

RICHMOND PUBLIC SCHOOLS
Shaping Our Future: Policy Pathways
Mr. Wayne Thomas, Teacher

1

Capstone Project

Climate Change and the Restoration of Depleted Forests to Build Food Security in Ghana

Capstone Team members:

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**Capstone Site: Center for Women and Food Security-Ghana
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**Sponsoring Organization: The Commonwealth (VA) Chapter of Links,
Incorporated, International Trends and Services Facet, LIFE
Program**

Problem Statement

2

Climate change and illegal logging and mining are contributing to the water crisis and rising poverty and hunger levels in rural Ghana.



Policy Context: Republic of Ghana

3



- Capital: Accra
- Population: 25.5 million
- Major languages: English, African languages
- Gold, cocoa, and oil form the cornerstone of Ghana's economy.
- 57.7% of Ghana's population lives in urban centers, while 42.3% lives in rural areas.

Policy Context

4

- Climate change and deforestation
- Rural women farmers food insecurity
- Poverty



Policy Formation



- Promotion of food security and agricultural development to help women, children and families
- Improvements in Agricultural production.
- Environmental laws regulate the environment and ensure the implementation of environmental and forest policies.
- Illegal logging, corruption, and weak enforcement of forest and environmental laws are impediments to sustainable forestry and environmental initiatives.

Policy Implications: The Role of Non-Governmental 6 Community-Based Organizations



The Center for Women and Food Security-Ghana (CeWaFS-Ghana)

- a community development-based organization in Sunyani
- Educates and empowers rural women farmers
- creates avenues for food security and poverty reduction
- strengthens the capacity of women farmers



Policy Recommendations

- Help rural women farmers through education, advocacy, and financing
- Value rural women's opinions in policy decision making
- Address corruption
- Support organizations like the Center for Women and Food Security - Ghana
- Tackle gender gaps to help achieve food security





References

Source: <https://www.bbc.com/news/world-africa-13433790>

Source:

<https://datareportal.com/reports/digital-2021-ghana#:~:text=Ghana's%20population,31.40%20million%20in%20January%202021>

Source:

<https://extranet.who.int/nutrition/gina/en/node/11625#:~:text=Programme%20description,of%20poverty%2C%20hunger%20and%20undernutrition>

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Source:

<https://extranet.who.int/nutrition/gina/en/node/11625#:~:text=>

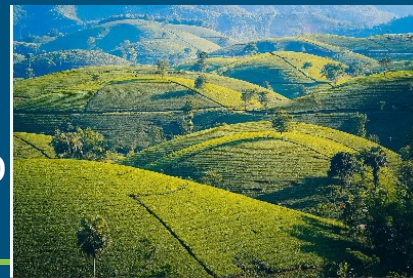


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**Climate Information for Disaster Risk Management
During The Monsoon Season in Central Vietnam**

The International Research Institute for Climate and Society (IRI)
Columbia University
Dannie Dinh, Program Officer

Team Members: Anaya White, Loany Escalante-Murillo
Tion Armstrong, Kyvon Taylor, and Ahmonte Green



Problem Statement: Vietnam



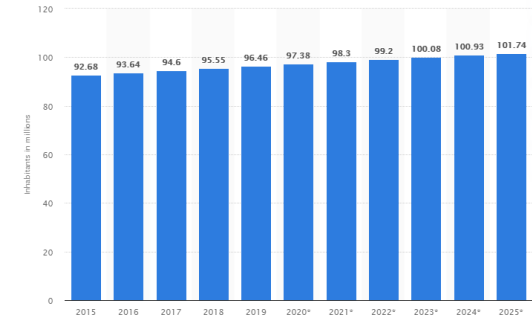
Over the last 20 years, climate change has negatively impacted the agricultural sector leading to a rise in the poverty level in Vietnam.

Policy Context: Vietnam

- Located in Southeast Asia on the eastern edge of the peninsula known as Indochina.
- Current population of Vietnam in 2021 is 98,168,833, a 0.85% increase from 2020
- In 2018, agriculture, forestry and fishing accounted for 14.68% of the country's Gross Domestic Product (GDP).
- The agricultural land area makes up 39.25 percent of Vietnam's total land area.



