

Background

Project ACIAR AGB/2012/109 Developing Vegetable and Fruit Value Chains and Integrating them with Community Development in the Southern Philippines

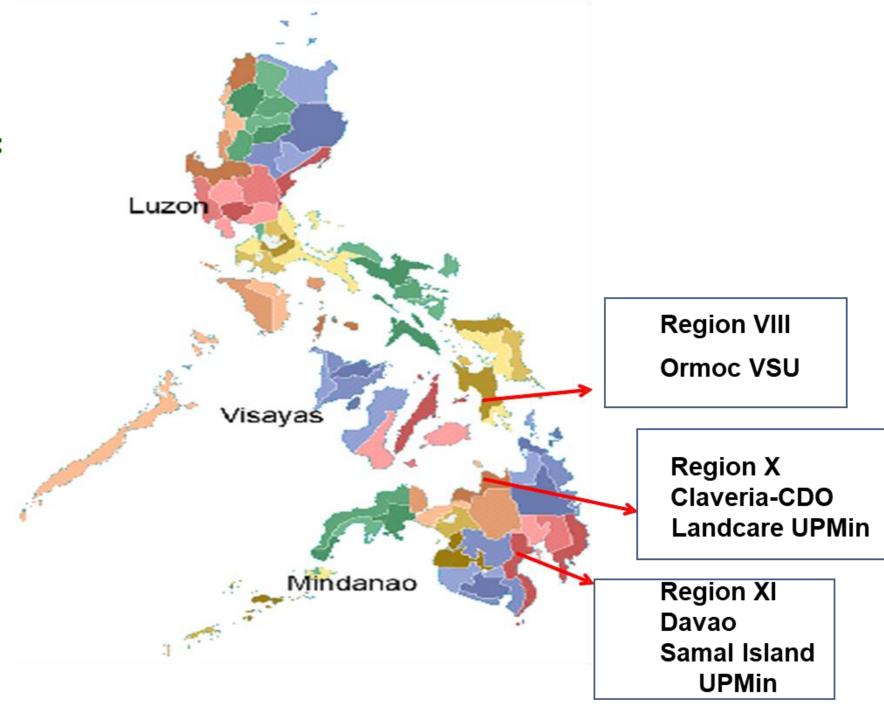
Objective:

1. Identify opportunities for improving farmer-to-market chain performance, competitiveness and farmer net income; and associated opportunities for community development

- **2. Develop value chains** to improve the level and sustainability of smallholder net income and livelihoods
- Maximise community benefits from improved value chains and enhanced community capacity to support value chain performance.

Background

Project locations:



Natural condition:

