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Memorandum No. 659
Series of 2024

TO: **Dr. Santiago T. Peña Jr., VPREI**
Dr. Ivy C. Emnace, Research Director
Dr. Antonio P. Abamo, Extension Director
Dr. Feliciano G. Sinon, Innovation Director
Dr. Suzette B. Lina, CAFS Dean
Dr. Aljay D. Valida, DOH Head

RE: **Transmittal of CHED Regional Memorandum Order No. 134 s. 2024**

FROM: 
DR. PROSE IVY G. YEPES
University President

DATE: **August 13, 2024**

Forwarding herewith a copy of the Commission on Higher Education (CHED) Regional Memorandum Order No. 134, series of 2024, for your information and necessary action.

This memorandum pertains to the RDC VIII Resolution No. 59, series of 2024, which enjoins all Local Government Units (LGUs) in Eastern Visayas to issue an ordinance adopting and implementing Good Agricultural Practices (GAP). Furthermore, it calls upon all State Universities and Colleges (SUCs) in the region to incorporate GAP into our research and extension services.

In line with this directive, it is imperative that we align our institution's activities and programs with the guidelines outlined in the said memorandum. This includes integrating GAP principles into our research projects and extension initiatives to support sustainable agricultural practices within our communities.

Please ensure that appropriate measures are taken to comply with the resolution and that relevant departments and units are informed accordingly.

For your information and usual support.

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COMMISSION ON HIGHER EDUCATION
REGIONAL OFFICE VIII



CHED REGIONAL MEMORANDUM ORDER
No. 134, Series 2024

FOR : PRESIDENTS, HEADS, AND OFFICERS-IN-CHARGE OF
STATE UNIVERSITIES AND COLLEGES (SUCs) IN REGION VIII
(EASTERN VISAYAS)

SUBJECT : RDC VIII Resolution No. 59, series 2024

DATE : 29 July 2024

Attached are the **Policy Brief** (Bridging the Gap: Advancing Good Agricultural Practices (PhilGAP) for the Safety, Health, and Prosperity of Vegetable Farmers and Consumers in the Region VIII) and **RDC Resolution No. 59, series 2024**.

RDC Resolution No. 59, series 2024 enjoins all Local Government Units (LGUs) in Eastern Visayas to issue an ordinance adopting and implementing Good Agricultural Practices (GAP) and all State Universities and Colleges (SUCs) in the region to include GAP in their research and extension services.

Attached is the Policy Brief and RDC Resolution on GAP, for reference

Thank you.


MAXIMO C. ALJIBE, Ph.D., DPM, CESO III
Director IV





MARCH 2024

POLICY BRIEF:

BRIDGING THE GAP

Advancing Good Agricultural Practices (PhilGAP) for the Safety, Health, and Prosperity of Vegetable Farmers and Consumers in the Region VIII



Mainstreaming Good Agricultural Practices (PhilGAP) is poised to become a cornerstone for comprehensive agricultural development in Region VIII, Leyte. Advancing PhilGAP in the region elevates food and environmental safety standards, while potentially boosting farmers' incomes. By integrating elements such as close monitoring, community engagement, infrastructure development, and market access, the proposed policy aligns with the Food Safety Act of 2013 in fostering a safer food system, healthier communities, and a more sustainable environment.

WHAT IS PHILGAP?

PhilGAP stands for **Philippine Good Agricultural Practices**. It is a certification program that aims to ensure food safety and quality of agricultural products while keeping high regard on environmental protection and workers' health, safety, and welfare. The program is being promoted and facilitated by the **Department of Agriculture's Regulatory Division**. Certification is awarded to farmers who follow the guidelines set by the program in their farming and food safety practices. Training to smallholder farmers to help them move towards PhilGAP certification for their farming and food safety practices is provided by the DA, LGUs, and Universities.

BACKGROUND & CHALLENGES

Food Safety & Community Health

Food safety extends from seed to table and is the assurance that food will not cause harm to the consumer when it is prepared and eaten according to its intended use (DA-BPI 1980). At the same time, the lack of fresh fruit and vegetable consumption has been linked to malnutrition, obesity, and chronic diseases. In the absence of accessible, clean, and affordable fruits and vegetables aggravates community health concerns.

- The WHO reports that about one in ten people fell ill in 2020 after consuming contaminated food (2021).
- In the Philippines, there were 209 foodborne disease outbreaks (FBDOs) from 13,577 recorded morbidity cases between 2005 and 2018 (Azanza, Membrebe et al. 2019).

