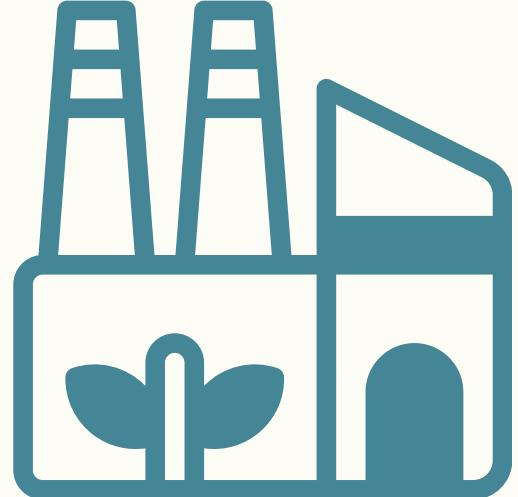
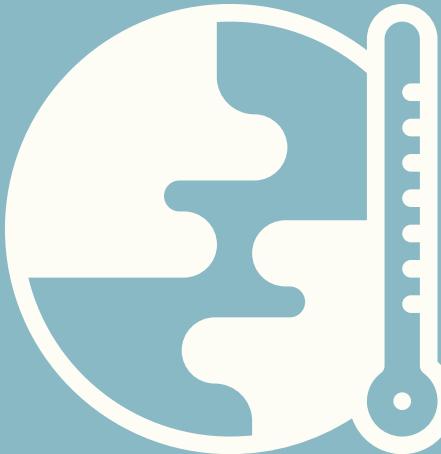


What's my FSI Score?

Shifting our priorities beyond agricultural growth toward a brighter future with the Food Security Index (FSI)



Presentation Outline

01

Introduction

Purpose and concept of findings

02

Problem Statement

The “so what?” and target audience

03

Real World Example

Singapore and Sudan

04

Model Utilization

How policy makers can use

05

How can we improve?

Limitations and Reflections

Introduction



What is Food Security?

- Availability
- Accessibility
- Utilization of safe, and nutritious food

Challenges

- Economic inequality
- Health Disparities
- Social Issues

Proposed solution

*A model designed to **guide policymakers** in making informed decisions to enhance the country's Food Security Index (FSI).*



Problem Statement

How might we develop a robust model for policy-makers to better understand the factors correlated to the Food Security Index (FSI), using economic, social, and health indicators?

Developed



Underdeveloped

Target Audience

Goals

1. Ensures the model provides insights to policy-makers for developed and under-developed countries
2. Identifies countries with factors regarding:



