

UNA-USA CASE COMPETITION: RESILIENT FOOD SYSTEMS IN SOUTHEAST ASIA

Case Competition Instructions

UNA-USA campus and community chapters are invited to host a case competition in their local school or community and select a winning team to advance to the final round, to be hosted by the UNA-USA national office in May 2021.

Chapters are encouraged to host their competitions in the month of February-April, and submit their winning team to the national office no later than **April 18**. Email UNA-USA Youth Engagement Manager amahalak@unausa.org with the names and emails of your chapter's winning team. Winning teams will have the opportunity to present their case competition presentation to UN representatives. The final winning team at the national level will have their presentation published on the UNA-USA website and will receive a private meet and greet with a UN representative.

The aim of this competition is for teams to critically examine major issues related to food insecurity, climate change, and agriculture in Southeast Asia and to understand its root causes and prospects for the future. To recruit teams, share the following case competition prompt and instructions, and encourage teams of 2-4 to select one **country** from the below list and one **issue of focus**. Teams should evaluate local projects that address the issue in that country, and share the local projects' strengths and weaknesses, as well as make their own recommendations to address SDG 2 that are sustainable and resilient. Furthermore, teams should consider connections to other Sustainable Development Goals.

For the competition, teams should prepare a 10-15 minute presentation, followed by questions from the judges. UNA-USA chapters should select 3-5 judges to score and select a case competition winner from the presentations. Judges can use the rubric below to score and evaluate presentations.

Case Competition Judging Rubric

- Team has selected a project that is relevant to one of the major issues in a Southeast Asian country
- Team has prepared a presentation that clear, well-thought out, and has a focused point
- Team has evaluated the projects for strengths and weaknesses to show critical analysis of the issue
- Team has addressed potential for their selected project to be scaled beyond their country of focus
- Team has evaluated the project for its ability to reach targets of SDG 2

- Team has discussed connections to other SDGs
- Team was prepared to respond to judges' questions

CHOOSE ONE COUNTRY

Brunei, Burma (Myanmar), Cambodia, Timor-Leste, Indonesia, Laos, Malaysia, the Philippines, Singapore, Thailand and Vietnam.

CHOOSE ONE MAJOR ISSUE

Access and Distribution, Nutrition, Rice Cultivation, Monocultures & Environmental Degradation, COVID-19

CASE COMPETITION PROMPT

SDG 2 - Zero Hunger

Globally, nearly 700 million people suffer from hunger, with millions more affected by food insecurity and undernutrition. In 2019, about 2 billion people did not have safe and reliable access to nutritious and sufficient food. The Sustainable Development Goals (SDGs), a framework intended to improve lives across the world by 2030, highlight the hunger crisis under SDG 2: Zero Hunger. We are not currently on track to achieve this goal, with recent trends indicating that by 2030, over 840 million people will be affected by hunger (United Nations 2020).

Issues such as climate change and COVID-19 are only increasing the severity of this crisis. Clearly, profound and systemic change in the global food network and the agriculture industry are essential to ending hunger and food insecurity. Sustainable and resilient agriculture and food systems can increase production levels and also have the potential to empower smallholder farmers and other marginalized communities in areas that are the most food insecure.

Background: Malnutrition in Southeast Asia

Southeast Asia, a tropical zone near the equator which includes Indonesia, Thailand, Vietnam, the Philippines, Singapore, Malaysia, Cambodia, Myanmar, Laos, Brunei, and Timor-Leste, holds one of the largest hungry populations, with 60 million of its 630 million people undernourished and 65.8 million severely food insecure, having reported experiencing entire days without eating (ASEAN Post 2019).

While Southeast Asia has made impressive gains in development and achieved food security in terms of caloric intake, there are still major hurdles to overcome. The largest challenges the region faces are adapting to climate change and implementing widespread sustainable agricultural practices to improve farmers' livelihoods. Southeast Asia is considered one of the world's most vulnerable areas to extreme weather due to climate change, and within the region

individuals involved in agriculture, primarily smallholder farms, will be the most affected. Rice is one of the dominant crops in the region and without sustainable adaptations for growing rice, yields may fall as low as 50% by 2100 (Prakash 2018). While rice is a staple crop, overreliance on rice consumption has led to decreased nutrition. Putting more emphasis on vegetable farming can help diversify diets in the area and lower levels of malnourishment. Less reliance on rice and palm oil is also needed to halt deforestation in order to achieve a future where agriculture is still viable for Southeast Asia.

The question for the region now is how to move away from the unsustainable practices of the Green Revolution, which initially led to great gains in development in the past but have also resulted in environmental degradation. Southeast Asian governments and development practitioners must also decide how to incentivize small farmers to implement sustainable practices, such as crop diversification and organic farming, in order to prepare them for the coming climate shift, a growing population and middle class, and the unknown long-term effects of COVID-19.

CHOOSE ONE MAJOR ISSUE

Access and Distribution

There are several barriers for communities in Southeast Asia to access nutritious food. Diverse foods, as opposed to staple, high calorie/low nutrition foods like rice, are difficult to afford and are unavailable to many communities (World Bank Blogs 2018). This is an issue especially in urban areas, where diets are shifting towards cheaply processed foods due to higher convenience and affordability compared to nutritious, unprocessed food coming in from rural areas (FAO 2018, 64). National food systems in Southeast Asian countries suffer from a lack of coordination between food access and related policies in energy, health, water, transport, and waste. Strong rural-urban divides also complicate equitable food distribution (FAO 2018, 63).

