# VALUE CHAIN ANALYSIS REPORT ON VEGETABLE ENTERPRISE IN LEMERY, ILOILO

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## Introduction

As part of the recovery and reconstruction efforts in Typhoon Haiyan-affected communities in Central Philippines, CARE International in the Philippines is implementing the four-year "Typhoon Haiyan Reconstruction Assistance Project" in Regions 6 and 8 funded by the Global Affairs Canada (GAC). The project focuses on supporting ten municipalities in three provinces in the Haiyan-affected areas, building on CARE's existing community enterprise facility (CEF) and women enterprise fund (WEF) by providing focused, deepened and sustained capacity to targeted men and women entrepreneurs through the value chain approach. It will directly benefit 21,600 people (10,800 women and 10,800 men).

With local partners, CARE is working closely with government line agencies and provincial, municipal and barangay government units, business development and financial service providers, academe and private sector. CARE, through its local partner Agri-Aqua Development Coalition (AADC), provides business development services on community enterprise organizing value chain analysis, gendered market model value chain on three commodities, namely abaca, vegetables and seaweeds.

This value chain analysis report on vegetables enterprise in Lemery, Iloilo is composed of four (4) parts: (1) profile of vegetables product and enterprise, (2) methodology, (3) value chain analysis, and (4) recommendations.

# Profile of Product: Vegetables and the Vegetables Industry



The Philippine economy is driven by the agriculture sector and the vegetable industry contributes more than 30% to total agricultural production. Main areas for production of highland vegetables are Cordillera, Northern Mindanao and Central Visayas, whereas production areas for lowland vegetables are Regions I, III and IV. Between 1995-2005, exports of vegetables have risen slowly while imports have risen dramatically, displacing local production of some crops and outcompeting on price and quality.<sup>1</sup>

# Methodology

A Value Chain Analysis (VCA) Workshop was conducted on September 6-7, 2016 in Iloilo City which was attended by key members and officers of vegetable farmer associations. The two-day VCA workshop oriented the community stakeholders on the basics of value chain and market mapping

<sup>&</sup>lt;sup>1</sup> The Vegetablle Industry in Tropical Asia: The Philippines, An Overview of Production and Trade, Greg Johnson, Katinka Weinberger, and Mei-huey Wu, <a href="https://www.avrdc.org">www.avrdc.org</a>

as a tool for analysis on chosen commodity. The workshop also developed a gendered market map as visual representation of the value chain of vegetables, including enabling and hindering factors, and required market services. The workshop was conducted in an interactive learning process using adult learning principles.

In a preliminary workshop, the learners were asked to form a human value chain in vegetables enterprise. This was done in a short role play so they were able to see the connection among various players/stakeholders in the vegetables enterprise. After which, inputs were provided by the trainer-facilitator. The inputs provided included a definition and description of value chain, its basic functions and components/process, market model – including enabling and hindering factors, value chain processes and actors, and market services. Inputs on gendered market map were also shared. This included a description of what a gendered market map is, and how it is developed/formulated.

In a workshop exercise, participants were asked to develop a gendered market map on vegetables. The participants were grouped into three (3) wherein each group will develop a part of the gendered market map. One group developed the value chain, the second group developed the enabling and disenabling factors, and the third group developed the market services. Their group outputs were reported in plenary for further discussions and clarifications.

After developing the value chain analysis, enabling and hindering factors, and market services, the participants were asked in plenary to identify participation of men and women in the vegetables value chain and reflect it in percentages. This facilitated the development of a gendered market map. Immediately afterwards, the participants were then asked to identify opportunities in the value chain where smallholder farmers and their association can generate higher income.

The two-day workshop was concluded with a recap, test, and a review of the objectives of the workshop and a validation from the participant that the objectives were met.

The output of the two-day workshop was a gendered market map/value chain analysis and this is provided in the succeeding chapter.

## Value Chain Analysis

#### The Vegetables Value Chain in Lemery

The key officers and members of the vegetable farmer associations in Lemery, Iloilo developed the vegetables gendered market map. They identified the input providers, input suppliers, producers, producers, and buyers and users. The vegetables gendered market map is attached as Annex A of this report.

### **Input Providers**

Seeds, technology, facilities and tools are among the inputs needed for vegetable farming and these are provided by the Department of Agriculture (DA), provincial and municipal government units, farmers, and private suppliers.

#### **Input Suppliers**

Carry All Merchandising supplies farm tools, whereas San Antonio Farmers Association and individual farmer producers and Agri-Farm Supplies provide fertilizer, FPJ, IMO, and OHN.

#### **Producers**

In addition to 24 farmers associations in Lemery which produce vegetables, Marapal and Alcantara Rice and Corn Farmers Association also produce vegetables.

#### **Products**

Raw, seeds, processed and waste vegetables are produced in Lemery. The following are the kinds of vegetables being produced as such: chili leaves, papaya, sweet potato leaves, string beans, ampalaya, okra, upo, kulitis (spinach), cucumber, squash, eggplant, ginger, malunggay (moringa), and saluyot.

#### **Buyers and Users**

Raw vegetables are sold to Yawyawan Trading Association, Pantoc and Bankal Trading, individual buyer/seller, wet market/bagsakan center to be supplied to market vendors, schools, hospitals, supermarkets, hotels and restaurants for users and consumers.

