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BACKGROUND

Agriculture is a cornerstone of the Philippine economy and society. Despite only making up 7.5% of the country's gross domestic product (GDP),¹ the sector directly employs almost 20% of the workforce² based on the 2025 2nd Quarter reports. The sector holds national importance and impacts a considerable portion of the population especially in rural communities. As such, national policies should consider and reflect agriculture and the communities that depend on it. The agricultural sector stands at the nexus of climate vulnerability and opportunity. As the Philippines faces intensifying climate shocks, food insecurity, and their subsequent feedback loop, agriculture emerges not merely as a sector in need of protection but as a critical driver of adaptation and mitigation solutions.

The Philippine Just Transition Framework (JTF) has the opportunity to meaningfully integrate agriculture and, through it, ensure that climate action supports both environmental and social objectives. Yet, while the JTF is envisioned as a vehicle for fairness, some initiatives risk alienating or even oppressing agricultural actors if agriculture is treated merely as a sacrifice to transition. A narrow, carbon-centric transition agenda centered on compliance and restrictions without recognizing the sector's unique vulnerabilities and contributions can exacerbate the burdens already carried by farmers, fisherfolk, and Indigenous Peoples. In particular, agricultural land and fishing areas are increasingly at risk of being converted for energy infrastructure projects in the name of transition, displacing food production and

¹ Philippine Statistics Authority, *GDP Expands by 5.5 Percent in the Second Quarter of 2025*, 2025. <https://psa.gov.ph/content/gdp-expands-55-percent-second-quarter-2025>

² Philippine Statistics Authority, *Participation in the labor force in July 2025 decreased to 48.64 million Filipinos aged 15 years and over*, Labor Force Survey, 2025. <https://psa.gov.ph/statistics/labor-force-survey/latest-press-release>

threatening rural livelihoods. Examples exist such as the Ahunan Dam project which is set to convert farmlands for its operation³ and the Laguna de Bay floating solar farm which will disrupt fishing practices of, if not entirely displace, fisherfolk.⁴

When farmlands and fishing areas are appropriated without safeguards, agricultural actors are reduced to passive victims of transition rather than agents of resilience and innovation. This alienating perspective risks reproducing historical injustices in the countryside and failing to activate the sector's potential for climate action. To avoid this, integration of agriculture into the JTF must be achieved through four main points: (1) Identify Adaptation and Mitigation synergies in agricultural transition; (2) Embed food security into transition plans; (3) Consider post-harvest in transition; and (4) Ensure equitable access and social justice in agriculture. By positioning agriculture as a proactive force in just transition, the Philippines can reimagine its food systems as resilient and foundational pillar of national development.

1. IDENTIFY ADAPTATION AND MITIGATION SYNERGIES IN AGRICULTURAL TRANSITION

Agriculture is one of the most vulnerable sectors to climate change and significantly responsible for greenhouse gas emissions (GHG). Farmers and fisherfolk directly experience the brunt of climate hazards such as typhoons, droughts, flooding, and sea-level rise. Global averages present that the agricultural sector absorbs around 25–26% percent of losses and damages from climate-related extreme weather and slow onset events.⁵ Meanwhile, agricultural activities contribute emissions, particularly methane from rice and livestock, and nitrous oxide from fertilizers. The most recent data shows Agriculture as the second largest contributor of GHG emissions in the Philippines.⁶ This duality of agriculture presents the sector as ripe for both mitigation and adaptation efforts.

Climate Smart Agriculture (CSA) is a framework which helps agricultural systems to respond to climate change by (1) sustainably increasing productivity, (2) building resilience, and (3) reducing emissions when possible. CSA has seen community-level adoption and has

³ Environmental Management Bureau, *1400MW Ahunan Pumped-Storage Hydropower Plant Project Description for Scoping (PDS)*, n.d.

⁴ Laqui, *Floating solar project to affect over 800 fishers in Laguna de Bay* — group, The Philippine Star, 2024.

⁵ FAO, *The impact of disasters and crises on agriculture and food security*, 2021

⁶ Philippine Statistics Authority, *The Country's Total Greenhouse Gas Emissions Reached 204.33 Teragrams of Carbon Dioxide Equivalent in 2020, 2024*. This statement excludes offsets from forestry and other land use.

received government support through the Department of Agriculture (DA).⁷ These practices represent the ongoing and potential contribution of the sector to adaptation and mitigation.

Local practices under CSA, such as solar powered irrigation systems, climate resilient rice varieties, alternate wetting and drying, and agroforestry, among other examples,⁸ do not provide only protective responses to climate shocks, but also either lower emissions or enhance carbon sequestration. For example, agroforestry systems provide shade and reduce heat stress on crops (adaptation), while simultaneously sequestering carbon and enhancing biodiversity (mitigation). Similarly, water-saving techniques such as alternate wetting and drying reduce methane emissions from rice farming (mitigation), while also conserving water and building resilience to drought (adaptation).

