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The Enabling Environment for Inclusive Agribusiness in Southeast Asia

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ABSTRACT

Smallholder farmers constitute a sizable subset of the population in the ASEAN region and therefore are important stakeholders to consider in realizing the broader goals of inclusive development and poverty reduction. Linking them to various agriculture-related activities across the value chain paves the pathway of opportunities to expand their access to markets and build capacities. As such, determining policy and institutional conditions that enable inclusive agribusiness development as well as key barriers to their engagement would provide greater leverage for smaller agribusiness players to move up the value chain. By reviewing the extant literature on agribusiness models, we provided a survey of the inclusive agribusiness structure most prevalent in the ASEAN region. The study draws from the “Hierarchy of Enabling Needs” model and socio-organizational structure model to offer an integrated conceptual framework that maps out the environment that facilitates stronger linkages and deeper inclusion of small-scale players in the agribusiness structure. To better situate the conditions of inclusive agribusiness, the sets of enablers are further assessed across varying country contexts. The paper suggests that there is no single model that could encapsulate deeper linkages in the sector. Notwithstanding ASEAN’s fundamental diversity, the region is bound by its outward looking and market-oriented policy frameworks that serve to enable pathways and corridors toward greater inclusiveness in the agribusiness sector.

Keywords: inclusive development, agribusiness linkages, inclusive agribusiness, agribusiness models, agri-food sector policies

JEL Classification: O13, O43, Q13, Q15

INTRODUCTION

Agriculture occupies a special role in the socio-economic development of ASEAN countries as most of them have their roots in agrarian societies. Historically, agriculture's role in ASEAN has been anchored by governments working with the millions of smallholder farmers, but post the "Green Revolution" era, when modern technologies became evident in fueling both production and productivity, the private sector emerged as an important catalyst for change and the agribusiness sector in ASEAN evolved into a significant contributor to economic growth in many countries (Clarete 2004). Taking into account their size, financial capacity, global operation, and engagement in international trade and investment, the role of the private sector is deemed highly critical in realizing inclusive development in the agriculture sector (OECD and World Bank 2015). Since the concept of inclusive development advances the key tenet of equitable opportunities across all segments of the population, sustained and equitable growth, therefore, is crucial for marginalized sectors to realize long-term development gains.

Major constraints, however, point to the lack of a conducive environment that incentivizes business and inadequacy of productive and sustainable linkages among agribusiness players (Gradl et al. 2012). As an upshot, marginalized sectors and smaller agribusiness players have in many countries been less able to integrate across agribusiness value chains, which characterize modern agri-food systems. In this paper, the environment that smallholder farmers operate were reviewed. The types of agribusiness models prevailing in Southeast Asia as a basis to assess inclusiveness of smallholder farmers were discussed. Lastly, a model that describes the enablers for inclusiveness of smallholders in the value chain was conceptualized. This model provides a useful framework for further

empirical inquiry in a relatively nascent but rich research ground of inclusive agribusiness.

CONTINUING IMPORTANCE OF AGRICULTURE IN ASEAN

The ASEAN region is endowed with abundant resources including land, water, and people, and ASEAN's agriculture sector has the potential to have even more positive impact on the region's food security and economic progress (Teng and Escaler 2016). However, challenges exist which in the mid- to long-term have potential to become real bottlenecks to progress. Several of these are highlighted in this paper, particularly trends that influence inclusiveness of smallholder farmers in the food supply chain.

The Changing Operational Environment of Agriculture

Southeast Asia's population is expected to increase by almost 100 million by 2030 to exceed 700 million (ADB 2014a). A direct result will be an increase in food demand and diet diversification, owing to larger proportion of urban population and a growing middle-class. By 2030, over half of ASEAN's population will live in urban areas. With rural to urban migrations, the agricultural sector is already facing new challenges associated with farmers growing older and not enough new entrants to farm. According to the Asian Development Bank (ADB), all of the ASEAN countries at least doubled their gross domestic products (GDP) during the 2000–2015 period (ADB 2014b). As incomes rise, there will be a move away from a mainly cereal diet to one that includes more resource-intensive food products, such as meat, dairy, eggs, fruits, and vegetables, thus, unleashing a rapid increase in demand for raw agricultural commodities. Food preferences have also undergone a shift towards

easy-to-prepare or “convenience foods” as female entrants in the workforce increase, and towards more international tastes, as preferences become increasingly globalized. These significant trends are breaking grounds for new markets for a broader range of higher-valued food products and processed foods. Aside from food products, such trends are also propelling the evolution of innovative marketing systems and food service industries across developing economies. The opening of new markets and innovations in service systems creates potential opportunities for more inclusive engagement particularly among specialized local producers.

Changes in dietary preferences and increases in food prices are among the factors that led to the expansion of land used for crops as a percentage of total land area in most of ASEAN in the last few decades. Between 1970 and 2011, the Food and Agriculture Organization (FAO)’s database, FAOSTAT, showed that the percentage of agricultural land area in ASEAN increased substantially from 20.2 percent to 29.4 percent (Teng and Escaler 2016). Land degradation and soil erosion, however, are rapidly taking place in the region while arable lands are being converted to other non-food uses that provide higher economic returns versus food production. The average per capita arable land area in ASEAN meanwhile is only 0.12 hectare (ha) (FAO 2011).

