

Cambodia

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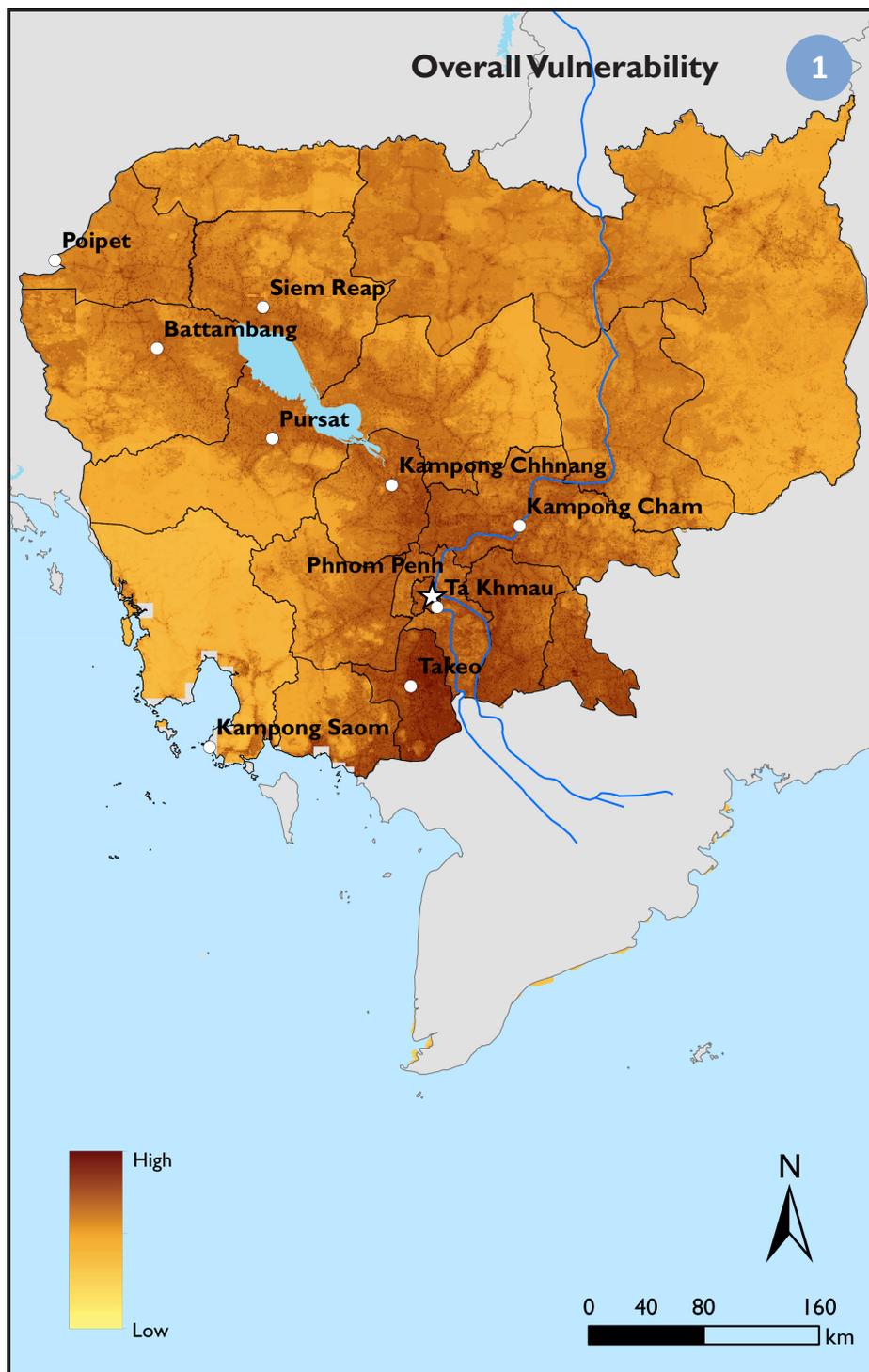
Introduction

Located in the southeastern part of the Indochina peninsula, Cambodia primarily faces climate related challenges associated with the changing water levels of the Mekong River Delta. Climate change has caused water scarcity and more frequent floods throughout the Greater Mekong Subregion resulting in agricultural challenges, food scarcity, and accelerated loss of biodiversity. In addition, poor governance and household capabilities add to the country's overall vulnerability. Between 1975 and 1978, two million people died in Cambodia under the brutal regime of the radical communist Khmer Rouge. However, for the last two decades, despite rampant corruption, Cambodia has been relatively stable and progressing towards its development goals of reducing poverty and growing its economy.¹ However, Cambodia still remains one of the world's poorest countries with most of its people still earning their livelihood through subsistence farming. Much of the population lacks education and professional skills, especially in the impoverished countryside leaving them more vulnerable to climate change risks.²