Conversely, mitigation efforts in agriculture should be evaluated for their adaptation co-benefits. Low-emission practices such as conservation tillage or soil moisture conservation measures can reduce dependence on costly external inputs and improve soil health⁹; all of which strengthen resilience. In this way, mitigation does not remain narrow to merely GHG reduction. More importantly, it also becomes a driver of livelihood stability and community resilience.

By embedding agriculture within this synergy framing, the JTF can ensure that mitigation targets align with adaptation needs at the community level.¹⁰ Farmers and fisherfolk, often portrayed as victims of climate change, must instead be recognized as co-creators of integrated solutions. The JTF can institutionalize an outlook for agricultural transition which ensures that every adaptation measure maximizes mitigation potential, while every mitigation measure strengthens adaptive capacity. Positioning agriculture as such expands the JTF beyond energy sector-centered approaches.

⁷ Department of Agriculture, *DA attributes P24B for climate-smart agri and food systems in 2022*, 2022, <https://www.da.gov.ph/da-attributes-p24b-for-climate-smart-agri-and-food-systems-in-2022/>

⁸ F. Perlas, *Climate Smart Agriculture Initiatives in the Philippines*, 2020. <https://ap.fftc.org.tw/article/2513>

⁹ Smith and Olesen, *Synergies between the mitigation of, and adaptation to, climate change in agriculture*, Cambridge University Press, 2010

¹⁰ Gamboa, *Adaptation-Centered Just Transition Pathways: A Mapping of Options for Understanding Just Transition in the Context of Adaptation*, Manila Observatory, 2025

2. EMBED FOOD SECURITY INTO TRANSITION PLANS

Climate action and economic transition cannot be considered ‘just’ if they undermine access to affordable and nutritious food. In the Philippines, inability to access nutrition is an alarming problem. Most recent survey for the 2nd Quarter of 2025 reports that 16.1% of Filipino households have faced involuntary hunger within the past 3 months, while the annual average (average for Q1 and Q2) stands at almost 20%.¹¹ Furthermore, food inflation, or the increase in the price of goods classified by the Philippine Statistics Authority under ‘*foods and non-alcoholic beverages*’, remains an issue that disproportionately affects low-income households.¹² A just transition that includes agriculture must embed food security into transition pathways. This ensures that climate goals are achieved without sacrificing the basic right to food.¹³

Strengthening local food production must not be an afterthought when considering adaptation and mitigation in the sector. Investments in sustainable production of agricultural produce must not compromise yields. Transition strategies can be viewed as opportunities to introduce technologies and techniques that increase output with less input. A just transition in Philippine agriculture should also ensure affordability of produce, which ensures that the burden of the transition is not unequitably carried by the every-day consumer.

This aspect of agricultural transition may be likened to the issue of energy security in energy transition. Just as the integration of renewable energy sources should not compromise energy security, the transition in the agriculture sector should not also be done at the expense of food security.

Equally, food security must be viewed through a nutrition-sensitive lens. Climate-resilient agricultural practices should align with health objectives and synergize with the Philippine Plan of Action for Nutrition.¹⁴ Transition strategies that integrate agriculture and nutrition can create holistic human development outcomes and cascade effects to improve diets and ease access to nutrition.

By embedding food security in the JTF, policymakers affirm that no Filipino should go hungry in the pursuit of climate action. Transition strategies for agriculture should aim to

¹¹ Social Weather Station, *Hunger falls from 20.0% in April 2025 to 16.1% in June 2025*, Social Weather Report, 2025.

¹² IBON Foundation, *Food inflation worst this year; hits poor Filipinos hardest amid low wages*, 2024. <https://www.ibon.org/food-inflation-worst-this-year-hits-poor-filipinos-hardest/>

¹³ United Nations General Assembly, Universal Declaration of Human Rights Art. 25, 1948

¹⁴ National Nutrition Council, *Philippine Plan of Action for Nutrition 2023–2028*, 2023

produce greater quantities, better nutritional value, and more affordable prices while striving for a self-sufficient agriculture sector. This elevates agriculture as both a foundation of survival and a driver of equitable development.

3. CONSIDER POST-HARVEST IN TRANSITION

A just transition in agriculture cannot stop at the production level; it must address the entire food chain. Post-harvest activities make up around 33% of the total emissions of agriculture.¹⁵ In the Philippines, the food system is highly fragmented, with inefficiencies in storage, processing, transport, and retail that contribute to high food costs and losses of up to 30% in some commodities.¹⁶ Not only is there basis to consider the climate impacts of post-harvest activities, there is also a need to ensure that sustainably produced goods are reliably delivered to households. This ensures stable livelihoods for farmers and fisherfolk while supporting environmentally friendly post-harvest processes.

