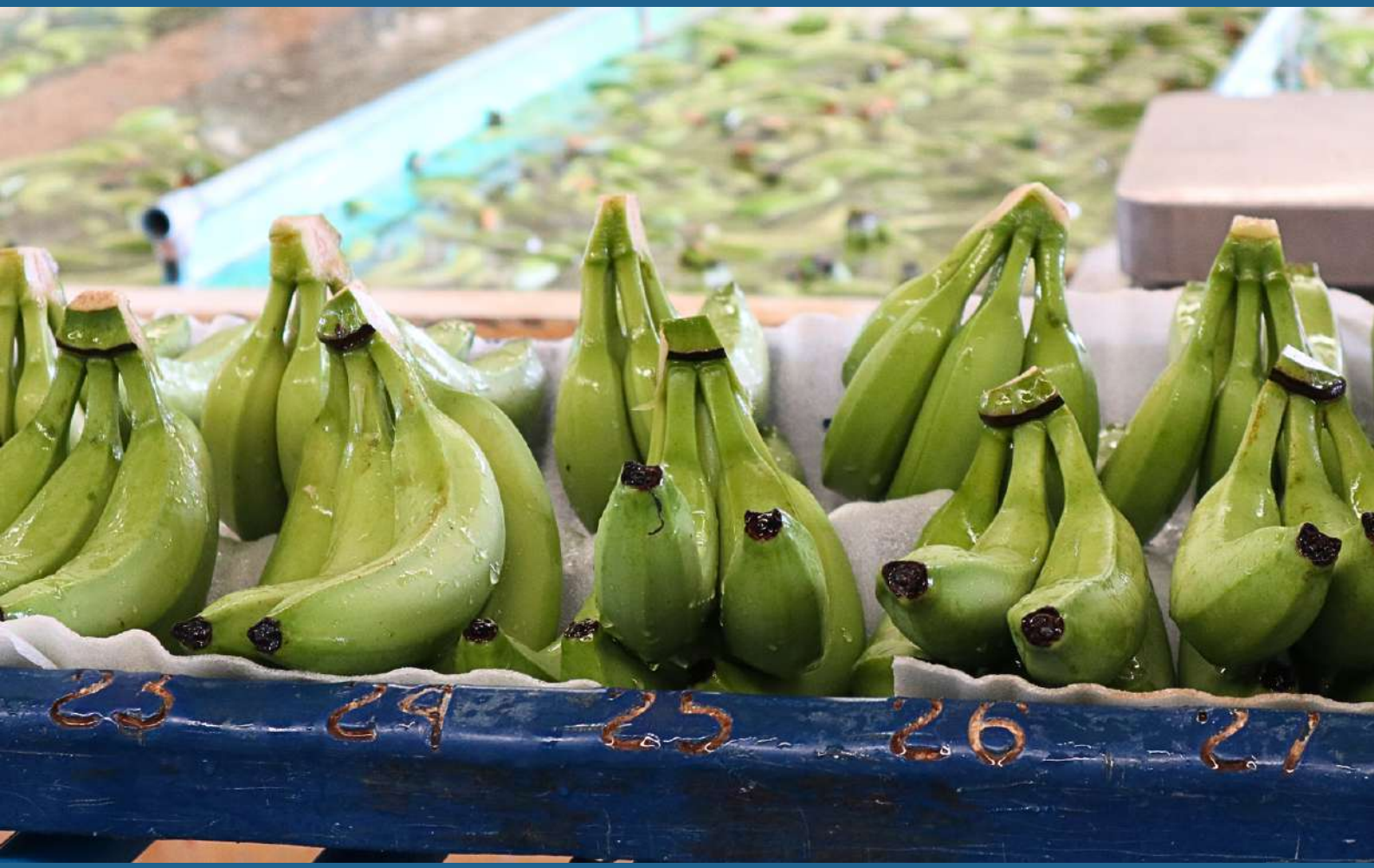
CODE OF GOOD AGRICULTURAL PRACTICE (GAP) FOR BANANA PRODUCTION

PNS/BAFPS 129:2013

EXPLANATORY MANUAL



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BUREAU OF AGRICULTURE AND FISHERIES STANDARDS
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Explanatory Manual

Good Agricultural Practice for Banana Production (PNS/BAFPS 129:2013)