o **Area:** 277 ha

Altitude: 600-700 meters above

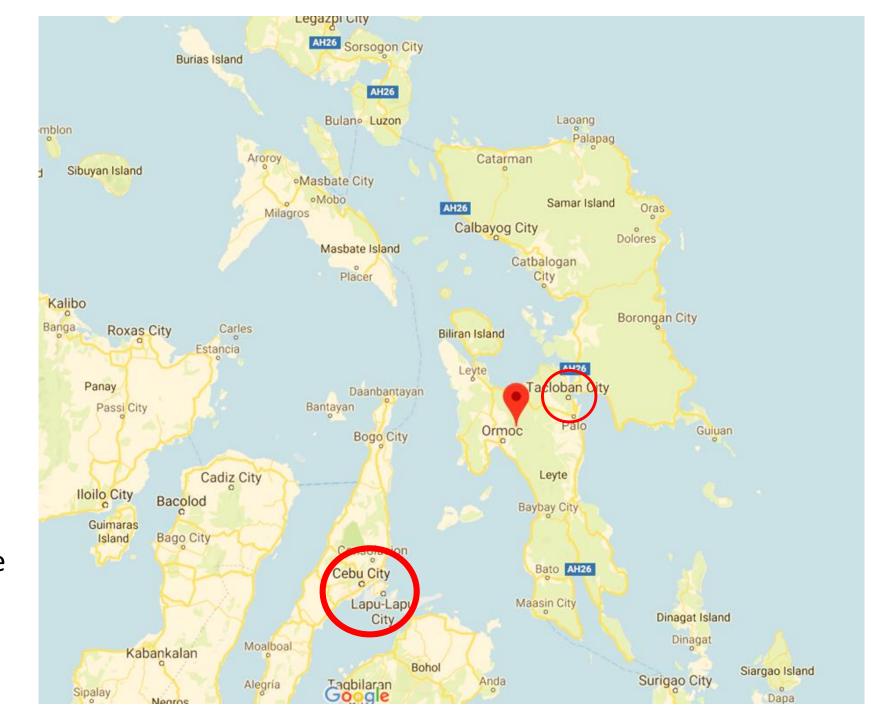
sea level

• Climate: Relatively cool climate allowing growing subtropical vegetable. The area receives rainfall frequently with wet and very wet months. The wet months are from February to June, and very wet months are from July to January



Cabintan in relation to major markets

- Only 12 hours from Cebu metropolitan area by ferry from Ormoc
- Only 4 hours away from Tacloban
- Ormoc itself becoming large consumption centre with Robison and SM shopping centers



Economic and social background:`

Population: 2,498 people = 608 families = 584 households.

Majority of them have access to basic necessities (electricity, water, etc.).

The barangay provides education facilities, beginning from elementary to secondary education.

Economics: majority are farmers with average monthly income of 3, 611 Pesos (100AUD). Sixty per cent of the barangay inhabitants owned the land, while 22% occupied the land for free with consent from the owner.



Economic and social background:`

Vegetable production provides significant portion of income and its characteristics depends on the season: during the rainy season (July to January) farmers grow cabbage and Chinese cabbage and during the dry (less wet) season (February to June) sweet pepper, chilli, tomato, beans, pechay and cabbage. Farmers plant these crops because of favourable growing conditions, not because of market demand resulting in oversupply and low price.

Marketing:

Most of the farmers are small and depend on traders for credit to source inputs.

- \Rightarrow traders, who are product aggregators, dictate the price.
- Farmers sell products without grading, usually in overloaded sacks and box
- => high percentage of rejected product and further reduction in income.

Economic and social background:`

Energy Development Corporation (EDC)

As part of the required corporate social responsibility (CSR), EDC commit to provide livelihood opportunity to communities within EDC reservation area

Partners Multi-Purpose Cooperative (PMPC)

Umbrella organisation that channel EDC funds and provide financial, administrative and marketing services to more than 20 associations from 16 barangays within EDC reservation area.

Cabintan Livelihood Community Association (CALCOA)

CALCOA was established as one of the constituencies of PMPC in 2005 to support livelihood through vegetable and abaca production, and to prevent forest logging.

CALCOA

CALCOA's situation prior to 2013 - problems

- The farmer association used most of the money to pay the farmers for their labour on the communal land for vegetable production.
- CALCOA had more than 70 members and only 20 members were active. The farmers in the association also grew vegetables in their own fields and the association was struggling to engage farmers to grow vegetables in the communal land under the protected structure.
- The association had policies which allowed all members of the association to share benefits equally irrespective of the work load on the communal land. This discouraged many farmers to engage in vegetable production activity under the tunnel.
- Also, the vegetables they grew under the tunnel didn't fetch them better price as the quality was poor. The farmers using the tunnel were selected through a lot method and paid fees (3200 pesos) for the tunnel.

Relatively favourable climatic conditions Close distance from major markets Support from EDC



farmers are still poor



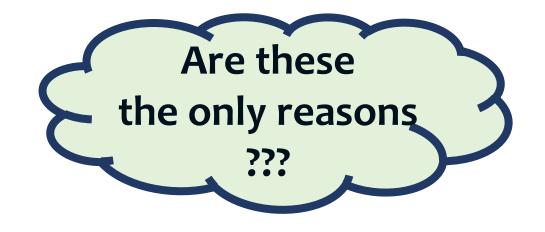


Technical and market information

Finance

Insurance

Logistics







Relatively favourable climatic conditions Close distance from major markets Support from EDC



farmers are still poor



There are more...

