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I. Introduction
On 8 November 2013, Typhoon Yolanda—the strongest storm ever to make landfall in recorded history—hit the Philippines.\(^1\) As part of its repercussions, a storm surge of anywhere from 3 to 5 meters (10-17 feet) in height hit the islands of Leyte and Samar.\(^2\) This deluge killed thousands and destroyed countless houses and establishments, on top of the damage wrought by strong winds (from which most infrastructure in the area was not yet designed to withstand). In addition, Typhoon Yolanda devastated many micro, small and medium sized enterprises (SMEs), not merely in terms of their infrastructure, but also by harming workers, disrupting supply chains, and crippling public services.

Some of these repercussions are expected to linger beyond the immediate effects of the typhoon itself, further affecting the livelihood of the entire community. Since then, relief efforts have been undertaken by the national government and by different local and international non-governmental organizations (NGOs). Nevertheless, many are concerned that the recovery from the aftermath of typhoon Yolanda will be much slower if the enterprises forming the backbone of the domestic economy are unable to resuscitate investments and job creation in the area. And if storms like Yolanda increase in frequency and intensity due to climate change, then there is also the concern that only larger firms will be able to adapt with strong disaster risk management strategies. On the other hand, SMEs could systematically lose out, reducing their competitiveness and marginalizing them in disaster-prone economies.

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\(^1\) Tropical cyclone Haiyan is known as typhoon Yolanda in the Philippines. In order to avoid confusion, we will refer to this tropical cyclone by its officially designated name in the Philippines.

\(^2\) Much of the local elevation is only about 10 feet above sea level (NASA, 2014).

* The views expressed in this paper are those of the authors’ and do not necessarily reflect the views and policies of the Asian Institute of Management. Questions and comments should be directed to the AIM Policy Center at policycenter@aim.edu.
To help identify and illustrate the important factors that might influence the abovementioned outcomes, this case focuses on the production chain of Eva Marie Arts and Crafts, Inc., a handicraft producer in Basey, Samar. The case describes how this particular enterprise (a small-scaled firm) fared when Typhoon Yolanda struck. It illustrates the important linkages across the resilience of this firm with the resilience of the entire production chain to which it belongs. Among other official and media sources, data for this case study was gathered through key informant interviews and focus group discussions with the relevant persons in the production chain of the firm, including raw material suppliers, weavers, embroiderers, the firm owner and her distributor. A local coordinator and case writer carried out initial interviews in the month of May, followed by the fieldwork of a team from the AIM Policy Center on June 9-12, 2014 to complete the research.

II. A Snapshot of the Production Chain

The main output in the production chain under study here includes handwoven mats, bags and other products made out of the domestic materials including “buri” and “tikog”. These are essentially the leaves of certain plants that grow in the region. And these indigenous inputs have served as sturdy and pliable materials from which to weave the various handicrafts that the region has come to be well-known for.

Description of the Production Chain

Supplier of raw materials. After Typhoon Yolanda, Eva Marie had to find her own source of tikog and buri as most of the plants were washed away by the storm surge. Before the typhoon, suppliers of tikog came to her on their own, or her weavers bought these from Tacloban. Some of the weavers also have small plantations of tikog. One of Eva Marie’s long-time buri suppliers is Miguela Palongpong of Barangay Loyo, Basey, Samar. Unfortunately, her plantation of buri was also washed away. At the time of writing this case, she adapted to this by accessing her supply of buri from other suppliers in Leyte who were less affected by the storm.
Weavers and Embroiderers. Eva Marie has in-house and job-out weavers and embroiderers from the different barangays in Basey such as Basiao, Catadman, and Loog. These weavers form groups or associations under one leader or coordinator. One example is the association of weavers in Barangay Catadman, led by Rowena Lumagbas.

Producer and Firm Owner. Eva Marie took over the business from her parents three years ago. Her firm, Eva Marie Arts and Crafts Inc., deals with the different elements of the production chain and takes majority of the risk of the finished products.

Distributor or Exporter. Renee Patron, creative director of Banago, approached Eva Marie three years ago as a buyer of woven products that she could export to the United States. She has since been heavily involved with Eva Marie Arts and Crafts Inc. through designing bags, dealing with retailers, and even finding support after Typhoon Yolanda.
Retailers. With the help of Renee Patron, Eva Marie Arts and Crafts Inc. supplies bags to retailers in the United States such as Tommy Bahama, Anthropologie, J.Crew, and Nordstrom.

II. The Case of Eva Marie Arts and Crafts, Inc.

II.1 Context
Basey comes from the Waray word *baysay*, which means beauty. It is a municipality in the province of Samar known for its natural scenic spots, which include caverns, subterranean rivers, waterfalls, and unique limestone formations. It is also well-known for its woven mats called *banig* that attracts hundreds of tourists who buy them as souvenirs (NSCB, 2009).

This small town in the southwestern part of the province of Samar, is located just opposite Tacloban City, the capital of Leyte, which was at the forefront of international news in mid-November 2013, as the city that Typhoon Yolanda ravaged. The San Pedro and San Pablo Bay, which is a continuation of the San Juanico Straights, is the only body of water which separates Basey from the capital of Leyte (Escoda, 1953). Basey is the largest municipality of Samar with a total land area of 513 square kilometers and is composed of 15 barangays (NSCB, 2009).