Bureau of Agriculture and Fisheries Standards (BAFS)
Quezon City, 2023

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Introductory Note

The Philippine National Standard (PNS) Code of Good Agricultural Practices (GAP) for Banana Production was developed in 2013 to reinforce the GAP for Fruits and Vegetables provisions and provide provisions specific to the banana industry. Furthermore, the PNS GAP Banana was first among the commodity-specific GAP prepared, considering that banana is one of the top exportable commodities in the Philippines. The PNS GAP Banana Production was developed by the Technical Working Group (TWG) created through the Department of Agriculture (DA) Special Order (SO) No. 788 series of 2012. The Code covers the production, harvesting, postharvest handling, and transportation of bananas for direct human consumption.

Consequently, the Explanatory Manual (EM) on Code of GAP for Banana Production is developed to harmonize the interpretation of the Standard through examples, anecdotal experiences, and supplementary images provided in the box of explanatory notes. This facilitates better appreciation and adoption of minimum requirements in the Standard. The explanatory notes are a guide only and shall not be construed as mandatory or additional requirements unless otherwise specified by the regulatory agency implementing the said Standard.

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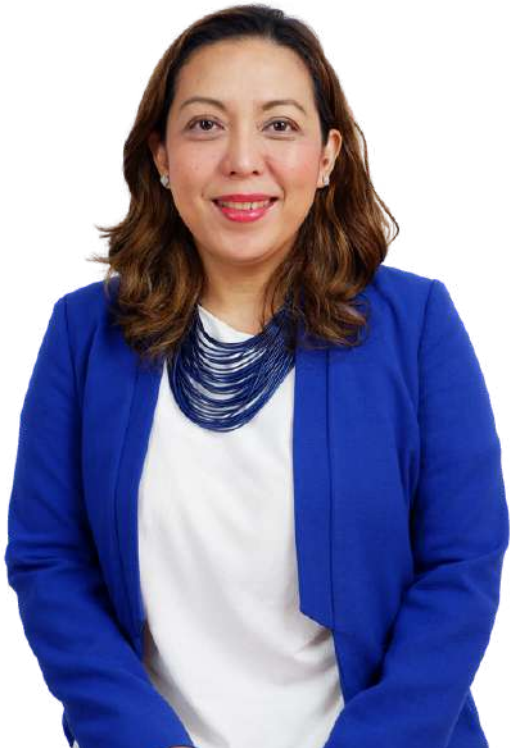
Director's Message



It is with great pleasure and pride that I extend my warmest greetings to all of you. This Explanatory Manual represents our collective efforts and dedication, serving as a testament to our mission of advancing agriculture and fishery standards.

As the standard-setting agency under the Department of Agriculture, the Bureau of Agriculture and Fisheries Standards (BAFS) developed the PNS Code of Good Agricultural Practice (GAP) for Banana Production to promote food safety practices in the industry. The PNS serves as one of the foundations for the nationwide implementation of the Philippine Good Agricultural Practice (PhilGAP) program, overseen by the Bureau of Plant Industry (BPI). Although we have many experts in banana production, the adoption of PNS requirements is susceptible to various interpretations due to their technical nature, evolving knowledge, and interpretive discretion.

The Philippine Banana Industry Roadmap (2021-2025) acknowledged that there is a low adoption rate of the PNS among banana growers, particularly smallholders. Albeit a challenge, an opportunity was likewise identified which is to build effective promotional strategies of the PNS requirements, along with collaborative enforcement of legal framework and control.

Hence, this Explanatory Manual aspires to contribute to building an effective promotional strategy and assist concerned agencies in enforcement and control. Specifically, it aims to guide the Bureau of Plant Industry (BPI) in the conduct of assessments, field inspections, and other regulatory activities. This can also aid and prepare the DA Regional Field Offices (DA-RFO), and the Local Government Units (LGU) in providing technical assistance to banana growers in adopting the standard, acquiring PhilGAP Certificates, and accessing markets.

Overall, this supplementary learning material promotes uniform understanding and interpretation of the PNS to ensure its efficient adoption and implementation. As we persist in pursuing this goal, we encourage and welcome stakeholders' feedback recognizing that doing so will help us refine our strategies in delivering science-based PNS information materials. Together, let's embark on this journey of knowledge and collaboration to make a lasting impact in the agriculture sector.

