

Acknowledgements

CFE-DM would like to thank the following people for their support in reviewing and providing feedback to this document:

Ms. Jan Gelfand (IFRC) Major Pablo A. Valerin, (U.S. State Dept, Dili)

Cover and section photo credits

Cover Photo: North Beach and Statue by Frank Starmer 24 November 2010. https://www.flickr.com/photos/ spiderman/5203371481/in/photolist-8VND4p-bVuwwu-

Country Overview Section Photo: Maubisse in the early morning by Kate Dixon. 1 April 2012 https://www.flickr.com/photos/kdixon/7168906532/in/photolist-bVuw9L

Disaster Overview Section Photo: Cruz Vermelha de Timor-Leste Facebook Page 27 October 2018. https://www.facebook.com/422556931191491/photos/a.424090534371464/1898143186966184/?type=3&theater

Organizational Structure for Disaster Management Section Photo: East Timor Portuguese Statue by John Hession. 6 September 2010. https://www.flickr.com/photos/56880002@N04/5248121098/in/photolist-8ZKZyw-crrJd-

Infrastructure Section Photo: Timor 005 by HopeHill. 9 July 2009 https://www.flickr.com/photos/45340412@N06/4215259751/in/photolist-7quiSg-

Health Section Photo: Timor Leste Defense Force participate in medical exercise during Cooperation Afloat Readiness and Training (CARAT) DILI, Timor Leste 26 February 2014) U.S Navy photo by Mass Communication Specialist 1st Class Jay C. Pugh https://www.flickr.com/photos/us7thfleet/12915899043/in/photolist-kFkmNx-7NyWiW-cjBXam-7LgA5S-

Women, Peace, and Security Section Photo: Bread Sellers by Ellen Forsyth January 2002 https://www.flickr.com/photos/ellf/8723982463/in/album-72157631131535020/

Conclusion Section Photo: Traditional Dress, East Timor by Alexander Whillas. 26 January 2007 https://www.flickr.com/photos/cpill/369949523/in/photolist-yG674-8XsboX-8HgADS-

Appendices Section Photo: Women in Maliana by Ellen Forsyth. 15 December 2012 https://www.flickr.com/photos/ellf/8277424758/in/photolist-dBrXZY-dBmgV2-bGoXJi-dBmwLB-

Table of Contents

| Welcome - Note from the Director | 9 |
|--|----|
| About the Center for Excellence in Disaster Management | 10 |
| Disaster Management Reference Handbook Series Overview | 11 |
| Executive Summary | 12 |

| Country Overview | 14 |
|------------------------|----|
| Culture | 16 |
| Demographics | 17 |
| Ethnic Makeup | 18 |
| Key Population Centers | 18 |
| Language | 18 |
| Religion | 19 |
| Vulnerable Groups | 19 |
| Economics | |
| Government | 22 |
| Environment | 24 |
| Geography | 24 |
| Borders | 24 |
| Climate | 25 |
| Climate Change | 26 |

| Disaster Overview | |
|-------------------------------------|----|
| Hazards | |
| Recent History of Natural Disasters | |
| Country Risks | |
| Country Risk Profile | |
| Country hisk frome | JI |

| Organizational Structure for Disaster Management | 34 |
|--|----|
| Lead Government Agencies in Disaster Response | 35 |
| Key Disaster Management Partners | 36 |
| International Federation of Red Cross and Red Crescent Societies | 38 |
| U.S. Government Agencies in Timor-Leste | 38 |
| Participation in International Organizations | 40 |
| Foreign Disaster Relief and Emergency Response | 40 |
| Laws, Policies, and Plans on Disaster Management | 41 |
| Education and Training | 42 |
| Disaster Management Communications | 43 |
| Early Warning Systems | 43 |
| Responsible Agencies for Flood and Storm Warning | 44 |
| Armed Forces Role in Disaster Response | 44 |
| Information Sharing | 44 |

| Infrastructure | 50 |
|---|----|
| Airports | 50 |
| Seaports | 50 |
| Land Routes | 51 |
| Roads | 51 |
| Railways | 51 |
| Waterways | 51 |
| Schools | |
| Disaster Risk Reduction in the Education Sector | |
| Communications | 53 |
| Utilities | 53 |
| Power | 53 |
| Water and Sanitation | 54 |

| Health | 56 |
|-----------------------------------|----|
| Health Overview | |
| Healthcare System Structure | 57 |
| Health Cooperation | 58 |
| Communicable Diseases | 59 |
| Non-Communicable Diseases | 62 |
| Training for Health Professionals | 62 |

Women, Peace, and Security......64

| onclusion |
|-----------|
|-----------|

| Appendices6 | 58 |
|--|----------------|
| DOD DMHA Engagements in the Past Five Years6 | 58 |
| International/Foreign Relations7 | 70 |
| Force Protection/Pre-Deployment Information7 | 73 |
| Passport/Visa7 | 73 |
| Emergency Contact Information7 | 73 |
| Currency Information7 | 73 |
| Travel Health Information | 74 |
| Vaccination and Prescriptions7 | 74 |
| Sendai Framework7 | 76 |
| HFA Country Progress Report7 | 78 |
| Country Profile | 31 |
| Acronyms and Abbreviations |) 2 |
| References (Endnotes) |) 5 |

List of Figures

| Figure 1: Map of Timor-Leste | .14 |
|--|------|
| Figure 2: Timor-Leste Population Pyramid (2019) | . 20 |
| Figure 3: Map Showing Administrative Divisions | .23 |
| Figure 4: Topography of Timor-Leste | .25 |
| Figure 5: International Reported Losses (1990-2014) | . 28 |
| Figure 6: Map of Red Cross Responses in Timor-Leste | . 30 |
| Figure 7: INFORM Risk Profile Timor-Leste (2019) | . 32 |
| Figure 8: National Disaster Risk Management Organization Chart | .34 |
| Figure 9: Reaction to 2017 Drought Alert | .51 |
| Figure 10: CFE-DM Disaster Management Handbooks | .48 |
| Figure 11: Health Indicators Surrounding Childbirth | .56 |
| Figure 12: Prevalence of Malnutrition Rates in Children Under 5 and in Women | .57 |
| Figure 13: Timor-Leste National Health Service Configuration | .57 |
| Figure 14: Timor-Leste National Health Infrastructure | . 58 |
| Figure 15: Development Assistance for Health Financing in Timor-Leste | .60 |
| Figure 16: Tuberculosis Incidence and Mortality Rates in Timor-Leste (2002-2016) | .60 |
| Figure 17: HIV Infections on the Rise in Timor-Leste | .61 |
| Figure 18: UN Sendai Framework for Disaster Risk Reduction (2015-2030) | .77 |
| Figure 19: HFA Level of Progress Achieved | .78 |

List of Tables

| Table 1: Airports in Timor-Leste | 50 |
|--|----|
| Table 2: Dili Port Specifications | 51 |
| Table 3: CDC, Travel Health Information for Timor-Leste | 75 |
| Table 4: National Progress Report on the Implementation of the HFA | 78 |
| Table 5: HFA Country Progress Report Future Outlook Areas, Timor-Leste | 80 |

List of Photos

| Photo 1: President Xanana Gusmao Says Farewell to Australian Troops (2012) 1 | 15 |
|--|----|
| Photo 2: Timorese Children in Traditional Dress1 | 6 |
| Photo 3: Timor-Leste Church Ceremony 1 | 17 |
| Photo 4: An "uma lulik" of the Fataluku People1 | 9 |
| Photo 5: Emergency Obstetric and Newborn Care (EMONC) | 20 |
| Photo 6: USAID Program Assistance in Timor-Leste2 | 22 |
| Photo 7: Planting Rice in Timor-Leste2 | 25 |
| Photo 8: Jaco Island and the Mainland2 | 26 |
| Photo 9: Timor-Leste Volunteers in a Community Awareness Program | 38 |
| Photo 10: USAID and Partners Run a Disaster Simulation Training | 39 |
| Photo 11: Dili Port, Timor-Leste5 | 51 |
| Photo 12: Students in a UNICEF Supported Child-Friendly School | 52 |
| Photo 13: Students Participate in UNDP-led Tsunami Drill, Timor-Leste | 53 |
| Photo 14: Water Sustainability Project in Timor-Leste5 | 54 |
| Photo 15: USAID workers in Timor-Leste5 | 56 |

Disclaimer

This report has been prepared in good faith based primarily on information gathered from opensource material available at the date of publication. Most of the information was from United States (U.S.) or other government sources and is thus considered to be in the public domain. Such sources include the Central Intelligence Agency (CIA) Factbook, U.S. Department of State (DoS), and foreign government's web pages. Where possible, a link to the original electronic source is provided in the endnote (reference) section at the end of the document. Other sources include Non-Governmental Organization (NGO) homepages, Relief Web, United Nations Development Program (UNDP) or other United Nations (UN) agency web pages, World Bank, and Asian Development Bank (ADB). While making every attempt to ensure the information is relevant and accurate, Center for Excellence in Disaster Management and Humanitarian Assistance (CFE-DM) does not guarantee or warrant the accuracy, reliability, completeness or currency of the information in this publication. Any necessary updates will be incorporated in a future version.

Welcome - Note from the Director

Dear Reader,

The United States (U.S.) aims to support Timor-Leste's goals and objectives while building interoperability with our regional partners. In April 2019, the U.S., partner nation military members, and non-governmental organization volunteers took part in humanitarian and disaster preparedness in Timor-Leste through Pacific Partnership 2019. Timor-Leste was one of several host nations for this event. Enhancing partnerships through host nation subject matter expertise and civil-military exchanges is the mission of Pacific Partnership.

Pacific Angel is another engagement in which joint and combined regional humanitarian assistance and disaster relief exercises are involved. In June 2018, Pacific Air Forces, in coordination with Timorese and multinational partners, improved the capacity of local authorities in Timor-Leste. Pacific Angel and Pacific Partnership are just a few examples of the ongoing cooperation between the U.S. and Timor-Leste to help improve the lives of Timorese and build the capacity of local authorities and security forces.

Timor-Leste is a small, mountainous country whose population is exposed to drought, flooding, landslides, storms, and earthquakes. This Handbook focuses on Timor-Leste's disaster management framework and partnerships, and highlights Timor-Leste's disaster risk reduction (DRR) strategies and plans. This Handbook also provides an overview of the country's government, geography, demographics, social cultural practices, as well as details its history of natural disasters, and the current state of its disaster risk and response management. CFE-DM provides education, training and research about disaster risk management and humanitarian assistance, particularly in international settings, which require coordination with Department of Defense (DoD) and civilian agencies. This guide serves as an initial source of information for individuals preparing for DRR activities or immediate deployment with Timorese partner responders in a crisis.



Timor-Leste Disaster Management Reference Handbook | October 2019 9

Information about the Center for Excellence in Disaster Management and Humanitarian Assistance

Overview

The Center for Excellence in Disaster Management & Humanitarian Assistance (CFE-DM) is a United States (U.S.) Department of Defense (DoD) organization that was established by U.S. Congress in 1994. The Center is a direct reporting unit to U.S. Indo-Pacific Command and is located on Ford Island, Joint Base Pearl Harbor-Hickam, Hawaii.

CFE-DM was founded as part of the late Senator Daniel K. Inouye's vision. The Senator had witnessed the effects of Hurricane Iniki that struck the Hawaiian Islands in 1992 and felt the civilmilitary coordination in the response could have been more effective. He set about to establish CFE-DM to help bridge understanding between civil and military responders, and to provide a DoD platform for building Disaster Management and Humanitarian Assistance (DMHA) awareness and expertise in U.S. forces, and with partner nations in the Asia-Pacific. While maintaining a global mandate, the Asia-Pacific region is our priority of effort and collaboration is the cornerstone of our operational practice.

Mission

CFE-DM builds crisis response capacity, enhances coordination and collaboration, and strengthens relationships to save lives and alleviate human suffering before, during, and after humanitarian crises.

Vision

CFE-DM increases the readiness of the US Joint Force, Allies, and Partners for a wide range of military operations by delivering leading-edge humanitarian assistance and civil-military expertise and insights.

Contact Information

Center for Excellence in Disaster Management and Humanitarian Assistance 456 Hornet Ave JBPHH HI 96860-3503 Telephone: (808) 472-0518 https://www.cfe-dmha.org

Disaster Management Reference Handbook Series Overview

The Disaster Management Reference Handbook Series is intended to provide decision makers, planners, responders and disaster management practitioners with an overview of the disaster management structure, policies, laws, and plans for each country covered in the series. Natural and man-made threats most likely to affect the country are discussed. The handbooks also provide basic country background information, including cultural, demographic, geographic, infrastructure, and other relevant data.

Conditions such as poverty, water and sanitation, vulnerable groups, and other humanitarian issues are included. A basic overview of the health situation in the country and disease surveillance is also covered. The handbooks include information on key national entities involved in disaster management, disaster response and preparation, and the military's role in disaster relief. Information on United Nation agencies, international Non-Governmental Organizations (NGOs), major local NGOs, and key U.S. agencies and programs in the country, are also provided.

The overall aim is to offer a guide that brings together important information about disaster management and response for each country in an effort to provide a basic understanding for the reader. Information in the handbooks are compiled and based primarily on trusted, reliable, publicly available sources. Much of the information used is from open source websites including but not limited to ReliefWeb, PreventionWeb, the Central Intelligence Agency (CIA) Fact Book, the United Nations (UN), The World Bank, the Asian Development Bank (ADB), government sources, NGO websites, various media sources, U.S. Department of State (DOS), and foreign governments' web pages. Where possible, a link to the original electronic source is provided in the endnote (reference) section at the end of the document. Other resources are provided by subject matter experts (SMEs).

Each handbook is a working document and will be updated periodically as new, significant information becomes available. We hope that you find these handbooks informative, relevant, reliable, and useful in understanding disaster management and response for this country. We welcome and appreciate your feedback to improve this document and help fill any gaps to enhance its future utility. Feedback, comments, or questions can be emailed to cfe.dmha.fct@pacom.mil. You may also contact the Center at: (808) 472-0518. Please visit our website (https://www.cfe-dmha.org) to view the latest electronic versions available or to request a hard copy of a disaster management reference handbook.

This report has been prepared in good faith based primarily on information gathered from open-source material available at the date of publication. While making every attempt to ensure the information is relevant and accurate, CFE-DM does not guarantee or warrant the accuracy, reliability, completeness or currency of the information in this publication.

Executive Summary

Timor-Leste lies on the eastern half of Timor Island within the Malay-Indonesian Archipelago in Oceania. The island is among the Lesser Sunda Islands, lying between the Savu and Timor Sea basins about 400 kilometers (km) north of Australia.¹ Timor-Leste is located near one of the most active tectonic plate boundaries in the world.² Consequently, the high seismic activity and exposure to frequent earthquakes causes significant damage including triggering landslides with devastating impact on citizen's lives, livestock, roads, infrastructure, and property. The country also counts tsunamis and tropical cyclones as threats.³

Timor-Leste has no active volcanoes. However, it is susceptible to risk by Holocene volcanic groups on neighboring Indonesian islands to the west and east.⁴ Timor-Leste's susceptibility to floods, landslides and prolonged dry spells, can also trigger insect infestations, diseases, and cause food insecurity. In the last decade, the country has suffered 470 disaster events,⁵ with its most frequent natural disaster being identified as flood, followed by drought and storms. Additionally, climate changes to the country threaten to create a hotter, drier, climate causing potential for harsher and longer drought conditions, heavier rainfall, and increased flooding and landslide hazards.⁶

Timor-Leste carries a median score on the INFORM Index for resiliency in hazards with Timor-Leste has a 2020 INFORM Global Risk Index of 4.5; a Natural Hazard and Exposure risk of 3.4; a Vulnerability score of 4.2; and a Lack of Coping Capacity score of 6.2. Earthquakes (6.3) and Tsunamis (6) are Timor-Leste's highest scoring vulnerability to natural disasters.⁷ While Timor-Leste does not necessarily contribute directly to global climate change, it does confront challenges within its local environment and potentially faces disastrous effects from global changes. Historic exploitation of resources included over-logging, land-clearing, and over-hunting/fishing.⁸ The low crop diversity in Timor-Leste creates a situation where any disruption to household food production immediately and severely impacts food security. Approximately two-thirds of the population suffers food shortages annually for at least two months during the months of October to March.⁹

Timor-Leste is a young country having gained its independence in 2002. The country, with its population of approximately 1.32 million people are of Malayo-Polynesian and Melanesian-Papuan descent. It is also a country continuing to recover from decades of unrest and civil difficulties. With regard to governance, Timor-Leste has a democratic, semi-presidential, parliamentary system of governance. The President is head of state, and the Prime Minister is head of government. Institutionally, disaster risk management is coordinated by the National Disaster Management Directorate (NDMD), the lead agency under the Ministry of Social Solidarity (MSS). NDMD has district-level agencies and District Disaster Management Commissions (DDMC). At the sub-district level, there is the Sub-District Disaster Management Commission (SDDMC) and at the village or suco level, there is the Suco Disaster Management Commission (SDMC). DDMC, SDDMC and SDMC work mostly in response to the occurrence of disasters. Efforts are still limited to responding as there is not an overall systematic effort in disaster management that ranges from mitigation to rehabilitation and reconstruction. At the village or suco level, the commission is responsible for verifying disaster sites and reporting their findings up to the district level.¹⁰

The Ministries of Interior and of Social Solidarity have joint responsibility for disaster response. The MSS is responsible for coordinating preparation and response in relation to any emergency. Under MSS sits the National Disaster Management Directorate, composed of the Disaster Operation Centre (DOC), the Departments of Preparedness and Formation, Prevention and Mitigation, Response and Recovery, and disaster management committees at Districts, Sub-district, and village/suco levels. The Joint National Disaster Operation Centre can stand up to function on a 24-hour basis, equipped with communications equipment, a secure power supply, and disaster proof structures.¹¹ The NDMD is responsible for providing disaster risk management coordination and technical support to the government and community. It supports the National Disaster Coordinator (NDC) during disaster response operations.12

Timor-Leste has some small engagements with the U.S. and is increasingly participating in events to create alliances and partnerships in the region. Timor-Leste also continues to make progress toward bolstering its capacities to prepare for, respond to, and recover from natural disasters as well as create resiliency plans to deal with impending climate changes to the environment.



TIMOR-LESTE Country Overview

Disaster Management Reference Handbook | October 2019

ICOUNTRY OVERVIEW

Country Overview

Timor-Leste is made up of the eastern half of Timor Island and the exclave, Oecussi, which lies within the western, Indonesian half of the island. The country also has two islands, Atauro and Jaco off the northern and eastern coasts respectively. Timor Island lies at the eastern end of the Malay-Indonesian Archipelago, among the Lesser Sunda Islands, surrounded by the Savu and Timor Seas and the Wetar Strait. In total, Timor-Leste's territory covers 14,874 km², and the country shares a 253-km border with Indonesia's East Nusa Tenggara province on Timor Island. Figure 1 shows a map of Timor-Leste and surrounding areas.¹³



Figure 1: Map of Timor-Leste

Timor Island is mountainous, situated on an active fault with some undersea volcanic activity in the region. The center of the island, western Timor-Leste, is the most mountainous area. The land levels off to rolling, highland plains out to the east where agriculture is more important than in western areas. The northern coast is home to settlements but is steeper than the southern coastal plains that can extend 20-30 km inland. Some rivers do run from the mountains to the plains, but they tend to experience wide seasonal differences, raging during the rains and disappearing entirely during the dry season. There is very little other ground water, with only one large lake and some coastal marshland.¹⁴

Initial settlement of Timor Island dates to about 2000 BCE, likely reflecting Austronesian expansion across Southeast Asia and Oceania. Follow-on waves of settlement brought other Asian, Melanesian, and Polynesian migrants, who were later joined by Javanese and Chinese sandalwood traders. The first European traders and missionaries reached Timor Island in 1515 CE. Portugal gained dominance by the latter 16th century, but Lisbon's control over the island as a colony was focused on coastal areas. After more than two centuries of disputes between Dutch and Portuguese colonial powers over the island, an 1859 treaty divided the island into Portuguese Timor (modern Timor-Leste) and Dutch Timor (the western half of the island in today's Indonesia). This arrangement saw the development of intensive coffee, sugar, and cotton cultivation, as well as expanding conversion of locals from animism to Roman Catholicism. 15

Timor-Leste was still a Portuguese colony when Japanese forces invaded Timor Island in February 1942. Despite a year of local, Australian, and Dutch guerilla resistance, the island was eventually incorporated into the Greater East Asia Co-Prosperity Sphere under Japanese Imperial Rule.¹⁶ Japan administered the island until the end of the war when the colony reverted to Portuguese control. After World War II, successive UN General Assembly resolutions recognized Timor-Leste's right to selfdetermination, but Lisbon refused until Portugal itself underwent a revolution in 1974. In May that year, the Portuguese Government authorized the creation of Timorese political parties, and the 1975 dissolution of the Portuguese Empire was followed by a 28 November unilateral declaration of independence in Timor-Leste.¹⁷

Nine days after Dili declared independence, Indonesian troops invaded the eastern portion of the island and occupied Timor-Leste. Over the subsequent 24 years, local resistance was both armed and diplomatic. It is estimated that one-third of the country's population – 250,000 people – died in fighting. The fall of Indonesia's Suharto regime in 1998 opened the door for Timor-Leste to reassert independence. A referendum in August 1999 saw huge turn-out and a 75% vote in favor of reasserting independence, but this was met with massive retaliation that saw the sacking of Dili by Indonesian regular troops and pro-Indonesian militia. Up to 2,000 locals were killed and 70% of the country's infrastructure was destroyed.¹⁸ Finally, on 18 September 1999, the International Force East Timor (INTERFET), an Australian-led multinational military force, deployed to East Timor to disarm militia and support the transition process and reconstruction. As the security situation started to stabilize, the UN Transitional Administration in East Timor (UNTAET) was established as a multidimensional peacekeeping mission that exercised full administrative authority over East Timor from October 1999 to May 2002 (one of only two UN peacekeeping missions to have ever functioned as an interim governing administration) while the country transitioned to independence.¹⁹ Timorese who had gone into exile began to return, and elections were held for a Constituent Assembly that drafted Timor-Leste's Constitution, which came into force in May 2002.20

The Democratic Republic of Timor-Leste elected Kay Rala Xanana Gusmão, a former guerilla leader, as its first president. The UN Mission of Support in East Timor (UNMISET) assisted his administration until May 2005.²¹ During Gusmão's administration, Timor-Leste joined the UN and gained financial assistance from Portugal; it also reached agreements with Australia over exploitation of oil and gas deposits in the Timor Sea.²² Despite advances, a rift within the military led to the deterioration of internal security in 2006. Some soldiers perceived discrimination, discipline was poor,

and morale was low.²³ Mass desertions in February 2016 were followed in March with the dismissal of 591 soldiers who had submitted a petition before deserting. Protest demonstrations turned violent in April, leading to multiple attacks over the next several weeks.24 With the collapse of law and order, gang violence swept through Dili. More than 100 people were killed by the end of 2006.²⁵ The UN Integrated Mission in Timor-Leste (UNMIT) was established 25 August 2006 to support the Timor-Leste government in "consolidating stability, enhancing a culture of democratic governance, and

facilitating political dialogue among Timorese stakeholders in their efforts to bring about a process of national reconciliation.²⁶ By August 2006, a new government had been installed, but various structural and political reforms were required, and the UNMIT was established to facilitate the process.

UNMIT backed various political and civil dialogues and reforms that eventually saw three rounds of presidential and parliamentary elections conclude in June 2007. Former Prime Minister José Ramos-Horta was sworn in as President; the new 65-member Parliament was inaugurated on 30 July; and former President Xanana Gusmão was named Prime Minister in August. The last of these elements triggered violent protests.²⁷ This political unrest was a precursor to a new set of violent incidents. On 11 February 2008, the armed group led by the fugitive, former Military Police Commander of the Falintil-Forças de Defesa de Timor-Leste (F-FDTL), Alfredo Reinado, carried out separate armed attacks against the President and Prime Minister, neither of which was fatal to the target but left Reinado dead. The Prime Minister and Parliament launched debates and urged their supporters to remain calm, seemingly forestalling a broader crisis. The UN Security Council extended the UNMIT mandate (Resolution 1802 of 25 February 2008) and condemned the attacks on the President and Prime Minister.²⁸ Photo 1 shows President Xanana Gusmao with Australian troops in Dili.29



Photo 1: President Xanana Gusmao Says Farewell to Australian Troops (2012)

COUNTRY OVERVIEW

As UNMIT prepared to withdraw in 2012, Timor-Leste held a new round of presidential and parliamentary elections. Voter turn-out was again high, and the transition to the new administration and government was smooth. Taur Matan Ruak gained the Presidency while PM Xanana Gusmão remained in his post at the head of a coalition government made up of his own National Congress (CNRT) and Fretilin, the former guerilla force turned political party.³⁰ UNMIT withdrew in December 2012.³¹ Since the withdrawal of international peacekeepers, the country has focused on integration into the Southeast Asian and Asia-Pacific diplomatic and economic communities with a focus on development. It has expanded participation in global structures and markets with a view to boosting economic production. In early 2017, elections placed Francisco Guterres ("Lu'Olo") in the Presidency while Fretilin and CNRT continued to dominate Parliament.

Culture

Timor-Leste, like other small, post-colonial states, exhibits a mixed cultural heritage that incorporates pre-colonial family and livelihood systems, institutions, and modern business and arts communities. Timorese culture is most notable in arts, music and dance, and food. Colonial heritage is most prominent in language and religion; indeed, greetings reflect European norms of shaking hands, air-kissing on the cheeks, and referring to people with the Portuguese "Senhor/Senhora." Cosmopolitan Anglo- and Sino-influenced business and trade practices can color the rhythms and habits of cities. Modes of dress, attitudes toward time, and community celebrations are generally national rather than peculiar to a specific group. Photo 2 shows Timorese children wearing traditional dress.³²

Ethno-linguistic cultural divisions tend to surface only in preferences shown for associating with and/or consulting members of an "ingroup."33 Society remains largely hierarchical, particularly in business, government, and family. The family and business structures are still broadly patriarchal with women being allocated home and support roles rather than decisionmaking ones. There is a government quota to involve women in elected government. A 2016 law established a one-third quota for women to hold seats in the national legislature, and it requires a female candidate to stand in every election for village/suco or hamlet chief. The candidacy of women is brushing up against current social limitations such as child-care duties, poverty, and lack of transport around constituencies (since most women and girls are not taught to drive motorbikes, the most common means of personal transport).³⁴ In addition to these challenges, attitudes continue



Photo 2: Timorese Children in Traditional Dress

to evolve regarding female leadership with strong pushes to educate and train women for elected and appointed positions.

Beyond male and female, hierarchies tend to rely subtly on family heritage and wealth. In the vast, rural area, two classes may be apparent: 1) the community leaders' families, and 2) everyone else. In urban areas, respect accrues to those with some Portuguese roots as well as to those who have amassed some wealth through trade, business, or expertise. Family, class, and community roots sometimes mean favors and services will be provided to the "ingroup" as a preference despite efforts to decrease such practices. In most circumstances, the community/family will come first.³⁵

Traditional music, dance, and poetic storytelling are among the strongest expressions of culture in Timor-Leste. Most festivals and national holidays involve these elements even if informally. Families and local communities who are celebrating a festival or national holiday evince hospitality and invite all, including foreigners, to join the celebration. Traditional dance persists even as music becomes more global. The likurai was primarily a Tetun dance used to welcome warriors returning from battle. Women danced with a small drum and circled the village compound where heads taken in battle were displayed. Today, it is performed by unmarried women as a courtship dance. The tebedai is a circle dance performed throughout East Timor and it is accompanied by a drum.³⁶

The role of the Catholic Church in the country's culture is historic. While the Portuguese colony of Timor was nominally Catholic, locals most often followed a syncretic set of rituals that incorporated traditional animist actions into Catholic practice. It was only under Indonesian rule (1975-1999) that the Church became a symbol of the Timorese. Many locals proclaimed belonging within the Church in response to Jakarta's demand that every person follow one of five recognized faiths, of which animism was not one. At the time, to have taken up Islam would have meant allying one's self with the Indonesian occupier. Moreover, the Roman Catholic leadership in Dili were vocal proponents of Timorese independence and rights, earning these leaders great respect.³⁷ Regardless of individual Timorese citizens' faith, the Church's role in independence continues to allow it a prominent place in society. Photo 3 shows Timor-Leste Bishop Basilio do Nascimento of Baucau (1) and Vatican Secretary of State

Cardinal Pietro Parolin (r) celebrating the Church's 500th anniversary in Timor-Leste.³⁸

Among the cultural practices that have proven important in the post-colonial, postconflict era is tara bandu. Tara bandu is a Timorese custom of peace and reconciliation through public consensus and involves various symbols and rituals that vary from group to group. Very often, it is used to place a ban on certain behaviors in certain places. In a general context, it regulates relations: 1) among people; 2) between people and animals; and 3) between people and the environment. Since local people are involved in setting tara bandu in their own spaces, the custom of agreeing on a set of acceptable behaviors and practices tends to lend them legitimacy lacking in other law and justice schemes, particularly in a country like Timor-Leste where extending formal structures to isolated areas is difficult.³⁹



Photo 3: Timor-Leste Church Ceremony

Demographics

Population estimates in 2018 suggest there are 1.32 million people in Timor-Leste. The population is heavily skewed young with over 40% of the population under age 15; about half the population is of working age (15-54). All age groups show an even male-female split. The median age is 19 years,⁴⁰ fully two decades younger than in high-income economies and one decade younger than in most developing countries.⁴¹ This age profile suggests that the country will see a slowly declining dependency ratio as its population growth rate (2.32% in 2018) also slowly decreases. Overall life expectancy as of 2013 had reached 64 years for males and 66 years for females, an increase of 6 and 7 years respectively from 2002. Nonetheless, this rise has not been even, with most of the rise occurring since 2009.⁴² Although rising life expectancy can be expected to continue, this will depend heavily on other public health and institutional factors.⁴³

The 2015 national census found that Timor-Leste was home to 1.2 million people; projections expect that number to rise to 1.5 million by 2030. The 2015 population is expected to double shortly after 2050, but there is also an expectation of slowing fertility rates. Analysis of the 2015 census expects overall fertility to fall from 4.3 births/woman to 2.5 births/woman by 2050; still, very high fertility rates in the recent past (5.5-7.0 live births per woman between 1996 and 2011) mean a certain level of population rise momentum. Local fertility will continue to account for most of the population increase since Timor-Leste is relatively insulated from international migration trends.⁴⁴

A slowly falling fertility rate and the large number of children slowly entering the work force are expected to position the country well for some time in terms of dependency ratios. The provision of jobs for those entering the labor force will be crucial to managing dependency if the country is to avoid a large-scale outmigration of working-age individuals. The 2015 census already showed some evidence of migration. At present, this migration is internal, from lower-opportunity rural areas to Dili; all areas of the country are showing loss of population to the capital with administration zones farthest from the capital showing the largest loss. This poses challenges both to rural areas and to Dili's managers in terms of planning, infrastructure, and industry.⁴⁵ For example, the local unrest of 2006-2007 was influenced by youth gangs present in Dili, where they had not gained access to jobs or educational opportunities.

During the Indonesian occupation, many otherwise idle youth joined what were known as "martial arts societies." They provided not only self-defense training but also communities for people whose families were involved in the resistance or had already been lost or killed. After independence, some of these societies shifted toward criminal enterprises, extortion, gambling, etc. During the 2006 political unrest, these societies played a role in blocking roads, attacking displaced persons, burning houses, and engaging each other and security forces in fights. At the time, this challenge was bemoaned as the "youth bulge" exacerbating idle youth. More recently, those youth have aged into the labor force and are, rather, considered a boon as they provide a large component of potential workers to fuel a growing economy relatively cheaply. ⁴⁶

Ethnic Makeup

The 1.3 million people of Timor-Leste – collectively, Timorese or "Maubere" in the local dialect – are of Malayo-Polynesian and Melanesian-Papuan descent. These groups are broadly linguistic rather than strictly ethnic. Indeed, Timorese are largely genetically mixed with dominant Melanesian and Malay components alongside minority Portuguese and Chinese component.⁴⁷ Malayo-Polynesian languages of Timor-Leste are related to other Austronesian tongues present across Southeast Asia and Oceania while Melanesian languages are primarily found in the island states of Oceania. Within Timor-Leste, Malayo-Polynesian groups include the Tetun, Mambae, Tukudede, Galoli, Kemak and Baikeno. Papuan groups include the Bunak, Fataluku and Bakasae.⁴⁸ Officially, these groups range in number from 20,000 - 100,000, but this is primarily a geographic and linguistic division rather than a strict ethno-cultural one.⁴⁹

Key Population Centers

Only one-quarter to one-third of the population lives in a city or town although urban populations are growing. The average population density is low (81.5 persons/km²) but has also been steadily rising. No city or town in Timor-Leste is home to more than 300,000 people. Dili, the capital, is home to 280,000 people. The eastern town of Baucau is the second-largest settlement with an estimated 20,000 people. The towns of Maliana (Bobonaro) and Suai (Covalima) may house up to 20,000 people; Likisa, Aileu, Lospalos (Lautem), Maubara (Likisa), and Venilale (Baukau) are home to 15,000-20,000 people each; all other settlements are home to fewer than 15,000 people. Dili is the political, economic, and cultural capital of the country while other towns are the cultural and administrative capitals of their districts/ethnolinguistic groups. 50

Language

The official languages of Timor-Leste are Tetun and Portuguese, while English and Bahasa Indonesia are working languages. Estimates regarding the number of other languages range from one dozen to 32; the government suggests about 15 more indigenous languages are spoken daily on the island.⁵¹ Tetun is the native language of about one-third of the population.⁵² A Malayo-Polynesian language, Tetun is spoken only on the island of Timor (in Timor-Leste and the Indonesian province of East Nusa Tenggara). Within Timor-Leste, Tetun as a first language is concentrated in the southern districts and in the exclave, Oecussi-Ambeno. The use of Portuguese, Bahasa, and English all reflect colonial history, economic necessity, and a need to communicate across ethno-linguistic divisions via a third or neutral language.⁵³

Religion

Timor-Leste is a strongly Roman Catholic country, an inheritance of its history as a Portuguese colony. The Church is the sole religious force mentioned by name in the Constitution. The Roman Catholic Church played a key role in the independence struggles and retains the respect of a majority of citizens, meaning that official events may include prayers and/or officials from the Church.⁵⁴ An estimated 90% of the population self-identify as Roman Catholic with the remainder adhering to Protestant groups ($\sim 2\%$), Islam (less than 1%) or no organized faith.55 As with other post-colonial countries, religion in Timor-Leste bears some hallmarks of the pre-colonial animist tradition, and religious observance in the country may not strictly adhere to Western institutional norms but, rather, reflect local syncretic practices. Animism, in most contexts, sees natural phenomena, flora, fauna, and the environment as imbued with spiritual meaning and power. Ancestors often come into play in animism as a force to be placated, honored, or feared. A visible illustration of the animist tradition are the uma lulik of the Fataluku people. These structures (like the one depicted in Photo 4)⁵⁶ are holy homes that people share with their ancestors; they rebuilt the homes every 10-20 years to rebuild the bond between present and past generations. The timber, bamboo, and twine used to build them also link the families to their environment.57

Although the constitution provides for freedom of worship, religious organizations other than the Catholic Church do report some difficulties with civil servants when attempting to register as non-profits, or when registering marriages and births. The government still allocates some official funding to the Catholic Episcopal Conference of Timor-Leste while other churches do not receive equal funding. Despite instances of official deference to the Catholic Church, there is not a significant religious component to societal ills. ⁵⁸



Photo 4: An "uma lulik" of the Fataluku People

Vulnerable Groups

According to the World Health Organization (WHO), vulnerability is "the degree to which a population, individual or organization is unable to anticipate, cope with, resist and recover from the impacts of disasters." Factors such as poverty, food insecurity, and being a member of a potentially marginalized group (e.g. based on gender or age, which particularly pertains to the youth or the elderly), can contribute to the population's increased vulnerabilities. ⁵⁹ Timor-Leste's vulnerable groups include the poor, children, the elderly, and the disabled.

Poverty

Timor-Leste has a poverty rate of almost 50%. The anti-poverty efforts for over a decade have mostly been in-kind assistance and subsidies in the expectation that long-term change will come from improved education and employment as the country develops. Impoverished people are present in urban and rural areas and experience many of the same struggles for food, shelter, and health care in both situations. There is a pension program to support the elderly, disabled, female-headed poor households, and veterans of conflicts of the past 40 years. Persons displaced by conflicts have all been reintegrated with payments disbursed to those who claimed them. All camps for displaced persons have closed. There remains the potential for people who fled the country during conflict to return and require additional assistance to reintegrate.⁶⁰

ICOUNTRY OVERVIEW

Food Insecurity

Timor-Leste struggles with malnutrition, particularly among children under age five and among women; one-third of each of these groups nationally show some effects of malnutrition (stunting, anemia, etc.). Food security and nutrition are intimately tied into livelihoods across the country, particularly in rural areas where families practice subsistence agriculture. While school-age children can be targeted by school feeding programs, younger children are more difficult to reach. At least five districts in the country do not have hospitals, and villages rely on health posts. These are most often staffed by mid-wives or community health workers with basic training but who often do not have additional resources for supplemental feeding programs.⁶¹ There is, as yet, no formal process for ensuring nutrition programs reach the countryside. A portion of the adult population who experienced stunting in childhood due to malnutrition continue to experience negative health effects. Photo 5 shows participants in the Emergency Obstetric and Newborn Care training program.62



Photo 5: Emergency Obstetric and Newborn Care (EMONC) Training for Doctors and Midwives

Children/Youth

The country has a large youth population and a growing population of school-age children. Over half the population, 53.2%, is 19 years old or younger, as graphically represented in Figure 2. The population pyramid shows Timor-Leste's youth bulge.⁶³

Education is the primary tool the government is planning to use for younger children's future advancement. Meanwhile, job training and community integration is the strategy for older youth, many of whom may already have

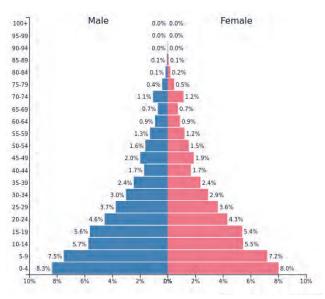


Figure 2: Timor-Leste Population Pyramid (2019)

separated from their families and joined gangs in Dili. As of 2018, nearly 200,000 children below the age of 4 were the next cohort to potentially enter pre-school; they follow 320,000 children ages 5-14 already in primary education. Their elders (140,000 teenagers aged 15-19) are working their way through secondary school.

At present, the country requires nine years of basic education, followed by three years of noncompulsory secondary education as available. As of 2010, only 11% of preschool-age children were attending school; attendance is far more common in urban areas. This reflects limits on rural communities' facilities, funding, need for children to work in homes or on farms, etc. At the same time, in 2011 some 90% of school-age children were attending compulsory primary education. Still, approximately 70% drop out before year 9. Facilities shortages and lack of standardization are obstacles. The national development strategy for 2011-2030 promised a new, nation-wide curriculum with the target of literacy and numeracy in Portuguese and Tetun.