Basey has a total population of 48,389 according to the 2007 Census of Population. Its population density of 94 persons per square kilometer makes it the eleventh lowest density among the 25 municipalities of the province. Basey has an average annual income of Php 58.7 million from 2004-2007, placing it in the income classification of a First Class Municipality. Its Internal Revenue Allotment (IRA) amounted to P74.0 million in 2008, translating to an IRA per capita of P1,510. *Waray* is the most commonly spoken dialect in the province (NSCB, 2009).

The art of mat weaving is the municipality’s prime industry and has been handed down from generation to generation. Each generation introduces innovations in the method of weaving. Its origin dates as far back as the beginning of the Spanish rule (Escoda, 1953). It is the source of
livelihood for around 60% of the population. Sedge grass or tikog is used by the local women to weave a variety of intricately designed mats, wall decors, room dividers, ceiling panels, furniture matting, place mats, throw pillows and bags (NSCB, 2009).

II.2 Firm Background
Eva Marie Arts and Crafts, Inc. is a local handicraft manufacturer in Basey, Samar Province. This firm produces a wide range of products made of materials such as buri and tikog. The owner, Eva Marie Adona-Yu, is a fourth generation artisan. The business was handed down to her in 2011 by her parents, who started in the 1980s, but concentrated full-time on the business only starting around 1993. This enterprise has a showroom in Barangay Loyo, Basey, Samar, where tourists can buy souvenir items. The firm participates in the different local trade shows conducted by the Department of Trade and Industry (DTI) such as One Town One Product (OTOP)\(^3\) and various other trade expos.\(^4\)

The bulk of their production at the time that Typhoon Yolanda struck was mainly destined for export markets. Through its partnership with Banago, this enterprise exports hand-woven bags and home accessories in international markets. Its products are being sold in department stores, hotel chains and in different stores such as Tommy Bahama, Anthropologie, J. Crew, and Nordstrom. The creative director of Banago, Renee Patron, co-designs and leaves the production exclusively to Eva Marie Arts and Crafts. Eva Marie candidly shares that she only marks up her products by around 30%. Banago and the different retailers further increase the price before the products reach the public.

Eva Marie’s initial arrangement with Rene consists of 50% down payment upon the first purchase order and the final payment upon delivery of goods. If Renee fails to pay the 50% down payment, all risk lies with Eva Marie. Sometimes, even the final payment is given one month after the delivery of goods.

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\(^3\) The DTI website notes that the “One Town, One Product (OTOP-Philippines) is a priority program of the government to promote entrepreneurship and create jobs. Through OTOP, local chief executives of each city and municipality take the lead in identifying, developing, and promoting a specific product or service, which has a competitive advantage.” Through OTOP, the government supports SMEs in their efforts to manufacture and market distinctive products in each Philippine region, showcasing indigenous raw materials, skills and talents. Source: http://www.dti.gov.ph/dti/index.php?p=442.

For the most part, the weavers produce only two sizes of mats. A family mat (160cm x 2m) is large enough to be sat or slept on, while a panel mat (24 ft x 8 ft) is used to make other small handicraft items or different kinds of bags. The weavers use two main raw materials:

1. **Tikog**
   
   The preferred material for mat weaving is tikog, a reed plant that grows in swampy areas along rice fields and has solid jointless and usually triangular stems. It is abundant in Basey but is also available in the different towns of Leyte such as Alang-Alang, Tanauan, San Miguel and McArthur. The weavers buy tikog wherever it is available, but some choose to plant their own tikog to lessen their expenses. It takes six months to one year for the tikog grass to grow to its desirable size for harvesting.

2. **Buri**
   
   The buri palm is the largest of the Philippine palms. Its trunk has a diameter of up to one meter and a height of 20 meters. It takes eight to ten years before one can harvest buri. The firm gets its supply of buri from Miguela Palongpong who has a plantation of it in Samar. Suppliers from Ormoc, Dulag and other parts of Leyte also deliver buri to Miguela Palongpong. She sells the buri at Php10.00 per bundle to both bulk buyers like Eva Marie and individual mat weavers.

   At the time that Typhoon Yolanda struck, Eva Marie Arts and Crafts worked with about 400 weavers, and roughly about 80 embroiderers per day. Its normal production rate peaked at 200 boxes or 10,000 finished pieces of bags, wallets, etc. per shipment. Technically, the weavers were not employees, as the firm simply outsourced much of the production of the *banig* to local artisans, primarily women working from their homes. This arrangement increased the connectedness of the firm to many more weavers, so that the firm’s success in penetrating export markets might have helped to benefit many more weavers. It also enabled the firm to reach scale without having to expand its facilities for production unnecessarily.

   Typically, so-called “job-out” weavers had the responsibility of sourcing their own tikog, which they usually gathered from their own fields, thereby eliminating the need for capital to buy the raw materials. They also had the option to buy tikog from Eva Marie at Php500 per bundle.

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5 Definitions of small and medium enterprises (SMEs) vary across countries. In the Philippines, they are defined as any enterprise engaged in industry, agri-business or services that has an asset size of Php3M – P100M or has an employment size of 10-199 employees. The employment size of Eva Marie Arts and Craft, Inc. varies per day depending on the demand of the production and willingness of weavers to give mats to Eva Marie, thus it would be better to base firm size on its asset size. Her asset size falls under the range of small enterprises (Php3-15M).
and pay through instalments or at a staggered pace. (Hence, when the firm bought their woven output, the weavers received payment that was net of their input costs. Eva Marie insisted on charging them for this input—even as she admitted she would be willing to provide the inputs for free—in order to extract a commitment from the weavers to complete the job.) One bundle of tikog can make around four mats if all of the grasses are of good quality.

