

UNIVERSITY OF THE PHILIPPINES
CENTER FOR INTEGRATIVE AND DEVELOPMENT STUDIES
PROGRAM ON ESCAPING THE
MIDDLE-INCOME TRAP: CHAINS FOR CHANGE

#### **UP CIDS DISCUSSION PAPER 2020-10**

# **Going Against the Tide**

The Middelen Magna Trade Inc.—Mahusay Case Study

Tara Alessandra S. Abrina

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# **Going Against the Tide**

# The Middelen Magna Trade Inc.—Mahusay Case Study

Tara Alessandra S. Abrina<sup>1</sup>

**ABSTRACT** ■ In 2008, the United Nations Development Programme (UNDP) published a report that documents the ability of firms to be inclusive of the most marginalized sectors of society within the bounds of markets. On this basis, the Program on Escaping the Middle-Income Trap: Chains for Change (EMIT C4C) of the University of the Philippines Center for Integrative and Development Studies (UP CIDS) posited that the "litmus test of inclusion [in a value chain...] is whether or not such integration of the poor as producers and consumers eventually lifts them out of poverty" (Balaoing-Pelkmans 2020, 12). In this discussion paper, I present a case study that aims to (1) provide a snapshot of a fisheries value chain from the point of view of its lead firms and articulate how the value chain impacts its most primary producers and (2) surface the motivations of lead firms for their strategies. As the fourth case study for the EMIT C4C, the evidence provided may also be used to expand and possibly generalize the Program's theory of change for poverty alleviation via inclusive value chains. The vertical integration of the three main subjects/actors via their interlinked value chains—and the value that it has created—is evidence to support a definition of inclusivity along the utilitarian concept of interlinked value chains, even if the value created is not explicitly higher revenues for the smallest producers in the chain (i.e., fishers). Though this particular value chain has shown to have failed the "litmus test" of inclusivity, the introduction of Middelen did create value for upstream actors in four ways: block and timely payments; scale; price and buyer criteria certainty; and transparency.

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Motivations seem to represent the classic business case in van Tulder et al.'s (2014) matrix of motivations, which is evidence to suggest potential for generalizability and replicability.

**KEYWORDS** ■ Inclusivity, business models, fisheries, value chains, sustainability, case study

## Introduction

In 2008, the United Nations Development Programme (UNDP) published a report that synthesized the learnings from fifty inclusive business models around the world. In it, they document the ability of firms to consider and create value for the most marginalized sectors of society within the bounds of markets (UNDP 2008). On this basis, the Program on Escaping the Middle-Income Trap: Chains for Change (EMIT C4C) of the University of the Philippines Center for Integrative and Development Studies (UP CIDS) posited that the "litmus test of inclusion [in a value chain...] is whether or not such integration of the poor as producers and consumers eventually lifts them out of poverty" (Balaoing-Pelkmans 2020, 9).

To provide data to support this proposition, the EMIT C4C documented and analyzed the case studies of three large-scale agricultural value chains in the Philippines—that of vegetables, rice, and bananas (Pelkmans-Balaoing 2019). This discussion paper serves as the debut of a fourth case. In this study, I document the first fishing value chain for the project, and the first case that involves more traditional trader-lenders as lead firms in the value chain.<sup>2</sup> It is therefore an arguably more representative model of agri-fisheries value chains in the Philippines.

The EMIT C4C has so far documented value chains with lead firms that are purposefully designed to provide public goods and services, such as a foundation, a large social enterprise, the church, or government units. Acknowledgement goes to Ms. Jane Lynn Capacio for this important observation.

Following the discussion of Pelkmans-Balaoing (2019), this case study takes on an explanatory route to gather evidence for the research question: In what ways does this value chain impact its most primary and marginalized producers and what are the motivations of the lead actors? Then, if the information suffices, the evidence provided may also be able to expand and generalize EMIT C4C's theory of change that inclusive value chains ameliorate the lagging agricultural sector.

This case study is structured as follows: The next section begins with a background of the fisheries industry in the Philippines, with special emphasis on squid fisheries. In the methodologies section, a brief literature review on inclusive value chains, interlinked credit arrangements, motivations for inclusivity, and a formal proposition of the case study as a research method is laid out. The fourth section presents the case study of a traditional squid fisheries value chain in Cawayan, Masbate from the point of view of one of its most successful consolidators, Mrs. Naneth Mahusay. This is followed by a documentation of the entry of a new and inclusive intermediary link-Middelen Magna Trade, Inc.-and documents the changes that it has brought to the traditional value chain, if any. The results and discussion sections then attempt to align some details of this case study to the theories mentioned in the literature review and aim to contribute to the growing literature on inclusive business models. The last section concludes the study.

## **Background**

The Philippine fisheries industry

In 2016, the fisheries sector of the Philippines was ranked eighth in the world for its 2.1% contribution to the total global production of fish, crustaceans, mollusks, and aquatic plants. It contributed 1.4% (at constant 2000 prices) to the Philippines' gross domestic product (GDP) in 2017. Such a share is valued at almost Php 123 billion (at constant 2000 prices) and is shared among its commercial, municipal, and aquaculture sectors (see **TABLE 1** on next page).

TABLE 1	Data on Philippine fisheries, 2017 and 2018

	Volume (% of PH)	Value (% of PH)	Employment (% of PH)	Value per capita
Commercial	946,000 (22%)	61 million (23%)	16,500 (1%)	3,700.00
Municipal	1,106,000 (25%)	94 million (36%)	1.4 million (85%)	68.51
Aquaculture	2,304,000 (53%)	110 million (42%)	226,000 (42%)	487.76
Total	4.4 million (100%)	265 million (100%)	1.6 million (100%)	

Source: PSA 2018

Municipal fisheries' contribution was more than that of commercial fisheries in terms of value (Php 94 million) and volume (25%) in the period from 2017 to 2018 (PSA 2018). Despite this productivity, the Philippine Statistics Authority (PSA) has consistently identified fishers to be among the "poorest of the poor" in the Philippines from 2006 to 2015. Fisher poverty incidence was the highest from 2006 to 2012 among nine sectors (Bersales 2017).<sup>3</sup> This may be because the municipal sector value is shared among its 1.4 million operators, making the value per capita only 1.8% of that of the commercial sector's (see last column of **TABLE 1**).

It is important at this point to briefly compare the distinct industry features of aquaculture, commercial, and municipal fisheries. In terms of economic producer theory (Mankiw 2008; Hindriks and Myles 2013), aquaculture has many similarities with crop farming, in that the level of output and the timing of harvest can be more or less estimated with some certainty based on the resources invested (e.g., capital and inputs).

These sectors include: fishers, farmers, children, self-employed and unpaid family workers, women, youth, migrant and formal sector workers, senior citizens, urban dwellers (Bersales 2017). The sectors are not mutually exclusive.

On the other hand, commercial and municipal fisheries are *capture* fisheries—that is to say, their output is highly dependent on the wild stock of fish (ADB 2014). In many cases, especially here in the Philippines, this stock is unknown at any given time and location. It can be estimated however using certain proxy metrics, such as catch per unit effort (CPUE). An example of CPUE is how much of a particular species of fish is caught (measured by weight) on a normal or average fishing day (ibid.). CPUE can be used just as well as fishers' estimation of stock based on experience.

In many small-scale fisheries in the Philippines, these metrics—the CPUE (ibid.) and fishers' qualitative perceptions of current versus past catch (Muallil et al. 2014)—are found to be declining. This highlights the growing risk and uncertainty involved in the capture fisheries sector relative to aquaculture—of which value and volume have been steadily increasing (PSA 2018). As to the difference between commercial and municipal fishers, Philippine law distinguishes between the two only in capital—that is, one is considered a commercial fisher when the capacity of their boat exceeds three gross tons of catch (ibid.). The most important policy implication of this distinction is that, though commercial fishers are restricted from harvesting nearshore, many kinds of fish that can be caught at scale are found within commercial fishing grounds, and municipal fishers still need to compete with these larger fishers.

