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Revisiting the Adoption of the Philippine Good Agricultural Practices (PhilGAP) Certification Programme: A Case Study of Cavendish Banana Plantations

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Abstract

In Philippine Cavendish banana plantations, pesticides are applied to produce "perfect bananas" with unblemished peel and uniform maturity as required by the export markets. The increased use of pesticides has resulted in a number of food safety and sustainability problems such as excessive pesticide residues and environmental contamination. The Philippine government introduced a *PhilGAP* certification programme, a type of quality management system (QMS), for fruit and vegetables in 2005 to address these problems. A study initiated in 2011 revealed that there was no Cavendish banana plantation certified with *PhilGAP*. The study also identified the barriers to, and drivers of, the adoption of the *PhilGAP* certification programme. Five years after the initial study in 2011, there are only two out of more than 700 Cavendish banana plantation growers that had been certified with *PhilGAP*. This study aims to investigate if the barriers to, and drivers of, the adoption of the *PhilGAP* certification programme have changed since the initial study in 2011. A qualitative case study approach was used in this study. Data were collected through an in-depth interview, field observation and sourcing of relevant documents. The study used Rogers' (2003) adoption process as a tool to investigate the barriers to, and drivers of adoption. The data were analysed through qualitative data analysis using *Nvivo 11 Pro* software.

The results show that the barriers to the adoption of the *PhilGAP* certification programme in the Cavendish banana plantations identified in 2011 remain a problem. These barriers include: (1) knowledge, (2) cost, (3) processes, (4) rewards or incentives, (5) scale of farm operations, and (6) trade issues within the banana industry, particularly the practice of pole-vaulting. The emerging barriers identified by this research include sub-types of these barriers, namely: (1) the processes involved in the audit, particularly the disagreements on the concept of quality, the perceived lack of coordination, and the perceived lack of independence in the audit process; and (2) the trade issues in the industry, specifically the presence of splinter groups or non-accredited groups of banana growers, packing facilities, traders and exporters. A new category of barrier has also emerged which is the competition with the *GlobalGAP* certification programme, a competing technology and the gold standard QMS. Despite these barriers, the two *PhilGAP*-certified Cavendish banana plantations continue to participate in the programme because the drivers of adoption outweighed these barriers.

The results also show that the drivers of the adoption of the *PhilGAP* certification programme identified in 2011 has led to the adoption of the programme. These drivers include: (1) the requirements of the international market; and (2) the presence of a quality-focused corporate culture being forward-looking and open to change. The emerging drivers identified by the research include: (1) serves as a repository

that satisfies other types of government policies; and (2) the government subsidy that includes the provision of free certification services, and chemical residue analysis.

Previously identified barriers were overcome by the adopters, but remain to be a barrier for non-adopters. However, new barriers have emerged which continue to limit the adoption of the programme. On the other hand, previously identified drivers have led to the adoption of the programme, and newly identified drivers of adoption have motivated the continued participation in it. This research argues that the adoption rate of the *PhilGAP* certification programme for the Cavendish banana plantations remains low because many of the barriers to adoption have not been properly addressed by the government, and the benefits from adoption have not been properly communicated to the intended adopters.

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List of Acronyms and Abbreviations

ASEAN Association of Southeast Asian Nations ATI Agricultural Training Institute **BAFS** Bureau of Agriculture and Fisheries Standards BPI **Bureau of Plant Industry CEO** Chief Executive Officer Chief Finance Officer **CFO** Central Intelligence Agency CIA COO **Chief Operating Officer CPCC** Control Points and Compliance Criteria DA Department of Agriculture **DENR** Department of Environment and Natural Resources Department of Labor and Employment **DOLE FAO** Food and Agriculture Organization **Good Agricultural Practices GAP GAPCC GAP Certification Committee GDP Gross Domestic Product GlobalGAP Global Good Agricultural Practices IRR** Implementing Rules and Regulations Internal Organization for Standardization ISO LGU Local Government Unit **NDLF** Nonoy Librado Development Foundation National Economic Development Authority **NEDA** NGO Non-Government Organization **PBGEA** Pilipino Banana Growers and Exporters Association **PhilGAP** Philippine Good Agricultural Practices PPE Personal Protective Equipment **PQS** Plant Quarantine Services **PSA** Philippine Statistics Authority **Quality Management System QMS TWG Technical Working Group** UN **United Nations**

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