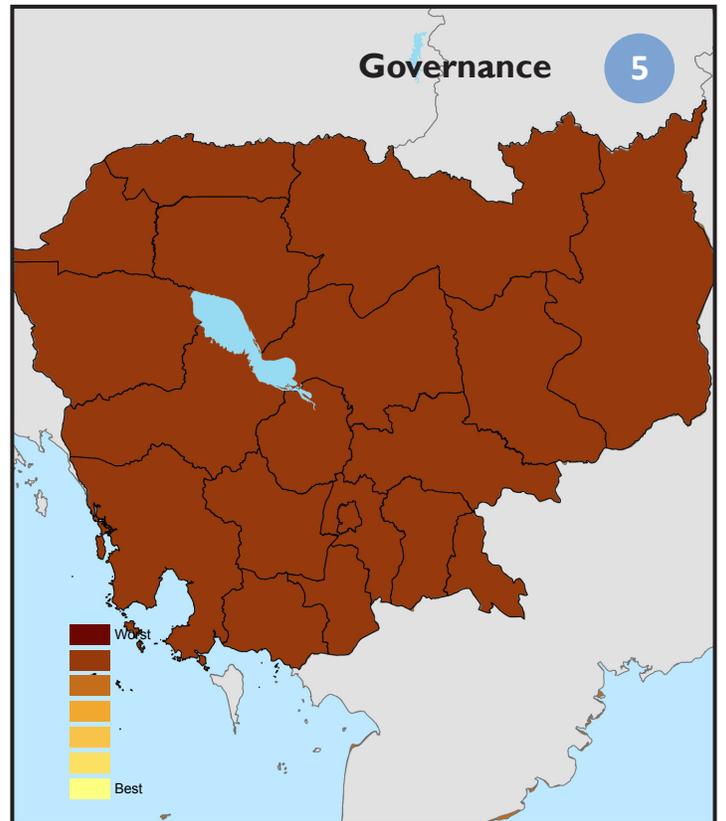
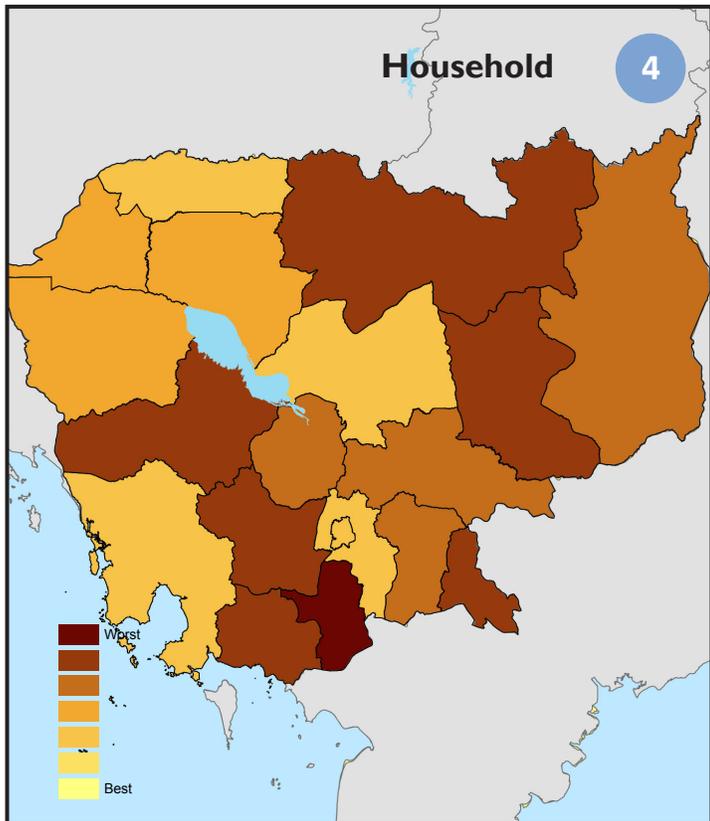
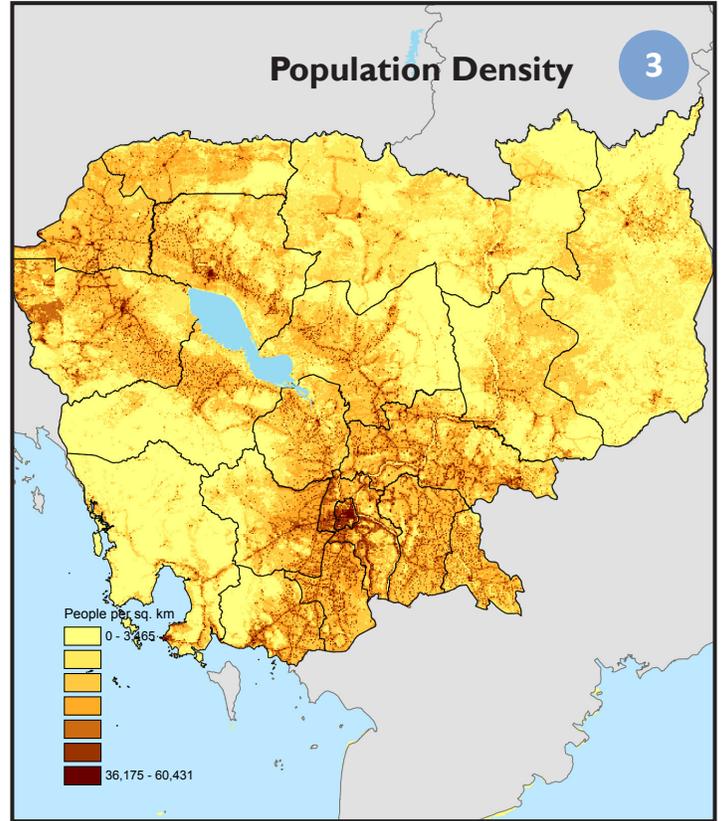
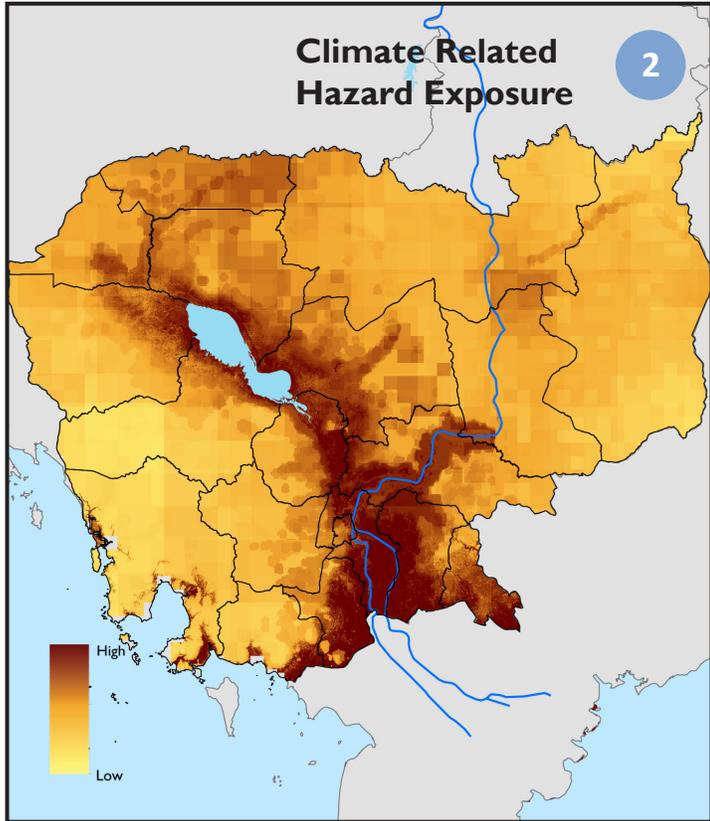
As Figures 1 through 5 highlight, the country is moderately exposed to overall climate change related vulnerabilities. Cambodia's climate related hazard exposure is mostly centered around the southeast area and around the Mekong River (see figure 2). In addition poor governance (see figure 5) and low household capabilities (see figure 4) contribute to the country's overall vulnerability.³ Calculations under the CEPSPA program indicate that approximately 83% (i.e., 12.5 million people) of the country's population faces above average exposure. Further, roughly 44% (i.e., 6.6 million) and 16% (i.e., 2.6 million) of Cambodia's people are more than 1 and 2 standard deviations above the mean regional exposure score respectively.⁴