The table below (Absulio-Morales 2023) shows food safety hazards reported in the Philippines fruits and vegetables.

Foodborne Disease Outbreaks (FBDO) is as an occurrence in which at least two persons experience a similar illness resulting from the ingestion of a common food (CDC 1996).

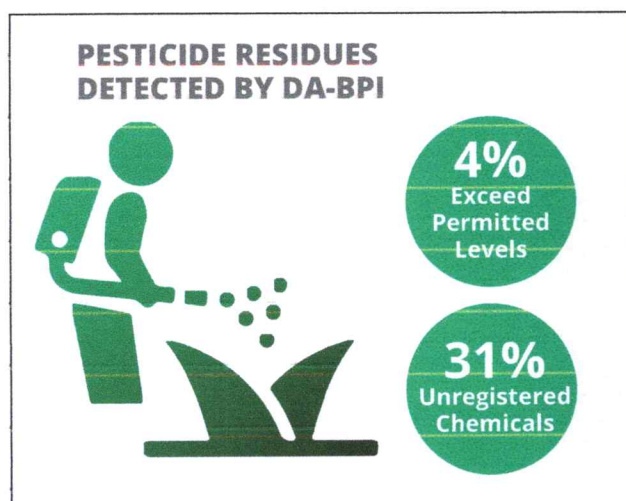
REPORTED FOOD SAFETY HAZARDS IN FRUITS AND VEGETABLES IN THE PHILIPPINES

FOOD SAFETY HAZARD	COMMODITY
Chemical: Pesticide residues (pyrethroid, carbamate, organophosphate)	Bittergourd, Eggplant, Tomato, Celery, Chinese cabbage, Pechay, Lettuce, Commercial fresh green salad, Yardlong bean, Snap bean, Cabbage, Broccoli, Cauliflower, Mango
Chemical: Heavy metal (lead, cadmium, mercury)	Water spinach
Biological: Pathogenic microorganisms	Banana, Mungbean sprouts, Bell pepper, Carrot, Cabbage, Lettuce, Tomato, Pechay, Chinese cabbage, Fresh-cut fruits
Biological: Naturally occurring	Banana, coffee, corn, peanut, sorghum, soybean, gabi, cassava

Sources: Alexander, 2005; Balendres et al, 2019; Baysa et al, 2006; Lu, 2011; Nuevo et al, 2019; Nuevo et al, 2015; Lu, 2014; Perez et al, 2015; Cubelo et al, 2021; Manuben et al, 2022; Alvindia et al, 2000; Gabriel et al, 2007; Vital et al, 2014; Sia Su et al, 2011; Mathay, 2018; Vizon et al, 2019; Sacdal et al, 2021

Concerns over pesticide residues also deter produce consumption, evidence by recent findings from the Department of Agriculture:

- Analysis of pesticide residues on popular market vegetable (DA-BPI 2022) show that:
 - 4% contained residues above permitted levels,
 - 31% contained residues from unregistered chemicals.



Farmer Health

Farmers' well-being is compromised by pesticide use, harsh labor, climate change, and poor financial conditions. Remote locations make healthcare access difficult. The elevation of health and safety standards is urgently required to halt the decline in both the physical and mental well-being of farmers. Further exacerbating the issue is the remote location of many farming communities, which hinders access to essential healthcare services.

Environmental and Human Health Impact

Agriculture has a substantial environmental footprint operating at the interface between society and natural resources (soil, water, forests). Protection of natural resources will guard society from food related illness and support food security.

- Water is a critical input in fresh fruit and vegetable production and is used for pesticide and fertilizer application, irrigation, postharvest operations, and sanitation. Preliminary results from irrigation water quality tests in the Region VIII show the presence of high *E.coli* counts after significant rain events which may indicate fecal matter, organic fertilizer (manure and sewage sludge), and decaying vegetables that flow from surrounding land into the water ways and subsequently into the food production system (VSU 2023).
- In Region VIII, a small sample size for pesticide residues showed 2% exceeded the maximum residue limits (MRL). The sample size was too small to be conclusive, but does indicate further monitoring is warranted.
- Soil can contain pollutants that find ways to enter the food system and threaten human health. An example is from Marinduque island, known for farming and it faces a temporary fresh vegetable consumption reduction recommendation because of high levels of heavy metals detected in vegetables collected from public markets due to heavy metal soil contamination (DA 2020).