Vietnam: Total population from 2015 to 2025
(in million inhabitants)



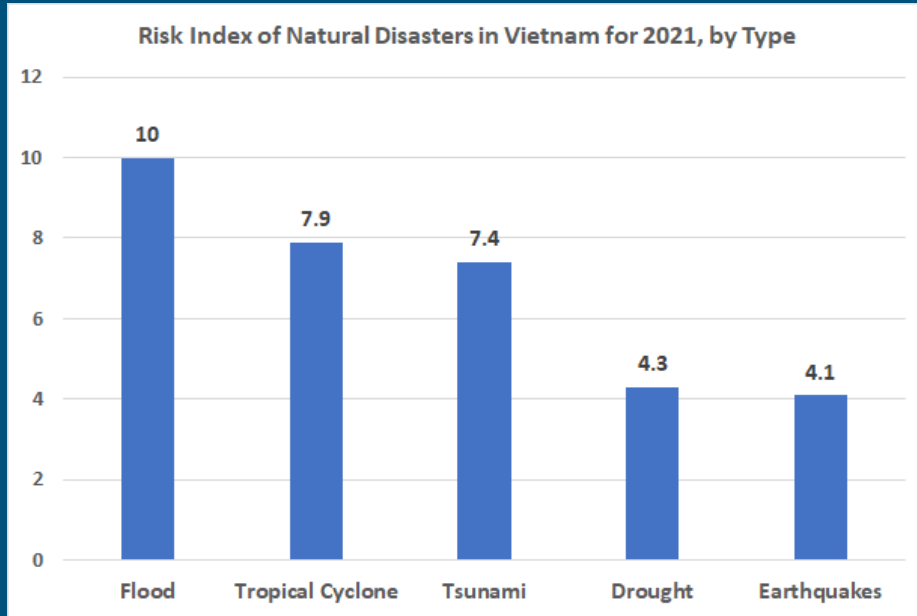
Policy Formation



- Climate change and the devastation of the monsoon season have led to calls for action
- Traditional models of responding to disasters after-the-fact with relief aid are costly and unsustainable.
- Management and response strategies must become more proactive

Source: The International Research Institute for Climate and Society (IRI)

Policy Analysis



Source: <https://www.statista.com/statistics/920892/vietnam-risk-index-for-natural-disasters/>

- Compared to droughts, and earthquakes, Vietnam is more likely to experience flooding, tropical cyclones, and tsunamis.
- The destruction to crop lands and livestock creates additional hunger, food insecurity, and poverty with wider impacts beyond the geographic region.

Policy Analysis



- One in nine people on the planet go hungry-- mostly farmers and their children.
- Climate change makes these humanitarian and development challenges worse.
- Eighty percent (80%) of the world's agriculture is rainfed.
- Man-made climate change is a contributing factor to food insecurity and rising poverty.

Policy Implications: The ACToday Vietnam Project

- The ACToday Vietnam works with Vietnam's lead hydrological and meteorological agency (NCHMF) to develop climate information, tools, and services to support the agricultural sector's needs.
- Project Aim: To improve climate information and services to support disaster risk management in Central Vietnam.
- Challenges: Cultural practices, non-scientific traditional beliefs local farmers, and lack of technology, such as cell phones.



Recommendations

Strengthen governmental partnerships to:

- Share information, data, plans, and strategies
- Monitor atmospheric changes
- Strengthened dyke systems
- Enhance communications to enhance flood prevention
- Improve alert and rapid response systems



References

Image (Slide 2):

<https://en.vietnamplus.vn/mekong-delta-floods-inundate-over-2000ha-of-rice/140743.vnp>

Images (Slides 5, 6, and 7):

<https://kids.nationalgeographic.com/geography/countries/article/vietnam#:~:text=use%20is%20prohibited.-,Vietnam%20is%20a%20long%2C%20narrow%20nation%20shaped%20like%20the%20letter,to%20the%20east%20and%20south>

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Source: <https://en.vietnamplus.vn/mekong-delta-floods-inundate-over-2000ha-of-rice/140743.vnp>