For older youth, general (university preparatory) secondary (80%) and technical schools (20%) are available; the private sector manages one-third of students in both tracks, and 43% are located in Dili. Only 12% of students in either track finish at the appropriate age. As with younger students, facilities shortages and lack of a standardized curriculum are challenges. However, the development of secondary schools is further hobbled by poor teacher training. The long-term goal is to funnel 60% of secondary students into technical schools to train the next entrants into the labor force as the economy itself develops. At present, the focal points are agriculture, applied engineering, and services skills (business management, tourism, etc.).⁶⁴

Working-Age Youth

Once youth age out or graduate, there remain shortfalls in literacy and basic education equivalency programs that aim to help those who missed out on schooling catch up. An estimated 40% of people over 15 years old had no education while another one-quarter had only six years. This will continue to put a brake on economic development as health, education, oil-gas, and agriculture expand as a portion of the economy and increasingly require literate, numerate, and skilled individuals. By 2015, the government had targeted a 50% enrollment rate in technical training for those students who neither continue education nor immediately enter work. It is hoped that training, education, and jobs will productively channel youth who could otherwise prove long-term threats to social stability and security. 65

Elderly/Disabled

As of 2018, the population over 65 years old numbered just over 50,000,⁶⁶ but is expected to grow to 119,000 by 2030, topping 6% of the population.⁶⁷ Timorese elders are overwhelmingly rural with limited transport to access health care or other services. This places the cost for care directly on their families and broader communities where capacity is limited by education and resources. There is little ability to manage chronic disease or to address the isolation that affects the chronically ill or aged when their families and societies cannot help. Beyond social and health outcomes, the government does provide a \$30 per month benefit for people over 60 or who cannot work due to disability.68

Economics

The post-independence economy of Timor-Leste has been slow to develop despite the boost that oil and gas exploitation has provided. Conflict between 1975 and 2002 as well as during unrest in 2006 and 2008 devastated the country's infrastructure and left many people jobless or without the appropriate skills to take up jobs or create businesses. At present, the country is heavily dependent on the profits from oil and gas production for the public budget (90% of government revenue); all gas is sent to Australia for processing meaning that value-added activities are not yet providing jobs or revenues to Timor-Leste.

The government's focus is on using public revenues to build basic infrastructure, electricity, roads, etc. A cumbersome procurement process and minimal experience among civil servants has slowed progress. Thus, in recent years, there has been a move to incorporate public-private partnerships in infrastructure in hopes that opening the economy to private, large-scale, international investment will relieve some pressure on the government.

For years, the economy steadily grew at 4-6% annually but stumbled in 2017-2018 due to political instability. Economic performance has proven to be closely linked to political stability largely because of reliance on the government budget to underpin the rest of the economy. During 2017, the economy contracted by almost 5%, and it shrank again in 2018 due to a lack of certainty over parliamentary factions' ability to form a government. However, eventual government formation and approval of a 2019 budget saw a reversal that has led to projections of 4-6% growth in 2019 and 2020.69 The ability of the government to formulate spending priorities and programs is a direct investment driver. Public capital expenditures have steadily increased although private and consumer spending remain at a low level.

The three pillars of the economy are oil and gas, agriculture, and tourism, the latter two of which are largely underdeveloped. Oil and gas make up 80% of gross domestic product (GDP). Cash crops, coffee, cloves, and vanilla have steadily become stronger export commodities alongside staple crops for local consumption. All agricultural outputs have posted gains in production in recent years with coffee alone marking upwards of 30% growth annually.⁷⁰ Meanwhile, tourism remains a longer-term goal since hospitality facilities are rudimentary. Shortterm projections see the economy continuing to grow by 4-6% annually on the basis of sustained financial stimulus and steady consumer confidence barring shocks.⁷¹ Domestic demand will have a significant impact on inflation and could drive food prices higher and influencing farmers throughout the country. The potential for rising food prices poses a risk since it will likely entail increased direct subsidies to the country's poor. Photo 6 depicts a farmer in central Timor-

ICOUNTRY OVERVIEW

Leste harvesting strawberry crops planted via a U.S. Agency for International Development (USAID) program.⁷²



Photo 6: USAID Program Assistance in Timor-Leste

In terms of spending, public expenditures account for roughly half of total domestic spending. Non-public spending is heavily reliant on wage growth and social transfer programs (direct stipends and subsidies). This means that construction, commerce, and services all rely heavily on a stable government revenue and spending policy. Construction is one of the most reliable service sectors given the government prioritizing infrastructure. Construction tends to contribute 20% of total services with relatively large growth annually since 2014.⁷³ In addition to basic infrastructure projects, the country is constructing Tibar Bay Port (launched in September 2018). Over the shortterm this project will provide construction jobs while over the longer-term, it will open a route for import-export and even trans-shipment business. Tibar Bay is the country's first publicprivate partnership (PPP) project; it will result in a state-of-the-art cargo port. The French transport conglomerate, Bolloré, won the 30-year concession tender with a 3-year construction timeframe and the projection of 500 local jobs created.74

The development of Tibar Bay Port is tracking

to provide much-needed trade and transport capacity. Trade is critical to the maintenance of the economy since the country produces few consumer or capital goods. Imports far outstrip exports with exports accounting for less than 5% of all trade (by cost). Most of the potential for export growth is in vulnerable natural resources forestry and stone products – whereas long-term planning seeks to export services. Meanwhile, the country imports food, gasoline and other fuel products, and machinery.⁷⁵ Despite the importance of imports, the country has only one port: Dili. To date, Dili has had limited capacity with a single 280 meter wharf (5-9m draft alongside) that can accommodate 3 vessels at any one time. It has limited storage.⁷⁶ In 2016, France's Bolloré gained the concession to build and operate a deep-sea, multi-function port with the ability to handle container vessels up to 7,000 TEU at Dili. (TEU, or twenty-foot equivalent, is an inexact container capacity, based on the volume of a 20-foot long container with the height most commonly being 8 feet 6 inches.) When complete, the expansion will have a 630m wharf (15m draft alongside), a 27-hectare container yard, gantry cranes (5 x ship-to-shore; 13 x rubber-tire), 20,000 TEU of container storage and a total annual capacity of 1 million TEU.7

Export-import infrastructure can only do so much. Road transport is the main mode of transport within the country which has only 6,000 km of roadway. Roughly 50% of the road network is underdeveloped rural tracks. The core network consists of 1,426 km of national roads and 869 km of district roads; almost 70% of these roads are in very poor condition and some sections are narrow and located in difficult terrain. With major port structures and population centers all on the north coast, these areas have, naturally, been the focus of paving and development schemes. However, with 75% of the population located inland, extending roads to these rural, agricultural communities will be required to improve rural economic development. 78

Government

The Democratic Republic of Timor-Leste is governed by the President, who is head of state, and the Prime Minister, who is head of government. There is a unicameral legislature, the National Parliament. The President is directly elected by popular vote for a five-year term (last election: 2017); although the President is supreme commander of the armed forces, he or she wields less power than the Prime Minister. The Prime Minister (PM) is selected by the party or parties with a majority in the National Assembly. The PM then forms a cabinet, the Council of State, with the agreement of the President. The legislature has a varying number of seats (from 52 to 65 – every party that secures more than 4% of the vote gets a proportional number of seats), and members of the national parliament are elected by popular vote on party lists to five-year terms (last election 2017).⁷⁹

Administratively, the country is divided into 12 municipalities and one special region, as depicted in Figure 3.⁸⁰ The municipalities are: Aileu, Ainaro, Baucau, Bobonaro (Maliana), Covalima (Suai), Dili, Ermera (Gleno), Lautem (Lospalos), Liquica, Manatuto, Manufahi (Same), and Viqueque. Oecussi-Ambeno (Pante Macassar) is the special region and an exclave found on the western half of the island. Names in parentheses above are the main settlements of the municipality; otherwise, the main town is the namesake of the municipality.

Each municipality is divided into subdistricts and sucos, the latter being the Timorese equivalent of villages, the smallest administrative unit and calculated to have a manageable number of inhabitants.⁸¹ Governance is relatively decentralized, due partially to capacity limitations at the national level. Nonetheless, political parties tend to be national and to be present in most villages due to the parties' emergence from Indonesian Occupation-era resistance groups.

The sitting President, elected in 2017, is Francisco "Lu'Olo" Guterres (b. 1954). Before becoming President, Lu'Olo was part of leftwing, nationalist Fretilin among the resistance groups battling Indonesian occupation. He rose through the ranks to become the president of Fretilin. After independence, he became the president of the National Parliament and was involved in crafting the constitution. At present, Lu'Olo enjoys wide respect from the population for his role in securing independence, but younger generations are expected to begin demanding more than just historical accomplishments and will pressure older politicians to produce or depart. A major part of this will be transitioning the country away from limited oil and gas reserves, while still expanding infrastructure and opportunity.82

The sitting Prime Minister is Jose Maria de Vasconcelos "Taur Matan Ruak". Taur Matan Ruak ("two sharp eyes") served as President (2012-2017). He belongs to the Alliance of Change for Progress (AMP) which includes the People's Liberation Party (PLP), National Congress for Timorese Reconstruction (CNRT), and Khunto. The coalition holds more than half of the seats in the current Parliament. The long-standing ruling party (and the President's party), Fretilin had formed a minority government between 2017 and 2018.⁸³ The most important challenges to the current leaders are reducing poverty, stamping out corruption, and

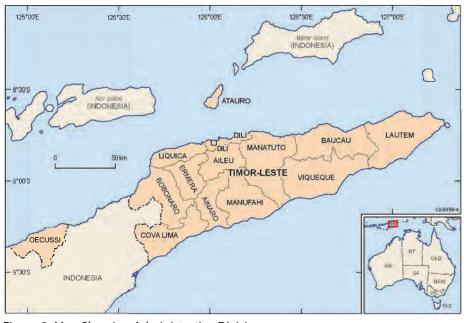


Figure 3: Map Showing Administrative Divisions

developing resources. CNRT and Fretilin are the country's two longest-standing political parties, formed from resistance-era militia. Both skew somewhat to the left with Fretilin more avowedly so. Together, in coalition or separately, they have provided the leaders of the country since independence. Only in 2017 did two new parties win sufficient votes to enter Parliament, the People's Liberation Party (PLP) and Khunto. PLP skews somewhat more centrist and financially moderate while Khunto was formed

from one of the country's youth martial arts street gangs and only contested its first election in 2017. Khunto's ideological underpinnings are unknown. Neither PLP nor Khunto has any governing experience, underscoring the sustained dominance of the resistance-era parties.⁸⁴

Environment

Timor-Leste lies on the eastern half of Timor Island within the Malay/Indonesian Archipelago in Oceania. The island is among the Lesser Sunda Islands, lying between the Savu and Timor Sea basins about 400 km north of Australia. The island itself was formed by continental uplift, and it lies on a major fault that has produced some undersea volcanic activity in the vicinity of Timor-Leste's Atauro Island. Some geothermal activity continues in the form of mud pools and hot springs in the Oecussi exclave, and in Marobo, Waicana, and Uato Carbau, and on Atauro.⁸⁵

Geography

The land on Timor-Leste rises steeply from the narrow coastal plain to the central mountains (over 2,000 km in elevation). The highest point is Foho Tatamailau (also known as, Mt. Ramelau) at 2,963m. The northern coast tends to rise more sharply to the mountains than do the southern coastal areas, where plains can stretch 20-30 km inland. There are some areas of rolling plains in eastern and northern areas, around Lospalos, Baukau, and Maliana.⁸⁶ Figure 4 shows the topography of Timor-Leste.⁸⁷ The steep lands mean that rivers are inconsistent. In the rainy season, they flow swiftly from the mountains, but during the dry season, they can all but disappear. There are 29 main river systems, 12 in the north and 17 in the south. All are short and fastflowing; the total river distance in the country is 4,200 km with a total river basin area of 14,870 km² (nearly the entire country). Lake Ira Lalaro (east of Los Palos) is the only standing fresh water and varies in size seasonally from 10 km² to 55 km² of surface area.⁸⁸ The southern coasts are marshy and host salt lakes important for the island's wildlife.⁸⁹

Timor-Leste covers 14,874 km² of land, including the Oecussi exclave. Nearly half of the country's land area remains forested. About one-quarter of the land is used for agriculture, which remains largely subsistence due to isolation of communities and poor farm to market infrastructure, and primarily roads. The exception to this subsistence-based farming is the coffee industry which generates an estimated 90% of the country's non-energy exports.⁹⁰ Any expansion of farming or forestry is a sensitive issue because of the steep slopes of the country's mountains. In the pre-colonial and colonial era, the island was a source of sandalwood. The logging of sandalwood started a process of deforestation that continues today with cutting, land clearing, and livestock eating young plants. This clearing has exacerbated landslides and loss of topsoil that threatens both agriculture and downstream communities.

Most coffee growers use a three-crop, tiered system that includes shade trees, legumes, coffee, and grasses, but other areas use less sustainable and less productive methods. Subsistence farmers tend to grow rice and maize with rice areas irrigated by gravity when river waters are highest. Other food crops include cassava, sweet potato, taro, banana, squash, beans, peanuts, and white potato. Cassava, sweet potato, and taro are the main sources of calories for the population. Cropping systems vary depending on topography, elevation, and rainfall pattern. One or two crops of rice dominate irrigated or rainfed areas of the northern lowlands. Where no irrigation water is available, maize or peanut followed by cassava, sweet potato, or beans are common. Cropping systems on the northern slopes include single or two crops of flooded rice, maize, cassava, sweet potato or pumpkin, or mixed cropping of maize, cassava, kidney beans or peanut, and sweet potato. In the northern and southern highlands, small, communal areas of rice exist alongside maize, cassava, sweet potato, beans, and kantas. On the southern slopes, farmers grow maize followed by cassava or mixed maize with cassava, sweet potato, and peanut, but because of the relatively longer wet period, cropping systems are usually of longer duration.⁹¹ Photo 7 depicts women in Timor-Leste planting in the rice fields.92

Borders

Timor-Leste shares land borders only with Indonesia's East Nusa Tenggara province, which comprises the western portion of Timor Island. The land borders are 253 km in length, which

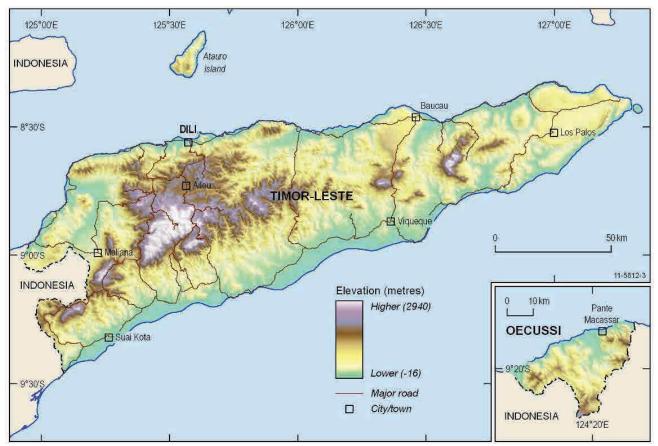


Figure 4: Topography of Timor-Leste



Photo 7: Planting Rice in Timor-Leste

include the main border through the center of the island as well as the border around the Oecussi exclave on the northern coast of the Indonesian half of the island. Timor-Leste has 706 km of coastline on the Savu Sea, Wetar Strait and Timor Sea.⁹³

Climate

The climate is tropical and fed by the Western Pacific Monsoon. From December to March, northwest winds bring the principal rains. From May until October southeast winds prevail, bringing mostly dry conditions, except on the southern coast and southern mountain slopes where the wet season persists until July. The northern coast sees very little rain for most of the year (April-November). Average annual rainfall is around 1,500mm (59 inches), but there is wide variability. The northern coast receives ~500mm (20 inches) while the central mountains can receive more than 2,000mm (79 inches). There is little temperature variation except as influenced by elevation. Average temperature at sea level is 27°C (81°F); this falls to 24°C (75°F) at 500m (1,640 feet), 21°C (70°F) at 1,000m (3,281 feet), 18°C (64°F) at 1,500m (4,921 feet), and 14°C (57°F) at 2,000m (6,562 feet). It is generally very humid (70-80%).94

The El Niño Southern Oscillation (ENSO) has an important influence on rainfall. In the 1997-98 and 1982-83 El Niño events, the annual rainfall in Dili was the lowest and second lowest, respectively, in 48 years of records (1950 to

ICOUNTRY OVERVIEW

1999). In El Niño years, places such as Ainaro and Lautem experience annual rainfall that is up to 50% less than average, while others such as Bacau and Oecussi receive greater rainfall than average. The wet season is delayed by two to three months in El Niño years, and rainfall can be higher than the annual average in the following year with implications for crop planting, food security, and flooding. Timor-Leste experiences drought once every four years; during these events, rainfall is diminished but still begins at the end of November. In an El Niño year, rainfall is not only diminished but the onset of rains is delayed.⁹⁵

Climate Change

While Timor-Leste does not necessarily contribute directly to global climate change, it does confront challenges within its local environment and potentially faces disastrous effects from global changes. Historic exploitation of resources include over-logging, land-clearing, and over-hunting/fishing. Communities that rely on the country's forest lands today face a shortage of food, fuel, medicines, and building material.⁹⁶ Moreover, continued unsustainable practices contribute to future shortages and risks. Locally, soil erosion and deforestation are major challenges that increase the risk of landslides and reduce productivity of agricultural lands. Beyond these local effects, the rise in global sea levels from climate change threatens the country's coastal areas and will affect rainfall patterns. 97

While the country is a party to major global

climate and environment agreements, its own laws show shortfalls in outlining the legal requirements of government and citizens regarding protection, conservation, and access. By 2030, the country aims to have laws in place that can be enforced to ensure the sustainable use and protection of forests, rivers, seas, and fauna. Moreover, the government is planning to reduce the risks of coastal flooding, forest fires, and food shortages, but it fully expects those events to happen regardless of its own actions. The first expected effects of climate change are for hotter and drier dry seasons, greater

variation in rainfall, and damage to coral reefs.⁹⁸ The impact on agricultural production and tourism are the most obvious risks of these changes.

Keeping in mind Timor-Leste's large youth bulge, almost 95% of youth consider the environment important to livelihoods. Approximately 70-80% believe that erosion, landslides, drought, flooding, and a lack of access to clean water are major issues, and around 60% believe deforestation, slash-andburn farming, and land and air pollution are also issues. Some 86% feel responsible for protecting the environment, but only around 40% have participated in an environmental protection activity.⁹⁹

Direct efforts to address activities that impact climate, ecology, and the environment include halting illegal logging, rehabilitating forests, stabilizing forest areas, and managing forest fires. Meanwhile, broader protection regimes are being brought into force that encourage sustainable use, such as a national bamboo marketing strategy for both income and erosion control. Natural area conservation schemes are starting with the Nino Konis Santana National Park (est. 2007).¹⁰⁰ The 1,200 square kilometers of protected space at the eastern tip of the island encompass marine and forest resources and cover Lake Ira Lalaro and Jaco Island (shown in Photo 8).¹⁰¹ Facilities development and enforcement of protections are still being worked out, but it is expected that the national park will prove to be the example of future conservation and mixed-use schemes.

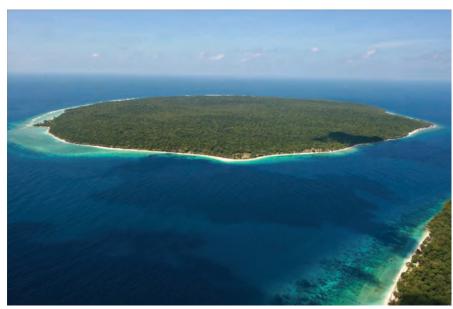


Photo 8: Jaco Island and the Mainland



TIMOR-LESTE Disaster Overview

Disaster Management Reference Handbook | October 2019

DISASTER OVERVIEW

Disaster Overview

Timor-Leste faces several natural disaster risks, including frequent flooding, recurrent landslides, rapid deforestation, and climate changeinduced drought.¹⁰² The country also counts earthquakes, tsunamis and tropical cyclones as threats.¹⁰³ The 2015 Global Assessment Report on Disaster Risk reduction identified flood as Timor-Leste's most frequent natural disaster, followed by drought and storms. Additionally, climate change threatens to create a hotter, drier, climate, potentially causing harsher and longer drought conditions, heavier rainfall and increased flooding and landslide hazards.¹⁰⁴ Timor-Leste has no active volcanoes, however, is susceptible to risk by Holocene volcanic groups on neighboring Indonesian Islands to the west and east.¹⁰⁵ Timor-Leste's susceptibility to floods, landslides and prolonged dry spells, can trigger insect infestations, diseases, and cause food insecurity. In the last decade, the country has suffered 470 disaster events.¹⁰⁶ Figure 5 shows International Reported Losses to natural disasters from 1990-2014.¹⁰⁷

Hazards

Flooding

Flooding is Timor-Leste's most frequent natural disaster.¹⁰⁸ The country is affected by two main types of flooding: riverine flooding and flash floods. Both are results of heavy rains, low soil permeability, and rapid excessive runoffs from high mountain range slopes to the streams below. Major flood events affected several thousand people in Timor-Leste during events in 2001, 2003, 2007, and 2010.¹⁰⁹

Landslides

January 12, 2012, a landslide in Suco Mulo, Ainaro district, caused damage to 70 houses, affected 20 people. The same day, another landslide in Suco Faturasa, Aileu district caused damage to 15 houses, and affected 15 people. Rainfall, and seismicity were the main causes of landslides in the country with Sucos Ainaro, Aitutu, Beboi Leten, Catrai Craic Cotolau, Edi, and Fatisi the most susceptible to landslides.¹¹⁰ Community volunteers and staff planted 15,580 trees to combat major landslides and protect traditional farming techniques, harvesting and natural erosion.¹¹¹

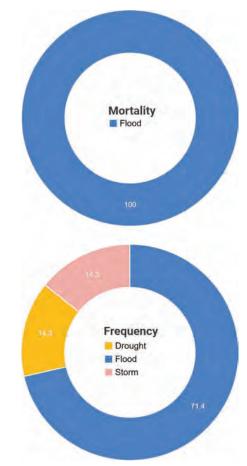


Figure 5: International Reported Losses (1990-2014)

Drought

Timor-Leste has suffered from the effects of extreme and extended droughts over the last several years. The dry season in 2015 was exacerbated by El Niño conditions affecting 400,000 people across Covalima, Oecusse, Baucau, Viqueque, and Lautem municipalities.¹¹² In May 2017, a Start Fund Alert was submitted for a potential secondary El Niño scheduled to arrive in November 2017. This drought would have further impacted the country still recovering from the previous drought conditions of 2015-2016. Five agencies responded to the alert with assistance of food and seed distribution, early warning system analysis, and other drought preparedness activities to help mitigate the impact of the imminent drought on the communities.¹¹³

Earthquake

Timor-Leste is located near one of the most active tectonic plate boundaries in the world.¹¹⁴ As a result, the high seismic activity and its exposure to frequent earthquakes cause significant damage including triggering landslides with devastating impact to citizen's lives, livestock, roads, infrastructure, and property. Coastal communities also have a risk of tsunami due to the seismic activity of the location and are of particular concern after the Indian Ocean tsunami affected the region. However, tsunamis have not historically affected the island.¹¹⁵

Extreme Weather

Timor-Leste is plagued with seasonal monsoon rains and cyclones that regularly cause damage and destruction to homes, particularly in rural communities. The monsoons are of two varieties, the Northwest (also known as the wet monsoon) exhibits with storms and flooding; and the Southeast (also known as the dry monsoon) characterized by strong winds to the south of the island.

Additionally, the island is heavily affected by La Niña and El Niño climate events producing localized wind, flood, and landslides and impacting agriculture, roads and infrastructure, and homes in all 13 districts of the country. In the 2008 wet season, 3,600 homes were destroyed, prompting substantial government and international intervention efforts to improve risk reduction preparedness across the country.¹¹⁶ La Niña weather phenomena, although positively impacting Timor-Leste communities by improving agricultural production and water security, negatively results in increased flooding, landslides and erosion.

Cyclones currently have a low frequency of occurrence, however, due to climate change, this is expected to change. Climatologists predict Timor-Leste is likely to become increasingly vulnerable to cyclones, tropical storms, and flood, prioritizing the need for radical climate adaptation measures.¹¹⁷

Recent History of Natural Disasters

Flood – June 2001

Heavy flooding lasting three days resulted in approximately 1,000 people left homeless in eastern Timor-Leste in June 2001. Peacekeepers from UNTAET responded by providing support and relief, access to protection centers and rescuing people from isolated areas.¹¹⁸ The number of affected people rose to 2,508 and one person was killed. A reported 19.35 metric tons of food relief was received from World Food Program (WFP) in coordination with U.S. Support Group East Timor (USGET). Additionally, the Special Representative of the Secretary-General (head of UNTAET), released US \$5,000 for reconstruction of homes in the Lautem District.¹¹⁹

Flood – June 2003

Heavy rains caused severe flooding in the districts of Cova Lima, Manufahi and Viqueque in southwestern Timor-Leste. Substantial damage to infrastructure including roads, bridges, stores and livestock housing resulted in the displacement of approximately 450-600 villages and damage to 125 homes.¹²⁰

Additionally, flooding damaged 381 hectares of rice fields, 672 hectares of farmlands, and affected over 7,000 people in southwestern districts of Timor-Leste, leading to short term emergency aid by UNOCHA and USAID. Extended results included food security concerns exacerbated by the previous year's drought caused overall food production shortfall by 21%. The Government of Timor-Leste via a letter from the Prime Minister requested assistance to cope with the food shortage.¹²¹

Flood – January 2006

Several storms caused floods from December 2005 – January 2006 resulting in damages to 1209 homes and affecting 8400 people. The floods also contributed to health problems including diarrhea, malaria and dengue in some districts. The Cruz Vermelha de Timor-Leste (CVTL, or Timor-Leste Red Cross) responded by deploying disaster management and health teams to conduct assessments and restore availability of safe drinking water for affected communities.¹²²

Flood – July 2013

Excessive rainfall in June 2013 resulted in severe flooding in four districts of Timor-Leste including Viqueque, Bacau, Shame, and Spol. It was reported that 2,572 families (totaling approximately 20,624 people) were affected. No human casualties were reported. The Government coordinated response to the affected population and 1,700 families were returned to their homes after living in temporary shelters during the event. Flood waters contaminated 125 wells and schools were closed for several days until confirmation that no damage was reported to the buildings. Among the responding organizations, the National Directorate of Disaster Management (NDDM) provided essential support including food and clothing; the Ministry of Health and district

DISASTER OVERVIEW

health offices provided medical support and organized awareness in affected areas to prevent diarrhea; and UNICEF provided 410,000 water purification tablets and 840 family hygiene kits to affected families. Additionally, 1,280 jerry cans and 1,240 bars of soap were provided to the district of Soi. CVTL and Oxfam responded by providing family kits including tents, tarpaulin, cooking pots and pans, blankets and hygiene kits, soap, rice and disinfectant. Oxfam also assisted with cleaning the well in the Soi district.¹²³

Earthquake - April 2015

A 6.3 magnitude earthquake struck the capital of Timor-Leste, Dili, causing minor damage and no reported casualties. Some buildings were damaged and telephone lines were temporarily affected. Aftershocks measuring 5.7 and 4.9 in magnitude followed but caused no additional damages.¹²⁴

Drought - 2015 - 2017

Timor-Leste suffered from severe drought during the 2015-2017 period due to the El Niño event. The rainy seasons during that time frame did not provide sufficient water to recover the land causing crop failure and livestock reduction which threatened food security. Agriculture is one of the main industries in the country and citizens were particularly vulnerable to food losses.¹²⁵ National and international responses were made to the Prime Minister's declaration of emergency in May 2016 followed by a revised emergency appeal in September 2016 requesting \$751,074 Swiss francs (776,492 USD) to support the CVTL in delivering humanitarian assistance to 27,500 people.¹²⁶ Figure 6 depicts the Red Cross' response to the areas of the drought response.

Earthquake – April 2019

A 6.3 magnitude earthquake struck 122 miles north-northwest of Dili at 9:55pm on 6 April 2019. The U.S. Geological survey reported the earthquake was manually reviewed and assigned it an alert level of green, indicating zero fatalities and less than \$1 million in losses.¹²⁷

Flooding - May 2019

Flooding due to Cyclone Lili was reported on 11 May 2019 near Baucau and Lospalos which were the worst affected by the floods. Several homes were damaged, resulting in some residents having to evacuate their home. Infrastructure was also affected, but no fatalities were reported.¹²⁸

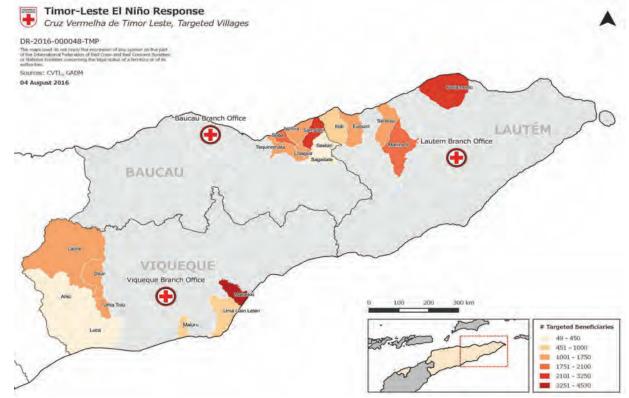


Figure 6: Map of Red Cross Responses in Timor-Leste

Country Risks

Environmental Degradation

Unsustainable land management, agricultural practices, and unregulated tree-cutting have resulted in severe forest deforestation and degradation, high soil loss and reduced water flow to rivers in Timor-Leste. Climate change adaptation has therefore become an urgent issue with a need to adapt farming and forestry systems to ensure a more sustainable future. As a result of this need to look toward sustainability and adaptation, the Building Resilience to a Changing Climate and Environment (BRACCE) project was begun. The BRACCE project aims to increase environmental and community resilience to climate change through integrated and specific activities targeting deforestation, land and water catchment degradation and addressing environmentally unsustainable agriculture and forestry practices at the policy level. They further aim to improve household incomes and bolster local communities from the potential effects of climate change.

Declining soil organic matter, reduced fertility, landslides and erosion is caused by the slash and burn agriculture in Timor-Leste, which features annual burning. However, though the forests have been heavily degraded, living tree trunks remain in most hills from which rapid reforestation is a possibility.¹²⁹ Specific projects in Aileu and Bobonaro districts have seen remarkable transformation with regard to revitalization efforts and development of sustainable livelihoods to mitigate climate change and deforestation. Farming communities were also shown how to provide shade and wind protection by growing nitrogen-fixing fodder trees, grow mulch crops to increase soil fertility, establish big compost pits and use organic matter from weeds and tree leaves. Additionally, they built small dams and irrigation channels in project villages, and slopes were terraced to halt erosion and capture and store water. They also introduced raised bed farming to protect crops from water-logging. World Vision expected BRACCE, to benefit 12,000 people across four Aileu sub-districts with a total budget of US \$2,602,757 over five years.¹³⁰

Internal Conflict

In March 2006, approximately 591 soldiers from the Timor-Leste defense force were dismissed from service. The relieved soldiers were from the western part of the country and had grievances over the alleged favored treatment of soldiers from the eastern part of Timor-Leste. Civil unrest ensued, causing the CVTL to shift its focus from responding to flood conditions to helping thousands of internally displaced people (IDP) fleeing their homes for safe camps. Approximately 4,000 houses were burned down. There were 78,000 IDPs in Dili and another 70,000 in other regions (one sixth of the population). The arrival of an Australian-led military mission, with support from Portugal, New Zealand, Malaysia and UN missions, improved the security situation and projects began to be implemented again.¹³¹

Food Security

The low crop diversity in Timor-Leste creates a situation where any disruption to household food production immediately and severely impacts food security. Approximately twothirds of the population suffers food shortages annually for at least two months during the period from October to March.¹³² As a result, Oxfam Australia has organized relief via 'Haforsa' a five-year program from the Strengthening Community Livelihoods Program which aims to increase incomes and food security of men and women and build their resiliency to the erratic and changing climate. The program assists local farmers to make improvements to their farming techniques, diversify their crops with more resilient crops better suited to the climatic conditions, access local markets, and weatherproof their gardens. In 2017-2018, approximately 15,000 men and women were assisted through this program and as a result, farmers' annual income improved and their food security became more stable.¹³³

In addition to the impact flooding and drought risks have on food security, agricultural production is also vulnerable to insect and rodent infestation as well as bacterial plant diseases.¹³⁴

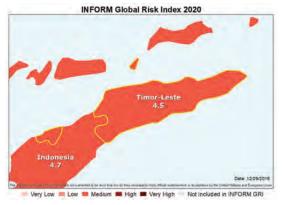
Country Risk Profile

Disaster risk involves exposure to hazards, vulnerability, and lack of coping capacity, all of which are important factors in disaster risk management. Figure 9 shows INFORM's risk profile for Timor-Leste. INFORM is a global, objective, and transparent tool for assessing the risk of humanitarian crises. INFORM is a composite indicator, developed by the European Commission Joint Research Centre, combining 53 indicators into three dimensions of risk:

IDISASTER OVERVIEW

hazards (events that could occur) and exposure to them, vulnerability (the susceptibility of communities to those hazards) and the lack of coping capacity (lack of resources that can alleviate the impact). It is a collaboration of the Inter-Agency Standing Committee Reference Group on Risk, Early Warning and Preparedness and the European Commission. The index results are published once every year.

INFORM gives each country a risk score of 1-10 (1 being the lowest and 10 the highest) for each of the dimensions, categories, and components of risk, as well as an overall risk score. The higher the score the more vulnerable a country is. The purpose of INFORM is to provide an open, transparent, consensus-based methodology for analyzing crisis risk at global, regional or national level. Timor-Leste has a 2020 INFORM Global Risk Index of 4.5; a Natural Hazard and Exposure risk of 3.4; a Vulnerability score of 4.2; and a Lack of Coping Capacity score of 6.2. Earthquakes (6.3) and Tsunamis (6) are Timor-Leste's highest scoring vulnerability to natural disasters.¹³⁵ The INFORM scores for Timor-Leste are show in Figure 7.



| | Value | Rank | Trend |
|-------------------------|-------|------|-------|
| INFORM Risk | 4.5 | 66 | - |
| Hazard & Exposure | 3.4 | 97 | - |
| Vulnerability | 4.2 | 72 | - |
| Lack of Coping Capacity | 6.2 | 44 | — |









Figure 7: INFORM Risk Profile Timor-Leste (2020)



TIMOR-LESTE Organizational Structure

Disaster Management Reference Handbook | October 2019

Organizational Structure for Disaster Management

The Ministries of Interior and of Social Solidarity have joint responsibility for disaster response. The Ministry of Social Solidarity (MSS) is responsible for coordinating preparation and response in relation to any emergency. Under MSS sits the National Disaster Management Directorate (NDMD), composed of the Disaster Operation Centre (DOC), the Departments of Preparedness and Formation, Prevention and Mitigation, Response and Recovery, and disaster management committees at district, sub-district, and village/suco levels. The Joint National Disaster Operation Centre can stand up to function on a 24-hour basis, equipped with communications equipment, a secure power supply, and disaster-proof structures.¹³⁶

The National Disaster Management Directorate (NDMD) is responsible for providing disaster risk management coordination and technical support to the government and community. It supports the National Disaster Coordinator (NDC) during disaster response operations. The district is the basic unit for risk management. District Administrators (DAs) serve as the District Disaster Coordinator (DDC). A District Disaster Management Committee (DDMC), containing district representatives of key government and non-governmental agencies, assists the DDC. During emergencies, the functions of the DDMC are to:

- Coordinate rapid assessment surveys of affected areas and analysis of results;
- Coordinate district financial resources to provide the most effective response to identified needs; and
- Recommend the timing and content of requests for national support, identifying the type, scale and timing of the support, and the logistical information needed for effective delivery.

At the sub-district level, the Sub-District Administrator (SDA) is responsible for emergency and disaster risk reduction activities. When the response to a major emergency or disaster is beyond the capability of sub-district resources, assistance should be sought from the DDC, then from national level. Generally, within each village, the Suco Chief (Xefe) and village leaders (elders, traditional leaders and village councils) are responsible for emergency and disaster risk reduction activities. When a village requires assistance, a request should be passed through the village head to the SDA.¹³⁷ Timor-Leste's Disaster Risk Management Organizational Structure is presented below in Figure 8.

Inter-Ministerial Commission for Disaster Management

The Inter-Ministerial Commission for Disaster Risk Management (CIGD) is comprised of the Vice-Prime Minister (National Coordinator); representatives of the Ministries of Social Solidarity; Foreign Affairs and Cooperation; Finance; Justice; Education; Health; Infrastructure; Commerce, Industry and Tourism; Economy and Development;

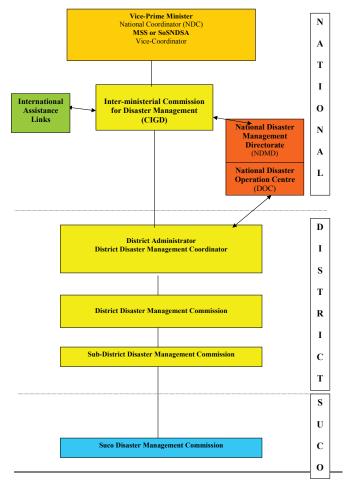


Figure 8: National Disaster Risk Management Organization Chart

Agriculture and Fisheries; and State Public Works. It also incorporates other government representatives, the Commanders of F-FDTL and PNTL, the Secretary General of Red Cross Timor-Leste (CVTL); representatives of civil society and the UN.

CIGD is tasked with the following:

- Conduct an annual review of national disaster risk reduction policy and strategic development;
- Provide an annual report to the Prime Minister on national disaster risk reduction to include recommendations on priorities;
- Provide technical and policy advice and resource support to the National Disaster Coordinator (NDC) and the Joint National Disaster Operations Centre (DOC) during response operations, if required; and Assign responsibilities related to disaster risk

management to relevant departments and other bodies.¹³⁸

Crisis Management Centre

The Crisis Management Centre, also known as the Centro de Integrado de Gestao de Crisis (CIGC) was established in Timor-Leste by the National Security Law Article 29 as a specialized arm of the government under the supervision of the Prime Minister. The CIGC coordinates strategic development for prevention, mitigation, and resolution for threats, conflicts, catastrophes and calamites in the country.

The CIGC's mission is to coordinate, provide advice and consulting with technical and operational directorates for the activities conducted by entities involved in the National Security Integration System (SISN). In particular, the Centre manages the strategic development of conflict prevention. The Centre also provides support to entities to define their roles and operational response to government requirements with regard to threats to national security.¹³⁹

CIGC has the following competencies:

- To study and propose best practices or collaborative mechanisms between entities taking part in the SISN;
- To study and propose resources for the improvement of defense and security forces and civil protection members responding to threats or risks in Timor-Leste in accordance with competencies attributed to them;
- To study and propose coordination and mobilization of personnel integrated under SISN and utilizing those facilities to respond

to threats, risks, crises, or conflict and disasters in Timor-Leste;

- Proposing rules of engagement and standard operating procedures for the Defense and Security Forces and the Civil Protection staff to adopt in order to cope with high risk situations or threats to National Security;
- Defining the coordination and international cooperation for defense and security forces and services taking part in the SISN;
- Preparing public policy on Internal Security and preparing cooperation mechanisms between relevant defense and security services to contribute to internal security;
- Proposing intern-ministerial cooperation to ensure internal security when threats, risks, crises, or conflict and disaster arise;
- Preparing and proposing strategies and a national action plan in the area of criminal prevention;
- Preparing the National Security Integrated Plan; and
- Other tasks attributed to the Centre.