For the rest of this paper, I focus only on municipal capture fisheries.

A wicked problem in Philippine municipal capture fisheries

"Wicked problem" is a term that was first popularized in a think piece by H. Rittel (1972). In the simplest of terms, wicked problems—as opposed to "tame" problems in the sciences and engineering—are generally societal problems that are difficult to prescribe solutions to. This is because these kinds of problems are characterized by "(a) incomplete or contradictory knowledge; (b) the number of people and opinions involved; (c) the large economic burden; and (d) interconnected nature of these problems with other problems" (Pelkmans-Balaoing 2019, 8).

In Philippine capture fisheries, Rosales et al. (2017) and the Asian Development Bank (2014) describe how small-scale fishers receive the lowest profit margins among the actors in the supply chain. This gap in margins is even more pronounced in the export value chain for highly traded seafood commodities (ADB 2014). In case studies of fisheries value chains in the Coral Triangle (of which the Philippines is a part), the maximum value retention of fishers for their seafood products is 15%. For two tuna fisheries in the Philippines for example, the combined profit margins of the fishers and their post-harvest processors are only 12 to 33 percent of what their exporter earns (ibid.).

One main problem identified by the Bureau of Fisheries and Aquatic Resources (BFAR)<sup>4</sup> is that much of this value leaks out due to poor post-harvest practices and that the fishing industry is structured such that these losses are absorbed by the primary/upstream chains (BFAR 2018). Post-harvest losses are estimated to be 20 to 40 percent of the total volume caught, which costs the industry Php 57 billion per annum (ibid.). Therefore, much like that of other agricultural products in the Philippines (Mopera 2016), sections in the value chain that have much room for efficiency gains for upstream producers and buyers are in post-harvest and marketing.

In order to address post-harvest losses and increase competitiveness, capital for storage and processing facilities, as well as training and information on quality criteria, are needed. However, akin to the rest of the agriculture sector, there is very little access to formal credit in small-scale capture fishing communities (Samonte and Ortega 1992). It is possible that credit is even less accessible to capture fishers who have less collateral than farmers in terms of owned land (ibid.). Because of this uncertainty in capture fisheries, the risk of defaulting based on the certainty of output is also much higher. Post-harvest training is also

The Bureau of Fisheries and Aquatic Resources is the government agency responsible for the development, improvement, management, and conservation of the country's fisheries and aquatic resources. It was reconstituted as a line bureau under the Department of Agriculture by virtue of Republic Act No. 8550 (Philippine Fisheries Code of 1998). One of its primary mandates is preparing and implementing plans for the development of the national fisheries industry.

limited by the capacity of the government to provide this extension service (BFAR 2018). Therefore, the cycle of poor value retention continues, and municipal capture fishers are unable to increase their share of the value.

In situations like these, wicked problems can be ameliorated by intermediaries who plug what Pelkmans-Balaoing (2019) terms as "institutional voids." In this case, in the absence of equipment that can prolong the shelf life of products, marketing—such that product is sold quickly enough that sophisticated storage or processing is not required—becomes another avenue through which post-harvest losses can be minimized at the fisher and consolidator levels. It is possible that this is the reason why the BFAR (2018) identified marketing as a priority activity in its Comprehensive Post-harvest, Marketing, and Ancillary Industries Plan 2018–2022. It is also the reason why consolidators and buyers play such crucial roles in the value chain of fisheries

#### Squid and cuttlefish

On the basis of value, the top seafood products that make up the Philippine fisheries sector are tuna, seaweeds, shrimps, crabs, octopus, grouper, squid, ornamental fish, roundscad, and sea cucumber. Of these, the squid capture fisheries comprised five percent of the total value of fisheries both in 2015 and 2017; its value in 2017 was Php 3 billion (PSA 2018). In Luzon, the provinces of Masbate, Palawan, and Quezon were the top producers of squid and cuttlefish products from 2015 to 2017.

Squids, cuttlefish, and octopus belong to a class of mollusks called cephalopods. The peculiar reproductive biology of squids and their adaptive capabilities to climate change may reduce the uncertainty of catch rates and production for small-scale fisheries. Each squid will live for only three to five years; such short lifespans warrant high reproduction rates for the success of the organism (Doubleday et al. 2016). Studies have noted increases in the global population of squids, while the rest of fisheries stocks are dwindling (ibid.). This could be because squids are able to adapt to extreme changes in their environment, including temperature anomalies and ocean acidification.

As a viable protein substitute for other fishery products, this could potentially give squids an important role in curbing an "imminent" collapse of global fisheries (Worm et al. 2006; 2009).

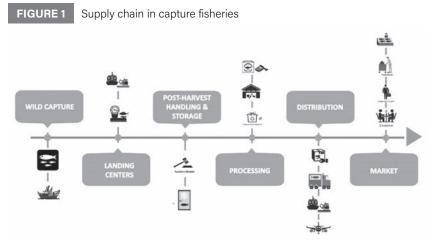
# Methodology

Because of the "how" and "why" nature of the research questions, I employ a qualitative research methodology known as a case study (Yin 2018). Aside from the descriptive aims of this case study, it is also structured to attain two goals. The first is to work on expanding theories (ibid.). In particular, I attempt to add more rigor to EMIT C4C's theory of change. The second goal, if the data gathered prove to be sufficient, is to use the evidence to further generalize these theories—not as a sample to estimate the likelihood or central mean for the success of this theory of change (as in statistical generalizability)—but rather in an analytical generalization. It is for this reason that the extensions—and analytically, the limitations—of EMIT C4C's theory of change will be detailed in the next sections.

#### Inclusive value chains

According to M. E. Porter (1980), an actors' value retention is largely pre-determined by industry structure. Such a line of discussion implies that the marginalization of some actors (i.e., poor value retention) is taken as given, and that the governance (M4P 2008) of the value chain cannot be designed towards making value shares more equitable. Although an interesting topic to explore, this is a notion that the EMIT C4C project rejects, based on case studies of inclusive value chains that provide evidence to the contrary (ibid.). For this study, I therefore focus on a smaller frame of reference that is more appropriate for this case study: the value chain (ibid.; see also Porter 1985; Rosales et al. 2017)

Although handbooks have been made with guidelines on using value chains to analyze wicked problems (M4P 2008), I go back to the original concept of the value chain as posited by Porter (1985) in his book on competitive advantage. A value chain, in the simplest of terms, is a map of the activities a firm does to produce a product or service



Source: BFAR 2018

for their buyers (M4P 2008; Rosales et al. 2017). An example of a value chain is illustrated in **FIGURE 1** (see above). Such a disaggregation of activities allows a firm to identify areas where they can either (1) minimize costs relative to, and/or (2) differentiate their product/service from other competing firms (Porter 1985). However, with recent developments on the idea of an appropriate "entry point" (Rosales et al. 2017), a value chain can and has been used in a development agenda to pinpoint exactly where interventions can be made in favor of target sectors, such as the poor (M4P 2008). Furthermore, that a value chain is a tool used to gain relative advantage implies that it is coded from the point of view of one lead firm,<sup>5</sup> as opposed to the industry supply chain.

Despite these recent developments, an often-overlooked innovation of Porter's (1985) original approach was the view that upstream and downstream actors each have their own value chain(s)—even buyers. He mentions that the firms that design and manage their value chains to align with those of their forward and backward links gain this

<sup>&</sup>lt;sup>5</sup> Lead firms are responsible for the governance of the system of production (Sturgeon 2001; M4P 2008) and are capable of investing large-scale resources (Pelkmans-Balaoing 2019).