They can finish two panel mats in one week and Eva Marie buys from them at Php180 to Php200 per mat (or roughly about US$4 per mat based on the exchange rate at the time of writing this case).

Eva Marie also has in-house embroiderers and a few in-house coordinators. These are technically different from job-out arrangements, because these embroiderers are full-time employees who work eight hours a day and are paid P150 per day. When doing this full time, they can finish one family-sized mat in three days. The in-house coordinators also find job-out weavers to help them finish orders. These coordinators also provide quality control as they can track which job-out weaver produced a bad quality mat. Both in-house and job-out weavers do the dyeing of tikog, but Eva Marie makes sure the dyeing of buri is done in-house to ensure quality by bleaching them first. (She confided that some job-out arrangements in the past did not work out well, as the dyeing was done too quickly, leading to defective mats that lost their color quite easily.)
Among all the handicraft showrooms and factories in Basey, Eva Marie Arts and Crafts, Inc. was the hardest hit, being located along the coastal area, in Barangay Loyo. The storm surge washed out all their raw materials, equipment and finished products including Php21 million worth of clutch bags and tote bags ready for shipment in time for the 2014 Spring Summer Collection in January-March. Although there were no casualties among her employees, their houses, which also served as their workplace, were damaged. The firm’s production and operations ceased for 3 months.

Based on an interview with Eva Marie, she felt as if all her hard work building her business was undone, and she did not know what her next move would be. There had been cash donations from relatives, but these were still not enough for her to rebuild her house and her

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6 Also called a barrio in the past, a barangay comprises the smallest administrative division in the Philippines. It is also the native Filipino term for a village, district or ward.
business. Thereafter, to her surprise, Eva Marie’s business partner from Banago introduced her to an employee of Global Communities who was interested in helping her and the people of Samar.

The government offered assistance to businesses through the Department of Trade and Industry (DTI) by offering loans to be paid after a year. However, compared to Global Communities, government aid was much slower and cumbersome. Since December 2013, DTI had already been inviting businesses affected by Typhoon Yolanda to apply for loans. Eva Marie applied for the loan in February 2014 and it was approved on May 16, 2014. However they only learned about the approval on June 10, 2014. (At the time of writing the case in June 2014, Eva Marie finally received a call that her loan might be approved—a full 7 months after Typhoon Yolanda.) The firm already started the construction of their showroom, however there had been problems with the construction since part of their lot was located in the so-called “no-build zone”. The government decision to ban construction within 40 meters of the shoreline in much of Tacloban City and other parts affected by Typhoon Yolanda created an uproar among the communities that owned properties in these areas. In addition, the initial decision for a no-build zone was applied in a standard manner across the entire region, disregarding evidence on which areas were particularly vulnerable to flooding or storm surges.7

In addition, the building requirements have also become strict after the typhoon so to avoid any more delays, Eva Marie is building one floor instead of the original plan to build two floors. There are also many fees that the firm has to pay, primarily in the form of building permits.

A majority of the houses of the weavers were completely washed out after Typhoon Yolanda. In Barangay Catadman, the flood levels reached the roofs of their houses and lasted for around one hour. Only 50 out of the 185 households were left standing. Many of the houses are now new and are made out of materials that they picked up from different places. Relief goods and cash-for-work programs provided some relief, albeit only temporarily.

In our discussions with some of the weavers in the local community, many of the women mentioned that they could benefit from more access to cash-for-work programs, but that these were limited. Many more people wanted to do cash-for-work but were not chosen; and of those that were chosen, the period was typically only about one week at most. When asked whether

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7 For further information on this government policy, see for example: http://www.mb.com.ph/everything-you-wanted-to-know-about-taclobans-no-build-zone-but-are-afraid-to-ask/.
cash-for-work schemes might deter them from going back to weaving, they mentioned that this was less likely given the cash-for-work was not enough anyway. And even when they engaged in these programs, they made sure to complete their weaving on the side (even late at night if need be).

Finally, tikog also became scarce. If local artisans wanted to weave, they needed to buy tikog from Eva Marie or other suppliers. They lost the option of harvesting the tikog in their own fields as the storm surge washed away most plants.

II.4 Interventions by Different Organizations

1. Global Communities

With the goal of restoring livelihoods and shelter, Global Communities partnered with Eva Maria Arts and Crafts, Inc. and its artisans, whose homes served as their base of production and were damaged by Typhoon Yolanda. The assistance provided to these artisans to repair their homes (and thus be able to resume production of mats) appeared to be a key factor in the rapid resumption of Eva Marie’s business operations.

Global Communities provided overall management and the material support for livelihood restoration, small and medium-sized enterprise asset recovery and shelter repair kits distribution, while Eva Marie provided operational and logistical support. The grant Eva Marie received from Global Communities was about US$15,000—of this amount, around US$6,000 was given to fishermen in the area, and the rest was allocated to the handicraft industry, including Eva Marie’s own firm and weavers. Global Communities did not set up a strong presence in the Philippines in providing its support to the communities affected by Typhoon Yolanda. Instead, it tapped Eva Marie’s existing production chain network, in order to course its support to the targeted beneficiaries. Eva Marie was tasked with the distribution to the beneficiaries and buying some of the materials to be distributed, such as fishing nets and other materials that Global Communities wanted to give out. In exchange for her support, Eva Marie received three sewing machines worth Php20,000 each and a small budget to buy raw materials such as tikog, buri, and dye. In fact, once could surmise that the support received by Eva Marie was also “conditional” on its ability to provide work with Global Communities in distributing its relief. In our discussions with Eva Marie, she mentioned that this seemed fair, even as this took part of her time and energy in the recovery period. While she wanted for her weavers and
embroiderers to receive all of the aid from Global Communities, Eva Marie realized that receiving some immediate support was much better than none at all.