Transitions across the food chain means promoting sustainable practices from farm to table. This entails transition strategies for processing, logistics, distribution, and consumption of agricultural produce. Encouraging value-adding at the local level with community-based food processing keeps profits within rural economies and reduces post-harvest losses.¹⁷ The DA has already done work in support of community based post-harvest projects.¹⁸ This provides an opportunity to introduce an adaptation and mitigation perspective to existing post-harvest solutions. On another note, logistics and mobility of the food chain can easily synergize with the transition strategies for the transport sector, which is also a critical sector for just transition.

Household consumption and retail practices are other critical dimensions to consider. Campaigns for sustainable consumption may be considered to reduce waste and promote diets with lower environmental footprints. Public procurement policies can also prioritize climate-resilient and locally produced foods, creating stable markets for sustainable farmers and fishers.

¹⁵ Food and Agriculture Organization, *Greenhouse gas emissions from agrifood systems. Global, regional and country trends, 2000–2022*, 2024

¹⁶ A. Romero, *DA: 30 percent of crops wasted due to poor logistics*, 2024, The Philippine Star

¹⁷ Philippine Institute for Development Studies, *Farmers earn more with postharvest facilities*, PIDS study says, 2015. <https://www.pids.gov.ph/details/farmers-earn-more-with-postharvest-facilities-pids-study-says>

¹⁸ Martinez et al., *Promotion of Developed Postharvest Technologies for Sustainable Community-based coffee processing enterprise*, 2020, Philippine Center for Postharvest Development and Mechanization, Technical Bulletin 15

By extending transition planning across the food chain, the JTF creates a systems-based approach for the sector. A just agricultural transition must integrate community-based adaptation and mitigation solutions to processing, storage, transportation, and consumption, and ensure a steady market for locally produced agricultural goods. This reframes agriculture from an isolated sector to the backbone of a broader sustainable food economy.

4. ENSURE EQUITABLE ACCESS AND SOCIAL JUSTICE IN AGRICULTURE

At its core, Just Transition is about justice. For agriculture, this means addressing deep-seated inequities in access to land, capital, and decision making as a foundation for just transition. Despite the Comprehensive Agrarian Reform Program (CARP), many smallholders remain landless or insecure in their tenure with only 21.8% of farmers holding ownership over their land.¹⁹ Access to finance and capital has also been difficult for the agricultural sector, especially for small farmers.²⁰ Women and youth often face additional barriers to resources and decision-making. Without deliberate action, a transitioned economy risks reproducing existing inequalities.

Ensuring social justice in the transition of agriculture requires the consideration of multiple aspects. Firstly, land tenure security must be guaranteed to enable and encourage farmers to invest in long-term sustainable practices. Without stable access to land, producers are unlikely to adopt practices that need long term timescales to generate returns. Secondly, finance for transition must be directed toward smallholder-inclusive programs.²¹ Mechanisms such as the People's Survival Fund (PSF) and similar instruments should allow and encourage farmer- and fisherfolk-led transition projects that enable adaptive transformation.

Finally, transition strategies must be gender-responsive and youth-inclusive. Women play critical roles in rural communities as well as in agricultural production, yet often remain invisible in policy design.²² Youth, meanwhile, represent the future of agriculture but are largely disincentivized by the sector's low profitability, lack of capital, and limited education about the sector among other issues.²³

¹⁹ Philippine Statistics Authority, *2022 Census of Agriculture and Fisheries Agricultural Population with Ownership or Secure Rights Over Agricultural Land (SDG 5a.1)*, 2025

²⁰ R. Briones, *Philippine Agriculture: Current State, Challenges, and Ways Forward*, 2021

²¹ International Labour Organization, *Financing a just transition: State of play of the sustainable finance ecosystem in the Philippines*, 2025

²² Philippine Council for Agriculture and Fisheries, *Enhancing Gender Outcomes of Different Rice Related Agencies through Gender Analysis of Rice Supply Chain and Advocacies*, 2022

²³ de Leon, *What is the Current Thinking on Youth and Agriculture in the Philippines?*, 2023, Rice-Based Biosystems Journal

Embedding equity and social justice in agricultural transition transforms the sector into a platform for democratic participation and rural empowerment. Addressing deep injustices in Philippine agriculture like landlessness, limited capital, and demographic inequalities is imperative to a genuine and just transition in the agricultural sector. By ensuring that no one is left behind, the JTF can deliver not only climate and economic outcomes but also the social transformation that a just transition demands.

CONCLUSION

Agriculture must be considered as a priority sector for the Philippine Just Transition Framework. The sector not only absorbs a disproportionate share of climate impacts but also holds significant adaptation and mitigation potential. Embedding food security, extending transition strategies across the food chain, and tackling structural inequities are essential steps in ensuring that no community is left behind in the case of agricultural transition. A just agricultural transition thus represents more than technical reform; it is a chance to transform livelihoods and align climate action with human development goals. By embracing agriculture as a proactive force in transition, the Philippines can lead in crafting pathways that are truly reflective of its national and local context.