Environmental factors likewise put additional pressure on natural resources and food security, such as higher and more variable temperatures, changes in precipitation patterns, and increased occurrences of extreme weather events (Teng et al. 2015). Climate change is also responsible for rising sea levels leading to increased salinization in river deltas and lakes, thus further reducing freshwater availability. According to projections by the International Food and Policy Research Institute (IFPRI), Asia’s production of irrigated wheat and rice will be 14 and 11 percent lower, respectively,

in 2050 than in 2000 due to climate change (Nelson et al. 2009). Critical Southeast Asian rice production in low-lying coastal and deltaic areas is projected to be at increasing risk with the effects of climate change. Along with the changes in external environment are significant implications that factor in the growth and development of the sector. Unless growth is sustained and equitable, the marginalized groups in the agri-food sector are less able to realize the ripple benefits in the long term (UNDP 2011).

The Multiple Roles of Agriculture and Agribusiness

Agriculture has played and continues to play essential and multi-faceted roles in the ASEAN region—as an important driver for social, inclusive growth; as an important source of export earnings in support of economic development; as a guarantor of food availability to its citizens for staple and non-staple food items; and as a source of employment directly and through agriculture-related, value-adding activities (Teng and Oliveros 2015). Historically, the agriculture sector in the majority of member states has contributed significantly to GDP. However, as the regional economy boomed and countries opened up and embraced market-oriented economics, agriculture’s share of GDP declined over the years. In 2013, agriculture’s contribution as a percentage of national GDP were significantly lower in Cambodia (33.8%), Myanmar (36.9%), Lao PDR (30.8%), Vietnam (18.4%), Indonesia (14.4%), and the Philippines (11.2%). Agriculture still remains an area of high-priority for ASEAN despite its declining contribution to the region’s GDP during the last two decades (FAO 2014). Across Southeast Asian economies, agriculture’s share of GDP showed observable disparities and relative decline owing to corresponding growth in the industry and services sectors. This, however,

does not imply the declining importance of agriculture in ASEAN, as it still employs a significant proportion of the workforce in every country in the region, with the exceptions of Singapore and Brunei Darussalam, which are primarily urban city centers, and to a lesser extent, Malaysia (Table 1). More than 60 percent of the workforce in Cambodia and Lao PDR are employed in agriculture.

ASEAN agriculture also remains a powerhouse in the production and supply of important food items. From its arable land area of approximately 70 million ha, ASEAN has the world's two top consistent rice exporters (Thailand and Vietnam) responsible for over 70 percent of the world's exported rice. ASEAN countries remain among the top three exporting countries of pineapple, banana, mango, sugar crops, coffee, cashew nuts, and cassava. The region's semi-permanent to permanent agricultural land use has made it the world's top producer and exporter of palm oil, coconut, and rubber. ASEAN is also a major producer and exporter of seafood, and has been the world's largest exporter of crustaceans. While most of the region's farmers and producers are smallholders, there are also significant large-

scale plantations, notably in the permanent agriculture land producing palm oil and rubber. The robust trade in the region was achieved through a mix of public and private sector investments sourced intra- and extra-regionally. Following the phased roll-out of the ASEAN Economic Community (AEC) in 2015, there will likely be increased opportunities to tap synergies brought on by the opening and liberalization of markets, which are central to the goals of the AEC.

Increasing trade within the region and across the globe has significant implications with regard to the rapid evolution of the agri-food landscape and transformation of agribusiness-related activities. As an upshot of deeper regional integration and liberalization of trade and investment, the production system has increasingly grown complex; compounded by multi-layered linkages and boosted cross-border business activities (OECD and World Bank 2015). The unprecedented increase in the flow of foreign direct investment (FDI) induced by multinational companies also enabled fragmentation of production processes and activities into geographically dispersed but intricately connected value chains (i.e.,

Table 1. Employment in agriculture (% of total employment)

	1990	2000	2010	2013
Brunei Darussalam	...	...	...	...
Cambodia	...	73.7	72.3	64.3
Indonesia	55.9	45.3	38.3	35.0
Lao PDR	...	...	72.2	...
Malaysia	26.0	16.7	13.6	13.6
Myanmar	65.6	...	...	...
Philippines	44.9	37.1	33.2	31.0
Singapore	0.3	0.1	0.1	0.1
Thailand	63.6	44.2	38.2	41.7
Vietnam	72.1	64.4	49.5	46.8

Source: ADB 2014b

Note: ... means data not available

research and development, production, processing, procurement, distribution) (OECD 2012; Thun 2012). These global value chains (GVCs) consist of links between production, processing, and distribution centers, often driven by FDI in the food and retail sectors of developing countries. GVCs favor production and distribution systems that meet volume requirements and address quality and safety standards. Hence, organized supply chains are displacing traditional arrangements such as spot markets and integrated plantations. Many multinational companies are involved in the different parts of GVCs in ASEAN, as providers of farm inputs (fertilizers, pesticides), traders, processors, and retailers. In ASEAN, there is also an emerging significant number of agri-food industry entities, which have in their portfolios, activities spanning more than one part of the supply or value chain, and with revenues exceeding USD 1 billion, as exemplified by Wilmar (Singapore), CP Group (Thailand), and Sime Darby (Malaysia) (Dy 2009).