The CIGC is also responsible for the strategic management of crises and briefing the Prime Minister. The National Disaster Operations Centre (NDOC) is responsible for the tactical management of a disaster.¹⁴⁰

Lead Government Agencies in Disaster Response

Institutionally, disaster risk management is coordinated by the National Disaster Management Directorate (NDMD), the lead agency under the Ministry of Social Solidarity (MSS). NDMD has district level agencies, District Disaster Management Commissions (DDMC). At the sub-district level, there is the Sub-District Disaster Management Commission (SDDMC) and at the village/suco level, there is the Suco Disaster Management Commission (SDMC). ¹⁴¹

National Disaster Management Directorate

The National Disaster Management Directorate (NDMD) is responsible for providing disaster risk management coordination and technical support. Duties and responsibilities of NDMD are:

IORGANIZATIONAL STRUCTURE

- Acting as Timor-Leste's center for disaster risk reduction activities – collecting information, monitoring overseas developments and proposing developments for incorporation into the national disaster risk reduction system;
- Developing strategies in disaster risk reduction including preparedness and response plans and procedures and assisting in district planning;
- Administering and providing secretariat support to the inter-agency council;
- Establishing and sustaining links to risk assessment and monitoring in the region, and interpreting and providing warning and strategic planning;
- Acting as the contact point for initial reports of emergencies and disasters in conjunction with the DOC;
- Coordinating disaster risk management including scheduling of regular meetings of stakeholders;
- Organizing and leading multi-sector damage and needs assessment teams during response when necessary;
- Developing and conducting public information and awareness programs in cooperation with other relevant agencies;
- Developing disaster risk reduction and emergency response training programs in conjunction with relevant partners;
- Maintaining and developing a National Disaster Risk Management Information System;
- Developing or identifying the sources of baseline data for use in disaster preparedness and response activities;
- Maintaining, reviewing and developing the National Disaster Risk Management Policy (NDRMP) and advising on other sector and development policies, strategies and legislation related to disaster risk management; and
- Administering a national regional strategic stockpile of disaster response assets.¹⁴²

District and Village Disaster Management Commissions

DDMC, SDDMC and SDMC work mostly in response to the occurrence of disasters. Efforts are still limited to responding as there is not an overall systematic effort in disaster management that ranges from mitigation to rehabilitation and reconstruction. At the village/suco level, the commission is responsible for verifying disaster sites and reporting their findings up to the district level.¹⁴³

Other Government Agencies

The Ministries of Health, Civil Protection and Infrastructure, the National Police (PNTL) and the armed forced (F-FDTL) will provide staff to the Disaster Operations Center (DOC), assist in evacuations and staff/supply evacuation centers, and deploy assessment and repair teams as necessary to support disaster response efforts.¹⁴⁴

Key Disaster Management Partners

Various agencies of the United Nations system are present and active in Timor-Leste and have a remit to promote disaster risk management and to participate in disaster response. Timor-Leste relies heavily on international agencies, particularly the United Nations Development Program (UNDP), World Bank and Australiabased NGOs under the Australian Department of Foreign Affairs and Trade's (DFAT) Australian Humanitarian Partnership (AHP). The Humanitarian Country Team (HCT) has been set up to coordinate emergency response operations; headed by the UN Resident Coordinator. The HCT is organized under the auspices of the Ministries of Interior and Social Solidarity, UNDP and Plan International.¹⁴⁵

The UN Development Programme (UNDP) established a Disaster Risk Management Program at the national, municipality and village/suco levels. UNDP has helped to build capacity of the national Disaster Operation Centre (DOC) and pushed for vulnerable communities to engage in disaster risk reduction practices. The World Bank has offered different forms of humanitarian assistance. In 2015, Dili and the World Bank signed a grant agreement of US\$2.7 million to fund a community-based disaster risk management project along the Dili-Ainaro road corridor, where flash floods, destructive winds and landslides frequently threaten infrastructure and livelihoods.¹⁴⁶ The International Organization for Migration (IOM) runs workshops for government leaders, civil servants and communities. IOM's two-pronged effort includes: 1) raising awareness in reducing risk by managing the environment, and 2) building community capacity to respond to wet season emergencies.¹⁴⁷ The World Food Program (WFP) helps upward of 4000 people every month via food and nutrition programs. It works with

various international and national organizations to delivery supplementary feeding supplies to schools and to provide training and inputs to farming communities to increase resilience.¹⁴⁸

Australia-based NGOs are important development partners which include: the Australian offices of CARE, Caritas, Oxfam, Plan International, Save the Children, and World Vision. Plan International supports an emergency preparedness and prevention program focused on helping children, parents, teachers and community members understand how to prepare, mitigate and prevent disasters through Child-Centered Disaster Risk Reduction (CCDRR). CARE Australia works with poor farmers and their families to help them grow their own food, sell surplus crops for profit and to store seeds for the next season so that food shortages are reduced.¹⁴⁹

Department of Foreign Affairs and Trade (DFAT)

Australia is Timor-Leste's largest development partner, investing an estimated \$95.7 million in official development assistance (ODA) to the country. Australia via the Department of Foreign Affairs and Trade (DFAT) expects to provide an estimated \$100.7 million in ODA, including \$73 million in bilateral funding to Timor-Leste in 2019-2020. The funds provide aid in building the Timorese economy, supporting private sector development through policy, regulatory and legal reform, as well as creating jobs and increasing income for the people. Additionally, funds are used to assist in improving the citizen's wellbeing by increasing services to women and girl's safety and empowerment, and improving all citizen's lives through quality health care including access to clean water and sanitation, and basic education. DFAT also aids in improving governance at the sub-national level and supporting village infrastructure and developing policy to develop and improve villages across the country. During 2018-2019 Australian aid resulted in the following improvements:150

- 12,000 trained to deliver better services including health professions, teachers, and nutrition-sensitive agricultural workers
- 2,200 equipped for community management and constructions jobs
- 10,000 instances of support services including medical support, accommodation, legal advice, and rehabilitation, provided to people affected by violence.

 Over 5,000 people increased income through seasonal work and market development initiatives.

UN Development Programme (UNDP) Timor-Leste

The Standard Basic Assistance Agreement (SBAA) signed at independence in 2002 provided an early framework for UNDP's work in the country as well as the ongoing legal basis for UNDP's operations in Timor-Leste. The current UNDP Country Program Action Plan (CPAP) 2015-2019 was designed in partnership with state institutions, responding to the key priorities of the Government of Timor-Leste over the period. UNDP has an office in Dili. Email: registry.tp@undp.org

International Office of Migration (IOM)

IOM first began work in Timor-Leste in August 1999; it provided return and reintegration assistance to the approximately 190,000 Timorese who fled to West Timor during the 1999 post-referendum violence, participated in the disarmament and reintegration of ex-Falintil and undertook community stabilization and infrastructure programs. IOM is assisting the Government of Timor-Leste in the development of coherent and well-coordinated migration management systems and runs a variety of counter-trafficking activities. IOM has an office in Dili. E-mail: iomdili@iom.int

United Nations Children's Fund (UNICEF)

Since the restoration of independence in 2002, UNICEF has been working to promote and protect the rights and wellbeing of children alongside the Government of Timor-Leste and business and civil society organizations with the goal of ensuring the rights of all girls and boys to survival, development, protection and participation.

UNICEF has an office in Dili. E-mail: dili@unicef.org

World Food Programme (WFP)

WFP works in close collaboration and coordination with the Government of Timor-Leste, with a view to strengthening its capacities for delivering social safety programs. WFP has a three-pronged set of operations focused on nutrition, capacity-strengthening and South-South cooperation. WFP has an office in Dili.

ORGANIZATIONAL STRUCTURE

E-mail: WFP.Dili@wfp.org *World Health Organization (WHO)*

The WHO country office provides technical assistance to the Ministry of Health with five strategic goals in mind: 1) strengthening health systems; 2) reducing the burden of communicable diseases; 3) inter-sectoral collaboration to reduce the burdens of communicable disease, mental health, violence, injuries and disabilities, and aging. The WHO has a representative in Timor-Leste. E-mail: pandavr@who.int

International Federation of Red Cross and Red Crescent Societies

The International Federation of Red Cross and Red Crescent Societies (IFRC) is a humanitarian organization that provides assistance and promotes humanitarian activities by National Societies, with a view to preventing and alleviating human suffering. It was founded in 1919 and includes 190 Red Cross and Red Crescent National Societies. The IFRC carries out relief operations to assist victims of disasters and combines this with development work to strengthen the capacities of its member National Societies.¹⁵¹

The Timor-Leste Red Cross

The Timor-Leste Red Cross or Cruz Vermelha de Timor-Leste (CVTL), was legally recognized as an auxiliary to the Government in September 2005. CVTL has 2,367 members, 164 staff, 2,858 volunteers and a network of 13 branches across

all 13 municipalities/districts in Timor-Leste. It is headquartered in Dili. ening of disaster risk and response. Involvement in national disaster simulation exercises and annual district-level simulations is key to national and district DMCs' capacity to respond when required and deliver coherent

and rapid response. The installation of four warehouses and nine shipping containers across the 13 district branches facilitates prepositioning of emergency stocks and equipment to ensure CVTL can respond where needed. In 2014, CVTL acquired two inflatable boats for maritime search-and-rescue, and has since conducted week-long training simulations. CVTL conducts regular trainings to ensure the readiness of 350 staff and volunteers.¹⁵²

including developing inter-agency contingency

Photo 9 depicts CVTL volunteers participating

in program to boost community awareness of

plans and standard operating procedures (SOPs).

U.S. Government Agencies in Timor-Leste

U.S. government agencies present in Timor-Leste include: Departments of State, Defense, and Justice; USAID, and the Peace Corps.¹⁵³ The U.S. is not only a large bilateral development assistance donor, but it supports development activities by multi-lateral partners, including the UN, Asian Development Bank (ADB), and World Bank. The focus of assistance is on governance, economic growth, health systems, and professionalizing security forces.¹⁵⁴

As an auxiliary to the Government, CVTL plays a key role as a first-responder in saving lives and restoring livelihoods, including via the provision of emergency water and sanitation, hygiene promotion, protection, shelter, non-food items and livelihoods support. National and branch staff and volunteers conduct needs assessments, distribute relief items, attend coordination meetings with other emergency response actors, and where necessary, assist evacuation of at-risk communities. CVTL participates in national emergency management planning,



Photo 9: Timor-Leste Volunteers in a Community Awareness Program

Peace Corps

Two Peace Corps projects launched in 2018: Community Economic Development (CED) and English Education. Together, they have 28 volunteers in-country.¹⁵⁵ CED promotes financial literacy, supports development of income generation and entrepreneurial activities, and strengthens organizational/management practices. CED volunteers are present in rural communities, working with women's groups, youth, and community leaders. English Education volunteers are also present in rural communities, teaching English in secondary schools, strengthening English teacher skills, and enhancing classroom materials and resources.¹⁵⁶

Peace Corps Contacts in Timor-Leste

No. 12 Rua Nu'u Laran Bairro Dos Grilhos Dili, Timor-Leste Tel: +670-331-0133 Mobile: +670-7751-3080 E-mail: PCTimor-Leste@peacecorps.gov or TL01-info@peacecorps.gov

U.S. Agency for International Development (USAID)

In Timor-Leste, USAID focuses on capacitybuilding. This includes programs to strengthen democratic institutions, expand inclusive economic growth, and improve health services. Most of the economic component is to improve the sustainability and productivity of the country's agriculture. This plays out in the form of equipment transfers and the establishment of farm-market links for non-subsistence products.¹⁵⁷ The health component has played out in the delivery of health promotion sessions especially for peri-natal women and child health care, delivery of immunizations for children, and delivery of contraception.¹⁵⁸ Governance interventions see USAID engage with the Office of the Prosecutor-General, Central Bank, and Parliamentary research staff.¹⁵⁹ Photo 10 depicts a USAID training event in Timor-Leste.¹⁶⁰

Contact information for USAID

USAID Timor-Leste U.S. Embassy Dili Avenida de Portugal Praia dos Coqueiros Dili, Timor-Leste Web: https://www.usaid.gov/timor-leste



Photo 10: USAID and Partners Run a Disaster Simulation Training

USAID Mission Contact

Diana Putman, Mission Director 8250 Dili Place Sergio Vieira De Mello Rd. Farol, Dili, Timor-Leste 20189-8250 Tel: +670-332-2211 Fax: +670-332-2216 E-mail: usaid-timor-leste-info@usaid.gov

USAID Contact in Washington, DC

Zachary Child, Desk Officer U.S. Agency for International Development (USAID) 1300 Pennsylvania Avenue, NW Washington, DC 20523 Tel: (202) 216-6967 E-mail: ZChild@usaid.gov

U.S. Embassy

The U.S. Émbassy in Dili supports American citizens living or traveling in Timor-Leste; it promotes U.S. interests and develops friendly, cooperative relations with the people and Government of Timor-Leste. Additional assistance for non-standard services (including all passport and visa transactions) is provided by the U.S. Embassy in Jakarta, Indonesia.¹⁶¹

Contact information for the U.S. Embassy includes: *U.S. Embassy in Dili* Avenida de Portugal Praia dos Coqueiros Dili, Timor-Leste Tel: +670-332-4684 Fax: +670-331-3206 Web: https://tl.usembassy.gov/

ORGANIZATIONAL STRUCTURE

U.S. Embassy in Jakarta

American citizen services Jalan Medan Merdeka Selatan No. 5 Jakarta Pusat10110 Tel.: +62 21 5083 1000 ext. 0 (operator); Fax.: +62-21 385-7189; E-mail: jakartaacs@state.gov

Participation in International Organizations

Timor-Leste's foreign policy places high priority on its relationships with Indonesia, Australia, other neighbors, and friendly countries and donors, most notably the Community of Portuguese Language Countries (CPLP), and member states of the Association of Southeast Asian Nations (ASEAN).¹⁶²

Timor-Leste participates in the following multi-lateral/international organizations:

African, Caribbean and Pacific Group of States (ACP), Asian Development Bank (ADB), Alliance of Small Island States (AOSIS), ASEAN Regional Forum (ARF), Association of Southeast Asian Nations (ASEAN) observer, Community of Portuguese Language Countries (CPLP), Extractive Industries Transparency Initiative (compliant country) (EITI), Food and Agriculture Organization of the United Nations (FAO), Group of 77 (G-77), International Bank for Reconstruction and Development (IBRD), International Civil Aviation Organization (ICAO), International Criminal Court (ICC), International Development Association (IDA), International Fund for Agricultural Development (IFAD), International Finance Corporation (IFC), International Federation of Red Cross and Red Crescent Societies (IFRC), International Labor Organization (ILO), International Monetary Fund (IMF), International Maritime Organization (IMO), Interpol, International Olympic Committee (IOC), International Organization for Migration (IOM), Inter-Parliamentary Union (IPU), International Telecommunication Union (ITU), Multilateral Investment Guarantee Agency (MIGA), Non-Aligned Movement (NAM), Organization for the Prohibition of Chemical Weapons (OPCW), Pacific Island Forum (PIF), United Nations (UN), United Nations Conference on Trade and Development (UNCTAD), United Nations Educational, Scientific, and Cultural Organization (UNESCO), United Nations Industrial Development Organization (UNIDO),

Union Latina, United Nations World Tourism Organization (UNWTO), Universal Postal Union (UPU), World Customs Organization (WCO), World Health Organization (WHO), World Meteorological Organization (WMO).¹⁶³

Foreign Disaster Relief and Emergency Response

In the past two decades, Timor-Leste has experienced many small-scale disasters. The country is prone to severe and recurrent drought, flooding and landslides. Cyclones, earthquakes and tsunamis also pose a risk. According to the National Disaster Management Directorate (NDMD), the country sees upwards of 20 floods annually, affecting all districts in the country.¹⁶⁴ As flooding occurs almost annually in some areas, the NDMD and UN Resident Coordinator often work closely to examine the extent of the need and elicit an appeal, as necessary. This most often incorporates UNDP and the national Red Cross Society (CVTL). CVTL and Australia-based NGOs are the most common implementing partners, providing the NDMD with plans for the scope and budgets of their responses and then launching their operations.

As an example of how responses can work, in May 2017, an alert of an anticipated drought was published by NDMD and CVTL, and various global and regional partners noted it, offering funding as needed. Timor-Leste had suffered a severe El Niño in 2015-2016; a second drought would have been immensely detrimental. Five agencies responded – four through "food and seed distribution" and one through an early warning system analysis and some drought preparedness activities with local partners.¹⁶⁵ Figure 9 shows the humanitarian response to the 2017 drought in Timor-Leste.¹⁶⁶

In the end, by September 2017, El Niño and drought-related operations brought in many stakeholders. The response was led by the Ministry of Interior and supported by the Ministry of Social Solidarity. The Ministries of Agriculture and Fisheries; Commerce, Industry and Environment; Health; and Public Works, Transport and Communications; and the National Disaster Management Department (NDMD) were all involved. UN agencies (WFP, OCHA, UNICEF, UNDP, WHO and FAO) all contributed alongside international NGOs (CARE, Caritas, Plan International, Catholic Relief Services, Mercy Corps, Oxfam and World Vision). Within a week of the alert and funding offer, nearly 40,000 people were reached with food/nutrition and livelihoods assistance.¹⁶⁷

Laws, Policies, and Plans on Disaster Management

To date, Timor-Leste lacks legislation to support its national disaster risk management policies. Despite the existence of a disaster risk management policy, the country still lacks longrange mitigation and preparedness planning at the national, institutional level.¹⁶⁸

Timor-Leste has the following plans and policies regarding disaster management:

National Disaster Risk Management Policy (2008)

The 2008 NDRM policy outlines the government's vision of disaster management from the national to the village level. It lays out

the plan to develop disaster risk management programs in vulnerability assessments, risk analyses, early warning systems, crisis management, post-disaster research and review, recovery and reconstruction, raising awareness of disaster risks and management, and human resource development. In 2013, the government conducted a National Hazard, Vulnerability and Risk Assessment with UNDP to develop a new Disaster Risk Management Policy and Legislation. However, the new policy and legislation have yet to be announced.¹⁶⁹

Under the policy, the Ministry of Social Solidarity (MSS) set out the following general policies:

- Ensure, through the National Disaster Management Directorate (NDMD), that disaster risk is reduced in the territory of Timor-Leste;
- Implement the organization and the functioning of the Suco (village) Commissions, or relevant bodies,

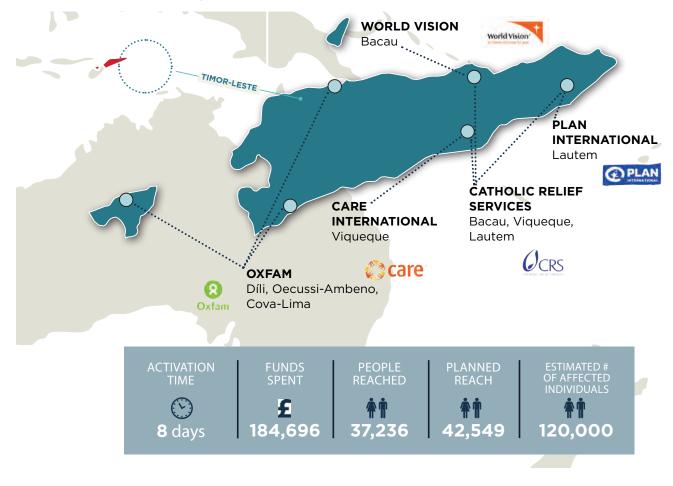


Figure 9: Reaction to 2017 Drought Alert

IORGANIZATIONAL STRUCTURE

emphasizing the necessity and the importance of an articulated and timely response by local bodies;

- Support the districts and sub-districts to implement disaster risk reduction plans with the aim of guaranteeing the reduction of disasters in the communities;
- Promote the arrangements of urban space with the aim to minimize the unorganized occupation of disaster risk areas, with the aim to reduce vulnerabilities of urban and rural areas against landslides, floods and other disasters;
- Establish criteria related to risk assessment and risk evaluation, with the aim to direct disaster risk reduction planning to the most vulnerable areas of the country;
- Prioritize actions related to disaster prevention through evaluation and disaster risk reduction;
- Implement interaction between government agencies and local communities, especially through District, Sub-District and Suco (village) Commissions, with the objective to guarantee and integrate response activities for the whole country;
- Implement cultural change and training for volunteer programs using a participatory approach involving communities, so they are well informed, prepared and conscious of their rights and obligations in relation to community protection from disasters;
- Promote the integration of the National Disaster Risk Management Policy into other national policies, especially socio-economic development and environmental protection policies;
- Establish a National Information System on Disaster Risk Management;
- Seek new financial sources for NDMD to improve the existing mechanisms and implement projects that attract technological and/or financial support through international agencies and/or bilateral cooperation;
- Implement activities to reduce natural disasters through international partnerships with the objective to promote bilateral and multilateral cooperation in the area of disaster risk reduction;
- Foster studies and research on disasters and implement scientific and technological developmental projects related to disaster risk reduction;

 Develop implementation plans and legislation related to disaster risk reduction.¹⁷⁰

National Adaptation Program of Action (NAPA) for Climate Change (2010)

The vision of the NAPA for Climate Change (2010) was to make Timorese citizens more resilient to the impact of climate change by understanding their vulnerability in an economy that focuses on subsistence farming. The program introduced adaptation initiatives that seek to reduce the impact of climate change and to promote sustainable development.¹⁷¹

National Strategic Development Plan (2011-2030)

Although disaster management was included in the Ministry of Social Solidarity strategic plan (2009-2012), it was not integrated into the National Strategic Development Plan (2011-2030). Rather, the NSDP focuses on social and economic policy to consolidate security.¹⁷² Activities that improve social and economic security have the potential both to bolster and to erode disaster preparedness, depending on the incorporation of environmental concerns and goals into plans.

Education and Training

The Ministries of Interior and of Social Solidarity have joint responsibility for disaster response; their most common civil society partner is the Red Cross of Timor-Leste or Cruz Vermelha Timor-Leste (CVTL). Within the Ministry of Social Solidarity, the Directorate of Disaster Risk Management handles information regarding disasters and directs resources to assist victims.¹⁷³ Timor-Leste experiences hundreds of small-scale disasters annually, mostly linked to heavy rains and flooding.

In April 2019, the Secretary of State for Civil Protection (SEPC) of Timor-Leste signed a Memorandum of Understanding (MoU) with CVTL for cooperation in managing/responding to natural disasters (2019-2024). The goal is to build cooperation between the Secretariat and CVTL and to build the country's human resources for response.¹⁷⁴ CVTL carries out contingency planning and awareness raising programs to prepare the public for various scenarios. This includes annual districtlevel simulations as well as other educational initiatives related to health emergencies including disease outbreaks. They are present in all 13 municipalities and can conduct doorto-door campaigns, over-the-road banners, radio and television campaigns, community meetings, and public service announcements.¹⁷⁵ In 2017, the International Committee of the Red Cross (ICRC) provided Training of Trainers in international humanitarian law.¹⁷⁶

Since 2014, the National Directorate for Disaster Risk, UN Development Programme (UNDP), and PLAN International have partnered on the Community-Based Disaster Risk Management (CBDRM) project to increase the capacity of communities along the Dili-Ainaro road to reduce the impacts of landslides and floods. These trainings focus on communicating the risk of flooding and landslides, facilitating planning, and promoting investment to reduce impacts. This affects 26 local councils who are being assisted in preparing comprehensive disaster management plans.¹⁷⁷ The project concluded in 2019 with PLAN and the World Bank laying out recommendations for follow-up projects.

The International Organization for Migration (IOM) provides capacity-building support, funded by USAID-OFDA. Alongside the National Disaster Risk Management Directorate (NDRMD), it conducts training on coordination, planning, and multi-agency cooperation. IOM focuses on village-level trainings for resiliency and risk reduction. It also works with local/ national media on disseminating disaster information. Annually, IOM can engage upwards of 1000 training participants for emergency response, 3000 participants in awareness campaigns, and hundreds of others for smaller programs.¹⁷⁸

In April 2019, staff from the Office of Civil Protection, the National Directorate of Disaster Risk, the National Police, and fire departments were part of the U.S. Pacific Fleet program, Pacific Partnership. Therein, they discussed disease mitigation, emergency pre-planning and mental health assistance, particularly in the potential case of a mass evacuation in a natural disaster (MEND).¹⁷⁹

Disaster Management Communications

Radio and television reach nearly the entire national territory, and radio is ubiquitous, operated at both national and local/community levels.¹⁸⁰ The country relies heavily on mobile telephone since the fixed-line network is limited and lacks investment. Mobile subscriptions number 120 per 100 inhabitants with 3G the most common type of service, covering 97% of the population.¹⁸¹ The expansion of the national fiber-optic network is improving communications and e-government services, albeit slowly. 4G communications are increasingly available across the country although the expense of data plans limits the number of people using them.¹⁸²

Early Warning Systems

Early Warning Systems (EWS) and other emergency communications have been codified into policy at the national level, but implementation has been uneven at the municipality, district, and village/suco level. Budget shortfalls, communications network limitations, transportation difficulties, and human resource shortages all play a role in slowing the roll-out.¹⁸³ In addition to shortfalls in weather stations and other structures that can send alerts to leaders, the challenge of who will respond to alerts, relay them, and prioritize response remains unanswered in many districts. Locations that have received NGO or global financial and technical support are more likely to have stronger EWS protocols.

Since mid-2017, the country has partnered with the World Meteorological Organization (WMO) to boost EWS capacity. The primary goal is to inform the country's farmers so that they can reduce loss and damage. During 2017, IOM assisted communities to put in place solar powered loud-speakers and facilitated communities to undertake disaster drills.¹⁸⁴ This expansion was boosted in 2018; the Ministry of Social Solidarity, supported by the Ministry of Transport and Communication and UNDP, installed equipment to expand the EWS with weather stations and water level meters along the Dili-Ainaro road that is highly susceptible to flooding and landslides. These automatic elements are designed to send warnings to local community leaders who will then disseminate the information as necessary. ¹⁸⁵

EWS infrastructure is in place in every district but not every village/suco. When the district or municipality leadership receives warning about a disaster from national leadership, they are tasked with immediately informing the community. Actions may include going to the atrisk villages in person if there is no other means to deliver information. In many cases, mobile phones or radio will be available, but cases where the network is not active or where it has been

ORGANIZATIONAL STRUCTURE

damaged will require in-person communication. District leaders may rely on national police radio or other national media. When a village/ suco becomes aware of an impending disaster, the village chief (Xefe Suco) has primary responsibility for communicating the situation upward to the municipality.¹⁸⁶

Timor-Leste lacks its own meteorological monitoring capacity, data management, and forecasting system. Thus, it has agreements with various regional and international entities (mostly in Australia) to receive climate/weather alerts and other hazard up-dates. In 2016, the Petroleum and Geology Institute (IPG) took over management of a national seismological monitoring system that is networked to the national disaster monitoring bodies as well as to global scientific and academic partners.¹⁸⁷ The Dirreção Nacional Meteorologia e Geofisica (DNMG) is the national focal point for alerts from national bodies and global partners. DNMG's ability to then disseminate information relies on mobile networks, mass media, and personal contacts rather than automated services.188

Responsible Agencies for Flood and Storm Warning

The Ministry of Social Solidarity (MSS) is responsible for coordinating the preparation and response in relation to any emergency. Under MSS is the National Disaster Management Directorate (NDMD), composed of the Disaster Operation Centre (DOC), the Departments of Preparedness and Formation, Prevention and Mitigation, Response and Recovery, and disaster management committees at Districts, Sub-district, and village/suco levels. The national Disaster Operation Centre (DOC) was established to function on a 24-hour basis, operated by well-trained personnel equipped with communications equipment, a secure power supply, and disaster proof structures. The functions of the DOC are:

- Direction and control of survival recovery efforts and operations;
- Public information regarding emergencies;
- Early warning and notification;
- Damage assessment;
- Evacuation, traffic control, and security;
- Health and emergency medical care;
- Emergency food and shelter;
- Debris clearance; and
- Restoration of utilities.¹⁸⁹

Timor-Leste has minimal capacity for monitoring or analyzing hazards and climate changes. DNMG and the NDMD continue to rely on regional partners and global bodies for information. DNMG has yet to begin publicizing its own cyclone tracking and early warning via digital platforms; it likely continues to rely on Australia's Bureau of Meteorology and other international bodies for time-sensitive monitoring and public information regarding cyclonic events.¹⁹⁰

Armed Forces Role in Disaster Response

The Timor-Leste Defense Force, FALINTIL-Forcas Defesa Timor Lorosae (F-FDTL) is the country's military force. The constitution assigns F-FDTL responsibility for protecting against external attack while the National Police (PNTL) are responsible for internal security. F-FDTL's mission is:

- Defense against any external threat;
- Support to other the security forces and civil protection authorities;
- Support to the population; and
- Support to the state's foreign policy.

F-FDTL is a light infantry force of 1500 active troops and 1500 reservists. It includes a headquarters and components (Land, Light Naval, Air Support (not yet raised), Service Support, Education and Training, Military Police, and the FALINTIL Unit). To date, F-FDTL believes that it is only required to respond to large-scale disasters, and its training regime for such responses is not detailed. During annual drought and flooding seasons, F-FDTL commonly responds by providing logistical and transportation support as requested by NDMD.¹⁹¹ There remain high rates of community confidence in F-FDTL nationally due, in part, to the lingering presence of independenceera veterans at many levels;¹⁹² this confidence suggests that the presence of national military forces during a disaster response, particularly in rural areas, is unlikely to have any immediate negative repercussions.¹⁹³

Information Sharing

Understanding how to overcome the information challenges that civilian and military agencies experience during a typical disaster response mission is important. Knowing what the available information resources are will assist Joint Task Force leaders and staff during mission planning.¹⁹⁴ The sharing of information is critical because no single responding entity (host government, NGO, international organizations or assisting country government or foreign military forces) can be the source of all the required information.¹⁹⁵

Collaboration, information sharing (IS), and networking have been the backbone of successful disaster response and preparation. Disseminating information not only to those in country and threatened by disaster but also to those responding to the emergency has been crucial to timely, efficient and effective disaster response. Recent technology has advanced to aid in both prediction and when and how to send alerts regarding disasters around the world, and these advances have resulted in improved early warning and evacuation measures and opportunities to react and prepare for incoming threats to countries. The following are some of the ways in which information regarding disaster risk management and response are shared.

There are many resources, stakeholders and components to consider regarding information sharing before, during and after a natural disaster. This section will discuss government, country specific, humanitarian and regional sources.

Country-specific information sources:

National Disaster Management Directorate

Ministry of Social Solidarity Rua de Caicoli Dili, Timor-Leste Tel: +670 331 0940 E-mail: dngd@mss.gov.tl Website: http://www.mss.gov.tl/

Directorate of Meteorology and Geophysics (DNMG)

Ministry of Transport and Communication Rua Avenida Fransisco Xavier do Amaral, Nº 8 Ex.Telecom Mercado Lama Dili, Timor-Leste Tel: +670 333 9355/9353 Website: http://www.mtc.gov.tl/

Joint Australia Tsunami Warning Centre (Bureau of Meteorology)

Since 2013, Australia has provided tsunamiwarning services to Timor-Leste. http://www.bom.gov.au/tsunami/iotwms/ The Indian and Indonesian Warning systems may also provide warnings and updates: Indian Tsunami Early Warning Centre (ITEWC): http://www.incois.gov.in/Incois/tsunami/ eqevents.jsp Indonesian Tsunami Early Warning System (InaTEWS): http://rtsp.bmkg.go.id

Humanitarian Information Sources

ReliefWeb is a service of UNOCHA that consolidates information and analysis from organizations, countries and disasters for the humanitarian community.

Website: https://reliefweb.int/

PreventionWeb is provided by UNISDR to consolidate disaster risk reduction information into an online, easy to understand platform.

Website: https://www.preventionweb.net/english/

International Federation of Red Cross and Red Crescent Societies (IFRC) is the world's largest humanitarian network, with over 13.7 million volunteers helping to reach 150 million people in 190 National Societies, including Timor-Leste's CVTL. IFRC provides support to and coordination among national societies as needed, working before, during and after disasters and health emergencies to meet the needs and improve the lives of vulnerable people.

In Southeast Asia, Facebook and Twitter have become increasingly important platforms for a wide range of purposes. In 2015, IFRC identified and facilitated a peer-to-peer exchange, in the area of social media, between the Indonesian and Timorese sister National Societies (Palang Merah Indonesia (PMI) the Indonesian Red Cross, Cruz Vermelha Timor-Leste, or CVTL). Since PMI had strong experience in the strategic use of social media, a common language (Bahasa), geographical proximity, and shared cultural understanding, they were the ideal partner to mentor CVTL in this area.

Timor-Leste's social media usage has increased drastically with approximately 25% of the population active on Facebook. Additionally, PMI led training in Timor-Leste to raise the importance of social media in disseminating information to wide audiences during emergencies, and promoting the utilization of the power of social media.

This training with 23 participants from across CVTL, including staff from the Communications, Disaster Management,

ORGANIZATIONAL STRUCTURE

Health, Youth, Finance, Fundraising, RFL and Organizational Development units. The objectives of the training were to raise the importance of social media; to learn to use social media to disseminate information for wider audiences during emergencies, non-emergencies and for advocacy (campaigns); and to encourage CVTL staff to regularly and systematically send updates to the CVTL communications team.¹⁹⁶

Website: https://media.ifrc.org/ifrc

Joint Typhoon Warning Center provides advanced warning for U.S. Government agencies and organizations in relevant areas.

Website: https://www.metoc.navy.mil/jtwc/jtwc. html

Humanitarian Response is a platform providing the humanitarian community a means to aid in coordination of operational information and related activities.

Website: https://www.humanitarianresponse.info

DKI-APCSS is a U.S. Department of Defense institute that addresses regional and global security issues, inviting military and civilian representatives of the U.S. and Asia-Pacific nations to its comprehensive program of executive education and workshops.

Website: https://apcss.org/

Global Disaster Alert and Coordination System (GDACS)/Virtual OSOCC is a cooperation framework between the United Nations, the European Commission and disaster managers worldwide to improve alerts, information exchange and coordination in the first phase after major sudden-onset disasters.

Website: https://vosocc.unocha.org

The latest alerts can be found here: http://www.gdacs.org/Alerts/default.aspx

To subscribe: http://www.gdacs.org/About/ contactus.aspx

Consider other sources of information, such as:

Humanitarian Country Teams (HCT)

The HCT is a strategic and operational decision-making and oversight forum established

and led by the Humanitarian Coordinator in each country. It is generally comprised of representatives from the UN, IOM, international NGOs, and the International Red Cross and Red Crescent Movement. During a disaster response, HCT's often produce a Situation Report, often in conjunction with UNOCHA.

Most HCT SitReps can be found through ReliefWeb: https://reliefweb.int/.

Humanitarian Data Exchange (HDX) is an open platform for sharing data across crises and organizations launched in 2014 with the goal of centralizing humanitarian data for easy access and analysis. HDX is managed by OCHA's Center for Humanitarian Data in The Hague.

Website: https://data.humdata.org/faq

Regional Information Sources

Changi Regional HADR Coordination Center (RHCC) was launched in September 2014 by Singapore's Ministry of Defence to support the military of a disaster affected state in coordinating relief efforts with assisting foreign militaries. It aims to provide open, inclusive and flexible platforms that allow both regional and extra-regional militaries to work together effectively in a multinational disaster response effort. RHCC manages the OPERA CIS web portal to broadcast updated situation status of multinational military responses to disasters to minimize duplication and gaps in the provision of foreign military assistance.

Website: https://www.changirhcc.org/

To subscribe to RHCC Weekly and Spot Reports, email: Changi_RHCC@defence.gov.sg

United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA) Regional Office for Asia and the Pacific (ROAP) seeks to optimize the speed, volume and quality of humanitarian assistance and coordinates emergency preparedness and response in the world's most disaster-prone region in support of national governments. ROAP covers 41 countries partnering with them for coordinated and effective international responses to emergency situations.

Website: https://www.unocha.org/roap For UNOCHA situation reports, click on "Subscribe" button on bottom of page.

ASEAN Disaster Information Network (ADINET), is a publicly sourced open repository of information concerning regional hazards and disasters. The platform is run by the AHA Centre, which receives information and reports submitted from the public regarding hazards and disasters in the area. Once a report has been submitted, AHA will vet the information for relevance and accuracy and then add the new information to the platform. Individuals and agencies can sign up to receive real time alerts to their email address on various categories such as tsunami, volcano, earthquake, floods, oil spills, landslides, etc. The ADINET has been recording disaster information in the region since 2012.¹⁹⁷ Although Timor-Leste is not an ASEAN member, it can be affected by major disasters reported by member-states.

Website: http://adinet.ahacentre.org

U.S. Government (USG) Sources

Office of Foreign Disaster Assistance (OFDA)

The U.S. Office of Foreign Disaster Assistance is responsible for leading and coordinating the U.S. Government response to disasters overseas. OFDA responds to an average of 65 disasters in more than 50 countries every year. OFDA fulfills its mandate of saving lives, alleviating human suffering and the reduction of the social and economic impact to disasters worldwide in partnership with USAID functional and regional bureaus and other U.S. government agencies. OFDA works with the international population to assist countries prepare for, respond to and recover from humanitarian crises.¹⁹⁸

USAID/OFDA products are situation reports and maps which are available via email mailing lists.

For OFDA updates on a disaster response, ask the OFDA representative for USINDOPACOM (whose Area of Responsibility includes Timor-Leste) to add you to the email list: OFDAindopacom@ofda.gov

U.S. Agency for International Development (USAID)

USAID's presence in Timor-Leste regarding Disaster Risk Reduction (DRR) has been focused in the five most disaster prone districts of the country (Bobonaro, Ermera, Baucau, Manatuto and Lautem districts) to assist those communities in utilizing globally accepted best practices in the reduction of the impact of disasters to their citizens. Through the use of small grants, training, and education, USAID, partnering with the International Organization for Migration (IOM) has been able to build capacity by passing on formalized strategies and providing mitigation efforts for DRR related activities. USAID's simulation exercises bring the district together so that national and local responders coordinate efforts to develop action plans thereby enhancing the capacity of the Timorese authority and community to respond to disaster risks and manage disaster response.¹⁹⁹

USAID is committed to responding to crises around the world to help people and places most in need. They aim to:

- Promote Global Health
- Support Global Stability
- Provide Humanitarian Assistance
- Catalyze Innovation and Partnership
- Empower Women and Girls

USAID produces a monthly newsletter called USAID Newsletter which is available digitally at: https://www.usaid.gov/news-information/ newsletter

More information and updates from USAID is available via their blog, IMPACT at, https://blog. usaid.gov/ and on Facebook, Instagram, Twitter, and YouTube.

Website: https://www.usaid.gov/

Pacific Disaster Center (PDC) Global

The Pacific Disaster Center (PDC) Global has trademarked an early warning and decision support system called DisasterAWARE[®]. DisasterAWARE[®] is primarily for disaster management practitioners and senior decision makers. It supports disaster risk reduction and best practices throughout all phases of disaster management from early warning to multi-hazard monitoring. It boasts the largest collection of scientifically verified, geospatial, data and modeling tools to assess hazard risks and impacts.