KAREN KRISTINE A. ROSCOM, PhD
Director IV

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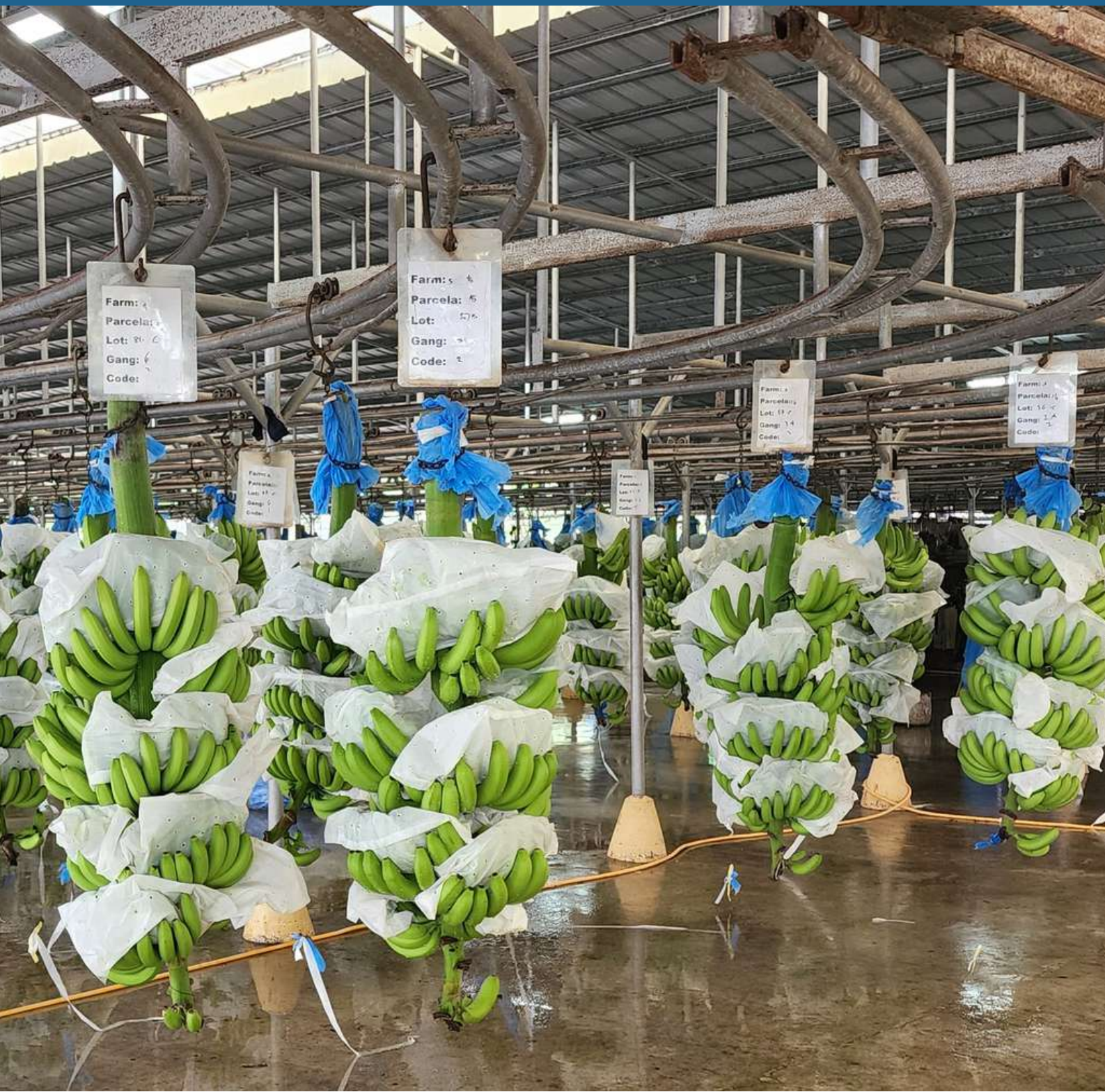
Scope

Explanatory notes on the provisions of the standards are found inside the yellow boxes. Additional information are presented as notes and/or images. Section numbers of the manual mirrors the content of the PNS.



