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Purpose of the Handbook

In the Philippines, a country blessed with rich biodiversity, vibrant culinary traditions, and fertile lands, issues of malnutrition, food insecurity, and declining food diversity ironically persist. Despite having one of the highest biodiversity of plant species globally, with 25 plant genera found nowhere else in the world, the Philippines faces a decreasing diversity of cultivated native crops. Alarmingly, 27-8% of the food energy consumed in the country now comes from non-native sources (Oraye et al., 2023), sidelining local, climateresilient species that once thrive in Filipino foodways.

Compounding this issue are stark nutrition-related problems. According to the DOST-Food and Nutrition Research Institute (DOST-FNRI, 2021), the recommended healthy food plate for Filipino adults should contain 33% vegetables, yet the average Filipino consumes only 9.5%. In 2021, 26.7% of children under five were stunted, 15.% of children aged 6 months to 5 years suffered from vitamin A deficiency, and 10.4% of Filipinos experienced anemia (DOST-FNRI, 2022). Despite the Philippines' natural abundance, 12.2% of Filipinos reported experiencing moderate to severe hunger, with families in agriculture being the most vulnerable (Cruz, 2022; PIDS, 2022). These statistics reflect a disconnection between the Philippines' natural wealth and the nutritional well-being of its people. The question arises: How can a country so rich in resources face such scarcity?

As food historian Doreen Fernandez (1990) argued in "Colonizing the cuisine: The politics of Philippine foodways," Philippine cuisine has evolved through layers of history, foreign influences, and colonial legacies. This complex interplay has both enriched Filipino food culture and pushed native ingredients to the margins, making them less familiar or even endangered in modern diets.

In response, this handbook seeks to promote ethical consumption by revisiting the Philippines' rich food heritage, with a focus on native and endemic plant species that are at risk of disappearing from Filipino plates. Ethical consumption, in this context, means making informed, conscious food choices that support local farmers and smallholder communities, promote environmental sustainability, and preserve cultural and culinary heritage.

Introduction 1

These native plants represent the Philippines' rich natural heritage. They are climate-resilient, adapted to local ecosystems, and key to achieving food security (PCARRD, 2007). By reducing reliance on imported goods and challenging the dominance of unhealthy, processed foods, ethical consumption becomes both an act of cultural pride and a step toward national self-sufficiency. However, the decline of these native ingredients is not just due to environmental factors. The loss of traditional knowledge, limited accessibility, and changing food preferences all contribute to their disappearance (Florendo, 2019; Oraye et al., 2023; Tafoya, 2023).

Reversing these problems requires active engagement at multiple levels. The simplest yet most powerful way to preserve these plants is to keep them alive in our foodways. By incorporating them into everyday meals, educating food sellers, and creating demand through delicious, familiar dishes, we can ensure that these ingredients remain part of Filipino identity (Tan, 2024).



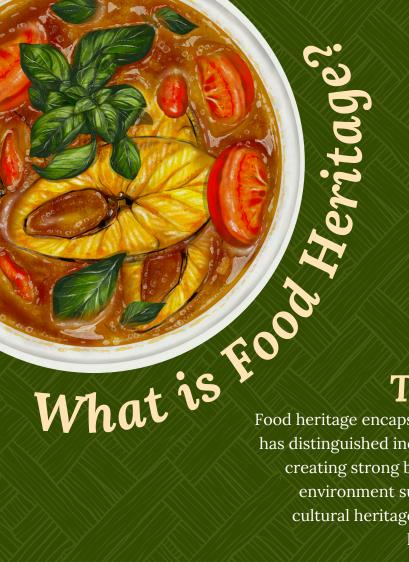


Philippine National Hero Dr. Jose Rizal famously declared, "Ang kabataan ang pag-asa ng bayan"-"The youth are the hope of the nation." In today's context, where health, food security, and environmental sustainability are urgent issues, we can build on this by saying: "Ang malusog na kabataan ang pag-asa ng bayan"-"Healthy youth are the hope of the nation."

The youth are not just the leaders of tomorrow—they are consumers, advocates, and changemakers today. With over 30 million young people aged 10-24, accounting for 28% of the Philippine population, this generation represents the largest in the country's history (UNFPA, 2024). Their choices influence food trends, shape cultural practices, and determine the future of Philippine food systems. By embracing ethical consumption, young Filipinos can promote sustainable local food, support small farmers, protect biodiversity, and advocate for policies that prioritize agriculture, health, and conservation.

Reintroducing native ingredients is a radical act of preservation and empowerment. Through taking pride in Filipino food heritage and making native plants part of their daily lives, the youth can help secure a future where our plates reflect the richness of our land, the resilience of our people, and the hope of a healthier, more sustainable Philippines.







To cultural identity

Food heritage encapsulates shared memories and origin, thus it has distinguished individual groups and societies for centuries, creating strong bonds and identities. In a multigenerational environment such traditions were passed down as part of cultural heritage, which often remains a source of culinary habits and patterns (Ossowska et al., 2024).

To sustainability

Culinary traditions keep up with the growing demand for sustainability. The dishes, ways of eating and handling food, and food-sharing practices manifest environmental responsibility. Culinary traditions often include sustainable practices such as organic farming, foraging, and using seasonal, locally available ingredients (Ossowska et al., 2024).





To ethical consumption

Food heritage is often tied to local food production. Prioritizing local resources and supporting small-scale producers encourages consumers to make ethical choices that are environmentally sustainable and socially responsible, thereby strengthening the local economy and cultural identity.

The Diversity of Philippine Food: Native, Endemic, and Introduced Species



The Diversity of Philippine Food: Native, Endemic, and Introduced Species



How Native Species Became Marginalized?

For generations, native and endemic food plants have been part of everyday life in the Philippines. They were once staples in Filipino kitchens. But over time, they have been pushed to the margins, replaced by imported crops, commercial farming, and changing food habits.

Colonial Influence and
Changing Tastes. New
World crops arrived in the
Philippines via the ManilaAcapulco Galleon Trade
(16th-19th century), with
corn, sweet potatoes, and
other various vegetables
and fruits becoming
staples. Under U.S. rule,
food culture shifted further,
while traditional crops
were seen as "poor man's
food."