Percentage of
Children Stunted



Measure of the
**Human Development
Index**

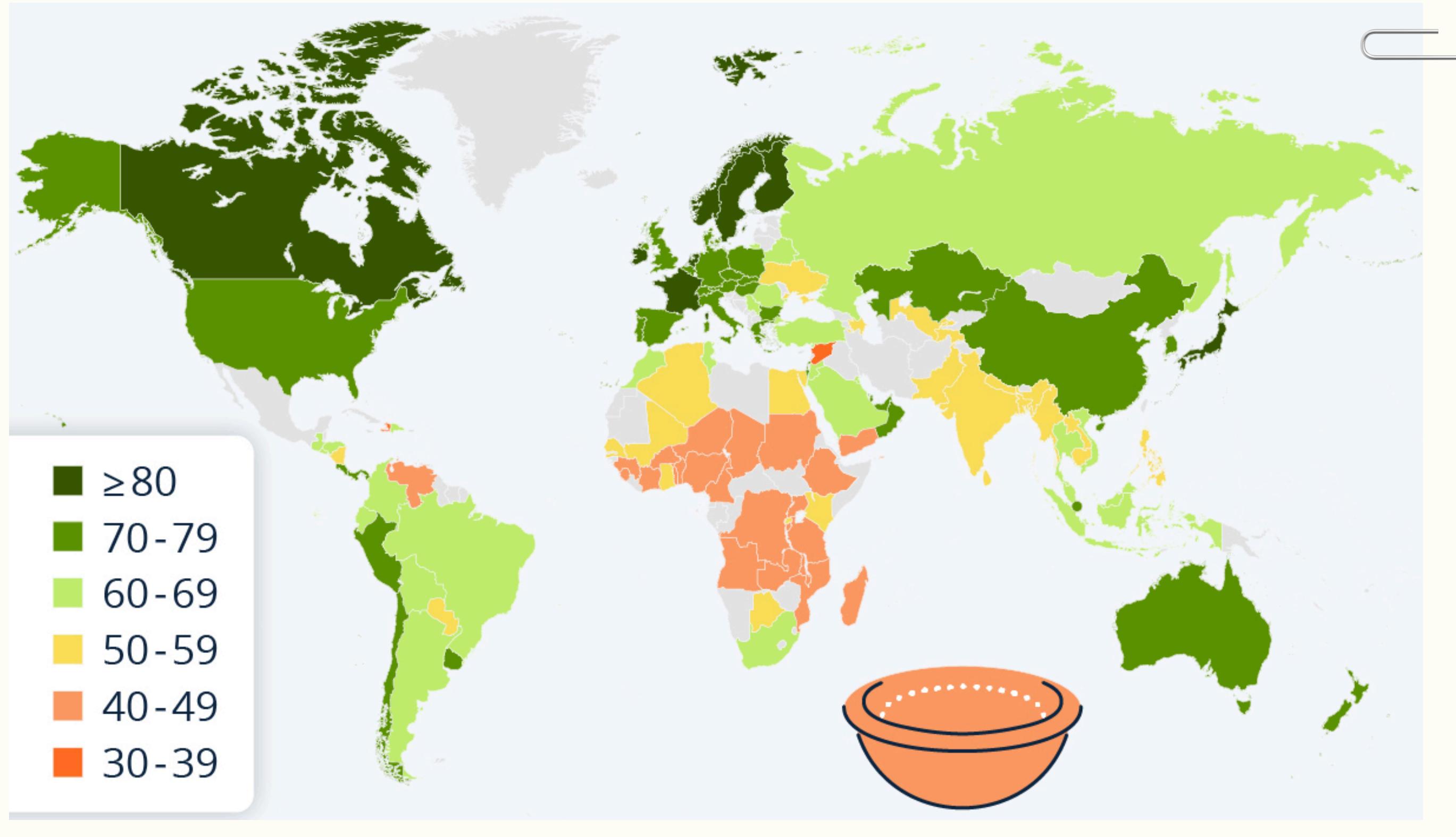


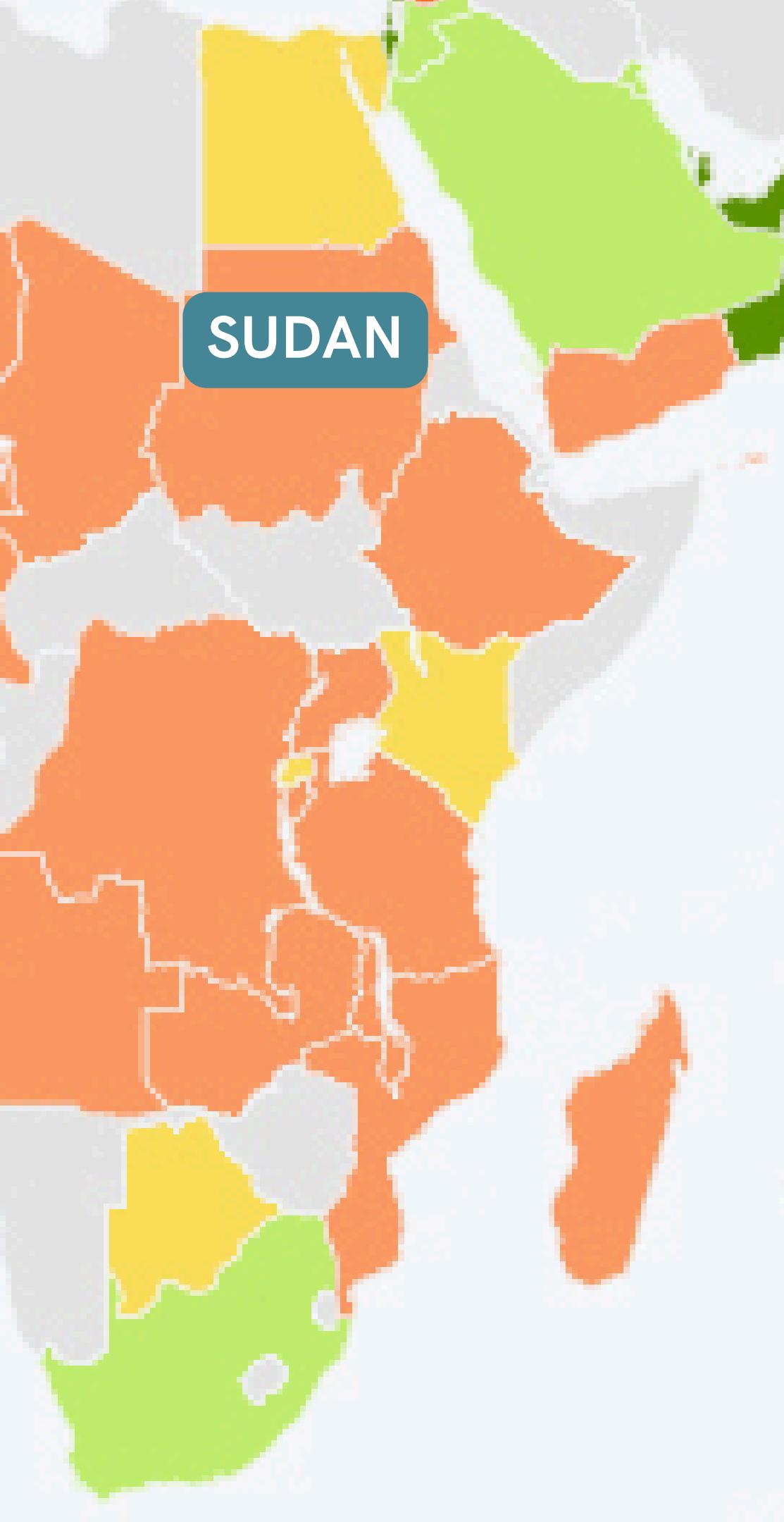
Income from
**Agriculture, Forestry,
and Fishing**