The PDC also hosts a public application, Disaster Alert which is a free, early warning app to receive customizable map based visual alerts of active hazards. The app offers the fastest, most comprehensive global notification system covering every type of natural and man-made hazard to the public. It is available on both iPhone and Android. There is also a link to Disaster Alert without the app to view the world map documenting 18 hazard types.²⁰⁰

IORGANIZATIONAL STRUCTURE

Website: https://www.pdc.org/ https://www.pdc.org/apps/disasteraware/

Emergency Operations (EMOPS) system: (Request account): https://emops.pdc.org/emops/

All Partners Access Network (APAN)

APAN is the Unclassified Information Sharing Service (UISS) for the U.S. Department of Defense. APAN provides the DoD and mission partners community space and collaboration tools to leverage information to effectively plan, train and respond to meet their business requirements and mission objectives. Importantly, APAN's technology team has been supporting humanitarian assistance and disaster response (HADR) operations for over 15 years. APAN has played an integral role in the success of disaster responses, such as the 2015 California Wildfire Response and the 2013 Typhoon Haiyan Response, in which they provided organizations and militaries a centralized location to share information, increase situational awareness and decrease response time and duplicated efforts for best practices in HADR services.²⁰¹

Website: https://www.apan.org/

Note: The Multinational Communications Interoperability Program (MCIP) has an APAN site used in planning exercises and real world HADR information sharing.²⁰²

CFE-DM

The Center for Excellence in Disaster Management and Humanitarian Assistance (CFE-DM) is a U.S. Department of Defense organization that was established by U.S. Congress in 1994 and is a direct reporting unit to

U.S. Indo-Pacific Command. CFE-DM provides training and education to help U.S. and foreign military personnel navigate complex issues in DMHA. They produce country focused disaster management reference handbooks, after action reports and disaster management country assessments, which provide best practices and lessons learned for advancement in response coordination. CFE-DM also works to improve cross-coordination and reduce duplication of efforts and promote U.S. involvement in civil-military consultations and dialogues with relevant HADR parties, such as the AHA Centre, UNOCHA and the Changi RHCC. CFE-DM provides DMHA resources and updates at its website, as well as via their Facebook and Twitter accounts.203

CFE-DM Disaster Management Reference Handbooks provide a baseline of information regarding countries prone to disasters. The handbooks offer readers an operational understanding of a nation's disaster management capability and vulnerability, with detailed information on demographics, hazards, government structure, regional and international assistance, infrastructure, laws and guidelines, risks and vulnerabilities and other areas vital to a comprehensive disaster management knowledge base. Figure 10 shows a selection of CFE-DM's Reference Handbooks. There are currently 23 countries available for download at: https://www.cfe-dmha.org/DMHA-Resources/ Disaster-Management-Reference-Handbooks

CFE-DM Disaster Information Reports: https://www.cfe-dmha.org/Publications/Reports

Website: https://www.cfe-dmha.org/



Figure 10: CFE-DM Disaster Management Handbooks



Disaster Management Reference Handbook | October 2019

IINFRASTRUCTURE

Infrastructure

Timor-Leste's infrastructure is focused on domestic movement of people and goods. Given the country's minimal role in international trade, cargo movement to/from the country tends to be sea-based and regional in character. Meanwhile, passenger arrivals are via air except local movement between Indonesia and Timor-Leste. The road network is the most important transport mode for most Timorese; the road network serves 90% of passengers and 70% of freight moving throughout the country, and an estimated 50% of that network is underdeveloped.²⁰⁴

Airports

Timor-Leste is isolated from the international air sector as it is served by only 3 routes: Bali (Denpassar), Darwin (Australia) and Singapore. Moreover, the country has no regularly scheduled domestic services due to a lack of demand driven by local poverty, a lack of tourists and the country's small size. Research has discovered two key needs for the aviation sector: 1) infrastructure improvement; and 2) policy shortfalls.²⁰⁵

Presidente Nicolau Lobato International Airport (IATA code: DIL) is the only international airport and is served solely by low-capacity aircraft on short routes (to/ from Indonesia, Singapore and Australia). Located in the capital, Dili, DIL handles about 200,000 passengers and less than 200 tons of cargo annually on approximately 65 regular weekly flights on small jets (A320/319, B737 and E170/175). DIL has a single 1850m x 30m paved asphalt runway. The airport has terminal buildings, a control tower, an air navigation system, a tarmac apron (paved parking area for aircraft), a standby generator, and a fire and rescue team. DIL does not have space for overnight aircraft parking nor separate cargo handling facilities. There are time and weather limitations on DIL operations due to high winds and unreliable lighting systems. DIL operates only under Visual Flight Rules (VFR).

Timor-Leste's basic law for civil aviation, Decree-Law 2003/01, limits the use of foreign operators to DIL and Baucau; only Timorese registered operators can run domestic air services. The law also provides that only DIL and Baucau airport can provide international flights. Baucau airport has a 2,500m runway and hosted international flights prior to Indonesian occupation (1974). During occupation, it was used exclusively by the Indonesian military. The runway pavement has not been properly maintained and currently it cannot support jet flights. Timor-Leste's other regional airports are on Atauro Island and in Covalima, Oecusse, Manufahi, Bobonaro, Viqueque and Lautem municipalities. However, these airports are in very poor condition, lacking air traffic control, maintenance capacity and other facilities.²⁰⁶

The UK's Mission Aviation Fellowship (MAF-UK) provides domestic charter flights on its 2 x GA8 Airvans. Annually, it carries about 2,000 passengers with an emphasis on NGO/aid worker services and medical emergency flights.²⁰⁷ MAF is joined by several other small, private entities that serve particular industries, such as the oil industry or aid/development partners.²⁰⁸ Table 1 lists the main airports in Timor-Leste.²⁰⁹

| Airport Name | Max Runway Length (m) | Runway Surface | Nearest Town/ City |
|--|--------------------------------|-------------------|--------------------------|
| Presidente Nicolau Lobato International Airport (DIL) | 1850m | Asphalt | Dili (<1km) |
| Baucau/ Cakung | 2509m | Asphalt | Baucau (6.5km) |
| Suai | 1050m | Asphalt | Suai Kota (3km) |

Table 1: Airports in Timor-Leste

Seaports

Dili is presently the country's only seaport; a second, deepwater port is under construction at Tibar Bay. The latter port is set to be operational by late 2021. Cargo volumes handled at Dili have grown rapidly in recent years. The infrastructure is often overloaded, and the port's operations are inefficient and unsafe.²¹⁰ Dili's harbor is surrounded by a natural reef with only one clearly marked access route. A single, 280m-long wharf can handle a maximum of three vessels at any one time and is nominally divided into three multi-functional berths with a draft of 5-9m.

One ramp facilitating roll-on, roll-off (RO-RO) vessels is located past the east end of the jetty, and there is a second RO-RO ramp on the west side.²¹¹ Photo 11 depicts an image of Dili Port in Timor-Leste.²¹²



Photo 11: Dili Port, Timor-Leste

An apron and adjacent back yard are used for cargo handling. Loading and unloading is mainly carried out by ship's crane, and cargo handling operations are carried out by private stevedoring companies. The container yard with a total area of 14,190m² is divided into east and west areas; the east container yard is used for stacking of 20ft containers, and the west yard is for 40ft containers. There are 380 ground slots for laden containers and 83 for empty ones. The storage facilities consist of three warehouses and one transshipment shed.²¹³ Table 2 includes additional information on Dili Port specifications.²¹⁴

Tibar Bay, 10 km west of Dili, is being constructed by Bolloré (Timor Port S.A.) with a design and construction subcontract to China Harbor Timor Lda (CHT). Construction is expected to take approximately three years and be complete around September 2021.²¹⁵ The three major types of cargo expected to be handled are: containerized, vehicles and cement.²¹⁶

| Total Wharf Length | 630m | |
|----------------------------------|--|--|
| Draught alongside | -15m | |
| Container Yard | 27 hectares | |
| Equipment | 5 x Ship-to-shore gantries 13 x Rubber-Tired gantries | |
| Container Storage Capacity | 20,000 TEU | |
| Annual Throughput Capacity | 1 million TEU | |

Table 2: Dili Port Specifications

Land Routes

Roads

Roads are the primary means of passenger and cargo transport across the country. The network consists of national (1,426 km), district (869 km) and rural (3,025 km) roads. National roads are those that connect districts, and these include the two major coastal roads (north and south) as well as five that cross the interior to connect the coastal roads; on this network can be found 456 two-lane bridges. The main highways are: 1) Dili to Ainaro via Aileu (110 km), 2) Dili to Baucau via Manatuto (118 km), and 3) the Indonesian border to Dili via Liquica (115 km).²¹⁷ Beyond Dili and the northern coastal road connecting Indonesia, Dili and Baucau, traffic is very light and consists primarily of motorcycles. They are the primary means of passenger transport for a majority of Timorese.²¹⁸ Due to the poor road condition in Timor-Leste, people's maintenance costs of vehicles and motorbikes are very high.²¹⁹

The country is mountainous, and most of the road network passes through terrain that requires road-widening work with new embankments or slope cuttings.²²⁰ Much of the road network is in poor condition. Timor-Leste's slope instability and frequent landslides also pose a challenge to the provision of road transport. The results of a September 2015 survey (MPWTC, Rural Roads Master Plan, Investment Strategy 2016-2020) indicated that 13% of rural roads were rated good, 30% were rated fair, 44% were rated poor, and 13% were rated bad.²²¹ Poor condition of roads slows both service delivery to rural areas and the movement of agricultural products from the main farming areas to coastal cities and export hubs. Poor road conditions have a big impact on seriously ill patients due to the long travel time it takes to reach the hospital in Dili.²²² Among others, the World Bank, the Asian Development Bank, and Japan's JICA, are all participating in road rehabilitation projects intended to provide all-weather surfaces.²²³ Current projects are focused on slope stabilization, improvement of drainage structures and pavement repairs.²²⁴

Railways

There are no railways in Timor-Leste.²²⁵

Waterways

Timor-Leste has no lakes that host water

INFRASTRUCTURE

transport, and the country's rivers are dry much of the year. Thus, any inland water transport is seasonal and local.²²⁶

Schools

An estimated 20% of primary school-age children are not enrolled in formal education in Timor-Leste. While 80% of primary school children are enrolled, only 15% are enrolled in pre-school and 30% in secondary.227 Although the government highlighted education in its 2011-2030 development plan, aging facilities, dropout rates, language diversity, undertrained teachers and rural capacity shortages all contribute to poor outcomes.²²⁸ The National Strategic Plan for Education (2011-2015) foresaw the institutionalization of the 3-9-3 basic structure. This would include three optional years of pre-school; nine years of free, compulsory basic schooling; and three years of available secondary education in either a general, academic track or a technical-vocational track. At the top of the pile would be the universities and polytechnic institutions for professional education.229

Both public and private schools operate across the education sector with a roughly 80-20 split. There are fewer than 150 pre-schools available across the country, and those that are available are usually "community" schools that involve some private investment. There are more than 250 "basic schools" that provide all nine years of basic schooling; meanwhile there are more than 650 that provide only the first six years of basic and more than 350 "filial" schools in the most remote areas and that provide only the first four years of the basic structure. Of the country's secondary schools, about three-quarters are general academic rather than technical.²³⁰

Drop-out rates remain a huge challenge with only about one-quarter of students who enter year one of the nine-year cycle completing it. Meanwhile, only 16% of students enter secondary education. There is little gender difference in drop-out rates, but girls tend to be enrolled at lower rates than boys, particularly in rural secondary schools. There are several culprits involved in persistently high drop-out rates: access (distance), parental resistance, financial challenges (purchasing school materials, loss of child's labor inputs, etc.), school building maintenance (lack of water or bathrooms), and violence in schools.²³¹

Photo 12 captures students participating in

group work at the basic school in Lauana Groto, located in the remote hills of Timor-Leste. Lauana Groto school was constructed with UNICEF's support. However, many children in Timor-Leste do not receive a quality education. Almost one in four youths age 15-24 in rural areas are illiterate.²³²



Photo 12: Students in a UNICEF Supported Child-Friendly School

Disaster Risk Reduction in the Education Sector

In 1999, most education infrastructure in Timor-Leste was destroyed. Since then, significant resources have gone into building and rehabilitating schools, but there remain large shortfalls in basic construction (classrooms and facilities) in addition to ensuring that those facilities can withstand potential disasters (flooding, land-/mudslides, etc.). While construction is on-going, there are also glaring gaps in a national curriculum regarding standardized emergency preparedness.²³³ PLAN International, UNDP and other partners are involved in running preparedness drills and education in some areas of the country.

UNDP runs regular training events for students and teachers on tsunami evacuation and first aid. Tsunami drills focus on schools located below 500m in elevation. The exercise involves taking cover, evacuating and re-convening with the group at a pre-arranged location, and it involves the national Red Cross (CVTL) to provide care for the presumed injured.²³⁴ PLAN International completed a 3-year cycle of Child Centered Disaster Risk Reduction (CCDRR) at 20 schools in Aileu district; the program focused on preparing for and responding to disasters to include removing potentially dangerous trees to monitoring the condition of roofs to evacuation drills.²³⁵ Photo 13 depicts students participating in UNDP-led Tsunami Drills.²³⁶



Photo 13: Students Participate in UNDP-led Tsunami Drill, Timor-Leste

Communications

For the first 10 years of Timor-Leste's independence since 2002, the country only had one telecommunications company to provide all services, including internet. In 2012, a new law was enacted to liberalize the telecommunications industry by renegotiating the exclusive contract with Timor-Telecom and allowing more companies to enter the market.²³⁷ Two new telecommunications companies started operating in the country, Telkomcel Indonesia and Telemor Vietnam, which helped reduce costs and improve services. Industry reforms included establishing an independent regulatory agency, the Autoriedade National de Communicações, which was mandated to ensure compliance with regulations in the newly competitive market and to support universal access in less commercially viable areas.²³⁸

While there is almost universal access to mobile telephones, fixed landlines are rarely available in Timor-Leste, reflecting a trend across many developing countries that have surpassed the traditional development step of fixed phone lines.²³⁹ As of 2017, for every 100 residents, there is less than 1 subscription to a fixed telephone line, or an estimated 2,364 total. In sharp contrast, for every 100 residents, there are 120 subscriptions to mobile cellular telephones, or 1,546,624 total.²⁴⁰ The lack of fixed telephone lines is partially due to the occupying Indonesian forces having inflected significant damage to the infrastructure when they withdrew following the Timorese having overwhelmingly voted for independence in the 1999 referendum.

Timor-Leste, along with Myanmar, recorded the largest price reductions in mobilebroadband prices in the Asia Pacific region in 2017. That year, operator Timor-Telecom revised its pricing for prepaid mobile Internet add-ons, with the price of the packages reduced and validity extended. However, fixed-broadband prices are unaffordable for the majority of the population. As a small island developing state, the

geography poses a challenge for the deployment of fixed-broadband networks, resulting in residential customers relying on mobilebroadband services for internet connection.²⁴¹ Mobile phone sales indicate the majority of mobile phone users do not use smart phones, thus cannot connect to the internet on their phones.²⁴² Approximately 28% of the population had access to the internet, as of 2017.²⁴³ While most available data is not disaggregated by gender, 65% of Facebook users are male, which suggests that women may have poorer internet access than men.²⁴⁴

There are seven television stations, of which three have nationwide satellite coverage. Two are cable, and the remaining two are terrestrial but covering mostly the capital, Dili. Timor-Leste has 21 radio stations, of which 3 have nationwide coverage.²⁴⁵

Utilities

Power

Approximately 42% of the population had access to electricity as of 2012, rising to 78% in urban areas and declining to 27% in rural areas.²⁴⁶

Timor-Leste is a net exporter of crude oil; however, there are no distilling facilities in the territory. Energy consumption relies on imported energy, mostly for generation of electricity generation and fuel for transportation, leading to relatively high expenditures for the annual energy budget.²⁴⁷

INFRASTRUCTURE

Electricidade de Timor-Leste is the main generator and distributor of electric power in areas served by its limited grid system, and in isolated areas served by its diesel generators. The main power supply is from the 16 MW dieselfired Comoro power station in Dili, as well as two facilities in Hera (120 MW) and Betano (135 MW) that both run on heavy fuel oil and were installed by Finnish company Wartsila. In many areas not serviced by the electricity grid, small diesel-fired generators are the main source of electric power. Many villages have no electricity and candlelight is commonly used.²⁴⁸

While the situation has been improving in recent years, many schools and health facilities do not have reliable water and electricity supplies, making proper functioning difficult. The national strategic development plan states that by 2020, at least half the energy needs will be met from renewable energy sources, including wind, solar, hydroelectric, and biomass, with the intention to not only adapt to climate change but facilitate development in rural areas. Additional goals include 100,000 families having access to solar-powered electric light by 2020, and all households having access to electricity either by expanding the conventional electricity system or using renewable energy by 2030.²⁴⁹

Water and Sanitation

Considerable improvements have been made in drinking-water services since independence in 2002, although a large proportion of the population still lacks access to sanitation. Rural areas are lagging behind in terms of both water and sanitation services, especially in difficult-to-access mountainous regions where some of the poorest parts of the population live. Approximately 353,000 people do not have clean water, which is more than 25% of the population.²⁵⁰ As of 2015, 663,000 people lacked access to at least basic sanitation, which refers to the use of improved sanitation facilities that are not shared with other households. As of 2015, 24% of the population practiced open defecation for lack of toilet access.²⁵¹ In 2016, 211 children under five years of age died due to diarrhea (which is often a result of poor water and sanitation), comprising 10% of deaths of all children under five-years-old.²⁵² Poor access to water and sanitation results in serious health problems, including water borne illnesses and stunted growth.253

Water, Sanitation and Hygiene (WASH) services are led by the Ministry of Public Works under the Secretary of State for Water and Sanitation, and supported by several other ministries, NGOs and international agencies. The Ministry of Public Works has lead responsibility for sanitation and drinking water. The Ministry of Health has lead responsibility for hygiene promotion, while also having some responsibilities in water and sanitation.²⁵⁴ To strengthen advocacy in the WASH sector, the National Platform for Water, Sanitation and Hygiene (PN-BESITL) was established in 2014 to guarantee participation of civil society organizations in providing oversight on the political process and WASH development. With an eye to meeting the Sustainable Development Goal of universal access to safe water, sanitation and hygiene by 2030, PN-BESITL is focusing on advocacy of: 255

- 1. Strengthening the legal framework for the WASH sector;
- 2. Increasing investment of financial and human resources for WASH sector services;
- 3. Achieving higher quality, accessibility and transparency in WASH sector services; and
- 4. Strengthening PN-BESITL's institutional capacity to advocate for the WASH sector.

Photo 14 is of a woman in Laclubar, Manatuto District, Timor-Leste utilizing a water supply facility funded by USAID through its District Water Sanitation and Hygiene project.²⁵⁶



Photo 14: Water Sustainability Project in Timor-Leste



NAVAL

Disaster Management Reference Handbook | October 2019

NAVAL

NAVAL

HEALTH

Health

Health Overview

Widespread poverty and high malnutrition rates increase the population's susceptibility to other diseases. Prevalent health challenges include high maternal and child mortality rates, malnutrition, malaria, tuberculosis, dengue,²⁵⁷ and parasitic infections.²⁵⁸ Health access remains a challenge for residents in rural mountainous areas. Mountainous terrain and lack of transport pose serious challenges for accessing health services and implementing preventive health strategies. However, considerable progress has been made since the country's independence, with a focus on increasing primary health care through integrated community health programs.²⁵⁹

Life expectancy in Timor-Leste has been steadily rising since 1990, with the exception of 1999 when the Indonesian military violently withdrew following a Timorese vote for independence. In 1990, observed life expectancy was 60.8 years for women and 59.7 for men, but had risen considerably by 2017 to 73.0 years for women and 68.9 for men.²⁶⁰

Various health indicators surrounding childbirth indicate significant health improvements from 2000 to 2015. As Figure 11 depicts, during that timeframe, the maternal mortality rate dramatically decreased from 694 to 215 maternal deaths per 100,000 live births; the number of births attended by skilled health personnel increased from 18 to 30 per 1,000 live births; and child mortality significantly decreased, with deaths of children under five years of age decreasing from 110 to 53, and neonatal deaths decreasing from 37 to 22.²⁶¹ Despite progress, Timor-Leste's maternal and under-5 mortality rates remain the highest in Southeast Asia. To help save lives, USAID works to expand access to high-quality health services for all Timorese, especially women and children, encouraging best health practices and quality reproductive health care. Photo 15 depicts USAID introducing a wet suit-like garment that is saving the lives of women suffering from postpartum hemorrhage in remote communities by aiding circulation.²⁶²



Photo 15: USAID workers in Timor-Leste

Timor-Leste has one of the highest malnutrition rates in the world with Timorese children suffering the highest levels of stunting and wasting in the region. An estimated 27% of the general population is undernourished.²⁶³ Timor-Leste ranks 110 out of 119 in the 2018 Global Hunger Index.²⁶⁴ The high malnutrition rate exacerbates the population's susceptibility to contracting other illnesses, and contributes to poorer health and social outcomes across the board. High malnutrition among women contributes to low birth weight, anemia, and growth faltering among infants and young children and perpetuates an inter-generational cycle of malnutrition.

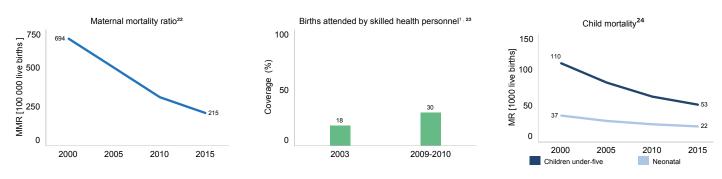


Figure 11: Health Indicators Surrounding Childbirth

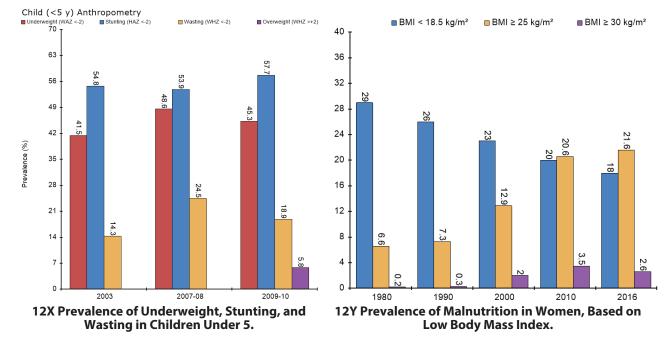


Figure 12 is a split malnutrition table with 12X showing malnutrition rates in children under 5, and Figure 12Y showing malnutrition rates in women.²⁶⁵

Healthcare System Structure

The Ministry of Health has five national directorates: 1) Community health services; 2) Planning and finance; 3) Administrative logistics and procurement; 4) Hospital and referral services; and 5) Human resources. Official external partners of the health ministry include the World Health Organization and the UN Children's Fund.

One of the Ministry of Health's key programs is the Integrated Community Health Services (SISCa), which has functioned since 2008. It is a key initiative to extend the reach of basic primary health care services to the community and household level.²⁶⁶

Figure 13 shows Timor-Leste's National Health Service configuration, as depicted in its National Health Sector Strategic Plan 2011-2030.²⁶⁷

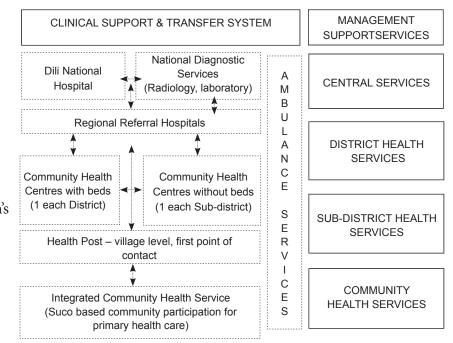


Figure 13: Timor-Leste National Health Service Configuration

Figure 12: Prevalence of Malnutrition Rates in Children Under 5 and in Women

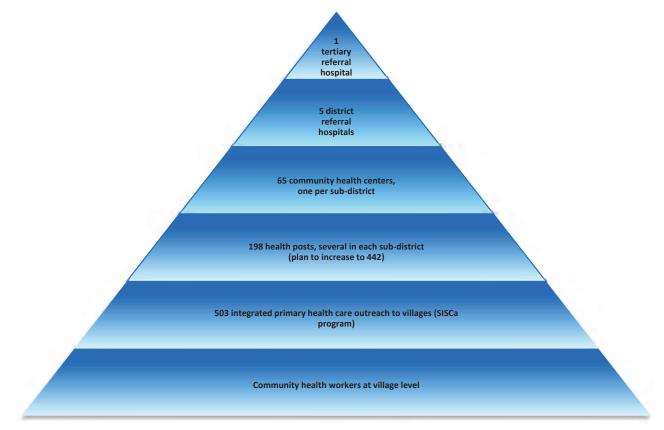


Figure 14 depicts the national health infrastructure, including numbers of key facilities, as of 2013.²⁶⁸

Figure 14: Timor-Leste National Health Infrastructure

Health Cooperation

The World Health Organization is an official partner of Timor-Leste's Ministry of Health. The WHO Country Cooperation Strategy with Timor-Leste for 2015-2019 identified five strategic priorities and corresponding focus areas:²⁶⁹

Strategic Priority 1: Strengthening health systems to ensure universal health coverage Focus areas:

- Support development of robust national health policies, strategies and plans, identification of appropriate health financing mechanisms to ensure financial risk protection, formulation of legal and regulatory frameworks, strengthening inter-sectoral coordination, harmonization/alignment of international cooperation for health and partnerships.
- Support strengthening of human resources for health with focus on institutional

capacity building at the National Institute of Health and health research.

• Support strengthening of quality health service delivery at all levels, including of primary health care, improving access to medicines, laboratory and blood transfusion services, and health management information systems including civil registration and vital statistics systems.

Strategic Priority 2: Reducing the burden of communicable diseases.

Focus areas:

- Strengthening health systems' capacity to reduce the burden of communicable diseases, including vaccine-preventable diseases, tuberculosis, malaria, HIV and dengue.
- Strengthening health systems capacity to reduce the burden of neglected tropical diseases (NTDs) including lymphatic filariasis, yaws, soil transmitted helminth infections and leprosy.

• Strengthening health systems capacity in early detection and to reduce the burden of emerging infectious diseases and zoonotic diseases.

Strategic Priority 3: Reduce the burden of non-communicable diseases, mental health, violence and injuries and disabilities, ageing, through intersectoral collaboration.

Focus areas:

- Strengthening health systems capacity to reduce the burden of non-communicable diseases including cancer through health promotion, risk reduction, early detection and treatment through a multi-sectoral approach.
- Strengthening health systems capacity for scaled-up response to mental health and epilepsy.
- Support initiatives in the area of violence and injury prevention and disabilities, ageing, oral health, eye and ear, nose and throat diseases.

Strategic Priority 4: Reproductive, maternal, newborn, child, adolescent health and nutrition.

Focus areas:

- Support development and review of reproductive, maternal, newborn, child and adolescent health policies, strategies and guidelines and strengthening capacity with a view to reducing risk, morbidity and mortality and improving health across the life course through adoption of a multi-sectoral approach.
- Support initiatives in the area of nutrition such as formulating evidence-informed guidelines, strengthening nutrition surveillance and scaling up action in nutrition, promoting child growth standards, complementary feeding, and strengthening capacity in the management of severe acute malnutrition in infants and children through multi-sectoral mechanisms.

Strategic Priority 5: Emergency preparedness, surveillance and response including implementing the provisions of the International Health Regulations.

Focus areas:

• Support health systems strengthening in disaster risk management for health through systematic analysis and

management of health risks posed by emergencies and disasters, through a combination of hazard and vulnerability reduction to prevent and mitigate risks, preparedness, response and recovery measures.

- Strengthening of integrated disease surveillance and implementing the provisions of the International Health Regulations.
- Strengthening risk reduction through addressing the social, economic and environmental determinants of health.

The Ministry of Health established the Department of Partnership Management to align donor support with national plans and strategies. The ministry also instituted the Health Sector Coordination Group to strengthen donor coordination of bilateral, multilateral and NGO partners in the health sector.²⁷⁰

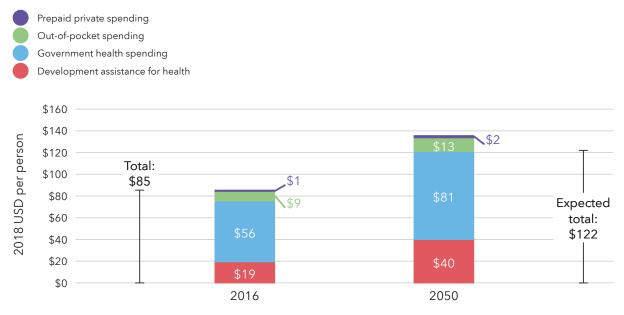
In 2016, at least 22% of health financing came from donors' development assistance for health, as depicted in Figure 15.²⁷¹

Communicable Diseases

In Timor-Leste, communicable diseases remain a concern. These include tuberculosis, malaria, dengue, HIV/AIDS, leprosy, and others. Tuberculosis (TB) is highly endemic in Timor-Leste.²⁷² The country is estimated to have the second-highest incidence of TB in the Asia-Pacific region.²⁷³ In 2017, an estimated 6,500 people developed TB, among whom 800 were children. Of particular concern is that 260 people were estimated to have developed drugresistant TB in 2017, a new increase of 24% from the previous year.²⁷⁴ Figure 16X shows the tuberculosis incidence rate in Timor-Leste from 2002 to 2016. Figure 16Y shows the mortality rate for tuberculosis from 2002-2016, which has been on the rise since 2009.²⁷⁵

Malaria risk is present throughout the country, including urban areas, and with risk present at all altitudes. Considerable progress has been made in reducing malaria infections. Two factors are of concern. One is that the incidence of plasmodium falciparum malaria is greater than 50%, as that is the most dangerous of the human malaria parasites. Two is that multidrug resistant P. falciparum malaria is present in all areas of the country that have malaria.²⁷⁶ However, Timor-Leste has reported a dramatic decrease in malaria cases, from 220 cases per 1,000 people in 2006 to

How much is spent on health -- now, and in the future -- and from which sources?



Source: Financing Global Health Database 2018

"Expected" is the future growth trajectory based on past growth.

Figure 15: Development Assistance for Health Financing in Timor-Leste

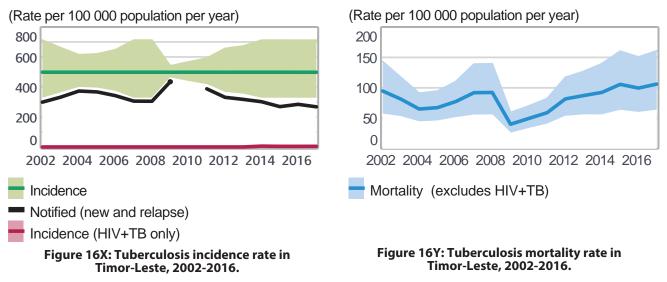


Figure 16: Tuberculosis Incidence and Mortality Rates in Timor-Leste (2002-2016)

less than 1 case per 1,000 in 2013. The country has made significant progress in preventing and controlling malaria, due partially to advances in diagnostic testing and treatment and support from WHO and the Global Fund to Fight AIDS, Tuberculosis and Malaria. This is a remarkable improvement from 2006, when there was almost no equipment for entomological (e.g. mosquito) surveys, and little attention was provided to prevention efforts. All areas with malaria risk now have control and prevention measures in place, and all public health facilities are equipped to diagnose and treat the disease.²⁷⁷

Timor-Leste also has a risk of dengue. In April 2019, the Cruz Vermelha de Timor-Leste (Timor-Leste Red Cross Society) reported a dengue fever outbreak in Dili after heavy rains during an extended monsoon season. As of 29 April, 532 new cases had been confirmed since the beginning of 2019, with 5 resulting in fatalities. Dili municipality had the highest number of cases (382 cases), followed by Liquica (113), Viqueque (15), Covalima (14) and Baucau (12), with the remaining cases in other districts or municipalities. The Timor-Leste Red Cross estimated that this indicated a 50% increase in infection rates.²⁷⁸

Timor-Leste's rate of infection remains low for human immunodeficiency virus (HIV), which can lead to acquired immunodeficiency syndrome (AIDS) in the final stage, at less

than one percent of the population as of 2015. However, the country is seeing a significant increase, at a time when most of the world is containing or reducing numbers of new HIV infections. One challenge has been obtaining comprehensive HIV data, with an identified way forward being to strengthen routine data collection and surveillance. The data that is available varies. From 2011-2015, government statistics indicated a 33 percent rise in the HIV infection rate. There were 509 known people with HIV reported from 2003-2015, with 326 of those having reported after 2011, according to the National Commission to Combat HIV and AIDS in Timor-Leste.²⁷⁹ The HIV and AIDS Data Hub provides lower numbers from 2003-2017, as shown in Figure 17, but still consistently depicts a trend of alarming increases in infection in recent years.280

Numbers from WHO indicate 464-500 people in Timor-Leste are living with HIV as of 2015, which is higher than the AIDS Data Hub and more in line with government statistics.²⁸¹ The various datasets all indicate a rising trend of HIV, which is concerning because Timor-Leste is still struggling with a high rate of tuberculosis, and the possibility of rising co-infection could pose an extra challenge for the developing health care system. Globally, TB is one of the leading causes of death among people living with HIV.²⁸²

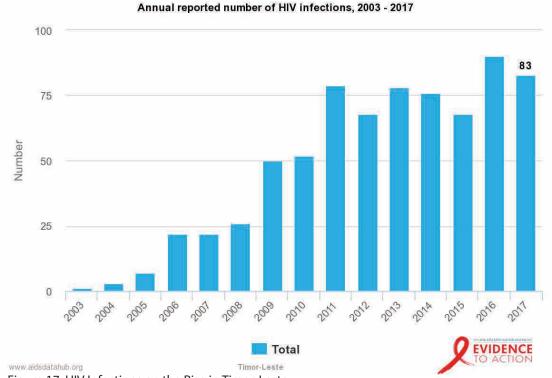


Figure 17: HIV Infections on the Rise in Timor-Leste

Leprosy has been significantly reduced, but it remains endemic in some municipalities, particularly in Oecusse.²⁸³ Due to a long incubation period, a significant backlog of hidden leprosy cases remains in the community. These cases have yet to be diagnosed as they are not yet showing any clinical signs of the disease. Despite these holdouts, Timor-Leste has had an active and successful leprosy elimination campaign in place since 2003, with WHO supplying multi-drug therapy free of charge. Much progress has been made against leprosy, with it being declared eliminated as a public health problem at the national level.²⁸⁴

Intestinal parasitic infections such as Lymphatic Filariasis (LF) which causes severe swelling of hands and feet, from soil-transmitted helminths (STH) are common in Timor-Leste. Yaws, a neglected disease that causes skin ulcers, is also a major public health challenge. Often these diseases are exacerbated by poor living conditions and poor nutrition.²⁸⁵

Non-Communicable Diseases

Non-communicable diseases (NCDs) are not passed from person to person, but are usually of long duration and result from of a combination of genetic, physiological, environmental and behavioral factors. They are also known as chronic diseases. NCDs are responsible for 71% of all deaths worldwide,²⁸⁶ and 45% of all deaths in Timor-Leste.²⁸⁷ Cardiovascular diseases comprise 18%, cancer accounts for 12%, chronic respiratory diseases make up 4%, diabetes constitute 1%, and other NCDs are responsible for 10% of mortality in the country.²⁸⁸ While NCDs cause a significant amount of death in Timor-Leste, a greater cause of death and disability combined are communicable, maternal, neonatal and nutritional diseases.²⁸⁹

Among behavioral risks that contribute to NCDs, tobacco use is a high risk factor. Timor-Leste has one of the highest tobacco use prevalence rates in the world. The Global Youth Tobacco Survey (2013) results show overall tobacco use prevalence of 42% among adolescents aged 13–15 years and that 66% of students were exposed to tobacco smoke in their homes.²⁹⁰ Although tobacco use is declining, the percentages are still very high. Almost 80% of males smoked tobacco in 2015.

High blood pressure is another risk factor significantly driving death and disability in Timor-Leste. However, less than half the population has had their blood pressure measured, as indicated in a 2016 survey among women and men age 30-49. Among survey respondents, 39% of women and 32% of men reported having their blood pressure measured, and 18% of women and 12% of men reported being told by a health professional that they have high blood pressure. Among those told of their high blood pressure, 65% of women and 54% of men are currently taking medication for it.²⁹¹

While NCDs are responsible for a significant portion (45%) of mortality in Timor-Leste, progress is being made in reducing some risk factors. The overall risk of premature death due to NCDs is slowly declining.