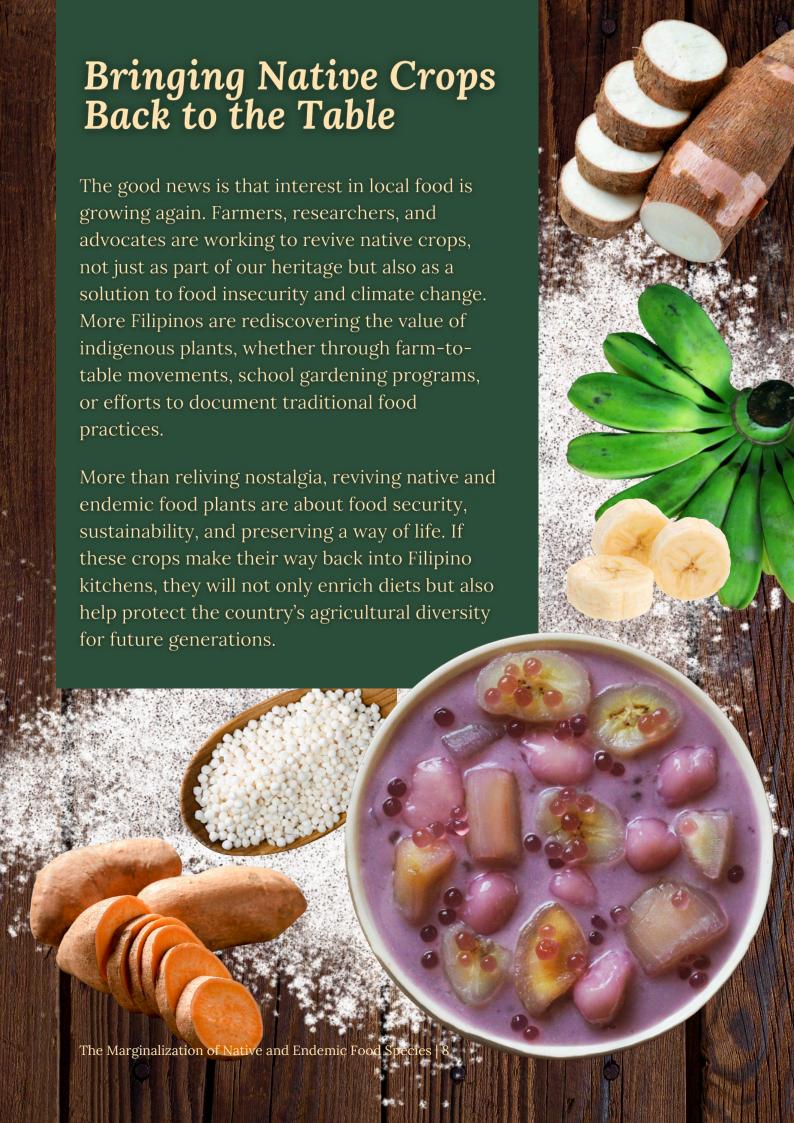
Farming for Profit, Not for Food. The Philippines turned to export agriculture, focusing on crops like sugar, coconut, and pineapple. These brought in money but took up farmland that once grew food for local communities. Farmers had little incentive to grow indigenous crops when cash crops were more profitable.



Modern Agriculture and
Market Demands. Highyield, commercially grown
crops dominated the
market, leaving little room
for native plants that did
not meet industrial
standards. People wanted
food that had qualities
that many traditional
crops did not have.

A Move Away from
Traditional Diets. As cities
expanded, lifestyles
changed. People relied
more on supermarkets and
fast food, and traditional
cooking practices faded.

Losing Knowledge, Losing Choices. Many indigenous farming techniques were passed down through oral tradition. As fewer people grew and ate native crops, knowledge about how to cultivate and prepare them started disappearing.



Impact on Biodiversity and Food Security

As native and endemic food plants are marginalized in the Philippines, biodiversity, resilience, and food security face increasing threats. These plants are part of a natural system that has sustained communities for generations. When they disappear, food systems become weaker, ecosystems lose their stability, and people's connection to their food heritage fades.

Biodiversity at Risk

Native plants do more than provide food. They support pollinators, improve soil health, and serve as key food sources for wildlife. Replacing them with commercial crops disrupts these natural relationships, and in some cases, pushes these plants closer to extinction. When local varieties vanish, the genetic diversity that helps crops resist diseases and adapt to climate change disappears with them.

The shift to large-scale, high-yield farming has also led to monoculture—the practice of planting a single crop over vast areas. This approach weakens ecosystems by depleting soil nutrients, increasing reliance on chemical fertilizers, and reducing biodiversity. As native plants fade from farmlands, invasive species often take over, further destabilizing the natural balance.



Food Security and Cultural Loss

For many communities, native crops were the backbone of their diets. These plants were well-adapted to local conditions, requiring less water and fewer resources to grow. But as food production became more commercialized, people moved away from these traditional food sources, relying more on imported and mass-produced goods. This change has made communities more vulnerable to price fluctuations, supply chain disruptions, and food shortages.

At the same time, knowledge about farming and foraging native crops is disappearing. Many traditional food practices, once passed down through generations, are being forgotten. This weakens cultural identity and reduces food sovereignty—the ability of people to control their own food systems.

Restoring Balance

Protecting native and endemic food plants are key to revitalizing biodiversity and ensuring long-term food security. These crops offer sustainable, climate-resilient alternatives that can strengthen both the environment and local food systems. Supporting local farmers, reviving traditional food practices, and promoting biodiversity-friendly agriculture are crucial steps in restoring balance in nature and on our plates as well.



Why Revisit and Revitalize Native and Endemic Food Plants?



As industrialization started, we also started to believe that imported food was better—more nutritious, more prestigious, more desirable. But at what cost? Our lands are abundant with native and endemic food plants, yet they remain underutilized while we depend on mass-produced, resource-intensive crops. The irony? Many of these so-called "superfoods" from abroad have local counterparts that are just as, if not more, nutritious. So why aren't we prioritizing what's already ours?

Bringing back native plants isn't just about nostalgia—it's about survival.

Enhancing Biodiversity

Philippines is home to a rich variety of indigenous food plants that significantly contribute to the country's agrobiodiversity. Promoting the cultivation and consumption of these native species helps maintain ecological balance and resilience. Indigenous plants are often well-adapted to local conditions, requiring fewer inputs and being more resistant to pests and diseases, which then reduces the need for chemical interventions. This adaptability supports a diverse ecosystem where various species coexist, fostering a robust natural environment.