Processed vegetables are taken by Poblacion Farmers Association (dried vegetables), Yawyawan and Bankal Farmers Association (pickled vegetables), and Ambo Farmers Association (squash candy balls and feeds) will be supplied to commissaries (for fast food chains) and local restaurants.

Vegetable seeds are consolidated in seed bank for the seed supply of vegetable farmers.

Waste vegetables are consolidated and supplied to livestock growers and organic input producers.

#### **Market Services**

Available market services for vegetables enterprise in terms of finance, technology, logistics, business development, and human resources were identified. Vegetables farmers also tagged which among the services have they availed and which are yet to be tapped.

On finance, Lemery vegetable farmers have yet to avail of microfinance services by TSKI, insurance provided by PCIC, and marketing fund by Landbank and BARBASA.

On technology, processing technology services are provided by ATI and DOST, production technology are provided by DA, CPU and UP, and post-harvest handling technology are provided by DA, DTI and UP-Los Banos. Storage technology are available with UST and SDTI, while harvesting and sorting technology are provided by DTI and DA. All these services are yet to be tapped by Lemery vegetable farmers.

On logistics, Lemery vegetable farmers were able to avail of harvest facility by CARE whereas they have yet to avail of similar facility by DA. Storage facility is provided by CARE and FAO, although Lemery vegetable farmers have yet to avail of these services. Trucking facility is provided by CARE and DA, and Lemery vegetable farmers availed such services from CARE. Production facility is available with the LGU and DA, but farmers have not availed these yet. Processing facility is provided by DA, while refrigerated van services are provided by CARE and DA. Lemery vegetable farmers have yet to avail such services. The farmers avail of plastic crates provided by CARE.

On business development, market information is provided by DA/AMAD and UP-Los Banos, production programming is provided by TSKI, and branding and packaging is provided by DTI and TSKI. Lemery vegetable farmers have yet to avail such services. Business management is provided by CARE and TSKI, certification is provided by DOLE, CDA and SEC, and disaster resilient measures are provided by LGU and CARE. The farmers have yet to avail the certification services and programs on disaster resiliency. Capacity building for human resources are provided by DTI, FDA and TESDA.

On human resource, processing workers, truck labor, farm labor and storage facility workers are provided by farmer association members.

An illustration of the market services for vegetables enterprise in Lemery is provided in Annex A.

## (Dis-) Enabling Factors

The following were identified as enabling and disenabling factors:

Enabling Factors	Disenabling Factors
<ul> <li>Presence of farm to market road</li> </ul>	Rain-Red Farms
<ul> <li>Ready supply of vegetable for household</li> </ul>	<ul> <li>Limited personnel of Municipal</li> </ul>
consumption	Agriculture Office (MAO)
<ul> <li>Sufficient technology on vegetable</li> </ul>	No bagsakan center
production	Most farmlands are acidic and
Available greenhouse technology from	degraded
DA	<ul> <li>Low income of vegetable farmers</li> </ul>
<ul> <li>Farmers with marketing experience (i.e.</li> </ul>	<ul> <li>DA no support in terms of farm</li> </ul>
Bakal FA, Pontoc FA, Yawyawan FA and	equipment for vegetable
individual buyer/seller)	production
<ul> <li>Existing CARE Philippines/DSWD SLP on</li> </ul>	<ul> <li>3 barangays are ot yet organized</li> </ul>
vegetable production	<ul> <li>75% of households are living below</li> </ul>
<ul> <li>28 barangays have well-organized</li> </ul>	poverty line
farmers associations	<ul> <li>Insecure land tenure of some</li> </ul>
<ul> <li>60% of population are engaged in</li> </ul>	farmers
vegetable production	<ul> <li>Some crops are vulnerable to</li> </ul>
<ul> <li>Municipal Agriculture Office (MAO) is</li> </ul>	climate change
supportive	<ul> <li>Limited reach of LGU in</li> </ul>
• Equal opportunity for men and women	implementing DRR strategies
in farming	Black propaganda of competitors
Local ordinance on organic farming	Low quality of product
<ul> <li>Vegetable consumers are health</li> </ul>	(Un)availability of planting
conscious	materials
Conducted CBED training on vegetable	(Lack of) climate resilient crops
	- (Eack or) chilate resilient crops

Enabling Factors	Disenabling Factors
<ul> <li>At leats 13 farmers have secured land tenure</li> <li>Availability of demo farm/testing evaluation of varieties</li> </ul>	<ul> <li>Denuded forest</li> <li>Landslide and perennial flooding prone farming areas</li> <li>No demo farm for vegetable production</li> <li>Unstable source of water</li> <li>90-95% of farmers are still practiving inorganic farming</li> <li>55% of farmers have no access to farm to market roads</li> <li>Local ordinance on organic farming is not fully implemented</li> <li>Need for soil testing for vegetable production</li> <li>Less area for vegetable production</li> </ul>

## Recommendations

Considering the high nutritional value of vegetables and its potential for addressing food security especially among the poor, it is hoped that the vegetable industry is further developed by adopting appropriate policies and programs to support environment-sustainable agriculture in the country. Organic farming and integrated pest management may be promoted, as well as the use of appropriate varieties and technologies.

It is hoped that the gendered market map would guide the vegetable farmers associations in Lemery, Iloilo in firming up their respective operational systems, building their capacities and set higher goals for production and marketing towards sustainability.