Natural Disasters and Climate Change Vulnerability

Cambodia faces natural disaster risks related to changing water levels of the Mekong River Delta, higher temperatures, rising sea levels as well as wildfires in eastern Cambodia. Since 2000, Cambodia has experienced over 15 flooding events and 4 droughts.⁵ In addition, climate change and overfishing have damaged the country's largest lake, Tonle Sap. Cambodia's economy heavily relies on rice production, and these floods and droughts have already begun to destroy rice crops threatening the country's food security and economy.⁶ In 2011, floods affected three-quarters of the country's land area and turned large swaths of Cambodia's countryside into lakes. The UN estimated that 1.2 million people out of a population of about 15 million may have been affected. The floods also caused Lake Tonle Sap to swell to the highest levels in living memory and ruined rice crops.⁷ In 2014, heavy rains caused severe flooding along the Mekong river in nearly the entire



Data Sources: KOF Index of Globalization; World Bank World Governance Indicators; Political Instability Task Force (PITF); Polity IV Project; World Bank World Development Indicators; USAID Demographic and Health Surveys; UNICEF Multiple Indicator Cluster Surveys; Center for International Earth Science Information Network; UNEP/GRID-Europe; Viewfinder Panoramas; LandScan; Princeton University Terrestrial Hydrology Research Group



eastern part of the country destroying rice fields and homes. Simultaneous droughts in provinces of Oddar Meanchey in the north and Takeo in the south left the areas without adequate water threatening rice crops.⁸

In addition to the Mekong River, rice farmers and fishermen in Cambodia depend on the monsoon and dry season to control the levels of Lake Tonle Sap. Cutting of mangrove forests, development of hydroelectric dams upstream, and dry seasons that are expected to grow hotter and longer with climate change threaten this important source of livelihood for Cambodia. Cambodia must decide whether to prioritize electricity produced by hydroelectric dams or protect the fisheries and farming land that sustain the livelihoods of 1.5 million people around Tonle Sap.⁹ Nearly 250,000 hectares of flooded forests around the Tonle Sap lake were consumed by fire between January and May of 2016. While negligence and land grabbing (involving conversion of forests into rice fields by burning) are suspected to be the immediate causes of the fires, many believe that both manmade and environmental factors created the fires. Climate change and strong El Niño-induced drought, deforestation, and upstream hydropower and irrigation projects all factor into the extremely dry conditions that created these wildfires.¹⁰

In 2013, the Royal Government of Cambodia officially launched the first-ever, Cambodia Climate Change Strategic Plan 2014-2023. The CCCSP captures the main strategic objectives and directions for climate-smart development of Cambodia in the next 10 years.¹¹ In addition, the European Union has taken a significant role in Cambodia's climate change response by supporting the Cambodia Climate Change Alliance (CCCA) as well as other initiatives on reducing emissions and deforestation and managing natural resources. The CCCA focuses on improving climate change mitigation, adaptation and institutional capabilities.¹²

External Assistance

The Cambodian government has been working with bilateral and multilateral donors, including the Asian Development Bank, the World Bank, and IMF to address the country's many pressing needs. Between 2000-2013, Cambodia received \$11.8 billion in foreign aid with \$307 million going towards climate change adaptation and disaster risk reduction.¹³ Net official development assistance constitutes 4 percent of the total gross national income and 30 percent of the government budget.^{14,15}

Aid given to Cambodia is highly fragmented by sectors and number of donors. The government of Cambodia spends a large amount of time meeting and reporting to its numerous donors through more than 100 parallel project implementation units. Aid is also volatile as financing is unpredictable and often not adequate to meet funding needs. However, as donors complain, the government's own poor financial management system plays a role in the volatility of aid delivery. Additionally, non-traditional donors such as China and private donors play an important role in Cambodia; however, these donors have been criticized for paying less attention to development results such as poverty reduction.¹⁶

Regional Issues

Located on the Mekong River Delta, Cambodia coordinates water resources with its neighbors Vietnam, Laos, and Thailand through the Mekong River Commission (MRC) (see articles on Vietnam, Laos, and

Thailand). Dams constructed by Laos have changed the flow and consistency of the Mekong, posing a serious threat to food security in Cambodia. Even though the (MRC) coordinates water resources development between its member countries in the Mekong basin, critics say it is not doing enough to resolve dam disputes and their consequences.¹⁷