Promoting Sustainable Agriculture

Incorporating native plants into agricultural practices aligns with sustainable farming practices. These plants often thrive without extensive resource inputs, making them ideal for low-impact farming systems. Their resilience to local climatic conditions and soil types reduces dependency on synthetic fertilizers and pesticides, leading to environmentally friendly cultivation methods. Moreover, the diversity provided by indigenous crops can enhance food security; if one crop fails due to unforeseen circumstances, others can compensate, ensuring a stable food supply.

Decreasing Carbon Footprint

Cultivating and consuming native food plants can reduce the carbon footprint associated with food production and transportation. Local crops require less energy for transportation from farm to table, minimizing greenhouse gas emissions. Additionally, indigenous plants are adapted to the local environment, often necessitating fewer agricultural inputs such as water, fertilizers, and pesticides, which further reduces energy consumption emissions.

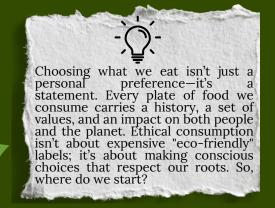
Providing Healthy Food Choices

Native and endemic plants are often rich in essential nutrients, offering healthy food choices that can combat malnutrition and promote overall well-being. For instance, many traditional tropical green leafy vegetables and ferns have significantly higher nutritional value compared to commonly consumed introduced species. Incorporating these indigenous plants into diets can enhance nutrient intake and diversify food sources.

Preserving Cultural Heritage

Food is a vital expression of cultural identity, and native food plants are integral to traditional Filipino cuisine. Revitalizing these plants ensures that culinary traditions are preserved for future generations. Traditional dishes often utilize indigenous ingredients, and their continued use keeps cultural practices alive, fostering a sense of identity and community. Additionally, educating younger generations about these plants and their uses can instill pride in their heritage and encourage the perpetuation of traditional knowledge.

Ethical Consumption and Sustainable Food Choices



Steps to Eating with Intention

Step 1: Reclaim Native and Indigenous Ingredients

• Ever noticed how much of what we eat now wasn't even part of our ancestors' diets? Imported wheat, processed dairy, fast food—meanwhile, our native crops sit on the sidelines. Reintroducing local staples like kamote, adlai, and local rice grains isn't just about health; it's about reclaiming our food sovereignty.

Step 2: Eat with the Seasons

• Before grocery stores stocked the same fruits year-round, our ancestors ate based on what was in season. It wasn't just practical—it was sustainable. Eating duhat when it's abundant or indulging in ripe santol instead of imported apples reduces food miles and supports local farmers.

Step 3: Support Ethical Sourcing

• Food heritage isn't just about ingredients—it's about how they're grown and harvested. When we choose wild-caught tawilis over overfished species or buy native free-range chickens instead of factory-farmed broilers, we uphold sustainable practices that have existed for generations.

Step 4: Reduce Waste by Honoring Whole Ingredients

• Filipino cuisine is built on resourcefulness—yet today, we waste more food than ever. Why throw away puso ng saging when they make a great vegetable dish? Why discard fish bones when they can create rich, nutritious broths? Respecting food means using it fully.

Step 5: Revive Traditional Cooking Methods

• Before industrialized food, we had slow-cooked dishes, fermented delicacies, and sun-dried preservation techniques that required minimal resources. Cooking with a palayok enhances flavors naturally. Fermenting fish like our ancestors did reduces dependence on store-bought preservatives. These are not just cooking methods—they're survival skills.

Step 6: Shift to Plant-Based Filipino Proteins

• Who said protein has to mean meat? Monggo, kadios, and langka have always been part of our food culture. Cutting back on mass-produced meat and shifting to plant-based proteins isn't just good for health but also a starting step against unsustainable food production.

Step 7: Pass It On

• Food traditions don't survive on their own; they live through the people who practice and teach them. Cook with family, introduce younger generations to native flavors, and support local food movements. If we want future Filipinos to enjoy the richness of our food culture, we have to keep it alive today.

Reconnecting with Native and Endemic Species: Practical Strategies



Growing Native Plants in Home and Community Gardens

Prioritizing Native Foods in Daily Diets





Supporting Local Farmers and Markets

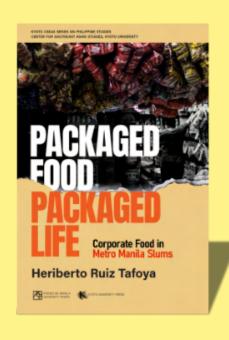
Integrating Native Foods in School and Community Meal Programs





The Kinilaw Philosophy

Kinilaw is one of the oldest food traditions in the Philippines, found in various regions under different names—lataven in Batanes, lawal among the Tausug, and kinilaw in many Tagalog and Visayan communities (Alegre & Fernandez, 1991). It is a dish that embraces food in its purest form, using raw, fresh ingredients like fish, seafood, and vegetables, "cooked" not by fire but by the acidity of vinegar or citrus. More than a method of preparation, kinilaw represents a philosophy—one that values simplicity, freshness, and patience in food consumption.



According to Filipino scholar Heriberto Ruiz Tafoya (2023) in his book Packaged Food, Packaged Life: Corporate Food in Metro Manila Slums, Kinilaw is built on three key principles:

Food as It Is – The appreciation of ingredients in their natural state.

Freshness – The celebration of food at its peak quality.

Sourness – A process of transformation that requires patience, subtlety, and communal sharing.

Food as It Is

Valuing Native Ingredients in Their Purest Form

Freshness

Supporting Local and Seasonal Eating

Sourness

Appreciate slow and traditional food preparation methods These principles align closely with ethical consumption, particularly in the promotion of native and endemic species. By applying the philosophy of Kinilaw, we can move toward food choices that are sustainable, culturally rooted, and in harmony with our environment.

Advocating for Native Foods: How to Spread Awareness



Sharing stories about the native foods (history, nutritional facts, advantages compared to mass-produced products, etc.)

Utilize reels, TikTok videos, and other short-form videos to showcase the cultural identity of native foods (interview local farmers, collaborate with chefs to make dishes using native produce, etc.)