Through these interconnected chains of business activities from farm to fork, the agribusiness sector has become an integral vehicle for employment and income generation (Konig, da Silva, and Mhlanga 2013). The ADB has noted that small farmers in developing Asia could realize dramatic income increases by joining these supply chains, especially if they can upgrade their farming and postharvest practices. Of the various world regions, Asia has the smallest sized farms and the largest number of smallholder farmers. In the ASEAN region, available statistics show approximately 100 million smallholder farmers (Eskesen 2016). The various upstream and downstream agribusiness links also created equitable and viable opportunities for smaller agribusiness players to be incorporated deeper in the value chains, making the agribusiness approach inclusive. As a key locomotive for attaining

inclusive development, this study stresses a greater need for more in-depth analysis of the participation barriers as well as underlying conditions and policy actions that facilitate greater engagement and deeper inclusion of smaller players in the agribusiness landscape.

Smallholder Farmers in ASEAN

There are an estimated 100 million smallholder farmers in the ASEAN region (Eskesen 2016), each farm less than 2 ha. Farm sizes have important implications for food production because relatively large consolidated farms have the capacity to be more efficient and productive by optimizing mechanization and using modern technologies. These trends and patterns point to the unequivocal importance of smallholders in the ASEAN agri-food sector. Furthermore, smallholders face many challenges in attempting to relate to modern agri-food supply chains (IFC 2013). Among the major challenges are access to market, lack of organization, informal landholding, and poor access to credit.

The ASEAN region has also evidenced increased global and regional trade, which has been a key driver of the modernization of the agricultural sector in the region (Clarete 2004). It has spurred technological changes of production practices, shifted production from traditional to high value products, expanded food processing industries, boosted other value-added industries along the supply chain, and improved quality and safety standards. This has been particularly pronounced in plantation crops such as palm oil and cacao. While the increase in trade has provided consumers with a greater variety of products at lower prices, the distribution of benefits along the supply chains has been uneven (FAO 2014). The rapid transformation of supply chains has obvious implications on food security, particularly for the millions of smallholders in the region

who are themselves food insecure. While this transformation has led to higher quality, safer, and cheaper produce for urban consumers, market participation by smallholders is lower (Minten and Reardon 2008). Smallholders, whether in the crop, livestock or fisheries sectors, are unable to meet the quality, safety, uniformity and standards demanded at the higher end of the market. They do not have adequate access to technology, inputs, and services required to produce high quality products demanded by consumers and supplied by new market outlets like supermarkets. Also because of economies of scale in production and processing, smallholders are unable to compete with industrial production systems (Jabbar 2014). This provides a strong argument for ASEAN to consider a stronger push towards “inclusive agribusiness” approaches to sustain growth in the agriculture sector.

INCLUSIVE AGRIBUSINESS MODELS IN SOUTHEAST ASIA

Agricultural business models are basic structures or strategies that capture value along market network links of different business stakeholders (i.e., producers, traders, and buyers). Predicated on basic business principles, it is vital that every component across the system follows a coordinated and smooth-running chain to increase value and gain competitive advantage in the business. As such, agribusiness models are highly susceptible to cost additions and business risk and it has been noted that dealing with fragmented small farmers reinforces the very definition of risk and cost (Vorley, Lundy, and MacGregor 2009). This has substantial impact on the degree of discernment among smallholders in terms of market inclusivity. The range of business activities through which smallholders could gain entry to agribusiness arrangements varies across the

agri-food spectrum. The opportunity lies on “tapping the assets of agribusiness in terms of access to technology, capital, and markets to complement the assets of smallholders in terms of labor, land, entrepreneurship, and local knowledge” (Byerlee et al. 2014).

The data on business models for agribusiness within the ASEAN region is relatively scarce (Dy 2009). This lack of comprehensive studies may be attributed to the difficulty of monitoring existing business models in the agriculture sector. There is no definitive means to delineate these models into neatly defined categories since some of these have overlapping functions across value chain stages (i.e., farmer-owned business models mainly use contract farming arrangements to engage smallholder farmers). However, in the interest of providing a clearer and more critical analysis, this study devised an appraisal of the various agribusiness models across the varying stages of the value chain based on comparative prevalence/adoption of the model as well as relative benefits and risks for small farmers that are associated with the model (Table 2). Table 2 also gives an assessment of the relative adoption of the different agribusiness models along the supply chain.

Agribusiness models inclusive of small farmers in ASEAN include contract farming, management contracts, land concessions, farmer-owned businesses, and upstream and downstream business links. Each will be described in the sections that follow.

Contract Farming

This involves agribusinesses (including processing and marketing firms) forming an agreement with farmers for the production and supply of agricultural products (Eaton and Shepherd 2001). The arrangement involves specification on volume and quantity of supply, purchase price, and agreed delivery date terms

Table 2. Inclusive agribusiness models across different stages of the value chain