Global Communities’ emphasis was essentially on asset recovery, in order to boost the chances of quicker return to normalcy of key livelihoods in the region. This project benefitted 470 households comprised of weavers and fishermen. They provided materials essential to the resumption of their trade and a supplemental package of essential household material. For weavers (400 households), it included a quantity of tikog grass for weaving and dyeing material sufficient for 1.5 months of production. For fishermen (70 households), this included a fishing net, lamps and handling equipment (Global Communities, 2014).

The project also provided shelter repair kits that benefitted 450 households. In keeping with the technical guidelines produced by the UN shelter cluster in the Philippines, standard shelter repair kits were distributed to individuals who met the cluster targeting criteria. Kits included galvanized iron sheeting, fastening materials and the tools needed to repair and mount the roof. They also included basic household items that were lost in the storm, including basic cooking implements and sanitation supplies such as soap, basins, and buckets (Global Communities, 2014).

The availability of equipment and materials provided by Global Communities enabled the firm to resume its operations. On February 2014, three months after Typhoon Yolanda, the firm was able to export 600 hand-woven bags to the US and Japan.

The priority of Global Communities was to give assistance to those who lived along the coastal area. However, only 20% of the employees of Eva Marie were living along the coastal area and were given shelter repair kits. Because of this, 80% of her employees were not given assistance and this created some tension between those that did not receive help and Eva Marie. Another reason Eva Marie found it hard to motivate her employees to report to work was because they were relying on relief aids from other organizations. This, according to her, may have delayed their effort to revert back to mat weaving.

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8 For further information on this program, see http://www.globalcommunities.org/philippines.
2. **Cash-for-Work Programmes**

As mentioned earlier, emergency cash for work programmes were implemented by different organizations to immediately boost incomes notably among those most affected by the typhoon; and at the same time these programs were intended to speed up the debris removal and clean-up operations (which are among the main activities entailed by the work made available). This approach anticipated that enterprises might take some time to recover and jobs would be deficient in the immediate aftermath of the typhoon. Some of the weavers of Eva Marie Arts and Crafts, Inc. opted to apply for cash for work programmes since they were not able to get back to work immediately. There was scarcity of raw materials as most plants were washed out by the storm surge. Planted buri and tikog were also destroyed by salt water.

Cash for work programmes typically paid around Php260 per day for 8 hours of work. However, participants could only participate once with work duration lasting for 7 to 10 days. Each organization employed its own criteria for selecting eligible participants in their cash for work program; and typically only one member of the family was accepted (in an effort to help spread the benefits across many more takers). While no systematic study has been done on how extensive and coordinated these programs were, it appears based on our research that these were only temporary as many of the organizations have already pulled out. The main organizations that implemented cash for work programs included:

a. **Plan International Inc.**

Plan implemented cash-for-work and unconditional cash grant programmes targeting 12,900 of the most vulnerable families in 11 towns across Western and Eastern Samar in the Eastern Visayas region of the Philippines. The work mainly involved debris cleaning, as well as assistance and construction of temporary shelters. Plan offered villagers work helping to clear debris, especially in the school sites, installing temporary learning spaces and strengthening the community’s sanitation facilities, such as with temporary toilets (PLAN, 2013).

b. **United Nations Development Programme (UNDP)**

In the immediate aftermath of Typhoon Yolanda, UNDP and its partners launched an Early Recovery Programme, which began with emergency employment cash-for-work in debris and waste removal in the most affected areas. The program aimed to help build back better in support of stronger, more resilient and thriving communities able to withstand future super storms. This approach was built on meeting the immediate needs of affected communities by
kick-starting recovery such as supporting the removal of debris and waste, and generating emergency employment while also creating conditions for long-term recovery, resilience and sustainable development (UNDP, 2013).

c. Department of Social Welfare and Development (DSWD)

Under the Cash-for-Work (CFW) Program of the DSWD that started on November 24 and is still on-going (at the time of writing this case), the beneficiaries were given work according to their capacity such as loading and unloading of relief goods, repacking of goods, food preparation, cleaning of debris, coastal clean-up, canal dredging, and communal gardening, among others.

Qualified beneficiaries included those 18 years old and above; and were able and willing to be assigned where they would be needed the most. Areas of assignment were focused on the different relief and rehabilitation hubs of the Department in Tacloban City, Isabel, Ormoc City, Catbalogan and Guiuan, as well as at community projects in Basey in Western Samar and Burauen in Leyte. Each worker was paid daily an average of Php260 for eight hours of work (DSWD, 2014).