Restraints

- Missing data during collection for underdeveloped countries

FSI Around the World





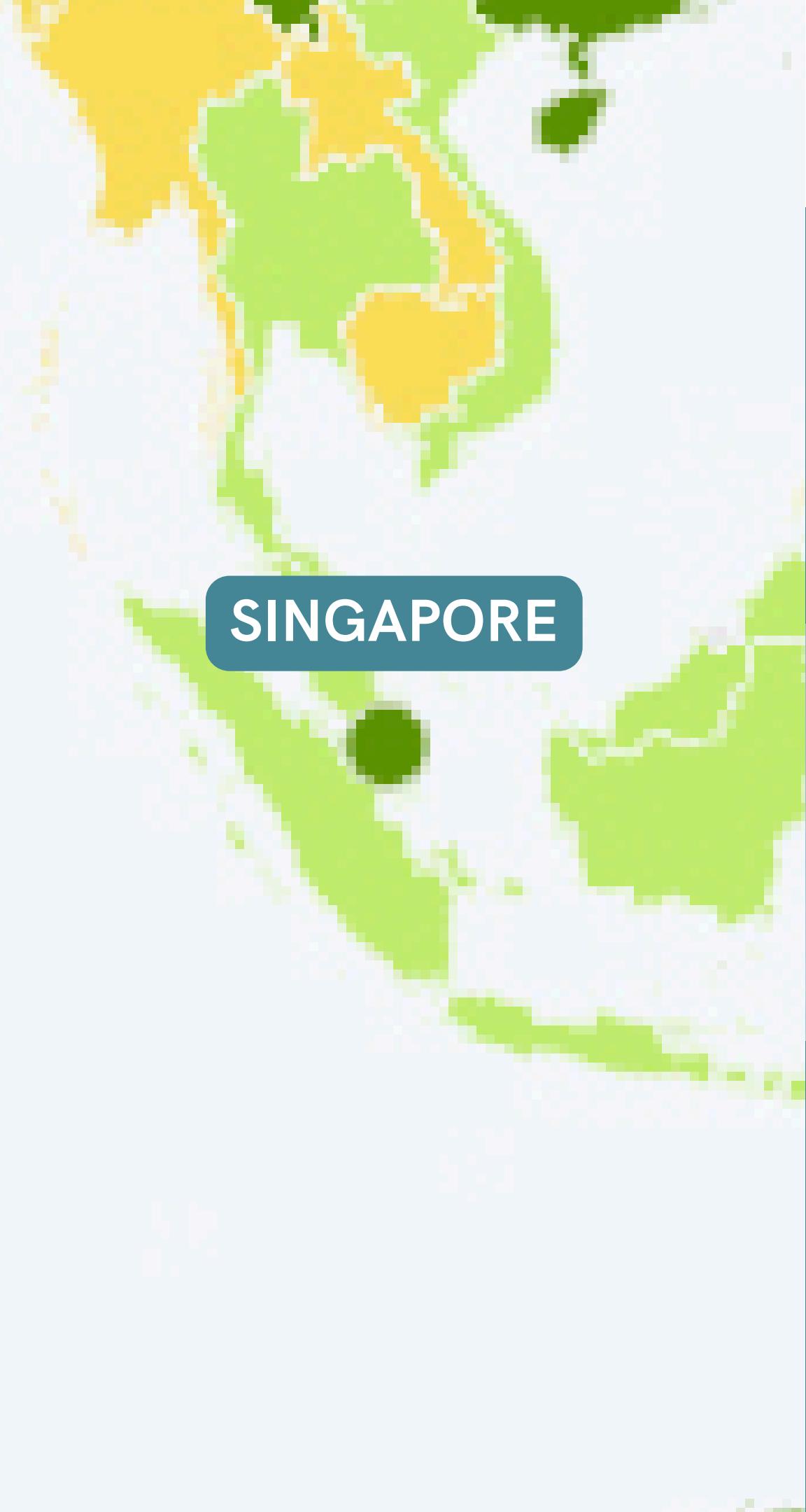
Sudan (FSI = 38.8)