"competitive advantage" over other rival firms (ibid.). More recently, he explicitly writes about how this view facilitates a culture of shared value along the chain (Porter and Kramer 2011). Therefore, the original value chain concept in Porter's (1985) book may not be as limited to corporate or business settings as development practitioners believe (M4P 2008). This innovation is notably overlooked even in EMIT C4C's working definition of inclusive value chains thus far.

In one of EMIT C4C's discussion papers, Pelkmans-Balaoing (2019) qualifies the UNDP (2008) definition of inclusive value chains by invoking the concept of collective action: that different actors in the value chain collaborate to provide missing public goods and services (i.e., institutional voids) so that all actors are able to access and participate in the market. Said discussion paper aimed to explore the motives of lead firms for being involved in such inclusive arrangements as well. It invoked societal responsiveness as one hypothesis, referencing van Tulder et al.'s (2014) matrix of phases towards inclusivity (authors used "sustainability"), which distinguishes intrinsic versus extrinsic motives and liability versus responsibility attitudes of lead firms towards their marginalized partners in the chain.

In this paper, I will attempt to provide more rigidity to this framework by supplementing it with Porter's (1985) and Porter and Kramer's (2011) "shared value chain" approach. That evidence for inclusivity in value chains might be found not just among attitudes of actors in one long value chain but more so in the complementarity of their respective value chains at the level of their granular activities. This approach also allows a certain measurability of inclusiveness by mapping out value chains. One can also observe this concretely in the way that (informal) credit in agricultural value chains is interlinked to other markets.<sup>6</sup>

<sup>6</sup> Although missing markets are in themselves an interesting topic to explore, simply note here that the absence of a market that is linked to credit does not preclude the value chain's ability to interlink that missing market's values. We see this in Platteau and Abraham's (1987) observation that some personal loans are linked to a social obligation of mutual care between the parties. Acknowledgements once again goes to Ms. Jane Capacio for this idea.

#### Interlinked credit contracts

One of the most ubiquitous forms of (informal) credit agreements observed in small-scale fishing communities around the world involves a trader using credit (in the form of cash advances) to secure future fishing harvests (Platteau and Abraham 1987). This kind of credit agreement is so widely used that traders have often come to be known as trader-lenders, and that it is not only observed in fishing communities but also in farming (Esguerra, Nagarajan, and Meyer 1993).

Besides the usual trader-lender arrangement, Platteau and Abraham (1987) also observe two other kinds of credit contracts in small-scale fishing villages in India: one that is used for personal expenses—such as health, educational, or everyday subsistence—and is linked to the social obligation of future care; and another that ties future labor instead of output to credit. These three kinds of credit contracts are collectively known as "interlinked credit contracts" in the literature (Platteau and Abraham 1987; Bell 1988; Esguerra, Nagarajan, and Meyer 1993), because of the way the credit market is tied to markets for other goods and services.

In this case study, I focus on the first kind of interlinked contract: output-tying credit. Note how the trader and the fisher simultaneously act both as producer and consumer in these kinds of contracts: the trader is a producer of credit and a consumer of fish, while the fisher is a producer of fish and a consumer of credit (see **TABLE 2** below). In other words, their value chains are not just linked at the point of their transaction but are exactly complementary: their input and output are two sides of the same coin. This complementarity, I hypothesize, is precisely what makes the relationship mutually beneficial—a concept

TABLE 2 Simultaneous producer and consumer roles in interlinked creditmarket transactions

Market/role	Producer	Consumer
Credit	Trader	Fisher
Fish	Fisher	Trader

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I will call "interlinked value chains" in this paper. I explore this further as we describe the relationships among the actors in our value chain case study. The marriage of the two conceptual frameworks will allow us to explore a working and measurable definition of inclusivity.

## A framework for understanding motivations and ontological caveats

The second research question surfaces the motivations of firms to move towards this definition of inclusivity. In line with the EMIT C4C's roster of case studies (Pelkmans-Balaoing 2019), I adopt van Tulder et al.'s (2014) typologies of businesses transitioning towards sustainable models (see **FIGURE 2** below).

Liability Responsibility Inactive Active tension intrinsic (mixed) Proactive tension Reactive extrinsic 4: Societal Business case: 1: Classic 2. Defensive 3: Strategic (New Economy)

FIGURE 2 Phase model of sustainable (business) development

Source: van Tulder et al. 2014, 12

In **FIGURE 2**, we see how van Tulder et al. (2014) identify two dichotomies (or tensions): one between an intrinsic and extrinsic sense of societal responsiveness, and the second, between a liability- or responsibility-based attitude. They then create a matrix that typifies combinations of these two dichotomies into four business archetypes (ibid., 42–43):

- (1) Classic (inactive; intrinsic societal responsiveness, liability-based attitude): here, a business is essentially motivated to adopt sustainability strategies by "concrete quantifiable profit" (ibid., 42);
- (2) Defensive (reactive; extrinsic societal responsiveness, liability-based attitude): a defensive business adopts sustainability as a means to avoid financial losses, whether from reputation or legislation;
- (3) *Strategic* (active; intrinsic societal responsiveness, responsibility-based attitude): a strategic business sees sustainability as a strategy for long-term competitiveness;
- (4) Societal (proactive; intrinsic/extrinsic societal responsiveness, responsibility-based attitude): sustainability is seen by the societal business case as a means to create new kinds of value.

Curato (2018), however, in an article on the ontology and presuppositions of the middle-income trap discourse, cautions against discourses on developmental progressions like these because they tend to carry many implicit, normative assumptions about what the "default" trajectory should be. On the middle-income trap discourse, Curato (2018, 12) writes:

This raises a conceptual question, as to whether the highincome category is comparable to a teleological end state where economies will ultimately converge, or a moving target depending on the performance or definition of prosperity by high-income countries.

In the case of van Tulder et al. (2014), these four transitional phases are presented as sequential steps that businesses take towards inclusivity. This hints at the authors' ontological and teleological frames of reference: that purely for-profit business models and social responsibility models are mutually exclusive. Curato (2018) however points out that such discourse is not inherently "trapped;" that it is important only that such a study critically recognizes its own contextual underpinnings.

Therefore, to be explicit about my proposition's context, our working definition of inclusivity (interlinked value chains) is based on the economic concept of utilitarianism, in that value is created between actors when needs are satisfied. Furthermore, because this case study must be designed to act as an embedded unit of the larger EMIT C4C action research project, it adopts per capita income relative to poverty thresholds as a proxy for the welfare of its marginalized actors and uses the "litmus test of inclusion" (Pelkmans-Balaoing 2020, 12). By extension, profit margins and/or value retention relative to other actors will also be used to test and validate the interlinked value chain concept. These are by no means the only measures of welfare available, where shared value can also be non-monetary such as morals, culture, and ethics (Porter and Kramer 2011), but this is the limitation of this case study. It also does not aim to demonstrate the robustness of this measurement but seeks only to build a theoretical foundation of such a measure from field observation.

#### Data gathering

An embedded type of case study is one that can involve several units of analysis (points of view) for data triangulation (Yin 2018). In simple terms, these are differing points of view of one issue, phenomenon, or organization. Because the value chain is made up of actors fulfilling their specialized role (as in **FIGURE 1**), and each actor is vertically linked to the last, these actors neatly become the sub-units of analysis that I use to study the entire value chain. The main units of analyses by default are therefore the lead actors (or lead firms).

One main unit of analysis is the main local consolidator, Mrs. Naneth Mahusay, her husband, and two men who contribute their services for consolidation. They allow me to observe one full morning's operations. They then invite six of their most active fisher-suppliers for interview, who serve as another unit of analysis. I also briefly interview the municipal agriculturist of Cawayan, who is not an actor in the value chain but whose account is representative of the municipal local government's role in the Middelen-Mahusay value chain (and the fisheries value chain from Cawayan in general). Some observations I have made while on the field are also documented. In Manila, I am

afforded an interview with Ms. Vina Cansanas Baybay, the owner of Middelen Magna Trade Inc., who provides the last and most downstream unit of analysis. She requested that I do not interview her buyers (i.e., Gerry's Grill and Gerry's Grill commissary), to which I complied.