Training for Health Professionals

Cuban doctors first arrived in Timor-Leste in 2004 as part of a large-scale medical training program. Cuba offered 1,000 scholarships to train Timorese medical students, and by 2009, 680 medical students were studying in Cuba and 190 medical students were receiving Cubansponsored training at home in Timor-Leste. Cuba also provided a brigade of 300 health workers, with the majority dispatched to the district and sub-district level, starting the core of a rural doctor-centered health service.²⁹² By the end of 2017, more than 1,000 Timorese doctors were to have entered the national health system. This marks a dramatic turnaround from only 20 doctors in the country in 2001, following a destructive withdrawal by the Indonesian military in 1999.293

The Royal Australasian College of Surgeons provided specialist medical support from 2000-2015, including resident surgical and anesthesia services in Dili, through programs designed with the Ministry of Health and Australian Aid. Chinese medical teams also contributed, primarily bringing specialists to Dili National Hospital.²⁹⁴

The internationalization of health care training has greatly increased Timor-Leste's health capacity, but also brings new challenges linguistically and medically. Timorese doctors who were not Cuban-trained may have studied in Fiji, Indonesia, the Philippines, Papua New Guinea or Australia, where the medical science is the same but the methodology of treatment may differ.²⁹⁵



TIMOR-LESTE Women, Peace and Security

Disaster Management Reference Handbook | October 2019

12006-

WOMEN, PEACE, AND SECURITY

Women, Peace and Security

Following Indonesia's invasion of Timor-Leste in 1975, sexual assault against women was prevalent and went largely unpunished during the military occupation. Upon independence, the 2002 constitution established legal equality for women. Significant efforts have been made to improve gender equality, including policy reform, legislation, institutional mechanisms and public awareness campaigns.²⁹⁶ However, challenges remain, including widespread genderbased violence. Domestic violence is the most reported case to the Vulnerable Persons Unit of the National Police, a unit set up with assistance from the UN specifically for vulnerable people including women, children and the elderly. Poverty is a significant obstacle for many women. Another challenge is the lack of recognition for women's political, economic and social contributions, a significant issue as the country's civil conflicts resulted in almost half the women widowed and becoming sole providers for their family.297

Timor-Leste ranks 124 out of 149 countries in the 2018 Global Gender Gap Report, taking the lowest spot in the East Asia and the Pacific region. The report catalogs the Global Gender Gap Index's benchmarks towards gender parity across four themes: 1) economic participation and opportunity, 2) educational attainment, 3) political empowerment, and 4) health and survival. Women's economic participation and opportunity particularly lags behind, as the country's rank in that sub-index falls to 138 out of 149. However, Timor-Leste has made improvements in closing the gender gap in primary and secondary education, and significantly increased the number of women in parliament.²⁹⁸ Following the passage of an electoral law in 2006 requiring that women comprise at least one-third of listed candidates, 38% of parliament members are now women, the highest rate in the Asia-Pacific region.²⁹⁹ Women are more under-represented at the local level among village chiefs, although this has been slowly increasing following a July 2016 law stipulating at least one women had to stand for election in every village. Prior to that, women comprised 11 of the 442 elected village chiefs. In the 2016 election held four months after the new

law was passed, the number of women village chiefs almost doubled to 21.³⁰⁰

Timor-Leste acceded to the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) on 16 April 2003 without reservations.³⁰¹ In October 2016, Timor-Leste published its National Action Plan (NAP) for implementing United Nations Security Council Resolution (UNSCR) 1325 on Women, Peace and Security (WPS).³⁰² UNSCR 1325 was passed in 2000 as the first resolution in which the UN Security Council addressed the disproportionate effect of conflict on women and girls, and emphasized the importance of women's participation in conflict prevention, conflict resolution, and peacebuilding for more peaceful and secure societies. As of December 2018, 79 out of 193 UN member states had adopted NAPs.³⁰³ Timor-Leste's NAP is the result of a participatory process involving multiple stakeholders that the Secretary of State for Security started in 2013. The NAP draws upon experiences of men and women during armed conflict starting from Indonesia's invasion in 1975, while affirming more actions are needed for Timorese women to achieve equal rights and justice. While the creation of a NAP is a significant step, beyond the gender-responsive budgeting policy, the NAP has no allocated funding for its implementation.³⁰⁴

The Ministry of Interior is responsible for overall leadership and coordination for implementing the NAP. Additionally, the Ministry of Social Solidarity, Ministry of Justice, Ministry of Defense, and the Secretary of State for the Support and Socio-Economic Promotion of Women are responsible for implementing separate activities relevant to their areas of work. Civil society organizations are to also support by advocating for resource allocation and implementation, as well as shadow reporting.³⁰⁵

Despite much progress, women in Timor-Leste continue to make strides against societal challenges including poverty, domestic violence, and a dearth of recognition for their political, emotional, and social contributions.³⁰⁶ In 2019, the government of Timor-Leste will submit its progress report to the CEDAW Committee detailing 25 years of advances in women's rights and equality to review the progress and challenges the country has faced in it's journey to eliminate all forms of discrimination against women.³⁰⁷



Disaster Management Reference Handbook | October 2019

CONCLUSION

Conclusion

Timor-Leste is one of the newest developing nations in the world and continues efforts toward strengthening its capacities with regard to disaster preparedness and capacity building for social services, health care, the economy, and providing stabilizing governance after decades of colonization, civil unrest and national tragedy. The country is a low-income economy with a GDP of about 3 billion dollars. Approximately 49% of the population live below the poverty line, half the country earns less than \$1.25 a day, and 20% is unemployed.³⁰⁸

Significant efforts have been made to improve gender equality, including policy reform, legislation, institutional mechanisms and public awareness campaigns.³⁰⁹ Timor-Leste ranks 124 out of 149 countries in the 2018 Global Gender Gap Report, taking the lowest spot in the East Asia and the Pacific region.³¹⁰ Following the passage of an electoral law in 2006 requiring that women comprise at least one-third of listed candidates, 38% of parliament members are now women, the highest rate in the Asia-Pacific region.³¹¹

The country continues to struggle with improvements to its citizens' health. Timor-Leste has one of the highest malnutrition rates in the world with Timorese children suffering the highest levels of stunting and wasting in the region. An estimated 27% of the general population is undernourished.³¹² Timor-Leste also struggles with high maternal and child mortality rates.³¹³ Additionally, communicable diseases such as, tuberculosis, malaria, dengue, HIV/AIDS, leprosy, and others remain a concern.³¹⁴ The country is estimated to have the second-highest incidence of TB in the Asia-Pacific region. The difficult terrain and lack of transport pose serious challenges for accessing health services and implementing preventive health strategies.³¹⁵ While non-communicable diseases are responsible for a significant portion (45%) of mortality in Timor-Leste, progress is being made in reducing some risk factors.³¹⁶

The health problems of the population are impounded by the threat of natural disaster. In the last decade, the country has suffered 470 disaster events.³¹⁷ Additionally, climate changes to the country threaten to create a hotter, drier, climate causing potential for harsher and longer drought conditions, heavier rainfall and increased flooding and landslide hazards. Timor-Leste's susceptibility to frequent floods, landslides and prolonged dry spells, can also trigger insect infestations, diseases, and cause food insecurity.³¹⁸

Although disaster management was included in the Ministry of Social Solidarity's strategic plan (2009-2012), it was not integrated into the National Strategic Development Plan (NSDP) 2011-2030. Rather, the NSDP focuses on social and economic policy to consolidate security.³¹⁹ Activities that improve social and economic security have the potential both to bolster and to erode disaster preparedness, depending on the incorporation of environmental concerns and goals into plans. ³²⁰ The country has a robust Early Warning System infrastructure and a system in place in every district.³²¹ To date, Timor-Leste lacks legislation to support its national disaster risk management policies. Despite the existence of a disaster risk management policy, the country still lacks longrange mitigation and preparedness planning at the national and institutional level.³²²

Direct efforts are at work to halt damaging practices and encourage sustainable use of the country's natural resources. Many of these activities impact climate, ecology, and the environment.³²³ Additionally, climate change adaptations have become an urgent effort and training individuals and adapting farming and forestry systems to ensure a more sustainable future is important to Timor-Leste.³²⁴

Various agencies of the United Nations (WHO, FAO, UNFPA, UNICEF, etc.) are present and active in Timor-Leste and are active in promoting disaster risk management and supporting the country in disaster response efforts. Timor-Leste relies heavily on international agencies, particularly the United Nations Development Programme (UNDP), World Bank, and Australia-based NGOs under the Australian Department of Foreign Affairs and Trade's DFAT, and the Australian Humanitarian Partnership (AHP). The Humanitarian Country Team (HCT) has been set up to coordinate emergency response operations; it is headed by the UN Resident Coordinator, who is usually also the head of UNDP.325

The first expected effects of climate change are for hotter and drier dry seasons, greater variation in rainfall, and damage to coral reefs. By 2030, the country aims to have laws in place that can be enforced to ensure the sustainable use and protection of forests, rivers, seas, and fauna. Moreover, the government is planning to reduce the risks of coastal flooding, forest fires, and food shortages, but it fully expects those events to happen regardless of its own actions.³²⁶



Disaster Management Reference Handbook | October 2019

UN

IAPPENDICES

Appendices

DoD DMHA Engagements in the Past Five Years (FY 2015-2019)

Pacific Partnership (April 2019)

Timor-Leste was one of several host nations for Pacific Partnership 2019 including the Republic of the Marshall Islands, the Philippines, the Federated States of Micronesia, Malaysia, Vietnam and Thailand. Pacific Partnership's mission has evolved over the years from emphasis on direct care to an operation focused on enhancing partnerships through host nation subject matter expert and civilmilitary exchanges.³²⁷ The mission incorporated engineering civic-action projects, humanitarian assistance-disaster relief drills, medical and dental readiness, and outreach events.³²⁸

Ground-breaking Ceremony of National Health Institute (April 2019)

National Health Institute construction was carried out by U.S. Navy Seabees from Naval Mobile Construction Battalion FOUR (NMCB 4) and Amphibious Construction Battalion ONE (ACB 1), who was working with the F-FDTL CAS Engineers.³²⁹

Ribbon Cutting Ceremony of Sarlala Balibo Primary School (April 2019)

The U.S. Ambassador opened Escola Ensino Basico Filial Sarlala Balibo (Maubisse Balibo School's), the first of two phases of construction. Phase II will be NMCB FOUR and F-FDTL CAS Engineers constructing a detached head facility. NMCB THREE personnel and F-FDTL CAS engineers worked side by side on Phase I.³³⁰

Harii Hamutuk 2018 Closing Ceremony (September 2018)

Harii Hamutuk is a training opportunity partnering Timor-Leste with the U.S., Australia and Japan to develop key infrastructure projects as a training opportunity for ongoing defense and security cooperation. This collaboration demonstrates continued commitment shared by partner nations in support of capacity building in Timor-Leste.³³¹

United States and Timor-Leste Convene for CARAT Exercise (August 2018)

The U.S. Navy and Timor-Leste Defense Force (F-FDTL) began the Cooperation Afloat Readiness and Training (CARAT) Timor-Leste exercise at Port Hera Navy Base. During CARAT Timor-Leste 2018, U.S. Navy Sailors assigned to Coastal Riverine Group (CRG) 1 Det. Guam and 7th Fleet Surgeon's Office trained with their F-FDTL counterparts at Port Hera.³³²

UCT 2 Constructs Pier for Timor-Leste Maritime Police (April 2018)

U.S. Navy Seabees from Underwater Construction Team (UCT) 2's Construction Diving Detachment Bravo (CDDB) completed construction of the Timor- Leste National Police's (PNTL) Maritime Police Unit (MPU) small boat pier in Dili Harbor. The \$400,000 project funded through the U.S. State Department's Bureau of International Narcotics and Law Enforcement Affairs provides berthing for four small boats and supports the U.S. Pacific Command's Asia Pacific Regional Initiative to increase law enforcement and maritime security in this remote region of the globe.³³³

Pacific Angel 2018 to Feature Humanitarian Assistance for Suai Residents (June 2018)

Pacific Angel 2018 (PAC ANGEL 18), a joint and combined regional humanitarian assistance and disaster relief engagement led by Pacific Air Forces, included U.S. military personnel in Suai, Cova Lima Municipality. PAC ANGEL 18 included general health, dental, optometry, pediatrics, and engineering programs, as well as various subject-matter expert exchanges. Pacific Angel is part of the ongoing cooperation between the United States and Timor-Leste to help improve the lives of Timorese and build the capacity of local authorities and security forces.³³⁴

Seabees Complete Hari'I Hamatuk 2017 (November 2017)

Seabees assigned to Naval Mobile Construction Battalion (NMCB) 4, marked the end of Exercise Hari'i Hamutuk 2017 with a closing ceremony at Metinaro Military Base.³³⁵ Representatives from NMCB 4, U.S. Marine Corps combat engineers, Japan Ground Self Defense Force (JMSDF), Royal Australian engineers (RAE), and engineers from the Timor-Leste Defense Force (F-FDTL) celebrated the successful completion of Hari'i Hamutuk, which included the renovation of a 3,000 sq. ft. kitchen facility at Baucau Military Base and refurbishment of the Sidara Health Clinic in Hera community.³³⁶

U.S. Ambassador Inaugurates the Vatobou Health Clinic with U.S. NAVY Seabees (October 2017)

U.S. Ambassador Stanton and the U.S. Naval Mobile Construction Battalion Three, also known as the Seabees, officially inaugurated the Vatobou Health Clinic in Liquiçá District. With support from the Ministry of Health, the Seabees worked for more than three months to construct the facility, which will provide health care to more than 5,000 residents in the local area.³³⁷

Exercise Crocodilo events in Metinaro (September 2017)

U.S. Marines with Task Force Koa Moana 17, and members of the Falantil Forca de Defensa Timor-Leste (FFDTL) attended Exercise Crocodilo events in Metinaro. Koa Moana 17 is designed to improve interoperability, enhance military-to-military relations, and expose the Marine Corps forces to different types of terrain for familiarity in the event of a natural disaster in the region.³³⁸

U.S., Timor-Leste Partner for Annual CARAT Exercise (July 2017)

U.S. Navy Task Group 75.5 arrived in Dili. U.S. Navy and Marines, Timor-Leste National Police, and Forsa Defesa Timor-Leste joined Cooperation Afloat Readiness and Training (CARAT) exercise. CARAT Timor-Leste 2017 was focused on maritime security capabilities and increasing interoperability among participants. Skill areas exercised include small boat maintenance, evidence collection, diving procedures, and antiterrorism security. CARAT 2017 was the 5th year in Timor-Leste. U.S. Navy assets participating in CARAT Timor-Leste 2017 included Commander, Task Group 75.5, Coastal Riverine Group 1, Underwater Construction Team 2, and U.S. Marines with Fleet Antiterrorism Security Team Pacific.339

Naval Mobile Construction Battalion Three in Timor-Leste (June 2017) Seabees from Naval Mobile Construction Battalion (NMCB) 3's Construction Civic Action Detail (CCAD) deployed to Timor-Leste to execute humanitarian assistance construction projects throughout the nation. The projects were aimed at improving the quality of life and health of the residents within the growing nation, and developing enduring relationships with the government, military, and people of the country.³⁴⁰

The USA provides training on HIV/AIDS Awareness & Prevention Program to F-FDTL (June 2017)

U.S. Department of Defense's Defense HIV/AIDS Awareness & Prevention Program (DHAPP) and Church World Services held a three-day workshop for 13 selected F-FDTL members to be new facilitators regarding health issues such as HIV/AIDS prevention, reproductive health, and sexually transmitted diseases.³⁴¹

U.S., Timor-Leste Begin Bilateral Training (August 2016)

U.S. Navy units from Commander, Task Force 75, U.S. Marines, and Forsa Defesa Timor-Leste (F-FDTL) service members kicked off the 4th annual Cooperation Afloat Readiness and Training (CARAT) Timor-Leste. U.S. Navy Seabees from Naval Mobile Construction Battalion 4, explosive ordnance disposal technicians from Explosive Ordnance Disposal Mobile Unit 5, Riverine Sailors from Coastal Riverine Group 1, and U.S. Marines from the Fleet Anti-terrorism Security Team Pacific, worked with their F-FDTL counterparts throughout the weeklong exercise. The exercise covered information gathering, small craft maintenance and repair, infantry tactics, and staff planning.342

Seabees, Pacific Partnership 2016 Arrive in Timor-Leste (June 2016)

Pacific Partnership 2016 arrived in Timor-Leste June 8 for the sixth time in the past eleven years. While in Timor-Leste, Pacific Partnership personnel worked with civilian leadership from the Dili community and Timor-Leste Defense Forces in a disaster relief symposium, civil engineering projects, cooperative health engagements (CHE), subject matter expert exchanges (SMEE), and community service projects. Engineering projects include the renovation of Manleuana Primary School and Aimutin School.³⁴³

Exercise Crocodilo 16: U.S. Sailors conduct combat lifesaving courses in Timor-Leste (June 2016)

Exercise Crocodilo 16 included a CLS course that provided information for treating patients during combat situations.³⁴⁴

APPENDICES

Exercise Crocodilo (November 2015)

In November 2015, a joint-combined force of F-FDTL Naval Component Fusilero, F-FDTL Land Component Soldiers, and U.S. Marines conducted an amphibious assault and cleared a Timorese seaside village harboring enemy insurgents in a training scenario. In the weeklong military engagement activity, U.S. Marines and F-FDTL focused on small unit leadership, tactics, mission planning, and execution. Integrated teams of F-FDTL and U.S. Marines participated in Exercise Crocodilo, an annual event which contributes to the defense professionalization and maritime security efforts in Timor-Leste.³⁴⁵

Hari'i Hamutuk Exercise 2015 Officially Closes (November 2015)

Seabees, from Naval Mobile Construction Battalion (NMCB) 3, marked the end of construction for Exercise Hari'i Hamutuk with a ribbon cutting ceremony at Hera Naval Base and Hera Health Post, Nov. 5. Representatives from Timor-Leste, Australia, Japan, and the U.S. attended to celebrate the successful completion of the projects which included two classrooms, a restroom facility, burn pit and upgrades to a health post, among other projects. "Hari'i Hamutuk," Tetun for "build together", is a multilateral exercise designed to increase interoperability between U.S. Navy Seabees, U.S. Marine Corps combat engineers, Japan Ground Self Defense Force, Royal Australian engineers, and engineers from the Timor-Leste Defense Force (F-FDTL). A total of 99 personnel participated in the exercise.³⁴⁶

Pacific Angel 2015 Brings Together U.S., New Zealand and Timorese Defense Forces for Joint Operation, Free Medical Clinic for People of Baucau (September 2015)

From September 7-14, the U.S., New Zealand, and Timor-Leste jointly participated in Pacific Angel 2015, with the aim of simulating a joint humanitarian operation, organizing a free medical clinic for the people of Baucau and upgrading key facilities in the local region that would be used in case of a humanitarian operation. The highlight of this year's Pacific Angel was a medical services outreach at the Baucau Gymnasium. In addition to the medical services outreach, the partners, led by the U.S. Air Force also upgraded facilities at the Eskola Medicina Baucau, Diwake Health Post, and Venilale Community Center. Another key element of the operation was a simulation of a humanitarian air drop at the Baucau airport followed by a donation of the air dropped food supplies to a local orphanage in Baucau.³⁴⁷

U.S. Navy Seabees Complete Bridge for Local Community in Ermera (August 2015)

The Seabees completed two suspended cable bridges in Leimea, Hatolia sub-district (Ermera District) to provide access to food, health, and medical services which are inaccessible during the rainy season.³⁴⁸

U.S. Navy Boosts Defense Ties With East Timor in Maritime Exercise (July 2015)

The U.S. Navy and the Timor-Leste Defense Force conducted their third Cooperation Afloat Readiness and Training (CARAT) exercise in Dili and in the vicinity of Port Hera Naval Base from July 27-28. This year's exercise involved about 100 personnel from the U.S. side and 300 from East Timor. It featured seamanship and navigation exercises and symposia, civil engineer-exchanges and security training, and a community service and outreach project to interact with the local community.³⁴⁹

International/Foreign Relations

Since 2002, Timor-Leste has prioritized two fronts in foreign relations and diplomacy: 1) the region; and 2) development/investment partners. The latter sees Dili strive to maintain strong ties to European states, North America, East Asia's heavy-weights, and Australia. In general, these ties are un-problematic with the exception of occasional tension with Canberra over oil and gas exploitation agreements. It is within the region that Dili's efforts have shown only moderate success. Having been admitted to ASEAN as an observer in 2002 and to ASEAN Regional Forum in 2005, Timor-Leste formally applied for ASEAN membership in 2011. By 2017, most ASEAN members had publicly supported, or said they would not oppose membership. Still, various procedural obstacles have meant that the country continues to wait; the dominant concern of standing members appears to be Timor-Leste's economic stature.³⁵⁰ As the country's economy develops, there is every likelihood of Timor-Leste being admitted, thereby shoring up its ability to access the region's economic, political, and security expertise.

U.S.

The U.S. did not historically play a significant role in Timor-Leste. Since independence, the U.S. has boosted bilateral assistance and supports multi-lateral development projects.

Bilateral relations are almost entirely related to development projects and mil-to-mil contacts. There is little trade between the two countries with energy investment and coffee projects being the most significant. Indeed, even the largest investment, ConocoPhillips investment in oil-gas exploitation, has fallen in recent years as Dili has worked to localize the proceeds of its natural resources. In 2019, ConocoPhillips sold 30% of its stake in the Greater Sunrise Fields to Dili.³⁵¹ In many ways, sales of this type allow the U.S. and its corporations working in the country to avoid allegations of exploitation like those that have roiled the Timor-Leste-Australia relationship.

While present relations are well-rounded, incorporating political, economic, and security initiatives, there is some potential for pre-1999 history to impede. There is some evidence that the Ford administration in Washington at worst encouraged and at best turned a blind eye to the Indonesian occupation of Timor-Leste in 1975. The U.S. military cooperation with Jakarta's Suharto regime as well as the leftist character of many Timorese guerilla groups are thought to have influenced Washington's decision not to oppose Jakarta's military adventure. Moreover, there is a high probability that Indonesian forces used US-supplied weapons and equipment in their takeover of Timor-Leste. Many in the Timorese resistance harbored doubts over the U.S.' actual support for Timor-Leste's independence despite U.S. support for UN resolutions calling for Indonesia's withdrawal. Those resistance-era leaders who are still present in the upper echelons of government and veterans of the resistance may still evince some distrust of the U.S. due to perceptions that the U.S. backed Suharto as part of the broader effort to contain the spread of Communism.³⁵²

Australia

Canberra and Dili are strongly engaged at political, economic, and civil society levels. Defense and police engagement are among Australia's major contributions to Timor-Leste's security and development. Not only did Australian troops fight alongside Timorese resistance during World War II, but Australian troops provided the backbones for two of the major multi-national military interventions in Timor-Leste since 1999, INTERFET and the ISF (2006-2013). In the past five years, Canberra has maintained the Australian Defence Force Cooperation Program and the Australian Federal Police Timor-Leste Police development programs a means to professionalize Timorese forces and to build familiarity between the Australian and local forces ahead of any contingency. ³⁵³

Economic ties are important for Timor-Leste although Timor-Leste imports significantly more from Australia than it exports (at a ratio of about 15:1). The countries have had preferential duty-free and quota free access since 2003. Initiatives to allow Australian businesses to access opportunities in Timor-Leste have seen Australian companies enter the construction, logistics, financial services, vocational training, tourism, and security sectors. Australian involvement in the non-oil sector is crucial to managing Timorese frustration with Australian dominance of the oil/gas sector given the importance of the latter sector to Dili's revenues.

In 2018, the two countries signed the "Treaty Between Australia and the Democratic Republic of Timor-Leste Establishing Their Maritime Boundaries in the Timor Sea." From Canberra's perspective, this allows Dili to have confidence that future cooperation with Australia, particularly on the Greater Sunrise gas field will be undertaken on firm legal footing.³⁵⁴ Going forward, development of resources at Greater Sunrise or elsewhere along the boundary is expected to accrue revenues to both sides.

China

The first Chinese are thought to have migrated to what is today Timor-Leste in the 1800s as traders before marrying into local families. However, the 20th century saw many of their descendants depart for greener pastures, eroding any strong feeling linking Timor-Leste to China socially or culturally. The few hundred Chinese-Timorese left in the country are clustered in Dili and are prominent in business, but many of them continue to depart, citing local discrimination. Since 2002, China itself has revived its interest in the country with state firms involved in major electric grid, road, and airport projects.³⁵⁵

China's relationship with Timor-Leste is focused on infrastructure assistance although there are historic ties.³⁵⁶ In recent years, Beijing has used its Asian Infrastructure Investment Bank (AIIB) to donate funding and materials for homes, commercial facilities, schools, and other structures. The major focus is a 10-hectare

IAPPENDICES

plot in Dili said to cost US\$60 million and be supervised by China.³⁵⁷ Meanwhile, Chinese funds and material helped build Dili's foreign ministry building, presidential office building, and ministry of defense building. China has given yearly grants totaling US\$7 million which Dili could use to purchase Chinese equipment or to pay for some of China's "donations." Beyond official outlays, China's presence in Timor-Leste is minimal.

A Chinese warship paid the first PLA Navy visit to Timor-Leste in 2016, sparking concern that Beijing would be seeking more from Dili than just a foothold in the country's infrastructure and market. However, beyond occasional exercises involving both Timorese and Chinese military forces, contacts are minimal between the two militaries.³⁵⁸

Indonesia

Historically, ties between Dili and Jakarta have been problematic due to the 24-year occupation of Timor-Leste by Indonesia (1975-1999). However, the bilateral Commission of Truth and Friendship, launched in 2005, has improved relations. More recently, Indonesia has become one of the main proponents of Timor-Leste's accession to full ASEAN membership. The countries have centuries of intermarriage, interaction, and proximity. ³⁵⁹

From Dili's perspective, official ties with Indonesia are "mature³⁶⁰". Indonesia is a very important trading partner and an important source of investment. Indonesia accounts for upward of 50% of Timor-Leste's imports. Both sides would like to move toward a better balance, seeing Indonesia import more from Timor-Leste, but Dili has struggled to build export-oriented economic sectors beyond oil, which Indonesia does not import from Timor-Leste. Indonesian projects account for about US\$810 million in Timor-Leste.³⁶¹ Jakarta has regularly expressed its view that boosting the Timorese economy and infrastructure will, in general, help provide security and stability for Indonesia's portion of the island.³⁶² Indonesia hosts hundreds of Timorese students and businesspersons as part of a person-to-person means of developing the Timorese economy. Meanwhile, hundreds of Indonesian state-owned and private companies do business in Timor-Leste, supporting 7000 or more Indonesians residing there. Despite this contact, suspicions and historic grievances mean that Indonesians can be the target of harassment and violence in Timor-Leste.³⁶³

A key issue that could emerge is delimitation of land and maritime boundaries. While the main land border has been delimited and marked, the border between Indonesia's East Nusa Tenggara and Timor-Leste's Oecussi exclave (120 km) remains disputed. Both countries conduct police patrols in the vicinity to address smuggling and other criminal activity but the remoteness and a lack of dialogue over the issue means the potential for misunderstanding or miscalculation is high.³⁶⁴

Defense cooperation is marked by high level meetings between senior officials as well as regular interaction in terms of military training and exercises. Indonesia trains and hosts Timorese military officers at all levels at its various academies and staff colleges. More importantly, military-to-military contact involves humanitarian activity with Indonesian military doctors and health experts providing direct assistance to Timorese civilians while also training Timorese personnel.³⁶⁵

Japan

Despite Japan's World War II-era invasion of what is today Timor-Leste, ties between Tokyo and Dili show little tension or animosity. Contacts at high levels of government are regular and focus mostly on Timorese economic and social development.

Japan's primary engagement with Timor-Leste is via Foreign Affairs and Defense Agency leadership and via the Japan International Cooperation Agency (JICA). JICA works in three priority areas linked to Timor-Leste's Strategic Development Plan (2011-2030): 1) socio-economic infrastructure; 2) industry diversification; and 3) social service delivery. JICA maintains technical cooperation projects, dispatches experts and Overseas Cooperation Volunteers, provides grant aid and loans, conducts training in Japan, and collaborates with Japanese NGOs working in Timor-Leste. Two priority areas are road construction/maintenance and agricultural productivity.³⁶⁶

Japan's Self-Defense Forces (SDF) regularly visit Timor-Leste as part of training exercises that have a significant engineering project focus. JSDF, along with U.S. and Australian forces, often build or repair Timorese infrastructure, bases, or public structures during exercises. JSDF also participates in disaster risk reduction and disaster readiness activities in the country.³⁶⁷

Portugal

After Timor-Leste's centuries as a Portuguese colony, ties between Dili and Lisbon have been maintained in part by the shared Portuguese language that allows cross-pollination in several sectors. While Dili can rely on Lisbon, and Brasilia, to support some Timorese global goals, minimal economic or shared security ties mean diplomatic engagement is the top priority.

In 2014, Portugal and Timor-Leste signed a new Strategic Cooperation Program with a budget of €42 million distributed across areas linked to Dili's Strategic Development Plan (2011-2030). The main objective for Portugal is eradication of poverty and sustainable development. Lisbon provides help with institution building and education, particularly as demand for quality Portuguese teaching materials remains high. Annual overseas development assistance sits at about €13 million.³⁶⁸ This offers Portugal a means to shape Timor-Leste's future in terms of public service provision and economic development since educated.³⁶⁹

Force Protection/Pre-Deployment Information

The following information is provided for pre-deployment planning and preparations. Visit www.travel.state.gov prior to deployments for further up-to-date information.

Passport/Visa

All foreigners seeking to enter Timor-Leste on a temporary visa (including Tourist Visa) are required to have a valid national passport with an expiration date of no less than 6 months from the date of entry into Timor-Leste.

Foreigners traveling to the national territory for tourism or business need an Ordinary Visa Class I which allows a maximum length of stay of 90 days and is valid for up to one year with one or multiple entries.

All visitors for tourism and business purpose, except the nationals of countries with which Timor-Leste had celebrated visas waiver agreements must apply for a Visa Authorization Application at the Timor-Leste Embassies and Consulates abroad, prior to their visit to Timor-Leste.

IMPORTANT NOTICE: Please be informed that the Minister of Interior Order nr. 470, of 16th April 2019 has been temporarily suspended until a new decision is made. Whereas the travelers fulfill all the legal requirements an ordinary Visa Class I for tourism and business purpose, may be granted on arrival at the Border Post by presenting the "Visa Authorization Application". The tourism and business visa fee is US\$30.

According to the article 15 law 9/2003, entry into the national territory shall be denied to foreigners who do not have the means to support themselves for the length of their stay, who do not have a return ticket to a country that guarantees their re-entry or whose status does not allow them to legally provide for themselves.

In order to enter and remain in the national territory, foreigners must have the means to pay per capita an amount equivalent to:

- \$100 (One hundred U.S. dollars) for each entry into the national territory
- \$50 (Fifty U.S. dollars) for each day expected to remain in the national territory.

In addition, travelers must:

- Hold a passport, or travel document, with an expiry date not less than 6 months from the date of entry into Timor-Leste. The passport must have at least a whole unused page for the visa sticker.
- Pay US \$30 visa fee in cash.
 *Note that there may be no ATM or money changer facilities at the border post.³⁷⁰

Emergency Contact Information

The local equivalent to the "911" emergency line in Timor-Leste is 112. For U.S. Citizens, contact the U.S. Embassy in Dili. U.S. Embassy in Dili, Timor-Leste³⁷¹ Avenida de Portugal Praia dos Coqueiros Dili, Timor-Leste T: 670-332-4684, Emergency After-Hours number: 670-723-1328 Fax: 670-331-3206 Website: ConsDili@state.gov

Currency Information

The Ú.S. dollar became the official currency in Timor-Leste in 2000 replacing the Indonesian rupiah. The decision came as an effort to provide political and economic stability to the country. The U.S. dollar was also seen as a way to facilitate ease of business and trade in the country.³⁷²

Travel Health Information

Vaccination and Prescriptions

The Center for Disease Control and Prevention (CDC) provides the following recommendations for travel to Timor-Leste. The information in Table 3 is taken directly from the CDC website.³⁷³

Eat and Drink Safely

Unclean food and water can cause travelers' diarrhea and other diseases. Reduce your risk by sticking to safe food and water habits.

Eat

- Food that is cooked and served hot
- Hard-cooked eggs
- Fruits and vegetables you have washed in clean water or peeled yourself
- Pasteurized dairy products

Don't Eat

- Food served at room temperature
- Food from street vendors
- Raw or soft-cooked (runny) eggs
- Raw or undercooked (rare) meat or fish
- Unwashed or unpeeled raw fruits and vegetables
- Unpasteurized dairy products
- "Bushmeat" (monkeys, bats, or other wild game)

Drink

- Bottled water that is sealed
- Water that has been disinfected
- Ice made with bottled or disinfected water
- Carbonated drinks
- Hot coffee or tea
- Pasteurized milk

Don't Drink

- Tap or well water
- Ice made with tap or well water
- Drinks made with tap or well water (such as reconstituted juice)
- Unpasteurized milk

Take Medicine

Talk with your doctor about taking prescription or over-the-counter drugs with you on your trip in case you get sick.

Prevent Bug Bites

Bugs (like mosquitoes, ticks, and fleas) can spread a number of diseases in Timor-Leste. Many of these diseases cannot be prevented with a vaccine or medicine. You can reduce your risk by taking steps to prevent bug bites.

To prevent bug bites:

- Cover exposed skin by wearing long-sleeved shirts, long pants, and hats.
- Use an appropriate insect repellent (see below).
- Use permethrin-treated clothing and gear (such as boots, pants, socks, and tents). Do not use permethrin directly on skin.
- Stay and sleep in air-conditioned or screened rooms.
- Use a bed net if the area where you are sleeping is exposed to the outdoors.

For protection against ticks and mosquitoes:

• Use a repellent that contains 20 percent or more DEET for protection that lasts up to several hours.

For protection against mosquitoes only:

- Products with one of the following active ingredients can also help prevent mosquito bites. Higher percentages of active ingredient provide longer protection.
- DEET
- Picaridin (also known as KBR 3023, Bayrepel, and Icaridin)
- Oil of lemon eucalyptus (OLE) or PMD
- IR3535

If you are bitten by bugs:

- Avoid scratching bug bites, and apply hydrocortisone cream or calamine lotion to reduce the itching.
- Check your entire body for ticks after outdoor activity. Be sure to remove ticks properly.
- Note: The CDC has given guidance that the Zika Virus is potentially endemic in Timor-Leste.³⁷⁴

Safety and Security

As a first step in planning any trip abroad, check the Travel Advisories for your intended destination.

Note that conditions can change rapidly in a country at any time. To receive updated Travel Advisories and Alerts for the countries you choose, sign up at step.state.gov.

| Routine vaccines (for all travelers) | Make sure you are up-to-date on routine vaccines before every trip. These vaccines include Measles-Mumps-Rubella (MMR) vaccine, diphtheria-tetanus-pertussis vaccine, varicella (chickenpox) vaccine, polio vaccine, and your yearly flu shot. Specifically, for measles: Infants (6 through 11 months old): 1 dose of measles-mumps-rubella (MMR) vaccine before travel. This dose does not count as the first dose in the routine childhood vaccination series. People 12 months old or older, with no evidence of immunity or no written documentation of any doses: 2 doses of MMR vaccine before travel. The 2 doses must be given 28 days apart. People 12 months old or older who have written documentation of 1 dose and no other evidence of immunity: 1 additional dose before travel, at least 28 days after the previous dose |
|---|--|
| Hepatitis A (for most travelers) | CDC recommends this vaccine because you can get hepatitis A through contaminated food or water in Timor-Leste, regardless of where you are eating or staying. |
| Typhoid (for most travelers) | You can get typhoid through contaminated food or water in Timor- Leste. CDC recommends this vaccine for most travelers, especially if you are staying with friends or relatives, visiting smaller cities or rural areas, or if you are an adventurous eater. |
| Hepatitis B (for some travelers) | You can get hepatitis B through sexual contact, contaminated needles, and blood products, so the CDC recommends this vaccine if you might have sex with a new partner, get a tattoo or piercing, or have any medical procedures. |
| Japanese Encephalitis (for some travelers) | You may need this vaccine if your trip will last more than a month, depending on where you are going in Timor-Leste and what time of year you are traveling. You should also consider this vaccine if you plan to visit rural areas in Timor-Leste or will be spending a lot of time outdoors, even for trips shorter than a month. Your doctor can help you decide if this vaccine is right for you based on your travel plans |
| Malaria (for all travelers) | You will need to take prescription medicine before, during, and after your trip to prevent malaria. Your doctor can help you decide which medicine is right for you, and also talk to you about other steps you can take to prevent malaria. Areas of Timor-Leste with risk of malaria: Present in Oecusse District. Rare cases in other districts. |
| Rabies (for some travelers) | Rabies can be found in dogs, bats, and other mammals in Timor-Leste, so CDC recommends this vaccine for the following groups: Travelers involved in outdoor and other activities (such as camping, hiking, biking, adventure travel, and caving) that put them at risk for animal bites. People who will be working with or around animals (such as veterinarians, wildlife professionals, and researchers). People who are taking long trips or moving to Timor-Leste Children, because they tend to play with animals, might not report bites, and are more likely to have animal bites on their head and neck. |

Table 3: CDC, Travel Health Information for Timor-Leste

Sendai Framework

The Sendai Framework is the global blueprint and fifteen-year plan to build the world's resilience to natural disasters.³⁷⁵ The Sendai Framework for Disaster Risk Reduction 2015-2030 outlines seven clear targets and four priorities for action to prevent new and reduce existing disaster risks:

The Seven Global Targets include:

- Substantially reduce global disaster mortality by 2030, aiming to lower average per 100,000 global mortality rates in the decade 2020-2030 compared to the period 2005-2015.
- Substantially reduce the number of affected people globally by 2030, aiming to lower average global figure per 100,000 in the decade 2020 -2030 compared to the period 2005-2015.
- Reduce direct disaster economic loss in relation to global gross domestic product (GDP) by 2030.
- Substantially reduce disaster damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including through developing their resilience by 2030.
- Substantially increase the number of countries with national and local disaster risk reduction strategies by 2020.
- Substantially enhance international cooperation to developing countries through adequate and sustainable support to complement their national actions for implementation of this Framework by 2030.
- Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to the people by 2030.³⁷⁶

The Four Priorities of Action include:

- Understanding disaster risk;
- Strengthening disaster risk governance to manage disaster risk;
- Investing in disaster reduction for resilience; and
- Enhancing disaster preparedness for effective response and to "Build Back Better" in recovery, rehabilitation and reconstruction.

The Sendai Framework aims to achieve the substantial reduction of disaster risk and losses in lives, livelihoods and health and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries over the next 15 years. It was adopted at the Third United Nations World Conference on Disaster Risk Reduction in Sendai, Japan in 2015.³⁷⁷ The Sendai Framework is the successor instrument to the Hyogo Framework for Action (HFA) 2005-2015: Building the Resilience of Nations and Communities to Disasters.³⁷⁸ Figure 18 shows the Sendai DRR Framework.³⁷⁹

Chart of the Sendai Framework for Disaster Risk Reduction 2015-2030

Scope and purpose

The present framework will apply to the risk of small-scale and large-scale, frequent and infrequent, sudden and slow-onset disasters, caused by natural or manmade hazards as well as related environmental, technological and biological hazards and risks. It aims to guide the multi-hazard management of disaster risk in development at all levels as well as within and across all sectors

Expected outcome

The substantial reduction of disaster risk and losses in lives, livelihoods and health and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries

Goal

structural, legal, social, health, cultural, educational, environmental, technological, political and institutional measures that prevent and reduce hazard exposure and vulnerability to disaster, increase preparedness for Prevent new and reduce existing disaster risk through the implementation of integrated and inclusive economic. response and recovery, and thus strengthen resilience

| | Substantially enhance Substantially increase the international cooperation with hazard early warning through adequate and multi-hazard early warning through adequate and systems and disaster risk systems and disaster risk information and assessments complement their national to people by 2030 this framework by 2030 | | there is a need for focused action within and across sectors by States at local, national, regional and global levels in the following four priority areas. | Priority 4 Enhancing disaster preparedness for effective response, and to «Build Back Better» in |
|---------|--|-----------------------|---|--|
| | Substantially increase the substantially increase the national and local disaster risk reduction strategies by 2020 | | al, regional and global levels | Priority 3 Investing in disaster risk reduction for resilience |
| Targets | Substantially reduce stater damage to critical infrastructure and discuption of basic services, among them health and educational facilities, including through developing their resilience by 2030 | Priorities for Action | irs by States at local, nation | |
| | Reduce direct disaster economic lost in relation to global gross domestic product (GDP) by 2030 | | on within and across secto | Priority 2 Strengthening disaster risk governance to manage disaster risk |
| | Substantially reduce the number of atmospheric globally by 2030, atming to lower the average global figure per 100,000 between 2020-2030 compared to 2005-2015 | | is a need for focused action | ity 1 g disaster risk |
| | Substantially reduce global Substater mortality by 2030, aiming to lower average per 100,000 global mortality between 2020-2030 compared to 2005-2015 | | There | Priority 1 Understanding disaster risk |

Figure 18: UN Sendai Framework for Disaster Risk Reduction (2015-2030)

Enhancing disaster preparedness for effective response, and to «Build Back Better» in recovery, rehabilitation and reconstruction

Hyogo Framework for Action Country Progress Report

The Hyogo Framework for Action (HFA) was adopted as a guideline to reduce vulnerabilities to natural hazards. The HFA assists participating countries to become more resilient and to better manage the hazards that threaten their development. The levels of progress of the 2009-2011 results of the HFA for Timor-Leste are represented in Figure 19 and Table 4. Table 5 provides an overview of the overall challenges and the future outlook statement from the HFA report. The 2009-2011 is the most recent HFA report available for Timor-Leste.³⁸⁰

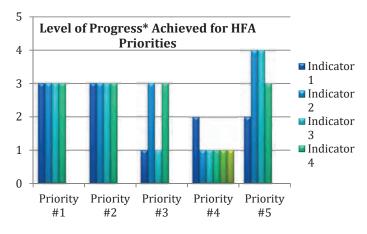


Figure 19: HFA Level of Progress Achieved

| Priority for Action #1: Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation. | | |
|--|--|------------------------------------|
| Core Indicator* | Indicator Description | Level of Progress Achieved |
| 1 | National policy and legal framework for disaster risk reduction exists with decentralized responsibilities and capacities at all levels. | 3 |
| 2 | Dedicated and adequate resources are available to implement disaster risk reduction plans and activities at all administrative levels. | 3 |
| 3 | Community Participation and decentralization is ensured through the delegation of authority and resources to local levels. | 3 |
| 4 | A national multi sectoral platform for disaster risk reduction is functioning. | 3 |
| | | |
| Priority #2: | Identify, assess and monitor disaster risks and enhance early warning | |
| Priority #2: Core Indicator* | Identify, assess and monitor disaster risks and enhance early warning Indicator Description | Level of Progress Achieved |
| Core | | Level of Progress Achieved 3 |
| Core Indicator* | Indicator Description National and local risk assessments based on hazard data and vulnerability | Achieved |
| Core Indicator* 1 | Indicator Description National and local risk assessments based on hazard data and vulnerability information are available and include risk assessments for key sectors. Systems are in place to monitor, archive and disseminate data on key | Achieved 3 |

Table 4: National Progress Report on the Implementation of the HFA

| Priority #3: | Use knowledge, innovation and education to build a culture of safety and res | ilience at all levels |
|--------------------|--|-------------------------------|
| Core Indicator* | Indicator Description | Level of Progress Achieved |
| 1 | Relevant information on disasters is available and accessible at all levels, to all stakeholders (through networks, development of information sharing systems, etc.). | 1 |
| 2 | School curricula, education material and relevant trainings include disaster risk reduction and recovery concepts and practices. | 3 |
| 3 | Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened. | 1 |
| 4 | Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities. | 3 |
| Priority #4: | Reduce the underlying risk factors | |
| Core Indicator* | Indicator Description | Level of Progress Achieved |
| 1 | Disaster risk reduction is an integral objective of environment related policies and plans, including for land use natural resource management and adaptation to climate change. | 2 |
| 2 | Social development policies and plans are being implemented to reduce the vulnerability of populations most at risk. | 1 |
| 3 | Economic and productive sectorial policies and plans have been implemented to reduce the vulnerability of economic activities. | 1 |
| 4 | Planning and management of human settlements incorporate disaster risk reduction elements, including enforcement of building codes. | 1 |
| 5 | Disaster risk reduction measures are integrated into post disaster recovery and rehabilitation processes. | 1 |
| 6 | Procedures are in place to assess the disaster risk impacts of major development projects, especially infrastructure. | 1 |
| Priority #5: | Strengthen disaster preparedness for effective response at all levels | |
| Core Indicator* | Indicator Description | Level of Progress Achieved |
| 1 | Strong policy, technical and institutional capacities and mechanisms for disaster risk management, with a disaster risk reduction perspective are in place. | 2 |
| 2 | Disaster preparedness plans and contingency plans are in place at all administrative levels, and regular training drills and rehearsals are held to test and develop disaster response programs. | 4 |
| 3 | Financial reserves and contingency mechanisms are in place to support effective response and recovery when required. | 4 |
| 4 | Procedures are in place to exchange relevant information during hazard events and disasters, and to undertake post-event reviews. | 3 |

Table Notes:

lable Notes:
*Level of Progress:
1 - Minor progress with few signs of forward action in plans or policy
2 - Some progress, but without systematic policy and/ or institutional commitment
3 - Institutional commitment attained, but achievements are neither comprehensive nor substantial
4 - Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational

capacities 5 – Comprehensive achievement with sustained commitment and capacities at all levels

Table 4: National Progress Report on the Implementation of the HFA (cont.)

| Future Outlook Area 1: The | more effective integration of disaster risk considerations into sustainable | |
|--|---|--|
| development policies, planning and programming at all levels, with a special emphasis on disaster prevention, mitigation, preparedness and vulnerability reduction. | | |
| Challenges: | Although the Government of Timor-Leste considers DRM as a priority and supports the dissemination of DRM policy to the district levels, the current Strategic Development Plan 2011-2030 of Timor-Leste has not explicitly reflected nor integrated DRM as one of its development priorities. Disaster Management is included in the Strategic Plan Document of MSS 2009-2012. | |
| Future Outlook Priorities: | In March 2008, the NDMD established a National Disaster Risk Management Policy for the next five years (2007-2012) to guide in the identification of government's development priorities, objectives and strategies. The policy includes risk analyses, vulnerability monitoring, early warning, emergency management, post-disaster research and review, recovery and knowledge development, awareness raising and human resource development. The policy outlines plans to develop DRM programs and recognizes the need for institutional capacity building, organizational and decentralized administration of disaster risk management as well as the need for community participation, including the vulnerable groups. | |
| Future Outlook Area 2: The development and strengthening of institutions, mechanisms and capacities at all levels, in particular at the community level, that can systematically contribute to building resilience to hazards. | | |
| Challenges: | The United Nations Transitional Administration East Timor (UNTAET), the East Timor Transitional Authority (ETTA) and UNDP conducted an overall analysis of the disaster risks and vulnerabilities in Timor-Leste. The findings suggest there is a need for the NDMD to also establish Disaster Operations Center (DOC) in every district to receive and to send disaster-related data/ information to and from the community. Due to budget constraint, NDMD currently only manages to establish three DOCs in three districts: in Dili, Lautem and Bobonaro. NDMD is expecting to receive more funding this year to set up more DOCs in the rest of the country. | |
| Future Outlook Priorities: | Timor-Leste intends to improve profile and performance in order to reach internationally accepted standards and principles of DRM. With this regard, Timor-Leste will focus on promoting DRM as a multi-sectoral responsibility, assigning accountability for disaster losses and impacts, allocating necessary resources for DRR, enforcing implementation of DRM, and facilitating participation from civil society and private sector. | |
| Future Outlook Area 3: The systematic incorporation of risk reduction approaches into the design and implementation of emergency preparedness, response and recovery programs in the reconstruction of affected communities. | | |
| Challenges: | DDMC provides relief assistance and construction materials to the communities who are affected by disasters. However, due to personnel and funding shortage, DDMC could not monitor on how the beneficiaries use the assistance, esp. the construction materials based on DRR measures when rebuilding their damaged houses. | |
| Future Outlook Priorities: | Timor-Leste is interested in developing and strengthening its capacities, especially the investment in disaster preparedness. Currently, contingency planning is included in several key sectoral planning of civil protection and health. With a collaboration of CBDRM Working Group, substantial capacity buildings and trainings for NDMD at the national level, and DDMC and DOC staff at the district level have been ongoing. The trainings include Disaster Management Orientation, Emergency Management Training, and Training of Trainers. The trainers have also given trainings to the community at the local level. | |

Table 5: HFA Country Progress Report Future Outlook Areas, Timor-Leste

Country Profile

The information in the Country Profile section is sourced directly from the CIA World Fact book. Additional numbers on country comparison to the world can be found by going directly to the CIA website.³⁸¹

Background:

This entry usually highlights major historic events and current issues and may include a statement about one or two key future trends.