Economic Challenges

Smallholder farmers often face financial constraints that can impede their ability to invest in the

infrastructure and equipment required to implement sustainable farming practices like PhilGAP. In addition, smallholder farmers are vulnerable to financial instability due to the destructive impacts of natural disasters and inclement weather on their food production. Furthermore, smallholder farmers may not have access to the same markets as larger producers, which can limit their ability to sell their products at a premium price. To address these challenges, it is essential to provide smallholder farmers with adequate financial support and resources.

Slow Take-up of PhilGAP

Despite over a decade of efforts to promote Philippine Good Agricultural Practices (PhilGAP), adoption rates remain low due to challenges in knowledge, cost, procedural complexities, and insufficient rewards or

incentives. Government support, especially from Local Government Units (LGUs), is vital for breaking these barriers, as they directly interact with farmers and can efficiently disseminate crucial information and resources.

Further boosting PhilGAP adoption necessitates a multi-stakeholder approach. Non-governmental organizations, export markets, and the private sector contribute by implementing good management practices and fostering a sustainability-focused corporate culture. Collaborative efforts among these entities can help realize PhilGAP's goal of nationwide sustainable, safe, and profitable agriculture.

POLICY STRATEGIES & SOLUTIONS

The Region VIII can support local farmers transition into the PhilGAP system through the following recommendations:

Recommendation 1: Provide a minimum of Php40,000 financial assistance in the form of material procurement to an individual farmer during their transition toward PhilGAP certification.

- **Rationale:** Low crop yields keep farmers' incomes small, preventing them from providing collateral to a financial institution so they can receive a loan, purchase inputs and transition from subsistence farming to PhilGAP farming that provides positive outcomes for worker health, environment, and safe production of food. Incentives that alleviate financial costs towards PhilGAP are more likely to lead to the adoption of better practices under PhilGAP, especially if they are voluntary.
- **Evidence:** Smallholder farmers lack access to financial services, farming inputs, agricultural training, and fair crop markets, which prevent them from optimizing their productivity and increase their earnings (Opportunity International 2023). Several studies suggest that financial support can be used to improve production practices for smallholder farmers that deliver positive outcomes (health, climate, environment) and increase resilience (Palmer 2023).

Recommendation 2: Increasing the number of Agriculture Extension Workers (AEW) dedicated to PhilGAP to support farmer training and transition to PhilGAP certification.

- **Rationale:** AEWs provide valuable information, skills, and support to farmers who face various challenges and constraints in their transition to PhilGAP. To maximize the investment, it is important the AEWs are well-trained, well-equipped, well-supervised, and well-incentivized to use participatory and demand-driven approaches tailored to local farmer needs. These AEWs can help farmers to access training, inputs, technologies, markets, credit, coordinate with other stakeholders and other services that can support their PhilGAP transition and improve quality and quantity of produce, worker health, and the environment.
- **Evidence:** A meta-analysis of 292 studies from 31 countries found that extension services had an average impact of 17.6% on crop yields and 13.5% on farmer incomes. Specific studies on farmer participation in agriculture extension programs show crop yields increase by 29% and income by 34% (Buehren, Goldstein et al. 2018, Danso-Abbea, Ehiakpor et al. 2018).



Recommendation 3: Sustainable cold chain solutions that use renewable energy sources, energy-efficient equipment, natural refrigerants, and smart management systems.

- **Rationale:** Cool chains help reduce food loss and waste by preserving the safety and quality of food; however, conventional cold chain technologies are energy intensive and harm the environment and climate. This is a recommendation of public good for the Region VIII government to carefully design a cool chain investment that can help farmers increase their productivity, profitability, and market access; and also improve the health of the Region VIII community without harming the environment.
- **Evidence:** Cool chains can improve food security and nutrition, especially for people who cannot afford a healthy diet. Studies show that farmers and value chain actors experience at least a 15% reduction in income due to post-harvest food losses (UNEP 2022). Cold storage can enable year-round access to nutritious food, reduce postharvest losses, and improve profit margins for farmers (Ekka 2020).

Recommendation 4: Financial support for PhilGAP Farmer Field Schools (FFS). The FFS is comprised of 14 stepwise training sessions (once/week half day) over one cropping season (3 months) provided by 2 AEWs to a group of farmers (25 pax). One three month FFS costs Php100,000.

