cash between payer and payee but the value is exchanged between electronic stores of value at regulated financial institutions."

Examples of payments that can be enabled by mobile money include:

- **Person-to-person (P2P).** This includes domestic transfers such as from a person in Dili to a relative in a gural area; it can also include a transfer from a person in the person of the person of
 - in a rural area; it can also include a transfer from a person in Timor-Leste to an individual outside the country. At the moment, P2P is the major type of mobile money used in Timor-Leste.
 - Examples: Family members transferring from urban to rural areas, friends borrowing and re-paying money, and agricultural value chain payments.
- Merchant payments. Payment from an individual to a business for a product or service.
 - Example: Individual paying a small retail shop owner, farmers paying input providers.
- **Bill pay.** A payment from a consumer to a service provider, whether public or private sector. This includes, for example, paying bills.

BOX 2: MOBILE MONEY

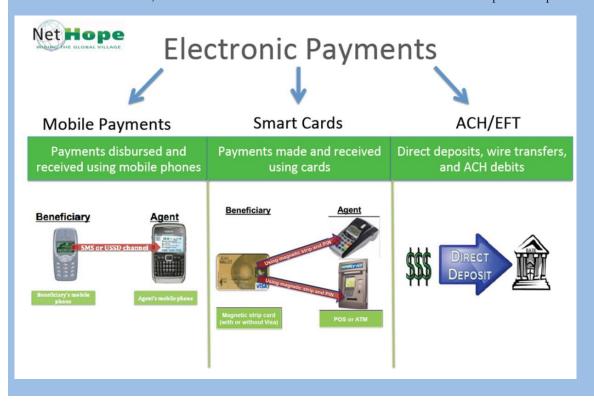
Because simple payments (i.e., money transfers) have been the first and most popular use of mobile-enabled finance, the term 'mobile money' has often continued to been used even when referring to other services such as mobile-enabled savings or credit. However, this report distinguishes these more advanced concepts by referring to them by the term 'mobile financial services.'

¹⁶ GSMA's Mobile Money for the Unbanked Glossary

- Example: Individuals paying electricity and water bills.
- **Bulk payments.** Payments made by an entity (public, private or other) to multiple or many individuals, often on a frequent, ongoing basis.
 - Examples: Timor-Leste's Ministry of Social Solidarity (MSS) social welfare payments, pension payments, government salaries, a chief farmers' payout to individual source farmers.

BOX 3: MOBILE MONEY VERSUS OTHER ELECTRONIC TRANSFER METHODS

Note that there are several forms of electronic payment other than by mobile including through traditional bank transfer, debit/credit cards as well payment cards or e-vouchers (see diagram below). In addition, electronic 'merchant payments' are those that are enabled by electronic web or bank payment using a fixed line computer. Most of these non-mobile-based payment methods are widely used in Timor-Leste of course, but are currently available only to the higher income urban consumers. The innovation that mobile technology enables is that e-transfers can securely and cost-effectively reach lower-income populations who often live in remote, hard-to-reach areas and do not have access to fixed line computers or phones.



TIMOR-LESTE ECONOMIC DIVERSIFICATION ANALYSIS

Mobile financial services (MFS)

GSMA defines MFS as "The use of a mobile phone to access financial services and execute financial transactions. This includes both transactional and non-transactional services, such as viewing financial information on a user's mobile phone. Mobile money, mobile insurance, mobile credit and mobile savings are mobile financial services." In this category, mobile channels are the basis to register, maintain, inquire and transact on savings accounts, loan and insurance schemes or other financial situations (e.g., leases, trade finance, etc.) via mobile phone. Beyond payments, such advanced services as these are NOT available yet in Timor-Leste to lower-income users outside of the urban, already-banked areas; however, it is these more sophisticated services that are the ultimate goal of financial inclusion, so that the poor can better plan and manage their household expenditures and be protected from economic shocks.

Mobile banking

What is commonly referred to as mobile banking in Timor-Leste (and globally) includes traditional banking services that are conducted via a non-fixed channel. Such channels can take several forms (all of which are commonly referred to by the term 'mobile banking' in Timor-Leste as elsewhere):

- Mobile device enabled banking. Also commonly referred to as mobile banking. In this scenario, existing
 bank clients access their traditional bank account using their mobile performing bank inquiries, processing transactions as well as carrying out other bank activities which vary by bank. This does not extend
 financial inclusion however as the clients are generally already users with bank accounts.
- Mobile branches (mobile vehicles/officers). The bank officers is this model are equipped with portable information technology equipment commonly referred to as Point-of Sale (POS) devices. BNCTL currently is launching a fleet of vans to deliver mobile services to remote villages; Tuba Rai Metin, a Microfinance Institution (MFI), also uses POS devices to connect its traveling officers to their central database. In this scenario, it is the bank officers that are 'mobile' traveling to reach consumers. (See table 8 below, which summarizes these offerings.)
- Mobile financial services. It should be noted that mobile financial services, as defined above, are also
 commonly referred to as *mobile banking*. This is especially the case in Timor-Leste, since the regulations
 are such that all services must be transacted with the back-end controls of a registered bank.

As a point of clarification, mobile financial services (or "mobile finance") are the primary focus of this study which includes mobile money/mobile payments as a component.

B. WHAT IS A MOBILE WALLET VERSUS A MOBILE ACCOUNT?

A mobile wallet (also called an "e-money account") is an account held virtually and primarily accessed using a mobile phone, into which a user can deposit and withdraw funds and execute transfers. Mobile wallets, however, do not have the features of a full bank account which can also offer the user interest on funds held (such as with a savings account), credit features, insurance, government benefits and other.

GSMA's definition explains: "In some jurisdictions, e-money (mobile wallets) accounts may resemble conventional bank accounts, but are treated differently under the regulatory framework because they are used for different purposes (for example, as a surrogate for cash or a stored value that is used to facilitate transactional services)." In Timor-Leste, the regulatory framework requires that all mobile accounts be backed by a registered financial institution, so in practice most of the proposed "mobile wallets" will resemble and be more suitable defined as "mobile accounts."

In the Timor-Leste setting (as in all markets), the government's regulatory environment necessarily shapes how these products develop, which will be elaborated in the next section on regulation.

III. CURRENT SITUATION ASSESSMENT: SUPPLY-SIDE

Mobile finance is still in its beginning stages of development in Timor-Leste. While the stage is set in terms of a suitable regulatory framework and eager service providers, the market still must evolve for widespread adoption. However, there are several key areas, such as with government welfare program payments and enabling agricultural value chain finance, which will benefit greatly from integrating mobile solutions and can serve as the on-ramp to scaled adoption.

A. MOBILE FINANCE PRODUCTS (AVAILABLE AND ON THE HORIZON)

BOX 4: HOW MOBILE-ENABLED SAVINGS WORKS: EXAMPLE FROM KENYA

M-Shwari: The Story so Far, 2015. M-Shwari is a savings and loan bank account exclusively accessed through M-PESA.

As shown in table 8 below, there are three mobile finance products currently either in existence or planning to launch in the next six month in Timor-Leste. Each features a core bank provider and a telecommunications partner. Interestingly, two of the three partnerships line up by country of origin (the Portuguese and Indonesian partners).

BNU Mobile and bottlenecks faced in its launch

As of August 2015, BNU Mobile was the only service that had officially launched; however, there are many challenges that have reportedly arisen, and the uptake is weak. Most of the current use is for purchase of airtime (which allows remote top-up), and is not used effectively for other purposes such as domestic remittances, bill pay or other small scale person-to-person transfers.

Table 8: Mobile Finance Landscape in Timor-Leste, as of August 2015

Service name	Partnership	Launch Status	Competitive Advantage /Market Entry
BNU Mobile	Banco Nacional Ultra- marino (BNU)/Caixa Geral de Depositos (CGD), partnering with Timor Telecom	 Launched December 2014 Launch originally supported by UNCDF, support ended 2014 IT challenges and limited use in just four agent locations 	 BNU bank clients, Timor Telecom users Plan to expand via BNU branches/TT network across the country Executes portion of government payments
TBD	BNCTL/ANZ (still exploring partnership)	 End of year 2015 expected, though likely delayed Assessment anticipated September 2015 	 Executes majority of government welfare/salary payments Government-owned Financial inclusion mission
TBD	Bank Mandiri/ Telkomcel, also part- nering with Ericson on hardware	 Scheduled to launch asap, September 2014 Telkomcel eager to launch, BM more cautious 	 Telkomcel reaches rural markets, trusted brand Bank Mandiri has urban base

The challenges that BNU Mobile is experiencing can be summarized as follows:

- Registration requirements. Use of BNU Mobile still requires that the user obtain a BNU bank account (though this is a different type of account), and this requires visiting a BNU branch and calling on customer service to register this new account, a process which often involves 1) queuing in a long line and 2) a visit to a physical branch which is not accessible to many rural populations.
- **Technical.** According to BNU/CGD management, there are some IT issues related to connecting regular BNU and BNU Mobile accounts.
- Market entry not tied to large payment streams. Global experience shows that market entry is
 most effectively launched when tied to a large set of payment streams; this could either be through a
 strong remittance corridor, a large government payment scheme (whether salaries, welfare payments
 or such), or a large donor payment scheme (such as World Food Program payments). BNU Mobile
 has not connected with these bulk payment opportunities.
- User education. There is a low rate of traditional and technical literacy and numeracy as well as low financial education especially outside Dili. This will require some education and sensitization which has not yet been undertaken.
- Telecom partner un-incentivized. Timor Telecom is not an active marketing partner in the venture and is only really a service provider, due to regulatory constraints and also because of recent corporate distractions (such as the recent financial turbulence in European markets and the sale of part of the company to Oi, the Brazilian operator).
- Limited agent engagement and training. Although UNCDF undertook an effort to assess potential agents countrywide and advise on trainings, the four agents that are participating in the current

pilot are not effective in their promotional effort and support. Now that UNCDF support has ended, there is a need for more agent development.

It is unclear whether BNU Mobile will grow or even continue as a market product, without some outside support or incentive.

BNCTL/ANZ Partnership being explored

BNCTL is the government-owned bank, recently converted from an MFI that delivers the largest government payment streams to the Timorese population. Thus, it has a unique high touch relationship with the least served, rural communities. As a government-owned entity, it also carries a strong financial inclusion mission.

Currently, BNCTL is exploring partnering with ANZ to offer a mobile finance product, using ANZ's technology platform, which is already in operation in Vanuatu, Papua New Guinea and the Solomon Islands. However, there is some question as to whether BNCTL will decide to build its own solution or continue with ANZ and use their solution. Currently, the ADB is financing an assessment by a consulting firm (A2F Consulting) to recommend the best pathway forward. The factors considered are summed in table 9 below. The assessment is expected to be complete by September 2015, with rollout to occur shortly after.

Table 9: BNCTL – decision factors on whether to partner with ANZ

Pros	Cons
 ANZ is a proven, accredited bank with robust governance structure "Go money" mobile finance platform already functions in four other Pacific markets Strong human capital (capable ANZ operations manager set to devote her time to the project), useful to help BNCTL evolve from MFI mentality 	 ANZ platform said to be very costly BNCTL's financial inclusion mission may conflict with ANZ's profit goals ANZ only has urban base in Timor-Leste, therefore does not expand BNCTL's footprint (rural customers are a new market for ANZ and therefore a possible learning curve required) Government wishes to maintain greater con-
	trol over welfare/salary payment schemes

Ultimately, BNCTL will be very challenged in implementing a mobile finance and/or a mobile money solution themselves. At the moment, this is a point of great disagreement between ANZ and BNCTL's (ADB-financed) consultants. BNCTL does not appear to have the internal capacity, especially as it is just transitioning from being an MFI into a commercial bank, it is facing many challenges and building and maintaining the IT infrastructure will be a great challenge, if not impossible for them. BNCTL lacks capacity on many levels: operational, technological, financial risk management, human resources and overall in terms of product design for the consumer.

ANZ, on the other hand, has an already existing IT product which has been launched and is operational in other Pacific markets and also has a Dili-based operations team ready to support BNCTL in the launch. The only way that BNCTL can launch it themselves is with the heavy-handed support of consultants, which will be financed by the government and donors (such as the ADB which is the primary supporter now).

With regard to available budget, it seems that BNCTL does in fact have access to adequate finance in order to choose either path -1) to work with consultants to develop a solution internally or 2) to partner with ANZ. There is again some disagreement, however, on the actual short and long term costs and (financial) risks associated with each model. This will hopefully be clarified as BNCTL makes its decision (expected in the September 2015 assessment).

According to ANZ Timor-Leste's CEO, the ANZ solution is the most budget-conscious choice that BNTCL could make, which would serve both development (financial inclusion) and budget/profit goals for both parties. In other words, ANZ's solution is less expensive and technically and operationally superior to anything that BNCTL (with consultant support) could create internally.

Bank Mandiri/Telkomcel

Telkomcel is eager to enter the mobile finance market in Timor-Leste; it plans to leverage the ECash Payment model it has built for Indonesia (see www.ecash.co.id). Its partner, Bank Mandiri, is reportedly less eager and more risk-averse. According to Telkomcel, the partnership leverages each of their contributions well: while Bank Mandiri has a strong urban financial base and the necessary regulatory base, Telkomcel has a strong and growing presence across the country and a recognized, trusted brand. Telkomcel is eager to launch the mobile finance service as soon as September, though it is unclear exactly when this will occur.

It is likely that there is enough of a market opportunity for all three of these services to grow and become sustainable business lines. Especially since each has their own advantages in certain markets, each could evolve into scaled operations. However, the sector may require some intervention to achieve this growth (see section below on possible interventions).

"Mobile Banking" solutions - NOT using telecommunications technology

As shown in table 10, there are also several active programs that are being called "mobile banking" that are active in Timor-Leste (per the models outlined in the Definition section above).

Table 10: "Mobile Banking" solutions - NOT using telecommunications technology

Program	"Mobile" solution
Moros Rasik (MFI)	Mobile Android app that their officers use when they visit customers remotely and synch with main database
	No mobile application available for access by individuals
Tuba Rai Metin (MFI)	Piloting system where traveling MFI officers have POS devices and synchronize upon return to office
(MITT)	No mobile application available for access by individuals
BNCTL	Mobile vans with officers being deployed currently to the districts

These programs do have the benefit of providing access to remote populations using "mobile" methods (such as vans) and are usually enabled by technology (such as a POS device), though they do not employ the "mobile" technology spectrum. These are important to consider, however, in defining and understanding the ecosystem of opportunities for delivering financial access.

B. STAKEHOLDER MAP – WHO TO WORK WITH

Table 11 presents an overview of the stakeholders and their roles in delivering, supporting and regulating mobile finance. These are important for USAID to consider in developing any activities in this area. As mentioned in the previous section, only one mobile finance product has launched in Timor-Leste to date (BNU Mobile).

Table 11: Key Mobile Finance Stakeholders to Engage

Type of entity	Current and potential roles in relation to mobile finance	
Private sector – key service providers		
Commercial banks ANZ, Bank Mandiri, CGD/BNU, BNCTL	 Market leaders/innovators in developing mobile finance solutions and launching to market CGD/BNU is only one to have launched a mobile finance product 	
MFIs (Moros Rasik, Tuba Rai Metin)	 No MF integrated at the moment Under transformation to Other Deposit Taking Institutions so role will evolve 	
Money Transfer Operators (9 in operation in Timor-Leste)	 Use Western Union, MoneyGram and bank transfer as well as through informal channels to transfer money internationally Existing business challenged by mobile finance; though may choose to become mobile finance agents 	
Community-level financial institutions (27 cooperatives & 313 savings groups)	 No mobile finance integrated yet Potential to be partners in financial education, sensitivity programs for new technology adoption, etc. 	
Telecommunications (Timor Telecom, Telkomcel, Telemor	 Engaged as mobile finance partners solely as a communications and marketing channel, as these entities cannot lead an mobile finance service Timor Telecom currently partnering with CGD/BNU on BNU Mobile Telkomcel aligned with Bank Mandiri to launch upcoming mobile finance service Telecom partnerships general have short term exclusivity and mobile finance programs generally plan to use all channels to reach the full market 	
Government – key regulators a	and payment makers (major players to consider, not all inclusive)	
Ministry of Social Solidarity	Largest payment maker for government welfare programs for the elderly, veterans, disability and other social welfare	
Ministry of Finance	Salary payment makerTax collection and management	
SEFOPE (Sekretaria Estado ba Politika Formasaun Professional no Emprego)	 Salary payments Implemented Cash for Works programs The Secretariat of State of Professional Training and Employment 	

BCTL	Payments and banking regulator	
Other ministries	Other government salaries	
Active donors – advisory, pilot	funding and associated technical support	
Asian Development Bank	 Have provided technical advisory to BCTL to create the current regulations, which are close to completion; The University of New South Wales worked on latest Circular on Agent Banking ADB also funding assessment to support BNCTL's new product design for its MF product, in possible partnership with ANZ. 	
IFC	 Working on financial sector issues such as credit registry and bank/ATM inter-operability with BCTL. Supporting BNCTL with exposure trips to other functioning MF markets such as the Solomon Islands. Providing capacity support to the two MFIs to transition to ODTIs. 	
UNCDF	 INFUSE program ended Dec 2014 – performed studies on mobile finance support issues such as developing agent networks as well as a general financial services sector assessment Directly supported BNU Mobile in its pilot launch Regional Pacific Islands Financial Inclusion Program continues in other geographies – Timor-Leste was part of this for a short time only 	

These stakeholders will be referenced throughout this assessment as key actors in the evolution of the mobile finance sector.

C. REGULATORY FRAMEWORK FOR MOBILE FINANCE

All mobile financial products must be led by a registered bank in Timor-Leste. The regulations were made this way to create a safe and efficient framework for the sector to grow.

BCTL is the regulatory body responsible for regulating banking and payments in the country. Regulating mobile finance (and 'branchless banking') is a strong priority as it seeks to stabilize and grow the economy as well as achieve financial inclusion goals. These are stated in BCTL's recently released <u>Master Plan for Financial Sector Development in Timor-Leste 2014-2025</u>

The regulatory framework that enables mobile financial services in Timor-Leste proscribes a 'bank-led' model. This means that all such services must partner with or be based entirely within the regulatory purvey of a registered financial institution.

In many other markets, telecommunications operators (such as TigoCash in Africa and Latin America) or third-party providers (such as bKash in Bangladesh) may also host such services. These can range from basic payments to more advanced savings or credit. The diagram below shows the range of such regulatory models and the functions typically performed. In markets that are less regulated than Timor-Leste, several business models may develop in one country's market. The diagram specifically refers to payment functions, though this general structure may also apply to more advanced mobile finance.

MNO Network Take Cash In/ Hold Deposits. for Data **Move Money** Cash Out Settle (Forex) Transmission Bank or Third Party MNO Bank FI-Led **Business Models** MNO Bank or Third Party Bank MNO Bank MNO MNO-Led

Figure 7: Mobile Payment Models

Source: mPay Connect Consulting, MMT APAC presentation, 2009

D. REGULATORY ISSUES TO CONSIDER

The ultimate strategy for Timor-Leste in promoting and regulating digital and mobile payments, as informed by donors including the ADB and the UNCDF, is that BCTL will continue to monitor the market as it develops and adapt the framework as it evolves. While BCTL has already started receiving applications for branchless banking initiatives, it has few specific guidelines in place, besides the requirement to partner with a registered banking institution. Risks that BCTL will continue to monitor include those related to several key issues.

- Identification (i.e., Know-your-Customer 'KYC') issues. Identification is one of the main constraints and risks that BCTL must consider. For Timor-Leste, anti-money-laundering requirements require a level of customer information which is the major reason why registered and regulated banks are the only entities licensed to host payment and other mobile-enabled finance. In other markets (such as in East Africa), telecom SIM card registration provides the required KYC; however, the SIM registration in Timor-Leste has not been deemed by BCTL to be sufficient. Notably ANC (The National Communications Authority of Timor-Leste, formally Autoridade Nacional de Communicações) requires registration and information from new SIM acquirers, but it is the enforcement of this regulation that is not generally performed.
 - Intervention area: Encouraging BCTL to have an open dialogue with the telecommunications regulator on these identification issues could bring positive advancement to this issue.
- Agent-banking. Having a network or agents available to administer and monitor mobile finance is a basic requirement, especially when looking to reach the more remote unbanked populations, and with a secure efficient channel. Much work has been done in this area, particularly by UNCDF's INFUSE program (including several key studies and support to BNU as it chose its pilot agents), but still and this lack of infrastructure is a major barrier to expansion of mobile finance. It is still largely unclear how the framework will play out for e-money issuance and trust account management; an

agency banking 'circular' (Circular Letter 14/2015: Guidelines on the Use of Agents in Branchless Banking) has been drafted (as of August 2015) with support from the ADB and is under review now.