The Portuguese began to trade with the island of Timor in the early 16th century and colonized it in mid-century. Skirmishing with the Dutch in the region eventually resulted in an 1859 treaty in which Portugal ceded the western portion of the island. Imperial Japan occupied Portuguese Timor from 1942 to 1945, but Portugal resumed colonial authority after the Japanese defeat in World War II. East Timor declared itself independent from Portugal on 28 November 1975 and was invaded and occupied by Indonesian forces nine days later. It was incorporated into Indonesia in July 1976 as the province of Timor Timur (East Timor). An unsuccessful campaign of pacification followed over the next two decades, during which an estimated 100,000 to 250,000 people died. In an August 1999 UN-supervised popular referendum, an overwhelming majority of the people of Timor-Leste voted for independence from Indonesia. However, in the next three weeks, anti-independence Timorese militias - organized and supported by the Indonesian military - commenced a large-scale, scorchedearth campaign of retribution. The militias killed approximately 1,400 Timorese and forced 300,000 people into western Timor as refugees. Most of the country's infrastructure, including homes, irrigation systems, water supply systems, and schools, and nearly all of the country's electrical grid were destroyed. On 20 September 1999, Australian-led peacekeeping troops deployed to the country and brought the violence to an end. On 20 May 2002, Timor-Leste was internationally recognized as an independent state.

In 2006, internal tensions threatened the new nation's security when a military strike led to violence and a breakdown of law and order. At Dili's request, an Australian-led International Stabilization Force (ISF) deployed to Timor-Leste, and the UN Security Council established the UN Integrated Mission in Timor-Leste (UNMIT), which included an authorized police presence of over 1,600 personnel. The ISF and UNMIT restored stability, allowing for presidential and parliamentary elections in 2007 in a largely peaceful atmosphere. In February 2008, a rebel group staged an unsuccessful attack against the president and prime minister. The ringleader was killed in the attack, and most of the rebels surrendered in April 2008. Since the attack, the government has enjoyed one of its longest periods of post-independence stability, including successful 2012 elections for both the parliament and president and a successful transition of power in February 2015. In late 2012, the UN Security Council ended its peacekeeping mission in Timor-Leste and both the ISF and UNMIT departed the country. Early parliamentary elections in the spring of 2017 finally produced a majority government after months of impasse. Currently, the government is a coalition of three parties and the president is a member of the opposition party. In 2018, this configuration stymied nominations for key ministerial positions and slowed progress on certain policy issues.

Geography: Timor-Leste

Location:

Southeastern Asia, northwest of Australia in the Lesser Sunda Islands at the eastern end of the Indonesian archipelago; note - Timor-Leste includes the eastern half of the island of Timor, the Oecussi (Ambeno) region on the northwest portion of the island of Timor, and the islands of Pulau Atauro and Pulau Jaco

Geographic coordinates:

This entry includes rounded latitude and longitude figures for the centroid or center point of a country expressed in degrees and minutes; it is based on the locations provided in the Geographic Names Server (GNS), maintained by the National Geospatial-Intelligence Agency on behalf of the US Board on Geographic Names.

8 50 S, 125 55 E

Map references:

This entry includes the name of the Factbook reference map on which a country may be found. Note that boundary representations on these maps are not necessarily authoritative. The entry on Geographic coordinates may be helpful in finding some smaller countries.

Southeast Asia

Area:

This entry includes three subfields. Total area is the sum of all land and water areas delimited by international boundaries and/or coastlines. Land area is the aggregate of all surfaces delimited by international boundaries and/or coastlines, excluding inland water bodies (lakes, reservoirs, rivers). Water area is the sum of the surfaces of all inland water bodies, such as lakes, reservoirs, or rivers, as delimited by international boundaries and/or coastlines.

total: 14,874 sq km land: 14,874 sq km water: 0 sq km country comparison to the world: 160

Area:

This entry provides an area comparison based on total area equivalents. Most entities are compared with the entire US or one of the 50 states based on area measurements (1990 revised) provided by the US Bureau of the Census. The smaller entities are compared with Washington, DC (178 sq km, 69 sq mi) or The Mall in Washington, DC (0.59 sq km, 0.23 sq mi, 146 acres).

Slightly larger than Connecticut; almost half the size of Maryland

Land boundaries:

This entry contains the total length of all land boundaries and the individual lengths for each of the contiguous border countries. When available, official lengths published by national statistical agencies are used. Because surveying methods may differ, country border lengths reported by contiguous countries may differ.

total: 253 km

border countries (1): Indonesia 253 km **Coastline:** 706 km

Maritime claims: territorial sea: 12 nm contiguous zone: 24 nm exclusive fishing zone: 200 nm

Climate:

tropical; hot, humid; distinct rainy and dry seasons

Terrain: mountainous

Elevation:

lowest point: Timor Sea, Savu Sea, and Banda Sea 0 m **highest point:** Foho Tatamailau 2,963 m

Natural resources: gold, petroleum, natural gas, manganese, marble

Land use: agricultural land: 25.1% (2011 est.) arable land: 10.1% (2011 est.) / permanent crops: 4.9% (2011 est.) / permanent pasture: 10.1% (2011 est.) forest: 49.1% (2011 est.) other: 25.8% (2011 est.)

Irrigated land: 350 sq km (2012)

Population distribution: most of the population concentrated in the western third of the country, particularly around Dili

Natural hazards:

This entry lists potential natural disasters. For countries where volcanic activity is common, a volcanism subfield highlights historically active volcanoes.

floods and landslides are common; earthquakes; tsunamis; tropical cyclones

Environment - current issues: air pollution and deterioration of air quality; greenhouse gas emissions; water quality, scarcity, and access; land and soil degradation; forest depletion; widespread use of slash and burn agriculture has led to deforestation and soil erosion; loss of biodiversity

Environment - international agreements:

party to: Biodiversity, Climate Change, Climate Change-Kyoto Protocol, Desertification signed, but not ratified: none of the selected agreements Geography - note: People and Society: Timor-Leste

Population: 1,321,929 (July 2018 est.) **country comparison to the world:** 156

Nationality: noun: Timorese adjective: Timorese

Ethnic groups: Austronesian (Malayo-Polynesian) (includes Tetun, Mambai, Tokodede, Galoli, Kemak, Baikeno), Melanesian-Papuan (includes Bunak, Fataluku, Bakasai), small Chinese minority

Languages: Tetun Prasa 30.6%, Mambai 16.6%, Makasai 10.5%, Tetun Terik 6.1%, Baikenu 5.9%, Kemak 5.8%, Bunak 5.5%, Tokodede 4%, Fataluku 3.5%, Waima'a 1.8%, Galoli 1.4%, Naueti 1.4%, Idate 1.2%, Midiki 1.2%, other 4.5%

note: data represent population by mother tongue; Tetun and Portuguese are official languages; Indonesian and English are working languages; there are about 32 indigenous languages

Religions: Roman Catholic 97.6%, Protestant/ Evangelical 2%, Muslim 0.2%, other 0.2% (2015 est.)

Age structure:

0-14 years: 40.44% (male 274,881 /female 259,736) 15-24 years: 20.46% (male 137,363 /female 133,128) 25-54 years: 30.13% (male 191,290 /female

206,973) 55-64 years: 5.02% (male 33,047 /female 33,325) 65 years and over: 3.95% (male 25,086 /female 27,100) (2018 est.)

Population pyramid:

Dependency ratios:

total dependency ratio: 90.3 (2015 est.) youth dependency ratio: 83.7 (2015 est.) elderly dependency ratio: 6.6 (2015 est.) potential support ratio: 15.2 (2015 est.)

Median age:

total: 19.1 years male: 18.5 years female: 19.7 years (2018 est.) country comparison to the world: 202 **Population growth rate:** 2.32% (2018 est.) **country comparison to the world:** 32

Birth rate:

32.9 births/1,000 population (2018 est.) country comparison to the world: 28

Death rate: 5.8 deaths/1,000 population (2018 est.) **country comparison to the world:** 174

Net migration rate: -3.9 migrant(s)/1,000 population (2018 est.) **country comparison to the world:** 184

Population distribution: most of the population concentrated in the western third of the country, particularly around Dili

Urbanization: urban population: 30.6% of total population (2018) rate of urbanization: 3.35% annual rate of change (2015-20 est.) Major urban areas - population: 281,000 DILI (capital) (2018)

Sex ratio:

at birth: 1.07 male(s)/female 0-14 years: 1.06 male(s)/female 15-24 years: 1.03 male(s)/female 25-54 years: 0.92 male(s)/female 55-64 years: 0.99 male(s)/female 65 years and over: 0.93 male(s)/female total population: 1 male(s)/female (2018 est.)

Mother's mean age at first birth: 22.1 years (2009/10 est.)

note: median age at first birth among women 25-29

Maternal mortality rate: 215 deaths/100,000 live births (2015 est.) country comparison to the world: 50

Infant mortality rate:

total: 33.9 deaths/1,000 live births male: 36.7 deaths/1,000 live births female: 31 deaths/1,000 live births (2018 est.) country comparison to the world: 53

Life expectancy at birth:

total population: 68.7 years male: 67.1 years female: 70.4 years (2018 est.) country comparison to the world: 165 Total fertility rate: 4.67 children born/woman (2018 est.) country comparison to the world: 23

Contraceptive prevalence rate: 26.1% (2016)

Drinking water source: improved:

urban: 95.2% of population rural: 60.5% of population total: 71.9% of population

unimproved: urban: 4.8% of population rural: 39.5% of population total: 28.1% of population (2015 est.)

Current Health Expenditure: 3.1% (2015)

Physicians density:

0.72 physicians/1,000 population (2017)

Hospital bed density: 5.9 beds/1,000 population (2010)

Sanitation facility access: improved:

urban: 69% of population (2015 est.) rural: 26.8% of population (2015 est.) total: 40.6% of population (2015 est.)

unimproved:

urban: 31% of population (2015 est.) rural: 73.2% of population (2015 est.) total: 59.4% of population (2015 est.)

HIV/AIDS - adult prevalence rate: NA

HIV/AIDS - people living with HIV/AIDS: This entry gives an estimate of all people (adults and children) alive at yearend with HIV infection, whether or not they have developed symptoms of AIDS.

Major infectious diseases: degree of risk: very high (2016) food or waterborne diseases: bacterial diarrhea, hepatitis A, and typhoid fever (2016) vectorborne diseases: dengue fever and malaria (2016) Obesity - adult prevalence rate:

3.8% (2016)

country comparison to the world: 190

Children under the age of 5 years underweight:

37.5% (2013)
country comparison to the world: 3
Education expenditures:
This entry provides the public expenditure on education as a percent of GDP.
2.7% of GDP (2014)
country comparison to the world: 156

Literacy:

definition: age 15 and over can read and write (2015 est.) total population: 67.5% male: 71.5% female: 63.4% (2015 est.) School life expectancy (primary to tertiary education): total: 13 years male: 14 years female: 13 years (2010)

Unemployment, youth ages 15-24: total: 13.2% male: 10.9% female: 15.9% (2016 est.) country comparison to the world: 106

Government: Timor-Leste

Country name: conventional long form: Democratic Republic of Timor-Leste conventional short form: Timor-Leste

local long form: Republika Demokratika Timor Lorosa'e [Tetum]; Republica Democratica de Timor-Leste [Portuguese]

local short form: Timor Lorosa'e [Tetum]; Timor-Leste [Portuguese]

former: East Timor, Portuguese Timor

etymology: timor" derives from the Indonesian and Malay word "timur" meaning "east"; "leste" is the Portuguese word for "east", so "Timor-Leste" literally means "Eastern-East"; the local [Tetum] name "Timor Lorosae" translates as "East Rising Sun"

note: pronounced TEE-mor LESS-tay

Government type:

semi-presidential republic

Capital:

name: Dili geographic coordinates: 8 35 S, 125 36 E time difference: UTC+9 (14 hours ahead of Washington, DC, during Standard Time)

Administrative divisions: 12 municipalities (municipios, singular municipio) and 1 special adminstrative region* (regiao administrativa especial); Aileu, Ainaro, Baucau, Bobonaro (Maliana), Covalima (Suai), Dili, Ermera (Gleno), Lautem (Lospalos), Liquica, Manatuto, Manufahi (Same), Oe-Cusse Ambeno* (Pante Macassar), Viqueque

note: administrative divisions have the same names as their administrative centers (exceptions have the administrative center name following in parentheses)

Independence: 20 May 2002 (from Indonesia); note - 28 November 1975 was the date independence was proclaimed from Portugal; 20 May 2002 was the date of international recognition of Timor-Leste's independence from Indonesia

National holiday: Restoration of Independence Day, 20 May (2002)Proclamation of Independence Day, 28 November (1975)

Constitution: history: drafted 2001, approved 22 March 2002, entered into force 20 May 2002 amendments: proposed by Parliament and parliamentary groups; consideration of amendments requires at least four-fifths majority approval by Parliament; passage requires two-thirds majority vote by Parliament and promulgation by the president of the republic; passage of amendments to the republican form of government and the flag requires approval in a referendum (2018)

Legal system: civil law system based on the Portuguese model; note - penal and civil law codes to replace the Indonesian codes were passed by Parliament and promulgated in 2009 and 2011, respectively

International law organization participation: This entry includes information on a country's acceptance of jurisdiction of the International Court of Justice (ICJ) and of the International Criminal Court (ICCt); 59 countries have accepted ICJ jurisdiction with reservations and 11 have accepted ICJ jurisdiction without reservations; 122 countries have accepted ICCt jurisdiction. Appendix B: International Organizations and Groups explains the differing mandates of the ICJ and ICCt. Accepts compulsory ICJ jurisdiction with reservations; accepts ICCt jurisdiction **Citizenship:** citizenship by birth: no citizenship by descent only: at least one parent must be a citizen of Timor-Leste dual citizenship recognized: no residency requirement for naturalization: 10 years

Suffrage: 17 years of age; universal

Executive branch:

Chief of state: President Francisco GUTERRES (since 20 May 2017); note - the president is commander in chief of the military and is able to veto legislation, dissolve parliament, and call national elections

Head of government: Prime Minister Taur Matan RUAK (since 22 June 2018); note -President GUTERRES dissolved parliament because of an impasse over passing the country's budget on 26 January 2018, with then Prime Minister Mari ALKATIRI assuming the role of caretaker prime minister until a new prime minister was appointed

cabinet: the governing coalition in the Parliament proposes cabinet member candidates to the Prime Minister, who presents these recommendations to the President of the Republic for swearing in

elections/appointments: president directly elected by absolute majority popular vote in 2 rounds if needed for a 5-year term (eligible for a second term); election last held on 20 March 2017 (next to be held in 2022); following parliamentary elections, the president appoints the leader of the majority party or majority coalition as the prime minister

election results: Francisco GUTERRES elected president; percent of vote - Francisco Guterres (Fretilin) 57.1%, Antonio da Conceicao (PD) 32.5%, Jose Luis Guterres (Frenti-Mudanca) 2.6%, Jose Neves (independent) 2.3%, Luis Alves Tilman (independent) 2.2%, other 3.4%

Legislative branch:

description: unicameral National Parliament (65 seats; members directly elected in a single nationwide constituency by proportional representation vote to serve 5-year terms) **elections:** last held on 12 May 2018 (next to be held in July 2023)

election results: percent of vote by party - AMP - 49.6%, Fretilin 34.2%, PD 8.1%, DDF 5.5%, other 2.6%; seats by party - AMP 34, Fretilin 23, PD 5, DDF 3; composition - men 39, women 26, percent of women 40%

Judicial branch:

highest courts: Court of Appeals (consists of the court president and NA judges) judge selection and term of office: court president president appointed by the president of the republic from among the other court judges to serve a 4-year term; other court judges appointed - 1 by the Parliament and the others by the Supreme Council for the Judiciary, a body chaired by the court president and includes mostly presidential and parliamentary appointees; other judges serve for life

subordinate courts: Court of Appeal; High Administrative, Tax, and Audit Court; district courts; magistrates' courts; military courts

note: the UN Justice System Programme, launched in 2003 in 4 phases through 2018, is helping strengthen the country's justice system; the Programme is aligned with the country's long-range Justice Sector Strategic Plan, which includes legal reform

Political parties and leaders:

Alliance for Change and Progress or AMP [Xanana Gusmao] (alliance includes CNRT, KHUNTO, PLP) Democratic Development Forum or DDF Democratic Party or PD Frenti-Mudanca [Jose Luis Gutterres] Kmanek Haburas Unidade Nasional Timor Oan or Khunto National Congress for Timorese Reconstruction or CNRT [Kay Rala Xanana Gudmos] People's Liberation Party or PLP [Taur Matan Ruak] Revolutionary Front of Independent Timor-Leste or Fretilin [Mari Alkatiri]

International organization participation:

ACP, ADB, AŎSIS, ARF, ÁSEAN (observer), CPLP, EITI (compliant country), FAO, G-77, IBRD, ICAO, ICCt, ICRM, IDA, IFAD, IFC, IFRCS, ILO, IMF, IMO, Interpol, IOC, IOM, IPU, ITU, MIGA, NAM, OPCW, PIF (observer), UN, UNCTAD, UNESCO, UNIDO, Union Latina, UNWTO, UPU, WCO, WHO, WMO

Diplomatic representation in the US:

Chief of mission: Ambassador Domingos Sarmento ALVES (since 21 May 2014) chancery: 4201 Connecticut Avenue NW, Suite 504, Washington, DC 20008 telephone: [1] (202) 966-3202 FAX: [1] (202) 966-3205

Diplomatic representation from the US:

chief of mission: Ambassador Kathleen FITZPATRICK (since 19 January 2018) embassy: Avenida de Portugal, Praia dos Coqueiros, Dili mailing address: US Department of State, 8250 Dili Place, Washington, DC 20521-8250 telephone: (670) 332-4684 FAX: (670) 331-3206

Flag description:

red with a black isosceles triangle (based on the hoist side) superimposed on a slightly longer yellow arrowhead that extends to the center of the flag; a white star - pointing to the upper hoist-side corner of the flag - is in the center of the black triangle; yellow denotes the colonialism in Timor-Leste's past, black represents the obscurantism that needs to be overcome, red stands for the national liberation struggle; the white star symbolizes peace and serves as a guiding light.

National symbol(s):

Mount Ramelau; national colors: red, yellow, black, white

National anthem:

name: "Patria" (Fatherland) lyrics/music: Fransisco Borja DA COSTA/Afonso DE ARAUJO

note: adopted 2002; the song was first used as an anthem when Timor-Leste declared its independence from Portugal in 1975; the lyricist, Francisco Borja DA COSTA, was killed in the Indonesian invasion just days after independence was declared

Economy - overview:

Since independence in 1999, Timor-Leste has faced great challenges in rebuilding its infrastructure, strengthening the civil administration, and generating jobs for young people entering the work force. The development of offshore oil and gas resources has greatly supplemented government revenues. This technology-intensive industry, however, has done little to create jobs in part because there are no production facilities in Timor-Leste. Gas is currently piped to Australia for processing, but Timor-Leste has expressed interest in developing a domestic processing capability.

In June 2005, the National Parliament unanimously approved the creation of the Timor-Leste Petroleum Fund to serve as a repository for all petroleum revenues and to preserve the value of Timor-Leste's petroleum wealth for future generations. The Fund held assets of \$16 billion, as of mid-2016. Oil accounts for over 90% of government revenues, and the drop in the price of oil in 2014-16 has led to concerns about the long-term sustainability of government spending. Timor-Leste compensated for the decline in price by exporting more oil. The Ministry of Finance maintains that the Petroleum Fund is sufficient to sustain government operations for the foreseeable future.

Annual government budget expenditures increased markedly between 2009 and 2012 but dropped significantly through 2016. Historically, the government failed to spend as much as its budget allowed. The government has focused significant resources on basic infrastructure, including electricity and roads, but limited experience in procurement and infrastructure building has hampered these projects. The underlying economic policy challenge the country faces remains how best to use oil-andgas wealth to lift the non-oil economy onto a higher growth path and to reduce poverty.

GDP (purchasing power parity):

\$7.426 billion (2017 est.)
\$7.784 billion (2016 est.)
\$7.391 billion (2015 est.)
note: data are in 2017 dollars
country comparison to the world: 166

GDP (official exchange rate):

\$2.775 billion (2017 est.) note: non-oil GDP

GDP - real growth rate:

-4.6% (2017 est.)
5.3% (2016 est.)
4% (2015 est.)
country comparison to the world: 216
GDP - per capita (PPP):
This entry shows GDP on a purchasing power parity basis divided by population as of 1 July for the same year.

\$6,000 (2017 est.) \$6,400 (2016 est.) \$6,200 (2015 est.) note: data are in 2017 dollars country comparison to the world: 164

GDP - composition, by end use:

household consumption: 33% (2017 est.) government consumption: 30% (2017 est.) investment in fixed capital: 10.6% (2017 est.) investment in inventories: 0% (2017 est.) exports of goods and services: 78.4% (2017 est.) imports of goods and services: -52% (2017 est.)

GDP - composition, by sector of origin:

agriculture: 9.1% (2017 est.) industry: 56.7% (2017 est.) services: 34.4% (2017 est.)

Agriculture - products: rice, corn, cassava (manioc, tapioca), sweet potatoes, soybeans, cabbage, mangoes, bananas, vanilla

Industries: printing, soap manufacturing, handicrafts, woven cloth

Industrial production growth rate: 2% (2017 est.) country comparison to the world: 133

Labor force:

286,700 (2016 est.) country comparison to the world: 164

Labor force - by occupation:

agriculture: 41% industry: 13% services: 45.1% (2013)

Unemployment rate:

4.4% (2014 est.) 3.9% (2010 est.) country comparison to the world: 60

Population below poverty line: 41.8% (2014 est.)

Household income or consumption by percentage share: lowest 10%: 4% highest 10%: 27% (2007)

Distribution of family income - Gini index: 31.9 (2007 est.) 38 (2002 est.) country comparison to the world: 123

Budget:

revenues: 300 million (2017 est.) expenditures: 2.4 billion (2017 est.)

Taxes and other revenues:

10.8% (of GDP) (2017 est.) country comparison to the world: 213

Budget surplus (+) or deficit (-): -75.7% (of GDP) (2017 est.) country comparison to the world: 222

Public debt:

3.8% of GDP (2017 est.)3.1% of GDP (2016 est.)country comparison to the world: 206

Fiscal year:

calendar year Inflation rate (consumer prices): 0.6% (2017 est.) -1.3% (2016 est.) country comparison to the world: 34

Commercial bank prime lending rate:

13.29% (31 December 2017 est.) 14.05% (31 December 2016 est.) country comparison to the world: 57

Stock of narrow money:

\$563.3 million (31 December 2017 est.) \$464.1 million (31 December 2016 est.) country comparison to the world: 167

Stock of broad money:

\$563.3 million (31 December 2017 est.) \$464.1 million (31 December 2016 est.) country comparison to the world: 171 Stock of domestic credit:

-\$213 million (31 December 2017 est.) -\$212 million (31 December 2016 est.) country comparison to the world: 191

Market value of publicly traded shares: NA Current account balance:

-\$284 million (2017 est.) -\$544 million (2016 est.) country comparison to the world: 103

Exports:

\$16.7 million (2017 est.)\$18 million (2015 est.)country comparison to the world: 214

Exports - commodities: oil, coffee, sandalwood, marble note: potential for vanilla exports

Imports:

\$681.2 million (2017 est.)\$558.6 million (2016 est.)country comparison to the world: 192

Imports - commodities: food, gasoline, kerosene, machinery

Reserves of foreign exchange and gold:

\$544.4 million (31 December 2017 est.) \$437.8 million (31 December 2015 est.) note: excludes assets of approximately \$9.7 billion in the Petroleum Fund (31 December 2010) country comparison to the world: 150

Debt - external:

\$311.5 million (31 December 2014 est.) \$687 million (31 December 2013 est.) country comparison to the world: 184

Stock of direct foreign investment - at home: (31 December 2009 est.)

Exchange rates:

The US dollar is used

Energy: Timor-Leste

Electricity access:

electrification - total population: 63.4% (2016) electrification - urban areas: 91.7% (2016) electrification - rural areas: 49.2% (2016) **Electricity - production:** 0 kWh NA (2016 est.) country comparison to the world: 219

Electricity - consumption: 0 kWh (2016 est.) country comparison to the world: 218

Electricity - exports: 0 kWh (2017 est.) country comparison to the world: 207

Electricity - imports: 0 kWh (2016 est.) country comparison to the world: 209

Electricity - installed generating capacity: 600 kW NA (2016 est.) country comparison to the world: 215

Electricity - from fossil fuels: 0% of total installed capacity (2016 est.) country comparison to the world: 215

Electricity - from nuclear fuels:

This entry measures the capacity of plants that generate electricity through radioactive decay of nuclear fuel, expressed as a share of the country's total generating capacity. 0% of total installed capacity (2017 est.) country comparison to the world: 194

Electricity - from hydroelectric plants:

0% of total installed capacity (2017 est.) country comparison to the world: 204

Electricity - from other renewable sources:

100% of total installed capacity (2017 est.) country comparison to the world: 1

Crude oil - production:

40,320 bbl/day (2017 est.) country comparison to the world: 58

Crude oil - exports: 62,060 bbl/day (2015 est.) country comparison to the world: 39

Crude oil - imports:

0 bbl/day (2015 est.) country comparison to the world: 203

Crude oil - proved reserves: 0 bbl (1 January 2018 est.) country comparison to the world: 203 **Refined petroleum products - production:** 0 bbl/day (2015 est.) country comparison to the world: 207

Refined petroleum products - consumption: 3,500 bbl/day (2016 est.) country comparison to the world: 186

Refined petroleum products - exports: 0 bbl/day (2015 est.) country comparison to the world: 208

Refined petroleum products - imports: 3,481 bbl/day (2015 est.) country comparison to the world: 182

Natural gas - production:

5.776 billion cu m (2017 est.) country comparison to the world: 48

Natural gas - consumption:

0 cu m (2017 est.) country comparison to the world: 205

country comparison to the world: 27

Natural gas - exports: 5.776 billion cu m (2017 est.)

.

Natural gas - imports: 0 cu m (2017 est.) country comparison to the world: 199 Natural gas - proved reserves: 200 billion cu m (1 January 2006 est.) country comparison to the world: 42

Carbon dioxide emissions from consumption of energy:

533,400 Mt (2017 est.) country comparison to the world: 184

Communications: Timor-Leste

Telephones - fixed lines: total subscriptions: 2,364 subscriptions per 100 inhabitants: less than 1 (2017 est.) country comparison to the world: 210 Telephones - mobile cellular: total subscriptions: 1,546,624 subscriptions per 100 inhabitants: 120 (2017 est.) country comparison to the world: 153

Telephone system:

general assessment: rudimentary service in urban and some rural areas, which is expanding with the entrance of new competitors; 3G LTE service, with about 97% of population having access, among 3 mobile operators; increase in mobile broadband penetration (2018) domestic: system suffered significant damage during the violence associated with independence; limited fixed-line services; less than 1 per 100 and mobile-cellular services have been expanding and are now available in urban and most rural areas with teledensity of 120 per 100 (2018)

international: country code - 670; international service is available; geostationary earth orbit satellite agreement in the works

Broadcast media:

7 TV stations (3 nationwide satellite coverage; 2 terrestrial coverage, mostly in Dili; 2 cable) and 21 radio stations (3 nationwide coverage) (2019)

Internet country code: .tl

Internet users:

total: 318,373 percent of population: 25.2% (July 2016 est.) country comparison to the world: 156

Broadband - fixed subscriptions:

total: 3,346 subscriptions per 100 inhabitants: less than 1 (2017 est.) country comparison to the world: 182

Transportation: Timor-Leste

Civil aircraft registration country code prefix: 4W (2016)

Airports:

6 (2013) country comparison to the world: 176

Airports - with paved runways:

total: 2 (2013) 2,438 to 3,047 m: 1 (2013) 1,524 to 2,437 m: 1 (2013)

Airports - with unpaved runways:

total: 4 (2013) 914 to 1,523 m: 2 (2013) under 914 m: 2 (2013)

Heliports:

8 (2013)

Roadways:

total: 6,040 km (2008) paved: 2,600 km (2008) unpaved: 3,440 km (2008) country comparison to the world: 138

Ports and terminals:

major seaport(s): Dili

Military and Security: Timor-Leste

Military expenditures:

0.9% of GDP (2017) 0.93% of GDP (2016) 2.56% of GDP (2015) 2.12% of GDP (2014) 2.42% of GDP (2013) country comparison to the world: 127

Military branches:

Timor-Leste Defense Force (Falintil-Forcas de Defesa de Timor-Leste, Falintil (F-FDTL)): Army, Navy (Armada) (2013)

Military service age and obligation: 18 years of age for voluntary military service; 18-month service obligation (2019)

Transnational Issues: Timor-Leste

Disputes - international:

Three stretches of land borders with Indonesia have yet to be delimited, two of which are in the Oecussi exclave area, and no maritime or Economic Exclusion Zone boundaries have been established between the countries; maritime boundaries with Indonesia remain unresolved; Timor-Leste and Australia reached agreement on a treaty delimiting a permanent maritime boundary in March 2018; the treaty will enter into force once ratified by the two countries' parliaments.

Trafficking in persons:

Current situation: Timor-Leste is a source and destination country for men, women, and children subjected to forced labor and sex trafficking; Timorese women and girls from rural areas are lured to the capital with promises of legitimate jobs or education prospects and are then forced into prostitution or domestic servitude, and other women and girls may be sent to Indonesia for domestic servitude; Timorese family members force children into bonded domestic or agricultural labor to repay debts; foreign migrant women are vulnerable to sex trafficking in Timor-Leste, while men and boys from Burma, Cambodia, and Thailand are forced to work on fishing boats in Timorese waters under inhumane conditions

tier rating: Tier 2 Watch List – Timor-Leste does not fully comply with the minimum standards for the elimination of trafficking; however, it is making significant efforts to do so; in 2014, legislation was drafted but not finalized or implemented that outlines procedures for screening potential trafficking victims; law enforcement made modest progress, including one conviction for sex trafficking, but efforts are hindered by prosecutors' and judges' lack of expertise in applying anti-trafficking laws effectively; the government rescued two child victims with support from an NGO but did not provide protective services (2015)

Illicit drugs: NA

| Acronym | Definition |
|----------|---|
| ACP | African, Caribbean and Pacific Group of States |
| ADB | Asian Development Bank |
| ADINET | ASEAN Disaster Information Network |
| AHP | Australian Humanitarian Partnership |
| AIIB | Australian Infrastructure Investment Bank |
| AMP | Alliance of Change for Progress |
| APAN | All Partners Access Network |
| ARF | ASEAN Regional Forum |
| ASEAN | Association of Southeast Asian Nations |
| BRACCE | Building Resilience to Changing Climate and Environment |
| CCDRR | Child Centered Disaster Risk Reduction |
| CDC | Center for Disease Control |
| CED | Community Economic Development |
| CEDAW | Convention on the Elimination of All Forms of Discrimination Against Women |
| CFE-DM | Center for Excellence in Disaster Management and Humanitarian Assistance |
| CIA | Central Intelligence Agency |
| CIGC | Crises Management Centre |
| CIGD | Inter-Ministerial Commission for Disaster Risk Management |
| CNRT | National Congress for Timorese Reconstruction |
| СРАР | Country Program Action Plan |
| CVTL | Cruz Vermelha de Timor-leste/ Timor-Leste Red Cross |
| DDMC | District Disaster Management Commissions |
| DFAT | Australian Department of Foreign Affairs and Trade |
| DMHA | Disaster Management and Humanitarian Assistance |
| DNMG | Directorate of Meteorology and Geophysics |
| DOC | Disaster Operation Centre |
| DoD | Department of Defense |
| DoS | Department of State |
| ENSO | El Niño Southern Oscillation |
| ETTA | East Timor Transitional Authority |
| F-FDTL | Fantil-Forcas de Defesa de Timor-Leste |
| GDP | Gross Domestic Product |
| НСТ | Humanitarian Country Team |
| HFA | Hyogo Framework for Action |
| HIV/AIDS | Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome |

Acronyms and Abbreviations

| Acronym | Definition |
|-----------|--|
| IDP | Internally Displaced People |
| IFRC | International Federation of Red Cross and Red Crescent Societies |
| INTERFET | International Force East Timor |
| IOM | International Organization for Migration |
| IS | Information Sharing |
| JICA | Japan International Cooperation Agency |
| km | Kilometers |
| LF | Lymphatic Filariasis |
| MAF-UK | United Kingdom Mission Aviation Fellowship |
| MMR | Measles-Mumps-Rubella |
| MoU | Memorandum of Understanding |
| MSS | Ministry of Social Solidarity |
| MW | Megawatts |
| NAP | National Action Plan |
| NAPA | National Adaptation Program of Action |
| NCDs | Non-Communicable Diseases |
| NDC | National Disaster Coordinator |
| NDMD | National Disaster Management Directorate |
| NDRMD | National Disaster Risk Management Directorate |
| NGO | Non-Governmental Organization |
| NTDs | Neglected Tropical Diseases |
| OCHA | UN Office for the Coordination of Humanitarian Affairs |
| ODA | Official Development Assistance |
| PDC | Pacific Disaster Center |
| PLP | People's Liberation Party |
| PM | Prime Minister |
| PN-BESITL | National Platform for Water, Sanitation and Hygiene |
| PNTL | National Police |
| РРР | Public Private Partnership |
| RO-RO | Roll on – Roll Off |
| SBAA | Standard Basic Assistance Agreement |
| SDA | Sub-District Administrator |
| SDDMC | Sub-District Disaster Management Commission |
| SDMC | Suco Disaster Management Commission |
| SEPC | Secretary of State for Civil Protection |
| SISN | National Security Integration System |
| STH | Soil-Transmitted Helminths |
| ТВ | Tuberculosis |

| Acronym | Definition |
|---------|--|
| TEU | Twenty-Foot Equivalent (container capacity) |
| U.S. | United States of America |
| UN | United Nations |
| UNDP | United Nations Development Program |
| UNICEF | United Nations Children's Fund |
| UNMISET | United Nations Mission of Support in East Timor |
| UNMIT | United Nations Integrated Mission in Timor-Leste |
| UNTAET | United Nations Transitional Administration in East Timor |
| USAID | U.S. Agency for International Development |
| USD | United States Dollars |
| USGET | U.S. Support Group East Timor |
| VFR | Visual Flight Rules |
| WASH | Water, Sanitation and Hygiene |
| WFP | World Food Program |
| WHO | World Health Organization |
| WMO | World Meteorological Organization |
| WPS | Women, Peace and Security |

References (Endnotes)

¹ CIA World Factbook. Timor-Leste. 13 May 2019. https:// www.cia.gov/library/publications/the-world-factbook/

geos/tt.html ² The Conversation. Reducing risk in Timor-Leste: a strong foundation for one of the youngest nations. 10 November 2011. Sara Filomena Varudo Soares. https:// theconversation.com/reducing-risk-in-timor-leste-astrong-foundation-for-one-of-the-youngest-nations-3839

³ CIA World Factbook. Timor-Leste. 13 May 2019. https:// www.cia.gov/library/publications/the-world-factbook/ geos/tt.html ⁴ World Bank. Timor Leste Assessment. http://

siteresources.worldbank.org/INTPACIFICISLANDS/ Resources/TIMOR_LESTE_ASSESSMENT.pdf

⁵ UNISDR. Risk reduction critical to Timor Leste development plans. David Singh. 22 November 2011. https://www.unisdr.org/archive/23777

⁶ Australian Humanitarian Partnership. Disaster READY Timor-Leste. https://www.

australianhumanitarianpartnership.org/timorleste

⁷ INFORM Index. Timor-Leste 2019. www.inform-index. org/Countries/Country-profiles

⁸ Republica Democratica de Timor-Leste. Timor Leste Stategic Development Plan 2011-2030. http://timorleste.gov.tl/wp-content/uploads/2012/02/Strategic-Development-Plan_EN.pdf

⁹ Reliefweb. Timor-Leste: Country Profile. 8 Mar 2017. https://reliefweb.int/report/timor-leste/timor-lestecountry-profile