Nutrition

Trends in malnutrition, undernourishment, and food insecurity in Southeast Asia are at odds with the area's level of economic growth and development. Unfortunately, over the last few years, the rate of hunger reduction in this region has slowed and even reversed for some countries (FAO 2018, 7). From 2005-2015, all Southeast Asian countries experienced a decrease in the prevalence of undernourished people; however, since 2015 this has reversed, perhaps due to climate change and climate-related shocks affecting the agricultural sector (FAO 2018, 9). Furthermore, as the agricultural sector in Southeast Asia integrates with global food systems, the role of agriculture in hunger reduction and nutrition improvement has changed in many areas as farmers produce less for the community and more for large agribusinesses.

Child stunting, defined as children failing to reach their genetic potential for height, comes from chronic undernutrition, [DD3] poor nutrition of women before and during pregnancy, and poor sanitation and hygiene practices (FAO 2018, 13). Childhood wasting, a condition in which

children are too skinny for their height, has similar causes. The Asia-Pacific region, of which Southeast Asia is a large part, has the highest prevalence of “wasted” children in the world, with approximately 8.9% of children in the Southeast Asian region specifically experiencing childhood wasting (FAO 2018, 13). Additionally, the region is seeing a rise in obesity, owing to increased exposure to energy-dense and nutrition-poor foods. Over-reliance on rice as a staple food, for example, contributes to this type of diet (World Bank Blogs 2018). From 2000-2017, there was a percentage increase of about 3.2 to 7.5 in prevalence of childhood obesity (FAO 2018, 19).

There are a variety of causes of hunger and malnutrition in this region, the principal causes being poverty and inequity (FAO 2018, 1). There are also a range of underlying causes, including household food and nutritional security status, care practice, and access to health and sanitation services (FAO 2018, 28). Additionally, the rise in climate-related disasters such as droughts reduces production of diverse and nutritious crops.

Rice Cultivation

Southeast Asian countries’ agricultural sectors largely depend on rice. In 2010, 31% of the global rice harvested, or 48 million hectares, was harvested in Southeast Asia alone. Not only is rice key to these economies it is also a staple in Southeast Asian diets. However, many of the areas that rice is grown in are extremely vulnerable to climate change. With drought, cyclones, floods, and the temperature all on the rise in Southeast Asia rice production is expected to drop if nothing is done to combat these weather events (Redfern 2012, 295-296). Annual temperatures across Southeast Asia are expected to rise. This will affect rice productivity, growth duration and patterns (Redfern 2012, 296). For every 1-degree Celsius annual increase in temperature, rice yields are expected to decrease by 10%. With regional annual temperatures expected to increase by 4.8-degrees Celsius by 2100, rice yields would be expected to be cut almost in half. This would be disastrous for food security and destroy the livelihoods of small farmers in Southeast Asia.

Currently, the number one threat to rice production in Southeast Asia is drought. Rainfalls in the region have been consistently lower than past annual averages. This means finding drought resistant varieties of rice and less water intensive growing methods is key to adapting to climate change while meeting food security needs. Other issues facing rice cultivation include increased salinity in river deltas from rising sea levels, flooding from extreme weather events, and urbanization encroaching on fertile land (Food 2013, 23). Farmers also face rising prices for rice and rice inputs due to shocks to the global supply, making it harder for smallholder farmers to competitively produce. Many of these small farmers grow for the market and for subsistence making the higher prices of rice and inputs a food security issue for the most vulnerable populations in Southeast Asia.

Monocultures & Environmental Degradation

The rising dominance of monocultures, like rice, palm oil trees, rubber trees, and soybeans, in Southeast Asia has led to land expansion and ecological harm. Monocultures contribute to poor

soil health and erosion, loss of biodiversity, and increased greenhouse gas emissions (Sibhatu 2019, 2). Monocropping depletes soil nutrients and results in poor agricultural productivity, which leads to loss of farmer livelihoods. Declining incomes and yields further exacerbates food security in the region. In dry zones in the region, land being cleared and used for monocrops leads to soil erosion and increases desertification. This worsens climate issues that the region is already facing and makes growing food difficult for farmers (Climate 2018, 10).

The adoption of monocultures also contributes to nutrient deficiencies and loss of diet diversity among smallholder farmers. Because more land is used for the monocultures, farmers are less likely to grow a diverse range of crops, like fruits and vegetables for subsistence. This can lead to further food insecurity in a region, despite monocultures like palm oil being applauded as a way to fight poverty and hunger (Sibhatu 2019, 3).

COVID-19

While the impacts of the COVID-19 pandemic are still playing out, lockdowns across Asia have already disrupted value chains in the food system. Lockdowns have severely restricted the movement of people and goods in the region and limited farmer access to markets. Factory shutdowns and illness have caused supply and labor shortages, all of which create shocks to the rice value chain. A shortage in rice or negative economic shocks to rice farmers may impact food security in the region and the ability to meet certain SDG goals, including no hunger, no poverty, and health and well-being (Bhandari 2020, 1). Lack of access to inputs, like seeds, cause production shortages on the farm side and this has trickle down effects that create higher prices for consumers on the other end of the supply chain (Bhandari 2020, 3).

Job loss across the informal sector has impacted millions of rural laborers who are already some of the poorest and the most vulnerable to food insecurity. With farmers wary of having too many people on their land due to COVID-19 concerns, rural laborers may face a severe lack of income and food (Yasmi 2020, 3).

There are also many long-term concerns about COVID-19's effect on this region and its people. The food systems woven throughout the region rely on a complex web of industries: agriculture, fishing, transportation, processing, and retail (FAO 2020). Considering the many uncertainties of the COVID-19 pandemic, it is not known if and to what degree these food systems will be affected. Safeguards to prepare for this unknown future are essential, including research development and evidence-based policy solutions. Primary food producers such as smallholder farmers, who are among the most affected by the pandemic and food chain disruptions, and those who have been without income to buy sufficient food for months, should be prioritized.

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