Supply Chain	Farming and Food Production	Processing and Postharvest	Marketing and Sales	Distribution, Wholesale, and Retail
"Inclusive" arrangements to include small-scale owners and enterprises	Contract farming (e.g. nucleus estate and multipartite scheme) ++++	Contract farming agreement between processing and manufacturing firms and smallholder farmers +++++	Farmer-owned business links with agribusinesses (e.g., marketing and sales, logistics and administrative services) ++	Upstream links between agribusinesses and smallholders +++++
	Land concession arrangements +++	Farmer-owned business/ cooperative farmer links with agribusiness firms	Agribusiness links with smallholder farmers +++++	Downstream links between agribusinesses and smallholders ++
	Management contracts (e.g., sharecropping) ++			
Extent and comparative strength of agribusiness models in ASEAN	Contract farming and land concessions remain the most popular and widely practiced agribusiness models in ASEAN	Large agribusinesses and processing firms initiate linkages with smallholders through contract farming and joint ventures	Farmer-owned business links with smallholder primarily through contract farming and joint ventures	Emerging economies in Asia, particularly China, Malaysia, and the Philippines are becoming increasingly specialized in intermediate input production and upstream business activities
	Among management contract models, sharecropping is the most commonly employed land tenancy arrangement	Producer cooperatives or farmer-owned businesses also carry post-harvest operations through contract farming and joint ventures	Although trends in farmer organization are expanding, business activities on marketing and sales among farmer-organizations remain marginal	
	Plasma-Nucleus Partnerships, Indonesia	ABC Heinz supply chain with vegetable growers, Indonesia	Normincorp Mindanao, Philippines	Sino-Thai company Choern Pakard Group (CP Group) links with Myanmar farmers
Selected cases of inclusive agribusiness in Asia	Plantation farm owners (nucleus or "Inti") allot land plots for palm oil development for farmers; the agroholders also provide technical support and inputs for production	Major food processing companies like ABC Heinz have formal supply chains with local vegetable growers while they provide production inputs	As market facilitator for NorminVeggies farmer organization, their business activities include order taking, outshipment logistics as well as billing/ charging	The agro-food corporation led maize contract farming scheme with upland smallholder in Shan State, Myanmar

Note: +++++ High adoption; +++ Moderate adoption; ++ Low adoption; + Infrequent adoption

(Vermeulen and Cotula 2010).

Buyers are typically large agribusinesses firms (processors and traders), which initiate linkages with smallholder groups, stipulating provision of production inputs, financing, and extension services in exchange for delivery of commodities within quality, quantity, and price specifications (Tuan 2012). In the initial stages of crop cultivation, contract farming is the most prevalent and highly adopted model for agribusiness. There are different types of contract farming models being practiced in the ASEAN region, distinguishable by the intensity of contractual arrangement, type of product, and number of key actors involved. The Centralized contract farming model refers to supply purchase from large number of smallholder farmers given stringent quality control requirements and pre-agreed quantity of products (Melese 2011). One example of contract farming is the nucleus estate model frequently adopted in Indonesia, in which agribusiness possesses farm plantations in proximity to independent contracting farmers, e.g., the Plasma-Nucleus Partnership or the Pola Inti Rakyat (PIR) in the palm oil industry (Tambunan 2014). There is also a “Multipartite model,” which integrates various actors such as government, NGOs, and other business services. For example, cases in Vietnam involve agribusiness to provide inputs for production while the public sector renders legal support and extension programs (Melese 2011).

Since owner cultivation is the prevalent system within the ASEAN region, contract farming in general remains the most popular and widely practiced agribusiness model for both domestic and foreign investment in the region (Lastarria-Cornhiel, Melmed-Sanjak, and Philips 1999). Multinational firms such as Nestle, Olam, Unilever, and Carrefour source their products through contract arrangements with smallholder farmers in Asia (Prowse 2012).

Management Contracts

Management contracts include a variety of agreements in which farmers are contracted to work on the agricultural land belonging to larger-scale agribusiness or agro-holdings; the farmer is consigned as cultivator of the land. The farmer will manage production and harvest in the farmland in place of the owner or the ‘agro-holder’ (Vermeulen and Cotula 2010). The types of management contracts are differentiated in terms of the incentives received, such as fixed cash, profit sharing, and share cropping.

Share cropping is a common type of land rental widely practiced in Indonesia. The arrangement allows for tenants to cultivate crops on the land with each party acquiring shares of the production output. It is broadly criticized as a less efficient and more exploitative land rental system than fixed rentals. However, sharecropping is perceived to be more flexible and less risky for both landowners and tenants and also more beneficial for some small-scale farmers who lack credit access and have limited capital (Quan 2006). In terms of the land tenancy trends in Asia, share cropping is the prevailing approach in management contract models. Management contract models in general are adopted less as compared with contract farming arrangements.

Land Concessions

Aside from contract farming, land concessions are another frequently adopted business model in Southeast Asia. Through land concessions, agribusiness investors are granted the land-use rights for a specified period (Campbell, Knowles, and Sayasenh 2012). Land concession arrangements are prevalent among many ASEAN countries, particularly in Indonesia, Lao PDR, Myanmar, and Cambodia, where land is strictly regulated or fundamentally state-owned. In Indonesia, land ownership is

regulated under the Basic Principles of Agrarian Law (UUPA–Undang–Undang Pokok Agraria). Under this regulation, freehold access to land and cultivation rights are extended to Indonesian citizens only. Private enterprises and large commercial agribusinesses are granted various rights to exploit the land (such as the Industrial Forest Plantation [HPH–Hak Pengusahaan Hutan] and the Ecosystem Reforestation Rights [Hak Reboisasi Ekosistem]) (Tambunan 2014). Land concessions have been criticized for their impact on domestic growth and development, as well as effect on stability and land conflicts. Myanmar and Cambodia also allocate land concessions to large-scale agribusinesses (Byerlee et al. 2014).

Farmer-owned Businesses

For agribusinesses, working with larger and organized groups of farmers is sometimes more efficient. Farmer-owned businesses are formally organized cooperatives or legally incorporated entities that are involved with particular types of activities such as processing and marketing (Vermeulen and Cotula 2010). With these, farmers have greater leverage in obtaining credit and investment opportunities. Farmer-owned businesses include those with economic and business focus as well as welfare organizations. The main criticism on farmer organizations is the undue emphasis on democratic governance that often leads to inefficiencies in decision-making (Vorley, Lundy, and MacGregor 2009).