Teach communities how to make native dishes

Conduct talks with local farmers and Indigenous entrepreneurs as speakers about native foods





Advocate for local food policies/use by creating social media accounts as online resource hubs

Promoting Ethical Consumption through Food Heritage | 16



Recipes Using Native and Endemic Ingredients



Ingredients:

- Banana blossom
- Vinegar
- Soy sauce
- Ginger
- Chili peppers
- Sugar

Banana Blossom Salad (Adobong Puso ng Saging)

Recipe:

- 1. Slice the banana blossom thinly and soak in a mixture of vinegar and water to prevent browning.
- 2. Sauté ginger, then add the banana blossom.
- 3. Season with soy sauce, vinegar, sugar, and chili peppers to balance the flavors.
- 4. Serve as a side dish

Recipes Using Native and Endemic Ingredients



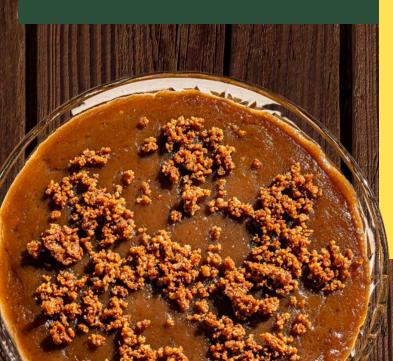
- Water spinach
- Calamansi (local lime)
- Ginger
- Bird's eye chili
- Coconut vinegar

Water Spinach Salad (Ensaladang Kangkong)

Recipe:

- 1. Pluck and wash the water spinach leaves thoroughly.
- 2. Cut them into smaller pieces and soak them in a mixture of calamansi, coconut vinegar, and fish sauce for a few hours.
- 3. Add finely chopped ginger, onions, and bird's eye chili for added flavor.
- 4. Toss everything together and serve.

Recipes Using Native and Endemic Ingredients



Ingredients:

- Glutinous rice flour (malagkit)
- Muscovado sugar
- Coconut milk
- Water

Sticky Rice Cake (Kalamay Hati)

Recipe:

- 1. In a deep pan, combine coconut milk, water, and glutinous rice flour.

 Mix well until the texture of the mixture becomes soft.
- 2. Turn the heat on and gradually stir for a few minutes.
- 3. Add the sugar and mix. Continue to mix until the mixture becomes really thick.
- 4. Transfer in a plate or pan. Let it cool then serve.





Ingredients:

- Pandan leaves (big)
- Water
- Milk
- White Sugar

Pandan Juice

Recipe:

- 1. Wash pandan leaves
- 2. In a saucepan, boil water and drop the pandan leaves.
- 3. Boil for 5 minutes then remove leaves.
- 4. Transfer the juice in a pitcher container.
- 5. Add cold water, milk, and sugar according to taste. Stir until sugar is dissolved. Serve.

A Pledge to Promote Local Food Heritage

Through this pledge, I acknowledge my role as a consumer to be more aware and intentional about alternate food and native ingredients in my locality. More than the cultural importance of food heritage, I am an advocate for ethical consumption that, in turn, makes ripples towards alleviating malnutrition, food security, and sustainability.

I will make an effort to try local food and ingredients.

An open mind and willing heart are crucial to experiencing local culture through its cuisine. From seasonal fruits and vegetables to unique main dishes and snacks, I will wholeheartedly explore and make sense of such culinary and communicative interactions.

I will support local producers and promote sustainable practices.

By choosing local ingredients and supporting small-scale farmers, I contribute to the health of my community and the preservation of our food culture. I will consider the impact of my choices on both the environment and the livelihood of local producers.

I will do my part in introducing local food and ingredients to others.

Sharing food with others is both a powerful and fun way to allow more people to experience local cuisine. When opportunities come, I shall consider bringing local food to the table, and I will do such practice with confidence and pride.

I will continue to promote local food heritage in my daily practice.

Food culture is embedded in the lives of an individual and of the community. I promise to continuously uphold values that will cherish and enrich my cultural experiences with food through experiences of tasting, sharing, celebrating, and more.

I will contribute to the preservation of food diversity.

I will support efforts to protect native ingredients and traditional food practices to ensure that future generations can enjoy the rich diversity of foods that are part of our heritage.

Community Efforts to Grow and Protect Native Plants

In the spirit of *bayanihan*, we come together as a *bayan*—a community united by shared values and goals. Just as the *bayani* (heroes) of our history have led by example, today, individuals and communities are stepping up as modern-day heroes to protect and revive our food heritage. Through collective action and personal commitment, we are all playing our part in nurturing the plants that are essential to our cultural identity, environmental health, and sustainable future. Each of us has a role to fulfill in this ongoing bayanihan for the preservation of our food landscape.

Haribon Forests for Life, Philippines

Haribon Forests for Life (FFL) in the Philippines aims to restore native forests, conserve endangered species, and promote biodiversity. Its objectives include reforesting one million hectares, expanding wildlife habitats, enhancing biodiversity, protecting ecosystem services, and supporting sustainable local livelihoods.

Contact Them: action@trilliontrees.org

Nat Re Seeds Sierra Madre Forest

On November 25, 2022, 35 participants from the National Reinsurance Corporation of the Philippines (Nat Re), both returning and new, gathered at the Laguna-Quezon Land Grant (LQLG) in Siniloan, Laguna, part of the Sierra Madre mountain range. They participated in FEED's Ridge to REEForestation initiative, in collaboration with the University of the Philippines Los Baños (UPLB), which manages the 5,719-hectare protected forest at LQLG.

During the event, the team established a community nursery and vegetable garden, adopting native seeds and cuttings based on the Bio-Intensive Garden modalities promoted by the International Institute for Rural Reconstruction (IIRR), a major partner of FEED. The perennial crops planted included kamote (sweet potato), talinum (native spinach), various beans, tomatoes, okra, eggplants, squash, patola, saluyot, sigarilyas, chaya, and malunggay (moringa). This initiative reflects Nat Re's ongoing commitment to environmental sustainability and community development, building upon their previous efforts to expand their Sierra Madre forest.

Contact them: info@nat-re.comomnat-re.co

Bayanihan: Communities and Individuals Revitalizing Native Foods | 23

SIBAT and Community-Based Sustainable Agriculture

Sibol ng Agham at Teknolohiya (SIBAT) is a Philippine NGO dedicated to sustainable rural development through appropriate technology. Their Community-Based Sustainable Agriculture (CBSA) program empowers communities to develop organic, diversified farming systems that ensure food security, improve nutrition, and enhance resilience against climate change.

Rooted in local and indigenous knowledge, CBSA promotes Diversified and Integrated Farming Systems (DIFS), shifting from chemical-intensive to ecological farming. It also advocates for land rights, strengthens cooperatives, and supports marginalized farmers, including indigenous groups and women. Through these efforts, SIBAT fosters self-reliance, sustainability, and agricultural innovation across rural communities.