- Anti-money laundering and countering the financing of terrorism (AML/CFT). BCTL is working to comply with international standards in these areas in compliance with the global Financial Action Task Force. BCTL established a financial intelligence unit in 2014 after the passage in 2011 of the Legal Regime Covering the Prevention of and Combat against Money Laundering and Financing of Terrorism (Law No. 17/2011). BCTL operates this unit under the oversight of the Comissão Nacional para a Implementação das medidas de Combate ao Branqueamento de Capitais e ao Financiamento do Terrorismo (National Commission for the Implementation of Measures on the Fight Against Money Laundering and Terrorism Financing, or CNCBC). This is a particularly sensitive topic recently as there have been scandals such as the ongoing trial of a former UNCDF and World Bank consultant who specialized in the area of mobile banking (though the alleged crime was supposedly not related to his professional work). Also, with a dollarized economy, capital controls and money laundering are even more of a risk that BCTL and the government of Timor-Leste must consider.
- Other payment regulatory issues. Issues directly related to mobile-enabled finance are not the only missing element in the regulatory structure, however, as inter-operability of ATMs and real-time payment settlement are also currently priorities for review.

As a relatively new institution, the BCTL has been evolving and adapting since its formation in 2011; the additional challenge of adapting to the rapidly changing technology environment adds elements of both risk and opportunity.

Other issues to consider as the mobile banking sector evolves include: size limitations on transfers, frequency limits on transfers, consumer protection/fraud protection and additional currency controls.

Telecommunications regulation

The ANC regulates the activities of mobile operators in Timor-Leste. Donors have been encouraging ANC to support BCTL more in the regulatory support structure for e-payments; however, the communication between these two agencies needs to be improved, according to ADB and IFC experts consulted.

The issue of identification is a priority (as noted above) as SIM registration in Timor-Leste is very inconsistent. Even though laws are in place requiring identification, these are not well enforced by ANC. It is partly because of this that BCTL limits the involvement of the telecommunications operators in payment innovation as users are not well traceable.

Overall, the regulatory framework is generally in place for the mobile payments and finance sectors to move forward with the expectation that these will adapt as the sector evolves.

IV. CURRENT SITUATION ASSESSMENT: DEMAND-SIDE

This section on demand highlights the main factors that will influence Timorese individuals and households to use mobile financial services. This includes first a needs assessment: low levels of financial inclusion reveal several opportunities to increase livelihoods through access to new financial tools. In addition, many payments streams would benefit from digitization.

A. OVERVIEW OF FINANCIAL INCLUSION, AND ACCESS AND USE OF FINANCIAL SERVICES

Few updated statistics are available on the financial inclusion status for Timor-Leste; in fact, the country is not included in the World Bank's Global Findex database which tracks financial inclusion data in 140 other countries. One data point that does exist is in BCTL's Financial Sector Development Master Plan, released in November 2013, which reports that 58% (2012) of the Timorese adult population do not have access to a bank account.

Other Pacific island countries (Fiji, Samoa, Papua New Guinea, Solomon Islands, and Vanuatu) that are part of the Alliance for Financial Inclusion collect a uniform set of financial inclusion indicators as per the set framework. As a new member, Timor-Leste (i.e., BCTL) is expected to begin to collect comparable data.

Payment streams & potential to digitize

There are several major types of payment streams in Timor-Leste accessed by lower-income and underbanked users that could be the focus for digitization. These include the following:

• Government to person salary and pension/welfare payments (G2P). In Timor-Leste, this includes payments by MOSS (elderly, disability and veteran welfare payments) and SEFOPE (the Secretariat of State of Professional Training and Employment). (See table 12.) MOSS's welfare payments are especially important as they are the main source of yearly income for more than 45 percent of the population, according to a 2013 survey by UNCDF's INFUSE project. In 2012, 133,087 beneficiaries received payments, generally administered quarterly. Many of these G2P payments are already being disbursed through bank accounts with BNCTL and BNU as the two banks which process the bulk of these payments. According to the Ministry of Finance, approximately 98 percent of government salary payments are disbursed electronically into bank accounts, while just 60 percent of benefits payments are made through bank accounts. BNCTL also uses mobile vans across six districts to disburse government benefit payments.

Table 12: Government to person payments¹⁷

Government Payment Type	Responsible Government Ministry	Details of Schemes	Number of ben eficiaries or re- cipients	Annual Flows ¹⁸ (US\$m)
Salary payment to government employees	Ministry of Fi- nance	Includes civil servants, national parliament, ministers in government, police and defense forces	40,000 – 50,000	~ 120m
Government benefit pay- ments (social security)	Ministry of Social Solidarity	 Bolsa De Mae (conditional cash transfer for children education) Elderly pensions Disability pensions Veteran pension 	~ 133,000	~ 20 m
Others	Ministry of Fi- nance	Community funds under National SUCO Development Program	442 Sucos	~ 25 - 30

Governments of Timor-Leste ministries are indeed interested in pursuing mobile finance as a method to deliver government payments. In fact, Ms. Isabel Amaral Guterres, the Minister of Social Solidarity, is a vocal proponent of exploring mobile finance options. MSS in particular reported that they have great motivation because of several reasons stated: 1) security - their recipients are often vulnerable such as the elderly) and have been subject to theft; 2) hard to save - recipients have a hard time saving because their families insist on spending their funds; and 3) remote payees – hard to reach certain recipients in remote places.

In 2013, the line ministries established an agreement involving MSS, MOF and BNCTL to explore mobile banking together. The MSS is intending to pilot use of the BNCTL mobile vans to deliver payments in the near future. Despite interest, to date, the problems both of internal ministerial capacity as well as a lack of a suitable technology available have prevented the adoption and scaling of any such mobile solutions.

Another barrier to overcome if salaries and other G2P payments are to be delivered by mobile finance is to build awareness of the uses and benefits of these services to the end user, the recipient. Individual end users are not yet aware or educated about the existence of mobile finance solutions; therefore the level of actual interest is most likely very low. This consumer education and 'sensitivization" is an essential component if catalyzing the market to scale.

• **Domestic remittances.** Generally flowing between the rural and the urban areas or between family members in different regions, these remittances are transmitted either informally (by individuals or

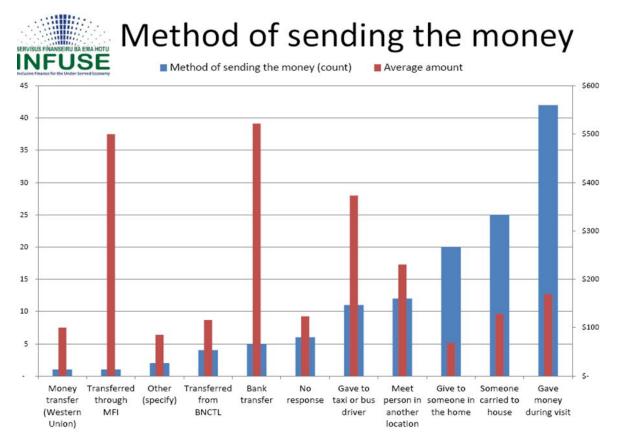
¹⁷ Assessment of the Potential for G2P Disbursement, Cash Management, Field Agents and Mobile Banking Payment Service Provision in Timor-Leste, Asian Development Bank, March 2013.

¹⁸ Source: Department of Treasury, Ministry of Finance.

carriers such as bus drivers), personally by hand, by bank transfer (but only if the persons both have accounts), or by money transfer operators (who charge a large fee). In 2014, an ADB study quantified the demand potential for domestic remittances at US\$50 million annually, "with 61% of it being remittance flow from rural households (rural families sending money for children education) to their urban counterparts." The study also examined the informal channels, finding that common methods

were "through friends and family transporting physical cash or through taxi/bus drivers with an average value per transfer of about US\$120-160."19 (See figure.)

Figure 8: Method of sending domestic remittances



International remittances. World Bank data from 2012 shows that international remittances constituted two percent of Timor-Leste's GDP with total inward flows approximately of US\$82 million (see table 13 below); The Labor Force Survey (2010) conveyed that remittances constitute four percent of household income. Source of remittances from abroad were largely sourced from the UK, Ireland, Portugal, South Korea and Indonesia. Outward flows were generally to Indonesia but also to

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¹⁹ Financial Services Sector Assessment of Timor-Leste, UNCDF INFUSE, AusAID, UNDP. Draft - not for Referencing or Distribution.

various other destinations. These are currently generally carried out by 1) money transfer operators (MTOs) largely operational in Dili, who use Western Union, MoneyGram or direct bank transfer as well as by 2) informal transfers (largely to Indonesia) carried similarly to the domestic transfers described above.

Table 13: Remittance flows to South-East Asia (2012)

Country	Remittances (US\$ million)	As percentage of GDP
Brunei Darussalam	75	0.5
Cambodia	256	1.8
Indonesia	7,180	0.8
Lao People's Democratic Republic	116	1.3
Malaysia	1,363	0.4
Myanmar	566	1.1
Philippines	24,325	10.7
Singapore	874	0.3
Thailand	4,103	1.1
Timor-Leste	82	2.0
Viet Nam	9,052	6.6
Total South-East Asia	47,992	

Source: World Bank Remittance Inflows by Country, November 2012. IMF World Economic Outlook Database, Gross Domestic Product Current Prices in US Dollars, 2012.

B. DEMAND-SIDE BARRIERS TO ADDRESS TO ENABLE MOBILE FINANCE USE

Mobile phone ownership

Having one's own phone is one of the major factors that contribute to user adoption of mobile financial services. This is because people are more likely to trust transactions on their own phones and are more likely to learn the process if they own the device on which this is facilitated. According to the GSMA, the mobile phone industry association, 43% of Timorese have their own mobile phones and each person has an average of 1.72 SIM cards (see table 14). This percentage is low compared to the Solomon Islands at 64% and Fiji at 67%.

Telecommunications network infrastructure

According to GSMA Intelligence, only 35% of the country is covered by 3G, therefore the majority of areas outside of Dili still relay on voice and basic phone use. The exact percentage of mobile coverage is not documented (i.e., was not available publicly at the time of research), but anecdotally there are many areas of the country that still do not have basic mobile service. With the recent deregulation of the telecommunications industry and the entry of two new providers (Indonesia's Telkomcel and Vietnam's Telemor), coverage is continuing to increase with the introduction of new cell towers reaching farther into the rural areas. Timor Telecom still has the greatest majority of subscribers but the two competing operators are continuing to invest in the market and grow.

Table 14: Mobile Penetration (Q1 2015)

Country Comparables	Timor Leste Pop 1.2m	Fiji Pop 887k	Solomon Islands Pop 582k
Mobile penetration	497,168 (43%)	600,452 (67%)	372,480 (64%)
Mobile internet	8%	25%	22%
SIMS per unique sub- scriber	1.72	1.69	1.32
Smartphones ²⁰	19%	28%	12%

Source: Q42014, accounting for persons with multiple SIM cards

Traditional and technical literacy

The overall low literacy rate in Timor-Leste (67.5% overall with an 8% gap between men and women) is one impediment to delivering financial services via mobile. However, there is much research and new design efforts globally to create interfaces that even the illiterate can use and trust, and with the growing availability of low-cost smartphones, more low-income users in rural areas may soon gain access.²¹

Table 15: Mobile operator market share (Q1 2015)

Mobile Operator	Market Share
Timor Telecom	78%
Telkomcel	16%
Telemor	6%

Financial literacy

A 2012 UNCDF study of households who currently held loans from registered financial institutions had low financial literacy. For instance, only a few borrowers from BNCTL²² were able to state the rate they are currently paying on their loan – their estimations of the interest rates were accurate within two percent in less

²⁰ Defining: A smartphone is defined as a mobile handset enabling advanced access to internet-based services with computer-like functions. It should be noted that this figure seems high for Timor-Leste; however, there are increasingly affordable data-enabled phones on the market.

²¹ "The ...interface and options available in a smartphone...provides mobile money solutions that are more flexible, more accessible to persons with a wide range of literacy levels, and more secure than solutions based on traditional "feature" phones phones'." Journal of Payments Strategy & Systems, Mobile Money Solutions for a Smartphone-Dominated World, Electrical Engineering Department, UCLA, Applied Mathematics Department, UCLA, Fenwick & West LLP

⁴ Departments of Public Policy, Electrical Engineering, and Management, UCLA, July 1, 2015

²² Since BNCTL uses a digressive interest rate with fixed principal installments, the total amount of each installment reduces each time and only the interest rate can characterize the cost of credit.

than a third of the cases.²³ There are many ongoing financial education initiatives already underway in Timor-Leste, recognizing this need.²⁴

Cost of service

In many markets, the cost of services for mobile money or mobile finance is often perceived as prohibitive to lower-income users. This is largely due to higher costs in some markets before the sector has matured and reached any economies of scale. This is a factor that is also likely to occur in Timor-Leste as new products come on the market. Donor support, both in terms of financing of pilot and creative design of price packages can help to alleviate this problem; though it is early days in Timor-Leste to full understand the factors that will contribute to costs.

V. CROSS-CUTTING ISSUES

USAID gives special attention to several cross-cutting issues which complement the overall impact opportunity assessment.

A. GENDER & WOMEN'S ISSUES

A 2014 World Bank study shows how digitizing payments can lead to women's empowerment.²⁵ The tools enabled by digital payments can facilitate women's greater account ownership and asset accumulation and increase women's economic participation. Digital payments also enable the confidentiality and convenience which can be helpful to women in the community and household context. The ultimate theory is that payments provided via an account are the on-ramp to full financial inclusion and access to other financial services such as savings, loans and insurance which can help women to grow businesses while feeding and supporting their household needs.

The recent gender assessment undertaken by USAID identified "gender-related Barriers and Opportunities to Increase Productivity within the Horticulture Value Chain." The study found that in Timor-Leste, women tend to manage the household finances, while most household financial decisions are made in consensus with the male partner. In a study of 135 small-scale farmer households in Liquica, with least 0.5-1.0ha of cultivable land, in 71% of the households women "hold the money;" while in 29%, the task is shared between the

²³ The cited figures were compared to the theoretical value of the installment calculation: reported values are considered accurate if the margin of error is no more than $\pm 2\%$.

²⁴ Including by the IADE (Institute for Support Development of Private Sector), East Timor Development Agency (ETDA), Care International, Credit Union Foundation Australia (CUFA), World Education, ANZ, Tuba Rai Metin, SDRA (Sentru Dezenvolvimentu Rekursu Aprendizajen); source: UNCDF Financial Services Sector Assessment.

²⁵ The Opportunities of Digitizing Payments:,, World Bank Group, 2014.

woman and man. The study also found that although 88% of land is formally owned by men, farming decisions are a joint process between the man and woman in 93% of households. Thus, it can be surmised that targeting women as users of mobile banking will be an effective strategy that will benefit the whole household.

The Food and Agriculture Organization (FAO) has stated that women farmers in developing countries globally are 20-30% less productive than men, attributed largely to the differences in access to inputs (e.g., fertilizers, seeds). Enabling women to access inputs by introducing mobile enablers and payment schemes could alleviate this barrier and increase overall agricultural productivity.

B. YOUTH

Globally, younger generations generally learn and uptake technology quicker than adults or the elderly. Because of the vastly young population in Timor-Leste, this creates an opportunity for rapid adoption. Also, because school fee payments are one of the top purposes for transfers at the moment, the young population is a natural first target audience for introducing mobile payments, with the intention to evolve into full access to financial services.

C. CLIMATE CHANGE

There are many climate-related mobile services that are being developed globally, often related to agricultural services. Catalpa, an IT firm based in Dili, has developed an application that can be accessed for free by mobile that delivers weather forecasts to farmers. Other mobile agriculture services include pricing information or even agricultural extension services. A payment framework can be an essential component of building a sustainable solution with these functions. These are possibilities for USAID's Avansa agricultural project to consider supporting.

VI. INSIGHTS FOR USAID'S ROLE INTERVENTIONS

The ultimate question for this assessment is to determine what USAID's role can be in the deployment and support of mobile finance in Timor-Leste. The proposed answer would be a combination of working to integrate mobile finance solutions into its own programs, as well as supporting other donors in their current efforts.

A. NEED FOR INTERVENTION TO CATALZYE MARKET (USAID ROLE OR OTHER)

The current mobile finance providers are stalled in their efforts to scale or even introduce products. This is largely due to the start-up risks and challenges in launching a new service to market. There are also systemic barriers that are holding this back including on the demand-side: low consumer awareness of mobile banking; low technical and financial literacy; and on the supply side: high perceived risk, low technical and operational

capacity (see BNU Mobile's current challenges) and also a small market overall with low effective economies of scale (as determined by the UNCDF's 2013 assessment of the G2P opportunity for a mobile finance service provider).

These challenges can and may be overcome on their own of certain market factors come into play such as 1) investment from a big player (such as a big push by ANZ or such), or 2) the active conversion of large payments streams (such as the G2P); however, it is likely that these big first movers will need help to hedge their risk. Otherwise, global technology players such as Facebook may innovate and introduce new payment tools.

However, to jumpstart the use of mobile finance, some additional incentives (from USAID or others) may be needed for these types of companies to even consider exploring the Timorese market opportunity.

B. GUIDING PRINCIPLES

USAID can base its intervention strategy on several foundational principles:

- Balance development goals with commercial sustainability. To create sustainable solutions for mobile finance, some up-front donor support will be necessary to make initial investment in technology, perform sensitization and deploy pilots. In the long term, the most effective solutions will be those that achieve commercial sustainability. Understanding and modeling the long-term cost and benefit will help to reveal and plan for this trade-off. It is important to recognize this balance as well when advising on investment decisions such as whether BNCTL should partner with ANZ to deploy G2P payments; in this scenario, ANZ's primary-profit motive may come to head with government-owned BNCTL's financial inclusion goals.
- Partner with active donors in promoting m-finance avoid overlap. There are many existing active donors working in the mobile solutions area in Timor-Leste (see table 15 above). USAID should not overlap with these efforts, but should look to complement. For example, the ADB has provided extensive support to build a solid regulatory framework for mobile banking. There is no need for USAID to overlap extensively in this area. However, it would be valuable for USAID to share its field experiences to contribute to the future adaption of the regulatory framework as the sector evolves.
- Leverage USAID field presence. USAID has many ongoing activities that can benefit from integrating mobile solutions. USAID's role as an executor in the field can be leveraged well to deliver these directly to the end beneficiaries.
- **Lead by example.** USAID can demonstrate the benefits of mobile solutions by making best efforts to digitize its own operational transactions.
- **Build new partnerships.** Technology companies such as Facebook and Yahoo have deep usage and brand recognition even out in the rural areas of Timor-Leste. These companies and other similar ones could be engaged to develop solutions to serve the Timorese population.

The following sections lay out some possible interventions for USAID to explore, with these guiding principles in mind.

C. ENABLE AGRICULTURAL VALUE CHAIN FINANCE

There is unmet demand for financial solutions in the agricultural supply chain. These include savings and credit for various parties as well as input and trade finance. These can be enabled by mobile-driven finance. Current USAID partners such as Kmanek and Dili Mart are eager partners in piloting solutions.

At this stage, the mobile payment and mobile banking solutions are not yet developed enough to be actively integrated. However, dialogue should be encouraged so that agricultural stakeholders can give their input in the development of the sector so that the services are suited to their needs. USAID's Avansa project can then be a suitable platform to pilot mobile banking solutions with the project's focus communities.

D. REACHING WOMEN IN AGRICULTURE

Women play a core role in agricultural product, but generally underperform in terms of productivity largely because they lack access to resources such as finance, skills training, and information services; this is observed in Timor-Leste as in most developing countries globally. Mobile technology, via mobile finance and other services, serves to bridge this gap, helping to: "increase productivity and incomes of rural women and their households, empower rural women in their households and communities and improve livelihoods overall for underserved communities."26

The GSMA mWomen and mAgri programs produced the Mobile Agricultural Services Toolkit as a guide for mobile operators, other mobile providers, and development practitioners to better serve women in this segment. It includes recommendations and tools for each stage of the product development process, as well as examples of good practices. The products and services in question include mobile financial services, value-added services (information, advisory, matchmaking, or other) as well as basic mobile services (voice, SMS, and data) delivered via mobile phone.

E. FINANCIAL EDUCATION

USAID can continue to support its activities in financial education (such as through the Avansa program), but should make sure to include new modules on digital/mobile solutions.