Farmer-owned businesses or cooperative farming have enormous potential for deeper inclusion of smallholders in the supply chain. However, while it has been recording notable growth, the different forms of cooperative farming have had very limited success in comparison with the independent or family farming agribusiness ventures within the Southeast Asian context. Even though the potential gains are augmented through farmer-

owned businesses, the distribution of benefits among heterogenous members of farmers is often a challenge, as the heterogeneity lends itself to group conflict (Wong 1979). Although trends show expansion of farmer organizations, their functions are largely confined within credit distribution, input provision, and farm product procurement. Other business activities across the value chain such as marketing, processing, and post-harvest operation remain relatively weak (Prakash 2003).

One of the successful farmer-owned businesses in terms of smallholder inclusiveness is the Northern Mindanao Vegetable Producers' organization in the Philippines—the Normin Veggies farmers' organization (Vorley, Lundy, and MacGregor 2009).

Upstream and Downstream Business Links

Upstream and downstream links refer to the array of business activities beyond or even supplemental to agricultural production that connect agribusinesses and smallholders or small enterprises. In the upstream spectrum, small producers are integrated via supply inputs of services to agribusinesses. Toward the downstream end, business activities that allow smallholder entry include processing, storage, transport, and wholesale facilities (Vermeulen and Cotula 2010; Vorley, Lundy, and MacGregor 2009). The business operation may be supplemental to production for the farmer or serve as backward linkage for large agribusinesses along the latter part of the supply chain, such as in wholesale or retail. In the upstream end, farmers form backward links with agribusiness for input supply such as feeds, fertilizers, and chemicals.

More prominently in the ASEAN region, there has been an observed trend of production fragmentation across the value chain. Firms are able to fragment or break down production activities and situate them in different locations,

depending on a country's comparative advantage such as low transaction cost or wage cost (Kimura and Ando 2005). Fragmentation along the supply chain allows greater involvement from different chain actors in accordance with their business specialization and comparative advantage, creating a large and interweaving production network in the region.

ASEAN possesses diverse socio-economic and political backgrounds, land tenure, cultural traditions, demographic patterns, and agro-ecological conditions. These influence the business decisions of agro-based firms and the consequent equity and inclusion of smallholder farmers. As such, there is no single business model that could facilitate inclusion of all smallholder farmers. The efficient functioning of these inclusive agribusiness models rely on good governance as well as effective public policy. Various policy measures, as well as legal and institutional framework function conjointly in setting the course toward a country's long-term goals on sustainability and inclusive growth and development. National policies steer the goals and action responses adopted by the government, while institutional environment provide the resources and capacities to develop and implement the policy goals. Legislation provides the regulatory instrument to put in effect policy objectives. The next section conceptualizes and assesses the conditions through which conditional drivers of inclusive agribusiness are facilitated.

SUCCESS ENABLERS FOR INCLUSIVE AGRIBUSINESS

Success enablers of inclusive agribusiness can be characterized as a set of policies, rules and regulations, values, institutions, and conditions that collectively facilitates deeper inclusion and involvement of smallholder farmers in the agribusiness sector. These enablers have

potential to bridge the gap between the large population of smallholder farmers and the dynamic business structures across the entire agri-food system

A Conceptual Framework to Characterize the Enablers of Inclusive Agribusiness

An enabling environment/condition for the business sector constitutes set of policies, rules and regulations, values, and institutions that jointly enhances the system through which business activities can develop. The concept of "conducive enabling environment" is thus associated with interaction or nexus among foreign firms and other business stakeholders as influenced and shaped by the imposed policies and working institutions (Konig et al. 2013). In the agribusiness sector, these sets of enabling policy measures and institutional framework collectively facilitate stronger linkages and deeper inclusion of small-scale players in the agribusiness structure (Gradl et al. 2012). The range of farm-to-fork business activities through which small players could gain entry to agribusiness value chain varies across the agri-food spectrum covering farming, production, processing, distribution, trading, exports, and retail. Such inclusive linkages bridge the gap between the transnational agribusinesses and agro-based companies and the large population of smallholder farmers across the entire agri-food system.

To situate discussion on the enablers of inclusive agribusiness, this study drew from two previous published papers. The first is the paper of Christy et al. (2009), which proposes an integrated model based on a "Hierarchy of Enabling Needs." The hierarchy classifies enablers in terms of the degree to which they facilitate inclusiveness, into three categories—essential, important, and useful. The *essential enablers* define the most necessary conditions that are needed to be achieved for the functioning