A more comprehensive design would have been to include the points of view of horizontally-linked actors—direct competitors of the actors. For example, I could have interviewed fishers who do not sell to the Mahusays, or direct competitors of the lead actors, such as another consolidator in Cawayan, other suppliers of Gerry's Grill, or buyers of the Mahusays from Cebu or Manila. I am limited however to 24 hours of data gathering on-site—from the noon of March 21, 2019 until noon of the next day—thus, I have only interviewed the actors directly involved in the Middelen-Mahusay value chain.

This case study thus takes on the points of view of a total of four aforementioned key informant interviews, with Mahusay and Middelen being the main units as lead firms. Triangulation (ibid.) is therefore severely limited to the first three actors in the value chain and one that is indirectly involved in the value chain, that is, the local government. Separate validation meetings were held in October 2020 with Mrs. Naneth Mahusay and Ms. Vina Baybay to confirm if the author's understanding of their contexts and operations was accurate. Any edits to the previous versions of the manuscript as a result of these meetings are in the footnotes.

Moreover, a case study (ibid.), as well as any benefit-cost analysis (Hanley, Schläpfer, and Spurgeon 2003), requires that the boundaries are explicitly set by the researcher; otherwise, the analysis of societal challenges can start to become very large and unwieldy. For our purposes, any measure of inclusion or "societal challenges" starts and ends with the fishers in Cawayan whose product ends up being sold by the Mahusays.

# Case study: Interlinked markets in a fishing community in Cawayan, Masbate

Masbate is administratively part of the Bicol region and is one of the southernmost islands of Luzon. Although it is politically part of Luzon, it is closer to Visayas in terms of culture and language. To illustrate, the main language spoken in the municipality of Cawayan, the site of this case study, is Cebuano.

The province of Masbate is one of the poorest provinces in the Philippines (PSA 2020). In 2018, despite having the lowest poverty threshold in the Bicol region, a quarter or 51,000 families in Masbate were considered poor (ibid.). Its main economic output is agriculture.

Manila

Manila

Mindoro

Malay

Masbate Island

Masbate Island

Masbate Island

Masbate Island

Source: Google Maps

Particularly, it is second in the country for producing cattle and livestock, but it is also known for other agricultural products such as copra, corn, and rice. Along the coasts, fishing is a major economic activity; the Visayan Sea is one of its most important fishing areas.

The municipality of Cawayan is located in the lower east coast of Masbate Island, facing the Visayas islands of Panay and Cebu. According to its municipal agriculturist, the main agricultural product is palay (C. Mercader, personal interview, March 22, 2019), even though about half of its barangays are involved in the fisheries industry (48%). Cawayan is home to almost 2,000 hectares of fish ponds that produce prawns, crab, tilapia, and milkfish for aquaculture (ibid.). However, during the validation meeting with Mrs. Naneth Mahusay, one of the municipality's most influential consolidators of seafood, its most competitive product is wild-caught seafood. The capture fisheries sector, in particular, is known for its squids and scallops.

A visit to the Municipal Agricultural Office (MAO) of Cawayan required a ten-minute ride by tricycle from Barangay Poblacion, the town's main economic and activity center. Located far from the shore, the office was situated inland beside the national highway, atop a small hill next to tall grasslands. The interview with the MAO revealed that the municipal government was not familiar with Naneth Mahusay, but is more familiar with the Taiwanese export plant and the aquaculture farms in Cawayan. Beside the office was a large building in construction, which the MAO claims to be a post-harvest facility for fisheries products.

During the validation meeting with Mrs. Naneth Mahusay, I have noted that she was not familiar with the name of the municipal agriculturist. She also challenged most of the information Mercader had said about Cawayan's most competitive agricultural products.

#### Production

Just an hour's boat ride from the shore of Barangay Poblacion, the waters are abundant with squid.

FIGURE 4

Across the street from consolidator Naneth Mahusay's base of operations



Photo credit: XX

There are two species available in this area: *pusit lumot* and *pusit calamares*. By 4:00 to 5:30 p.m., fishers can be seen wading through the low tide towards their boats (see **FIGURE 4** above). These small boats parked on the sand are usually either rented from their consolidators or are owned by the fishers. Pushing the boats until the waters are deep enough to keep the hulls afloat, they head out to the west and south into the Visayan sea as the sun sets each day.

By nightfall, the fishers use medium-sized torches (see **FIGURE 5** on next page) only to see their equipment: a hook and line, which they call *buhay-buhay*. Using live bait, locally called *lawian*, they catch the squid with hook and line, one cephalopod at a time. They then keep these squids in styrofoam boxes with some ice slurry until they reach the shore. On good nights when the moon is full, and it was not so hot during the day, a fisher can reportedly catch up to ten kilograms. On lean nights, especially when there is no bait fish to be found, they may only catch three kilograms. They do not use large lights to attract the squid as is the practice in other places, and neither do they stay out for more than one night at a time. The fishers also claim that all the fishers in the area use the same simple fishing equipment and have access to the same information on when and where fishing for squid is most optimal.

By 7:00 to 8:00 a.m. the next morning, the fishers proceed to their consolidator of choice to sell their catch. Sometimes, if a different member of the household is responsible for the sales and marketing, the fishers would head home where usually the wife or the children would be waiting to bring the catch to the local consolidator.

The consolidator then sorts the squid according to size then weighs them. A consolidator can be identified by having a large outdoor space with a linoleum-topped, tilted table (to drain the liquid through one corner) and a weighing scale that is tared according the weight of their plastic crates (see **FIGURE 6** on next page).

With this set up, the average fisher in Barangay Poblacion is reportedly able to sell around four to five kilograms daily at a price of Php 180 (for pusit calamares) or Php 260 (for pusit lumot) per kilo to a local consolidator (as of March 21, 2019). This means that, every day, if the average fisher was able to catch and sell two kilos of pusit calamares and two kilos of pusit lumot, that earns them a



Photo credit: XX

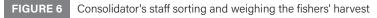




Photo credit: XX

gross income of at least Php 880 per day. If these fishers voluntarily take four days off in a thirty-day month, their average gross salary for 26 days would be Php 22,880 a month. At a Php 120 per day production cost, their net monthly earnings are estimated to be around Php 19,760.7 This is ten percent below the poverty threshold for Masbate of Php 22,003.79 (Php 20,406 at 2019 current prices). The fishers interviewed reported that it is mostly used to feed their family and send the children to school, while the rest is spent on cigarettes, alcohol, and gambling (e.g., cockfighting).

The male fishers are usually the only breadwinners in the family, and those interviewed expressed that they do not have an incentive to look for other jobs. Only one of the ten fishers interviewed reported

<sup>&</sup>lt;sup>7</sup> These figures have been agreed on by the fishers interviewed for this case study during a focus group discussion.

that he would drive a *habal-habal* (a single motorcycle taxi) on days that he is not able to go fishing. Even then, this is largely an exception rather than the norm. The women in these fishing families opt to stay home and take care of the children. According to the fishers interviewed, none of their wives participate in the labor market outside their homes.

For many fishers in Barangay Poblacion, their entire catch goes to the consolidators. Very little is eaten by their families as subsistence catch; the fishers would rather have currency to buy other food. On the rare occasion when there is an excess supply of squid, it is iced and sold the next day. The fishers report that there is virtually no food wasted at this level.