F. DIGITIZING PAYMENTS IN CURRENT USAID PROJECT OPERATIONS

The NetHope e-Payments Toolkit can serve as a guide for projects to transition "from using cash payments to electronic payments in all operational and program payment streams." This will enable the Timor-Leste mission to comply with the new guidelines from USAID requiring payments to be made digitally. The Toolkit contains extensive tools to assess, plan and execute a transition to using e-Payments.

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²⁶ GSMA's Women in Agriculture: A Toolkit for Mobile Services Practitioners, 2014.

G. GOVERNMENT PAYMENTS (SALARIES, SOCIAL WELFARE PAYMENTS)

Nearly 50% of the population of Timor-Lese depends on G2P payments for income (see figure 9). However, to obtain these benefits, people must wait in long queues and are often in danger of post-withdrawal assaults. This is a major issue especially for vulnerable elderly populations. USAID's current implementation partner, local NGO Belun, works with these populations and could be a valuable leading partner to pilot potential solutions.

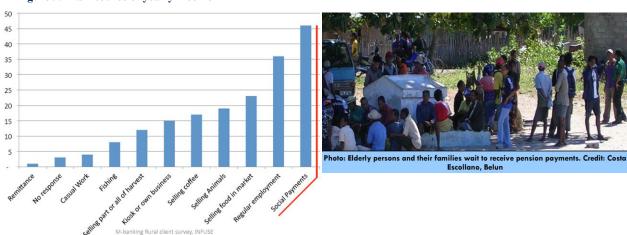


Figure 9: Main source of yearly income

H. INTEGRATING PAYMENTS INTO USAID PROGRAMS

Another opportunity lies in integrating payment into other technology-enabled mobile solutions such as the Liga Inan, which connects pregnant women with their midwives via mobile. An e-voucher program delivered by mobile is one possible new service to integrate.

I. OTHER USAID TOOLS AVAILABLE GLOBALLY

USAID has developed many initiatives to provide global support to technology development. Two examples that may be useful in the Timorese context are described below. These are managed out of the Washington DC-based Digital Development Lab and related offices.

USAID's agency-wide Development Innovation Accelerator tool

Recently, USAID released a Broad Agency Announcement (BAA) which laid out a method whereby the Agency (including field missions and bureaus) can engage potential partners "before the concept stage and maintain(s) constant engagement with the partner(s) throughout the award process while still meeting the requirements for competition." See the <u>Development Innovation Accelerator (DIA) Factsheet</u>.

The flexibility enabled by this tool will be especially valuable in designing partnerships and interventions in the digital financial services space, which is constantly evolving and changing. Also, in this often complex and technical industry, this enables USAID to engage "recognized expertise in relevant areas, and to co-create, co-design, co-invest, and collaborate with these partners." (Note: the DIA is not a "procurement mechanism",

but rather a set of pre-procurement guidelines and procedures to enable conversations with potential partners, while adhering to USAID's competition rules.)

NetHope's Global Broadband Initiative to improving rural infrastructure

Network connectivity and power are often limiting factors for rural or remote populations gaining access to mobile finance. (This varies of course by country and in some rural areas especially in Timor-Leste, coverage is quite extensive; though there are definitely remote areas that are not yet connected.) Listed below are some possible efforts to explore to address these infrastructure challenges. NetHope's program explores innovations such as the following:

- Unused "white space" frequencies. "White spaces are unused parts of the spectrum of radio frequencies ...which are unused and run free from interference...broadband delivered through 'white space' has a stronger signal able to travel a longer distance over hills and around/through buildings."
- **Solar-powered towers.** Powering base stations with solar panels enables broadband to reach remote rural communities despite limited or no access to national power grids
- Small cell Wi-Fi. "Hot spots" are relatively low cost requiring low levels of powers with a range of one or two miles operating via radio or "white space" frequencies. See more information at NetHope.org's page on rural connectivity at link here.

ANNEX: KEY REFERENCES: MOBILE FINANCE

BCTL Master Plan for Financial Sector Development in Timor-Leste 2014 -2025, Banco Central de Timor-Leste (BCTL), released July 2015.

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Aker, J., R. Boumnijel, A. McClelland, and N. Tierney, 2013. "How Do Electronic Transfers Compare? Evidence from a Mobile Money Cash Transfer Experiment in Niger." Tufts University Working Paper.

Asian Development Bank Technical Assistance Report, Project Number: 47002-001, Capacity Development Technical Assistance (CDTA), November 2014, Democratic Republic of Timor-Leste: Expansion of Financial Services, Team leader S. Spohn, Private Sector Development Specialist, PARD

Growing the Non-Oil Economy: A Private Sector Assessment for Timor-Leste. 2015, Asian Development Bank, Pacific Private Sector Development Initiative (PSDI)

<u>Early Warning, Early Response System: Policy Brief #9</u>: Elderly Pensions & Conflict in Timor-Leste, Rua No. 5 de Farol PO Box 472 Dili, Timor-Leste +670-331-0353, January 2015

Keynote speech by Excellency the Prime Minister Dr Rui Maria de Araujo meeting of the pacific Island Initiative of the Alliance for financial inclusion. Dili, 7 May 2015

BCTL Circular Letter 14/2015: Guidelines on the Use of Agents in Branchless Banking, 20 February 2015.

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Branchless Banking in Timor-Leste: Opportunities and Challenges, Briefing for representatives of the Government of Timor-Leste, Erik Aelbers, June 2013, ADB

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IMF Country Report No. 13/338 Democratic Republic of Timor-Leste, December 2013

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Dili Consensus on Financial Inclusion in the Pacific Islands, 8 May 2015. Governors at the Inaugural launch and 1st meeting of the Pacific Islands Regional Initiative (PIRI), endorsed and agreed on the broad vision, mission, objectives and financial inclusion policy areas for the initiative.

GSMA's Women in Agriculture: A Toolkit for Mobile Services Practitioners, 2014

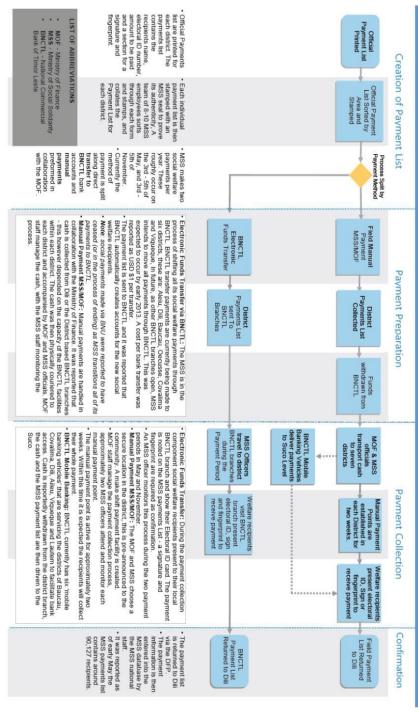
ANNEX: MEETINGS HELD – MOBILE FINANCE

Organization	Names of parties met	
Government of East Timor/Regu	lators	
Banco Central de Timor-Leste (BCTL)	 Ms. Nur Aini Alkatiri, Deputy Governor for Supervision, BCTL. nur.alkatiri@bancocentral.tl or nadalkatiri@bancocentral.tl Ms. Sara Lobo, Deputy Governor for Payment, sara.lobo@bancocentral.tl. 	
Ministry of Social Solidarity (MSS)	 Isabel Amaral Guterres, Minister of Social Solidarity Mrs. Aida Mota, Acting General Director of Social Protection, Actual National Director of contributory Regime Mr. Jose F. da Conceição, Chief of Cabinet of Minister) Mr. Leoneto B. F Pereira, National Directorof Non-contributory Regime 	
National Statistics Directorate/Division of Economic & Statistics	Gastao M.G de Sousa, Economy & Statistics Manager, gastao.desousa(at)bancocentral.tl, Tel. +670 331 371 2 (not available)	
Ministry of Finance	Balbino Soares, Vice-Minister Chief of Staff, Mrs Balbina Soares, <u>bsoares@mof.gov.tl</u> , (not available for meeting), Palácio do Governo, Edifício 5 - 1º andar, Avenida Presidente Nicolau Lobato, Dili,: (+670) 3339510	
ANC National Communications Authority of Timor-Leste	Mr. Antonio B. Correia. President/Chairperson (not available)	
Mobile Finance Implementer/Do	nors	
Pacific Financial Inclusion Programme (PFIP)/UNCDF	Sonum Puri, Digital Finance Consultant (former PFIP, now Accenture Digital in Singapore)	
International Finance Corporation	Milissa Day, Resident Representative mday@ifc.org	
USAID Avansa Agrikultura Project	• W. Jeff Gucker, Deputy Chief of Party, Cardno Emerging Markets	
Dilimart	David Fuho Jong, Director +670-77257966 fuhojong@gmail.com	
Kmanek Trading	• Clarence Kim, H.M., Mobile +67077284388	
Kmanek Farms	Kmanek Operations Manager, Chief of Farmers (Greenhouse Manager) Venue: Aileu	
Asian Development Bank	carol.stewart@adbpsdi.org, Country Director	
A2F Consulting (consultant to BNCTL funded by ADB)	• Jose Santos, Chief Information Officer, <u>jsantos@a2f-c.com</u> , +1.301.907.9477	

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CARE (Timor-Leste USAID implementer)	Peter Raynes, CARE international Country Director, Peter.raynes@careint.org
Health Alliance International	Marisa Harison, Monitoring and Evaluation Specialist in Health System Strengthening and Maternal and Newborn Health
University of New South Wales, Australia (consultant to BCTL on regulation funded by ADB)	 Federico Lupo-Pasini, Research Fellow in Financial Regulation, Faculty of Law, Room 360, UNSW Sydney NSW 2052 Australia T: +61 (2) 9385 7470, Email: f.lupopasini@unsw.edu.au W: unsw.edu.au
Banks	
BNU/CGD (Caixa Geral de Depositos)	 Fernanda Dias, Resposoval da Area de Coordenaceao Comerical Miguel Malheiro Reymao, Deputy General Manager CEO of BNU, Fernando Torrao Alves (out of town)
ANZ	David Dennis, David.Dennis2@anz.com, Frederico.pe- reira@anz.com (helping to arrange)
BNCTL	• Sérgio Maria do Espírito Santo, Chairman: Brigido da Sousa (Gido) +670-7723-3312, brigidosousa@icloud.com
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Timor Telecom	Luis Ferreira, Marketing Director <u>luis.ferreira@timortelecom.tl</u> +670-7701-0435

Telmor (Viettel)	• Ms. Than 7551-1589 is the mobile banking manager (General manager Mr. Tuan - 755-113-61, Mr. Roger Business Manager 7551-1555
Money Transfer Operator	
Sister Motor II Unipessoal, Lda	 Mr. Hendrik, Manager ,Av. Belarmino Lobo Dili, Timor-Leste Mobile number: 77171712
Sahabat Loro Sa'e, Unipessoal, Lda	• Mr. Hengky, Av. Jacinto Cândido Dili, Timor-Leste, Mobile number: 77344300
Pacific Holdings, Unipessoal, Lda	• Ms. Eugenia, (Western Union) Colmera Dili, Timor-Leste, Telephone:+670 3321 586 Facsimile: +670 3321 584
Island Dream Money, Lda	Mr. Sam, Manager, (MoneyGram) Av.Belarmino Lobo Dili, Timor-Leste

ANNEX: MINISTRY OF SOCIAL SOLIDARITY DISBURSAL PROCESS



Source: UNCDF INFUSE Financial Services Sector Assessment

PART III: TOURISM ASSESSMENT

ACRONYMS

ADB Asian Development Bank

ATM Automated Teller Machine

CBT Community-based Tourism

CIDAC Centro de Intervenção para o Desenvolvimento Amílcar Cabral

EU European Union

GDP Gross Domestic Production

GEF Global Environmental Facility

ILO International Labour Organisation

JICA Japan International Cooperation Agency

LCC Low Cost Carrier

LDC Least Developed Country

MAF Mission Aviation Frontiers

MAFF Ministry of Agriculture, Forestry and Fisheries

MPA Marine Protected Area

MSE Micro and Small Enterprise

NGO Non-governmental Organization

NTO National Tourism Organization

PADI Professional Association of Diving Instructors

SCUBA Self-contained Underwater Breathing Apparatus

SEFOPFE Secretariat of State of Professional Training and Employment

SIDS Small Island Developing State

UN-HRLLS Office of the High Representative for the Least Developed Countries, Landlocked De-

veloping Countries and Small Island Developing States

UNMIT United Nations Integrated Mission in Timor-Leste

UNWTO United Nations World Tourism Organisation

USAID United States Agency for International Development

USP Unique Selling point

VFR Visiting Friends and Relations

I. INTRODUCTION

At present, Timor-Leste is still emerging from a post-conflict environment and as such its tourism numbers and the tourism industry are very small. As a small island developing state, it also faces specific tourism challenges. Despite these challenges, government policy recognizes the potential of tourism in the *Timor-Leste Strategic Development Plan 2012-2030*, identifying tourism as part of a five-point economic development strategy. It states that Timor-Leste will position itself to provide a range of tourism experiences that take advantage of the country's natural beauty, culture and heritage. It seeks to differentiate the country from mass market tourist offerings and appeal to the growing market segment seeking boutique and unique experiences and locations. Government policy is not however widely communicated or elaborated in ministerial strategy. Despite the importance given to tourism in stated policy, statistical data and market research systems in Timor-Leste to guide tourism development and inform investors have not been developed; marketing requires development; and there is little physical or human resource investment in tourism at present.

Currently, tourism demand is slight and comes mostly from the internal domestic market (including resident expatriates) and business tourism. International leisure tourists come in small numbers, mostly for diving, and also for some sporting events or adventure. There are approximately 1,400 commercial accommodation rooms in the country, with most concentrated in Dili (i.e., fewer rooms in total than one large hotel in Malaysia or Tokyo). Visitor attractions are not significant and cultural tourism is difficult to access. Apart from the accommodation sector, other local important value chain players are a small number of domestic tour operators who offer activities and excursions, and three diving companies. Supply chain links with the international tourism value chain are largely undeveloped, so the product is not reaching the wider market. Lack of focused marketing is evident.

The main stages of the tourism value chain from market to destination are as follows:

Figure 10: Main Stages of Timor-Leste Tourism Value Chain



In addition to the actual tourism supply chain, there are also various facilitators to be considered. These include government ministries and agencies that impact on tourism, tourism training institutions, as well as donors and non-governmental organizations (NGOs) engaged in community-based activities. However, apart from the Ministry of Toursim's culture & arts department, no one is providing overall strategic guidance and master planning direction to tourism in Timor-Leste. This needs to be developed by the government working with the tourism industry.

There are tourism opportunities to be captured in the Asia-Pacific region, particularly for destinations which can balance tourism development with environmental protection. However in Timor-Leste, outside of the

Dili catchment, the country's potential host population for tourism is largely unprepared and districts do not have strategies or resources in place to manage tourism responsibly.

There are a significant number of key enabling issues which need to be addressed to facilitate tourism development in Timor-Leste. These include the following:

- Marketing
- Air access
- Regulatory/enabling policy issues
- Land ownership
- Transport (internal)
- Environmental impact
- Education
- Ensuring a whole-of-government approach

Major bottlenecks to address are as follows:

- International market awareness and image
- International market stimulation and air access
- Business and inward investment climate
- Land transfer issues
- Road and air access within the country
- Industry and government training
- Development of visitor attractions
- Development of accommodation, especially accommodation outside of the Dili catchment area
- Shore access and coastal and marine conservation
- Responsible tourism awareness and host community issues

Although these obstacles are significant and will take a long time to address, the experience of other South East Asian destinations and of small-island developing states is that tourism can offer significant economic development opportunities over time. There is a clear lesson to be learned in terms of targeted tourism value rather than volume in fragile environments.

For pro-poor impacts to be a reality, the government must be willing to foster equity, actively stem financial leakage from the economy, and develop progressive policies. For sustainability, the government, the host community and industry must recognize the importance of environmental protection. In the absence of such commitment it is likely that tourism development will be subject to elite capture (including capture of national assets by foreign elites including tourists), and development will focus on the most attractive/least risky sites close to Dili, regardless of environmental impact.

Research undertaken examining other successful small island destinations suggests that Timor-Leste should seek to avoid mass market opportunities like inclusive holidays and cruises, but rather concentrate on trying to attract high spending niches seeking activity and adventure. Indeed the country is not so well placed to develop mass beach tourism owing to its sacred salt-water crocodiles, fragile mangrove eco-systems, and the limited number of spectacular beaches compared to other Asia-Pacific destinations. Stand-alone product which is not physical location-dependent (such as casinos) could be developed if the government allows it

and the investment climate and air access from target markets (China, Malaysia, Singapore, Taiwan etc.) were much more favorable, but economic leakage to overseas from this sector is likely to be very high, and social impacts would need to be carefully considered.

The World Development Report 2011 found that on average, post-conflict countries take between 15 and 30 years – a full generation – to transition out of fragility and to build resilience. It is against this longer term backdrop that tourism development needs to be considered. There are inherent social and environmental risks if development is too fast paced, or if centralized control and responsible tourism policies are weak. Training needs to be a first priority for Timor-Leste's overwhelmingly young population, with phased tourism development as the road network improves.

The report concludes that government will need support to carefully phase the development of tourism in relation to market focus, compatible land uses, water management, coastal zone management, and the development of marine parks and protected areas. Extensive and sustained support rather than piecemeal interventions would be desirable to help this process. Government should be encouraged to integrate tourism within the existing cultural and environmental constraints and opportunities so that tourism development and job creation will be sustainable.

II. APPROACH TO TOURISM ASSESSMENT

Value chain analysis is a tool that enables the identification of stakeholders along a chain of transactions, from conception through production to consumption and after-use. The analysis helps structure ideas around what are the key processes and agents working within and outside the chain and where the benefits of the chain flow.

One approach found to be effective is to drive economic growth with poverty reduction through the integration of micro- and small enterprises (MSEs) into increasingly competitive value chains. By influencing the structures, systems and relationships that define the value chain, USAID helps MSEs to improve (or upgrade) their products and processes, and thereby contribute to and benefit from the chain's competitiveness. Supporting MSEs is particularly a priority when designing tourism interventions that will support the community and be sustainable.

A tourism value chain is different in some ways from that of other goods and services. This is because the product is consumed at the place of production, not at the point of sale. The tourism 'product' consists of the principal assets that the country has to offer to tourists, combined with every aspect of the tourism experience, from the time the tourist decides to travel until his return home. The attractiveness and, therefore competitiveness, of the tourism product will depend on the quality and accessibility of both built assets and natural and cultural assets, and how these are managed and conserved. In addition, in all but the most remote areas, the tourist must be able to access banking and telecommunications conveniently. Other essential elements of the tourism product are the physical security of the tourist and access to appropriate health services.

The different stages of consumption start when a tourist decides to buy a trip. The components of the value chain are multiple, and generally no one supplier can control them all. Destinations struggle to present a common 'branded' experience where the promise of the destination is delivered in a way which matches or exceeds expectations.

The main stages of the tourism value chain from market to destination are as follows:

Figure 11: Main Stages of Timor-Leste Tourism Value Chain



The Internet is becoming increasingly important as a means of linking consumers to destinations. Hotel booking engines will take as much as 18% of the price of a room sold on-line, a very significant value chain issue. This highlights the increasing dominance of the Internet in the value chain. Indeed 80% of consumers will consult the Internet, but many tourism businesses are still not connected to on-line booking mechanisms.

Large and small firms are involved in the value chain. The larger firms generally consist of the international tour operator, the airlines and airports (or cruise liners) and accommodation (mostly hotels). The degree of connection with the market varies considerably and many smaller firms can only reach a local ground handler in marketing terms; however the Internet is increasingly empowering tourism MSEs to market directly.

Unless all parts of the supply chain are considered, it is difficult to improve overall value. For example a tourist might stay in a good hotel, but if their entry or exit experience is poor, or they encounter other difficulties, the overall value of the tourism experience is undermined. The tourist experience at the destination goes well beyond the array of tourism service providers. The tourism value chain is thus very complex, in that multiple producers are involved at most points along the chain. Strong leadership, multi-stakeholder involvement, a widely agreed tourism master plan and national branding are generally the approaches adopted by successful tourism destinations. In order to deliver tourism effectively many government departments need to be engaged. Table 16 summarizes key value chain issues.

