Timor Leste
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Abstract

East Timor is a nation located on the island of Timor in the South Pacific. Portugal colonized East Timor during the sixteenth century (Healey 2010). From 1975 to 2002 East Timor was brutally occupied by Indonesia (Healey 2010). Having received independence in 2002, Timor-Leste is a republic with generally free and fair elections, but government corruption continues to be a significant problem (Freedom House, 2010). GDP (Purchasing Power Parity) is currently at a little over $3 billion dollars, and has one of the world’s highest growth rates at 8% (CIA, 2011). That having been said, 43% of the 1.2 million population is below the poverty line (CIA, 2011). The economy revolves around offshore oil reserves, coffee exports, and subsistence farming.

Maize, rice, squash, and cassava, are among the main foods grown for sustenance, maize being the most important, as it is a principle staple of the Timorese (Fox 2003). The climate is tropical with distinct wet and dry seasons. Rainfall is highly variable and inconsistent which makes planning and growing crops difficult, forcing agriculture to rely on monsoon rains. Only 8.2% of the land is arable. As a result, food shortages occur cyclically and are most severe from November to February. Shortages are projected to become worse with continued climate change (Barnett et al. 2007). Combating Timor-Leste’s poverty and hunger issues is a shockingly feasible task. The government has over $6 billion dollars in cash reserves (CIA, 2011). This fund could be used to institute social programs to create more jobs and to improve the infrastructure of the country, as well as develop natural food sources as opposed to a continued reliance on food aid (Moxham, 2005).

Background to Timor-Leste

The first humans to settle East Timor were the Melanesian Atoni and the Balu (Healey 2010). This heritage includes Afro-Timorese, Gaon-Timorese, Portuguese-Timorese and Sino-Timorese (Healey 2010). The Portuguese, Malay and Pacific Islander cultures have all had large influences on the culture of East Timor (Healey 2010). Today, Catholicism is the most widely practiced religion in East Timor and Tetum is the most widely spoken language (Healey 2010). Throughout the history of East Timor, headhunting, the practice in which the heads of enemies were cut off and displayed as trophies, was a common practice until the twentieth century and animism was practiced until the Indonesian occupation (Healey 2010).

Prior to the Portuguese arriving in East Timor, the inhabitants of East Timor engaged in trade with both China and India (Fredrickson 2000). The main export of early East Timor was sandalwood, which was of most worth to the Muslims in India and Persia (Fredrickson 2000). The Portuguese arrived on the shores of East Timor in 1512 (Fredrickson 2000). Portugal colonized East Timor during the sixteenth century until East Timor was decolonized in the mid twentieth century (Healey 2010). During World War II the Japanese occupied East Timor (Philpott 2006).

Civil war broke out in 1975 (Healey 2010). The civil war in East Timor occurred previous to the Indonesian invasion, and was fought between the Fretilin and the Timorese Democratic Union (Healey 2010). Indonesia invaded later in 1975 with the intent to halt the civil war and colonize (Fredrickson 2000). Following the Indonesian invasion in 1975, Indonesia began a 25-year rule in East Timor with a repressive government (Fredrickson 2000). The presence of the Catholic Church, in East Timor began during the Indonesian occupation impacting the culture (Healey 2010). Education in East Timor followed Indonesian standards during occupation (Healey 2010). The Indonesia militia killed 200,000 Timorese during their rule of East Timor (Fredrickson 2000). During this time, torture, kidnapping and mass murder were common (Healey 2010).
The Catholic Church assisted with the reorganization of schools that reopened with the end of violence in 1999 (Healey 2010). Each of the schools played a large role in ensuring proper nourishment for the attending children, and the school provided daily support and stability in the lives of the children (Healey 2010). The school system in East Timor provides primary education, some secondary education and only one school in which to receive tertiary education (Healey 2010). The tertiary school was destroyed during the violence in the late 1990s; however, a new National University of East Timor was opened in 2000 (Healey 2010).

In 2001, following the vote for independence, widespread violence occurred in retaliation and destroyed over ninety percent of all the health facilities (Bucens and Maclennan 2006). Also, 130 out of the 160 doctors left the country, and widespread destruction of civil infrastructure and death occurred (Bucens and Maclennan 2006).

In May of 2002 East Timor gained independence from Indonesia (Healey 2010). East Timor continues to be a politically turbulent nation. In 2006 a crisis occurred that included a near-assassination attempt of the President (Gunn 2010). No major outbreaks of violence have occurred since 2006 (Gunn 2010).

**Politics and Economics**

Timor-Leste is a republic with a unicameral legislature, a Head of Government in the form of a Prime Minister, and a mostly ceremonial President (CIA, 2011). National elections are held every five years for both the presidency and Parliament. The 2007 national elections, as well as the 2009 local elections, were deemed to be free and fair (Freedom House, 2010). Transparency International, a NGO which focuses primarily on corruption, ranked the country 127 out of 180 on its 2010 “Corruption Perception Index,” which classifies the government as highly corrupt (Transparency International, 2010). Over 5,200 cases of corruption were awaiting investigation in 2009, indicating that high level corruption is ineffectively addressed (Freedom House, 2010). A new source of concern is instability stemming from a phased withdrawal of UN police and military advisers. The national police and military are distracted by both the population at large, and each other.