a country in Northeast Africa with a population of 48.11 million, has endured decades of political instability and conflict that have severely hindered its development and deepened inequalities across the nation.



Geography and Climate

Nutrition and Public Health



Singapore (FSI = 72.8)

One of the world's wealthiest nations, with a population of about 6 million, known for its rapid development and innovation despite limited resources. Challenges include income inequality, high living costs, and reliance on global trade.

SINGAPORE



PAST → PRESENT → FUTURE

PRACTICES

(based on our model)

Past

Present

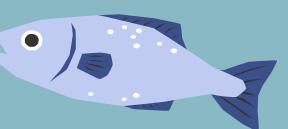
Future

Subsistence Farming:
Small-scale farming
for local
consumption.

Adoption of agroecology:
Organic farming, crop
diversification, and soil
health management.

Precision Agriculture:
Using drones and AI
for better resource
management.

**Coastal
Fishing/Farming:**
Small-scale
fishing/farming for
community use.



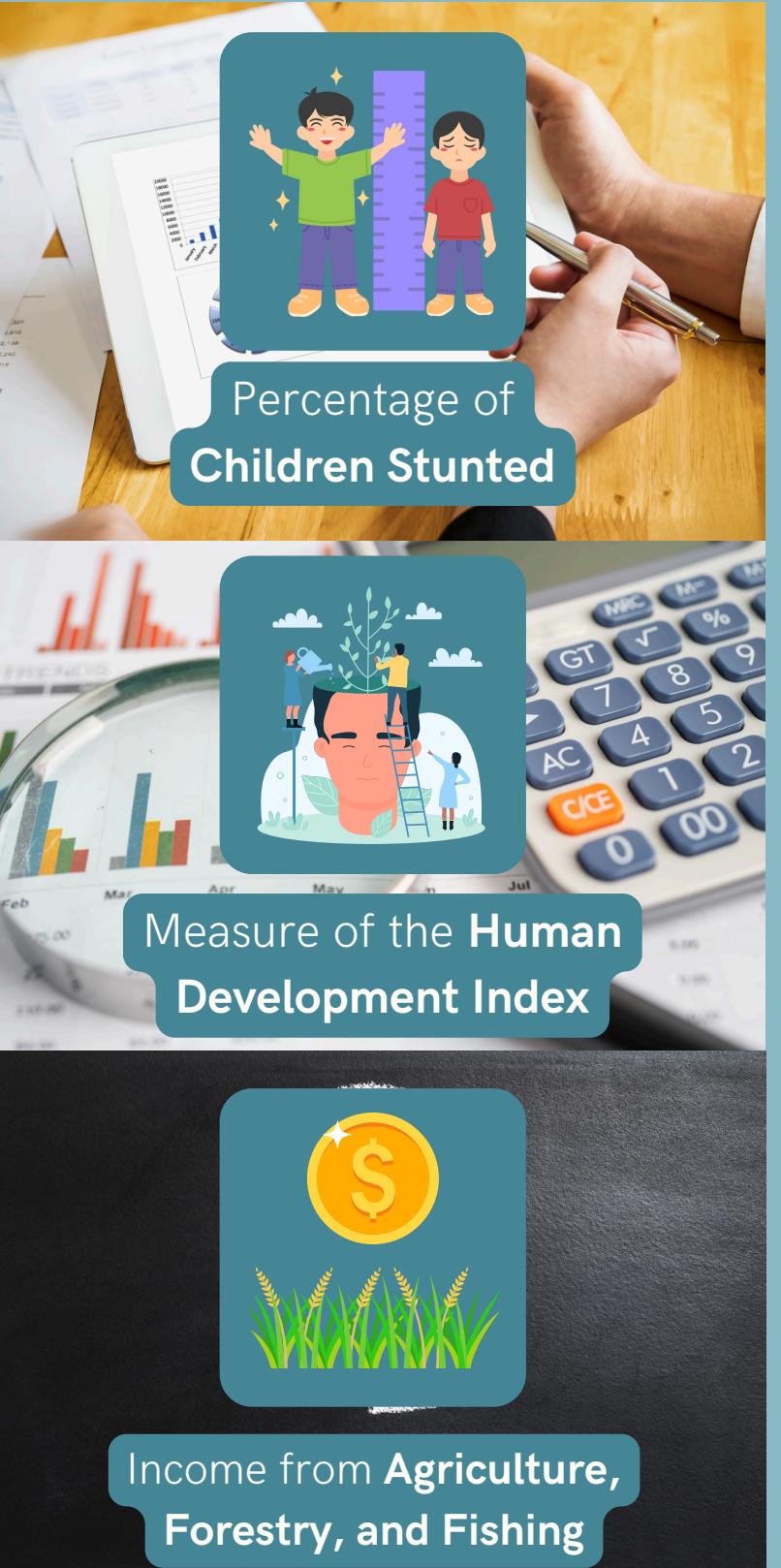
Smart Farming:
Techniques like smart
farming, hydroponics
and precision
agriculture.