In addition to the actual tourism supply chain, there are **value chain facilitators** to be considered. These include government ministries and agencies that impact on tourism, tourism training institutions, and – particularly in the case of developing countries – donors and NGOs. It is important to remember that NGOs are important as facilitators in a developing economy, but as illustrated in table 16, successful tourism delivery is essentially a private sector function. Government has a key role in bringing all players together, facilitating quality improvements and marketing the destination, but the private sector delivers most of the product.

Table 16: Tourism Value Chain Analysis Service Group Details Pricing Value chain issues							
Service Group		Pricing					
Foreign Intermediaries	International travel agents, tour operators, airlines	Commissions	Negotiation power, marketing strategy and budgets, tourist perceptions, pro- pensity to attract tourists, quality of destination service providers, overseas representation, global positioning, in- ternational tour operator commitment, Internet presence				
Frontier services	Visas and other entry permits	Fees/taxes	Visa processing times/policy, permits, health checks, international access agreements, border & airport costs. airport/port/land border facilities, delays/time to clear customs, baggage handling, airport taxes, transfer facilities, welcome services				
Domestic intermediaries	Domestic tour operators and travel agents	Commissions	Entry barriers to setting up business, reliability and service quality, value added, propensity to attract tourists, marketing budgets, presence in global tourism markets, innovation& product development				
Transport related services	a.) Domestic air transport and airport services; b.) Roads c.) Ground/other domestic transport logistics (including internal flights, busses, private charter helicopters, car rentals, taxis, boats, etc.)	Negotiated with service providers	 Quality of domestic air transport Quality and extent road network to tourism locations, quality of busses & car hire services, scheduling, capacity, fares. Entry barriers, reliability, safety, quality air-service agreements/competition policy, cost efficiency (e.g. cost/passenger mile), coordination with intermediaries, tariffs, taxes, administrative barriers, destination marketing. 				
Accommodation services	Hotels, lodges, guest-houses, hostels, camp sites etc.	Negotiated with service providers	Entry barriers, land access, labor productivity, capacity and quality, regulations/competition policy, input sourcing, operating cost drivers, quality drivers, training, spillovers to local economy/leakage, coordination with intermediaries, destination marketing				

Service Group	Details	Pricing	Value chain issues
Excursions, activities and places to visit	Tours offered, activities, events, attractions quality, specialist services (SCUBA, etc.), excursions, guides, etc.	Negotiated with service providers	Entry barriers, land access, access to the countryside/shore, labor capacity quality, regulation, operating costs driv- ers, spillovers to local economy, coordi- nation with intermediaries, taxes, mar- keting, health and safety
Ancillary expenditure	Restaurants, shops, Internet cafes, foreign exchange, etc., etc.	Discretionary by visitors (generally not part of a pack- age)	Entry barriers, land access, labor capacity, quality, regulation, operating costs drivers, spillovers to local economy, coordination with intermediaries, taxes. marketing
Total tourist impact	Economic, social and environmental	Sum of relevant costs	Employment, visitor expenditure (generally ascertained through exit surveys at airports), environmental impact analysis, visitor satisfaction, host community satisfaction

III. CURRENT SITUATION ASSESSMENT

A. OVERVIEW

Timor-Leste is emerging from a post-conflict environment. Tourism numbers²⁷ and its tourism industry are very small. Hotel occupancy has declined following the ending of the United Nations Integrated Mission in Timor-Leste (UNMIT) which had brought significant business tourism to the country and boosted the resident expatriate community (domestic tourism) for 13 years, helping to relaunch the country's hotel sector.

²⁷ Tourists are generally categorized as overnight visitors or excursionists (excursionists include day trippers and cruise line visitors who visit a destination but do not stay overnight); and as domestic or international visitors. An overnight tourist is someone who spends at least one night (and less than a year) away from his normal place of work (UNWTO). Overnight tourists can include business visitors, leisure visitors, educational visitors and those visiting friends and relations (VFR). Not all tourists stay in commercial accommodation.

Timor-Leste is also a small island developing state (SIDS). SIDSs have particular challenges in tourism and also often develop tourism-dependent economies. The tourism industry has greatly contributed to the development of many SIDSs. The contribution of the travel and tourism industry to GDP and employment is indicative of the industry's importance. For instance, in 2012 Aruba's travel and tourism industry made a total contribution of 27 percent to GDP and if the total contribution (direct and induced) is taken into account, the contribution amounts to 84%. Similarly, Antigua and Barbuda, the UK Virgin Islands, Anguilla, Seychelles and Vanuatu are heavily dependent on the travel and tourism industry (total contribution higher than 50%). Regarding employment, in 2012 the UK Virgin Islands topped the list with a direct contribution to employment of 33 percent and a total contribution (direct and induced) of 90 percent. In contrast, the travel and tourism industry in Haiti, Suriname and Papua New Guinea makes relatively small contributions to GDP and employment. This illustrates that there is potential of tourism for Timor-Leste as it seeks to broaden its economic base, but that success in tourism is not guaranteed. Tourism has however been key to the recent graduation of Samoa, Cabo Verde and the Maldives from least developed country (LDC) status.

The Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States (UN-HRLLS) highlights the challenges facing SIDSs as follows:

- Narrow resource base depriving them of the benefits of economies of scale; small domestic markets and heavy dependence on a few external and remote markets
- High costs for energy, infrastructure, transportation, communication and servicing
- Long distances from export markets and import resources
- Low and irregular international traffic volumes
- Little resilience to natural disasters
- Growing populations
- High volatility of economic growth
- Limited opportunities for the private sector and a proportionately large reliance of their economies on their public sector
- Fragile natural environment

With the exception of its energy resources, Timor-Leste faces all of these problems. UN-HRLLS also points out that the sustainable developments of SIDSs will be largely dependent of coastal and marine resource management.

²⁸ UN-HRLLS (2013) Small Island Developing States Factsheet

²⁹ The number of international tourists visiting 57 SIDS destinations increased from 28 million in 2000 to 41 million in 2013. In the same period, exports from tourism grew from US\$ 26 billion to US\$ 53 billion (UNWTO).

³⁰ UNWTO (2012) Tourism in Small Island Developing States

Like many island states Timor-Leste has exceptional natural and cultural resources, and these can make it unique for visitors. At the same time the management of these resources confronts the country with a number of challenges and vulnerabilities:

- Coastal management and the safeguarding of the shoreline and marine environment are major challenges.
- Culture will change and become more globalized as contact with the wider world opens up.
- Long-term investment, and long term investment in training, will be needed to develop a larger tourism industry.

At present most foreign investments are Australian in numbers and Indonesian in value, with a very small portion of investment from Portugal.³¹

B. DEMAND

Types of tourism demand

Most tourism demand in Timor-Leste at present is from the following:

- The internal domestic market (including resident expatriates)
- Business tourism

The growth potential of both of these segments is dependent on rates of general economic growth, although conference tourism can be stimulated by targeting international conferences to the country. In terms of **international leisure tourism** (which can be stimulated by marketing and positive public relations), the most active sources of international leisure tourism demand at present are divers attracted to Timor-Leste's coral reefs, and cyclists attracted by events. The international market for more general touring is at present extremely small, largely confined to VFR (visiting friends and relatives) tourism and some business visitors. There are no resorts of sufficient brand value to attract international visitors in their own right. One small cruise liner recently visited providing large numbers of **day trip visitors**, possibly indicating latent demand for new destinations. In overall terms however, lack of awareness, the cost of air access to the country, together with visa delays for overland access, are significant disincentives to international tourism.

Despite the importance given to tourism in government policy, statistical data and market research systems in Timor-Leste to guide tourism development and inform investors have not been developed.

Extent and sources of current tourism demand

• **Domestic Tourism.** The domestic market is a major source of bed-nights in Timor-Leste, both through business and weekend leisure. The domestic market includes resident expatriates and native Timorese. The size of the domestic market has declined following the departure of UNMIT resident expatriates in 2013, however to compensate there is a slowly growing Timorese middle class. The

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³¹ According to the government's 2013 publication *Timor-Leste in Numbers*.

Ministry of Finance's Timor-Leste in Figures 2013 reports the following facts which provide indicators as follows:

- Over the past decade Timor-Leste's population has grown from 923,000 to 1.2 million
- Most of the population is engaged in subsistence farming and 50% of the population lives below the poverty line;³² average income is around US\$500 per annum,³³ so the percentage that can engage in tourism is presently quite small. There are however important religious events for which local people will travel away from their normal place of work. They will also travel to markets or to Dili for business purposes.
- There were a total of 7,680 light vehicles registered in 2013. Assuming this has grown to around 10,000 by 2015 and that there are four people per vehicle, this would put the size of the travelling domestic market at around 40,000 people.
- International Tourism. The United Nations World Tourism Organization's (UNWTO) 2015 Compendium of Tourism Statistics reports Timor-Leste international overnight visitors growing from 40,000 in 2010 to 58,000 in 2012. In 2012 73% of these visitors came from within the Asia-Pacific region. According to a detailed report on tourism undertaken for the government's private sector support function,34 there were 147,410 total arrivals recorded entering Timor-Leste in 2012 via entry points (airport, seaport and land crossings). The majority of these seem to be Timor-Leste residents. 34,358 "tourist or business" visas were issued in 2012, indicating that the UNWTO figures for overnight visitors may be overstated. The industry reports a continuing decline following the departure of UNMIT and that the rising value of the United States dollar (US\$) is making the destination uncompetitive in South East Asia. The total numbers of arrivals, including Timor-Leste residents, over recent years are as shown in table 17.

Table 17: Arrivals 2011-2014

Year	2011	2012	2013	2014
# Arrivals	76,053	96,698	91,686	93,483

Source: The Asia Foundation

Further analysis of these figures has been carried out by The Asia Foundation. This research concludes that the number of arrivals coming to Timor-Leste purely for leisure was just 6,700 in 2014.³⁵

The Asia Foundation also carried out important market research amongst 710 exiting visitors at Nicolau International Airport, Dili in 2014. 39% of respondents were Australian, 18% Indonesian, 9% Portuguese and 6% American. Key findings were as follows:

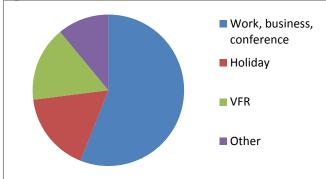
³² World Bank Country Overview

³³ http://travel.nationalgeographic.com/travel/countries/timor-leste-guide/ Average GDP per capita is much higher owing to oil exports.

³⁴ Jebsen (2014) Timor-Leste Tourism Research and Development

³⁵ Research carried out with Sara Currie, Swimburne University of Technology, Melbourne

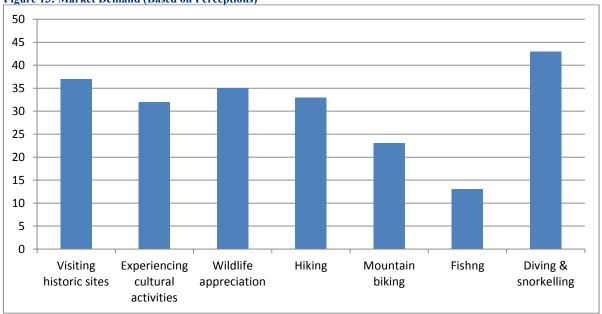




Source: The Asia Foundation

This indicates that of the 17% of arrivals who indicated that they are coming to work, 46% indicated that they intend to stay for a long term work commitment. Of all those surveyed, 78% indicated that they already knew someone in Timor-Leste, illustrating the importance of VFR (visiting friends and relations) traffic. Visitors were also asked about their intentions prior to arrival. These indicate what market demand is for based on perceptions. The results were as follows:

Figure 13: Market Demand (Based on Perceptions)



Source: The Asia Foundation

Economic impact

Based on the survey The Asia Foundation has estimated average expenditure per leisure visitor at US\$638 per person per trip,³⁶ and that tourism expenditure, using UNWTO definitions of leisure tourists, to be in the region of US\$10 million. UNWTO itself estimated inbound tourism expenditure at US\$29 million in 2013: The UNWTO figure includes business tourism.

As The Asia Foundation survey is not yet part of an ongoing annual benchmarking exercise and does not appear to cover many travelers from other countries in South East Asia, it needs to be treated with caution. It does however give indications of the type of tourism product being sought by many visitors to Timor-Leste at present, and an important indicator of the very small number of leisure visitors at present, and their modest but important economic impact.

Another important economic analysis study was undertaken by Conservation International in 2012. The study found that the number of foreign divers seeking SCUBA education in Timor-Leste has increased by 22% since 2008. Furthermore, the 2012 data analyzed puts diver expenditure in excess of US\$1.5 million.³⁷ This illustrates the real importance of the fragile marine environment to leisure tourism in Timor-Leste at present.

Tourism Stakeholder Mapping

Timor-Leste's tourism value chain can be illustrated as shown in figure 14.

Foreign intermediaries

Foreign intermediaries (including the Internet) are critical to the value chain in that they place and make available the product in the market. For all tourism destinations key value chain players include the following:

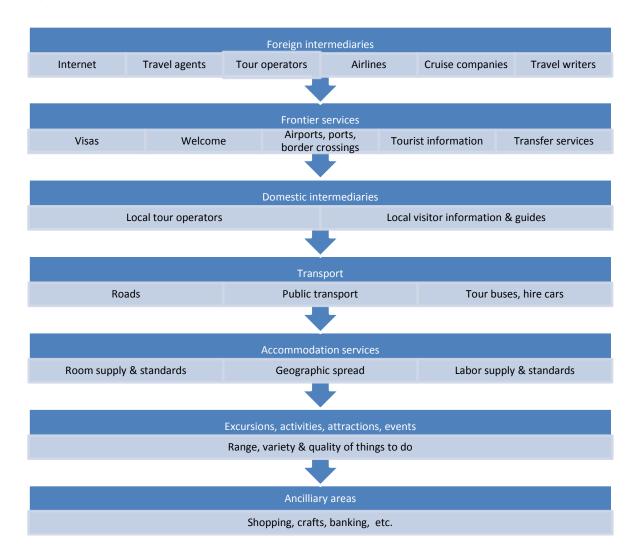
- Internet presence
- International tour operators who feature the destination
- On-line operators who feature the destination
- Travel journalists who write about the destination in magazines, in books and online
- Airlines that seek to sell seats to the destination
- Cruise companies that feature it
- Representative offices or (increasingly) contracted in-market representatives
- Consular representatives

At present, this key element of Timor-Leste's tourism value chain is fundamentally weak.

³⁶ Note that 27% of those surveyed stayed for more than three months, and 47% for less than two weeks.

³⁷ Pinto et al. (2014) Economic contributions and trends of SCUBA diving in Timor-Leste: Dive Timor Lorosa'e Case Study. Conservation International. The study also warns that dive sites being visited by tourists are quickly losing their biological integrity, and along with this, their aesthetic value, posing a significant threat to the sustainable development of the SCUBA dive tourism industry.

Figure 14: Timor-Leste's Tourism Value Chain



Timor-Leste's Internet presence is not extensive. There is a good site (with linked Facebook and Twitter) that offers a forum and some tourist information at <www.visiteasttimor.com> but the number of "likes" is quite small. In addition, Dive Timor Lorose maintains a comprehensive website on tourism diving www.divetimor.com. The government's official tourism website <www.turismo.gov.tl> is in need of upgrade to compete with other national tourism organization (NTO) websites. Another tourism website described as being the official one http://www.turismotimorleste.com/> promotes electronic cigarettes. 38

 $^{^{\}rm 38}$ When accessed on 7 August 2015

While hotels are featured on on-line booking sites (expedia.com, agoda.com, hotels.com, booking.com, etc.) there are very few tour operators offering packaged holidays to Timor-Leste at present. Examples include:

- <www.undiscovered-destinations.com> (UK operator)
- <www.worldexpeditions.com.au> (Australian operator)

There is a major marketing task to be done increasing the exposure of the destination in key target markets through tour operators and online.

Groups that do come are generally stimulated by contacts within Timor-Leste rather than overseas tour operator activity. For SCUBA diving, the situation is a little more developed but most business appears to come directly as a result of word-of-mouth recommendation through diving clubs and other networks, rather than through active marketing. Diving magazines do occasionally run features on Timor-Leste but more could be stimulated.

The most active effective players in terms of marketing the destination are probably some of the international airlines that fly to Dili and actively market to sell seats (AirNorth, Garuda, Sriwijaya Air and Silk Air).

The country is linked with direct flights to Bali (Indonesia) approximately two hours flight time, Singapore approximately four hours, and Darwin (Australia) approximately one hour flight time. Air Timor is mostly a ticketing service at present.

There are very few travel books on Timor-Leste tourism. Recent additions include *Lonely Planet* and a *National Geographic Traveler* publication in partnership with the Ministry's heritage and arts department. Magazine articles are relatively few and (apart from *Tour de Timor*), are not generally stimulated by Timor-Leste marketing.



Timor-Leste does not have any international marketing representatives contracted and training of consular representatives in what to market for tourism has not yet taken place.

The Ministry of Tourism has attended a wide range of trade shows, but is widely criticized in consultations for lack of strategic focus in its marketing. Participation in Expo Milan in 2015 comes in for particular negative comment. The theme of this event is food and Timor-Leste is located in the coffee section, so it does seem that a lead role for the Ministry of Agriculture would have made more sense.

In terms of addressing these critical aspects of the tourism supply chain, the role of the Ministry of Tourism, Arts and Culture will need strengthening. At present there is no focused marketing strategy in place. Private sector capacity development in online marketing would also be helpful.

Frontier Services

Frontier services at Presidente Nicolau Lobato International Airport and at Dili Port are basic. There are plans to improve both, however at present there is no tourist information service. There is a new border post at Batugade, but there is no visa-on-arrival service. This significantly undermines the potential of overland tourism and has had a negative effect on backpacker and island-hopping tourism, resulting in over-landers who wish to visit Timor-Leste via West Timor having to spend additional nights in Indonesia while waiting for entry visas.

UNWTO recently published a report highlighting the positive impacts on tourism that putting visa processes online in advance of arrival can have.³⁹ It states that visa facilitation is central to stimulating economic growth and job creation through tourism. An increasing number of countries facilitate the purchase of visas online in advance of arrival. This allows the tourist to purchase visas before departure and can increase security clearance and security of cash collection.

There is at present no active tourism information service at points of entry to Timor-Leste, and little sense of welcome.⁴⁰

Some hotels do offer transport services and there are minibuses and taxis available from border entry points, however the standard of these services will need improvement and new investment.

In terms of addressing these aspects of the tourism supply chain, the Ministry of Tourism, Arts and Culture, the Ministry of the Interior and the Ministry of Public Works, Transport and Communications (Civil Aviation) will need strengthening.

Domestic intermediaries

Domestic intermediaries are by far the most important players within the destination in terms of developing packages and providing the links to the international market. They source the product for the international market to sell, help decide which products are internationally saleable, and provide contracted ground handling services for incoming groups. They also sell packages to tourists and residents already in Timor. They invest in international marketing, as it is through contacts with international tour companies and their own online presence that they get business.

Timor-Leste has a small number of domestic intermediaries (ground handlers). All are very small companies with limited marketing resources. Some do not even own vehicles but rent them as required. Most also hire

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³⁹ UNWTO (2014) Visa Openness Report.

⁴⁰ All arriving flights at some Caribbean islands are welcomed while waiting for their luggage by live music and traditional dancers. Arriving tourists in Thailand and Sri Lanka often receive information packs and free local SIM cards.

guides as required rather than having permanent guiding staff. Indeed they are generally so small that based on their assets they probably would not qualify to be registered as tour operators in mainstream destinations. However they are vital for the sector to grow. Some are developing interesting day tours and are active in attracting specific market segments such as adventure, education and cruises. Domestic intermediaries currently or recently active include the following:

- Max Tours
- Eco-Discovery Tours
- Timor Mega Tours
- Island Explorer Tours [linked to Air Timor]
- Dive Trek & Camp East Timor
- Timor Adventure

In addition, diving and boating companies and some hotels offer packaging services.

This is a key private sector segment to support to market the destination, and to help highlight quality players within the emerging tourism industry. At present they are (naturally) very competitive with one another given the small scale of international demand. All see potential for growth and see the lack of effective national destination marketing is a key obstacle.

Transport-related services

Internal transport is well known as a key obstacle to tourism development in Timor-Leste. Public transport, car hire, coaches and boats all require improvement and the cost of maintenance of vehicles due to bad roads and the high cost of imports all act together to undermine tourism potential. In reality, mainstream tourism will only develop where there is good access. At present this means the coastal route towards the Indonesian border and inland to Maliana. The route along the coast to Nino Konis Santana National Park and inland to Ainaro require further upgrade if more tourism is to develop. This limits the potential to create jobs and alleviate poverty, although there can be some upstream linkages to remoter areas through crafts. (There are immediate opportunities to improve this income stream by developing better craft retail outlets in downtown Timor and in hotels).