1 Scope

This standard covers specific guidance related to the production, harvesting, postharvest handling and transport of banana intended for direct human consumption. It does not cover practices for banana intended for industrial processing.

This standard provides specific guidance to ensure the minimization of microbiological, chemical and physical food safety risks associated with the production of banana intended for fresh consumption during production, harvesting, and post-harvest handling and distribution.

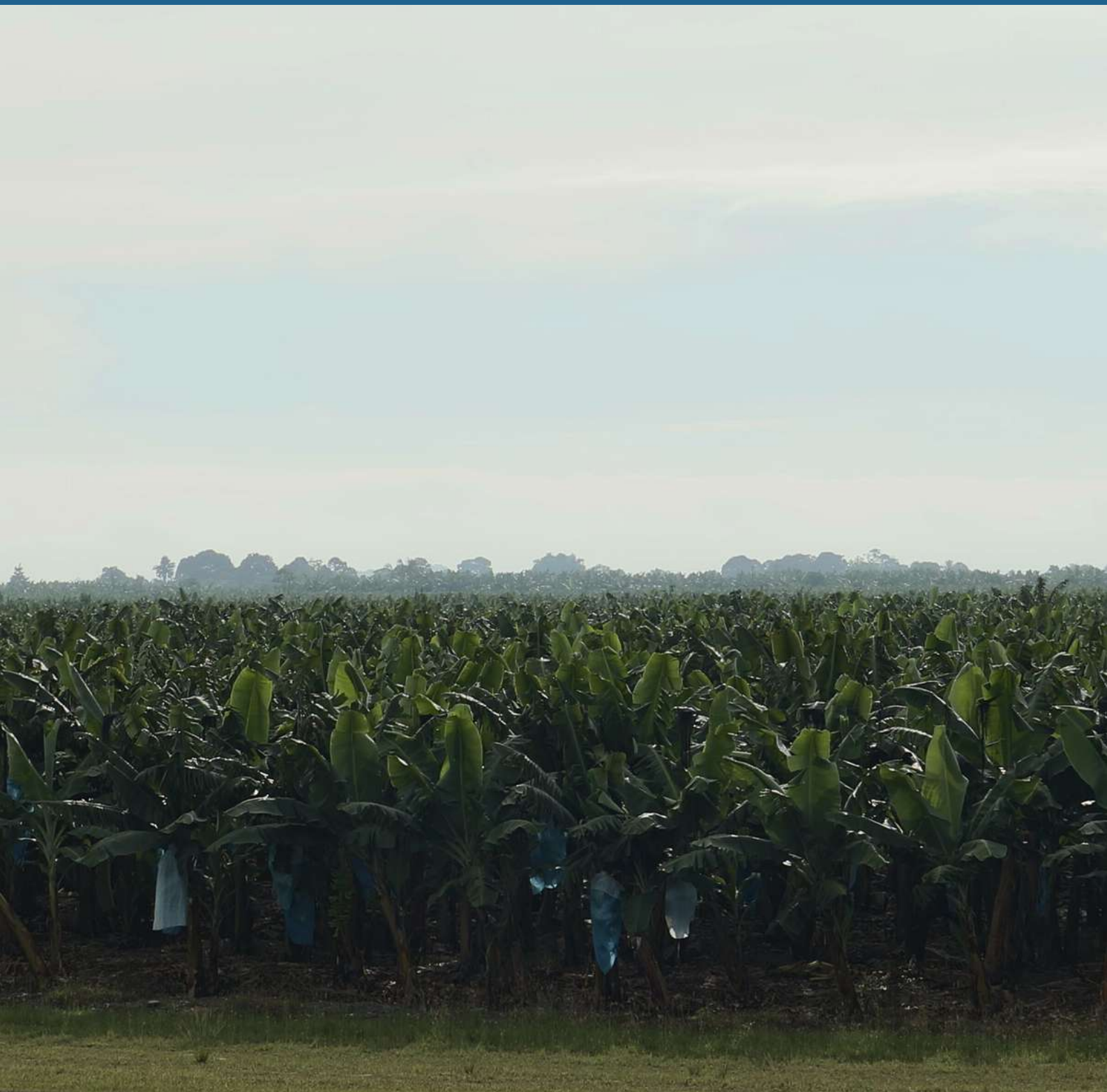
This standard also enumerates practices aimed towards protection of workers' health and safeguarding their safety and welfare; and environmental management.