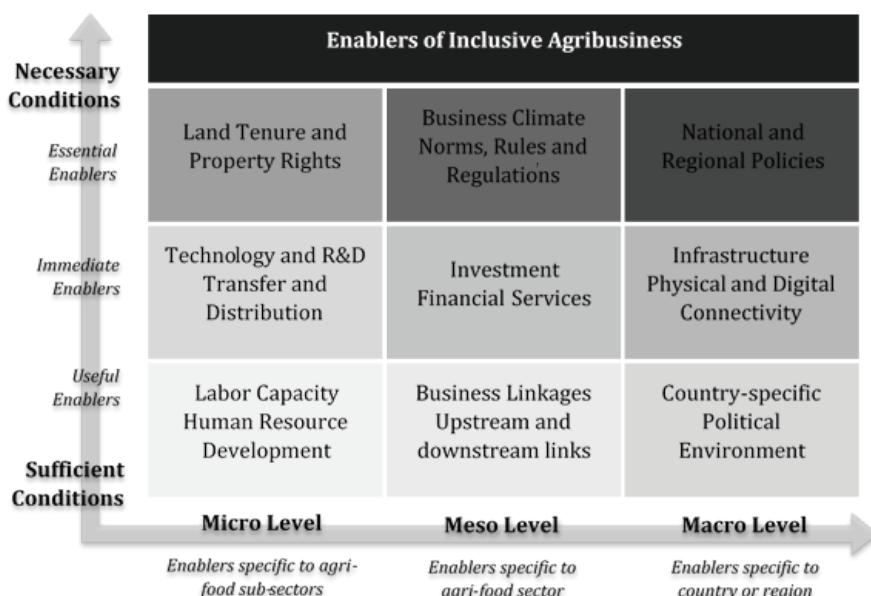
of other enablers. *Immediate (important) enablers* are second-order conditions that are corollary to the essential enablers. *Useful enablers* refer to sufficient conditions that will complement the antecedent enablers.

The various enabling conditions can be further grouped according to the interactive relationship of different institutions and sectors affecting the entire agri-food system. The second paper is that of Gross et al. (2000), which proposes a socio-organizational structure model that emphasizes impact and structural differences from the smallest unit (individual and household at the micro level), to a much bigger collective (communities, district at meso level), up to the largest scope (national or global at the macro level).

This paper proposes a new integrated matrix framework (Figure 1), juxtaposing

both conceptual models to create a more comprehensive and distinctly delineated categorization of the various enablers of inclusive agribusiness. This integrated model (Figure 1) provides a framework to map out projects and strategize policy directions and interventions aimed at greater inclusion of smallholders across the agri-food system and correspondingly the enabling conditions that shape these links. A way to interpret the framework is looking across directionality along the dimensions. Vertical directionality underscores the organizational progression of enablers from specific sub-sectors to broader level where institutions operate. Horizontal directionality can be understood in terms of tiered conditions of inclusiveness, defined in terms of overcoming participation constraints and facilitating access to markets, from the

Figure 1. Conceptual framework for the enablers of inclusive agribusiness



most useful to the most essential conditions. Although the framework shows defined categories of enablers, applying to real-world context would entail a much seamlessly interlinked categories that also rely on varying mechanisms of inclusivity. But on broader strokes, the integrated model provides a means to chart or plan policy initiatives aimed at greater inclusion of smallholders.

On the whole, the subject area of inclusive agribusiness and agri-food value chain is at its nascent but rapidly transforming stage that is why comprehensive research within the Asian context is relatively scarce, attributed to the difficulty in tracing and monitoring existing agribusiness system in the region. This study aims to fill the research gap by developing a comprehensive conceptual framework that can serve as guidepost towards more empirical research inquiry. The conceptual framework is further explicated in the ensuing section.

Macro Level Enablers of Inclusiveness

Enablers at macro level include national and regional policies, infrastructure development, and political environment. Supportive policies are deemed as necessary conditions because they lay the groundwork and provide the mechanism to operationalize large-scale cross-sectoral goals. Both physical and digital infrastructure development, for instance, require necessary funding to be implemented and therefore require, *a priori*, policies, which enable appropriate allocations from public coffers across countries. Political environment is regarded useful because of its relative importance as enabler of smallholder inclusiveness as well as the evident challenge in attaining such a goal.

Essential enablers—national and regional policies: One of the foundations of inclusive agribusiness centers on policies, which are effective to foster equity and inclusion among

small farmers both at the national and regional level. Policies comprise an entire system of principles and goals that set direction for decisions to be implemented to achieve beneficial outcomes for all stakeholders involved. At the very core of policy formulation and governance are the state and regional institutions that serve the pivotal role of helming negotiation of agreements, provision of laws to define rights, enforcement of legislation and contracts, administration of resources, and implementation of rules and regulations across industries (Christy et al. 2009).

As ASEAN moves towards a more connected and globally competitive region, policies that contribute to more liberalized trade and investment regimes are likely to open gateways for foreign agribusinesses to create upstream and downstream links with small players across the food value chain. Being integrated and open to trade becomes directly associated with growth and development of a country. For instance, when Vietnam embarked on socio-economic reform (*doi moi*) in the mid-1980s, and pursued trade liberalization, the economy, including the agriculture sector, experienced dramatic growth (Mai 2004). This has enabled large multinational corporations (MNC) in the food retail sector such as Carrefour to expand operations and work with small-scale producers in Indonesia (Vorley et al. 2009) and other ASEAN-based agribusinesses like Wilmar and San Miguel Corporation to extend operations within and outside the region. Policies that lead to deeper integration and equitable development would be expected generally to support further inclusion of smallholder farmers, across higher-valued activities in agri-food systems (Vorley et al. 2009). Regional agenda such as the AEC reflect the goal of a single market and a regionally competitive bloc, and are expected to address poverty and protect vulnerable groups through capacity building, SME development, and

promotion of pro-poor projects.