#### Consolidation and post-harvest

A Taiwanese plant serves as Cawayan's main exporter of squid. There are also several local consolidators in the municipality and in the barangays, locally known as *kumprador*, who are duly registered with the regional BFAR. These consolidators are mainly responsible for purchasing the harvest of small-scale fishers and reselling them to retailers (marketing). They also do minimal post-harvest work, including sorting, quality check, weighing, icing, packaging, and shipping. Most consolidators also finance the production of the seafood. Consolidators and exporters who are duly registered are given a mayor's permit to transport the products to Manila, Cebu, and to other exporters, or directly to buyers abroad (N. Mahusay, personal interview, March 21, 2019).

When I landed in Masbate City and was dropped off at the public van terminal, the first thing I asked Mrs. Mahusay was how to get to their house from the Cawayan station. Without asking who the driver was, her only instruction to me was: "Tell the van driver to drop you off at my house," which they promptly did. This shows how she is one of the most important figures in Barangay Poblacion: a registered consolidator, a barangay *kagawad* (council member), and a first-generation entrepreneur. She speaks for one of the lead firms in this case study: the Mahusays.

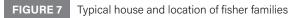




Photo credit: XX

Previously, Mrs. Naneth Mahusay ran a small-town convenience store on the island off Cawayan. Her husband used to be a fisher himself. They set up a consolidation business when they discovered how lucrative selling squids could be. Mrs. Mahusay claims it was because squids get heavier during travel. If they had paid for, packed, and shipped off 100 kilograms of squid for example, it would arrive Manila 20 kilos heavier, which meant that they could make a little more profit. Typically, their profit margin is Php 10 to 20 per kilo of squid sold.

The catch of about a hundred fishers from her home island and of another fifty from mainland Masbate end up being sold to the Mahusays. Most of this catch is sorted and weighed by small, local barangay traders before being sent to them.8 Some, especially those who also live nearby in Barangay Poblacion, land their catch directly at her backyard by sunrise and enjoy barangay-level (i.e., higher) trader prices. The product is then sorted, packed, and shipped off by her staff.

These barangays are Divisoria, Camayabsan (Placer), and Mahayahay.

These staff members used to be active squid fishers who now provide their services in the form of post-harvest labor and consolidation for the Mahusays.9 One receives a daily wage of Php 200, while another receives Php 300.

#### Consolidation and wholesale marketing

After sorting and weighing, Mahusay's staff simply ice the squid in plastic bags with salt (see FIGURE 8 on next page), place the bags in plastic boxes, wrap the top in insulation foam, and tie it down with repurposed sacks (see **FIGURE 9** on next page). These boxes are then brought by tricycle to their respective bus stations, which are about a five-minute drive from the Mahusays' base of operations.

Before the entry of Middelen as a buyer, Mahusay would mostly be speaking to buyers at large fish ports either in Manila or Cebu. By then, she was no longer selling to local Masbate retailers. As a registered consolidator, the mayor's office and the municipal agriculturist's office issue a transport permit (also called a Bill of Lading) for Php 255, plus Php 25 for every box that is shipped. This permit is issued at the bus terminal in Barangay Poblacion by a local government official. Mahusay reports that only a few samples are inspected, and none of the product is taken away.

At Manila or Cebu, the product is mostly auctioned off to small stall owners in wet markets or low-quality goods exporters.<sup>10</sup> According to Mahusay, the auctioneer charges a 7% commission on sales. These auctioneers are referrals made by networks of people. After auction, the products are usually sold in local urban wet markets or to seafood processors, either from the Philippines or in other countries.

<sup>9</sup> In the previous version of this manuscript, I had written that these consolidation staff members provide either labor for consolidation or squid product depending on the season and demand. Mahusay has clarified in our validation meeting over the phone that these staff members no longer fish and receive a daily salary from her for their services in the consolidation business.

<sup>&</sup>lt;sup>10</sup> Prior to validation, this passage had read that Mahusay also sells directly to wet market stall owners. However, she clarifies that all her products goes to an auctioneer in Manila and/or Cebu.

FIGURE 8 Packed squid before insulation



Photo credit: XX

FIGURE 9 Packed squid with insulating foam layers, ready for shipment to Manila



Photo credit: XX

FIGURE 10 Supply chain path from Cawayan, Masbate to Farmer's Market, **Quezon City** 

Source: Google Maps

# Traditional supply chain

Mahusay and the fishers report a couple key challenges of this supply chain (illustrated in **FIGURE 11** on page 27): (1) prices were always dependent on the buying stations and were therefore very volatile on a day-to-day basis; and (2) because of this, buyers from large fish ports would only be willing to pay Mahusay after the shipment arrives. Planning and predicting cash flows were thus very difficult, both for the Mahusays and the fishers. These price fluctuations are fully absorbed by the Mahusays, as the selling price of fishers remains the same regardless of the final bid price in the fishing ports. This allows the Mahusays to reap the gains during peak season, such as over Christmas, but also absorb some losses during the lean seasons. 11

In the previous version of this paper, I had written the following: "This is a departure in practice from their fishing village, where the fishers are aware of the selling prices of

When asked, the fishers are not aware of where their product goes after it is received in Manila. One fisher did mention that he is aware that the squid is eaten at restaurants in Manila.

## **Financing**

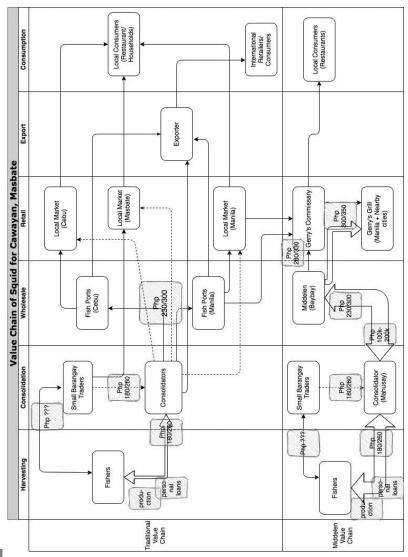
Naneth Mahusay is not only a consistent buyer of squid: those who sell their catch directly to her have the benefit of access to production capital and credit. For production capital, she and her husband own around twenty boats (i.e., one 50-person boat, some five- or ten-person boats, but mostly three-person boats) which their most trusted fishers can use at no cost. They offer gasoline in advance at Php 5 per liter, which can then be paid back through the sales the next morning. The fishers can also source their hooks and lines directly from the Mahusays, who buy them directly from Manila. There is no such supplier of fishing equipment in Cawayan.

As for credit, fishers who sell directly to Mahusay have access to informal loans for emergency expenses, at zero interest. Fishers have the option to pay back the loans in lump sum or as deductions from sales. During the lean season, terms are still flexible according to (1) the need of the borrower, (2) the supply of squid, and (3) the capability of the borrower to pay.

For these reasons, the fishers who were interviewed sell only to the Mahusays. More explicitly, they cite that the Mahusays offer competitive and stable pricing, access to credit (i.e., informal loans with flexible terms), and the fact that "may pinagsamahan" or they have a working relationship of ten years. Mahusay also reports that because the stock of squid is so consistent, there is no real need for a formal organization to manage the fisheries resources. All the fishers

consolidators and vice versa. Thus, the upstream actors (fishers and consolidators) in this traditional value chain are aware of what they each earn in terms of profits." Upon validation with Mrs. Mahusay, she clarified that she is not open about her selling prices to the fishers who sell to her. We deduce that the misunderstanding may have stemmed from when I interviewed her consolidation staff and surfaced that they knew the selling prices, who, at the time, had introduced themselves to me as fishers.





go out to sea at their own convenience, and each fisher gets to catch around the same volume of squid on a given night. Hence, despite the fact that no formal cooperative or organization exists for the fishers, and that they do not receive any financial nor technical support from government and non-government organizations, the fishers are still able to access a steady supply of squid, production financing, consolidation and marketing services, as well as other forms of financial support through their consolidator.