Lack of knowledge and skills to manage production, marketing and finance

Lack of analytical skills

No confidence to engage and make change

Lack of trust often because of previous negative experiences

Culture?

CALCOA

Typhoon and post-typhoon

8 Nov 2013, Super-typhoon Yolanda caused catastrophic destruction across the central Philippines. Cabintan was severely affected. *All tunnels were destroyed*.

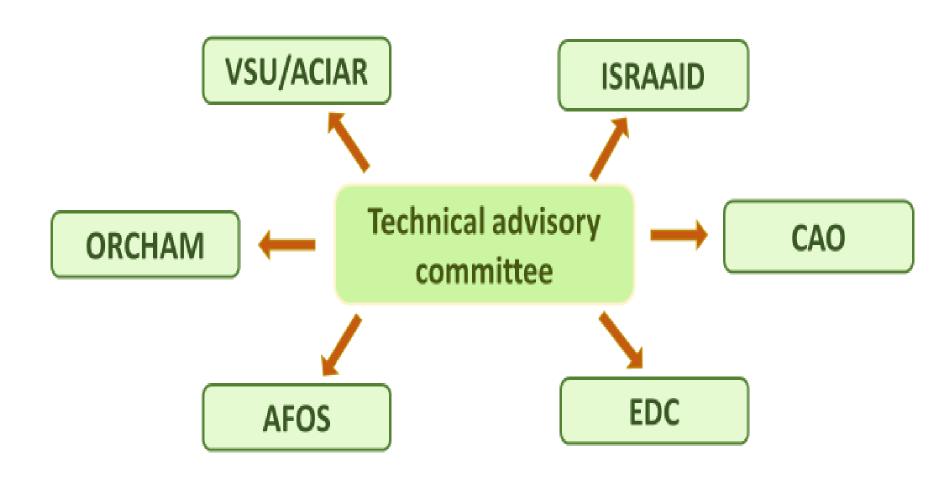


Post-typhoon recovery phase: influx of NGOs and international organisations providing aid to people in affected area. Yet, their *efforts* were carried out in very *individualistic and disorganised* manner, and sometimes even came into *conflict*

August 2014: project team initiated The *Technical Advisory Committee (TAC)* to coordinate all the organisations working in Barangay Cabintan.

Members: *ACIAR project/VSU, IsraAid*, German foundation AFOS Ormoc Chamber of Commerce (OrCham), EDC and Ormoc- City Agriculture Office (CAO)

CALCOA





Marketing



Improving organisational structure and management



Infrastructure rebuild

IsraAid, AFOS and EDC: finance, materials and technical supports



CALCOA: labour

1 large greenhouse13 high tunnel Israeli type11 high tunnels Filipino type30 small tunnels

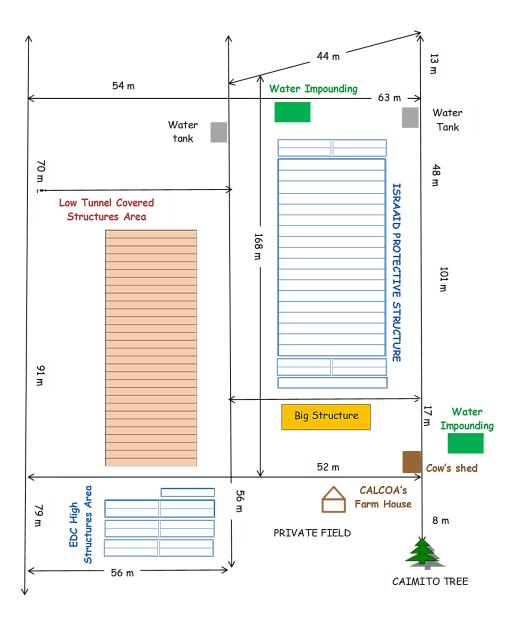
Modern Irrigation system

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2 years

Infrastructure rebuild





New crops/varieties and new production practices (with monitoring)