Immediate (important) enabler-infrastructure development: Physical infrastructure is key to connect food suppliers and producers across food supply chains. The past decades have seen a rapid influx of large agro-based enterprises or big supermarkets towards the developing world, particularly in the Southeast Asian countries like Indonesia, Malaysia, Thailand, and Vietnam. The modernization of the food retail system had prompted specific approaches on retail diffusion and the goods procurement system has coupled smallholder producers to large agribusinesses (Reardon, Timmer, and Mintend 2012). Physical infrastructure such as roads, railways, electric power, energy, and ports are crucial vehicles to provide access to markets. The vegetable industry in Indonesia relies heavily on transport by roads and ports for distribution of goods. Modern retailers and major food distributors (e.g., Sukanda Jaya) in Indonesia procure fresh produce supplies from vegetable farmers in South Sulawesi and Surabaya through reefer containers and non-refrigerated trucks (White et al. 2007).

Near the turn of the 20th century, the usage of internet, mobile communication, and computing power has experienced exponential growth globally (FAO 2013a). Although digital infrastructure developed much later than physical infrastructure in ASEAN, the adoption rate of digital technology as an information and communication tool is of growing importance for small-scale farmers. In ASEAN countries such as Indonesia, Thailand, and Vietnam, short messaging service (SMS) through mobile phones has become a common means to gain information on agricultural commodities (Bambawale and Ng 2016).

Useful enabler-political environment: Attaining inclusive agribusiness necessitates holistic and multi-pronged policy actions

channeled towards appropriate sectors such as infrastructure, business (industry), education, smallholders, and other social sectors. These policies should be underpinned by good governance to ensure that development programs are properly managed and resources are appropriately allocated. Furthermore, foreign businesses take into account the overall political environment and associated country risks in considering investment expansion. The quality of governance is a complementary factor that enables inclusion of smallholders primarily because the agribusiness sector does not function in silos, conducting business operations whether it is inclusive or not is subject to bureaucratic processes. A government that lacks transparency and sub-par regulatory standards adds to risk and transaction costs for business.

In contrast with developed economies, low-income developing economies such as Cambodia, Lao PDR, and Myanmar score poorly in governance, and this impedes inclusive agribusinesses particularly in these countries with large populations dependent on the agri-food sector (MacIntyre 2003). Advanced industrial countries have interweaving sets of institutions that serve to either constrain or rein in state power and thereby push governments to become more effective and efficient. In some ASEAN countries, the consistently weak and inefficient quality of governance is a major stumbling block to realizing greater inclusive agribusiness.

Meso Level Enablers of Inclusiveness

Enablers at the meso level include business climate, investment and financial services, and business linkages.

Essential enablers-business norms, rules, and regulation: ASEAN is characterized by its socio-economic, political, historical, and cultural heterogeneity. Such diversity also

engenders a complex business environment for agro-based enterprises (Christy et al. 2009). More noticeably among low-income agriculture dependent economies, there is general dissatisfaction about indicators like customs procedures, movement of goods, local investor protection, laws and regulation, as well as business incentives offered by government. Bureaucratic processes on importation and exportation increase uncertainties and impede trade across the supply chains (Teng et al. 2015a). The aim of a business-enabling environment is to entice large enterprises to pursue trade and investment, as well as directing their operations towards a country that will link local business across the upstream and downstream activities of the business.

One specific step towards the goal of facilitating cross-border trade is the implementation of the “National Single Window,” which accelerates trade procedures and reduces corruption. ASEAN acknowledges that expediting customs and clearance will lead to more effective and efficient trade. Improving these processes will also lessen the transaction costs of engaging business for traders and foreign corporations. ASEAN is endeavoring to establish an ASEAN Single Window (ASW) to better facilitate trade and deepen integration across economies (Koh and Mowerman 2013). The ASW potentially provides an integrated system that links with the National Single Window in individual AMS; it being the main mechanism of single point entry for documentation processing that operates within individual countries (Koh and Mowerman 2013). This is a major way to connect businesses in the region. The entire agri-food business sector is likely to benefit from the improved connectivity, and for smallholder producers, more opportunities to link up with supply chains.

Immediate (important) enabler—investment and financial services: For most agribusiness

firms, securing capital is difficult because agriculture-based business ventures are deemed generally to be high risk and accompanied with low returns to capital (Christy et al. 2009). From the perspective of smallholder producers, access to financial services is necessary in order to purchase production inputs to be able to start cultivation and generate income. Besides input capital, the smallholder also requires financial access to manage irregular cash flow, insurance for risk due to unexpected events, and land lease, among others. However, provision of credit from large commercial financial institutions is rigorously constrained because of the high-risk probability of smallholder farmers. There is need for more “inclusive finance,” which means “intensifying the depth of outreach and providing services to marginalized groups, especially women, reaching beyond conventional microcredit to the people at the bottom of the economic pyramid” (FAO 2013b).

Useful enablers—business linkages: There seem to be many incentives that serve as impetus for agribusinesses to form linkages with smallholder farmers. Important ones are land access, supply expansion, and financial access. In the ASEAN region, land access is affected by legal impediments that inhibit foreign nationals to conduct agribusiness activities, as discussed previously in this paper.

Micro Level Enablers of Inclusiveness

Micro level enablers refer to the smallest units through which institutions and conditions could influence the level of inclusiveness in agribusiness. This may refer to small farming units that focus on specific agricultural sub-sector like crops, fisheries, or livestock.