# The entry of Middelen

#### The beginnings of Middelen Magna Trade Inc.

GENPACCO, Inc. has been the business of Vina Cansanas Baybay's family since 1985. It manufactures and sells aluminum cans for export. In 2016, the same founders of GENPACCO decided to set up JNCL Ocean Ventures, Inc., a company that cans pasteurized crab meat for export. JNCL set up picking plants for crab meat that is sourced mainly from Olutayan, Roxas (V. Baybay, personal interview, January 26, 2019).

Baybay saw the opportunity to supply the restaurant chain Gerry's Grill with seafood. At that time, the objective was simply to find the cheapest source of seafood available that fits the needs and standards of the Gerry's Grill chain of restaurants around Metro Manila (ibid.).

By February 2018, Middelen Magna Trade, Inc. owner Vina Baybay conducted trial runs for *pusit calamares* and *pusit lumot* in Roxas City, Capiz, where JNCL mainly sources their crab meat. Seeing stable and increasing demand from Gerry's Grill, Middelen then expanded to invest in fishing communities around Bicol until its business registration was finalized in May 2018. However, the consolidators from Roxas City and Bicol did not honor their side of the arrangements and brought considerable losses to Baybay, which she estimates to be worth Php 350,000 (ibid.).

On November 19, 2018, Baybay and her business partner made their way to Cawayan, Masbate based on a tip from one of her

employees. While on the one-and-a-half-hour public van ride from Masbate City to Cawayan, the van driver (we are assuming the same van driver who ferried me to Mahusay's home) overheard Baybay and her partner talking about strategies for the new business and offered to connect them to a local consolidator. This was how Naneth Mahusay was first introduced to Vina Baybay. In terms of other suppliers, Baybay mentions that there was another local consolidator in Cawayan named Richard who was a potential competitor of Mahusay. However, she preferred Naneth Mahusay over Richard at the time because "mas madaling makausap ang mga babae" (it's easier to talk to women), citing the tendency of men to be caught drinking at any time of the day, especially in rural areas. It was then that Baybay decidedly made Mahusay its primary source of squid.

#### Changes to consolidation

The value chain of the squid fisheries in Cawayan after the inclusion of Middelen is also illustrated in **FIGURE 11** (on page 27).

In Cawayan, as was the norm, the Mahusays would accept catches of squid daily from 7:00 to 10:00 a.m. and prepare them for shipping in the same manner. Except this time, because Middelen has a size requirement of 200 to 600 grams, all the squid that fall within this range is sent directly to the Cubao Bus Station in Manila. The squid that do not fall within this size range (which are usually much larger) are then sent to Cebu. This shipment of squid for Middelen is around 100 to 300 kilograms daily. To reach this amount of squid, Mahusay needed to rely on small barangay consolidators, just as before. At times, she found herself needing to buy some squid of that particular size from rival consolidators at breakeven prices.

On the rare days that the Mahusays are unable to fulfill the whole purchase order, Baybay also sources squid from Roxas City and from Estancia, Iloilo (V. Baybay, personal interview, October 1, 2020). This

Although the initial weight of the shipment when packed is 100 kg per box, the purchase order from Middelen is around 120 kgs.

is because JNCL had already established relationships with the fishing communities in these areas. However, she cites that Cawayan is more cost-efficient in terms of transportation (i.e., the RORO from Masbate to Cubao makes logistics simpler than having to arrange more formal courier services from her Visayas suppliers). The squid from Masbate is also of better quality.

The squid from Cawayan is shipped immediately at around 10:00 a.m. on the same day. The Raymond Busline that goes straight from Cawayan to Cubao is a kind of bus that is accommodated on a large cargo ship called a Roll-On, Roll-Off (RORO) ship. Therefore, the boxes stay in the bus for the entire duration of the trip. The shipping fee for this kind of courier service is Php 700 per box, which is shouldered by the consolidator. In incoterms (international commercial terms), this is called a cost and freight (CFR) arrangement, where the seller's obligations end and that of the buyer's begin after the boxes are loaded unto the bus. A typical box of squid will weigh an average of 120 kilograms by the time it arrives at the Cubao Bus Station by 06:00 a.m. the next morning, at the latest.

At Cubao, Middelen receives the boxes and brings them to a nearby facility. After checking the shipment and sorting and repacking the squid, Middelen then distributes these to 23 Gerry's Grill branches<sup>13</sup> or to the Gerry's Grill Commissary.<sup>14</sup> Baybay estimates her daily cost for overhead (i.e., mostly labor and transportation costs) to be at Php 2,000 per day, or Php 60,000 a month. The empty boxes are promptly returned the same way, at Php 150 per box for shipping, which is also shouldered by Middelen. From this daily transaction with Mahusay, Baybay reports gross monthly revenues of around Php 2 to 3 million.

Middelen ships directly to 23 branches in and around Metro Manila, namely Binondo, Ermita, Sta. Mesa, SM Manila, Congressional, Tomas Morato, Fishermall, Antipolo, Cherry, Metroeast, Eastwood, Ayala Circuit, Ayala Alabang, Festival Mall, Bicutan, Market! Market!, Tagaytay, Ascon, Nuvali, Southwoods, Greenhills, Alimall, and Trece Martires.

Gerry's Grill Commissary (located at West Avenue, Quezon City) is a different company from Gerry's Grill restuarant chain. Middelen offers to the commissary an opportunity to make a small profit by offering the squid at a price that is Php 10 to 20 lower than the price sold to the Gerry's Grill branches.

In terms of payments, consolidators Mahusay and Baybay share some of the risk: sometimes, Baybay would deposit into Mahusay's bank account before harvest; sometimes, she would deposit promptly after the shipment is made. Mahusay reports that Baybay would deposit a block amount of Php 100,000 or Php 200,000 at a time. With the sample purchase order in **TABLE 3** below, a block payment of Php 100,000 to 200,000 would be enough to cover at least one to two days' worth of product, which means Baybay deposits every other day. They then account for the transactions and settle any liabilities between parties after every ten days. Gerry's Grill, on the other hand, pays for their purchase order every 15 days, while the Commissary pays every seven days. This means that Baybay shoulders that risk or lack of liquidity, even as she pays Mahusay almost on a daily basis.

TABLE 3 Average daily profit calculations of the actors in the value chain (estimation for 300/360 kg shipment)

	Total revenue (invoice to buyer)	Total cost	Net profit per shipment	Profit per kilo
Fisher/barangay trader (75 pax)	(880×75 pax) 66,000	120×75 pax= 9,000	57,000 (760 per pax)	190
Naneth Mahusay	95,400	66,000 + 4,550 = 69,550	25,850	71.81
Middlen	117,000	95,400 + 2,450 = 97,850	19,150	53.19

Mahusay also reports stable and "stickier" selling prices from Middelen, regardless of when the payments arrive. Baybay recounts an instance when Mahusay asked for higher prices. She responds by showing Mahusay the price demanded of Gerry's Grill and the profit margins that Middelen will have to face in turn if Baybay were to agree to Mahusay's higher price. When asked about what she thinks of this practice, Mahusay says that Baybay shows her the margins so that Mahusay in turn would be considerate when

asking for price increases. Note that Naneth Mahusay and Vina Baybay were able to corroborate the exact figures seen in **TABLE 4** below.

TABLE 4 Value-adding contributions and margins in the squid supply chain in Cawayan, Masbate (Q1 2019 stable php/kg)

Segment of the value chain	Buying price (Php)	Selling price (Php)	Average daily revenue (Php) × kg
Pusit lumot			
Fishers/barangay trader	0	260	Php 260 × 2 kg = Php 520
Consolidator	260	300	Php 300 × 180 kg* = Php 54,000
Manila/Cebu buyer (Middelen)	300	350	Php 350 × 180 kg* = Php 520
Pusit calamares			
Fishers/barangay trader	0	180	Php 180 × 2 kg = Php 360
Consolidator	180	230	Php 230 × 180 kg* = Php 41,400
Manila/Cebu buyer (Middelen)	230	300	Php 300 × 180 kg* = Php 54,000

<sup>\*</sup> Consolidator buys, packs, and ships 100 kilos, but this reportedly expands to 120 kilos in transit. Thus, the calculation is based on the weight when it arrives in Cubao, of 120 kg × 3 boxes = 360 kg. For purposes of estimation, this sample calculation is further divided equally into the two species of squid, i.e., 180 kg of pusit lumot and 180 kg of pusit calamares.