Areas where positive changes in tourism can quickly be brought about relate to

- Improvements to ferry services (scheduling and standards);
- Provision of visa-on-arrival at more entry points; and
- Internal air transport.

According to consultations undertaken with civil aviation authorities, airport upgrades are underway as shown in table 18.

Table 18: Domestic air transport								
Airport Name	Location	Status	Planned upgrade (as fore- cast by Civil Aviation)					
1. Atauro Airport	Atauro Island, Dili	This was recently operational using commercial chartered plane to fly visitors from Dili to Atauro (Mission Aviation Frontiers [MAF])	Plan for airport expansion in 2016*					
2. Cakung Airport	Baucau	 Chartered plane for emergency purpose only Occasionally used to transport goods, etc., but no regular flights Trans Australian used the area for international flight before Indonesian occupation 	Plan for repair and renovation in 2016* Consultant's note: If major investment in tourism were to be secured, the coastline East of Baucau is flat and not so heavily populated, so may present opportunities if linked to flights to Cakung Airport.					
3. Presidente Nico- lau Lobato Inter- national Airport	Comoro, Dili	Currently operational and with regular flights	Under consideration					
4. Abisu Airfield	Fuiloro, Lospalos	 Non-operational and under repair Occasionally used to charter emergency cases or high official visiting in the area 	• Likely to open in 2017- 2020					
5. Maliana	Maliana, Bobonaro	 Non-operational and under repair Occasionally used to charter emergency cases or high official visiting in the area 	• Likely to open in 2017- 2020*					
6. Oecussi Airport	Oecussi	 Non-operational and under repair Occasionally used to charter emergency cases or high official visiting in the area 	Likely to open in 2016					
7. Suai Airport	Covalima	 Currently operational but not for commercial flights. The influx of petroleum companies and those who worked in the company made this airport the second busiest airport in the country. Occasionally used to charter emergency situation or by high officials visiting in the area 	• Open					
8. Viqueque Airport	Viqueque	 Non-operational and under repair Occasionally used to charter emergency situation or high official visiting in the area 	• Likely to open in 2017 - 2020					

Source: Civil Aviation

Air Timor/Pegar Air have plans to supply domestic travel services, but issues such as route subsidy and competition policy are not yet formulated and the government would benefit from some technical assistance to realize this important issue for tourism stimulation.

There are plans to relocate the commercial port, which should free up space for leisure marine services in the center of Dili's waterfront. There are also plans for a commercial leisure marina opposite the Novo Turismo Hotel.

The air developments could change the tourism landscape by providing much easier access to adventure tourists who can afford to fly. A key requirement would of course be the development of affordable scheduled flights. In other countries, for example Nepal and Laos, small domestic planes serving remote areas have brought tourism to these locations and stimulated the development of accommodation and trekking. The civil aviation authorities probably require capacity development support to facilitate the process of domestic air transport development. The development of leisure marine facilities will encourage more yachts, and could improve the arrival facilities for ferry passengers and passengers from cruise liners which anchor offshore.

Accommodation services

Accommodation is the 'bread and butter' of the tourism industry and where most direct tourism jobs are created in most tourism destinations. At present Timor-Leste has a very small accommodation sector, mostly concentrated in Dili. Annex 1 lists the value chain players in the accommodation sector and annex 2 lists the owners of most of these businesses. In total it is estimated that there are approximately 1,400 rooms available: ⁴¹ less than one large hotel in Malaysia or Tokyo. ⁴² 75% of these rooms are in Dili with the remainder in the districts.

Assuming that on average each hotel room represents two accommodation sector employees, this would put the accommodation industry's total employment at 2,800 at present. A 2010 survey of total business activity in Timor-Leste estimated total employment in accommodation and food services including restaurants at 5,700, which seems reasonable.⁴³ This was before the departure of UNMIT.

The standard of accommodation is very variable and the lack of an accommodation grading system and hotel design guidelines means that room sizes and facilities do not necessarily relate to international expectations by hotel grade.

Accommodation in Timor-Leste is expensive compared to Indonesia and other South East Asian destinations. Partly this is because the industry has not adjusted prices downwards to compensate for the rising dollar, and partly because import costs are so high (and, as in most small island destinations, virtually all hotel supplies are imported, which also results in extensive economic leakage from the sector).

At the higher end there are a number of investors who have upgraded and expanded their properties. Future expansion plans are however mostly limited to Dili and its catchment, reflecting the dependence of the industry on business and domestic tourism. Spreading tourism away from Dili will be a challenge as these investments will be more high risk as they are more dependent on the country attracting more leisure tourists. At present, rural hotels and guesthouses are heavily dependent on NGO and government demand, but reliance

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⁴¹ There is no up-to-date official registry of accommodation at present: Treat figure with caution.

⁴² The First World Hotel in Genting has over 6,000 rooms. The Shinagawa Hotel in Tokyo 2,600.

⁴³ Ministry of Finance (2011) Business Activity Survey of Timor-Leste 2010

on NGOs, while helpful as a current source of business, will not provide much further growth. Although hotel and service industries were amongst the very few sectors that attracted foreign investment in Timor-Leste during UNMIT administration, the ease of doing business in the country is ranked very poorly at 172 out of 189 countries reviewed by the World Bank. This limits its ability to attract international investment in tourism. Also the country does not appear in recent World Economic Forum Tourism Competitiveness Indices due to unreliable statistical data.

How to expand Timor-Leste's accommodation supply is an area that will require careful future master planning and business climate reform. Locations which are less environmentally sensitive but also attractive to tourists need to be identified. In the short to medium term there may be opportunities to redevelop colonial heritage at coastal and inland locations, as has been done at Balibo Fort Hotel and Pousada du Baucau. A high quality chain of such properties would be an additional attraction, if well managed.

A five star hotel complex is awaiting government approval at the Pelican site in Tasi Tolu, west of Dili. ⁴⁵ The proposed investment includes a hotel with 492 bedrooms, gym, restaurant, spa, and convention center for 1,500 people, golf course, commercial area and residential area. The total investment is costed at US\$310 million. ⁴⁶ During the construction stage of the hotel complex, the investor (Datuk Edward Ong of Singapore) estimates that 1,500 direct jobs may be created, 70% to 80% of which can be carried out by Timorese. Once the hotel complex is completed and operational, the investor foresees that 830 jobs will be established and maintained, 70% to 80% of which can be carried out by Timorese according to the developer. This equates to a ratio of just under two jobs per hotel room.

A similar development (residential and touristic) is proposed east of Dili by the Jape group (Paradise Beach). Both of these investments are centered on Dili.

Excursions, activities and places to visit

There are relatively few excursions on offer from Dili hotels at present, and those that are offered are expensive. This is due to limited demand and the high wear and tear on tour operator or hired vehicles. In general the options are to Atauro Island, heading inland southwards to Maubisse, westwards to Balibo, or a longer excursion to Com and the Nino Konis Santana National Park (with overnights).

The NGO Trekking East Timor has developed extensive trekking routes of the country (see trekkingeasttimor.org).

SCUBA diving is the most developed activity tourism product in Timor-Leste at present and has significant economic impact through divers who can be long staying. The Asia-Pacific coral triangle in which Timor-

⁴⁴ Available at < http://www.doingbusiness.org/rankings>

⁴⁵ Source: Timor-Leste Specialist Investment Agency

^{46 &}lt;www.invest-tl.com>

Leste lies contains 75% of all coral species, 35% of all coral reefs in the world, and the largest mangrove forest. Three thousand fish species are found here. In addition, the triangle is a major route for many sea mammals, and a major nursery area.

The quality of Timor-Leste's diving is high, although there are structural weaknesses and only a small handful of dive centers: In particular the lack of medical services for emergencies is a weakness which does put off even experienced divers. Emergencies are thankfully few but diving can be difficult due to strong currents. The nearest compression chamber facilities are in Bali or Darwin, which is very far for low altitude flights. 47 In addition lack of investment in piers and slipways is a problem for shore access, and sewage pollution from Dili and run off from road development is a growing concern, with significant coral deterioration reported. 48

Key value chain players in this sector are as follows:

- Dive Timor <www.divetimor.com> Professional Association of Diving Instructors (PADI) accredited 5 star diving center
- Compass Charters & Ocean Adventures < www.compassadventures.com > PADI registered and specializing in boat dives, whale and dolphin watching tours and sailing tours to Atauro island and to
- Aquatica Dive Resort <aquaticadiveresort.com> PADI dive resort, located the outskirts of Dili. Also attracts Asian divers

All dive companies are Australian-owned: Aquatica is developing Asian markets. The study on the economic impact of diving⁴⁹ indicated that in 2012 one dive company serviced 11,000 dives, based on the number of air tanks used. Economic impact was estimated at US\$1.6 million, 16% of the value of coffee exports in that year. 50 The Conservation International study does not examine employment numbers, but consultations undertaken for this study indicate approximately 36 direct employees, 80% of whom would be Timorese. There is one native Timorese dive master at present. The sector has scope for further expansion if marketing, medical and access issues are addressed.

Another important activity is mountain biking, developed around the reputation of the annual *Tour de Timor*. The Tour de Timor is an international mountain bike race, held in stages in September. The first race was held in August 2009, and attracted 300 competitors from 12 countries. Hundreds of thousands of Timorese line the streets all along the course (especially in the more remote areas). Income from the race is considerable: The registration fee alone is US\$600 for participants and US\$400 for supporters.

⁴⁷ This problem can invalidate divers' emergency insurance

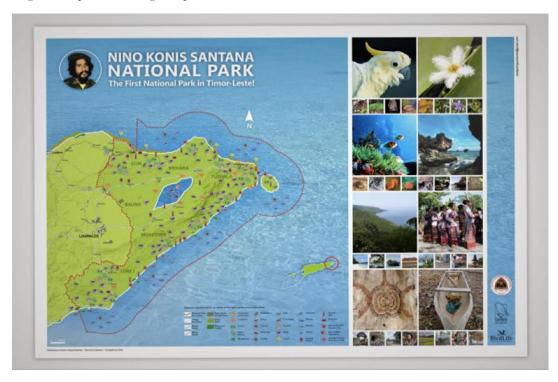
⁴⁸ Source: Conservation International.

⁴⁹ Pinto et al (2014)

⁵⁰ However as 40-50% of divers are from the domestic market, the export value of diving is more likely to be around US\$ 1.2 million (US\$800,000 through divers with the main operator, say and approximately US\$400,000 for the other two).)

Other activities offered by ground handlers include trekking, camping, whale watching, bird watching and other outdoor activities, firmly illustrating the country's current actual leisure tourism product as Adventure Tourism.⁵¹

Visitor attractions are limited. In Dili there are revolutionary museums but no national museum at present.⁵² The Arts and Culture division has developed some good, if small-scale, attractions at colonial sites along the Western road. In the absence of a flagship national museum, the country's flagship attraction is the Nino Konis Santana National Park, however there is a need for capacity development and institutional strengthening to get this up and running as a prime visitor attraction.



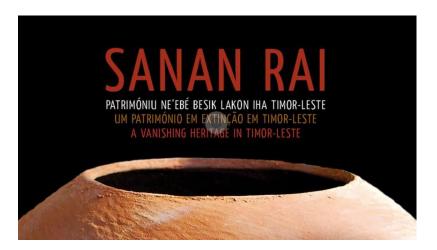
Source: http://voices.nationalgeographic.com/files/2013/09/map.png

Cultural tourism, although clearly a potential strength, is difficult to access. The country's rich heritage of textile weaving, pottery (sanan rai) and wood carving (ai to'os and antoulas), together with other ethnic experiences are difficult for the tourist to discover, even in Dili, and local people's attitudes to the tourism exploitation of ethnic groups are (quite rightly) not always positive. There will be much work to be done to develop responsible tourism that benefits local people in rural areas. The development of a national museum, and perhaps the use of some colonial buildings like Casa Europa for cultural tourism purposes do present opportunities.

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⁵¹ Activities are however largely unregulated and as visitor numbers grow problems are likely to arise. The New Zealand model for adventure tourism management would be useful to study.

⁵² One is planned but funding has not yet been secured.





With the exception of SCUBA diving (where there are also investment needs) and Tour de Timor, this key aspect of Timor-Leste's current value chain is also weak. Strengthening protected area management and assisting the Arts and Culture department of the Ministry of Tourism, Arts and Culture to develop more tourism product would be desirable if more tourist attractions are to be provided.

Ancillary areas

Opportunities for ancillary tourism expenditure are largely undeveloped, especially outside of Dili where in some towns it can be difficult and at times impossible even to find a simple restaurant. This has particular relevance for all tourism. For cruise tourism, even in Dili there are few tourist-orientated retail outlets and therefore few opportunities for local people to benefit from an influx of cruise line passengers.

Few hotels have craft shops (a notable exception being the Timor Hotel) and this is an immediate opportunity. At present, to access local crafts the tourist probably has to search for an NGO, which is not easy to do especially when there is no downtown tourist office (another immediate opportunity).

Automated teller machines (ATMs) are almost totally lacking outside of the capital and bank charges on international cash withdrawals are so high that they probably discourage ancillary expenditure by tourists in the economy.

C. VALUE CHAIN FACILITATORS

Governmental tourism value chain facilitators

In addition to the Ministry of Tourism, Arts & Culture, the following government agencies have important value chain facilitation roles:

- The Secretariat of State of Professional Training and Employment (SEFOPFE)—SEFOPPE is a key government agency working with training institutions, including community employment scheme and community-based tourism (CBT).⁵³
- Ministry of Agriculture, Forestry and Fisheries (MAFF) —MAFF also supports CBT and can in future help develop linkages to the hotel supply chain, and possibly events such as flower and agricultural festivals.
- Ministry of Public Works, Transport & Communication
- Ministry of Planning & Strategic Development
- Ministry of Social Solidarity
- Ministry of Education
- Ministry of Commerce, Industry & Environment

Non-governmental value chain facilitators

There are a large number of NGOs supporting various aspects of tourism. In some cases NGOs have initiated tourism projects and their continued operation is dependent on NGO support. The main NGO tourism value chain facilitators include table 19. There are also various NGOs (including the Alola Foundation, and Plan International) which work with women's groups to support craft development.

It is clear that many NGOs are supporting tourism development in Timor-Leste, however interventions are mostly piecemeal and none is supporting overall tourism master planning and marketing implementation at present. Given that the most significant tourism projects in terms of both employment marketing investment and environmental impact could come from large-scale resort development, airports and possibly casino development, these are the areas where there needs to be a concentration of technical resources in ensuring that development will be environmentally and socially responsible, and economically viable.

Table 19: Active Tourism NGOs

Active Tourism NO	GOs
The Asia Foundation	The Asia Foundation has worked with the Ministry of Tourism, Arts, and Culture on market research into Timor-Leste tourism and local people's attitudes to tourism. It is also currently investigating branding.
Cooperation Portugal	Extensive assistance towards cultural tourism projects. In addition the Centro de Intervenção para o Desenvolvimento Amílcar Cabral (CIDAC) supports archival projects relating to revolutionary history.
Haburas Foundation	Currently supporting CBT projects in rural areas.
Market Development Facility (MDF)	MDF is working to bring private sector expertise to NGO/community projects. It has worked with the Bilabo House Trust to help develop the Bilabo Fort Hotel.

⁵³ ACDI-/VOCA visited a SEFOPFE

East Timor Develop- ment Agency (ETDA)	ETDA is engaged in providing vocational tourism training in Dili.
ChildFund	ChildFund is also providing tourism training.
Hummingfish Foun- dation	 The Hummingfish Foundation published <i>Timor-Leste Land of Discovery</i> in 2006. It works on projects promoting nature-based tourism assets includ- ing assisting Timor-Leste promotion at World Expo 2010 and the Timor- Leste Dive Photo Competition.
New Zealand Aid	Supporting tourism development and other tourism-related NGOs
Australian Aid	Supporting The Asia Foundation and some other tourism-related projects.
International Labour Organisation (ILO)	The ILO has supported research and training projects related to tourism.
Japan International Cooperation Agency (JICA)	 Currently a marketing advisor (senior JICA volunteer) to the Ministry of Tourism.
UNWTO	 UNWTO is planning to providing trainings to Ministry staff and others in the tourism industry
UNDP	Not currently active in tourism development ⁵⁴
Blue Ventures	 Marine conservation NGO. Not currently active in Timor-Leste but has been considering an intervention.
Asian Development Bank (ADB)	 Not currently active in tourism (although potentially a major source of funding).
European Union (EU)	 Although working in the rural development area, the EU is not currently active in tourism.

A. HOST POPULATION

With 60 percent of the population under 25 years of age, Timor-Leste's population of 1.2 million makes it one of the youngest countries in the world. Benefitting from high global oil prices, Timor-Leste achieved lower middle-income status in 2011, but oil prices have since fallen and poverty remains persistently high, particularly in rural areas, where the majority of the population lives.

Outside of the Dili catchment Timor-Leste's potential host population for tourism is largely unprepared and districts do not have strategies or resources to manage tourism. Hostile attitudes to foreigners occasionally emerge as a result of the country's colonial and post-colonial experience.

In 2014 The Asia Foundation carried out research which indicated that the majority of respondents (66%) believe an increase in the number of tourists will be beneficial for their community (with 36% saying "a little beneficial" and 30% saying "very beneficial"). Twenty-two percent of respondents feel their community will not benefit greatly from additional tourists (including 11% who said "not very beneficial" and 11% who said "not at all beneficial"). Twelve percent of respondents were unsure of the impact of an increased number of tourists ("don't know").

5454 The Global Environmental Faculty (GEF) may be a future source of funding through United Nations organizations..

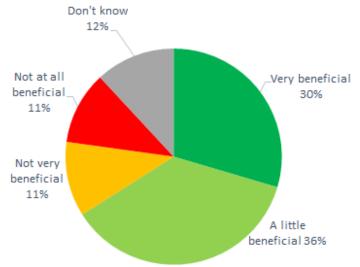


Figure 15: Will an increase in the number of tourists be beneficial for your community?

Source: The Asia Foundation

Respondents were asked whether they believe their community is ready to meet the needs of tourists. A large number of respondents (44%) had no concerns about their community's preparedness to meet tourist needs, illustrating a lack of awareness of the challenges which tourism will bring. Urban respondents were less likely to have concerns about community preparedness for tourists (56% having no concerns) than rural respondents (38% having no concerns). Younger respondents (17-34 years) and respondents who had completed primary school expressed greater concern about their community's understanding of tourist needs than other respondent groups (25% of each group nominating this as their greatest concern).

Traditional *tara-bandu* law⁵⁵ empowers local communities to have a strong voice regarding tourism development in their communities, and is important for ensuring responsible tourism development which engages with local communities. There are limits of acceptable change where tourism development is concerned and not all tourism development will be welcomed.

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⁵⁵ Community empowerment based on Timor-Leste's traditional form of conflict resolution

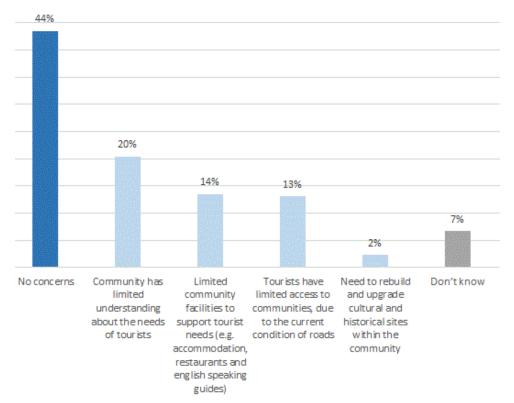


Figure 16: Is your community ready to meet the needs of tourists?

Source: The Asia Foundation

B. POLICY ENVIRONMENT

Government policy recognizes the potential of tourism. The *Timor-Leste Strategic Development Plan 2012-2030* sees tourism as part of a five point economic development strategy which also includes rural development, agriculture, petroleum, and private sector investment. The vision for tourism is as follows:

In a global market seeking new and authentic tourist offerings, Timor-Leste will position itself to provide a range of tourism experiences that take advantage of our natural beauty, culture and heritage. This will allow Timor-Leste to differentiate itself from mass market tourist offerings and appeal to the growing market segment seeking boutique and unique experiences and locations.