Governance

Two decades of conflict and civil war ended when Cambodia signed the Paris Peace Agreements in 1991 and began reconstruction. The surrender of remaining Khmer Rouge forces and a coalition government, formed after national elections in 1998, brought political stability.¹⁸ However, critics believe that the current prime minister, Hun Sen has become increasingly authoritarian using electoral fraud, corruption, and intimidation to maintain his rule. Hun Sen is one of the world's longest-serving prime ministers and has been in power in various coalitions since 1985.¹⁹

Although it has taken many steps towards developing and protecting its environment, Cambodia still has many challenges. Despite achieving its Millennium Development Goal (MDG) of halving poverty in 2009, around 8.1 million people are still only barely above the poverty line. In addition, the public service sector is still very weak impeding inclusive development, and the government has been ineffective at managing land and natural resources. As a developing nation with 80 percent of its population relying on subsistence agriculture, Cambodia needs a strong government to coordinate adaptation to climate change; however the existing authoritarian regime has thus far had a weak adaptive capacity to climate change.²⁰

Endnotes

- ¹ Brookings Institution (2016). Economic history of industrialization in Cambodia. Available at: https://www.brookings.edu/wp-content/uploads/2016/07/L2C_WP7_Chhair-and-Ung-v2-1.pdf
- ² Nations Online. Cambodia. Available at: <http://www.nationsonline.org/oneworld/cambodia.htm>
- ³ Further explanation of our approach can be found in Busby et al. (2016)'s Climate Security Vulnerability in Asia v1.0. Available at: <https://www.strausscenter.org/cepsa-research-briefs?download=627:climate-security-vulnerability-in-asia-1-0>
- ⁴ These estimates were calculated using LandScan (2014) and our overall exposure layer.
- ⁵ CRED (2017). EM-DAT The International Disaster Database. Available at: http://www.emdat.be/advanced_search/index.html
- ⁶ National Intelligence Council (2010). Southeast Asia: The Impact of Climate Change in 2030. Available at: <https://www.hsdl.org/?view&did=24131>
- ⁷ The New York Times (2011). Relief is Slow to Reach Cambodia Flood Victims. Available at: <http://www.nytimes.com/2011/11/03/world/asia/floods-in-cambodia-affect-more-than-a-million.html>
- ⁸ Radio Free Asia (2014). Cambodia Hit Hard by Floods And Drought. Available at: <http://www.rfa.org/english/news/cambodia/double-08252014165854.html>
- ⁹ The New York Times (2014). Of fish, monsoons and the future. Available at: <https://www.nytimes.com/2014/06/10/science/of-fish-monsoons-and-the-future.html>
- ¹⁰ Phnom Penh Post (2016). Tonle Sap Forest Razed by Fire. Available at: <http://www.phnompenhpost.com/national/tonle-sap-forests-razed-fire>
- ¹¹ Department of Climate Change. CCCSP 2014-2023, Kh/En, FINAL. Available at: <http://www.camclimate.org.kh/en/policies/nccc-news/197-cccsp-2014-2023-kh-en-final.html>
- ¹² Department of Climate Change (2016). Ambitious agenda needed to fight climate change. Available at: <http://www.camclimate.org.kh/en/documents-and-media/climate-change-in-the-news/360-ambitious-agenda-needed-to-fight-climate-change.html>
- ¹³ AidData. Available at: <http://aiddata.org/dashboard#/advanced/project-list>
- ¹⁴ World Bank. Net ODA received (% of GNI). Available at: <http://data.worldbank.org/indicator/DT.ODA.ODAT.GN.ZS>
- ¹⁵ Central Intelligence Agency. The World Factbook: Cambodia. Available at: <https://www.cia.gov/library/publications/the-world-factbook/geos/cb.html>
- ¹⁶ Brookings (2008). Aid Effectiveness in Cambodia. Available at: <https://www.brookings.edu/research/aid-effectiveness-in-cambodia/>
- ¹⁷ BBC (2015). Climate change: Mekong Delta heads for troubled waters. Available at: <http://www.bbc.com/news/science-environment-34407061>
- ¹⁸ Cambodia.org. Available at: <http://www.cambodia.org/facts/>
- ¹⁹ BBC (2017). Cambodia country profile. Available at: <http://www.bbc.com/news/world-asia-pacific-13006539>
- ²⁰ World Bank (2016). The World Bank in Cambodia. Available at: <http://www.worldbank.org/en/country/cambodia/overview>

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