Freedom House, a Western NGO which focuses matters pertaining to civil liberties and political rights, gives the country scores of four and three out of seven in their respective categories, which translates to a rating of “partially free.” The country is 58% Catholic, and religious education is mandatory for all students (Freedom House, 2010). Abortion was criminalized in 2009, with exception to cases of endangerment to the health of the mother. Freedom is hampered by limited access to television, the Internet (1%), and radio (68%) (Freedom House, 2010). Approximately 140,000 people own cell phones out of the country’s 1.17 million inhabitants (Freedom House, 2010).

Food security issues stem from economic and political hardships as well as domestic food production problems. Much of the economic infrastructure was laid to waste by the Indonesian military (CIA 2010). GDP (Purchasing Power Parity) is currently at slightly over three billion US dollars, with one of the highest growth rates in the world, at an astonishing real GDP (non-oil) growth rate of thirteen percent (Gunn 2010). That having been said, per capita GDP is still extremely low, and 42% of the population is below the poverty line (CIA 2010). The economy is primarily driven by the service sector, but has a significant agricultural sector. Coffee, rice, and corn are the top three crops produced by the country, consuming the latter two while exporting the former (CIA 2010). Government revenues have been supplemented by offshore oil and gas deposits, but all production is handled elsewhere, resulting in little job creation. The unemployment rate is extremely high, at 50% (Freedom House, 2010). This is only expected to get worse, as the population growth rate of Timor-Leste was recently determined to be the highest in the world, with a population growth rate set to outpace economic growth (Lundahl 2006). As is, slightly less than half the population is under the age of 16 (Blunt 2009). The government holds significant assets, with over $6.6 billion USD in a “Petroleum Fund” designed to preserve natural resource wealth for future generations (CIA 2010). As of 2008, the money was invested, with a return rate of approximately $250 million USD annually (Blunt, 2009). Given that the fund has more than doubled, it is likely that its present rate of return is significantly higher. Currently, the government takes in $6.643 billion USD more than it spends, which translates to a budget surplus of over 40% (CIA 2010). Spending on infrastructure, namely roads and electricity, has increased markedly over the past few years (CIA 2010). Despite recent economic growth, the nation continues to struggle with its recent independence as seen in the wave of political violence in 2006 (Nevins 2006)

**Hunger in Timor-Leste**

As of 2003 it was estimated that 20% of the nation’s population was below the poverty line and this appears to have grown considerably over the past eight years. Unemployment rates were also estimated to be high at 20% in rural areas and more than 40% for urban youth, as of 2006 (CIA 2011). 90% of the labor force engages in agriculture with a large number farm for sustenance (Barnett et al. 2007; CIA 2011). Average life expectancy in Timor-Leste, as determined by the United Nations Development Program (UNDP), was 62.1 years in 2010. The UNDP places the nation at a rank of 120 out of 169 countries on its Human Development Index (HDI) with a score of 0.502. The HDI is a measure of human development based on evaluations of health, education, and income. According to the UNDP, 11.5% of the nation’s total GDP is spent on public health, infant mortality was 93 out of 1000 births, and 23% of the population was undernourished (United Nations Development Program [UNDP] 2010).

Food security issues stem from economic and political hardships as well as domestic food production problems. Much of the economic infrastructure was destroyed in the late 1990s during warfare between Indonesian troops and independence militia (CIA 2011). Currently, much of the nation’s agricultural resources are dedicated to coffee growing. Coffee prices have dropped over the past few decades as a result of overproduction and the growth of large agribusiness. As a result coffee producers receive low prices for their crops (Barnett et al. 2007). Rural sustenance farmers also face food security issues due to unpredictable rainfall. Farmers rely on monsoon rains which seemingly shift erratically from the effects of the El Nino Southern Oscillation (ENSO) (Fox 2003). Shortages are common from November to February as insufficient food stores are depleted (Barnett et al. 2007).

Maize production in the interior mountain regions is particularly vulnerable to seasonal variations in rainfall. Farmers who take advantage of early western monsoon rains to advance production must often replant crops as rainfall becomes insufficient later in the season (Fox 2003). More than 90% of predominantly maize growing districts have reported a shortage of food in January. Maize production declined an estimated 34% between 2002 and 2003 due to drought and late arrival of rains in the previous season (Barnett et al. 2007). Another drought in 2007 resulted in a major food crisis with up to one-fifth of the population suffering from food shortages (Gunn 2010; Voice of America News 2007).

Rice production in Timor-Leste has increased over the past four decades. New developments, however, were not matched with sufficient labor to obtain production levels that would ensure food security. Additionally, during times of heavy rainfall in the mountains, flooding damages and destroys irrigation infrastructure and causes soil erosion. Lowered output and the costs of regular repairs make rice production more costly (Fox 2003). As population continues to grow, more strain will be put on East Timor’s food production systems and economy which is currently unable to provide work for many entering the labor force (Gunn 2010).