- Initially IsraAid agronomist conducted experiments with new crops (salad tomato), or different varieties or different production methods without consultation with farmers
- During experiments, farmers' opinion or approval were often ignored.
- Farmers did not receive proper communication/explanation about the experiments and how the trials can lead to better production and commercial outcomes.
- After experiments, farmers still hesitated to apply new crops in production
- Income distribution: even though farmers did trust that IsraAid/project will pass all income to them, they were not sure if they would get fair share of the income proportional to their labour input. (In other words, whether farmers who did not put much time or effort would be rewarded same as hard-working ones)

New crops/varieties and new production practices (with monitoring)

 First, the project shifted initial focus from new products to improving production of familiar tomato variety and made innovations in marketing: grading and better packaging (part 2) => create initial success





New crops/varieties and new production practices (with monitoring)

 After success with tomatoes, farmers were confident to start production of bell pepper, which required substantial investment





New crops/varieties and new production practices (with monitoring)

- First, the project shifted initial focus from new products to improving production of familiar tomato variety and made innovations in marketing: grading and better packaging (part 2) => create initial success
 - After success with tomatoes, farmers were confident to start production of bell pepper, which required substantial investment
- The project team also worked with CALCOA leaders to develop a mechanism (and group structures) needed to effectively distribute resources, labour and profit (part 3)

In both cases the project agreed to underwrite risks by guarantee compensation in case the initiatives fail

Maximise product qualities by improving post-harvest

- Vegetables have been harvested only during a cool period of the day.
- Plastic crates are used to get vegetable from the tunnels to shaded processing area.
- Packaging practice was changed to reduce loss during transportation by reducing quantity of tomato packed from 26 kg to 24 kg.







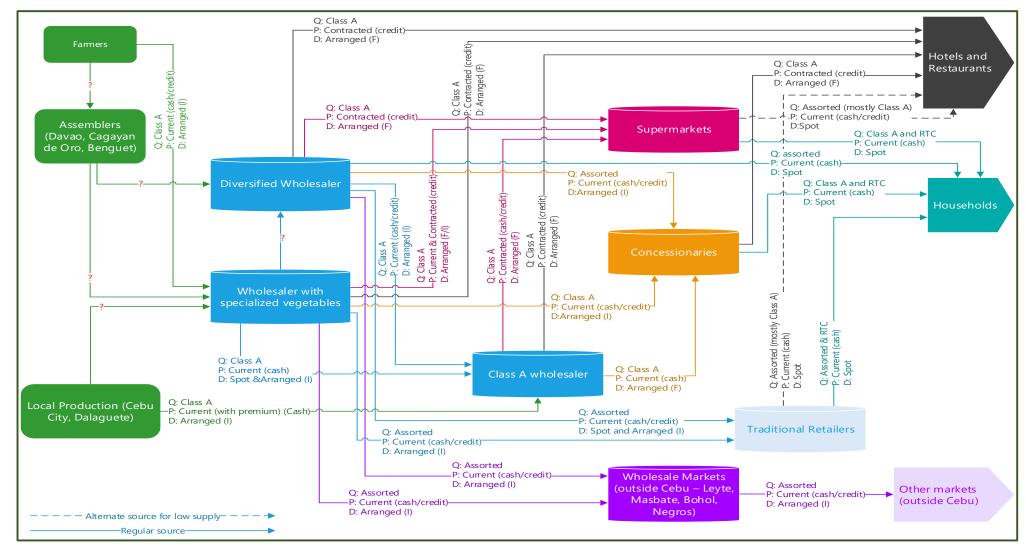






2. Marketing

Market assessment



Vegetable distribution network

Traders visited farmers

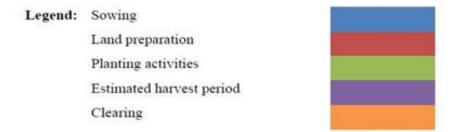


2. Marketing

Production planning

Based on market assessment (crops are selected based on price and customers' preference. Members identify planting areas to meet target volume based on the demand