Timor-Leste will also develop niche market offerings for visitors seeking adventure tourism, SCUBA diving and marine tourism, trekking or cultural and historical tourist experiences. Over the short to medium term, we will also build our capacity to host international conferences and conventions. The following markets will be targeted:

- Eco and marine tourism
- Historic and cultural tourism
- Adventure and sports tourism
- Religious and pilgrimage tourism

Conference and convention tourism⁵⁶

Tourism actions to be delivered in the strategy are as follows:

- Roads on key tourist routes, including the Great Northern Coast Road from Com to Balibo, and from Maliana through Ermera to Tibar, will have been rehabilitated and signposted
- A tourism and hospitality training center will have been established in Dili
- Comprehensive tourist packages will be in place for each of the Eastern, Central and Western Tourist Zones
- An international tourist marketing strategy will be operating
- A program of developing tourism infrastructure will be underway involving the private sector
- Critical tourist infrastructure will have been built or rehabilitated, including the Dili airport and regional airports and improved telecommunications infrastructure
- Tourist Information Centers will have been established in Dili, Lospalos and Baucau.

In addition the Arts and Culture Department within the Ministry of Tourism, Arts and Culture is charged with ensuring that:

- The Museum and Cultural Center of Timor-Leste and the National Library and Archives of Timor-Leste will be operational
- Regional Cultural Centers Centers will be located in Baucau, Oecusse, Ainaro, Maliana and Atauro
- There will be a regular program of outdoor cinemas at sites around Dili and each district will have access to mobile cinemas on at least a monthly basis
- The National Academy of Arts and Creative Industries will be operational
- There will be appropriate village based accommodation around the country for cultural tourists

Other government areas with a tourism role in the strategic plan include:

- Roads: An extensive network of quality and well maintained roads will connect communities, promote rural development, industry and tourism and provide access to markets.
- Education: Centers of technical excellence will be created in a number of regions with courses related to economics, agriculture and engineering, as well as those related to service industries such as tourism and hospitality. The new technical secondary education curriculum will be based on market needs, with a focus on: (i) agriculture, (ii) applied engineering, and (iii) services, especially oriented to business management and tourism. It will include formal links with industry and the marketplace to give students direct experience of the workplace both nationally and internationally. A service industry polytechnic to cover tourism and hospitality will be located in Lospalos. A new national training program will include tourism and enterprise start-up.
- Heath, ports, civil aviation and land tenure

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⁵⁶ Government of Timor-Leste (2011) The Timor-Leste Strategic Development Plan 2012-2030

Foreign Affairs: Timor-Leste will have diplomatic missions capable of a broad range of quality services, including particular expertise in attracting inward trade, investment and tourism into the country

Conservation is highlighted in the plan under social capital:

- Natural conservation zones, or national parks, aim to protect ecosystems by limiting commercial activity; however, research and education, as well as cultural, tourism and recreation activities, are permitted. Timor-Leste's first protected area is Nino Konis Santana National Park, which will be a centerpiece of Timor-Leste's tourism strategy. Areas that are sites of international importance for birds have also been identified in Timor-Leste and will be protected.
- Other areas that will be protected in conservation zones are: Tilomar, Ramelau, Fatumasin, Atauro Island-Manucoco, Matebian, Kablake, Builo, Clere River, Lore, Paitchao Mountain and Iralalaro Lake, Jaco Island, Diatuto Mountain, Be Male-Atabae, Maubara, Mak Fahik and Sarim Mountain, Tasitolu, Areia Branca Coast, Curi Mountain and the Irebere and Iliomar Estuary.
- To protect and conserve marine biodiversity and the beautiful coral reefs, Timor-Leste will continue
 to work with Indonesia and other governments in the region that have signed up to the Coral Triangle Initiative to safeguard the region's marine and coastal biological resources for sustainable growth
 and the prosperity of current and future generations.
- A policy for managing watershed areas and coastal zones will be developed that will include strategies to rehabilitate and protect mangroves in coastal areas, regulate sand exploration in various rivers, especially the Comoro River, and create buffer zones.

A National Biodiversity Strategy and Action Plan has also been drawn up.⁵⁷ This plan states that all sectors including tourism, agriculture, infrastructure, and industry must be brought early into the biodiversity conservation and sustainable management process. The guiding principles of the strategy state that the tourism and petroleum sectors will be developed with great attention and protection of the natural environment, so that development does not compromise the natural beauty or the ecosystem functions of the country. It commits to promoting nature-based and community-based sustainable tourism and eco-tourism and notes that there is a lack of laws and regulations on the management of eco-tourism activities. Eco-tourism activities that have been identified in the National Biodiversity Strategy include the following:

- Recreation in beaches—diving, snorkeling, swimming, and canoeing, and sport fishing in the coastal area
- Hiking/trekking, mountain climbing, trail-biking, horseback riding, camping (especially for backpackers), site seeing, visiting cultural sites and historical sites in the terrestrial areas
- Wildlife observation such as dolphin/whale-watching, and bird watching are also recreational activities that are being discovered by tourists

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⁵⁷ Government of Timor-Leste (2011) The National Biodiversity Strategy and Action Plan of Timor-Leste (2011-2020)

On paper then, Timor-Leste has developed a wide-ranging policy framework for eco-tourism. In addition, the potential for tourism in many SIDSs is well proven, but so also is the challenge of ensuring that tourism benefits actually reach local people, for whom poorly managed tourism can also bring significant disadvantages.⁵⁸ Much depends on what type of tourism development governments allow, and the extent to which it ensures developments are pro-poor and pro-environment.

Sub-strategies within ministries vary, and appear significantly more advanced in the arts and culture division than in tourism, for example.⁵⁹ A policy challenge is clearly the scheduling and coordination of the delivery of tourism actions across ministries, as well as the practical upholding of policy regarding the protection of the environment, particularly the marine environment.

The government's investment portal illustrates the vagueness and lack of robust strategy in tourism, making it difficult to attract significant inward investment:

The government will facilitate the growth of the tourism industry by rehabilitating infrastructure, including the Dili airport, telecommunications and roads on key tourist routes, particularly the Great North Coast Road from Com to Balibo. The Government will build a tourism and hospitality training centre in Dili within the next five years. Tourism Information Centres will be established in Dili, Lospalos, Balibo and Baucau.

Over the next five years we will expand our tourist promotion marketing activities internationally, including an annual calendar highlighting our special events and our attractions. The government will continue to promote and expand the "Dili City of Peace" Tourism and publicity campaign which includes the "City of Peace" Marathon, the "Tour de Timor Mountain Bike race through each of the 13 Districts of the country, the Atauro fishing competition, the annual Darwin-to-Dili yacht rally, the International Dive Photo Contest, the Dili Adventure Race and the Com Fishing Festival.

Source: http://invest-tl.com/potential-investment-opportunities-timor-leste/

D. KEY ENABLING ENVIRONMENT ISSUES

There are a large number of key enabling issues which need to be addressed to facilitate tourism development in Timor-Leste. These include the following:

- Marketing
- Air access
- Enabling business environment issues (very complicated to register a business; excise duties on imports for diving and other tourism businesses, etc.)
- No regulation of tourism
- Land ownership
- Transport (internal, by sea)
- Environmental impact

 $^{^{58}}$ Such as loss of access to natural resources, and loss of cultural identity and pride.

⁵⁹ The Ministry's National Tourism Development Strategy and National Tourism Marketing Strategy have not yet been published.

- Education
- Whole of government approach

E. MAJOR BOTTLENECKS TO ADDRESS

Major bottlenecks to address are as follows:

- International market awareness and image
- International market stimulation and air access
- Business environment and inward investment climate
- Land transfer issues
- Road and air access within the country
- Industry and government training in tourism management, marketing and hospitality
- Development of visitor attractions
- Development of accommodation, especially accommodation outside of the Dili catchment area
- Shore access and coastal and marine conservation
- Responsible tourism awareness and host community issues



Timor -Leste rock art

IV. END MARKET COMPETITIVE-ANALYSIS

While Timor-Leste has strengths in the areas of nature and culture, it is competing with other islands which have similarly strong and much more developed tourism products. The country has a lot of catching up to do to become competitive as a tourism destination.

Ambitions that Timor-Leste "can become another Bali" are perhaps overly ambitious. Bali has grown from being a (cheap) backpacker paradise to a sophisticated multi-faceted mass tourism destination over a thirty-

year timeframe and has an economic system more open to inward investment and foreign ownership. The island, although smaller than Timor-Leste and with a lower GDP per capita, also has an internal domestic market many times the size of Timor-Leste.

Comparisons are also sometimes made with Cabo Verde which has developed mass tourism from proximate European markets seeking sun holidays. Here also inward investment by foreign-owned companies was facilitated, and it should be noted that there have been some social and environmental problems as a result of the pace of development and the diversion of resources (in particular water) from the local population to meet the needs of the tourism industry.

In terms of the eco-tourism products which Timor-Leste does offer to leisure tourists, diving and the marine environment appears to be the main motivator at present, followed by culture and nature generally. (There is also some conference tourism but lack of direct air access from most markets undermines this.)

The country's competitive positioning can therefore be summarized below in table 20. It illustrates a lack of competitive advantage and that there are major barriers to be addressed. Of particular relevance to tourism in all SIDSs is air connectivity, which in turn is related to marketing the destination to stimulate demand.

Table 20: Competitive Positioning: Tourism

	Timor Leste Population: 1,200,000 Tourism expenditure 2013 (inbound) US\$10 million* Tourism earnings per head of population: US\$ 8.49	Destination
	 Superb marine environment especially coral reefs Unspoilt nature Very rich indigenous cultures Some Portuguese heritage Low taxes and few exchange controls Close to Northern Australia Tropical climate 	Advantages
Timor-Leste arrivals (2014: 150 100 50 2011 2012 2013 2014 Source: The Asia Foundation	 Very high air access cost Limited flights (air capacity) Difficult visa connectivity with island-hopping backpacker trail Very limited and unfocussed international marketing Limited on-shore facilities for marine tourism Limited developed cultural tourism product Limited capacity in tourism management of protected areas Limited developed tourism product Strong US\$ Restrictions on inward investment (company ownership, etc.) 	Major barriers to entry (disadvantages)
Timor-Leste arrivals (2014: 93,483)	 Domestic market SCUBA divers (mostly Australia & Singapore/Malaysia-based) VFR Some adventure tourists (mostly Australia/SE Asia) Some cyclists (mostly Australia/SE Asia) Some education (mostly Australia/SE Asia) Some education (mostly Australia/SE Asia) 	Main markets served

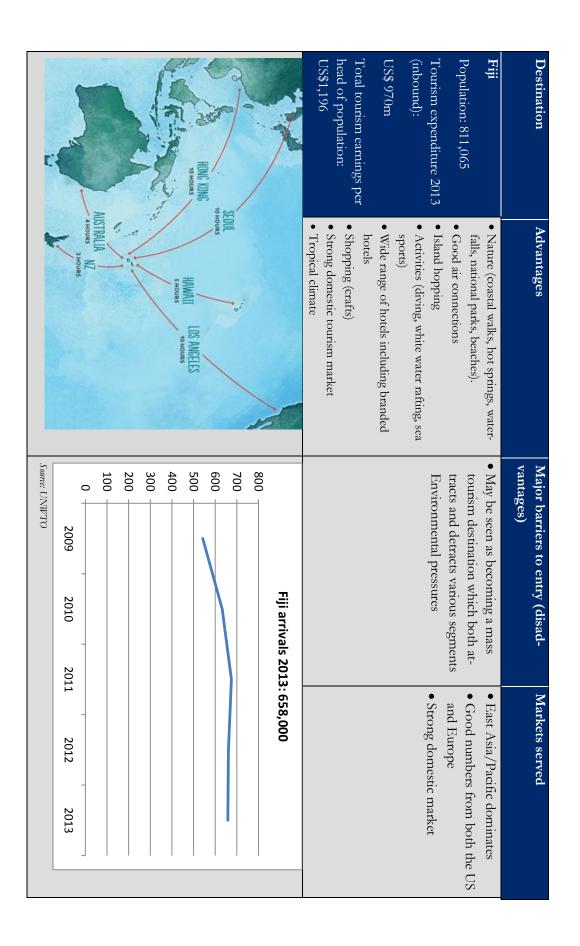
^{*}Asia Foundation estimate. Other country estimates from UNWTO.

			Bali, Indonesia ⁶⁰ Population: 4,225,000	Destination
			 Very strong international brand (lifestyle, architecture, design, etc.) Very developed and multifaceted tourism product Wide range of accommodation including branded hotels Major international air hub, competitive air fares Strong cultural image (Hindu temples, etc.) Eco-resorts, spas Strong international marketing by Tourism Indonesia & Bali Tourism Board Very developed diving industry with iconic species (Bali sunfish [Mola Mola], manta rays) and famous wreck dives. Tropical climate 	Advantages
Source: EcoFlores	4000 2000 1000 0 2007 2008 2009 2010 2012 2013	Bali arrivals (2013: 3,278,598)	 Seen as mass tourism destination which both attracts and detracts various segments Security legacy (Bali bombing) Environmental pressures 	Major barriers to entry (disadvantages)
	2013	8,598)	 Australia China, Japan, Malaysia and South Korea Europe North America Domestic Rest of Indonesia 	Main markets served

⁶⁰ Further information on inbound tour operators to Bali has been requested by USAID Timor-Leste. This data is available at http://www.wordtravels.com/Travelguide/Countries/Indonesia/Touroperators

	Flores, Indonesia Population: 1,831,000	Destination
Razilite Vendusta soom (22/7/2) is	 Iconic wildlife (Komodo dragons, flying foxes, marine) Komodo National Park World Heritage Site and Marine Protected Area (MPA) Part of Indonesia island-hopping trail Mount Kelimutu volcano & crater lakes Accessible cultural tourism (Mangarrai) Some diving resorts Some boat rental Some boat rental Some Tourism Indonesia marketing Eco-tourism network <www.ecoflores.org></www.ecoflores.org> Flores homestay network Some colonial heritage (Portuguese colony until 1851) Tropical climate 	Advantages
Flores arrivals (2012: 40,593) 60 40 20 20 2007 2008 2009 2010 Source: EcoFlores	 Variable hotel quality Limited air access Limited marketing 	Major barriers to entry (disadvantages)
40,593)	 Australia South East Asia Rest of Indonesia Some Europe 	Markets served

			US\$5,354	Total tourism earnings per	(inbound): US\$ 112 million	Tourism expenditure 2013	Population:20,917	Palau	Destination
		• Iropical chimate	 Good range of hotels High expenditure per visitor Tropical climate 	 WW2 history & wreck diving US support & investment	 Culture (strong matrilineal society, stone monoliths, museums) Good flight connectivity 	 Nature: Jellyfish Lake, Rock Islands, waterfalls 	• Strong environmental emphasis (branded as Palau Pristine Paradise)	Superb SCUBA diving	Advantages
Source: UNIVIO	Palau arrivals 201 140 120 80 60 40 20 2009 2010 2011					Extensive economic leakageSalt water crocodiles	• Threatened by sea-level rise	• Expensive (strong US \$)	Major barriers to entry (disadvantages)
	2013 105,000					SOLIE CO	Asia/Pacific region	• Almost all visitors from Fast	Markets served



A. TOURISM GROWTH POTENTIAL

To create job opportunities for youth and prepare for a future of potentially declining natural resource returns, Timor-Leste needs to diversify its economy and sources of revenue, elevate the quality of health and education services, and equip the population with viable skills. Tourism is an obvious path to follow, and many other countries have recognized this including major oil producers like Malaysia, Saudi Arabia, and the United Arab Emirates. Economic diversification efforts must however be underpinned by capable institutions with a strong and consistent focus on quality of spending and policies that nurture private investment.

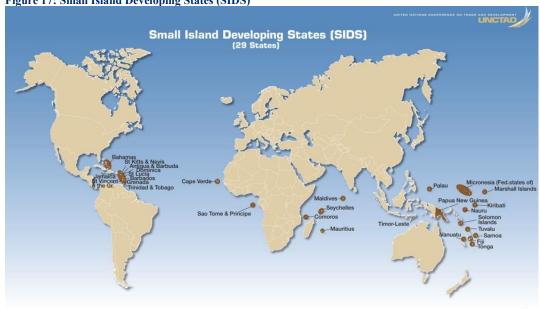
The World Development Report 2011 found that on average, post-conflict countries take between 15 and 30 years – a full generation – to transition out of fragility and to build resilience. It is against this backdrop that tourism development needs to be considered. Tourism can offer a fast track development approach, but it has inherent social and environmental risks if development is too fast paced.

Government strategy for tourism is not well developed and certainly not well communicated. Official documents refer to emphasis on eco and marine tourism; historic and cultural tourism; adventure and sports tourism; religious and pilgrimage tourism and conference and convention tourism, but there is effectively no detailed strategy in place to deliver growth. Even allowing for interest in Timor-Leste as a new Asian destination like Myanmar or Laos, without a practical step-by-step development strategy that enjoys industry confidence, tourism development is likely to be missmanaged, fail to capture the opportunities of forecast growth in the Asia-Pacific region, and result in the degradation of the very environment upon which the country's tourism industry should rely.

The tourism performance of selected Pacific SIDSs is variable, but the most successful concentrate on developing high expenditure per visitor rather than high visitor numbers: Tourism value is more important to them than tourism volume. This implies that Timor-Leste should seek to avoid mass market opportunities like inclusive holidays and cruises, but rather concentrate on trying to attract high spending niches seeking activity and adventure. Indeed the country is not so well placed to develop mass beach tourism owing to its sacred salt-water crocodiles, fragile mangrove eco-systems, and the limited number of spectacular beaches compared to other Asia-Pacific destinations. Standalone product which is not physical location-dependent (such as casinos) could be developed if the government allows and the investment climate and air access from target markets (China, Malaysia, Singapore, Taiwan etc.) are favorable, but economic leakage from this sector can be very high and social impacts would need to be carefully considered.

UNWTO in its publication *Tourism towards 2030* predicts that international tourism to the Asia-Pacific region from the rest of the world will increase from 204 million in 2010 to 535 million in 2030. Inter-regional tourism will grow at an even faster rate. There is clearly an opportunity for Timor-Leste in that buoyant tourism growth is predicted by all sources and destinations in the region, but its challenge is to develop an image and product that will attract this demand.

Figure 17: Small Island Developing States (SIDS)



Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

UNCTA

Source: UNCTAD. Note – does not show all current SIDSs

Table 21: Tourism indicators for selected Asia-Pacific SIDS

Country	Population ⁶¹	Overnight	Total tourism	Total tourism	Total tourism
		visitors	expenditure	expenditure	expenditure
			(US\$)	per overnight	per head of
				visitor (US\$)	population
Cook Islands	10,134	104,000	110 million	1058	10,981
(2010)					
Fiji (2013)	903,207	741,000	955 million	1289	1058
Micronesia (2011)	105,216	35,400	26.1 million	737	248
Palau (2013)	21,186	105,000	112 million	1067	5,283
Timor-Leste	1,201,542	58,000	29 million	500	24
(2012 overnights,					
2013 expenditure)					
Tonga (2012)	104,440	57,100	42.3 million	741	402
Vanuatu (2012)	266,937	321,000	261 million	813	977

Sources: UNWTO, CIA World Factbook

⁶¹ CIA World Factbook

Table 21 illustrates that, based on UNWTO comparative data for other SIDSs in the region, Timor-Leste is significantly underperforming. The tourism model which brings in the highest expenditure per tourist is Fiji. The island state achieving the highest expenditure per head of population is Palau. It suggests that Timor-Leste should concentrate on tourism value targets (and retained tourism earnings) rather than volume growth. Ways to keep tourism revenues and earnings within the country for re-investment must be carefully considered.

Much can be learnt from Fiji. The Fiji experience illustrates both the necessity and the limitations of using tourism growth to achieve pro-poor objectives. While visitors have increased and revenue growth has been strong, tourism itself has greatly contributed to growing inequality and uneven spatial development in Fiji, particularly evident on Fiji's main island of Viti Levu, where regions inside the main 'tourist belt' between Nadi and Suva attract the lion's share of investment in roads and other infrastructure, while less 'desirable' regions have largely missed out. It has been claimed that within the current Fiji tourism strategy, the benefits of tourism growth would accrue to only 25% of the regions in Fiji in the tourism belt where the required infrastructure is in place. Similar problems are reported by UK charity Tourism Concern regarding all-inclusive tourism in Cabo Verde. It is entirely possible to foresee a similar scenario in Timor-Leste if investment is allowed to focus on Dili.

