

SUSTAINABLE CONSUMPTION AND GREEN SUPPLY CHAIN:

How Guam's Perspective on Sustainability Balances Tradition, Development, and Environmental Stewardship

Sharleen Q. Santos - Bamba, Ph.D.
Senior Vice President & Provost
Academic Accreditation Liaison
University of Guam



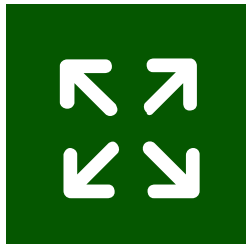
GUAM'S BACKGROUND



Largest island in Mariana Islands Northern chain



Home to ~167,777 people (2024)



Measures 30 miles (48.3 km) long, 9 miles (14.5 km) wide



Cultural “melting pot”

CHamoru, Filipino, Micronesian, Korean, Japanese, American





GUAM'S BACKGROUND



Reliant on **importation** of goods



Economy based in **tourism**



Farming and **fishing** practices
rooted in culture



Increased push for **sustainability**
within economy

WHY IS IT IMPORTANT TO CONSIDER GUAM'S **UNIQUE** CONTEXT?

- ① Geographic isolation & limited local production
- ② Climate and cultural considerations
- ③ Reliance on importation & geopolitical/military factors
- ④ Limited infrastructure & tourism - based economy

WHAT IS SUSTAINABLE CONSUMPTION?



using goods and services in ways that meet people's needs while *MINIMIZING* harm to the environment, society, and future generations

WHY DOES SUSTAINABLE CONSUMPTION MATTER?