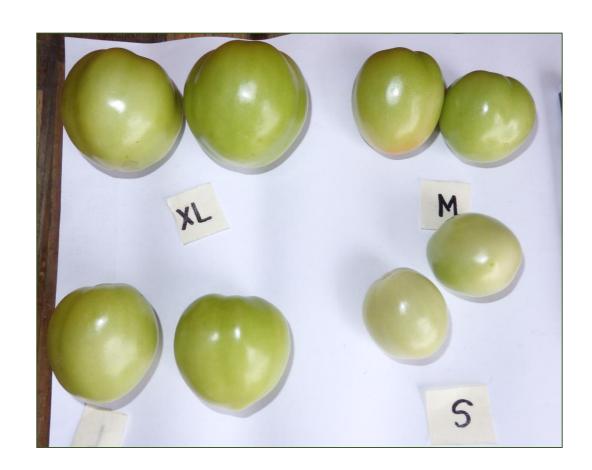
Group No.	No. Structure	Crops	CY: 2017 Second Qu Apr				May				Jun			
			14 2-Apr	15 9-Apr	16 16-Apr	17 23-Apr	18 30-Apr	19 7-May	20 14-May	21 21-May	22 28-May	23 4-Jun	24 11-Jun	25 18-Jun
5	6	Lettuce												
4	3	Capsicum												1
4	3	Tomato												
2	4	Chinese Cabbage												
2	1	Lettuce												
3	4 1/2	Cabbage												
3	4 1/2	Tomato					1							
		Salad Tomato												
1	1	Lettuce												



2. Marketing

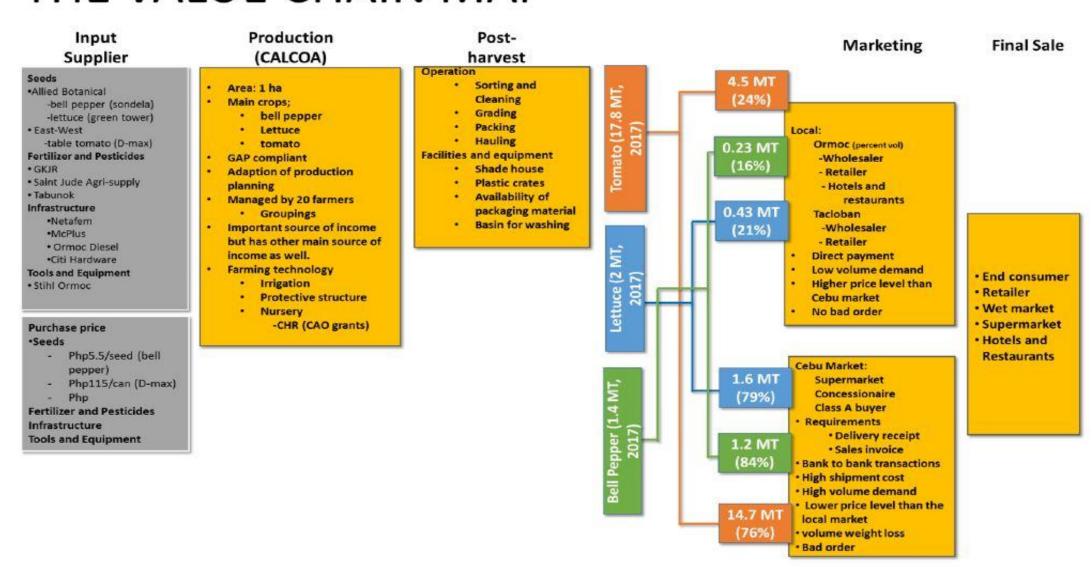
Test marketing and improvement





grading

THE VALUE CHAIN MAP



Developing group governance mechanism and organisational structure

As soon as CALCOA finished rebuilding necessary structures and entered production phase, the problem of *resources* (tunnels), labour and profit distribution emerged