This standard provides additional and specific guidelines for banana production and should be read in conjunction with of the Code of good agricultural practices (GAP) for fruits and vegetable farming, PNS/BAFPS 49:2011.

Section 2

Definitions

Explanatory notes on the provisions of the standards are found inside the yellow boxes. Additional information are presented as notes and/or images. Section numbers of the manual mirrors the content of the PNS.



1 Definitions

2.1
barrier
physical obstruction that aims to prevent entry of vermin and other animal influences from the production area to the packing shed (e.g. nets)

2.2
block identification
identification of areas in the production site (e.g. parcela)

2.3
defingering
removal of deformed, fused and excess fingers

2.4
deflowering
removal of flowers from the tip of the finger of the hand. Deflowering can be done in the field before bagging or during post-harvest operations

2.5
hand pruning
removal of hands just before bagging operations to promote optimum growth of individual fingers within the bunch

2.6
dehanding
removal of the hands from the stalk of the bunch in preparation for packing

2.7
debelling
removal of bud prior to bagging

2.8
guying
process of strapping the bunch to an overhead cable or neighboring plant to prevent from tipping over. Guying is a form of propping.

There are two types of guying: overhead and ground. Overhead guying is done by strapping the twine in the neck of the bunch to the overhead cable. Ground guying is done by strapping a twine in the neck of the bunch to the neighboring plant

2.9
lot identification/box code
pertains to identification code of produce packed/processed in a specific packing shed at a specific time and date

2.10
mat/hill
refers to the set of mother plant and corresponding followers/suckers

2.11
packinghouse
a place where harvested fruits are processed and packed. The term can be used interchangeably with packing shed, packing plant throughout the text. The term also includes mobile packinghouse and on-site packinghouse

2.12
production area
refers to an area planted for banana production

2.13
propping
process of providing support by using two (2) poles tied together to support the weight of the bunch

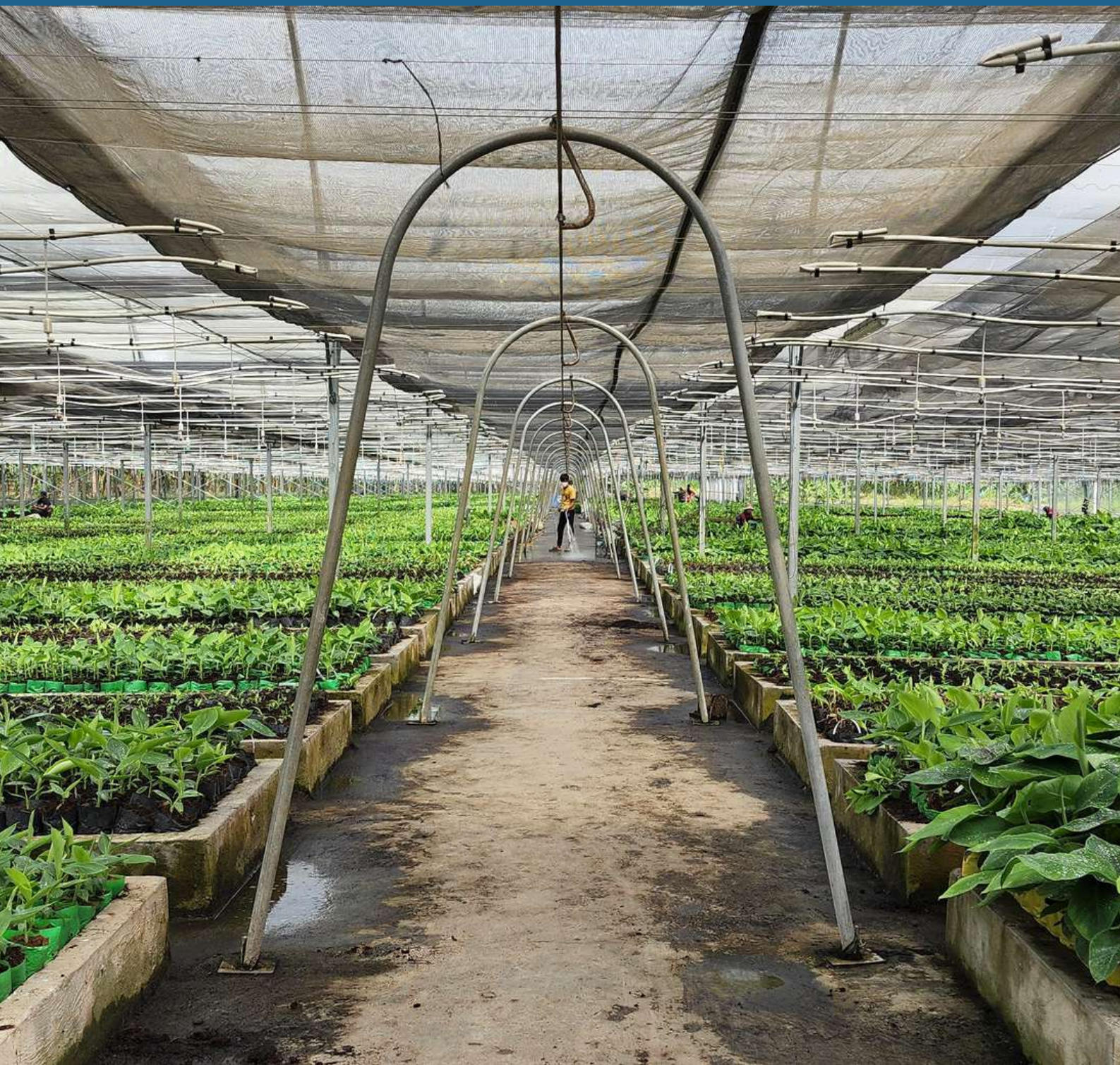
2.14
skimming/pre-calibration
selection of fruits based on calibration by using fixed caliper before harvest or selection of fruits based on diameter using fixed caliper