ENVIRONMENTAL CONSIDERATIONS

- waste production
- natural resource conservation
- climate change mitigation

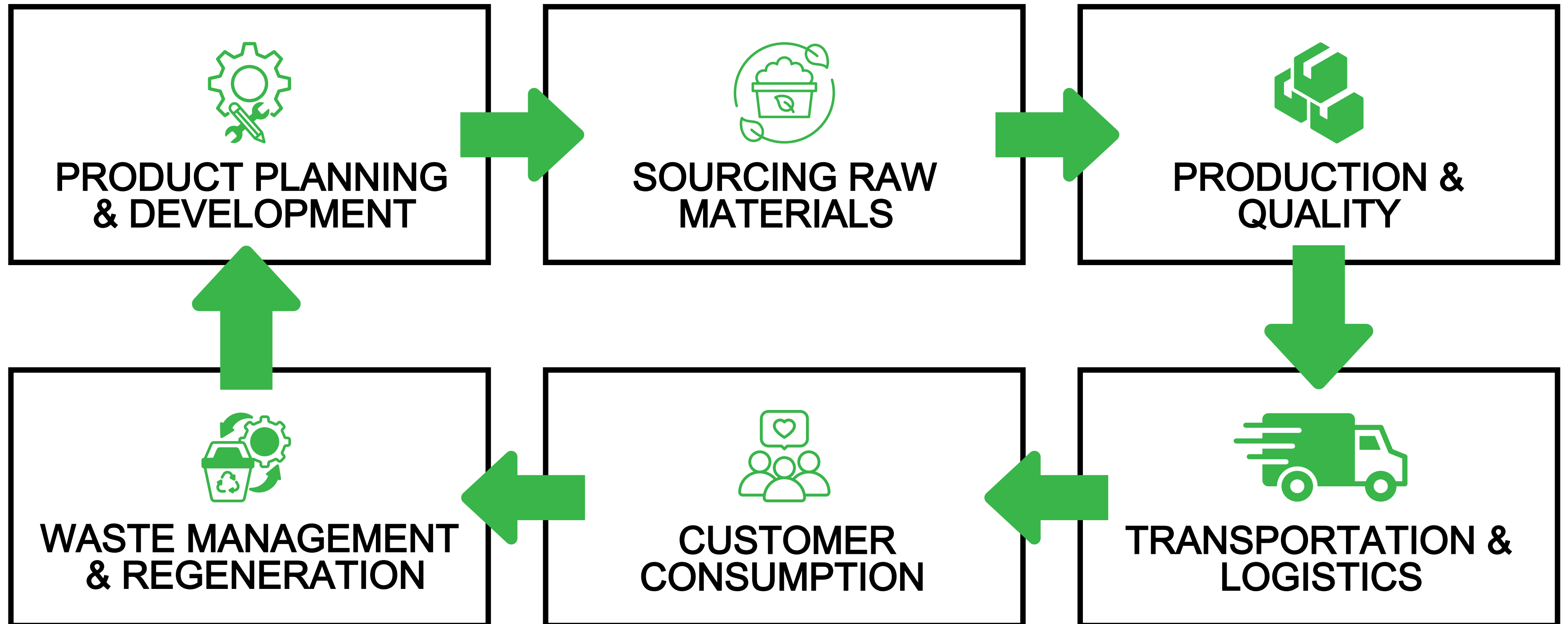
ECONOMIC STABILITY

- promotion of circular economies
- innovative development and production

SOCIAL WELL-BEING

- improvement of quality of life
- promotion of fair labor and equity

VISUALIZING THE GREEN SUPPLY CHAIN



UNIVERSITY OF GUAM



Established in **1952**



Over **50** undergraduate, graduate, and professional development programs



Over **2,800** students enrolled



Land Grant & Sea Grant
University



UOG'S CONTRIBUTIONS

RESEARCH

EDUCATION

EXTENSION

PARTNERSHIPS

SUSTAINABILITY FOCUS AREAS

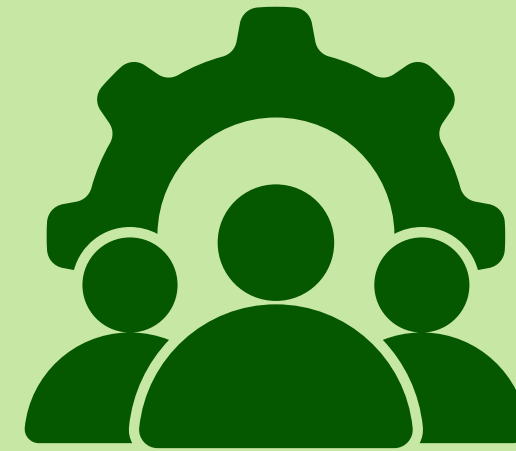
BUSINESS



ENVIRONMENT



**WORKFORCE
DEVELOPMENT**



UOG CAMPUS- WIDE REGULATIONS



- Vendors are required to use **biodegradable utensils, food containers, and bags** during all events held on campus
 - **Annual Charter Day festivities**
- Digitization of services reduces paper waste
 - Services can be navigated using the UOG website (**uog.edu**)
- Recycling efforts on campus promote sustainable behaviors
 - **Center for Island Sustainability (CIS)**
 - Service Work done through **Student Organizations** and **Americorps**

UOG CENTER FOR ISLAND SUSTAINABILITY (CIS)

- Founded in 2009
- Runs programs and community service projects to promote environmental sustainability
 - **Research Education and Extension Fellowship (REEF)**
→ opportunities for STEM and non-STEM majors to integrate sustainability into everyday life
 - **Guam Green Growth Conservation Corps & Kupu Conservation Corps**
→ workforce development opportunity for those interested in forestry and environmental stewardship
 - **Partnership with Northern Marianas College (NMC) to expand Kupu Conservation Corps**
- **Sustainable September**
→ became an island-wide effort to promote sustainability
- **Guam Green Growth Makerspace**
→ provides tools and equipment to turn recyclable items into functional materials and furniture



NEXTGEN & NATIONAL RESOURCE CONSERVATION SERVICE WORKFORCE DEVELOPMENT



- Provides students with **opportunities** to immerse themselves into **agriculture** and related **STEM** **research**
- Experience builds on **student interests** and **professional capacities**
- Promotes better understanding of **interdisciplinary sustainable efforts**

UOG LAND GRANT EXTENSION SERVICE



- Focused on expanding agriculture research and community outreach
- Collaborates with partners like Farmers Cooperative Association of Guam, Guåhan Sustainable Culture, and Farm to Table
- Shares new farming techniques and crops to broaden industry
- Connects local agriculture workers with business management and financial resources
- Various federally - funded projects explore different areas of cultivation
 - **Meat Processing and Animal Science**
→ teaches sellers and consumers about quality meat products and sustainable processing methods
 - **Natural and Value - Added Products Research**
→ innovation in making use of locally sourced materials
 - **UOG Farmer Focus Project**
→ touches on holistic wellness of agriculture workers
 - *2025 Guam Farmer Focus Conference* focused on sustainability in practice and in agribusiness

UOG ASIA PACIFIC STUDIES CENTER

- Fosters partnerships between the University of Guam and colleges within the Asia - Pacific region
- Primarily focused on maintaining relationships with sister schools in Taiwan
- Shares knowledge about agribusiness through events in collaboration with local organizations
 - **International Agribusiness Symposium Series**
 - collaboration between UOG School of Business and Public Administration, UOG College of Natural & Applied Sciences, and universities like the University of Guelph Canada, University of Maryland, and the National Kaohsiung University of Hospitality & Tourism
- Organizes **study abroad programs** between Taiwan and Guam to promote sustainable workforce development and knowledge sharing
 - Winter and Summer programs focused on **agribusiness, technological advancement, and cultural immersion**