Shumei International/Philippines Project

Shumei International's projects in the Philippines include Natural Agriculture programs in Tanay, Zambales, and Manila, promoting sustainability, biodiversity, and a deeper understanding of the human-nature connection. In Tanay, a model farm in Rizal offers education and sells Natural Agriculture products locally. In Zambales, schools have launched projects where students grow their own crops, while in Manila, a Montessori school in Temple Hill teaches Natural Agriculture principles and engages students in crop growing. Natural Agriculture is a farming method that avoids chemicals, fertilizers, and pesticides, emphasizing locally grown food. Shumei International, a Japan-based nonprofit, is inspired by the teachings of Mokichi Okada, a naturalist, art lover, and humanist from the early 20th century.

Contact Shumei International: Shumei International Headquarters

Email: info@nposhumei.or.jp



Champions of Food Heritage



Chef Laorence "Lao" Castillo is a co-founder of Gulay Na!, a non-profit organization focused on promoting Filipino food heritage, biodiversity, and food sovereignty. Founded in 2023, Gulay Na! organizes community cooking events and educational activities to raise awareness about native Filipino crops.

A key initiative, Gulay Pa More!, a fiesta celebrating local crops, was held in May 2024 at the University of the Philippines Diliman. The event featured markets, organic dishes indigenous ingredients, and workshops on Chef sustainability. Castillo advocates these crops, emphasizing their importance for food security climate resilience.

Through Gulay Na!, Chef Castillo continues to promote native ingredients, aiming to reintegrate them into Filipino diets and preserve the nation's culinary traditions.



John Sherwin Felix is the founder of Lokalpedia, a visual archive focused on preserving native and endangered Filipino ingredients. His work highlights significance of these foods in the country's culinary Through his travels across the Philippines, Felix documents ingredients, indigenous their origins, uses, and cultural value, while engaging with local farmers and communities.

Lokalpedia bridges research and practice, promoting Filipino food culture and sustainability by sharing its findings on digital platforms and public discussions.



chef Jam Melchon

Chef Jose Antonio Miguel "Jam" Melchor is a key advocate for preserving Filipino cuisine as the founder of the Philippine Culinary Heritage Movement (PCHM), a non-profit organization established in 2015. Under his leadership, PCHM successfully lobbied for the declaration of April as Filipino Food Month, a national celebration launched in 2018 to recognize the country's rich culinary heritage.

Chef Melchor is also a pioneer in promoting sustainable Filipino dishes. He opened his first restaurant, Villa Café, in 2011, offering Kapampangan heirloom recipes. In 2012, he founded Bite Contemporary Cuisine, known for organic, sustainable dishes.

Through PCHM's PagkainPH brand, Chef Melchor connects local farmers with consumers, supporting the sustainable market for indigenous produce.

Advocates and Influencers Raising Awareness for Native Plants

Celine Murillo



Celine Murillo is an environmentalist and storyteller who uses social media to raise awareness about the Philippines' biodiversity. Formerly an Economics instructor, she transitioned to full-time conservation advocacy, using her platform to educate about native plants and animals.

Together with her husband Dennis, Celine travels across the Philippines in their camper van, Eli, sharing their experiences on platforms like TikTok and Facebook. Her popular series, Saribuhay sa Salapi, connects species featured on Philippine currency to real-world environmental education.

With over 678,000 followers and 8.5 million likes on TikTok, Celine uses photography, film, and poetry to capture the beauty of native ecosystems, inspiring others to reconnect with nature and support conservation efforts.

Ethan Hernandez



Jonathan "Ethan" Hernandez is a licensed forester, researcher, and content creator passionate about plant ecophysiology and ecosystems. Through his platforms on Facebook and TikTok, he educates audiences on the importance of native Filipino plants, promoting both their ecological value and culinary uses.

By blending scientific knowledge with practical tips, Ethan highlights how these plants contribute to the environment and Filipino cuisine, encouraging sustainable practices and the revival of local food traditions.

His content fosters a deeper appreciation for conservation and the ecosystems these plants thrive in.

1

ABCs of Filipino Terms in Food and Cooking

The following words/terms are some terms in Filipino cuisine that serve as cultural symbols and practices. Words and description are based on Alternate Food books from UP-International Development Research Centre (IDRC) Research Group (1985a; 1985b) and the 2000 Sagisag Kultura ng Filipnas of the National Commission for Culture & the Arts (2013).

Adobo

A meat/fish/vegetable cooked basically in vinegar with garlic and pepper. Soy sauce may be added. For variation, coconut milk could also be added.

Bagoong

salted and fermented small shrimps (alamang) or fish usually dilis

Calamansi/Kalamansi (citrofortella microcarpa)

A circular green citrus fruit that has many uses: sweet-sour juice, medicinal, household purposes. In the Philippines, it is also known as kalamondin, limonsito, singonis, and aldonisis.

Dinuguan

A meat dish cooked in pig's blood or blood pudding.

Escabeche/Eskabetse

Fried fish in a sweet-sour sauce.

Ginataan

Meat/fish/vegetable/rootcrop dishes cooked in coconut milk.

Halabos

To cook in very little water until pan is dry.

Inabrao

Consists of broiled pork/fish and vegetable boiled in rice washing and seasoned with bagoong.

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Kinilaw

Fresh fish or shell meat eaten raw with calamansi juice or vinegar with seasonings.

Laing

A Bicolano dish of gabi leaves cooked in coconut milk with flaked fish added.

Menudo

One of the popular dishes served durimh fiestas or as a viand in Filipino cuisine. It is a pork stew dish cooked in tomato-based sauce with carrots and potatoes.

Nilaga

A meat/fish or fowl dish boiled with vegetable.

Otap

An oblong-shaped biscuit sprinkled with sugar. It is known to originate from Cebu and other parts of Visayas, such as Negros Oriental and Negros Occidental.

Pakbet/Pinakbet

A vegetable dish with tomatoes and bagoong and a little amount of water. Meat or fish may be added.

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Rimas/Breadfruit (Artocarpus altilis)

Also called as Dalungyan, Kamansi, or Lima in the Philippines. This edible fruit can be eaten raw (that has a sweet taste) or cooked (i.e., boiled, grilled, or fried). It is also processed to be flour.

Sinigang

A soupy meat/seafood dish with vegetables boiled with sour fruits, like sampaloc, or leaves to give it a tangy taste.

Tinola

A soupy dish prepared by sautéing garlic, onion, and ginger with meat/fish/shellfish. Rice washing is added and the mixture is allowed to simmer with vegetables until done.

