Chapter 12
Ensuring the Relevance of Independent Smallholder Farmers (ISHFs) Through Sustainable Sourcing Practices:
A Model to Track and Trace Within the Malaysian Palm Oil Industry

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ABSTRACT

Malaysia and Indonesia have been the main sources of supply for palm oil (PO), palm kernel oil (PKO), and other palm-related derivatives for most multi-national companies (MNCs). However, deforestation, new legislation in Europe, and stakeholder expectations have posed significant challenges to this industry. In response to these challenges, companies are looking at driving key sustainability initiatives in palm oil supply chains while remaining beneficial to the farmers. This chapter discusses the findings of a collaborative research project conducted through active academic-industry collaboration in South East Asia and shares an approach to identify and incorporate traceability within the supply chain. Critically, it also aims to provide a framework for both academicians and practitioners towards developing a collaborative approach of driving sustainability goals in difficult to measure parts of the supply chain. Importantly, this work also highlights the key aspects of implementing sustainability practices in the upstream palm oil supply chains, which are often ignored.

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INTRODUCTION

MNCs face constant challenges in trying to balance concerns related to the socio-economic and environmental aspects of palm oil production and at the same time, keeping organizational goals of maintaining procurement excellence to meet strategic business goals. Increasing pressure through global regulations on sustainable sourcing of palm oil has also forced organizations to relook at traceability in their supply chains. For instance, regulations enacted by European economies propose new requirements to adopt sustainable practices of palm oil production in Malaysia and Indonesia (MPOC,2019).

For organizations to establish high traceability of their supply chains, it is imperative that all stakeholders and actors must be tracked and transparent in terms of physical movement of crops, information sharing, and financial flows. This research study, conducted in collaboration with a large Consumer Packaged Goods (CPG) company (which is one of the largest buyers of palm oil in the world) revealed that there were a significant number of Independent Smallholder Farmers (ISHFs) in its supply base who were difficult to trace. Smallholders are divided into two groups: organized and unorganized or independent. A significant share of planted area in Malaysia is under the ownership of ISHFs. In general, ISHFs have contributed a substantial amount towards the Malaysian Palm Oil Industry, in spite of the land size holdings of less than 50 Hectares (Ha). ISHFs in Malaysia represents 17% of total palm oil plantations, or an equivalent of approximately 980,000 hectares of land, and consist of more than 250,000 ISHFs. (MPOB 2018). ISHFs are independent farmers, in the sense of self-managing and financing their plantations. Since they are not contractually bound and part of any corporate scheme, they receive limited technical, institutional and financial support, which makes it challenging for them to adopt sustainability initiatives. These posed a challenge in tracking their locations and mapping their agricultural practices.

Given this context, the author is addressing the following research questions in the study:

1. How can suitable trace and track methodologies be designed and adopted to help identify small and marginal farmers in upstream palm oil supply chains?
2. How can sustainable supply chain practices be adopted by small and marginal farmers in upstream palm oil supply chains?

Broadly, the objective of this research is to design a methodology to trace the farmers across multiple collection centers, spanning through various networks of Super Dealers, tracking the existing practices and design interventions to ascertain sustainability gaps while improving their livelihood.

BACKGROUND

The palm oil industry in Malaysia is organized into four segments. The *plantation* segment includes seed nursery, planting, harvesting, collecting, and milling. The second segment includes refining, bulking and trading activities. The remaining two downstream segments are non-food downstream as well as food and health-based downstream (PEMANDU, 2010).

The Oil palm tree starts to bear fruits after 30 months of field planting and continues to be productive for the next 20 to 30 years; thus ensuring a consistent supply of ripe palm fruit, commonly known as Fresh Fruit Bunch (FFB). In Malaysia, the oil palm trees planted are mainly the *tenera* variety, a hybrid between the *dura* and *pisifera*. The *tenera* variety yields about 4 to 5 tons of crude palm oil (CPO) per