As part of DSWD’s coordinating role, the agency also gives out “green cards” to each beneficiary where all the aids they receive are listed. It is a rule that they cannot receive aid if they lose this card. The card then becomes a tracking device for proper and fairer distribution of relief goods and pre-selection of beneficiaries, such as those for cash-for-work programs. Typically, DSWD will prioritize those not yet reached by their assistance; and they will try to target households that have not yet engaged in cash-for-work or other programs.
II.5 Resilience of the Production Chain

At the time of writing this case, Eva Marie Arts and Crafts has received a resurgence of orders for export even as their production is not at its full capacity in light of the scarcity of raw materials and ongoing construction of their warehouse. As part of its adaptation, Eva Marie Arts and Crafts, Inc. found a new supplier of tikog from Alang-Alang, Leyte which was less affected by the typhoon. The weavers who owned some property have also started to replant tikog. Those who were under cash-for-work programs requested that they be assigned to clean up the fields for them to be able to start replanting tikog. One of her suppliers of buri, Miguela Palongpong, has also started replanting, but according to her, buri takes eight to ten years to mature and it will be her grandchildren who will reap what she sowed. For now, Miguela gathers buri from different farmers in Leyte (each only able to supply around 10 stalks) to complete bundles that she can sell. She is currently selling at an increased price of Php12.50 per bundle (up from about Php10 per bundle prior to Typhoon Yolanda).

For the first production of mats after Typhoon Yolanda, Eva Marie noted that some of the tikog were smaller in length and width than usual. The scarcity of raw materials caused an increase in prices. Due to damaged and blocked roads, there were also problems with the delivery of the raw materials in the earlier months after Typhoon Yolanda. Because of these factors, Eva Marie Arts and Crafts, Inc. was forced to impose a 10% increase in the prices of its products.

The weavers who worked from their homes were able to continue weaving, however there were some who chose to work under cash-for-work programmes offered by different organizations. Based on our interviews, these “overlaps” in options could not have taken place...
for too long, as most of the cash-for-work programs were limited in their duration and scope. (As mentioned earlier, many more people wanted to access them; and among those who did manage to gain access, the duration of the programs appeared to be limited.)

In addition, Eva Marie mentioned persistent challenges in changing the mindset of the weavers, some of whom continue to rely on relief goods, cash-for-work, and foundations who promise to pay them higher wages. She thinks that her manpower was thus greatly reduced by some of these programs, subsequently delaying their production and full recovery. Whether and to what extent this is true or not, the issue looms large in the mind of this entrepreneur.

Eva Marie adapted to these challenges by finding new weavers to partner with. She eventually found weavers from Barangay Catadman; and a majority of them have been weaving since they were children, indicating their skill in this craft. They learned the skill from their parents and initially practiced on coconut leaves (dahon ng niyog) which are far more abundant and cheap compared to tikog and buri.

As the majority of the tikog in their own plantations died in the typhoon, they bought tikog from Eva Marie at an increased price of Php1,200 per bundle. In turn, one bundle makes around 9-15 panel mats, which Eva Marie buys from them at an increased price after the typhoon at Php350-380 per mat\(^9\).

One of the main concerns of the weavers is where to get capital to buy raw materials so they can resume weaving mats, which is their only source of income. Without weaving work, their husbands or parents earn income for their households through odd jobs.

These weavers are part of an association formed in December 2013, after the typhoon. It was after Typhoon Yolanda that Eva Marie encouraged one of the weavers from Barangay Catadman, Rowena Lumagbas, to form an association of women weavers in Barangay Catadman. To form an association, the custom is for the aspiring leader or coordinator to bring drinks and food for the weavers to entice them to join. The leader of the association collects finished mats and delivers them to the buyer. Rowena lived in a tent after Typhoon Yolanda and did not benefit from the aid given by Global Communities, but she is now getting on better when

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\(^9\) Before Typhoon Yolanda, Eva Marie sold a bundle of tikog at Php500 and bought one mat at Php180-200. Each bundle could make 9-15 panel mats, depending on the quality of tikog. This entailed a cost of around Php33-56 per mat. Each weaver then received an income of Php124-167 per mat. After Typhoon Yolanda, the price of one bundle of tikog increased to Php1,200 and Eva Marie now buys one mat at Php350-380. This means the cost of producing one mat for the weavers is now around Php80-133 and they take home an income of Php217-300 per mat.
the weavers from their barangay started to work for Eva Marie and she became the leader of the association. Eva Marie gives her coordinators incentives with each bag that they deliver.

The outlook for Eva Marie Arts and Crafts looks optimistic, even as many challenges remain. Due to Typhoon Yolanda and different organizations providing assistance, there has been an increased interest in the local products by both local and international markets. The banig market is once again alive. In the US, it only took five days to sell all the bags they shipped in March and most of the retailers reordered from them.

Nevertheless, this increased interest could also be somewhat disruptive. For example, one project of a local media company posed a threat to Eva Marie Arts and Crafts, Inc. and other handicraft businesses. One of the largest media corporations in the Philippines, ABS-CBN, started planning a project[^10] that would buy banig from the weavers at a higher price. Their goal was to also help resuscitate incomes in the region much more quickly. While laudable, this type of initiative could inadvertently create competition for Eva Marie and other suppliers of banig, even as they are still recovering from asset and other losses due to the typhoon. The presence of this potential competition also raised questions regarding the true competitiveness of pricing in the banig production chain, and whether and to what extent the compensation for the artisans could still be increased while still maintaining the cost-competitiveness of the final product for export.

In response to this development and through her personal connections, Renee talked to some of the people in ABS-CBN to explain some of the possible ramifications of being a competitor in buying mats. The initial plan of ABS-CBN was to build a shop or showroom in Basey that would directly compete with the current handicraft producers. (The intention here was to help the weavers market the mats to visiting tourists by providing them a showroom.) The plan changed when the current producers, including Eva Marie, were invited to a meeting with those managing ABS-CBN’s engagement in the region. As a result of that consultation meeting, the company adjusted the plan; and it now focuses on increasing the income of the weavers by buying a specific number of mats from them at a higher price. At first, they wanted to increase the price immediately by 100%, but Eva Marie told them that this would kill the other businesses as they would not be able to compete with the sudden increase.