Upo

A herbaceous, annual climbing plant with long strong tendrils and simple leaves. When the fruit matures, the rind is hard and durable. Young fruits are usually cooked as vegetable dish. Young shoots are also consumed as green vegetables and the seeds are popular snack food as "kutchi." This is also locally called as Tabungaw or Kandol. In English, this is called a boytle gourd or calabash gourd (Department of Agriculture, 2017).

Yema

A popular candy or dessert in the Philippines. It is made from egg yolks, condensed milk, and usually added with nuts.

Abante News. (2024, November 12). Eco-influencers, tangkilikin. Abante. https://www.abante.com.ph/2024/11/12/eco-influencers-tangkilikin/

Alegre, E. N., & Fernandez, D. (1991). Kinilaw: A Philippine cuisine of freshness. Bookmark.

Amano, N., Bankoff, G., Findley, D. M., Barretto-Tesoro, G., & Roberts, P. (2021). Archaeological and historical insights into the ecological impacts of pre-colonial and colonial introductions into the Philippine Archipelago. The Holocene, 31(2), 313–330. https://doi.org/10.1177/0959683620941152

Antonio, M. A., Utrera, R. T., Agustin, E. O., Jamias, D. L., Badar, A. J., & Pascua, M. E. (2011). Survey and characterization of indigenous food plants in Ilocos Norte, Philippines (Discussion Paper Series No. 2011–2). Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA). https://www.searca.org/pubs/discussion-papers?pid=130

Baes, P. (2024, May 13). Gulay Pa More 2024: Celebrating local produce and indigenous crops. Spot.ph. https://www.spot.ph/eatdrink/the-latest-eat-drink/108898/gulay-pa-more-2024-a3284-20240513?utm

Besa, A., & Dorotan, R. (2006). Memories of Philippine kitchens: Stories and recipes from the homeland of the Philippines. Stewart, Tabori & Chang.

Briones, N. D. (2005). Environmental sustainability issues in Philippine agriculture. Asian Journal of Agriculture and Development, 2(1&2), 67-77. https://core.ac.uk/download/pdf/6486838.pdf

BusinessMirror. (2024, May 22). The Philippines' reliance on imported food and its pursuit of agricultural exports. BusinessMirror. https://businessmirror.com.ph/2024/05/22/the-philippines-reliance-on-imported-food-and-its-pursuit-of-agricultural-exports/

Cabonegro, R. (2024, November 20). The hidden costs of food imports in the Philippines. Current PH. https://currentph.com/2024/11/20/the-hidden-costs-of-food-imports-in-the-philippines/

Cruz, M. (2022, December 12). WFP Philippines food security monitoring. October 2022. World Food Programme. https://www.wfp.org/publications/wfp-philippines-food-security-monitoring-october-

2022#:~:text=According%20to%20October%20survey%20results,poorest%20regions%20in%20t he%20Philippines.

Department of Science and Technology Food and Nutrition Research Institute (DOST-FNRI). (2021). Expanded and Nutrition Agenda: Let's Talk! Expanded National Nutrition Survey. National Dissemination Forum. 2021 Survey Results. Dusit Thani Manila, Makati City.

______. (2022). Philippine Nutrition Facts and Figures: 2018-2019 Expanded National Nutrition Survey (ENNS). FNRI Bldg., DOST Compound, Gen. Santos Avenue, Bicutan, Taguig City, Metro Manila, Philippines.

Department of Agriculture. (2017). Upo Production Guide. https://cagayanvalley.da.gov.ph/wp-content/uploads/2018/02/Upo.pdf

Dumaliang, B. (2024, February 23). TikTok for sustainability: Storytellers lead environmental change. Manila Bulletin. https://mb.com.ph/2024/2/23/tik-tok-for-sustainability-storytellers-lead-environmental-change

Durst, P. & Bayasgalanbat, N. (2014). Promotion of Underutilized Indigenous Food Resources for Food Security and Nutrition in Asia and the Pacific. RAP Publication. https://openknowledge.fao.org/server/api/core/bitstreams/4adbe693-f41f-4768-bead-8e7629185d86/content

Ebora, R. V., Eusebio, J. E., Pelegrina, L. D., & Alaban, M. C. (2017, November 13–15). Country status report: The Philippines underutilized crops for food and nutritional security in Asia and the Pacific. Department of Science and Technology, Philippine Council for Agriculture, Aquatic and Natural Resources Research for Development. Presented at the Regional Expert Consultation on Underutilized Crops for Food and Nutritional Security in Asia and the Pacific, Bangkok, Thailand. https://www.slideshare.net/slideshow/country-status-reports-on-underutilized-crops-by-reynaldo-v-ebora-philippines/83116045

Enriquez, M. C. (2021, April 7). Teaching Filipinos to be self-sufficient by growing their own food. Inquirer Lifestyle. https://lifestyle.inquirer.net/381306/teaching-filipinos-to-be-self-sufficient-by-growing-own-food/

Fernandez, D. (1990). Colonizing the cuisine: The politics of Philippine foodways. American Folklore Society Conference, Berkeley, California.

Felix, J. S. (2024, December 19). I'm tired of seeing the label "poor man's food" or "poor man's drink" used by content creators and even major media outlets... [Status update]. Facebook. https://www.facebook.com/100011730706454/posts/2215019765565692/?app=fbl

. (2025, February 18). Our dinner tonight: Ilokano veggie dishes [Photographs]. Facebook. https://www.facebook.com/100011730706454/posts/2260935654307436/

Florendo, J. G. (2019). Colonizing the Filipino palate. Presented at the 12th DLSU Arts Congress, De La Salle University, Manila, Philippines. https://www.dlsu.edu.ph/wp-content/uploads/pdf/conferences/arts-congress-proceedings/2019/FAC-03.pdf

Food and Agriculture Organization of the United Nations (FAO). (2017). Promoting neglected and underutilized crop species. http://www.fao.org/news/story/en/item/1032516/ico ____. (2019). The state of the world's biodiversity for food and agriculture (J. Bélanger & D. Pilling, Eds.). FAO Commission on Genetic Resources for Food and Agriculture Assessments. http://www.fao.org/3/CA3129EN/CA3129EN.pdf ____. (2023). Biodiversity in action. FAO Regional Office for Europe and Central Asia. https://www.fao.org/3/cc3397en/cc3397en.pdf Fostering Education & Environment for Development, Inc. (FEED), (2022, October 20), Nat Re seeds Sierra Madre forest, adding community nursery & veg garden. https://feed.org.ph/mediacentre/press-releases-2022/nat-re-seeds-sierra-madre-forest-adding-community-nurseryveg-garden/ _. (2022, September 09). Reviving Indigenous Agroecology in the Philippines: "Sulagad." Friends of the Earth International. https://www.foei.org/reviving-indigenous-agroecology-inthe-philippinessulagad/#:~:text=Tëduray%20and%20Lambangian%20indigenous%20people,a%20sacred%20so urce%20of%20life.