¹⁰ National Disaster Management Directorate (NDMD). "PARK Manual for CBDRM Pilot Project Along Dili-Ainaro Road Corridor." Ministry of Social Solidarity, 2015. https://www.geonode-gfdrrlab.org/documents/810 ¹¹ "A Comprehensive National Risk Assessment and Mapping: Timor-Leste; A Country Situation Report on Disaster Risk Assessment related Initiatives." Asian Disaster Preparedness Center, June 2013. https://www.geonode-

gfdrrlab.org/documents/810 ¹² "A Comprehensive National Risk Assessment and Mapping: Timor-Leste; A Country Situation Report on Disaster Risk Assessment related Initiatives." Asian Disaster Preparedness Center, June 2013. https://www.geonodegfdrrlab.org/documents/810

CIA. The World Factbook. 19 July 2019. https://www.cia. gov/library/publications/the-world-factbook/attachments/ maps/TT-map.gif

¹⁴ Timor Leste Ministry of Tourism Arts and Culture. http://www.timorleste.tl/east-timor/about/geographyclimate/

¹⁵ Government of Timor-Leste. http://timor-leste.gov. tl/?p=29&lang=en

¹⁶ Australian War Memorial. https://www.awm.gov.au/ articles/atwar/timor

¹⁷ Government of Timor-Leste http://timor-leste.gov. tl/?p=29&lang=en

¹⁸ Timor-Leste Ministry of Tourism Arts and Culture. http://www.timorleste.tl/east-timor/about/history/

¹⁹ United Nations Integrated Mission in Timor-Leste https://peacekeeping.un.org/mission/past/unmit/ background.shtml

²⁰ Government of Timor-Leste http://timor-leste.gov. tl/?p=29&lang=en

²¹ United Nations Integrated Mission in Timor-Leste https://peacekeeping.un.org/mission/past/unmit/ background.shtml

²² BBC. East Timor Profile - Timeline. 26 February 2018. https://www.bbc.com/news/world-asia-pacific-14952883 (28 May 19)

²³ Loro Horta. Young and Wild: Timor-Leste's troubled military. Institute of Defence and Strategic Studies, Nanyang Technical University. 20 March 2006. https://web. archive.org/web/20070927012843/http://www.idss.edu.sg/ publications/Perspective/IDSS0162006.pdf

⁴ UN Security Council. Report of the Independent Special Commission of Inquiry for Timor-Leste. S/2006/822 18 October 2006. UN Security Council. Letter dated 17 October 2006 from the Secretary-General addressed to the President of the Security Council. Kofi Annan. 17 October 2006. https://www.securitycouncilreport.

org/atf/cf/%7B65BFCF9B-6D27-4E9C-8CD3-

CF6E4FF96FF9%7D/TL%20S2006%20822.pdf ²⁵ Nautilus Institute for Security and Sustainability. Timor's political crisis in 2006. Accessed 22 August 2019. https:// nautilus.org/publications/books/australian-forces-abroad/ east-timor/timors-political-crisis-in-2006/

²⁶ Dolven, Ben; Margesson, Rhoda, and Bruce Vaughn. "Timor-Leste: Political Dynamics, Development, and International Involvement." Congressional Research Service. 03 July 2012 via https://fas.org/sgp/crs/row/ R42585.pdf

²⁷ BBC. Êast Timor Profile - Timeline. 26 February 2018. https://www.bbc.com/news/world-asia-pacific-14952883 (28 May 19)

²⁸ Dolven, Ben; Margesson, Rhoda, and Bruce Vaughn. "Timor-Leste: Political Dynamics, Development, and International Involvement." Congressional Research Service. 03 July 2012 via https://fas.org/sgp/crs/row/ R42585.pdf

²⁹ Photo 1. Australian Broadcasting Corporation. https:// www.abc.net.au/news/2018-08-28/xanana-gusmaofarewells-australian-troops-in-dili/10156362 ³⁰ BBC. East Timor profile – Timeline. 26 February 2018. https://www.bbc.com/news/world-asia-pacific-14952883 ³¹ Ûnited Nations Integrated Mission in Timor-Leste. https://peacekeeping.un.org/mission/past/unmit/ background.shtml

³² World Vision International: Job Opportuities in Timor Leste. https://careers.wvi.org/job-opportunities-in-timorleste

³³ Plan International. With a new law in Timor-leste, number of women in politics skyrockets. 2 November 2016. https://plan-international.org/blog/2016/11/newlaw-timor-leste-number-women-politics-skyrockets ³⁴ Plan International. With a new law in Timor-leste, number of women in politics skyrockets. 2 November 2016. https://plan-international.org/blog/2016/11/newlaw-timor-leste-number-women-politics-skyrockets

³⁵ Global Affairs Canada. Timor Leste. 9 September 2018. https://www.international.gc.ca/cil-cai/country_insightsapercus_pays/ci-ic_tl.aspx?lang=eng ³⁶ Visit East Timor. https://visiteasttimor.com/see-do/

timorese-people-culture/

³⁷ East Timor Government. Culture in East Timor. (2012) http://easttimorgovernment.com/culture.htm

³⁸ Union of Catholic Asian News (UCAN) 2015. https:// www.ucanews.com/news/timor-leste-commemorates-500years-of-church-presence/74088

³⁹ The Asia Foundation. "Tara Bandu: Its Role and Use in Community Conflict Prevention in Timor-Leste." June 2013 via https://asiafoundation.org/resources/pdfs/ TaraBanduPolicyBriefENG.pdf

⁴⁰ CIA Factbook https://www.cia.gov/library/publications/ the-world-factbook/attachments/maps/TT-map.gif ⁴¹ National Research Council. Aging and the

Macroeconomy: Long-Term Implications of an Older Population. Chapter 3. The National Academies Press. (2012) https://www.nap.edu/read/13465/chapter/5#56 ⁴² McTurk, Nicholas. "Timor-Leste Population and Housing Census 2015: Analytical Report on Population Projection

(Volume 9)." General Directorate of Statistics (GDS) and UN Population Fund (UNFPA), 2018 via https:// timor-leste.unfpa.org/sites/default/files/pub-pdf/2015%20 Population%20Projection%20Report_0.pdf

⁴³ ĈIA World Factbook. Timor-Leste. 13 May 2019. https:// www.cia.gov/library/publications/the-world-factbook/ geos/tt.html

geos/tt.html ⁴⁴ McTurk, Nicholas. "Timor-Leste Population and Housing Census 2015: Analytical Report on Population Projection (Volume 9)." General Directorate of Statistics (GDS) and UN Population Fund (UNFPA), 2018 via https:// timor-leste.unfpa.org/sites/default/files/pub-pdf/2015%20 Population%20Projection%20Report_0.pdf ⁴⁵ McTurk, Nicholas. "Timor-Leste Population and Housing

⁴⁵ McTurk, Nicholas. "Timor-Leste Population and Housing Census 2015: Analytical Report on Population Projection (Volume 9)." General Directorate of Statistics (GDS) and UN Population Fund (UNFPA), 2018 via https:// timor-leste.unfpa.org/sites/default/files/pub-pdf/2015%20 Population%20Projection%20Report_0.pdf

⁴⁶ Neupert, Ricardo and Silvino Lopes. "The Demographic Component of the Crisis in Timor-Leste." Association for the Study of Ethnicity and Nationalism, London School of Economics. September 2006 via http://www.sneps.net/ wp-content/uploads/2010/04/THE-DEMOGRAPHIC-COMPONENT-OF-THE-EAST-TIMORESE-CRISIS-firstcomplete-draft.pdf

 ⁴⁷ East Timor Government. Demographics. (2012) http:// www.easttimorgovernment.com/demographics.htm
 ⁴⁸ CIA Factbook https://www.cia.gov/library/publications/ the-world-factbook/attachments/maps/TT-map.gif

 ⁴⁹ East Timor Government. (2012) http://www.
 easttimorgovernment.com/demographics.htm (27 May 19)
 ⁵⁰ United Nations Development Programme. Project: Strengthening the Resilience of Small scale Rural Infrastructure and Local Government Systems to Climatic Variability and Risk. 2013.

⁵¹Ministry of Tourism. Timor-Leste. http://www.timorleste. tl/east-timor/about/people-culture/

⁵² CIA World Factbook. Timor-Leste. 13 May 2019. https:// www.cia.gov/library/publications/the-world-factbook/ geos/tt.html

⁵³ Ethnologue Langugages of the World. East Timor. (2019) https://www.ethnologue.com/country/tl/languages

⁵⁴ https://www.international.gc.ca/cil-cai/country_insightsapercus_pays/ci-ic_tl.aspx?lang=eng#cn-7 (27 May 19)

⁵⁵ Government of Canada. Timor Leste. Country Insights.
 19 September 2018. https://www.international.gc.ca/cil-cai/country_insights-apercus_pays/ci-ic_tl.aspx?lang=eng
 ⁵⁶ East Timor Law & Justice Bulletin. Embedded
 in the Land: Customary Social Relations and
 Practices of Resilience. (2012) https://www.

easttimorlawandjusticebulletin.com/2012/08/new-articlein-land-customary-social.html

⁵⁷ Atlas Obscura. Uma Lulik. Max Cortes. 2019. https:// www.atlasobscura.com/places/uma-lulik ⁵⁸ U.S. Department of State, Report on International Religious Freedom 2017 (Timor-Leste chapter) https:// www.state.gov/reports/2017-report-on-internationalreligious-freedom/

⁵⁹ WHO. Environmental health in emergencies and disasters: a practical guide. 2002. http://www.who.int/environmental_health_emergencies/vulnerable_groups/en/
 ⁶⁰ Republica Democratica de Timor-Leste. Launching of Timor-leste's Povery Report 2014. 28 Sept 2016. http://timor-leste.gov.tl/wp-content/uploads/2016/10/Launching-of-Timor-Leste-s-Poverty-Report-20141.pdf
 ⁶¹ Republica Democratica de Timor-Leste. Timor Leste Stategic Development Plan 2011-2030. http://timor-leste.gov.tl/wp-content/uploads/2012/02/Strategic-Development-Plan_EN.pdf

 ⁶² UNFPA (2018) https://timor-leste.unfpa.org/en/news/ intra-partum-and-immediate-post-partum-care-training-0
 ⁶³ PopulationPyramid.net. Timor-Leste – 2019. Accessed 23 August 2019. https://images. populationpyramid.net/capture/?selector=%23pyramidshare-container&url=https%3A%2F%2Fwww. populationpyramid.net%2Ftimor-

leste%2F2019%2F%3Fshare%3Dtrue

⁶⁴ Republica Democratica de Timor-Leste. Timor Leste Stategic Development Plan 2011-2030. http://timorleste.gov.tl/wp-content/uploads/2012/02/Strategic-Development-Plan_EN.pdf

⁶⁵ Republica Democratica de Timor-Leste. Timor Leste Stategic Development Plan 2011-2030. http://timorleste.gov.tl/wp-content/uploads/2012/02/Strategic-Development-Plan_EN.pdf

⁶⁶ CIA Factbook https://www.cia.gov/library/publications/ the-world-factbook/attachments/maps/TT-map.gif

⁶⁷ "Timor-Leste Strategic Development Plan 2011-2030." http://timor-leste.gov.tl/wp-content/uploads/2012/02/ Strategic-Development-Plan_EN.pdf

⁶⁸ "Timor-Leste Strategic Development Plan 2011-2030." http://timor-leste.gov.tl/wp-content/uploads/2012/02/ Strategic-Development-Plan_EN.pdf

 ⁶⁹ "Asian Development Outlook 2019: Strengthening Disaster Resilience." Asian Development Bank. April 2019 via https://www.adb.org/sites/default/files/ publication/492711/ado2019.pdf
 ⁷⁰ "Asian Development Outlook 2019: Strengthening

⁷⁰ "Asian Development Outlook 2019: Strengthening Disaster Resilience." Asian Development Bank. April 2019 via https://www.adb.org/sites/default/files/ publication/492711/ado2019.pdf

publication/492711/ado2019.pdf ⁷¹ "Asian Development Outlook 2019: Strengthening Disaster Resilience." Asian Development Bank. April 2019 via https://www.adb.org/sites/default/files/ publication/492711/ado2019.pdf

 ⁷² USAID. Avansa Agrikultura Project. https://www.usaid. gov/timor-leste/project-descriptions/usaids-avansaagrikultura-project
 ⁷³ "Timor Leste Reconstruction Provide Provide

⁷³ "Timor-Leste Economic Report October 2018: Regaining Momentum?" World Bank Group via http://documents. worldbank.org/curated/en/756821542739478616/ pdf/132202-WP-P168251-PUBLIC-Disclosed-11-25-2018. pdf

pdf ⁷⁴ "Timor-Leste: Tibar Bay Port: Gateway to the World." World Bank. 24 Feb 19 via https://www.worldbank.org/en/ about/partners/brief/timor-leste-tibar-bay-port-gatewayto-the-world (30 May 19)

⁷⁵ CIA Factbook (30 May 19) https://www.cia.gov/library/ publications/the-world-factbook/attachments/maps/TTmap.gif ⁷⁶ DLCA. Timor-Leste Logistic Infrastructure. Lucy Styles. 3 June 2019. https://dlca.logcluster.org/display/public/ DLCA/2.1+Timor-Leste+Port+of+Dili

⁷⁷ Bollore. Port of Dili, East Timor. 2016. https://www. bollore-ports.com/en/worldwide-network/ asia/port-ofdili-east-timor.html

⁷⁸ "Timor-Leste Transport Operations, November 2018." Asian Development Bank via https://www.adb.org/sites/ default/files/publication/471701/timor-leste-transportoperations.pdf

⁷⁹ Government of Timor-Leste. Web Portal of the Government of Timor-Leste. http://timor-leste.gov. tl/?lang=en

⁸⁰ Australian Government. Vulnerability assessment of climate change impacts on groundwater resources in Timor-Leste. https://www.environment.gov.au/system/ files/resources/3bf4aa02-6fa1-4c84-8f52-64773a63cfa9/ files/groundwater-timor-leste-report.pdf

⁸¹ Government of Timor-Leste. Web Portal of the Government of Timor-Leste. http://timor-leste.gov. tl/?lang=en

⁸² Davidson, Helen. "Timor-Leste president Franciso 'Lu'Olo' Guterres: a produce of war now pushing for peace." The Guardian, 08 Jun 17 via https://www.theguardian.com/ world/2017/jun/08/timor-leste-president-francisco-luologuterres-a-product-of-war-now-pushing-for-peace

 ⁸³ "New Timor Leste PM pledges to bring unity." Straits Times, 23 Jun 18 via https://www.straitstimes.com/asia/seasia/new-timor-leste-pm-pledges-to-bring-unity
 ⁸⁴ Belo, Jose. "New Timor-Leste govt beset with problems as Gusmao walks away." La Croix International, 27 Jul 18 via https://international.la-croix.com/news/new-timor-lestegovt-beset-with-problems-as-gusmao-walks-away/8158#
 ⁸⁵ Timor-leste. Ministry of Tourism. https://www. timorleste.tl/east-timor/about/geographyclimate/
 ⁸⁶ Timor-leste. Ministry of Tourism. https://www. timorleste.tl/east-timor/about/geographyclimate/

⁸⁷ Australian Government Department of Climate Change and Energy Efficiency. "Vulnerability assessment of climate change impacts on groundwater. Luke Wallace, Baskaran Sundaram, Ross S. Brodie, Sarah Marshall, Samantha Dawson, John Jaycock, Gerard Stewart and Lindsay Furness. July 2012.

https://www.environment.gov.au/system/files/ resources/3bf4aa02-6fa1-4c84-8f52-64773a63cfa9/files/ groundwater-timor-leste-report.pdf ⁸⁸ Food and Agriculture Organization (FAO) of the UN.

⁸⁸ Food and Agriculture Organization (FAO) of the UN. "Country Profile – Timor-Leste." Version 2011; FAO AQUASTAT Reports via http://www.fao.org/3/ca0411en/ CA0411EN.pdf

 ⁸⁹ Timor-leste. Ministry of Tourism. https://www. timorleste.tl/east-timor/about/geographyclimate/
 ⁹⁰ Government of the Democratic Republic of Timor-Leste. 2002. http://gov.east-timor.org/MAFF/

 ⁹¹ Food and Agriculture Organization of the United Nations. 2019. http://www.fao.org/home/en/
 ⁹² Ministry of Agriculture and Fisheries. Seeds of

Life. "Food security begins with seed security" http:// seedsoflifetimor.org/about-us/

⁹³ CIA Factbook (28 May 19) https://www.cia.gov/library/ publications/the-world-factbook/attachments/maps/TTmap.gif

⁹⁴ Food and Agriculture Organization (FAO) of the UN. "Country Profile – Timor-Leste." Version 2011; FAO AQUASTAT Reports via http://www.fao.org/3/ca0411en/ CA0411EN.pdf ⁹⁵ United Nations Development Programme. Project: Strengthening the Resilience of Small scale Rural Infrastructure and Local Government Systems to Climatic Variability and Risk. 2013.

⁹⁶ Republica Democratica de Timor-Leste. Timor Leste Stategic Development Plan 2011-2030. http://timorleste.gov.tl/wp-content/uploads/2012/02/Strategic-Development-Plan_EN.pdf

⁹⁷ Food and Agriculture Organization of the United Nations. 2019. http://www.fao.org/home/en/

⁹⁸ Republica Democratica de Timor-Leste. Timor Leste Stategic Development Plan 2011-2030. http://timorleste.gov.tl/wp-content/uploads/2012/02/Strategic-Development-Plan_EN.pdf

⁹⁹ Saika, Udoy and Dr. Merve Hosgelen. "Timor-Leste National Human Development Report 2018: Planning the Opportunities for a Youthful Population." UN Development Program (UNDP). April 2018 via https:// www.undp.org/content/dam/timorleste/docs/reports/ HDR/2018NHDR/TLNHDR%202018%20PPT%20 Presentation_Dili%20Public%20Seminar%2004.04.18.pdf

¹⁰⁰ Republica Democratica de Timor-Leste. Timor Leste Stategic Development Plan 2011-2030. http://timorleste. gov.tl/wp-content/uploads/2012/02/Strategic-Development-Plan_EN.pdf

 ¹⁰¹ (UNMIT) Communications and Public Information Office of the UN Integrated Mission in Timor-Leste (30 May 19) http://www.timorleste.tl/destinations/nationalpark/
 ¹⁰² Reliefweb. IFRC Program Overview 2019. https://

¹⁰² Reliefweb. IFRC Program Overview 2019. https:// reliefweb.int/report/timor-leste/ifrc-timor-leste-programoverview-2019

¹⁰³ CIA World Factbook. Timor-Leste. 13 May 2019. https:// www.cia.gov/library/publications/the-world-factbook/ geos/tt.html

 ¹⁰⁴ Australian Humanitarian Partnership.
 Disaster READY Timor-Leste. https://www. australianhumanitarianpartnership.org/timorleste
 ¹⁰⁵ World Bank. Timor Leste Assessment. http:// siteresources.worldbank.org/INTPACIFICISLANDS/ Resources/TIMOR_LESTE_ASSESSMENT.pdf
 ¹⁰⁶ UNISDR. Risk reduction critical to Timor Leste development plans. David Singh. 22 November 2011. https://www.unisdr.org/archive/23777

¹⁰⁷ Preventionweb. Timor-Leste Disaster & Risk Profile.
 2015. https://www.preventionweb.net/countries/tls/data/
 ¹⁰⁸ Australian Humanitarian Partnership.

Disaster READY Timor-Leste. https://www. australianhumanitarianpartnership.org/timorleste ¹⁰⁹ EMDAT. https://www.emdat.be/emdat_db/

¹¹⁰ Worldbank. Building Climate and Disaster Resilience in Communities along Dili-Ainaro and Linked Road Cooridors Project. May 2015. http://documents.worldbank. org/curated/en/466781468299341781/pdf/97119-WP-P133265-PUBLIC-Box391470B-ACS.pdf

 ¹¹¹ IFRC. Cruz Vermelha de Timor-Leste 5 Year Report 2010-2014. https://www.ifrc.org/Global/Documents/ Secretariat/Report%20CVTL_5_Years_WEB.pdf
 ¹¹² Reliefweb. Timor-Leste: Country Profile. 8 Mar 2017. https://reliefweb.int/report/timor-leste/timor-lestecountry-profile

¹¹³ Reliefweb, Case Study: Start Fund Alert 158. Timor-Leste: Anticipation of Drought 2017. Start Network. 24 April 2018. https://reliefweb.int/report/timor-leste/ case-study-start-fund-alert-158-timor-leste-anticipationdrought-2017

¹¹⁴ The Conversation. Reducing risk in Timor-Leste: a strong foundation for one of the youngest nations. 10 November 2011. Sara Filomena Varudo Soares. https:// theconversation.com/reducing-risk-in-timor-leste-astrong-foundation-for-one-of-the-youngest-nations-3839 ¹¹⁵ World Bank. Timor Leste Assessment. http://

¹¹¹ World Bank. Timor Leste Assessment. http://
 siteresources.worldbank.org/INTPACIFICISLANDS/
 Resources/TIMOR_LESTE_ASSESSMENT.pdf
 ¹¹⁶ World Bank. Timor Leste Assessment. http://
 siteresources.worldbank.org/INTPACIFICISLANDS/
 Resources/TIMOR_LESTE_ASSESSMENT.pdf
 ¹¹⁷ PreventionWeb. National Disaster Risk Management
 Policy. March 2008. https://www.preventionweb.net/
 files/22114_microsoftword15500nationaldisasterr.pdf
 ¹¹⁸ Reliefweb. Flash floods in East Timor leave 1,000
 homeless UN mission says. 21 June 2001. https://reliefweb.
 int/report/timor-leste/flash-floods-east-timor-leave-1000 homeless-un-mission-says

¹¹⁹ Reliefweb. OCHA. East Timor – Floods OCHA Situation Report No. 2. 4 July 2001. https://reliefweb. int/report/timor-leste/east-timor-floods-ocha-situationreport-no-2

¹²⁰ Reliefweb. Timor-Leste: Floods OCHA Situation Report No. 3. 27 June 2003. https://reliefweb.int/report/timorleste/timor-leste-floods-ocha-situation-report-no-3

¹²¹ Reliefweb. Timor-Leste: Appeal for assistance – Food supplies for people affected by drought and floods. https:// reliefweb.int/report/timor-leste/timor-leste-appealassistance-food-supplies-people-affected-drought-andfloods

¹²² Reliefweb. Timor-Leste: Storms and floods Appeal No. MDRTP001 Final Report. 1 July 2007. https://reliefweb.int/ report/timor-leste/timor-leste-storms-and-floods-appealno-mdrtp001-final-report

¹²³ UNICEF. Timor Leste Flood Emergency Situation Report. 1 July 2013. https://www.unicef.org/appeals/files/ UNICEF_Timor_Leste_Sitrep1_Floods_1Jul13.pdf
¹²⁴ SBS News_East Timor bit by 6.3 magnitude earthquake

¹²⁴ SBS News. East Timor hit by 6.3 magnitude earthquake. 11 April 2015. https://www.sbs.com.au/news/east-timorhit-by-6-3-magnitude-earthquake

¹²⁵ ACAPS. Timor-Leste Briefing Note: Anticipatory Drought in Timor-Leste. 3 May 2017. https://www.acaps. org/sites/acaps/files/products/files/20170503_acaps_start_ anticipatory_briefing_note_timor_leste.pdf

 ¹²⁶ IFRC. Emegency appeal Timor Leste: Drought.
 ¹²⁷ Guardian Liberty Voice. 6.3 Earthquake Shakes Dili, East Timor & 5.2 Quake Rocks Puerto Penasco, Mexico. DiMarkco Chandler. 6 April 2019. https://guardianlv. com/2019/04/6-3-earthquake-shakes-dili-east-timor-5-2quake-rocks-puerto-penasco-mexico/

¹²⁸ Floodlist. Indonesia and East Timor – Cyclone Lili Causes Flooding and Wind Damage. 12 May 2019. http:// floodlist.com/asia/indonesia-east-timor-cyclone-lilimay-2019

¹²⁹ World Vision Australia. Resilience project in Timor Leste. 2019. https://fmnrhub.com.au/projects/resilienceproject-timor-leste/#.XPHNHExFx7g

¹³⁰ World Vision. Timor-leste terrain recovers from the ashes of 'slash and burn'. 16 July 2013. https://www.wvi. org/timor-leste/article/timor-leste-terrain-recovers-ashes-slash-and-burn

¹³¹ Reliefweb. Timor-Leste: Storms and floods Appeal No. MDRTP001 Final Report. 1 July 2007. https://reliefweb.int/ report/timor-leste/timor-leste-storms-and-floods-appealno-mdrtp001-final-report ¹³² Reliefweb. Timor-Leste: Country Profile. 8 Mar 2017. https://reliefweb.int/report/timor-leste/timor-lestecountry-profile

 ¹³³ DFAT. Strengthening community livelihoods in Timore-Leste. 10 October 2018. https://dfat.gov.au/aid/ who-we-work-with/ngos/ancp/news/Pages/strengtheningcommunity-livelihoods-in-timor-leste.aspx
 ¹³⁴ World Bank. Timor Leste Assessment. http:// siteresources.worldbank.org/INTPACIFICISLANDS/ Resources/TIMOR_LESTE_ASSESSMENT.pdf
 ¹³⁵ INFORM Index_Timor-Leste 2019. www.inform-index

¹³⁵ INFORM Index. Timor-Leste 2019. www.inform-index. org/Countries/Country-profiles

¹³⁶ "A Comprehensive National Risk Assessment and Mapping: Timor-Leste; A Country Situation Report on Disaster Risk Assessment related Initiatives." Asian Disaster Preparedness Center, June 2013. https://www.geonodegfdrrlab.org/documents/810

gfdrrlab.org/documents/810 ¹³⁷ "A Comprehensive National Risk Assessment and Mapping: Timor-Leste; A Country Situation Report on Disaster Risk Assessment related Initiatives." Asian Disaster Preparedness Center, June 2013. https://www.geonodegfdrrlab.org/documents/810

¹³⁸ "A Comprehensive National Risk Assessment and Mapping: Timor-Leste; A Country Situation Report on Disaster Risk Assessment related Initiatives." Asian Disaster Preparedness Center, June 2013. https://www.geonodegfdr1ab.org/documents/810

¹³⁹ Concept of Crisis Management Center document provided by Major Pablo Valerin, U.S. State Department (Dili) via email correspondence on 29 July 2019.

¹⁴⁰ Government Crisis Management Structure provided by Major Pablo Valerin U.S. State Department (Dili) via email correspondence on 29 July 2019. ¹⁴¹ National Disaster Management Directorate (NDMD). "PARK Manual for CBDRM Pilot Project Along Dili-Ainaro Road Corridor." Ministry of Social Solidarity, 2015. https://www.geonodegfdrrlab.org/documents/810

¹⁴² "A Comprehensive National Risk Assessment and Mapping: Timor-Leste; A Country Situation Report on Disaster Risk Assessment related Initiatives." Asian Disaster Preparedness Center, June 2013. https://www.geonodegfdrrlab.org/documents/810

 ¹⁴³ National Disaster Management Directorate (NDMD).
 "PARK Manual for CBDRM Pilot Project Along Dili-Ainaro Road Corridor." Ministry of Social Solidarity, 2015. https://www.geonode-gfdrrlab.org/documents/810
 ¹⁴⁴ Ministry of Social Solidarity. "National Disaster Risk Management Policy." March 2008. Via https://www.preventionweb.net/files/22114_

¹⁴⁵ Sagar, Vishalini Chandara, et al. "Integrating a Disaster Response Architecture in Timor-Leste: Opportunities and Challenges." S. Rajaratnam School of International Studies. NTS Report No. 8. March 2018. via https://www.rsis.edu.sg/wp-content/uploads/2018/03/NTS-Report-8-Integrating-A-Disaster-Response-final.pdf

¹⁴⁶ Sagar, Vishalini Chandara, et al. "Integrating a Disaster Response Architecture in Timor-Leste: Opportunities and Challenges." S. Rajaratnam School of International Studies. NTS Report No. 8. March 2018. via https://www. rsis.edu.sg/wp-content/uploads/2018/03/NTS-Report-8-Integrating-A-Disaster-Response-final.pdf

¹⁴⁷ IOM Timor-Leste Quarterly Newsletter, July-September 2018. https://www.iom.int/timor-leste-iom-quarterlynewsletter-july-september-2018 ¹⁴⁸ Reliefweb. World Food Program. Timor-Leste Country Brief. April 2019. https://reliefweb.int/report/timor-leste/ wfp-timor-leste-country-brief-april-2019

¹⁴⁹ Sagar, Vishalini Chandara, et al. "Integrating a Disaster Response Architecture in Timor-Leste: Opportunities and Challenges." S. Rajaratnam School of International Studies. NTS Report No. 8. March 2018. via https://www. rsis.edu.sg/wp-content/uploads/2018/03/NTS-Report-8-Integrating-A-Disaster-Response-final.pdf

¹⁵⁰ DFAT. Development assistance in Timor-Leste. https:// dfat.gov.au/geo/timor-leste/development-assistance/pages/ development-assistance-in-timor-leste.aspx

¹⁵¹ IFRC. Retrieved 30 April 2018. Who we are. http://www. ifrc.org/en/who-we-are/

¹⁵² Red Cross of Timor-Leste (CVTL), https://www. redcross.tl/ (17 Jun 19)

¹⁵³ U.S. Embassy in Timor Leste. Policy and History. https:// tl.usembassy.gov/our-relationship/policy-history/

¹⁵⁴ U.S. Embassy in Timor Leste. Policy and History. https://tl.usembassy.gov/our-relationship/policy-history/ io/

¹⁵⁵ Peace Corps. Peace Corps in Timor Leste. https://www.peacecorps.gov/timor-leste/

¹⁵⁶ Peace Corps. Peace Corps in Timor Leste. https://www. peacecorps.gov/timor-leste/projects/

¹⁵⁷ USAID. Timor-Leste Economic Growth and Trade. 29 April 2019. https://www.usaid.gov/timor-leste/economicgrowth-and-trade

growth-and-trade ¹⁵⁸ USAID. Timor Leste - Global Health. 29 April 2019. https://www.usaid.gov/timor-leste/global-health

 ¹⁵⁹ USAID. Timor-Leste - Promoting Accountability and Transparancy. https://www.usaid.gov/timor-leste/ promoting-accountability-transparency
 ¹⁶⁰ USAID. Building Community Resilience in Timor-Leste.

¹⁶⁰ USAID. Building Community Resilience in Timor-Leste. https://www.usaid.gov/timor-leste/project-descriptions/ building-community-resilience-timor-lest

 ¹⁶¹ U.S. Embassy in Timor Leste. Sections and Offices https://tl.usembassy.gov/embassy/dili/sections-offices/
 ¹⁶² U.S. Embassy in Tmor Leste. History of the U.S. and Timor Leste. https://tl.usembassy.gov/our-relationship/ policy-history/io/ (02 Jun 19)

¹⁶³ CIA World Factbook. Timor-Leste. 13 May 2019. https:// www.cia.gov/library/publications/the-world-factbook/ geos/tt.html

geos/tt.html ¹⁶⁴ Sagar, Vishalini Chandara, et al. "Integrating a Disaster Response Architecture in Timor-Leste: Opportunities and Challenges." S. Rajaratnam School of International Studies. NTS Report No. 8. March 2018. via https://www. rsis.edu.sg/wp-content/uploads/2018/03/NTS-Report-8-Integrating-A-Disaster-Response-final.pdf

¹⁶⁵ Start Network. "Case Study: Start Fund Alert 158 TIMOR-LESTE: ANTICIPATION OF DROUGHT 2017." via https://start-network.app.box.com/s/ no0k7aa9jokewtmkkeuj8r2aq8dit78a

¹⁶⁶ Start Network. Case Study: Start Fund Alert 158: TIMOR-LESTE: Anticipation of Drought 2017. https:// reliefweb.int/sites/reliefweb.int/files/resources/Case%20 Study%20-%20Alert%20158%20-%20Timor%20Leste%20 Drought%202017.pdf

¹⁶⁷ IFRC. "Emergency Plan of Action Final Report: Timor Leste: Drought." 27 September 2017. https://reliefweb.int/ sites/reliefweb.int/files/resources/MDRTP004FR.pdf ¹⁶⁸ UNDP. Asian Disaster Preparedness Center. A Comprehensive National Risk Assessment and Mapping: Timor-Leste. June 2013. https://www.geonode-gfdrrlab.org/ documents/798/download ¹⁶⁹ Sagar, Vishalini Chandara, et al. "Integrating a Disaster Response Architecture in Timor-Leste: Opportunities and Challenges." S. Rajaratnam School

of International Studies. NTS Report No. 8. March 2018. via https://www.rsis.edu.sg/wp-content/uploads/2018/03/ NTS-Report-8-Integrating-A-Disaster-Response-final.pdf ¹⁷⁰ Reliefweb. National Disaster Risk Management Policy. March 2008. https://reliefweb.int/report/timor-leste/

national-disaster-risk-management-policy ¹⁷¹ Sagar, Vishalini Chandara, et al. "Integrating a Disaster

Response Architecture in Timor-Leste: Opportunities and Challenges." S. Rajaratnam School of International Studies. NTS Report No. 8. March 2018. via https://www. rsis.edu.sg/wp-content/uploads/2018/03/NTS-Report-8-Integrating-A-Disaster-Response-final.pdf

¹⁷² Republica Democratica de Timor-Leste. Timor Leste Stategic Development Plan 2011-2030. http://timorleste. gov.tl/wp-content/uploads/2012/02/Strategic-Development-Plan_EN.pdf

¹⁷³ Government of Timor-Leste. http://timor-leste.gov. tl/?p=17348&lang=en&lang=en

¹⁷⁴ Government of Timor-Leste. http://timor-leste.gov. tl/?p=21627&lang=en&lang=en

 ¹⁷⁵ Cruz Vermelha de Timor-Leste. Disaster Preparedness.
 (2016) https://www.redcross.tl/page/disaster-preparedness
 ¹⁷⁶ Cruz Vermelha de Timor-Leste. Instructors on International Humanitarian Law. (2016) https://www. redcross.tl/post/training-of-trainers-for-f-fdtl-instructorson-international-humanitarian-law

¹⁷⁷ World Bank. World Bank and Government of Timor Leste Improving Disaster Resilience along the Dili-Ainaro Road Corridor. http://www.worldbank.org/en/news/pressrelease/2015/02/06/world-bank-and-government-of-timorleste-improving-disaster-resilience-along-the-dili-ainaroroad-corridor (02 Jun 19)

¹⁷⁸ IOM Timor-Leste and Disaster Risk Reduction via https://www.iom.int/sites/default/files/country/docs/timorleste/reducing_disaster_risk_in_timor-leste_iom_disaster_ risk_reduction_drr_programme_2017.pdf

¹⁷⁹ Berksteiner, William (Petty Officer 2nd Class). "Timor-Leste First Responders Attend PP19 Disaster Preparedness Workshop." 25 April 2019 https://www.army.mil/ article/220839/timor_leste_first_responders_attend_pp19_ disaster_preparedness_workshop

¹⁸⁰ BBC Country Profiles – Timor-Leste (https://www.bbc.com/news/world-asia-pacific-14952882 on 02 Jun 19)
 ¹⁸¹ CIA World Factbook. Timor-Leste. 13 May 2019. https://www.cia.gov/library/publications/the-world-factbook/geos/tt.html

¹⁸² "Timor-Leste sees progress with international connectivity," 16 May 19 via https://www.budde.com.au/ Research/Timor-Leste-East-Timor-Telecoms-Mobile-and-Broadband-Statistics-and-Analyses

¹⁸³ Agarwal, Sheena and Caitlin Walker. "Case Study: T I M O R - L E S T E: Preparing for Change: Community Based Disaster Risk Management and the Role of Philanthropy." Arnova-Asia Conference Paper/Give2Asia 2018 via https://static1.squarespace. com/static/53c471ebe4b0beb5fe1b0738/t/5b883f 0a032be466fdb32ebe/1535655697344/give2asia-Timor+Leste+Case+Study-final.pdf

 ¹⁸⁴ "Taking Sendai Forward: IOM Progress Report on Disaster Risk Reduction and Resilience 2018."
 International Organization on Migration (IOM) via https://www.iom.int/sites/default/files/our_work/DOE/ humanitarian_emergencies/transition-recovery/drr/drrreport-2017-2018-1221.pdf
 ¹⁸⁵ "Supporting Disaster Reduction in the Dili-Ainaro

^{185*} "Supporting Disaster Reduction in the Dili-Ainaro Corridor," 15 October 2018 via http://www.tl.undp.org/ content/timor_leste/en/home/newscentre/articles/2018/ supporting-disaster-reduction-in-the-dili-ainaro-corridor. html

¹⁸⁶ "Democratic Republic of Timor-Leste: Building Disaster/Climate Resilience in Timor-Leste." World Bank. 22 May 2015 via https://www.gfdrr.org/sites/default/files/ publication/synthesis-report-democratic-republic-timorleste-natural-hazard-risk-assessment-2015.pdf

 ¹⁸⁷ http://timor-leste.gov.tl/?p=16462&n=1 (03 Jun 19)
 ¹⁸⁸ World Bank Climate Change Knowledge Portal https:// climateknowledgeportal.worldbank.org/country/timorleste/adaptation(03 Jun 19)

¹⁸⁹ "A Comprehensive National Risk Assessment and Mapping: Timor-Leste; A Country Situation Report on Disaster Risk Assessment related Initiatives." Asian Disaster Preparedness Center, June 2013.

¹⁹⁰ Direcao Nacional Meteorologia e Geofisica. https:// dnmgtl.blogspot.com/

¹⁹¹ Sagar, Vishalini Chandara, et al. "Integrating a Disaster Response Architecture in Timor-Leste: Opportunities and Challenges." S. Rajaratnam School of International Studies. NTS Report No. 8. March 2018. via https://www. rsis.edu.sg/wp-content/uploads/2018/03/NTS-Report-8-Integrating-A-Disaster-Response-final.pdf

¹⁹² Guro da Costa, Bertanizo, et al. "From Kindergarten to High School': Perceptions of Timor-Leste's Military and Police Ten Years after the 2006 Crisis." Belun. 2017. http:// www.belun.tl/wp-content/uploads/2017/09/Belun_ALTSS_ EN_low-compressed-for-web.pdf

193 Timor-Leste Ministry of Defence (https://defesa.gov. tl/en/f-fdtl-2/) (18 Jun 19)

¹⁹⁴ Center for Excellence in Disaster Management & Humanitarian Assistance. Humanitarian Assistance Response Training (HART) Module: HA/DR Information. September 2018.

¹⁹⁵Joint Publication 3-29. Foreign Humanitarian Assistance. January 3, 2014. http://www.jcs.mil/Portals/36/ Documents/Doctrine/pubs/jp3_29.pdf

¹⁹⁶ IFRC. Embracing Social Media. Timor-Leste Red Cross and Indonesian Red Cross link to learn. 23 September 2016. https://media.ifrc.org/ifrc/wp-content/uploads/ sites/5/2017/03/Peer-to-Peer-Cooperation-CVTL-and-PMI_CaseStudy_WEB_September-23-2016-2.pdf

 ¹⁹⁷ ASEAN AHÁ CENTER. http://adinet.ahacentre.org
 ¹⁹⁸ USAID. https://www.usaid.gov/who-we-are/ organization/bureaus/bureau-democracy-conflict-andhumanitarian-assistance/office-us

¹⁹⁹ USAID. Disaster Risk Reduction (IOM-OFDA). 29
 August 2019. https://www.usaid.gov/timor-leste/project-descriptions/disaster-risk-reduction-iom-ofda
 ²⁰⁰ USAID. https://www.usaid.gov/sites/default/files/

documents/1861/FS_EarlyWarningCapacityDevelopment_ PDC_Eng.pdf

 ²⁰¹ APAN. About Us. https://www.apan.org/
 ²⁰² Email communication from Thomas Grant, Communications Interoperability Analyst

USINDOPACOM, J651, MCIP. November 20, 2018.