Banago plans to come up with a way that will make the weavers loyal to the production of mats they deliver to Eva Marie Arts and Crafts, Inc. The company plans to give one dollar per bag to the weavers to encourage them and give them more of a financial incentive linked to the efforts of Banago and Eva Marie Arts and Crafts, which includes uplifting and preserving the art of mat-weaving.

Before Typhoon Yolanda, Banago ordered items for sale in October, in time for the Spring-Summer deliveries in January of the next year. This time, they would like to go directly to the consumers. Thus, they plan to invest in a press campaign and launch a website where people can order all year round. Based on their projections, this would mean that Eva Marie Arts and Crafts would be receiving US$5,000 worth of orders every two months. Ultimately, it is expected to help create a steady income to the weavers and embroiderers.

Eva Marie recently received an order from a buyer in California. The deal implies a purchase price of Php600 per mat. The ordinary price per mat is just around Php350 to Php380. Clearly, Eva Marie’s pricing so far is highly dependent on the willingness of the buyer to purchase at a higher price. And since Eva Marie says that she shares the good price with the weavers, this does imply some volatility in the pricing (and in what she pays the weavers). For instance, if the order is small, then she can only share the profit with a few weavers in each barangay. This also creates new challenges for Eva Marie who is constantly searching for ways to stabilize both the demand for her products, and also the pricing for the inputs in her production (and what she pays her workers and partners).

Finally, to lessen her risk from another storm surge, one of the changes Eva Marie implemented after Typhoon Yolanda is to ship her final products to a warehouse in Cebu for safekeeping every time her firm completes a certain target (e.g. 1,000 pieces of bags). There is a storage cost, but this is already shouldered by Renee, making this a part of the risk-management strategy for her firm. She is also looking at getting insurance, but she does not yet know where to buy this and how much it would cost. Since her brand new warehouse is still very near the coastline, this is likely to influence her access to these types of risk management products.
III. Quo Vadis?

The world is increasingly becoming shock prone and families and businesses need to cope and thrive despite the rising number of crises and aggregate economic and climactic disturbances (Mendoza et al, 2014). Indeed, a recent Asian Development Bank report notes that the Asian region is among the most shock-prone in the world—home to 1.1 deaths per 1,000 square kilometers from natural hazards (double the global average of 0.5 deaths per 1,000 square kilometer) and 50% of the world’s estimated economic cost of disasters over the past 20 years. The estimated average loss incurred by the ASEAN from disasters is more than $19 billion every 100 years, and yet less than 5% of disaster losses in developing Asia are insured as compared to the 40% in developing countries.

Promoting more resilient firms and production chains could also be part of strategies to strengthen the resilience of communities. The implicit rationale here is simple. Public sector and donor support for disaster- and crisis-hit communities is critical; but it is only when firms get back up that the community is able to recover fully. Once firms are able to start operating again, then workers are able to return to their jobs and the domestic economy is able to return to normal. Stronger resilience over time is also expected to reflect more robust economic competitiveness and yield more robust investments (Mendoza et al, 2014).

Crises even offer opportunities for expansion and innovation for those firms that are most resilient and are able to boost their competitiveness after crises. Nevertheless, not all firms are able to seize opportunities during crises. In the case of severe devastation—such as that brought about by Typhoon Yolanda on parts of the Visayas region of the Philippines—it is also likely that the worst hit firms are the smaller and informal ones. These types of shocks have the potential to further increase the productivity divide between relatively smaller and larger firms. Policymakers will need to think carefully about improving public infrastructure under these shock-prone environments, so as to help mitigate the effects of climatic shocks on both firms and their consumers (on whom firms clearly depend from the point of view of both labor inputs and demand).

All these factors appear cogent in the case of Eva Marie Arts and Crafts, as it recovers from Typhoon Yolanda. One of the insights gained from the fieldwork is the necessity of knowing the language and circumstance of the locals. The day before Typhoon Yolanda struck, government officials went around on foot in the town proper of Basey to give warnings of a
“storm surge” that would be caused by the coming typhoon. People heeded their advice to evacuate, leaving their houses that same morning, but the sun came out during noontime and many people returned to their homes, thinking the typhoon would not be as strong as warned. After the typhoon, many people said that had the government used the term “tidal wave” which they better understood, they would have been more prepared. Many people in Basey also found evacuation places through their own efforts, such as caves or the houses they built in higher areas. Given that Typhoon Yolanda destroyed even the sturdiest houses, it seems that proper evacuation procedure and evacuation areas are the most crucial elements that can save many lives.

Nevertheless, natural calamities, such as typhoons and earthquakes, remain largely out of one’s control and are difficult to cope with. In a town where every woman grew up weaving, no typhoon would stop them from their only source of livelihood. This is an example of a situation where the Filipino’s spirit of resilience reigns. Considering the fact that Eva Marie Arts and Crafts, Inc. had to start from nothing after Typhoon Yolanda, closing the business or starting a different line of business was an easier option. However, the owner Eva Marie Adona-Yu realizes that the banig industry in Samar is not only profitable but part of the heritage of the region. She admits that there is still fear on her part, but she has to be a source of hope among her employees and the community. Resilience of SMEs, which represent the backbone of the region's economy, enables the community to stand up again.