2.15
site
refers to the whole plantation

Section 3

Primary Production of Banana

Explanatory notes on the provisions of the standards are found inside the yellow boxes. Additional information are presented as notes and/or images. Section numbers of the manual mirrors the content of the PNS.



3.1 Farm location

3.1.1 General considerations

3.1.1.1 The production site must comply with related or applicable regulations of the Department of Environment and Natural Resources (DENR), local government units (LGUs) or municipal environment and natural resources office (MENRO).

Explanatory Note:

One relevant regulation is the Department of Environment and Natural Resources (DENR) Administrative Order No. 2003-30 *Implementing Rules and Regulations for the Philippine Environmental Impact Statement (EIS) System*.

- The EIS System is concerned primarily with assessing the direct and indirect impacts of a project on the biophysical and human environment and ensuring that these impacts are addressed by appropriate environmental protection and enhancement measures

The website of DENR, LGUs, MENRO, and other agencies provides updates on the required government permits and clearances as required by the laws.

3.1.1.2 In order to minimize degradation, areas should be supervised through sustainable land management practices.

Explanatory Note:

Sustainable land management practices, for example, in soil management and fertilization, and water stewardship, include the following:

- crop rotation and other land use practices to conserve soil organic matter;
- cover crop, permanent cover crop if feasible, to prevent erosion;
- define appropriate timing, amount, and application method for organic and mineral fertilizers;
- manage ground and soil water by adjusting drainage and infiltration;
- improve soil structure and increase soil organic matter;
- avoid contamination of water resources with organic or inorganic production inputs;
- monitor crop and soil water status and schedule irrigation accordingly; and
- adopt water-saving and recycling practices.

3.1.1.3 Depending on the size of the planted area, a topographic contour map representing the set of operations should be prepared. A good graphic representation is required, covering both altimetry and planimetric properties.

The comprehensive Explanatory Manual (EM) for the Philippine National Standard (PNS) Code of Good Agricultural Practice (GAP) in Banana Production is **accessible upon request** through the Bureau of Agriculture and Fisheries Standards (BAFS) - Technical Services Division. To obtain the manual, interested parties may contact the division at tsd.bafs@gmail.com.

When making a request, it is essential to provide specific details, including the **purpose or context in which the Explanatory Manual will be utilized, your full name, affiliation, and contact information**.