Fishers explicitly mention that since the inclusion of Middelen, Mrs. Mahusay has been more confident (in terms of the size of the loans) in providing production financing due to the timely and predictable payments from Middelen.

Despite Middelen coming in as a new buyer, prices faced by fishers and their seasonal variations remain the same (see **TABLE 4**). Prices are relatively stable for fishers and only rise or fall with exceptional

changes in demand.<sup>15</sup> Hence, net nominal income per fisher remains unchanged at around Php 760 a day. The consolidator set up has also not changed after Middelen (see FIGURE 11). There are still no other support services—neither from government nor from NGOs—available for fishers. Financial and capital support for production, as well as personal insurance and emergency funds, mostly still comes from their consolidator, financier, and barangay councilor, Mrs. Naneth Mahusay.

In forward linkages however, the flexibility of pricing (i.e., negotiation) ends with Baybay. 16 Baybay shares how negotiations on the price was played out between Middelen and Gerry's Grill: Middelen would accept the low-price bid of Gerry's Grill on the condition that Middelen be prioritized as a supplier, if not the sole supplier, of squid for the entire restaurant chain. This way, Baybay says, what the deal lacks in profit margins, she can make up for in scale. Moreover, she says her calculation of payoffs during this negotiation involved the profit margins of Mahusay, as well as that of the fishers, because she knew their asking prices. This is also supported by her quick recall of fishers' and consolidator's selling prices during her interview.

When asked if she knew of the strategies of other middlemen on her level, Vina Baybay says that not too many consider the gains of the most primary producers when dealing with negotiations. When describing competitors, she uses the term "nambabarat," which is a colloquial term for using buyer power to drive down seller prices. However, it is not certain that other consolidators have the same information on fisher prices as she does. She then fondly recalls the fishers who have now set up their own buying stations after their longterm relationship with INCL. It seems to be a reward to Baybay to see how their business has helped fishers themselves "grow."

<sup>&</sup>lt;sup>15</sup> For example, the COVID-19 lockdowns forced Naneth Mahusay to sell her squid at only Php 100 per kilo in the fish ports of Manila and use trucking services that also carry other kinds of goods in and out of the province.

<sup>&</sup>lt;sup>16</sup> Acknowledgement is due to Dr. Annette Pelkmans-Balaoing for surfacing this point.

One of the main challenges that Baybay mentioned is the difficulty in convincing consolidators to sell only to her, which, in turn, is indicative of opportunistic behavior on the part of consolidators (Balaoing-Pelkmans 2020). This is so that she can expand to other Gerry's Grill branches or other restaurant chains. Baybay claims that the reason for this hesitation could be the risk that comes with having only one buyer—both in terms of lower (wholesale) prices and insurance against shocks. Indeed, this was a strategic move on the part of Mahusays. When the pandemic lockdowns happened in 2020, they had little choice but to sell to their former buyers in the fish ports of Manila and earn a living off auctions once again. Mahusay reported the lowest selling prices of Php 180 for pusit lumot and Php 160 for pusit calamares during this time

At the time of the initial interviews (the first quarter of 2019), Naneth Mahusay and her husband were hoping to be able to expand their business. For them, this may only be possible with better prices. Middelen, on the other hand, was looking to diversify their line of products to be able to accommodate more restaurant chains or branches—a move that will require an expansion to other locations. The COVID-19 pandemic and the ensuing lockdowns in 2020 had halted these plans. The blow suffered by the value chain as a result warrants its own separate inquiry.

## Results

Recall that our research questions are: (1) In what ways does this value chain impact its most primary and marginalized producers, and (2) what are the motivations of the lead firms for doing so?

For the first question on impact, the evidence presented in the case study as highlighted by the profit margins in **TABLES 3** and **4** suggests that the entry of Middelen had no significant impact on the net nominal income of fishers. Therefore, if the "litmus test of inclusion" (Balaoing-Pelkmans 2020, 12) in a value chain is its ability to lift its most marginalized actors out of poverty, this value chain has failed. It

may also be because the scale of the value chain is still too small to be able to affect its primary producers' net incomes.<sup>17</sup>

However, it would be too simplistic to dismiss the Mahusay-Middelen case on the basis of its impact on household income alone. Clearly, the introduction of Middelen as an intermediary has impacted the Mahusays' squid value chain by creating value in four ways:

Block and timely payments. One of the main reasons why the Mahusays have a competitive advantage and regular suppliers is their ability to offer production support regularly and at scale, such as interlinked credit contracts and access to production capital. By receiving pre-payment for the product in large block payments from Middelen, the Mahusays are given enough liquidity to continue offering this line of credit or other forms of capital to fishers in turn. Just as the Mahusays and the fishers are simultaneously producers and consumers in the credit-squid interlinked markets, so are Middelen and the Mahusays in these same markets. Understandably, this payment scheme comes at great risk to the buyer and therefore may not be recommended for any given intermediary; recall that Baybay had once lost Php 350,000 in seed money to deals that fell through (this amount is coded in this case study as "search costs").

Scale. Because Middelen buys product daily and in bulk, this allows the Mahusays to drive down costs in many activities of their value chain. This cost minimization subsequently becomes another source of their competitive advantage. Moreover, when the volume of squid sold directly to the Mahusays is not sufficient for the purchase order, they buy product from other local consolidators, even at consolidator selling prices (breakeven). This way, the gains of their relationship with Middelen spill over into the community. It is interesting to explore if this kind of arrangement gives the Mahusays yet another competitive advantage, one that is related to their role as facilitators of cooperative strategy. In the forward linkage from Middelen to Gerry's Grill, scale is what distinctly creates value for Middelen given its low-price advantage over other suppliers.

<sup>&</sup>lt;sup>17</sup> Acknowledgements once again to Ms. Jane Lynn D. Capacio for offering this point.

*Price and buyer criteria certainty.* Sure market prices allow all the actors in the value chain to calculate their expected income and invest accordingly (Pelkmans-Balaoing 2019)—even if their understanding of their gains is only casual. This is compounded by the certainty of the stock of squid that is enjoyed by the fishers in Cawayan—a feature that makes squid fisheries distinct from other types of fisheries. This certainty from both ends is crucial in a chain that is built upon layers of overlapping interlinked credit agreements and builds confidence in social as well as personal investments. This is exhibited in the confidence of the Mahusays to provide credit since transacting with Middelen, which was explicitly noted by the fishers. Moreover, the certainty and specificity of buyer criteria<sup>18</sup>—information that was not available in auction-type markets—helps the fishers and consolidator to minimize wastage by shipping only the product that fit these criteria and are sure to be sold. This further adds to the certainty of their expected income. The market failure of asymmetric information is addressed with this arrangement.

Transparent transactions. This last point is a major departure from the competitive advantage literature. The findings of this case study do not support the competitive strategy that proprietary information about downstream actors gives a firm its edge over upstream links and establishes their position in the chain and vice versa. In fact, this particular value chain's success, as defined by an equity criterion, is distinctly founded on its lead actors' shared knowledge of the profit margins of other actors with whom they are vertically (i.e., Middelen and Mahusay) and even horizontally linked (e.g., rival consolidators when cooperating to fulfill a large purchase order; although this is only the case for Mahusay). It is precisely the open knowledge of payoffs that encourages lead firms to cooperate and act in consideration of

<sup>&</sup>lt;sup>18</sup> Acknowledgement goes to Mrs. Vina Baybay for offering this insight.