Interventions, such as donor support for disaster, enable a firm to recover faster. Without the intervention of Global Communities, the firm might not have been able to resume its operation at all. After an unforeseen storm surge washed out homes and establishments and killed thousands of people, the priority of the people was to provide themselves immediately with the basic necessities such as food and shelter. Once the basic necessities were provided, they began to restore their livelihoods. The intervention of Global Communities enabled the supply and production chain to function again and thus resume its operations. The speed at which Global Communities offered to help Eva Marie underscores a key factor in this firm’s resilience.

This particular entrepreneur sensed that most of the aid from the government seemed to be focused on helping households; and little has been done to make it easier for businesses to recover, even months after the typhoon when households have largely stabilized. If households were given cash and relief goods without many conditions post-crisis or post-calamity, then Eva
Marie noted that perhaps firms must also be given this benefit to help them recover faster. In accessing the government program for credit, Eva Marie noted that she had to go through many credit investigations and needed to provide numerous documents simply to apply for a loan from the DTI. She mentioned that this was during a time when almost all of her possessions were also washed out by the typhoon. She was also asked to pay several governmental fees to rebuild her showroom. These are obstacles that the government can consider to remove in cases where businessmen are already struggling to recover from their loss.

Finally, the typhoon also exposed several inherent challenges in the production chain, including the possibility of increasing the value-capture of the artisans and embroiderers. Even prior to Typhoon Yolanda, the compensation for weaving appeared to be well below the minimum wage, based on our calculations\textsuperscript{11}. It seems that one of the solutions is not to increase the market or output, but to upgrade the market so that the products can be sold at a much higher price.

\textsuperscript{11} Minimum wage (non-agriculture) in Samar (Region VIII) is Php260 per day (8 working hours per day, 5 working days a week). Before Typhoon Yolanda, if the weavers could finish two mats per week and Eva Marie bought one mat at Php180-200, this would be an income of Php72-80 per day. If they bought tikog from a supplier, then this income further decreases.
REFERENCES


Annex 1. Images from the Case Study

Eva Marie Adona-Yu with Renee Patron of Banago

The storm surge has reached the showroom of Eva Marie Arts and Crafts Inc. and completely destroyed the building and the products inside.

A part of the building of the showroom was already within the no build zone issued by the government after Typhoon Yolanda.
Photo taken during the interview with the weavers from Barangay Catadman in Basey, Samar

Some of weavers of Barangay Catadman had already started to plant tikog.

Tikog is the grass used for weaving mats.
Buri is a palm leaf used in the embroidery of the mats.

Mrs. Miguela Palongpong is getting ready to plant buri in her land which was washed out by the storm surge.

Weavers from Barangay Basiao prefer to weave in caves since it is cool and is a good environment for the ticog.
The residence of the parents of Eva Marie now serves as the workplace of the embroiderers.
Annex 2. Timeline of Events

2013

November 2  A low pressure area (LPA) develops east of the Pacific islands of Micronesia (Rappler, 2013).

November 3  LPA classified as tropical depression by Japanese Meteorological Agency (JMA) and the Joint Warning Center (JTWC) as it intensifies. Typhoon warning is raised in the islands of Palau and Micronesia (Rappler, 2013).

Three C-130 aircraft with supplies and 32 helicopters was prepared by the military should they be needed in Tacloban and the provinces of Leyte and Samar. 20 Philippine Navy ships were put on a state of heightened readiness (WSJ, 2013).

November 4  JMA and JWTC upgrade it to a tropical storm and assign the name Yolanda (Rappler, 2013).

November 5  The storm became a typhoon as it passed through Micronesia, and was forecasted to hit the Philippines (Rappler, 2013).

November 6  In Basey, persons with disabilities and senior citizens were evacuated from danger areas to ensure their safety (GMA News, 2013).

November 7  President Aquino warned residents of the calamity our countrymen will face in the coming days, “Let me repeat myself: This is a very real danger, and we can mitigate and lessen its effects if we use the information available to prepare.”

November 8  The storm brought tremendously powerful winds roaring ashore as it made landfall in the province of Eastern Visayas. Haiyan, known in the Philippines as Yolanda, appeared to retain much of its terrifying force as it moved west over
the country, with sustained winds of 295 kph, gusts as strong as 360 kph. Yolanda's wind strength makes it equivalent to a Category 5 hurricane (CNN, 2013). The winds tore roofs off buildings and a storm surge of anywhere from 3 to 5 meters (10-17 feet) washed away flimsy homes; much of the local elevation is about 10 feet above sea level (NASA, 2014).

Cities and villages in the hardest hit areas of Leyte and Samar were cut off from most ground transportation and communications. Capt. John Andrews of the Civil Aviation Authority of the Philippines received a radio report from the Tacloban airport station manager who said there were more than 100 bodies in the streets of Tacloban and more than 100 people injured. Philippine officials feared the death toll would grow (CNN, 2013). Looting was reported in Leyte (GMA News, 2013).

November 9 Tacloban City Airport was opened for military-grade aircraft. The first flight of C-130 transported Secretary of Social Welfare and Development Dinky Soliman, NDRRMC Director Eduardo del Rosario, an AFP medical team, and members of GHQ Crisis Action Team, Medical Team and members of GHQ Crisis Action Team, two generator sets, 7,000 lbs of relief goods from the Department of Social Welfare and Development (DSWD) and other food packs. An incident command post and radio contact center was established immediately upon arrival of equipment to monitor movement of relief operations (gov.ph, 2013).