Please be advised that **any unauthorized dissemination or distribution** of the Explanatory Manual for the PNS Code of GAP in Banana Production is **strictly prohibited.** This measure is in place to uphold the integrity and controlled access to the information contained within the manual. Your compliance with this restriction is appreciated in maintaining the confidentiality and appropriate use of the provided documentation.

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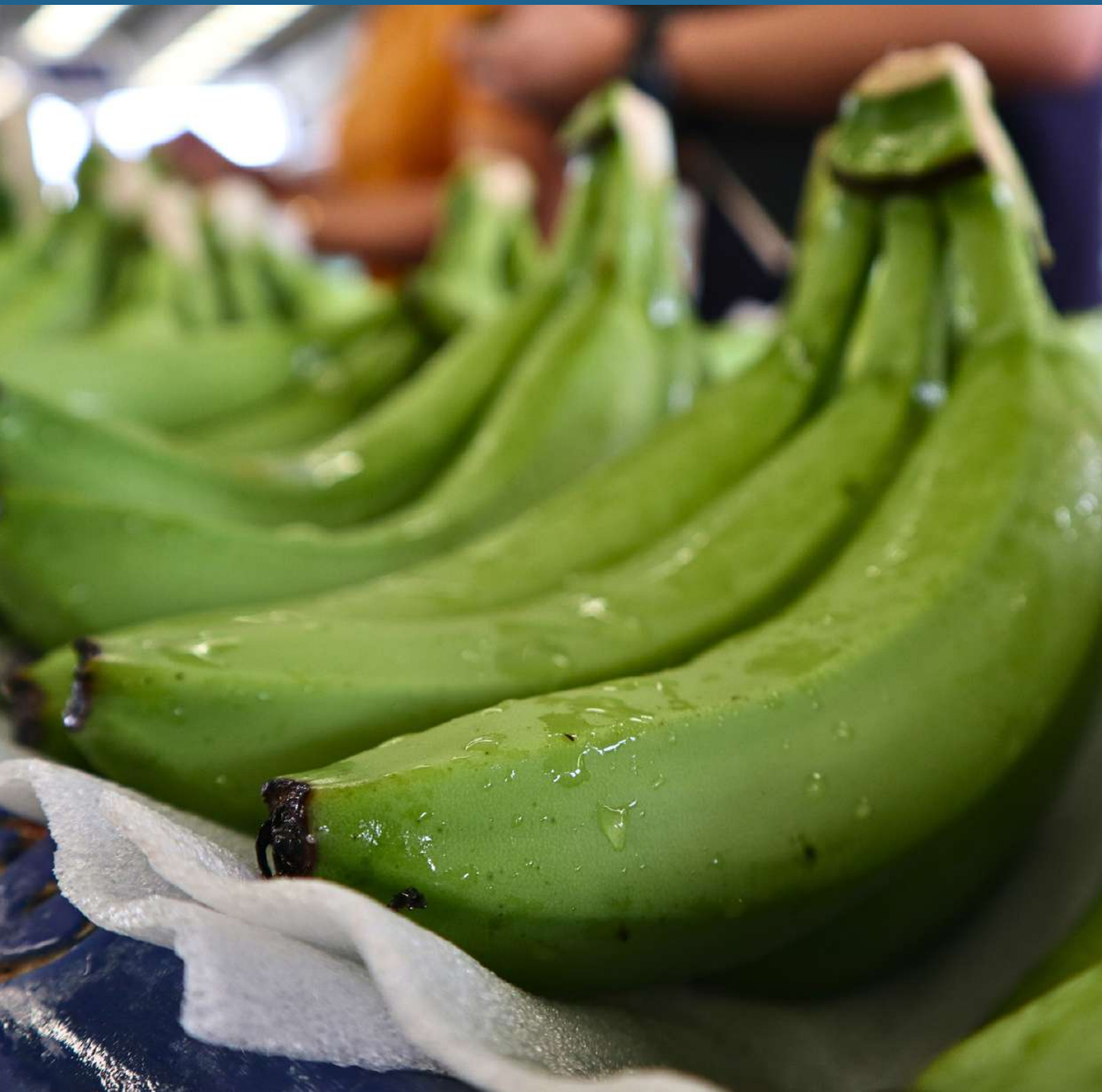