**AI-Integrated Vertical
Farms:**
Scale up vertical farms and
integrate AI to optimize
growth conditions.



HOW TO UTILIZE THE MODEL?

Analogy: The right coffin size for the hole



Solution

'Coffin'

Customize to fit,
with aid from our
model

**Community
Structure and
Food Systems**

'Varied sized
holes'

The **model** provides a macro-level analysis of national food security statistics, offering **insights into the factors** contributing to food security. However, policymakers must focus on the **specific needs of their communities** to develop **targeted and effective solutions**.



Model Limitations

Model only looks at the macro and generalized level

Unpredictable & Unquantifiable factors,
commonly seen in **underdeveloped countries**

Major
Political
Upheavals



Natural
Disasters



War



Addressable Limitations

Country
Wealth
Inequality



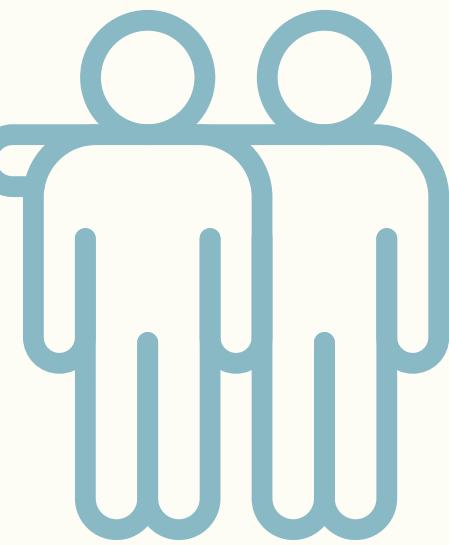
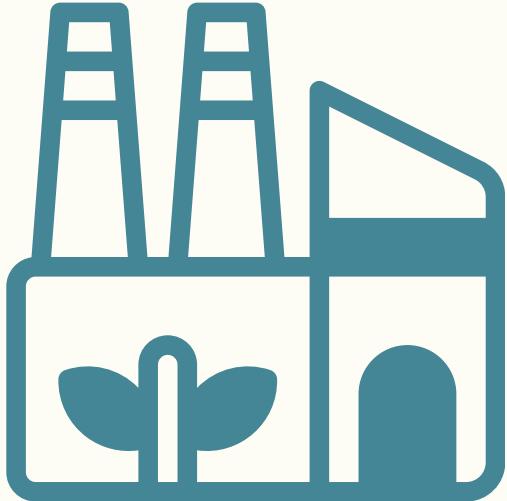
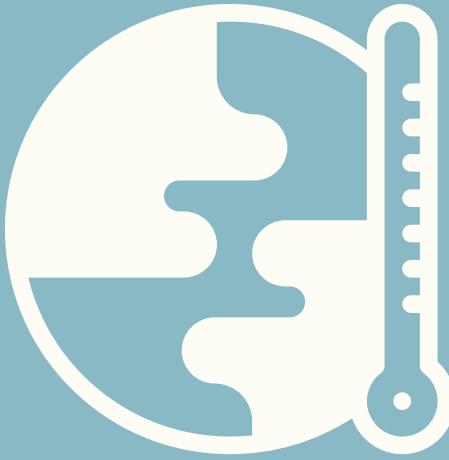
Global
Dependency



Final Thoughts

In our exploration of food security, we have highlighted the interconnectedness between FSI and the 3 indicators. However, achieving meaningful change requires:

1. Recognizing Community Nuances
2. Addressing Inequities
3. Adapting Globally, Acting Locally



Thank you for listening!

Feel free to ask us your **burning questions**