LOCAL FOOD SUPPLY CHAIN INITIATIVES WITH FARMERS



Local stores sell both **local** and **imported** produce to boost local agriculture revenue

Expansion of **farmer's markets** and **night markets** provide both local farmers and business owners **opportunity** to sell goods





CONCLUSION



Guam has a **holistic** sense of sustainability



Promoting a **green economy** is essential to long - term zero waste operations



Collaboration is key to enhancing efforts and quality of life

CALL TO ACTION

Together, we can build **supply chain resilience** through:



Forming joint curriculums & regional data networks



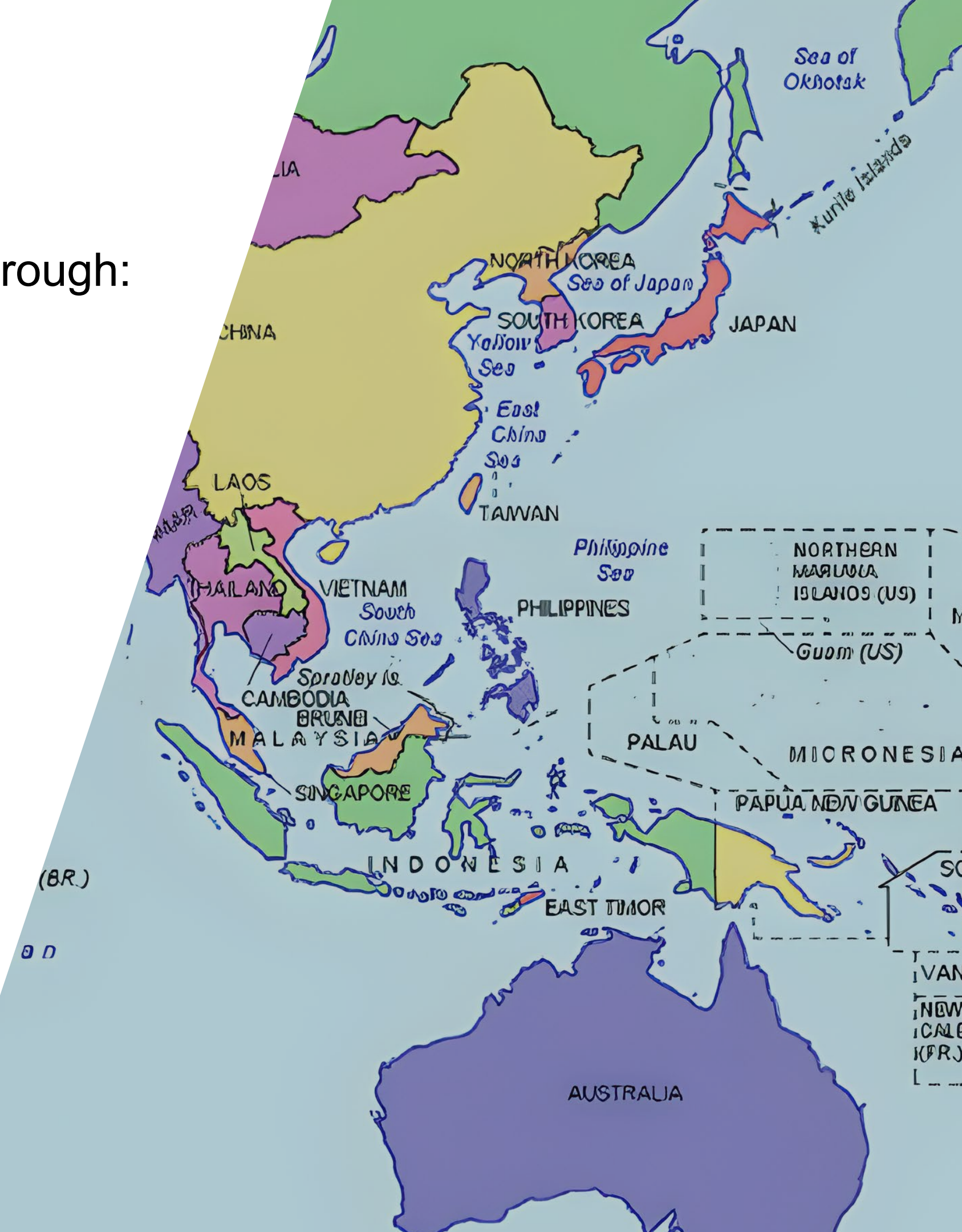
Focusing on student mobility and education



Navigating our shared geographic and economic challenges



Cultivating Strength and Connection



SI YU'US MA'ÅSE THANK YOU!



(671) 735-2994/8



sbamba@triton.uog.edu