Farmers were not sure if members who did not put much time or effort would be rewarded same as hardworking ones

There are activities which are essential to production (and should be carried out collectively) but do not generate incomes directly and thus attract little attention from farmers



There was a need to develop a mechanism to share resources, record labour contribution and distribute profit accordingly, which must be accompanied by a suitable organisational structure

Developing group governance mechanism and organisational structure

Solution:

25 active members of CALCOA were divided into 5 *small* groups (4 to 6 members/group) with assigned leaders. Each group were assigned to operate and maintain 4 to 5 high tunnels

Each group developed its own production plan, which must be based on plan of the whole association. After that, each group would be responsible for its own production, and keep track of group members' labour input. Profit would be divided within the group accordingly

Low tunnels were leased to members who wanted to use them. CALCOA collected leasing fee. Production activities on these low tunnels are independent from CALCOA's collective activities and plan. Farmers could decide which crops to grow in the low tunnels and who to sell products to by themselves

Developing group governance mechanism and organisational structure

Table Net Income Statement of vegetable production of CALCOA 2016-2017

ITEMS	TOMATO		CAPSICUM		LETTUCE		
	TOTAL	AVERAGE	TOTAL	AVERAGE	TOTAL	AVERAGE	
	35.5		12	 -	15		
Gross Sales:	761,657.85	21,455.15	436,334.50	36,361.21	185,199.31	16,836.30	
Less: 5% Association Shares	5,069.10	499.48	6,694.35	557.86	3,516.24	319.66	
Less: 5% Sales Tax	17,731.58	142.79	19,240.85	1,603.40	181,683.07	16,516.64	
Sales After Tax	711,851.18	20,052.15	410,399.30	34,199.94	6,674.30	667.43	
Less: Production Cost	327,925.94	9,237.35	159,204.71	159,204.71	175,008.76	15,909.89	
Gross Margin:	410,931.23	11,575.53	251,194.59	20,932.88	71,335.55	6,485.05	
Less: Marketing Cost	55,653.57	1,567.71	31,247.88	2,603.99	103,673.22	9,424.84	
Less: Marketing Commission	15,204.30	428.29	6,787.00	565.58	40,129.90	3,648.17	
Sales After Marketing Expenses	340,073.36	9,579.53	213,159.71	17,763.31	1,853.33	168.48	
Less: 10% Admin Cost	34,007.34	957.95	21,315.97	1,776.33	61,689.98	5,608.18	
Less: 10% (CBU or resiliency)	34,007.34	957.95	21,315.97	1,776.33	6,169.00	560.82	
Less: 5% PMPC Marketing Services	7,060.68	198.89	1,205.07	100.42	6,169.00	560.82	
Net Income:	264,998.00	7,464.73	169,322.70	14,110.23	892.70	4,405.39	
Net Income Share/ Farmer	15,579.18	438.85	26,387.93	2,198.99	13,721.98	1,247.45	
		2	<u> </u>	2			
Total Labour	89,857.81	2,531.21	37,917.25	3,159.77	29,693.75	2,699.43	
Plus Labour Share (5)	4,686.48	132.01	6,562.37	546.86	9,998.96	909.00	
Total Farmer Share:	20,265.66	570.86	32,950.30	2,745.86	23,720.94	2,156.45	

Capacity building continuous process never to be completed

Main areas of focus:

- Finance/accounting
- Marketing
- Management

Through formal training (workshops)

+ experimental Learnings (learning by doing)