Domestic crop production is furthered threatened by climate change. Under current projections, East Timor’s climate is expected to become warmer, drier, and more variable. Additionally, sea levels are likely to rise. Agricultural output will decrease and disease prevalence will increase. Increases in the prevalence of these diseases would occur in a warming scenario through increased mosquito activity and degradations in water quality. Diseases such as malaria, cholera, dengue fever, and diarrhea affect the body’s ability to extract nutrients and energy from food. (Barnett et al. 2007).
The practice of breastfeeding is an important component to the issue of child nutrition. Senarath et al. (2007:396) concluded that breastfeeding practices in East Timor were satisfactory except for the rate of exclusive breastfeeding. The current healthcare system in Timor-Leste faces a lack of resources and qualified staff. Healthcare access is limited; a problem especially for pregnant women and young children (Tilman 2004).

**Prospects and Strategies for Hunger Reduction in Timor-Leste**

In our opinion, the solution to mitigating the hunger crisis in Timor Leste is fairly clear-cut. However, seeing as things are rapidly changing in this fledgling country, it is very difficult to obtain much significant scholarly research on the matter. Thus, many of these solutions are speculative.

As of late, Timor Leste is seriously lacking in infrastructure and services. Yet the money to implement such is there. In fact, according to recent data in the CIA Fact Book, Timor Leste has about $6 billion dollars in cash reserves. This money is a result of its stores of natural resources such as oil. And while the words on everyone’s lips seem to be suggesting increased infrastructure and the institution of government programs, these actions are just nearly underway. With help from the WFP, Timor Leste’s very first food plant was built in July of 2010. The food plant “will cut the cost of distributing fortified foods, create jobs and provide a market for small farmers” (WFP, 2010). This is definitely a step in the right direction for Timor Leste; setting a prime example of how increased infrastructure will positively affect its people. We feel that more programs like this should and will spring up over the next few decades.

Decreased dependence on foreign aid is yet another positive development. The Timorese have long been dependent upon aid from countries like Australia. Up until recently, the little food that was being consumed and purchased was mostly imported. Although the UN World Food Program, which is considered foreign aid, essentially funded the food plant it helps the Timorese find sustainable solutions for them to obtain the resources they need within East Timor. This will ultimately help them become a more sustainable, independent nation. If programs were instituted that promoted self-sufficiency, it would further empower the people of Timor Leste, stimulating their economy by creating jobs and providing cheaper, homegrown food. I feel that if the government slowly funnels its funding into programs like this, it would provide greater mobility for the people, as well as a sense of security. There is also hope for their economy in the form of tourism. Timor Leste is a beautiful country, and they are currently attempting to attract prospective travelers to the mountainous land.

There are also many NGO’s making an impact in Timor Leste, such as Adventist Community Service and CSH International. Both organizations focus on providing education and opportunities for the Timorese, in hopes of increasing employment and mobility. And if there is effort being made both bottom-up through grassroots organizations and top-down through government programs and agencies, the country will see vast improvements and a decrease in people going hungry.

It is not to be forgotten that the people of Timor Leste are extremely adaptive. These seasonal food shortages have been occurring in this mostly un-arable country for centuries, and the people have always found coping mechanisms to survive. That being said, there can also be hope found within cultural revival among the Timorese; “…rather than waiting for the government to create land and resource management related laws, local people in Timor Leste are making and remaking their own laws, mobilizing their customary practices…” (Palmer & Carvalho, 2007: 1). These practices are empowering, as they provide hope for the future and make legitimate change to this deeply troubled country.

**Peer Reviewed References Cited**

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Frederickson, Allan.


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Describes political and economic conditions as of 2009.
Healey, C


Describes the history of East Asia and relations with Indonesia

Lundahl, Mats


Provided information on population growth, and an economic forecast.

Nevins, Joseph.


Describes social and political instability in East Timor. Demonstrates that the nation is still struggling with its recent independence from Indonesia.

Philpott, Simon


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Senarath, U., M. J. Dibley, and K. E. Agho


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Tilman, Carlos.


Discusses nutritional health conditions of mothers and children in East Timor. Outlines current state of healthcare system and programs, discusses problems, challenges, and possible solutions. Also discusses breast feeding practices and their implications in child nutritional health.

Lisa Palmer, Demetrio do Amaral de Carvalho


Discusses the role of culture and tradition in the process of nation building and resource management in Timor Leste.

Other References Cited

CIA


Freedom House


This was used for the Politics and Economics section, and provided information on civil liberties and political freedoms.

Moxham, Ben


This article discusses the reasoning behind hunger in Timor-Leste, and provides possible strategies and solutions.

Transparency International


United Nations Development Program [UNDP]

Voice of America News


World Food Programme


This article describes the new food plant built in Dili that will help promote infrastructure and services in Timor Leste.