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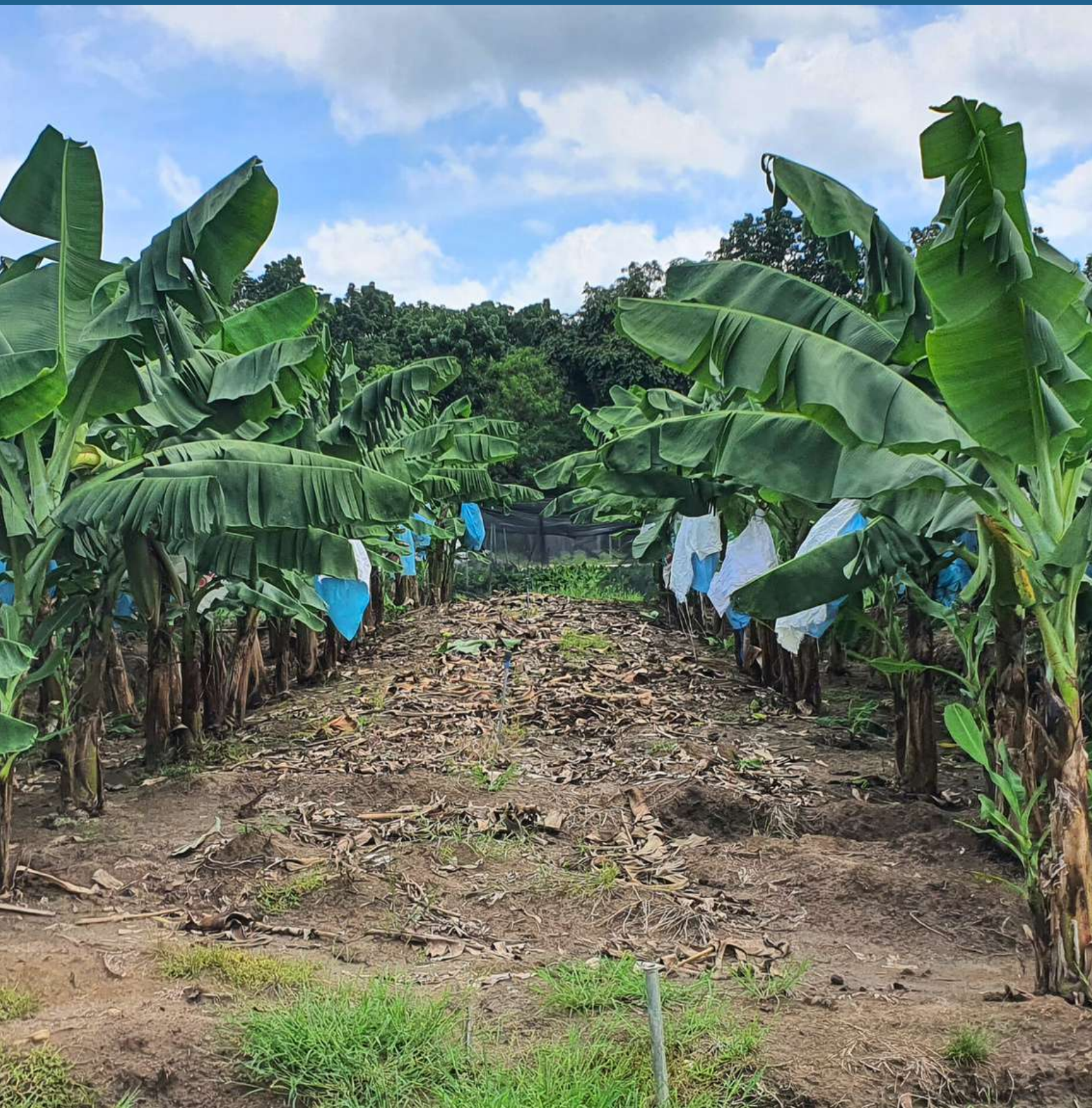
Technical Working Group



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This Explanatory Manual (EM) is a supplementary learning material for the Philippine National Standard (PNS) Good Agricultural Practice (GAP) for Banana Production (PNS/BAFPS 129:2013). The EM aims to aid stakeholders in understanding the provisions of the PNS, promoting uniform interpretation of the PNS and efficient adoption and implementation of the Standard.

PNS/BAFPS 129:2013 was developed to support Filipino banana farmers and to promote sustainable farming.


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