Garcia, M. (2013). The Filipino cookbook: 85 homestyle recipes from our Filipino kitchen. Tuttle Publishing.

GMA Integrated News. (2024, May 16). Gulay Pa More fiesta to highlight local indigenous crops on May 25. GMA News. https://www.gmanetwork.com/news/lifestyle/food/906964/gulay-pamore-fiesta-to-highlight-local-indigenous-crops-on-may-25/story/

Goel, A. (n.d.). The environmental impact of monocropping. Decoding Biosphere. https://decodingbiosphere.com/2024/07/07/the-environmental-impact-of-monocropping/

Guzman, R. (2021, September 15). Rediscovering our traditional and indigenous knowledge in agriculture. IBON Foundation. https://www.ibon.org/rediscovering-our-traditional-and-indigenous-knowledge-in-agriculture/

National Commission for Culture & the Arts. (2013). 2000 Sagisag Kultura ng Filipnas.

Oraye, C. D., de Chavez, H. D., Aguilar, C. H. M., Makiling, F. C., Ladia, V. A. Jr., Enicola, E. E., Maghirang, R. G., Anunciado, M. S., Monville-Oro, E., Gonsalves, J., Hunter, D., Borelli, T., & Mendonce, S. (2023). Conservation of indigenous vegetables in the Philippines: A scoping study. Alliance of Bioversity International and International Center for Tropical Agriculture - CIAT. https://cgspace.cgiar.org/server/api/core/bitstreams/210be3f6-f65f-4323-98ec-dfce85b4bfb9/content

Orda, C. (n.d.). Lokalpedia: The significance of Filipino food heritage and ingredients. Nolisoli. https://nolisoli.ph/104741/lokalpedia-food-heritage-filipino-ingredients/

Orquiza, R. A. D. (2020). Taste of control: Food and the Filipino colonial mentality under American rule. Rutgers University Press.

Ossowska, L., Janiszewska, D., Kwiatkowski, G., & Oklevik, O. (2024). Local Food Production Based on Culinary Heritage—A Way to Local Sustainability. Sustainability, 16(24), 11310–11319 https://doi.org/10.3390/su162411310

Paz-Alberto, A. M., Castro, E. S., Flores, V. L., & Romero, M. A. V. (2009). Endemic, indigenous, and introduced species in the freshwater ecosystems of Nueva Ecija and Pampanga: Status, diversity, and impacts. Silliman Journal, 50(2), 121–147. https://sillimanjournal.su.edu.ph/index.php/sj/article/download/196/197

Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development (PCAARRD). (n.d.). Documentation of indigenous vegetables in the Philippines. Industry Strategic Science and Technology Plans (ISPs) Platform. https://ispweb.pcaarrd.dost.gov.ph/documentation-of-indigenous-vegetables-in-the-philippines/

______. (2007). Mga lutuing katutubong gulay. Los Baños, Laguna: PCARRD/DOST, ADB, AVRDC, BPI-LBNCRDC/DA.

______. (2022, May 16). Documentation study on indigenous vegetables pushes for its consumption. DOST-PCAARRD. https://pcaarrd.dost.gov.ph/index.php/quick-information-dispatch-qid-articles/documentation-study-on-indigenous-vegetables-pushes-for-its-consumption

Philippine Institute for Development Studies (PIDS). (2022, July 3). No Filipino should go hungry. https://www.pids.gov.ph/details/news/in-the-news/no-filipino-should-go-hungry

Limos, M. A. (2023, March 14). Lokalpedia: The endangered ingredients of the Philippines. Esquire. https://www.esquiremag.ph/culture/food-and-drink/lokalpedia-endangered-ingredients-philippines-a00293-20230314?s=9ehkj9vs8mmidikp9oi51l99ac

ICCA Consortium. (2015, April 15). The Philippines: Don't blame indigenous peoples' farming practice for deforestation, but mining and mono-crops plantations. https://www.iccaconsortium.org/2015/04/15/the-philippines-dont-blame-indigenous-peoples-farming-practice-for-deforestation-but-mining-and-mono-crops-plantations/

Imai, A., De Castro, A., & De Castro, E. (2019, July 17). Protecting biodiversity in the Philippines: A community-based sustainable approach to the use of natural resources. Shumei International. https://satoyamainitiative.org/case_studies/protecting-biodiversity-in-the-philippines-a-community-based-sustainable-approach-to-the-use-of-natural-resources/

IPES-Food. (2016). From uniformity to diversity: A paradigm shift from industrial agriculture to diversified agroecological systems. International Panel of Experts on Sustainable Food Systems. http://www.ipes-food.org

Knez, M., Ranić, M., & Gurinović, M. (2024). Underutilized plants increase biodiversity, improve food and nutrition security, reduce malnutrition, and enhance human health and well-being. Let's put them back on the plate!. Nutrition reviews, 82(8), 1111–1124. https://doi.org/10.1093/nutrit/nuad103

Lasco, G. (2014, December 26). New Year and the marginalisation of native fruits in the Philippines. https://www.gideonlasco.com/2014/12/new-year-and-marginalisation-of-native.html

Machuca, P. (2014). The arrival of American plants in the Philippines: Ecological colonialism in the sixteenth-to-eighteenth centuries. Anais de História de Além-Mar, 1, 231–260.