²⁰³ CFE-DM. About CFE-DM.. Website last updated 2019. https://www.cfe-dmha.org/

²⁰⁴ Asian Development Bank. "Timor-Leste Transport Operations." November 2018 via https://www.adb.org/sites/ default/files/publication/471701/timor-leste-transportoperations.pdf

operations.pdf ²⁰⁵ Sakai, Tatsuo. "Taking Flight: Analysis of Timor-Leste Civil Aviation and Recommendations." The Asia Foundation, 2017 via https://asiafoundation.org/wpcontent/uploads/2017/05/Timor-Leste-Civil-Aviation-Report.pdf

²⁰⁶ Sakai, Tatsuo. "Taking Flight: Analysis of Timor-Leste Civil Aviation and Recommendations." The Asia Foundation, 2017 via https://asiafoundation.org/wpcontent/uploads/2017/05/Timor-Leste-Civil-Aviation-Report.pdf

²⁰⁷ MAF. Timor-Leste. 2019. https://www.maf-uk.org/place/ timor-leste

²⁰⁸ Sakai, Tatsuo. "Taking Flight: Analysis of Timor-Leste Civil Aviation and Recommendations." The Asia Foundation, 2017 via https://asiafoundation.org/wpcontent/uploads/2017/05/Timor-Leste-Civil-Aviation-Report.pdf

²⁰⁹ World Aero Data. Airports in East Timor. http:// worldaerodata.com/countries/

East_Timor.php

²¹⁰ International Finance Corporation. "Public-Private Partnership Stories: Timor-Leste: Tibar Bay Port." http://documents.worldbank.org/curated/ en/470341542225495367/pdf/132059-BRI-PUBLIC-PPP-Stories-Tibar-Bay-Port.pdf

²¹¹ dlca.logcluster.org (16 Jun 19)

²¹² AMBERO Consulting Gesellschaft mbH. Advisory and Training for the Maritime Related Industries of Timor-Leste. Website last updated 2018. https://ambero.de/en/ projekte-slug/advisory-and-training-for-the-maritimerelated-industries-of-timor-leste/

²¹³ Japan International Cooperation Agency. Data Collection Study on the Port Sector in Timor-Leste. January 2014. https://laohamutuk.org/econ/PPP/ Tibar/2016/JICAPortStudyJan2014en.pdf

²¹⁴ Bollore Ports. Port of Dili. https://www.bollore-ports. com/en/worldwide-network/asia/port-of-dili-east-timor. html ²¹⁵ Timor-Leste Ministry of Finance, "2018 IJ Global Asia Pacific PPP Deal of the Year: Tibar Bay Port in Timor-Leste." https://www.mof.gov.tl/2018-ij-global-asiapacific-ppp-deal-of-the-year-tibar-bay-port-in-timorleste/?lang=en (16 Jun 19)

²¹⁶ International Finance Corporation (IFC). "Tibar Bay Port: PPP Investor Conference" slideshow. 2013 via https:// timorpppinvestor.files.wordpress.com/2013/04/tibar-bayport-ic-presentation.pdf

port-ic-presentation.pdf ²¹⁷ Republica Democratica de Timor-Leste. Timor Leste Stategic Development Plan 2011-2030. http://timorleste.gov.tl/wp-content/uploads/2012/02/Strategic-Development-Plan_EN.pdf

²¹⁸ Republica Democratica de Timor-Leste. Timor Leste Stategic Development Plan 2011-2030. http://timorleste.gov.tl/wp-content/uploads/2012/02/Strategic-Development-Plan_EN.pdf

²¹⁹ ILO Asia-Pacific. Impact of Bad Roads on People in Timor-Leste. March 14, 2014. https://www.flickr.com/ photos/iloasiapacific/16035313512 ²²⁰ Japan International Cooperation Agency (JICA). "Road Maintenance in Timor-Leste." 06 Jul 18. https://www.jica.
 go.jp/easttimor/english/office/topics/180706_en.html
 ²²¹ The World Bank. Timor-Leste Branch Roads Project (P155203). Combined Project Information Documents / Integrated Safeguards Datasheet (PID/ISDS). June 10, 2019. http://documents.worldbank.org/curated/en/188051560144449980/pdf/Project-Information-Document-Integrated-Safeguards-Data-Sheet-Timor-Leste-Branch-Roads-Project-P155203.pdf

 ²²² The World Bank. Upgrade of Road Network to Improve Connectivity in Timor-Leste. July 24, 2014. https://www. worldbank.org/en/news/feature/2014/07/23/upgrade-ofroad-network-to-improve-connectivity-in-timor-leste
 ²²³ Republica Democratica de Timor-Leste. Timor Leste
 Stategic Development Plan 2011-2030. http://timorleste.gov.tl/wp-content/uploads/2012/02/Strategic-Development-Plan_EN.pdf

²²⁴ The World Bank. "Timor-Leste: Connecting People through Climate-Resilient Roads." 12 May 16. http:// www.worldbank.org/en/results/2016/05/12/timor-lesteconnecting-people-through-climate-resilient-roads ²²⁵ CIA World Factbook. Timor-Leste. 13 May 2019. https:// www.cia.gov/library/publications/the-world-factbook/ geos/tt.html

 ²²⁶ Logistics Capacity Assessments. Timor Leste. https:// dlca.logcluster.org/display/public/DLCA/LCA+Homepage
 ²²⁷ UNESCO Institute for Statistics (2017) via https://www. epdc.org/country/timorleste
 ²²⁸ UNICEF, Timor-Leste. "Quality Education: Realising

²²⁸ UNICEF, Timor-Leste. "Quality Education: Realising rights to quality education for all children." https://www. unicef.org/timorleste/quality-education

 ²²⁹ Ministry of Education, Timor-Leste. "National Education Strategic Plan (2011-2030)." 2011. https://www. globalpartnership.org/sites/default/files/2011-08-Ministryof-Education-Timor-Leste-Education-Plan_processed.pdf
 ²³⁰ Ministry of Education, Timor-Leste. "National Education Strategic Plan (2011-2030)." 2011. https://www. globalpartnership.org/sites/default/files/2011-08-Ministryof-Education-Timor-Leste-Education-Plan_processed.pdf
 ²³¹ Ministry of Education, Timor-Leste. "National Education Strategic Plan (2011-2030)." 2011. https://www.

globalpartnership.org/sites/default/files/2011-08-Ministryof-Education-Timor-Leste-Education-Plan_processed.pdf ²³² UNICEF. Hope for the future: Investing in girls' education in Timor-Leste. Simon Nazer. October 7, 2015. https://blogs.unicef.org/east-asia-pacific/hope-for-the-

future-education-in-timor-leste/ ²³³ Republica Democratica de Timor-Leste. Timor Leste Stategic Development Plan 2011-2030. http://timorleste.gov.tl/wp-content/uploads/2012/02/Strategic-Development-Plan_EN.pdf

²³⁴ UNDP Asia and the Pacific. "UNDP Concludes Tsunami Education Activities and Evacuation Drills in Schools in Timor-Leste." 09 Apr 18. http://www.asia-pacific.undp.org/ content/rbap/en/home/presscenter/articles/2018/04/09/ over-750-schoolchildren-participate-in-tsunamievacuation-trainings-in-timor-leste.html

 ²³⁵ PLAN International. "Disaster Risk Management in Timor-Leste." https://plan-international.org/timor-leste/ disaster-risk-management-timor-leste (17 Jun 19)
 ²³⁶ UNDP Asia and the Pacific: UNDP Concludes Tsunami

Education Activities and Evacuation Drills in Schools in Timor-Leste. April 9, 2018.

http://www.asia-pacific.undp.org/content/rbap/en/home/ presscenter/articles/2018/04/09/over-750-schoolchildrenparticipate-in-tsunami-evacuation-trainings-in-timorleste.html ²³⁷ The World Bank. Timor-Leste's telecommunications sector will soon help more people access to a variety of services. 20 December 2012. http://www.worldbank.org/ en/news/feature/2012/12/20/competition-in-timor-lestetelecommunications-sector-will-help-more-people-accessto-a-variety-of-services

²³⁸ Estrada De Caicoli. Obstacles to internet access faced by women in Timor-Leste. Provedoria dos Direitos Humanos e Justiça (Timor-Leste National Human Rights Institution). https://www.ohchr.org/Documents/Issues/Women/WRGS/GenderDigital/PDHJ_Timor-Leste_Internet_access_for_women.pdf
 ²³⁹ Simon Sharwood. Developing world hits 98.7 per cent

²³⁹ Simon Sharwood. Developing world hits 98.7 per cent mobile phone adoption. The Register. 3 August 2017. https://www.theregister.co.uk/2017/08/03/itu_facts_and_ figures_2017/
²⁴⁰ US Central Intelligence Agency. The World Factbook.

 ²⁴⁰ US Central Intelligence Agency. The World Factbook. Timor-Leste: Communications. https://www.cia.gov/ library/publications/the-world-factbook/geos/tt.html
 ²⁴¹ International Telecommunication Union. Measuring the Information Society Report, Volume 1, 2018. p. 130, 143. https://www.itu.int/en/ITU-D/Statistics/Documents/ publications/misr2018/MISR-2018-Vol-1-E.pdf

²⁴² Estrada De Caicoli. Obstacles to internet access faced by women in Timor-Leste. Provedoria dos Direitos Humanos e Justiça (Timor-Leste National Human Rights Institution). January 2017. https://www.ohchr.org/Documents/Issues/ Women/WRGS/GenderDigital/PDHJ_Timor-Leste_ Internet_access_for_women.pdf

²⁴³ International Telecommunication Union. Country Profile: Timor-Leste. http://www.itu.int/net4/itu-d/icteye/ CountryProfile.aspx

²⁴⁴ Estrada De Caicoli. Obstacles to internet access faced by women in Timor-Leste. Provedoria dos Direitos Humanos e Justiça (Timor-Leste National Human Rights Institution). January 2017. https://www.ohchr.org/Documents/Issues/ Women/WRGS/GenderDigital/PDHJ_Timor-Leste_ Internet_access_for_women.pdf

 ²⁴⁵ US Central Intelligence Agency. The World Factbook. Timor-Leste: Communications. https://www.cia.gov/ library/publications/the-world-factbook/geos/tt.html
 ²⁴⁶ US Central Intelligence Agency. The World Factbook. Timor-Leste: Energy. https://www.cia.gov/library/ publications/the-world-factbook/geos/tt.html
 ²⁴⁷ Lelis Gonzaga Fraga, José Carlos F. Teixeira, Manuel

²⁴⁷ Lelis Gonzaga Fraga, José Carlos F. Teixeira, Manuel Eduardo C. Ferreira. The Potential of Renewable Energy in Timor-Leste:

An Assessment for Biomass. Energies. 15 April 2019. p. 2. https://www.google.com/l?sa=t&rct=j&q=&esrc=s&source =web&cd=1&cad=rja&uact=8&ved=2ahUKEwiqhZeB7KP iAhUB0lQKHdeGA80QFjAAegQIAhAC&url=https%3A% 2F%2Fwww.mdpi.com%2F1996-1073%2F12%2F8%2F1441 %2Fpdf&usg=AOvVaw0nzeo279JEngp0JZw97Uct

²⁴⁸ Lexology. The future of hydropower development in Timor Leste. 7 May 2015. https://www.lexology. com/library/detail.aspx?g=c3915442-be45-4ef6-9076f382eefd9e81

²⁴⁹ Timor-Leste Strategic Development Plan 2011-2030. p. 19, 41, 87, 92. http://wedocs.unep.org/ bitstream/handle/20.500.11822/9800/-Timor-Leste_Strategic_Development_Plan_2011-2030-

2011TimorLeste_StrategicDvlpmtPlan_2011-2030.pdf. pdf?sequence=3&isAllowed=y

²⁵⁰ WaterAid. Timor-Leste. Accessed 20 May 2019. https:// www.wateraid.org/us/where-we-work/timor-leste

²⁵¹ "Open defecation" refers to the disposal of human feces in fields, forests, bushes, open bodies of water, beaches or other open spaces, or with solid waste.

WASHwatch. Timor-Leste: Statistics. Accessed 20 May 2019. https://washwatch.org/en/countries/timor-leste/ summary/statistics/

²⁵² UNICEF. Diarrhoea as a cause of death in children under 5. March 2018. https://data.unicef.org/wp-content/ uploads/2018/02/CoD_Diarrhoea_Feb-2018_WHO_ MCEE_234.xlsx

²⁵³ WHO. UN-Water Global Analysis and Assessment of Sanitation and Drinking Water: Timor-Leste. 2015. https://www.who.int/water_sanitation_health/monitoring/ investments/timorleste-11-nov.pdf

²⁵⁴ WHO. UN-Water Global Analysis and Assessment of Sanitation and Drinking Water: Timor-Leste. 2015. https://www.who.int/water_sanitation_health/monitoring/ investments/timorleste-11-nov.pdf

²⁵⁵ WASHwatch. Timor-Leste. Plataforma Nasional Bee, Saneamentu No Ijiene Timor Leste (PN-BESITL, National Platform for Water, Sanitation and Hygiene). https:// washwatch.org/uploads/filer_public/09/39/09392846-8f9f-441e-8ad4-e80565dd382d/national_platform_for_water_ sanitation_and_hygiene_pn-besitl_timor-leste_2015.pdf ²⁵⁶ Photo: USAID. DWASH Improves Water Project Sustainability in Timor-Leste. https://www.usaid.gov/ global-waters/ianuary-2011/dwash

global-waters/january-2011/dwash ²⁵⁷ Australian National University. Intestinal worm infections could be dramatically reduced. 4 May 2018. https://www.anu.edu.au/news/all-news/intestinal-worminfections-could-be-dramatically-reduced

²⁵⁸ WHO. Country Cooperation Strategy Timor Leste:
 2015-2019. https://apps.who.int/iris/handle/10665/246258
 ²⁵⁹ Institute for Health Metrics and Evaluation. Timor-Leste. Accessed 22 May 2019. http://www.healthdata.org/timor-leste

²⁶⁰ Institute for Health Metrics and Evaluation. Timor-Leste. Accessed 22 May 2019. http://www.healthdata.org/ timor-leste

²⁶¹ WHO Regional Office for South-East Asia. 2017 Health SDG Profile: Timor-Leste. June 2017. p. 1. http://www.searo.who.int/timorleste/publications/2017-health-sdg-profile-tls.pdf
 ²⁶² Photo source: https://www.usaid.gov/timor-leste/global-

²⁶² Photo source: https://www.usaid.gov/timor-leste/globalhealth Photo by Dr. Teodulo C. Ximenes/USAID Timor-Leste.

²⁶³ Stop TB. Timor-Leste: Tuberculosis (TB) situation in
 2017. http://stoptb.org/resources/cd/TLS_Dashboard.html
 ²⁶⁴ Welthungerhilfe, Concern Worldwide. 2018 Global

Hunger Index: Forced Migration and Hunger. p. 13. https:// www.globalhungerindex.org/pdf/en/2018.pdf

²⁶⁵ WHO. Nutrition Landscape Information System (NLIS) Country Profile: Democratic Republic of Timor-Leste. 22 May 2019. http://apps.who.int/nutrition/landscape/report. aspx?iso=tls

²⁶⁶ Ministry of Health, Democratic Republic of Timor-Leste. http://www.moh.gov.tl/

²⁶⁷ Ministry of Health, Democratic Republic of Timor-Leste. National Health Sector Strategic Plan 2011-2030.
 p. 9. http://www.searo.who.int/timorleste/publications/national_health_sector_plan.pdf?ua=1

²⁶⁸ Nelson Martins, Lyndal J. Trevena. Implementing what works: a case study of integrated primary health care revitalisation in Timor-Leste. Asia Pacific Family Medicine. 2014. 13:5. https://doi.org/10.1186/1447-056X-13-5 ²⁶⁹ WHO. Country Cooperation Strategy Timor Leste: 2015-2019. p. 42-45. https://apps.who.int/iris/ handle/10665/246258

²⁷⁰ WHO. Country Cooperation Strategy Timor Leste: 2015-2019. p. 24. https://apps.who.int/iris/ handle/10665/246258

²⁷¹ Institute for Health Metrics and Evaluation. Timor-Leste. Accessed 22 May 2019. http://www.healthdata.org/ timor-leste

²⁷² IAMAT. Timor-Leste for specific travellers: Tuberculosis. Accessed 22 May 2019. https://www.iamat. org/country/timor-leste-/risk/tuberculosis

²⁷³ Burnet Institute. Building capacity and improving tuberculosis diagnosis in Timor-Leste. Accessed 22 May 2019. https://www.burnet.edu.au/projects/235_building_ capacity_and_improving_tuberculosis_diagnosis_in_ timor_leste

²⁷⁴ Stop TB. Timor-Leste: Tuberculosis (TB) situation in
 2017. http://stoptb.org/resources/cd/TLS_Dashboard.html
 ²⁷⁵ WHO. Timor-Leste: Tuberculosis Profile. 2017.
 Accessed 22 May 2019. https://extranet.who.int/sree/
 Reports?op=Replet&name=/WHO_HQ_Reports/G2/
 PROD/EXT/TBCountryProfile&ISO2=tl&outtype=pdf
 ²⁷⁶ IAMAT. Timor-Leste General Health Risks: Malaria.
 Accessed 22 May 2019. https://www.iamat.org/country/
 timor-leste-/risk/malaria

²⁷⁷ WHO Regional Office for South-East Asia. Timor-Leste: Strong malaria control programme cuts cases. Accessed 22 May 2019. http://www.searo.who.int/mediacentre/events/ timor-leste-malaria-story/en/

²⁷⁸ Outbreak News Todaý. Dengue outbreak in Dili, Timor-Leste. Accessed 22 May 2019. http://outbreaknewstoday. com/dengue-outbreak-dili-timor-leste-34130/

²⁷⁹ Ryan Dagur. New struggles with HIV in Timor-Leste. Union of Catholic Asian News. 3 September 2015. https:// www.ucanews.com/news/new-struggles-with-hiv-intimor-leste/74161

²⁸⁰ HIV and AIDS Data Hub for Asia Pacific. Timor-Leste: Key facts on HIV. Accessed 22 May 2019. https://www. aidsdatahub.org/Country-Profiles/Timor-Leste

²⁸¹ WHO. Country Fact Sheet: HIV/AIDS in Timor-Leste. 1 December 2015. http://www.searo.who.int/entity/hiv/data/ tls-fs-2015.pdf?ua=1

²⁸² Centers for Disease Control and Prevention. TB and HIV Coinfection. Accessed 22 May 2019. https://www.cdc. gov/tb/topic/basics/tbhivcoinfection.htm

²⁸³ WHO. Country Cooperation Strategy Timor Leste:
 ²⁰¹⁵⁻²⁰¹⁹. https://apps.who.int/iris/handle/10665/246258
 ²⁸⁴ WHO. Timor Leste: leprosy's last frontier? Accessed 22
 May 2019. https://www.who.int/lep/resources/TimorLeste/
 en/

²⁸⁵ WHO. Country Cooperation Strategy Timor Leste:
 2015-2019. https://apps.who.int/iris/handle/10665/246258
 ²⁸⁶ WHO. Noncommunicable diseases: Key facts. 1 June
 2018. https://www.who.int/news-room/fact-sheets/detail/
 noncommunicable-diseases

²⁸⁷ WHO. Noncommunicable Diseases (NCD) Country Profiles, 2018: Timor-Leste. https://www.who.int/nmh/ countries/2018/tls_en.pdf?ua=1

²⁸⁸ WHO. Noncommunicable Diseases (NCD) Country Profiles, 2018: Timor-Leste. https://www.who.int/nmh/ countries/2018/tls_en.pdf?ua=1

²⁸⁹ Institute for Health Metrics and Evaluation. Timor-Leste. Accessed 22 May 2019. http://www.healthdata.org/ timor-leste

²⁹⁰ WHO. Country Cooperation Strategy Timor Leste: 2015-2019. https://apps.who.int/iris/handle/10665/246258 ²⁹¹ General Directorate of Statistics, Ministry of Planning and Finance and Ministry of Health. Timor-Leste: Demographic and Health Survey 2016. p. 331-332. https:// dhsprogram.com/pubs/pdf/FR329/FR329.pdf
 ²⁹² Tim Anderson. Cuban Health Cooperation in Timor Leste and the South West Pacific. South-South Cooperation: A Challenge to the Aid System? The Reality of Aid - Special Report on South-South Cooperation 2010. p. 77, 82-83. http://www.realityofaid.org/wp-content/ uploads/2013/02/ROA-SSDC-Special-ReportEnglish.pdf

²⁹³ Royal Australasian College of Surgeons. Almost 1000 more doctors in Timor Leste since 2001: A work in progress. 9 June 2017. https://www.surgeons.org/media/ media-releases/almost-1000-more-doctors-in-timor-lestesince-2001-a-work-in-progress/

²⁹⁴ Glenn D. Guest, David F. Scott, Joao P. Xavier, Nelson Martins, Eric Vreede, Antony Chennal, Daliah Moss, David A. Watters. Surgical capacity building in Timor-Leste: A review of the first 15 years of the Royal Australasian College of Surgeons-led Australian Aid programme. Wiley Online Library. 20 September 2016. https://doi. org/10.1111/ans.13768

²⁹⁵ Kate Hodal. Cuban infusion remains the lifeblood of Timor-Leste's health service. The Guardian. 25 June 2012. https://www.theguardian.com/global-development/2012/ jun/25/cuba-lifeblood-timor-leste-health-service

²⁹⁶ Women's International League for Peace and Freedom. Country/Region Profile of: Timor-Leste. Accessed 20 May 2019. https://www.peacewomen.org/profile/countryregion-profile-east-timor

²⁹⁷ UN Women. Timor-Leste. Accessed 20 May 2019. http:// asiapacific.unwomen.org/en/countries/timor-leste

²⁹⁸ World Economic Forum. The Global Gender Gap Report 2018. http://www3.weforum.org/docs/WEF_ GGGR_2018.pdf

²⁹⁹ Adrienne Ŵoltersdorf. Are Timor Leste's quotas for women in government a good thing? "Of course!" say female MPs. Friedrick Ebert Stiftung. 20 September 2018. https://www.fes-asia.org/news/are-timor-lestes-quotasfor-women-in-government-a-good-thing-of-course-sayfemale-mps/

³⁰⁰ International Women's Development Agency. Timor-Leste Doubles the Number of Women Village Chiefs in Recent Elections. 24 November 2016. https://iwda.org.au/ timor-doubles-the-number-of-women-village-chiefs-inrecent-elections/

³⁰¹ UN Treaty Collection. Chapter IV Human Rights, Subchapter 8 Convention on the Elimination of All Forms of Discrimination against Women. Accessed 21 May 2019. https://www.un.org/womenwatch/daw/cedaw/reservations. htm

 ³⁰² Ministry of Interior, Government of the Democratic Republic of Timor-Leste. National Action Plan on United Nations Security Council Resolution 1325 (2000) on Women, Peace and Security (2016 -2020). https://www. peacewomen.org/sites/default/files/NAP-WPS%20
 Engls%20%20FINAL%20(12%20July%202017)%20(1).pdf
 ³⁰³ Women's International League for Peace and Freedom. National Action Plans for the Implementation of UNSCR
 1325 on Women, Peace and Security. December 2018. https://www.peacewomen.org/member-states
 ³⁰⁴ Women's International League for Peace and Freedom.
 2016-2020 National Action Plan: Timor Leste. Accessed 21
 May 2019. https://www.peacewomen.org/resource/2016-2020-national-action-plan-timor-leste-0 ³⁰⁵Ministry of Interior, Government of the Democratic Republic of Timor-Leste. National Action Plan on United Nations Security Council Resolution 1325 (2000) on Women, Peace and Security (2016 -2020). p. 22. https:// www.peacewomen.org/sites/default/files/NAP-WPS%20 Engls%20%20FINAL%20(12%20July%202017)%20(1).pdf
 ³⁰⁶ UN Women. Asia and the Pacific. Timor-Leste. http:// asiapacific.unwomen.org/en/countries/timor-leste
 ³⁰⁷ UN Women. Asia and the Pacific. Timor-Leste. https://asiapacific.unwomen.org/en/digital-library/

publications/2019/06/un-women-timor-leste-quarterynewsletter-q1-2019#view

³⁰⁸ World Atlas. What is the Currency of Timor-Leste. (2019) https://www.worldatlas.com/articles/what-is-thecurrency-of-timor-leste-east-timor.html

³⁰⁹ Women's International League for Peace and Freedom.
 Country/Region Profile of: Timor-Leste. Accessed 20
 May 2019. https://www.peacewomen.org/profile/country-region-profile-east-timor
 ³¹⁰ World Economic Forum. The Global Gender Gap

³¹⁰ World Economic Forum. The Global Gender Gap Report 2018. http://www3.weforum.org/docs/WEF_ GGGR_2018.pdf

³¹¹ Adrienne Woltersdorf. Are Timor Leste's quotas for women in government a good thing? "Of course!" say female MPs. Friedrick Ebert Stiftung. 20 September 2018. https://www.fes-asia.org/news/are-timor-lestes-quotasfor-women-in-government-a-good-thing-of-course-sayfemale-mps/

³¹² Stop TB. Timor-Leste: Tuberculosis (TB) situation in
 2017. http://stoptb.org/resources/cd/TLS_Dashboard.html
 ³¹³ WHO. Country Cooperation Strategy Timor Leste:
 2015-2019. https://apps.who.int/iris/handle/10665/246258
 ³¹⁴ IAMAT. Timor-Leste for specific travellers:

Tuberculosis. Accessed 22 May 2019. https://www.iamat. org/country/timor-leste-/risk/tuberculosis

³¹⁵ WHO. Country Cooperation Strategy Timor Leste:
 2015-2019. https://apps.who.int/iris/handle/10665/246258
 ³¹⁶ Burnet Institute. Building capacity and improving

tuberculosis diagnosis in Timor-Leste. Accessed 22 May 2019. https://www.burnet.edu.au/projects/235_building_capacity_and_improving_tuberculosis_diagnosis_in_timor_leste

³¹⁷ UNISDR. Risk reduction critical to Timor Leste development plans. David Singh. 22 November 2011. https://www.unisdr.org/archive/23777

³¹⁸ Australian Humanitarian Partnership.
 Disaster READY Timor-Leste. https://www.
 australianhumanitarianpartnership.org/timorleste
 ³¹⁹ Republica Democratica de Timor-Leste. Timor Leste
 Stategic Development Plan 2011-2030. http://timor-leste.gov.tl/wp-content/uploads/2012/02/Strategic-

Development-Plan_EN.pdf

³²⁰ Cruz Vermelha de Timor-Leste. Instructors on International Humanitarian Law. (2016) https://www. redcross.tl/post/training-of-trainers-for-f-fdtl-instructorson-international-humanitarian-law

 ³²¹ "Democratic Republic of Timor-Leste: Building Disaster/Climate Resilience in Timor-Leste." World Bank.
 22 May 2015 via https://www.gfdrr.org/sites/default/files/ publication/synthesis-report-democratic-republic-timorleste-natural-hazard-risk-assessment-2015.pdf
 ³²² "A Comprehensive National Risk Assessment and Mapping: Timor-Leste; A Country Situation Report on Disaster Risk Assessment related Initiatives." Asian Disaster Preparedness Center, June 2013.

³²³ Republica Democratica de Timor-Leste. Timor Leste Stategic Development Plan 2011-2030. http://timorleste. gov.tl/wp-content/uploads/2012/02/Strategic-Development-Plan_EN.pdf

³²⁴ World Vision. Timor-leste terrain recovers from the ashes of 'slash and burn'. 16 July 2013. https://www.wvi. org/timor-leste/article/timor-leste-terrain-recovers-ashesslash-and-burn

³²⁵ Sagar, Vishalini Chandara, et al. "Integrating a Disaster Response Architecture in Timor-Leste: Opportunities and Challenges." S. Rajaratnam School of International Studies. NTS Report No. 8. March 2018. via https://www. rsis.edu.sg/wp-content/uploads/2018/03/NTS-Report-8-Integrating-A-Disaster-Response-final.pdf

³²⁶ Republica Democratica de Timor-Leste. Timor Leste Stategic Development Plan 2011-2030. http://timorleste.gov.tl/wp-content/uploads/2012/02/Strategic-Development-Plan_EN.pdf

³²⁷ U.S. Indo-Pacific Command. Pacific Partnership 2019 Mission Begins in Timor-Leste. April 25, 2019. https:// www.pacom.mil/Media/News/News-Article-View/ Article/1824131/pacific-partnership-2019-mission-beginsin-timor-leste/

³²⁸ USNS Fall River (T-EPF 4) in Dili as part of Pacific Partnership 2019 (PP19). April 2019. https://www.cpf. navy.mil/news.aspx/130454

³²⁹ Ground-breaking Ceremony of National Health Institute (April 2019) https://tl.usembassy.gov/ambassadorkathleen-fitzpatrick-remarks-at-the-groundbreakingceremony-of-national-health-institute/

 ³³⁰ Ribbon Cutting Ceremony of Sarlala Balibo Primary School (April 2019) https://tl.usembassy.gov/ambassadorkathleen-fitzpatrick-remarks-on-the-ribbon-cuttingceremony-sarlala-balibo-primary-school/
 ³³¹ Harii Hamutuk 2018 Closing Ceremony (September

³³¹ Harii Hamutuk 2018 Closing Ceremony (September 2018) https://tl.usembassy.gov/another-successful-yearharii-hamutuk/

³³² US and Navy Convene for CARAT Exercise. (2018) https://www.c7f.navy.mil/Media/News/Display/ Article/1614007/united-states-and-timor-leste-convenefor-carat-exercise/

³³³ UCT Constructs pier for Timor-Leste Maritime Police. (20 April 2018). https://www.dvidshub.net/news/273965/ uct-2-constructs-pier-timor-leste-maritime-police

³³⁴ Pacific Angel 2018 to Feature Humanitarian Assistance for Suai Residents. (18 June 2018). https://tl.usembassy.gov/ pacific-angel-2018-to-feature-humanitarian-assistance-forsuai-residents/

³³⁵ US Ambassador inaugurates Vatobou Health Clinic with US Navy Seabees (2017) https://tl.usembassy.gov/u-sambassador-inaugurates-vatobou-health-clinic-u-s-navyseabees/

³³⁶ Seabees Complete Hari'i Hamatuk 2017 (November 2017) https://www.navy.mil/submit/display.asp?story_ id=103372

³³⁷ U.S. Embassy in Timor Leste. U.S. Ambassador Inaugurates Vatobou Health Clinic. 3 October 2017. https://tl.usembassy.gov/u-s-ambassador-inauguratesvatobou-health-clinic-u-s-navy-seabees/

³³⁸ Timor Leste Ranges. (2017) https://www.dvidshub.net/ image/3780467/timor-leste-ranges

 ³³⁹ US, Timor Partner for Annual CARAT Exercise (2017) https://www.cpf.navy.mil/news.aspx/140070
 ³⁴⁰ Naval Mobile Construction Unit Battalion Three in Timor-Leste. 30 June 2017. https://seabeemagazine. navylive.dodlive.mil/2017/06/30/naval-mobileconstruction-battalion-three-in-timor-leste/ ³⁴¹ USA provides training HIV/AIDS awareness prevention to F-FDTL. (2017) https://tl.usembassy.gov/usa-providestraining-hivaids-awareness-prevention-program-f-fdtl/
 ³⁴² U.S. Department of the Navy. US, Timor-Leste Begin Bilateral Training. Commander, Task Force 75 Public Affairs. 2 August 2016. https://www.navy.mil/submit/ display.asp?story_id=95978

³⁴³ Seabees arrive at Pacific Partnership 2016. https:// seabeemagazine.navylive.dodlive.mil/2016/06/15/seabeespacific-partnership-2016-arrive-in-timor-leste/

³⁴⁴ Exercise Crocodilo 16: US Sailers conduct combat and lifesaving courses in Timor Leste. (2016). https://www. dvidshub.net/image/2656282/exercise-crocodilo-16-ussailors-conduct-combat-lifesaving-courses-timor-leste ³⁴⁵ Exercise Crocodilo 15. (2015) https://tl.usembassy.gov/ exercise-crocodilo/

³⁴⁶ Hari'i Hamutuk Exercise 2015 Officially Closes. November 2015. https://www.navy.mil/submit/display. asp?story_id=91965

asp?story_id=91965 ³⁴⁷ US Pacific Angel 2015 brings together US, New Zealand, Timorese defense forces for joint operation for free health operation in Baucau. (2015). https://tl.usembassy.gov/ pacific-angel-2015-brings-together-u-s-new-zealandtimorese-defense-forces-joint-operation-free-medicalclinic-people-baucau/

³⁴⁸ US Navy Seabees complete bridge in local community Ermera. (2015). https://tl.usembassy.gov/u-s-navy-seabeescomplete-bridge-local-community-ermera/

³⁴⁹ US Navy boosts defense ties with East Timor in Maritime Exercise. (2014) https://thediplomat. com/2015/07/us-navy-boosts-defense-ties-with-easttimor-in-maritime-exercise/

³⁵⁰ ASEAN Aims and Purposes via https://asean.org/asean/ about-asean/overview/ (04 Jun 19)

³⁵¹ Kallanish Energy. ConocoPhilips closes on \$350M sale to Timor-Leste. 17 April 2019. https://www. kallanishenergy.com/2019/04/17/conocophillips-closes-on-

kallanishenergy.com/2019/04/17/conocophillips-closes-on-350m-sale-to-timor-leste/

³⁵² Burr, William and Michael L. Evans, eds. "East Timor Revisited: Ford, Kissinger and the Indonesian Invasion, 1975-76." National security Archive Electronic Briefing Book No. 62. 6 December 2001 via https://nsarchive2.gwu. edu/NSAEBB/NSAEBB62/

³⁵³ Australia Department of Foreign Affairs and Trade https://dfat.gov.au/geo/timor-leste/Pages/timor-lestecountry-brief.aspx(04 Jun 19)

³⁵⁴ Australia Department of Foreign Affairs and Trade https://dfat.gov.au/geo/timor-leste/Pages/timor-leste. aspx(04 Jun 19)

³⁵⁵ Raynor, Sophie. "Timor-Leste's forgotten Chinese." The Interpreter, published by The Lowy Institute. 16 January 2019. https://www.lowyinstitute.org/the-interpreter/timorleste-forgotten-chinese

³⁵⁶ Raynor, Sophie. "Timor-Leste's forgotten Chinese." The Interpreter, published by The Lowy Institute. 16 January 2019. https://www.lowyinstitute.org/the-interpreter/timorleste-forgotten-chinese

³⁵⁷ Suzuki, Jun. "China in East Timor; concern in Indonesia and Australia." Nikkei Asian Review. 26 August 2017. https://asia.nikkei.com/Politics/China-in-East-Timorconcern-in-Indonesia-and-Australia ³⁵⁸ Carvalho, Raquel. "Chinese influence on rise in East Timor? 'Nonsense', says former president Jose Ramos-Horta." South China Morning Post. 06 September 2018. https://www.scmp.com/week-asia/geopolitics/ article/2163107/chinese-influence-rise-east-timornonsense-says-former

³⁵⁹ Aritonang, Margareth. "Discourse: Indonesia, Timor Leste have developed a mature relationship; PM." Jakarta Post, 31 August 2015. https://www.thejakartapost.com/ news/2015/08/31/discourse-indonesiatimor-leste-havedeveloped-a-mature-relationship-pm.html

³⁶⁰ Aritonang, Margareth. "Discourse: Indonesia, Timor Leste have developed a mature relationship; PM." Jakarta Post, 31 August 2015. https://www.thejakartapost.com/ news/2015/08/31/discourse-indonesiatimor-leste-havedeveloped-a-mature-relationship-pm.html

³⁶¹ Haan, Jarryd de. "A Friend in Need: Timor-Leste Leader to Visit Indonesia." Future Directions. 27 June 2018. http:// www.futuredirections.org.au/publication/friend-needtimor-leste-leader-visit-indonesia/

³⁶² Self, Natasha. "Indonesia and Timor-Leste: from Occupation to Cooperation." Humanitarian Aid Relief Trust (HART). 24 November 2015. https://www.hart-uk. org/blog/indonesia-and-timor-leste-from-occupation-tocooperation/

³⁶³ Åritonang, Margareth. "Discourse: Indonesia, Timor Leste have developed a mature relationship; PM." Jakarta Post, 31 August 2015. https://www.thejakartapost.com/ news/2015/08/31/discourse-indonesiatimor-leste-havedeveloped-a-mature-relationship-pm.htm

³⁶⁴ Sambhi, Natalie. "Finding Partners: Timor-Leste's Evolving Security Ties with Southeast Asia." Pell Center for International Relations and Public Policy. May 2019. https://www.pellcenter.org/wp-content/uploads/2019/05/ Sambhi-2019.pdf

³⁶⁵ Sambhi, Natalie. "Finding Partners: Timor-Leste's Evolving Security Ties with Southeast Asia." Pell Center for International Relations and Public Policy. May 2019. https://www.pellcenter.org/wp-content/uploads/2019/05/ Sambhi-2019.pdf

³⁶⁶ Japan International Cooperation Agency. Timor-Leste. https://www.jica.go.jp/easttimor/english/index.html ³⁶⁷ "Japan's Defense Capacity Building Assistance." Ministry of Defense via https://www.mofa.go.jp/files/000146830.pdf ³⁶⁸ https://www.instituto-camoes.pt/en/activity-camoes/ what-we-do/co-operation/programmes-and-projects/allcountries/east-timor

³⁶⁹ Robert, Alison. "Timor Leste and Portugal: A Special Relationship." Deutsche Welle. 15 January 2009. https:// www.dw.com/en/timor-leste-and-portugal-a-specialrelationship/a-5213105

³⁷⁰ Immigration Service for Timor-Leste. FAQs. https:// tl.usembassy.gov/

³⁷¹ U.S. Embassy in Timor-Leste. https://tl.usembassy.gov/
 ³⁷² World Atlas. What is the Currency of Timor Leste.
 (2019) https://www.worldatlas.com/articles/what-is-the-currency-of-timor-leste-east-timor.html

³⁷³ Center for Disease Control and Prevention. Health Information for Travelers to Timor-Leste. 18 June 2019. https://wwwnc.cdc.gov/travel/destinations/traveler/none/ east-timor ³⁷⁴ Center for Disease Control and Prevention. Security Message for US Citizens: Zika Virus.6 October 2016. https://tl.usembassy.gov/security-message-u-s-citizenszika-virus/

 ³⁷⁵ PreventionWeb.net. Chart of the Sendai Framework for Disaster Risk Reduction 2015-2030. http://www. preventionweb.net/files/44983_sendaiframeworkchart.pdf
 ³⁷⁶ UNISDR. Sendai Framework for Disaster Risk Reduction. https://www.unisdr.org/we/coordinate/sendaiframework

 ³⁷⁷ PreventionWeb.net. Chart of the Sendai Framework for Disaster Risk Reduction 2015-2030. http://www. preventionweb.net/files/44983_sendaiframeworkchart.pdf
 ³⁷⁸ UNISDR. Sendai Framework for Disaster Risk Reduction. https://www.unisdr.org/we/coordinate/sendaiframework

 ³⁷⁹ PreventionWeb.net. Chart of the Sendai Framework for Disaster Risk Reduction 2015-2030. http://www. preventionweb.net/files/44983_sendaiframeworkchart.pdf
 ³⁸⁰ Preventionweb. Timor-Leste. National Progress report on the implementation of the Hyogo Framework for Action (2009-2011) https://www.preventionweb.net/files/15907_ tls_NationalHFAprogress_2009-11.pdf

³⁸¹ CIA. The World Factbook. Timor Leste. https://www.cia. gov/library/publications/the-world-factbook/geos/tt.html

100119v2.0



Center for Excellence in Disaster Management & Humanitarian Assistance 456 Hornet Avenue, Joint Base Pearl Harbor - Hickam, Hawaii 96860-3503 Telephone: (808) 472-0518 https://www.cfe-dmha.org