Essential enabler—land tenure and property rights: The productivity of the agriculture sector depends heavily on the optimal use of the factors of production, particularly agricultural land. For the majority of the poor smallholder

farmers, land purchase is less pragmatic and highly risky since the market value of land could be greater than their returns from production. Due to the less accessible nature and notable entry barriers in the land sale market for the small-scale farmer, there has been significant attention over land rental markets as a means to access land (Quan 2006). Moreover, the land lease market thrives in the region due to market imperfections (poorly defined property rights, inefficient land titling, restrictions on transactions) as well as the unequal distribution of land that persist across ASEAN member countries (Childress 2004). The lease market would then appear to provide the most optimal means for smallholders and rural poor to access land.

Immediate (important) enablers—agricultural technology and R&D transfer: Technology transfer and dissemination are critical enablers to develop technological know-how and increase productivity among smallholder farmers. They also serve as pre-conditions toward wider engagement in other business activities across the agri-food landscape. Studies have shown that greater investment in technology diffusion and agricultural research and extension lead to increased productivity growth in agriculture (CAPSA 2014).

The case of Coco Technologies, a privately held company that specializes in products from coconut husks in the Philippines, exemplifies how technology diffusion can result in overall welfare improvement (Ganchero and Manapol 2007).

Useful enablers—capacity building and human resource development: The adoption of agricultural technology and a concomitant improvement in production efficiency has been closely associated with the characteristics and capacity of the labor force. A higher educational level among farmers has been shown to boost income growth (Marlaine et al. 1980) by

improving the adoption of technologies and management practices. There is thus high need for new approaches on capacity building and information and knowledge dissemination program to narrow the gap.

Philippine-based Jollibee Corporation Foundation has strived to assist smallholders in accessing markets and increasing their income through the Farmer Entrepreneurship Program (FEP) (Jollibee Group Foundation 2015). The program offers education and training for farmers, imparting them with business skills that enable links to institutional markets such as restaurants, supermarkets, and food processing firms. FEP also enables farmers to learn agro-enterprise skills, explore partnership and collaborative initiatives, as well as expand their training through collaborations with academic institutions.

CONCLUDING REMARKS

The issues of development and sustainability have increasingly provided impetus for smallholder inclusion in agribusiness. Among all other sectors, agriculture remains a fundamental engine for development, given the sector's integral contribution to economic growth, livelihood, and environmental sustainability (World Bank 2008). Agriculture-dependent rural poor farmers are a large subset of the population in the ASEAN region's developing smallholder agriculture, and therefore is one powerful means for sub-populations to break out of poverty and hunger. Many studies support how generated growth from the agriculture sector proffers a greater degree of effectiveness in terms of reducing poverty than other sectors (Seville, Buxton, and Vorley 2011). This impetus places emphasis beyond economic gains and business growth towards inclusive, equitable, and convergent development that benefits all segments of the

population. Connecting smallholder farmers with dynamic and well-functioning markets across the agri-food chain serves a pivotal role in long-term strategies to better and uplift the welfare of many vulnerable groups from abject poverty and food insecurity. In the longer term, rising beyond corporate social responsibility (CSR) is the notion that core agribusiness needs to include small farmers as part of business plans in order to sustain the business.

The disconnect between large agro-based firms and smallholder farmers should be a thing of the past as the agribusiness sector has acknowledged the growing need for a deeper involvement of an expanding population of smallholders in the agribusiness sector. Smallholder farmers, particularly in the developing economies, offer a viable opportunity to secure the multiple sources of food supply (IFC 2013). However, there are a number of constraints that contribute to the disinclination of agribusiness to engage with smallholder farmers. The areas of concern include inconsistent output, dispersed production, weak negotiating stance, constrained capacity to upgrade and qualify in formal market requirements, and less access to technology and financial services (Vorley et al. 2009).

What are the motivating factors for inclusion of smallholders in the agribusiness structure? For agribusinesses, one of the main motivations is market-driven—to secure supply. Taking into account that production of agricultural commodities is susceptible to risk (e.g., weather vagaries, pest infestation, natural hazards), ensuring a stable supply base and diversifying sources of supply contributes to improved food availability (Vorley et al. 2009). The other business case for smallholder inclusion is motivated by a more profound value system as well as the socio-economic and political impact on the business activities of (especially) large agri-food companies. The CSR concept rises

above profit-maximizing goals to support larger responsibility to society such as human rights, labor standards, and environment sustainability (Srivastava et al. 2012). Within this ethical and moral context of CSR, involving smallholders in the business structure aligns with agribusiness' social accountability. This has, until recently, appeared to be a main driver for agribusiness to use CSR as a means to be inclusive.

Experience in the ASEAN region has shown that top policy support is an important catalyst for change, either at the level of the ASEAN Summit (Heads of State) or the AMAF (ASEAN Ministers Meeting on Agriculture and Forestry). Policy changes have been beneficial open pathways and corridors for deeper trade and higher levels of investment across the region. Regional policy measures and regulatory frameworks have lain the groundwork to support inclusive agribusiness. However, there remain policy gaps that hamper the gains of economic convergence and consequent trickle down of development towards the vulnerable and marginalized sectors of population such as the rural, poor small-scale farmers. The full and effective functioning of the essential policy enablers is being impeded by weak institutions and poor implementation of policy measures. This has direct bearing on the important enablers of smallholder inclusion such as financial access, credit, and infrastructure investment. Poor implementation of measures and regulatory frameworks impede progress, particularly in resource allocation. This affects agricultural development goals and the capability of smallholder farmers to develop linkages within the agribusiness system. Adapting to the changing structure of the agribusiness landscape would necessitate optimizing the potential gains on these linkages to realize the greater benefits for smallholders in the long run.

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