Magdalita, P. M., & San Pascual, A. O. (2023). Characterization of neglected and underutilized fruits in the Philippines. *Mindanao Journal of Science and Technology*, 21(2), 178–200. https://doi.org/10.61310/mjst.v21i2.1718

Medenilla, V. (2022, July 12). A visual archive by a food heritage advocate highlights underrated Philippine ingredients. Agriculture. https://agriculture.com.ph/2022/07/12/a-visual-archive-by-a-food-heritage-advocate-highlights-underrated-philippine-ingredients/

Medrano-Tupaz, M. (2020, January 9). The importance of food heritage: Millennials and the Philippine culinary heritage movement. Nolisoli. https://nolisoli.ph/72825/food-heritage-millennials-philippine-culinary-heritage-movement-20200109/

Quirino, E. A. (2018, May 1). Watch out, world: Chef Jam Melchor stirs up Filipino culinary traditions. Positively Filipino. https://www.positivelyfilipino.com/magazine/watch-out-world-chef-jam-melchor-stirs-up-filipino-culinary-traditions

Reuters. (2025, February 3). Philippines declares food security emergency to tame rice prices. Reuters. https://www.reuters.com/world/asia-pacific/philippines-declares-food-security-emergency-tame-rice-prices-2025-02-03/

Reyes, R. (2018, May 22). Jam Melchor: Preserving Philippine culinary heritage. BusinessMirror. https://businessmirror.com.ph/2018/05/22/jam-melchor-preserving-philippine-culinary-heritage/

Rotary Club of Devonport North, District 9839, & Food Plants International. (2019, March). Potentially Important Food Plants of the Philippines. Food Plant Solutions. https://foodplantsolutions.org/wp-content/uploads/2021/06/Potentially-Important-Food-Plants-of-the-Philippines-V3.pdf

Salta, E. (2018, December 10). Philippine culinary heritage movement: Putting Filipino food front and center. F&B Report. https://fnbreport.ph/9126/philippine-culinary-heritage-movement-putting-filipino-food-front-and-center/

Shumei International. (n.d.). Natural agriculture around the world. Shumei International. https://shumei-international.org/farm-maps/

Sibol ng Agham at Teknolohiya (SIBAT). (n.d.). About us. https://sibat-apptech.org/about-us/ _____. (n.d.). Community-Based Sustainable Agriculture (CBSA). https://sibat-apptech.org/community-based-sustainable-agriculture-cbsa/

Sister, L. E., & De Chavez, H. D. (n.d.). A journey of Philippine rediscovery, one vegetable at a time. Horizon. https://horizon.uplb.edu.ph/1q-horizon-magazine-2020/a-journey-of-philippine-rediscovery-one-vegetable-at-a-time/

Tafoya, H. R. (2023). Packaged Food, Packaged Life: Corporate Food in Metro Manila Slums. Kyoto University Press & Ateneo de Manila University Press.

Tan, Y. (2024, May 31). This group is trying to get native vegetables back on the table. *Manila Bulletin*. https://mb.com.ph/2024/5/30/this-group-is-trying-to-get-native-vegetables-back-on-the-table

Telo, K. (2024, April 18). Celine Murillo teaches Philippine biodiversity, one video at a time. Interaksyon. https://interaksyon.philstar.com/videos/2024/04/18/274016/celine-murillo-teaches-philippine-biodiversity-one-video-at-a-time/

Trillion Trees. (n.d.). Haribon Forests for Life, Philippines. Trillion Trees. https://trilliontrees.org/project/haribon-forests-for-life/

United Nations Population Fund (UNFPA). (2024). Young people. United Nations Population Fund. https://philippines.unfpa.org/en/topics/young-people-19

UP-International Development Research Centre (IDRC) Research Group. (1985a). Alternate Foods Handbook: Their Names and Uses. University of the Philippines (UP) College of Home Economics.

_____. (1985b). Economical and Nutritious Alternate Foods. University of the Philippines (UP) College of Home Economics.

Valencia, C. (2019, December 18). Philippine increasingly relying on food imports—PSA. The Philippine Star. https://www.philstar.com/business/2019/12/18/1977799/philippine-increasingly-relying-food-imports-psa

World Rainforest Movement. (2013, April 30). Monoculture tree plantations & land grabbing for oil palm in the Philippines. https://www.wrm.org.uy/bulletin-articles/monoculture-tree-plantations-land-grabbing-for-oil-palm-in-the-philippines

Yan, G., (2023, May 28). The Unsung Value of Native Philippine Plants . Philippine Inquirer. https://newsinfo.inquirer.net/1775675/the-unsung-value-of-native-ph-plants#:~:text=According%20to%20the%20Forest%20Foundation,protected%20areas%20with%20natural%20forests.

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our team meetings and student exchanges.

Para sa bayan! (For the country!)

About the Authors

Mark R. Aspiras

Associate in Arts Sports Studies

Hello! I'm Mark, a 20-year-old sports studies student and passionate musician. I embrace a vegetarian lifestyle for both health and sustainability. With a keen interest in human performance and motivation, I blend my love for music and sports to explore creativity and well-being. I'm dedicated to inspiring others to live balanced, purposeful lives through my academic and artistic pursuits.



Adrienne Riel C. Cruz

BA Psychology

Hi, I am Adi! As a social sciences student with a focus on human behavior and mental processes, I am fascinated by how food goes beyond mere sustenance—it reflects culture, identity, and shared traditions. This handbook highlights the beauty of native Filipino foods but also encourages a shift toward more ethical and sustainable consumption practices. I hope this handbook not only informs but also inspires meaningful change in how we prepare, appreciate, and consume our food—making ethical choices an integral part of our daily lives.

Jester Vince P. De Torres

BA Communication Research

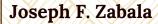
Haro, Jester here! It is truly an honor to work in this exchange with Adi, Dani, Joseph, Mark and I. In this endeavor, Not only I got to know more about Philippine culture and Ethical Food Consumption, but I also proud to share with you all what we, Filipinos and global concerned citizens, can do to contribute towards a more sustainable world. I appreciate and enjoy this process of exploring and mixing sociocultural knowledge and experiences. I hope this handbook would serve you well in inspiring you to be a more purposeful consumer and changemaker.



Danella Benice V. Vasquez

B Secondary Education major in Biology

Kumusta? I'm Dani, a Secondary Education major in Biology student with an interest in research and sustainability. Creating this handbook has allowed me to explore how food heritage connects to biodiversity, culture, and ethical consumption. As a future educator, my goal is to share my experience on this and to instill in my students a deeper appreciation for sustainable practices and the importance of preserving our local food systems. Through research and education, I aim to contribute to a more sustainable world—one that values both our environment and cultural identity.



BA Philippine Studies major in Malikhaing Pagsulat & Anthropology Mabuhay! I am Joseph from UPD College of Arts and Letters, a Philippine Studies student with a background in creative writing and anthropology. I am passionate about Filipino culture and society, its complexities and everyday realities, its histories and futures, and how they shape our lives. I enjoy exploring different forms of storytelling to better understand and share narratives that resonate with our collective identity. I joined the exchange to share knowledge and gain new perspectives about contemporary issues on climate change and sustainability through cross-cultural learning.