November 10 The Department of Social Welfare and Development (DSWD) estimates that more than 2.1 million families, or around 9.53 million individuals, are affected by Typhoon Yolanda (Rappler, 2013)

November 11 President Aquino declared state of national calamity in Yolanda-affected areas to hasten the action of the government to rescue, provide help, and rehabilitate these areas. In Tacloban City, the government deployed armored vehicles, set
up checkpoints and imposed curfew to help end looting in the city (Rappler, 2013).

November 12 PNP Chief Director General Alan Purisima ordered regional directors to implement a price freeze, along with local government units (LGUs) and the local Department of Trade and Industry (DTI) units (Rappler, 2013).

November 13 Amongst those devastated is Basey, a seaside town in Samar Province that lies across the bay from Tacloban, where 433 people are believed to have perished and many remain unaccounted for. These cities however are amongst the fortunate ones as their residents have begun receiving aid in the form of food, water and even mobile hospitals from countries all over the world (DOGONews, 2013)

November 14 Barangay San Antonio in Basey was reduced to rubble with about 100 houses left standing out of 1,000 and wherein 50 were estimated to be dead (Reliefweb, 2013).

Health Secretary Enrique Ona declared a price freeze on essential medicines to deter pharmacy owners and drug manufacturers from taking advantage of the desperate need for drugs (Rappler, 2013).

November 15 Some NGOs, the Red Cross, and the military reached Marabut with some relief supplies and provided some first aid (Reliefweb, 2013).

November 16 The government finally decided to airdrop relief goods to remote barangays, an idea that was earlier dropped because of supposed risks (Rappler, 2013).

November 17 80% of the population in Tacloban has access to piped water (UNOCHA) (WSJ, 2013).

November 18 Trees were flattened, power lines knocked down and officials estimate more
than 300 people were killed despite the official death toll of 190 dead in Basey (The Philippine Star, 2013).

November 19  
Phone networks restored in 85% of 419 municipalities in the three worst-affected regions of Central, Eastern and Western Visayas (UNOCHA) (WSJ, 2013).

November 23  
Official death toll for Typhoon Yolanda exceeds 5,200, confirming that storm was one of the Philippines’s deadliest ever recorded (NY Times, 2013).

November 24  

November 25  
The United Nations Development Programme (UNDP) began debris removal projects by providing cash-for-work to villagers hit hard by Typhoon Yolanda. Local communities started clearing rubble and medical waste, earning much needed income to get back on track after the destruction from the typhoon, while also easing access routes for humanitarian supplies.

November 26  
In Samar, about 240 families will benefit from the temporary shelter being constructed at the two-hectare Basey First Housing Area in Sitio Bangon, Basey, Samar as the contractor starts working for the construction of 10 bunkhouses (GMANews, 2013)

December 2  

December 10  
Dominant carrier Philippine Long Distance Telephone Co. (PLDT) has fully restored network services in all the cities and municipalities (Philippine Star, 2013).
December 24 100% power has been restored in all areas affected by Typhoon Yolanda. The last 5 municipalities of Eastern Samar that remained disconnected from the grid have been energized on the dawn of December 24, according to Petilla. These are Lawaan, Guiuan, Balangiga, Quinapondan, and Giporlos, all in Eastern Samar (Rappler, 2013).

2014

January 22 DTI extends loans to businessmen affected by Typhoon Yolanda. The Small Business Corporation (SBC) reported a total of P200 million loan applications from small and medium enterprises (SMEs) in the Visayas regions displaced by super typhoon Yolanda. The DTI said that about 50,000 SMEs were affected by the destructive typhoon in the three Visayas regions (Leyte Samar Daily News, 2014).

March 10 Nine LGUs in Yolanda-hit towns get P73M cash-for-work benefit. The beneficiaries worked mostly in the different relief hubs, seaports, and at the airport assisting in the hauling of goods (Philippine Star, 2014)

Timeline of Events for Eva Marie Arts and Crafts

2013

October 15 Last shipment to Japan and cash inflow before Typhoon Yolanda.

October 16 Eva Marie bought materials in Cebu worth P160,000 to prepare for a volume order from Tommy Bahama. The shipment was set for December 15, 2013.

November 8 Typhoon Yolanda hit Samar and a storm surge of about 10 ft. washed away the raw materials and products ready for shipment. It has also destroyed the showroom of Eva Marie Arts and Crafts.
A few days later, the Adona-Yu family left Samar for Manila to seek refuge.

**November 24**  
Eva Marie met with Christopher Rae of Global Communities in Manila to talk about her situation and the situation in Samar. Global Communities did not promise anything at first but they expressed their intention of helping the community by donating shelter kits/ GI sheets to households in the coastal areas that were affected.

**December**  
Some suppliers who were not affected or those who were able to save the *tikog*, *buri* and mats sold their products to Eva Marie.

**2014**

**January**  
Global Communities went to Basey to assess the extent of the damage. A contract was signed by Global Communities and Eva Marie Arts and Crafts. Eva Marie was assigned to purchase the fishing kits and sewing machine and to head the distribution of shelter repair kits, fishing kits and weaving kits for the community in exchange for three sewing machines and money to buy the raw materials, such as *tikog* and *buri*.

**February**  
The firm started the embroidery of bags for shipment. They also applied for a loan under the Department of Trade and Industries.

**March 30**  
The firm was able to make its first shipment after the typhoon.

**May 16**  
The firm’s application for loan to DTI was approved.

**June**  
The firm was able to confirm thousands of products ordered by Tommy Bahama to be delivered by December 2014.

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