Overall, Fiji's strong if variable tourism growth has not been reflected in either GDP or notably increased benefits for the poorest. Indeed, it should be noted that pro-poor tourism approaches actually rarely benefit the very poorest in society, since it is these people who have the fewest assets and least education, and are least likely to engage with the commercial economy. Responsible tourism development approaches can however bring communal benefits, such as improvements in infrastructure, which do reach the poorest members of society.

For pro-poor impacts to be a reality, the government must be committed to equity and local benefit, actively stem financial leakage from the economy, and develop redistributive policies. In the absence of such policies it is likely that tourism development will be subject to elite capture (including capture of national assets by foreign elites including tourists), and development will focus on the most attractive/least risky sites close to Dili, regardless of environmental impact.

Meaningful tourism growth which impacts poverty reduction will depend on both the state's ability to work effectively with the private sector to foster responsible tourism and tourism dispersal, and in jointly marketing the destination. Government must integrate tourism growth into a coherent national master plan for responsible tourism which weighs up economic, social and environmental impacts, positive and negative, and develops viable tourism clusters away from the capital.

B. UNIQUE SELLING PROPOSITION/MARKET POSITIONING/ COMPETITIVE ADVANTAGE

At the present time Timor-Leste has not developed a market positioning or competitive advantage in tourism, other than it is a 'new' destination. Its current strengths lie in activity and adventure (diving and some mountain biking), but these products are not unique, with competing destinations also offering them. Government and industry need to

TIMOR-LESTE ECONOMIC DIVERSIFICATION ANALYSIS

⁶² Rao, M. (2006) Challenges and Issues in Pro-Poor Tourism in South Pacific Island Countries: The case of Fiji islands, Working Paper for the School of Economics, Employment and Labour Market Studies in the South Pacific, Monash University, Australia.

^{63 &}lt;a href="http://tourismconcern.org.uk/all-inclusives/">http://tourismconcern.org.uk/all-inclusives/

work together to agree the stated future vision for tourism in the national strategic plan. A unique selling point (USP) could be created based on the country's natural and cultural assets if these can be protected and made more accessible, but to protect this USP the future of tourism in Timor-Leste needs to be much more environmentally and socially responsible, rather than *lassez faire*.

C. OPPORTUNITIES FOR EXPANSION

Government policy has identified main theme areas for expansion as follows:

Eco and marine tourism

If visitor numbers can be stimulated through marketing and cheaper air fares, there is no doubt that marine tourism offers opportunities for growth. A 2010 study on diving tourism in Hawaii for example estimated the total added value of SCUBA divers to the Hawaiian economy at US\$40 million.⁶⁴ PADI estimates that there are 3-6 million divers globally. PADI alone certified 940,000 divers in 2012 and the number of certified divers is growing at 13% per year.⁶⁵ Whale watching and other forms of eco-tourism also offer potential if the standard of accommodation can match market needs. Medical facilities, shore access and consumer awareness of Timor-Leste need to be improved.

Historic and cultural tourism

The country's rich heritage could, if better presented for tourism, lead to tourism growth. A flagship national museum is needed, together with the development of more heritage-related tourism product across the country.

Adventure and sports tourism

This area can also present opportunities for expansion. Timor-Leste has already proven market demand through the annual *Tour de Timor*.

Religious and pilgrimage tourism

This area has not yet been developed although there are a number of pilgrim rest houses run by religious institutions offering tourist accommodation. Rwanda is another emerging, post conflict, and strongly Roman Catholic country which is developing religious tourism through intensive market research and a focused marketing strategy. There is potential, but this product will require significant investment in pilgrim accommodation if it is to grow as an overnight tourism product.

Conference and convention tourism

The potential of this area is currently hampered by limited and expensive air access to Timor-Leste, as well as by limited convention facilities both within the national convention center and at hotels.

Not mentioned in the government's strategy are beach tourism, casino tourism and cruise liners. All are on the horizon but there is no plan to manage them for local benefit. These mass tourism products will require significant investment and improved access if they are develop.

⁶⁴ Ingram (2010)

⁶⁵ Hampton, M.& Jeucheya, J. (2014) Dive tourism, communities and small islands: lessons from Malaysia and Indonesia

V. CROSS-CUTTING ISSUES

A. GENDER

Tourism can often offer the majority of its jobs to women, not just in the accommodation sector but also in crafts. In other countries women have a strong role in the management of the tourism industry. Indeed JICA refers to tourism as a women's business in its *County Gender Report 2011: Timor-Leste*.

There is a growing awareness of gender issues in Timor-Leste tourism following controversy regarding the Ministry of Tourism's sponsorship of the Miss Timor competition in 2013. The prime minister, criticizing the event, was quoted as saying:

"There are many Miss Timors. We have miss-administration, miss-coordination, miss-understanding, miss lazy and many other misses." 66

B. YOUTH

Youth comprise the majority of Timor-Leste's population. The government's government's publication *Timor-Leste in Figures 2013* indicates that the average age of the Timor-Leste population is just 18.6 years. Any tourism activity will impact upon the livelihood of these people, either for good (employment) or bad (loss of traditional livelihood/access to resources).

C. FINANCE

As identified above, Timor-Leste's business climate creates obstacles for tourism investment. Land ownership can also be difficult to establish. These issues make finance for tourism development more difficult to obtain. As a result, investments are often made through family networks and the assets of other companies rather than through bank finance.

D. CLIMATE CHANGE AND ADAPTATION

Poorly planned and managed tourism will have significant negative effects on coastal protection. The extensive coastal and marine mapping exercise carried out in 2009⁶⁷ highlighted the actual very limited extent of coral reef, sea grass and mangrove on the North Coast. With increasing degradation due to road construction and other land-based activity including tourism, Timor-Leste's marine resource will inevitably become a scarcer commodity. There has for example been an 80% loss of mangrove since 1940. Environmental impact assessment services (undertaken by the environment ministry) are weak and in need of additional resources.

Tourism is often also an energy intensive industry through the hotel sector, land transport, construction and aviation. It is also a major consumer of potable water (already an issue on Atauro Island). Adaptation to low carbon technology

⁶⁶ The Economist, 20 May 2013

⁶⁷ Charles Darwin University et al.

is possible and the The Global Environmental Faculty (GEF) is supporting adaptation to low carbon tourism in some countries, including the Maldives. Timor-Leste has the opportunity to adopt such technology in new build, and to protect its remaining mangrove coastal barriers.

VI. POTENTIAL TO DIVERSIFY THE ECONOMY

A. STRENGTHS

Timor-Leste's tourism strengths at present can be summarized as follows:

- Located within the Asia-Pacific coral triangle with a high concentration of excellent dive sites
- Some good quality hotels in Dili
- A new country to discover
- Some unique cultural aspects
- Tour de Timor
- Growing government interest in tourism

B. WEAKNESSES

Governance

- No coherent tourism master plan at present nationally or for special economic zones⁶⁸
- No coherent national tourism marketing strategy and brand
- No national tourism training needs analysis to guide training development
- No effective regulation of tourism
- Lack of public-private partnership on tourism policy and very limited cooperation between private sector players
- Lack of awareness at all levels of tourism management challenges if tourism is to be made environmentally, socially and economically responsible.
- Weak environmental impact assessment services.

Product

- Limited accommodation supply, variable quality and high prices, particularly at the lower end of the market
- Severe lack of well managed accommodation facilities in districts
- Limited visitor attractions developed
- No district tourism planning or management

⁶⁸ Cultural development strategy is mostly in place however

- No tourist information service
- No regional/district tourism management structure
- Limited excursion and activity options available
- Limited air access and poor airport facilities
- Very poor rural roads, no internal air services at present
- Inadequate training
- Poor business climate, limited inward investment
- Limited shore access
- Sewage (Dili shore)
- Declining coral health due to poorly managed inland construction run off.
- Limited water supply at some locations (e.g., Atauro Island)
- No clear zoning for future tourism development and weak environmental safeguards
- No crocodile management, weak malaria control
- Limited language skills for tourism
- High bank charges

Marketing

- No national tourism marketing strategy and unclear strategic focus in marketing expenditure
- Poor online presence
- No professional overseas marketing representation
- No national advertising campaigns
- No marketing partnerships with airlines, tour operators or on-line tourism enterprises.
- Reactive rather than pro-active approach to the travel press
- No support for Timor-Leste ground handlers and diving operators in tourism marketing
- Negative image (war) or no image⁶⁹

C. OPPORTUNITIES

Governance

- Development of tourism master plan
- Development of district tourism plans
- Training of government officials at national and district levels (tourism, heritage, civil aviation, agriculture, employment).
- Improve advance visa processes (online applications) and improve air, land and sea immigration experiences. Improve arrivals and departure data capture (reason for visit, actual length of stay, etc.)
- Coordinate all NGO interventions in tourism in accordance with national tourism master plan. Allocate NGO support district by district (Laos model).⁷⁰

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⁶⁹ Based on research carried out in Australia by Swinbourne UnivirsityUniversity

^{70 &}lt;www.stdplaos.org>

- Targeting investors committed to eco-tourism/responsible tourism.
- Strengthen protected area and marine management.
- Strengthen environmental impact assessment procedures and policing.

Product

- Improvement of marine tourism facilities and conservation of marine environment; provision of recompression unit.
- Expansion of diving tourism and eco-tourism product generally (targeting specialist inward investment)
- Standards and service quality in hotels
- Accommodation supply expansion at cluster locations
- Domestic air services
- National Museum, Academy of Arts and district museums and cultural centers
- Protecting rock art and developing a tourism product around it.
- Strengthen protected area management and tourism product. Introduce crocodile management focusing on populated areas.
- Secure World Heritage Site enlisting for Nino Konis Santana National Park
- Integrated development of attractions, accommodation and other facilities as road network and integrated air
 access improves. Develop trekking routes and visitor attractions (including caves, hot springs, mountain
 climbs) in parallel with transport improvements, not in isolation.
- Consider with Heritage Secretariat feasibility of converting/developing Portuguese heritage buildings as quality accommodation
- Coffee, cut flowers and other agro-tourism
- Hot springs development to meet international as well as domestic market needs
- Developing colonial heritage towns as tourism clusters (Baucau, Maubisse, etc.)
- Develop tourism product related to crocodiles, sandalwood, and other unique aspects of Timor-Leste culture/environment.
- Improving land border access and integrating with trans-national trails, island-hopping
- Introduce soft loans or revolving fund for tourism entrepreneurs (including local restaurant development) and reduce dependence on NGO support and grants
- Training at all levels of the industry, in third level colleges and including language training (English, Bahasa, Chinese).

Marketing

- Extensive and ongoing market research to guide marketing strategy and product development
- Development of a comprehensive marketing strategy
- Development of websites and of digital marketing tools
- Creation of national tourism brand
- Development of marketing campaigns focused on near markets
- Marketing support to ground handlers
- Marketing partnerships with airlines, on line tourism companies and overseas tour operators
- Development of visitor satisfaction and expenditure surveys to guide development.

D. THREATS

- Increased investment and marketing by other destinations
- Storms and sea level rise
- Political instability
- Rising US\$
- Isolation if air services reduce
- Overfishing/oil pollution

E. CAPITALISING ON STRENGTHS

To capitalize on its strengths Timor-Leste needs a stronger tourism positioning as an tourism destination. Government policy needs to be clearer and marketing needs to be focused on segments interested in the country's actual tourism product and accessible to it (i.e., Australia South East Asia, and travelers connected via Singapore/Bali/Darwin).

F. ADDRESSING WEAKNESSES & CAPTURING OPPORTUNITIES

To address the many weaknesses in tourism at present, a long term and realistic action program needs to be initiated, based around a master planning process. It would be desirable that this process takes a 'whole-of-government' approach, and builds cooperation and contract with and within the private sector. Key areas which the plan needs to outline strategic actions are as follows:

- Access
- Product development
- Marketing
- Human resources
- Environmental impact and conservation
- Maximizing local economic and pro-poor impact

To capture opportunities the master planning process needs to be market-driven, based on developing products to serve well-researched market needs and not tourism development driven by job creation schemes, investor hunches or NGO agendas which may not be linked to market requirements. Strategy needs to be centrally controlled, but designed to be rolled out and delivered in tourism clusters in the districts. It needs to be built around private and public delivery of activities.

Anticipating Threats

Threats which Timor-Leste can anticipate and act to mitigate relate to climate change and disaster warning. If tourism is developed irresponsibly and without local benefit, however, political unrest is likely and it will also disrupt demand and perception.

VII. CONCLUSION

Prioritization and Likely Strategic Impacts

Tourism development can diversify Timor-Leste's economy but cannot quickly provide significant local benefit unless local populations (and tourism officials) are up-skilled and conditioned to working in a tourist-friendly, service-driven economy. Priority needs to be given to training. In addition, the scheduling of tourism development through national and regional master planning in a logical and strategic manner as access is improved needs to be considered. The regulation of tourism and enforcement of development conditions will need to be strengthened. Marketing is also a key strategic need. Without it demand is unlikely to grow.

Government needs to plan the development of tourism particularly in relation to compatible land uses, water management, coastal zone management and the development of marine parks and protected areas. It should integrate tourism within the existing cultural and environmental constraints and opportunities.

The government must ensure that tourism development and environmental management are mutually supportive. It needs to identify and help the private sector develop facilities to meet specific niche markets, particularly in eco-tourism, nature and cultural tourism, and involve local populations in the identification and management of natural protected areas set aside for eco-tourism.

Government should facilitate efforts, at the national and district levels, to assess the likely overall impact of the economic, social and ecological aspects of tourism, to plan sustainable tourism and to develop both eco- and cultural tourism.

Various scenarios can be put forward for growth, depending on the extent to which the government commits to business climate improvement, marketing, product development and environmental protection. The speed at which tourism develops and job creation occurs will largely be determined by the growth of the accommodation sector. If the Pelican development goes ahead as planned for example, national room supply (and direct tourism jobs) will increase by 33%. However much infrastructure and marketing will be needed to attract investments to areas away from Dili

Given the constraints and lack of strategic focus in development and marketing, an annual expansion rate of 10-15% would seem realistic. If strategic marketing, improved access, market research, training and targeted investor sourcing takes place based around a themed/branded approach to development, the pace of growth could be accelerated considerably.

ANNEX: ACCOMMODATION

Name	Locations	No. Rooms	Indicative Quality	Contact
Arbiru Beach Hotel	Bebonuk - Ocean Front	8 double	Comfortable	(+670) 332 2936/7726 3642/7738 1811 rochadores@hot- mail.com
Aru Residencias E Apartamentos	Pantai Kelapa	25 apartment	Comfortable	(+670) 331 2880/7736 9081 (Helder Viana) aruvillas@gmail.com
Beach Garden Hotel	Marconi	29 double, 33 apartments	Very Comfortable	(+670) 7743 6999 isabellazhang2003@ya- hoo.com.cn
Beach Side Hotel	Area Branca	1 twin, 7 double	Very Comfortable	(+670) 7750 2184/7754 9681 beachsidehoteld- ili@gmail.com
Brighton Apartment	Audian	2 twin, 13 double	Comfortable	(+670) 7724 0495/7723 0988 james.globus@ya- hoo.com
Caimeo Beach Resort	Liquica	5 Family Tents, 5 single, 5 double	Luxury Camping	(+670) 7798 8305 caimeobr@gmail.com
California Hotel	Metiaut	5 single, 5 twin, 5 economy, 15 double, 5 deluxe, 5 family	Comfortable	(+670) 332 2929/7734 5678 californiahoteld- ili@gmail.com
Carla Mansion Hotel	Farol	15 double	Comfortable	(+670) 7724 3390 teresa_tilmanalves@ya- hoo.com
Central Hotel	Bairro Formosa	10 double	Adequate	(+670) 332 3888 centralhoteltl@ya- hoo.com
D'city Hotel	Bebora	10 single, 25 double	Very Comfortable	(+670) 332 2653 info@dcityhotel.com
Diamond Villa	Pantai Kelapa	15 apartments	Very Comfortable	(+670) 7667 8217 / 7863 8858
Dili Beach Hotel	Kampung Alor	34 rooms	Very Comfortable	7723 6173 / 7734 0386 dilibeachtimor@ya- hoo.com

Name	Locations	No. Rooms	Indicative Quality	Contact
Discovery Inn	Bairro dos Grillos	31 rooms	Comfortable	(+670) 3311 111 / 3310 210, Fax (+670) 3321 045 info@discoveryinnti- morleste.com
Dive Timor Guest House And Apartment	Kampung Alor	2 single, 4 double	Comfortable	(+670) 7723 7092 info@diliguesthouse.com
East Timor Backpack- ers	Mandarin	10 double	Adequate	(+670) 7723 9821 info@easttimorback- packers.com
Excelsior Resort	Pantai Kelapa	100 double	Very Comfortable	(+670) 332 118 / (+670) 7743 6999 isabellazhang2003@ya- hoo.com.cn
Fantija Hotel And Apartment	Bebonuk Bebonuk	14 single	Very Comfortable	(+670) 77267943 / 7726 1533 fantija_dili@yahoo.com
Futo Apartment	Comoro	23 double	Adequate	(+670) 7775 7822
Green Diamond Residence	Pantai Kelapa	15 apartments	Comfortable	(+670) 7736 2449/7788 4788 greendiamondunipes- soal@yahoo.com
Hotel Colmera	Colmera	10 double	Comfortable	(+670) 331 1888/7761 6888
Hotel Esplanada	Pantai Kelapa	5 single, 15 double	Very Comfortable	(+670) 331 3088 admin@hotelespla- nada.com
Hotel Lecidere	Lecidere	2 single, 8 double	Comfortable	(+670) 7364 3955 reception@hotel-lecid- ere-dili.com
Hotel Plaza	Bairro Dos Grillos	10 single, 20 double	Comfortable	(+670) 331 2222/7723 2438 plaza_dili@hotmail.com
Hotel Royal Beach	Pantai Kelapa	2 single, 3 double	Adequate	(+670) 7725 8466 (Mr. Hamid)/7338 7496 (Mr. Ali) royal- beachtimor@gmail.com
Hotel The Ramelau	Aimutin	10 single, 10 twin, 15 double, 5, deluxe, 5 fam- ily	Very Comfortable	(+670) 3310 300/3311 100 hotelramelau@gmail.com

Name	Locations	No. Rooms	Indicative Quality	Contact
Jl Villa	Aimutin	20 apartments	Very Comfortable	(+670) 7758 7628/7758 7428/7723 3016 jlvilla@live.com
Katuas Hotel	Bairro Formosa	32 rooms	Comfortable	(+670) 7746 9090, Fax: 332 4888
				gruposagres@ya- hoo.com.br
Laciara Motel	Colmera	10 double	Range	(+670) 7728 7740/7779 7957
Lava East Villa Homes	Pantai Kelapa	10 apartments	Comfortable	palacio130@yahoo.com (+670) 332 4514/7723 2000 orchard_apartment@ya- hoo.com.sg
Liquica Oan Li	Liquica	5 double	Adequate	(+670) 7727 4944
Malinamoc Apartments	Comoro	16 apartment	Very Comfortable	(+670) 7775 1028/7723 0900 paradise@ma- linamoc.com
New Oriental Hotel	Hudilaran	20 double	Adequate	(+670)7634 5163/7616 6688 / 7863 2557
New Palace Hotel	Kuluhun	15 double	Adequate	+670 331 0619/7757 2247 / 7723 8659/7727 0566 newpalaceho- tel_culuhun@yahoo.com
Novo Horizonte Hotel	Metiaut	5 double bed	Comfortable	(+670) 331 1237 info@novohorizonteho- tels.com or vcabrita@novohorizon- tehotels.com
Novo Turismo Resort & Spa	Bidau Lecidere	10 double, 5 deluxe, 5 family	Very Comfortable	(+670) 331 0005 reservation@novoturis- motimor.com
Orchard Apartment	Audian	25 apartments	Very Comfortable	(+670) 332 4514 / 7723 2000 orchard_apartment@ya- hoo.com.sg
Palm Beach Apartment	Pantai Kelapa	20 apartments	Very Comfortable	(+670) 332 4844 / 7723 107, Fax: (+670) 3312856 jacks@psedili.com
Ponto De Encontro Hotel	Metiaut	10 double	Comfortable	(+670) 7723 4630 exotica.roma@gmail.com