- **Rationale:** Farmer Field Schools (FFS) are a participatory approach to agricultural extension that aims to educate farmers on PhilGAP and improve their farm management, skills and practices to become PhilGAP certified by the DA-BPI. To be successful, an FFS requires appropriately trained AEW facilitators. Training includes farmer record keeping that is an essential component of traceability
- **Evidence:** FFS can enhance the Capitals of rural communities (Human, Social, Financial, Physical, Natural) (van den Berg, Phillips et al. 2020). Studies have shown FFS to successfully reduce food loss and waste (Waddington and White 2023), and contribute to the reduction of poverty, improvement in production, income, food security, and the health and well-being of farmers (Davis, Nkonya et al. 2012) and adapt to sustainable natural resource practices (LWD 2008).



Recommendation 5: Promotion and awareness strategies for PhilGAP that target farmers to obtain certification (push strategy); and the general public on the benefits of PhilGAP (pull strategy).

- **Rationale:** Farmer adoption and community awareness of PhilGAP will improve food security, reduce food loss and waste, create jobs and income opportunities, improve natural resource management, and improve the health and well-being of farmers and the community of Region VIII. Promotion strategies include the use of media (radio, social media), posters, store banners, and awards i.e., VSU PhilGAP farmer award. The DA-ATI currently undertakes PhilGAP promotion with farmers through their PhilGAP training.
- **Evidence:** PhilGAP reduces food loss and waste, keeps food safe nutritious and safe, and can enhance the availability and affordability of diverse high-quality food products. A sustainable agriculture sector is essential to underpin the long-term health and prosperity of the country (Mailler 2020).

Recommendation 6: Market monitoring that will help farmers make informed decisions on selling their produce.

- **Rationale:** Market monitoring is an essential tool for smallholder farmers to make decisions about their produce. Knowledge of current produce prices and by tracking market trends, farmers can adjust their production and pricing strategies to maximize profits and minimize losses. Through market monitoring, farmers can make informed decisions about their crops and stay competitive in the local and global marketplace. Pesticide residues, water and soil quality, microbial and heavy metal contaminations, are food safety data that is expensive to monitor but should be collected periodically through a national scheme that Region VIII can support and disseminate information. Currently, Eastern Visayas State University is developing a digital prototype for online market monitoring that could be trialed by Region VIII.
- **Evidence:** Farmer access to market information can help them make informed decisions about the crops to grow, when to harvest, how much to charge, and identify opportunities for growth, challenges, and potential risks (Brown, De Costa et al. 2020)

Recommendation 6.1: Support to the DA-BPI and DA-AMAD for access to domestic and international markets for Region VIII area products.

Recommendation 6.2: Creation of an exclusive area for PhilGAP certified farmers to sell their produce within the Region VIII public markets.

- **Rationale:** New market access can help increase the demand for fresh produce which can lead to increased revenue for farmers and the Region VIII economy. New markets can also help improve the quality of fresh produce by encouraging farmers to adopt PhilGAP technologies and standards that are accepted in the international markets.
- **Evidence:** Government support for farmers to access new domestic and international markets will support economic growth and ongoing prosperity for the region. It will increase the number of local full-time secure jobs supported by the food sector, drive productivity growth and innovation, and secure access to affordable fresh produce through increased production and efficiency gains (AFPA 2022)

Recommendation 7: Support for the current proposed Ordinance (Organic & GAP) to encourage farmers to collaborate in a PhilGAP production and marketing cluster

- **Rationale:** Agricultural clusters are geographic concentrations of interconnected smallholder farmers who collaborate in production and/or marketing of the same produce in the same supply chains. A cluster can benefit smallholders through increased profits by encouraging innovation, reducing costs, sharing risks and increasing production (Oakeshott 2018).
- **Evidence:** A number of studies have shown agricultural clusters and Participatory Guarantee Schemes, where buyers partner with farmers for quality and quantity of PhilGAP products, can contribute to the improvement of regional socio-economic conditions (UNDESA 2021). Cabintan Livelihood Community Association (CALCOA) within the Region VIII is an example of progressive and successful agricultural cluster that could be replicated in other areas.

CONCLUSION

The success of any agricultural policy relies on its multifaceted nature, and this PhilGAP strategy is no different. By integrating food safety, farmer income, environmental sustainability, and public health, this policy aims to contribute significantly to the agricultural landscape in Region VIII. A concerted effort from local governments, communities, and other stakeholders is essential for the successful implementation of this policy. When effectively deployed, PhilGAP can act as a catalyst for a healthier, more environmentally responsible, and economically vibrant agricultural sector in the Philippines.