The risk in sharing profit margins to partners is that, if that link is available to them at minimal cost, they can then be incentivized to skip that now-informed link and become competitors to capture more of the value. However, because replicating Middelen's relationship with Gerry's Grill and its commissary would be too costly for Mahusay, and in the same vein, replicating Mahusay's ten-year relationship with fishers would be difficult for Middelen, there seems to be minimal risk of jumping links and becoming competitors either way.

both their upstream and downstream partners' gains when negotiating prices. Baybay mentions that this flexibility, in turn, fosters more trust among actors as these interactions become repeated transactions. The mention of "trust" (in English), used independently by Mahusay and Baybay, is telling of their shared perception of the arrangement. This strategy is used by Middelen in negotiating prices with Mahusay, and in economic terms, such a strategy addresses yet again the market failure of asymmetric information.

On the second research question on motivations, based on the ability to influence the governance within the value chain, we first explicitly identify that the Mahusays and Middelen are the lead firms in this case study. Second, there is no evidence in the interviews to suggest that these four key features of the Middelen-Mahusay link were implemented with the goal of inclusivity in mind; rather, the lead firms have always described them as strategic plays. In fact, Baybay explicitly mentions that these were strategies to provide Middelen a competitive advantage over other buyers and even rival sellers. It was this edge that the Mahusays explicitly said convinced them to sell almost exclusively to Middelen.

## Discussion

This case study has taken on a descriptive process of the value chain with its two main research questions addressed above. However, the other features of a case study as a method of inquiry are its ability to (1) expand theory, such as EMIT C4C's theory of change on inclusive value chains, and (2) provide more evidence to support this theory's generalization. In this section, we firm up our working definition of inclusivity—the extent to which value chains of actors are complementary or aligned—based on the evidence in the case study.

First, there is no evidence to suggest that the lead firms in this study, who indeed plug the institutional voids of credit, are necessarily motivated by altruism or lofty moral values, at least according to their own self-perception. Rather, they recognize that creating monetary value or lowering the (transaction) costs for their suppliers is in fact what gives them the competitive advantage: that a comparatively

profitable, long-term business model is sufficient enough motivation for pursuing such dynamics. Both Middelen and the Mahusays thus are found to have a "fundamentally introverted attitude and [are] strongly utilitarian" (van Tulder et al. 2014, 81).<sup>20</sup> Through the lens of van Tulder et al.'s (2014) framework of motivations, then both the Mahusays and Middelen seem to share the features of a *classic* business case (i.e., intrinsic motive, inactive attitude). This further solidifies this case study as one of the most representative cases of agricultural (fisheries) value chains in EMIT C4C's roster of projects.

The embedded and relationalist self-perception of the two lead firms surfaced from the interviews. It can be found in their understanding that as a buyer, one can simultaneously provide value to a supplier through another market, and perhaps even to their supplier's suppliers in turn. This is what makes the chain vertically integrated (Porter 1985), but through more than one channel (market), and in both directions. In effect, it is this coupling of output to credit that opens at least one market that would otherwise be inaccessible to the three main actors of this value chain.

Because it is utilitarian, this complementarity can be revealed in value chain maps and is verifiable by each actor's profit margins and level of information on the other actors, which is both a strength and a limitation of this definition. Regardless, this case study shows how overlapping and interlinked credit arrangements can serve to facilitate a value chain's move towards "inclusivity," even within a utilitarian and mutual needs-based framework.

As mentioned, van Tulder et al.'s (2014) discussion of "phases" towards sustainability is presented in such a way that reveals its ontological context: that a purely capitalist state and a socially responsible state are two opposite sides of a spectrum for businesses. However, on the basis of the evidence presented in this case study, it may not always be the case. Here, I have presented evidence of a (small-scale) business case that can in fact be simultaneously utilitarian and inclusive, efficient and equitable; supporting the notion that these

<sup>&</sup>lt;sup>20</sup> An acknowledgement is due here to Ms. Jane Lynn Capacio for pointing this out.

two states need not be tradeoffs in a spectrum (Pelkmans-Balaoing 2019).

Then, informal credit in this form may be just as likely as formal channels to be effective in funding primary production, if not more. This is because they open other markets, and at times, trade in the absence of interest rates (which have always been cited as a disadvantage of informal credit)<sup>21</sup> and flexible terms. In the process, these informal credit agreements plug institutional voids. That said, there is nothing in the case study to suggest the need for government intervention—where the markets seem to be sufficiently functional and actors sufficiently interlinked (as opposed to markets with huge gaps and many disparate actors).

Whether or not this proves to be self-sustaining remains to be seen. However, while we have identified that lead firms fall under the classic business case, their strategy was also designed for longterm business relationships. This feature of the lead firms' strategy may have stemmed from the years of experience that the Mahusays and Baybay both had in their former businesses: the Mahusays with their ten-year relationship with fishers and Baybay with the four-yearold INCL Oceanventures and GENPACCO Inc. since the 1980s. This supports the hypothesis that inclusive business models—even classic business cases that fill institutional voids—are built to support longterm relationships and gains (Pelkmans-Balaoing 2019).

Lastly, this case study supports a lesson that has been discussed in many studies on development economics that take on more pluralist views (Sen 2001; Balisacan 2015; Curato 2018): metrics that are based on poverty thresholds, which in turn are based on per capita income, may be a reason for otherwise good social investments to be prematurely dismissed. As mentioned, benefits exchanged within interlinked credit markets may not always be monetary. In fact, setting a specific "litmus test" for a policy approach (e.g., the ability for inclusive value chains to lift their most marginalized actors out of poverty) makes a planner vulnerable to the pluralism pitfalls that

<sup>&</sup>lt;sup>21</sup> Acknowledgements to Ms. Jane Capacio for raising this point.

Rittel and Webber (1973) themselves have cautioned against when dealing with wicked problems. Although the alleviation of poverty is a noble cause for any development project, there are other ways to measure success, including capabilities and empowerment (Sen 2001; Curato 2018). Recall that the Human Development Index (HDI) and other Sustainable Development Goals (SDGs) were created for this exact reason.

## Conclusion

This study presents the first-ever case for the EMIT C4C project that involves: (1) a fisheries value chain, with (2) purely trader-lender lead firms. This particular value chain has shown to have failed the "litmus test" of inclusivity, which is to lift its most marginalized actors out of poverty. Despite this, the introduction of Middelen did create value for the fishers and the Mahusays in four ways: block and timely payments, scale, price and buyer criteria certainty, and transparency. Motivations seem to represent the classic business case in van Tulder et al.'s (2014) matrix of motivations.

Here, I have attempted to expand EMIT C4C's definition of inclusivity by introducing the utilitarian concept of interlinked value chains. The vertical integration of the three main subjects/actors via their interlinked value chains—and the value that it has created—is evidence to support this definition, even if the value created is not explicitly higher revenues. Further research is needed to ascertain whether this definition is sustainable and generalizable to other case studies; this is the work that will be done with the synthesis of EMIT C4C's case studies. I argue that, because it presents itself as a classic business case, there is much potential for generalizability and replicability.

The degree to which these relations foster cooperation or competition among horizontally-linked actors in the area may be an interesting social phenomenon to document in future researches. The degree to which these kinds of arrangements compel fishers to sell their harvest and labor (Li 2014) may also allow a richer set of metrics for the success of inclusivity. Lastly, the "litmus test" of poverty alleviation

may still be further tested with other value chain case studies, either by enlarging the scale of analysis or redefining poverty metrics, such as the intensity of deprivation in other human dimensions beyond income (Balisacan 2015) or poverty in terms of capabilities or empowerment (Sen 2001; Curato 2018).

The EMIT C4C framework would also benefit from requiring industry structure as a background to all its case studies, as described in Porter (1980) and integrated to value chains, as in Porter (1985).

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