Name	Locations	No. Rooms	Indicative Quality	Contact
Pousada Casa Do Sandalo Bairro Central	Bairro Central Dili	8 double	Comfortable	(+670) 331 0409 or 7724 8709 casadosan- dalo@live.com
Rocella Hotel	Bidau Lecidere	8 double	Comfortable	(+670) 7723 7993 rocellaho- tel@ymail.com
Sakura Apartment	Audian	24 apartments	Adequate	(+670) 331 1136 / 7723 2992 sakuratowerdili@ya- hoo.com
Sands Motel	Mandarin	10 double	Comfortable	(+670) 332 4879, 77326915, 7728 9222 sandsmotel_dili@ya- hoo.com
Shah Garden	Pantai Kelapa	10 double	Comfortable	(+670) 7729 9000 / 7772 6677 / 7723 2509 / 77230898 / 7333 8777 naikau@hot- mail.com or hamudba der2012@gmail.com
Terra Santa Residence	Golgota - Rai- kotu	20 apartments	Very Comfortable	(+670) 7732 7171 nelo@terrasanta.tl
The Cove Backpackers	Metiaut	10 single	Comfortable	(+670)7725 1289 accommoda- tion@dtceastti- mor.com
The Gardens Residence	Bebonuk	10 rooms	Comfortable	(+670) 7745 8474 reserva- tions@thegardensresi- dence.com
Tianyuan Apartments	Bairopite	20 apartments	Comfortable	(+670) 333 9966, 7760 9000, 7739 9969 tianyuan.2011@ya- hoo.com
Tibar Beach Retreat	Liquica	3 single, 10 double	Very Comfortable	(+670) 7729 1124/7739 1124 info@tibarbeachre- treat.com
Timing Hotel & Apartment	Aimutin, Comoro	20 double	Adequate	(+670) 7773 3888/7789 5678 228350589@qq.com
Timor Homes	Bairo Central	15 apartments	Comfortable	(+670) 7725 8157/7752 0635 timorhomes@gmail.c om

Name	Locations	No. Rooms	Indicative Quality	Contact
Timor Lodge Hotel	Comoro	6 single, 15 double	Comfortable	(+670) 332 4227, 7723 4269 timor_lodgehotel@ya- hoo.com.au
Venture Hotel	Bidau Lecidere	8 double	Comfortable	(+670) 331 3276 / 7338 2476 venture_hotel@hot- mail.com
Villa Formosa	Formosa	7 double	Comfortable	(+670) 7723 2537, 7747 9943 luislorosae@hot- mail.com
Villa Harmonia	Becora	4 double	Adequate	(+670) 7723 8265
Villa Verde Hotel	Villa Verde	10 double	Comfortable	(+670) 7340 6111 / 7726 5190 moises.benevides@ya- hoo.com
White Sands Resort & Residence	Metiaut	5 apartments	Very Comfortable	(+670) 7700 1666 whitesands.tl@gmail.c om
Xingdeng Hotel	Bairopite - Hudil- aran	5 single, 10 double	Comfortable	(+670) 7739 9969 xing- denghotel2008@ya- hoo.cn
Total Rooms In Dili*		1,067 rooms		

Name	Locations	No. Rooms	Indicative Quality	Contact
Manukoko	Atauro Island	5 single, 5 double	Comfortable	(+670) 7748 7301 or 7758 6479 pierluigi_for-
				nasier@hotmail.com
Trisan House	Atauro Island	10 double	Comfortable	(+670) 7728 1031 or 7756 2762
				rogeriovalente6@ya- hoo.com
Barry's Place	Atauro Island	5 single, 5 double	Comfortable	(+670) 7723 6084 or 7744 1011
				boyhinton@ya- hoo.com.au
Beloi Guest House	Atauro Island	8 double	Comfortable	(+670) 755 83 421
				BeloiBeach- Hotel@outlook.com
Guest House Mauloco	Ainaro	5 double	Adequate	(+670) 7726 5712
Guest House Picoma	Ainaro	5 double	Range	(+670) 7726 2205
Gabmenis Guest House	Ainaro	4 double	Range	(+670) 7740 7564
Guest House Erulu	Ainaro	3 double	Range	(+670) 7737 0247
Guest House Bensa Au Ama V	Ainaro	4 double	Range	(+670) 7726 8708
Victoria Losmen	Baucau	5 double	Adequate	(+670) 7729 7970
Pousada De Baucau	Baucau	10 double	Comfortable	(+670) 7724 1111
Arbacriste Guest House	Baucau	7 double	Adequate	(+670) 7727 9190
Guest House Lorosae	Baucau	5 double	Adequate	(+670) 7727 2498
Melita Guest House	Baucau	3 double	Range	(+670) 7726 6613
Guest House Albergania Do Planalto	Baucau	3 double	Range	(+670) 7725 8751
Amor Guest House	Baucau	5 double	Adequate	(+670) 7731 5000
Toti Hotel	Baucau	7 double 1 Dor- mitory (4 beds)		

Name	Locations	No. Rooms	Indicative Quality	Contact
Maun Alin Guest House	Bobonaro	5 double	Adequate	(+670) 7725 1844
Hotel Maga Metan	Bobonaro	10 double	Adequate	(+670) 7741 3759
Hotel Pousada Maliana	Bobonaro	5 double	Adequate	(+670) 7742 2436
Hotel Risky	Bobonaro	10 double	Adequate	(+670) 7731 1477
Tansos Hotel	Bobonaro	10 double	Adequate	(+670) 7727 0401
Solimea Guest House	Bobonaro	7 double		
Fort Hotel	Balibo, Bobonaro	8 double	Comfortable	
Bugasa Matak Guest House	Ermera	5 double	Adequate	(+670) 7726 2272
Sina Seaside Hotel	Com	10 double	Adequate	(+670) 7737 8613
Esperanca Guest House	Com	2 double		
Omt Guest House	Com	4 double		
27 Guest House	Com	3 double		
Community Guest House	Com	9 double		
Fronteira Guest House	Covalima	5 double	Adequate	(+670) 7734 9138
Guest House Felanna	Covalima	5 double	Adequate	(+670) 7731 1278
Maun Alin Suai Unip. Lda	Covalima	6 double	Adequate	(+670) 7734 6622
Eastern Dragon Hotel	Covalima	5 single, 9 double, 5 family, 1 VIP/Deluxe	Comfortable	(+670) 3323 604 easterndragon@ya- hoo.com
Covalima Guest House	Covalima	7 double		
Hotel Suai	Covalima	7 double		
Timor Aid Guest House	Covalima	2 double		
Sely Guest House	Lautem	4 double	Adequate	(+670) 7735 7591
Guest House Sra. Rosa	Lautem	4 double	Range	(+670) 7728 8119

Name	Locations	No. Rooms	Indicative Quality	Contact
Guest House Walu Sere (Turismo Etico Tutuala)	Lautem	5 double	Adequate	(+670) 7729 9076
Village Guesthouse	Manufahi	3 double	Range	(+670) 7725 6815
Buru Mandaco Losmen	Manufahi	5 double	Adequate	(+670) 7738 2940
Pousada Cablaki	Manufahi	5 double	Adequate	(+670) 7729 9498
Same Hotel	Manufahi	9 double		
Same Guest House	Mnufahi	5 double		
Copa Losmen	Manatuto	5 double		
Marisa Pousada Maubise	Maubisse	5 double	Adequate	(+670) 7734 5321
Guest House Cafe	Maubisse	6 double	Adequate	(+670) 7745 8266
Matak Malirin	Maubisse	5 double	Adequate	(+670) 7728 3483
Hakmetik Guest House	Maubisse	4 double	Comfortable	
Guest House Inor Sacato	Oecusse	8 double	Adequate	(+670) 7727 0003
Guest House Marca	Oecusse	6 double	Adequate	(+670) 7726 2207
Hotel Rao	Oecusse	5 single, 8 double	Adequate	(+670) 7735 5029
Davidson Accomodation	Viqueque	6 double	Adequate	(+670) 7746 7277
Luminar Losmen	Viqueque	4 double	Adequate	
Total No. Rooms in Regions		331		

Sources: < http://www.guideposttimor.com/businessregister.htm > < http://www.iade.gov.tl/en/tis/enterprises/directory > < http://www.easttimor-timorleste.com > & ACDI/VOCA consultants.

ANNEX: ENTERPRISE OWNERS

Name of Establishment	Owners
Arbiru Beach Resort	Jose Napoleao da Rocha Dores
Arvec Apartment	Nelci Funay
Barrys Place	Barry Hinton
Brighton Apartment	
Beach Garden Estate	Jackson Kuet Nhang Lay
Beach Side Hotel & Rest	Bruce Logan/Kath Perry
Cast Away Apartments	Simon Jeffrey
Carla Mansion Hotel	Maria Carla Goncalves Tilman
Caz Seaside Villa	Luis Netto
Caimeo Beach Resort	Tanz Yeo
Central Hotel	Tjia Soh Siang
Com Beach Resort	Wayn l. Tomas
Chongti Hotel	He Zhe Xia
Crown Apartment	Wun Sandra Winata
Dili Beach Hotel	Michael Francis Mc Govern
Dili Club	Philip Rodney Richards
D'city Hotel	Youanto Kenchana Jaya
Diamond Villa	Mari Alkatiri
Discovery Inn	Saqib Abbas Awan
Dive Tl Apart & Guest House	Mark Mialszygroz
East Timor Backpackers	Dan Conroy
Esplanada Hotel	Ashley Rees
Excelsior Resort	Jackson Kuet Nhang Lay
Farol Hotel	Cheung Hiu Ching
Fantija Hotel And Apartment	Carlito X. de O. Moniz Araujo
Futo Apartment	Maria dos Santos Martins
Hotel California	Paulo dos Remedios
Hotel The Ramelau	Jay Song/ Moon San Jun
Katuas Hotel	Eduardo Santos Luis Almeida
Laciara Motel	Nguyen Binh Nguyen
Lecidere Hotel & Restaurant	Lana Kwok
Metiaut Apartment	Alcino F. da Silva
Metro Apartment	Kong Nam Mu
Novo Horizonte Hotel	Estela Bento Fereirra
Novo Turismo Resort & Spa	Manuel Jacinto Borges Ferreira
Ocean View Beach Hotel	Danny Lee

Name of Establishment	Owners
Orchard Apartments	Bernard Foo/ Alcino F. da Silva
Palm Spring Estate	Jackson Kuet Nhang Lay
Palm Beach Apartment	Jackson Kuet Nhang Lay
Pausada Casa Do Sandalo B.Central	Ivanildo Q. do Nascimento
Pausada Casa Do Sandalo P.Kelapa	Ivanildo Q. do Nascimento
Sakura Tower	Tee Boon Sin
Sands Motel	Francisco Manezes
Shah Garden	Hamud Bader alkatiri
The Cove Backpackers	Kim Miller
The Garden Residence	Maria Joao Paiva Fereira Nazareh
Terra Santa Residence & Golf	Ade Giuliano
The Plaza Hotel	Ni Tat Lai
The Plaza Hotel Executive Wings	Ni Tat Lai
Timor Lodge Hotel & Restaurant	Wayne l. Thomas
Timor Plaza Hotel & Apartments	Tony Jape
Tibar Beach	Alice Goncalves
Terra Santa Residence	Ade Giuliano
Villa Bemori Residence	Jose Luis do Carmo Santos
Villa Mata Ruak	Alcino F. da Silva
Villa Verde Hotel & Rest	Jorge Serano
Xingdeng Hotel & Restaurant	Nap Hian Lay

Source: ACDI/VOCA consultations. Treat with caution as legal due diligence has not been undertaken.

ANNEX: EXAMPLE OF SUCCESSFUL USAID TOURISM INTERVENTION



The USAID Siyaha (tourism) project in Jordan and has provided models of best practice to other countries via USAID Washington.

The latest phase, the Economic Growth for Sustainable Tourism Project is the third successive Jordan tourism support program. Since the start of the first USAID tourism project (Siyaha) in 2005, USAID has allocated a total of \$62 million in direct funding to develop Jordan's economy through tourism. Today, tourism is Jordan's largest private sector contributor to GDP and foreign exchange, and supports more jobs than any other industry.

For Jordan, tourism is a strategic industry. It is the largest sector in the economy, contributing over 14% of GDP. It is also the second largest earner of foreign exchange after remittances (generating \$3.4 billion in 2010) and is the largest generator of employment.

As a result, a Jordan Tourism Development Strategy was developed in 2005 and its implementation was supported by USAID through the first USAID tourism project known as Siyaha (2005-2008). Under the \$19 million Siyaha project, USAID/Jordan leveraged over \$90 million in funds to support tourism development across Jordan.

Building on the success of the Siyaha project, the \$31.5 million USAID Jordan Tourism Development Project (2008-2013) sought to leverage additional public and private funds by working with the Government of Jordan, private sector and other foreign donors. The Italian, Greek, German and Irish governments co-invested in project initiatives, as did the United Nations Foundation's World Heritage Alliance. Under this phase of the USAID tourism project, tens of thousands of people in hospitality and tourism were up-skilled and support was given to grow tourism receipts by \$500 million.

Throughout its work gender integration and empowerment was prioritized. A focus was placed on encouraging women to enter the sector and supporting those who do. The overriding majority of cooperatives supported by both phases of the USAID tourism project are women-led and women-focused.

USAID's tourism project worked in a wide spectrum of tourism development, and archaeological and natural conservation. Activities implemented across Jordan span several areas, such as destination management, tourism trails, education, training, awareness, marketing and conservation. The project supported archaeological conservation of key sites such as the Amman Citadel, Madaba and Petra, and improved management of the Wadi Rum Nature Reserve.

An extensive, nationwide training program was implemented that improved hygienic handling of food, housekeeping skills and customer service at tourism establishments throughout the country. Cultural and tourist attractions were diversified by establishing and developing parades, festivals, and other authentic experiences. To enhance tourism promotion and marketing, the project supported better promotion of Jordan as an attractive destination internationally and strengthened industry marketing and e-marketing business capacity. Jordanian handicrafts, from weaving to pottery to mosaics, were improved; designs were enhanced and products are better displayed and marketed to tourists. Bachelor and diploma programs in tourism and hospitality at universities and colleges were streamlined and transformed.

To achieve its goals, the current project is focusing on nine main initiatives as follows:

- Strengthening legal and institutional capacities
- Enhancing visitor experiences
- Destination and product marketing
- Human resources development
- Quality assurance and enhancement
- Handicraft sector development
- Industry development
- Tourism awareness
- Gender and environment

A key issue helping to ensure the success of this initiative has been the long term sustained commitment of USAID and recognition that tourism development is not a "quick win", rather it is a strategic intervention.

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ANNEX: MEETINGS HELD – TOURISM

Organization	Person met/position	Date
Haburas Foundation (NGO supporting eco-tourism)	Mr. Pedro Vieira, Tourism Manager	July 20
Haburas Foundation (NGO supporting eco-tourism)	Jacob Calar dos Reis, Director	July 20
Avansa Agrikultura Project	Mr. Jeff Gucker, Deputy CoP	Jul 20
Timor Plaza Group	Mr. Tony Jape, General Manager	July 21
Timor Plaza Group	MS Imelda Castro, PR Manager	July 21
GIZ	Mr. Lino Borges, Adviser	July 21
Alola Foundation (NGO supporting crafts)	Ms. Ilda Da Cruise, Economic Empowerment Program	July 21
Alola Foundation (NGO supporting crafts)	Mr. Jose Sabino Ximenes, Economic Empower- ment Program Manager	July 21
ChildFund (NGO supporting tourism vocational training)	Ms. Bernice Roldan, Program Director	July 21
ChildFund (NGO supporting tourism vocational training)	Mr. Aristide Horugavye, Youth Project Manager	July 21
Island Explorer Tours	Ms. Sally Ximenes, Travel Consultant	July 21
Market Development Facility	Mr. Shariful Islam, Senior Market Development Adviser	July 22
Air Timor	Ms. Yuni Rachmawati, Sales Manager	July 22
East Timor Development Agency (Tourism Training NGO)	Mr. Januario Neto Mok, <i>Program Manager</i>	July 22
Adrelenalin Timor	Mr. Chris Soltry, Jet Ski operator	July 22
Compass Charters & Ocean Adventures	Mr. Robert Crean Managing Director	July 23
Dive, Trek & Camp, East Timor	Ms. Kym Millar, Tourism Development Coordinator	July 23
East Backpackers Timor	Dan Conroy*, Owner	July 23
The Asia Foundation	Mr. Todd Wasswl, Deputy Country Representa- tive	July 23
The Asia Foundation	Mr. Gobie Rajalingam, Program Innovation Specialist	July 23
Asian Development Bank	Mr. David Freedman, Country Economist	July 23
Advisor to Minister for Economic Development	Mr. Jose de Sousa Rodrigues, Advisor	July 23
Swimburne University	Ms. Sara Currie, Researcher – Timor-Leste brand	July 23

Organization	Person met/position	Date
Timor Adventure	Mr. David Carlos, Managing Director	July 23
Plan International	Tracy Morgan, Program Manager	July 23
Ministry of Tourism, Arts & Culture, Tourism Division	Mr. José Quintas, Director General, Tourism Department	July 26
Ministry of Transport, Civil Aviation	Mr. Sabino Henriques, Secretary	July 26
Biqueli Marine Development Group	Mr. Kevin Austin, Managing Director	July 26
Instituto de Apoio au Desenvolvimento Empresarial (IADE)	Ms. Robyn Jebson, Tourism Development Adviser	July 27
Com Suso	Mr Robela Mendes, Village Chief	July 28
Com Beach Resort	Mr. Surat Babu, Manager	July 28
Pousada de Baucau Resort	Ms. Maria Isabel da Sousa, General Manager	July 28
Baucau Beach Bungalows	Mr. Jose Rui Borges, Owner	July 28
Al Pelo ruin	Pedro Da Cruz, Administrator	July 29
Caimeo Beach Resort	Tyson & Tanz Yeo, Owners	July 29
Balibo Fort Hotel	Luisa Da Cruz De Arauso Soares, Manager	July 30
Mos Bele Cooperation Cluster	Mr. Garcia, Village Head	July 30
SEFPOFE	Mr. Paulo Alves, <i>Director</i>	July 31
Ministry of Environment	Mr. Rui Dos Reis Pires, Chefe Biodiversedade, Ambiente Departamento	July 31
Conservation International	Mr. Rui Pinto, Policy Manager	July 31
Ministry of Tourism, Arts & Culture, Department of Arts and Culture	Ms. Cecilia Assis Belo, Director General	July 31

ANNEX: TOURISM SITES: VISITED

Location	Notes	Date
Xanana Reading Room	Historical building with useful resources for tourism research	July 20
Christio Rei Statue & park	Well maintained public facility. Good for sunset/sunrise tours	July 20
Timor Plaza Hotel	New 4 star In-mall hotel with small casino. Part of major Chinese-Timor investment	July 21
Backpackers Hostel	Basic small facility	July 22
The Cove	Backpacker+ facility & tour operator	July 23
Compass Charters Dive Center	Dive Centre	July 23
Novo Tourismo Report & Spa	5 star hotel in Dili.	July 23
Discovery Inn	Boutique hotel in Dili	July 23
Memorial de Darre	Small visitor attraction/cafe	July 24
Maubisse Pesada	Former District Governor's residence	July 24
Bigada Farm, Maubisse	Agricultural project	July 24
Floica Viewpoint	Stopping point above Maubissi	July 24
Teyuku Homestay	Haburas CBT project	July 24
Seloi Vallet	Scenic spot	July 24
Gleno	Market town	July 24
Armera	Small colonial town	July 24
Pelican Hotel site	West of Dili on way to proposed new port	July 24
Tasi Tulo area	John Paul II monument	July 24
K41 & Lone Tree dive sites	No facilities	July 26
Com village	Small beach resort en route to Jaco Island	July 27
Sina guesthouse, Com		July 28
Com Beach Resort	Resort is for sale	July 28
Portuguese Fort, Lautem	Large fortifications, overgrown	July 28
Baucau Pasada Hotel	Additional rooms under construction. Quality product	July 28
Baucau Beach Bungalows	3 destroyed in war; not rebuilt yet	July 28
Baucau Portuguese market	Now local government facility. Badly restored.	July 28

Location	Notes	Date
Watavwo beach	Little tourism at present	July 28
Al Pelo runins	Professional interpretation. Interesting site but no visitor facilities yet	July 29
Caimeo Beach Resort	Beach tented resort/beach club	July 29
Mos Bele	Fort with small restaurant. NGO project	July 29
Bacau Fort Hotel	Small but attractive development	July 29
Marubu Hot Springs	Sulphur hot spring, old Portuguese hill resort (ruins), being redeveloped at present. Very remote	July 29
Mos Bele community cluster	House to rent and shops. Tourism information centre also rehabilitated but not opened.	July 30
Resistance Archive & museum	Detailed modern interpretative centre	July 30
Chega! Exhibition	Similar material to resistance museum but in authentic location. Highly regarded on line. Not signed and difficult to find.	July 31