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Republic of the Philippines
REGIONAL DEVELOPMENT COUNCIL
Eastern Visayas (Region VIII)

RDC VIII Resolution No. 59, Series of 2024

ENJOINING ALL LOCAL GOVERNMENT UNITS (LGUs) IN EASTERN VISAYAS TO ISSUE AN ORDINANCE ADOPTING AND IMPLEMENTING GOOD AGRICULTURAL PRACTICES (GAP) AND ALL STATE UNIVERSITIES AND COLLEGES (SUCs) IN THE REGION TO INCLUDE GAP IN THEIR RESEARCH EXTENSION SERVICES

WHEREAS, Republic Act 10611, also known as the *Food Safety Act of 2013*, aims to protect consumer health, ensure food safety by establishing a comprehensive food safety regulatory framework from production to consumption, and facilitate market access of local food products;

WHEREAS, the Eastern Visayas Regional Development Plan 2023-2028 Chapter on *Ensuring Food Security and Proper Nutrition* highlights the implementation of policies and guidelines to enhance agricultural productivity, improve food supply chains, and enforce food safety standards, which will ensure safe and reliable food supply for the region;

WHEREAS, during the second quarter 2024 meeting of the Council, the Australian Center for International Agricultural Research (ACIAR) – GAP and the Visayas State University (VSU) researchers presented a policy brief on *BRIDGING THE GAP: Advancing Good Agricultural Practices for the Safety, Health, and Prosperity of Vegetable Farmers and Consumers in the Region VIII (Annex A)*;

WHEREAS, GAP is a collection of principles applied to on-farm production and post-production processes, resulting in safe and healthy food and non-food agricultural products, while considering economic, social, and environmental sustainability;

WHEREAS, the promotion, adoption, and implementation of GAP in LGUs are crucial in ensuring the safety and quality of agricultural products and promote sustainable agricultural practices;

WHEREAS, it is imperative to align the programs, projects, and activities of LGUs with GAP to support local farmers in the production, marketing, and distribution of safe and healthy food and non-food agricultural products;

WHEREAS, the inclusion of GAP in the research extension services of SUCs in the region is likewise pivotal in promoting the dissemination and adoption of GAP among agriculture practitioners, thereby fostering innovation and the mainstreaming of best agricultural practices;

NOW, THEREFORE, upon the motion of RDC VIII-Regional Research, Development, and Innovation Committee Vice-Chairperson and Private Sector Representative (PSR) for Agriculture and Fisheries Roy Bernard C. Fiel, duly seconded by RDC VIII-Development

Secretariat:

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Administration Committee Co-Chairperson and PSR for Disaster Resiliency Judah S. Aliposa, **BE IT RESOLVED, AS IT IS HEREBY RESOLVED**, to enjoin all LGUs to issue an ordinance adopting and implementing GAP, and all SUCs to include GAP in their research extension services;

RESOLVED FURTHER, to enjoin the ACIAR-GAP and the VSU researchers to actively reach out to LGUs already adopting or implementing GAP to benchmark on lessons learned and best practices therein and to other SUCs in the region, through the Philippine Association of SUCs VIII, to showcase and popularize GAP;


RESOLVED FURTHERMORE, to direct the Department of the Interior and Local Government VIII and the Commission on Higher Education VIII to ensure the widest dissemination of this resolution to all LGUs and SUCs in the region, respectively, and to monitor their compliance therewith;

UNANIMOUSLY APPROVED this 26th day of June, Two Thousand and Twenty-Four, during a blended meeting conducted at the Ormoc City Hall, Ormoc City and via Zoom.

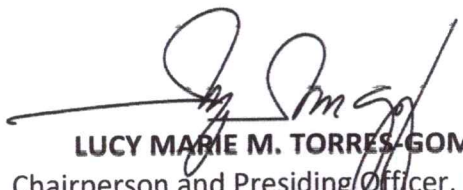
Certified true and correct:


ATTY. JAM M. COLAS-VILLABER
Secretary, RDC VIII and
Assistant Regional Director, NEDA VIII

Attested:


DIR. MEYLENE C. ROSALES
Vice-Chairperson and Head of Secretariat, RDC VIII
and Regional Director, NEDA VIII

Approved:


LUCY MARIE M. TORRES GOMEZ
Chairperson and Presiding Officer, RDC VIII
and Mayor, Ormoc City