

The background of the entire page is a photograph of a coffee processing facility. Two women are standing in the center-left, smiling and holding small amounts of coffee beans in their palms. They are surrounded by large wooden trays filled with coffee beans in various stages of processing, from light green to dark brown. Large pink sacks are visible on the left. The facility has a high, open wooden frame with a translucent roof.

# Baseline Study Report

## Philippine Coffee Advancement and Farm Enterprise (PhilCAFE)

June 2019



## Acknowledgement

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This report is a team effort of the Institute for Socio-Economic Development Initiatives – Ateneo de Davao University (ISED-AdDU). This study has been a blessing – meeting the coffee farmers who are one of the most generous people in the country. We had our fill of wonderful cups laced with great stories. Yes, we will never drink instant coffee again.

Any queries on the results of this study should be addressed to:

M&E Director

PhilCAFE Project

Juna Subdivision, Davao City

Phone Number: +63 82 296-1089

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## List of Acronyms

<b>ARMM</b>	Autonomous Region of Muslim Mindanao
<b>BPI</b>	Bureau of Plant Industry
<b>CARP</b>	Comprehensive Agrarian Reform Program
<b>CDA</b>	Cooperative Development Authority
<b>CLOA</b>	Certificate of Land Ownership Award
<b>DA</b>	Department of Agriculture
<b>DAR</b>	Department of Agrarian Reform
<b>DENR</b>	Department of Environment and Natural Resources
<b>DTI</b>	Department of Trade and Industry
<b>FGD</b>	Focus Group discussion
<b>GCB</b>	Green Coffee Bean
<b>ICO</b>	International Coffee Organization
<b>ISED</b>	Institute for Socio-Economic Development Initiatives
<b>KII</b>	Key Informant Interview
<b>LGU</b>	Local Government Unit
<b>MFI</b>	Microfinance Institution
<b>MinPACT</b>	Mindanao Productivity for Agriculture Commerce and Trade
<b>MSA</b>	Market System Actors
<b>NCIP</b>	National Commission for Indigenous People
<b>NGO</b>	Non-Government Organization
<b>PAO</b>	Provincial Agriculturist Office
<b>PCA</b>	Philippine Coconut Authority
<b>PhilCAFE</b>	Philippine Coffee Advancement and Farm Enterprise
<b>PRDP</b>	Philippine Rural Development Program
<b>PMP</b>	Performance Monitoring Plan
<b>PO</b>	Producer Organization
<b>PSA</b>	Philippine Statistics Authority
<b>PSM</b>	Propensity Score Matching
<b>RCC</b>	Regional Coffee Council
<b>RSBSA</b>	Registry System for Basic Sector in Agriculture
<b>SNA</b>	Social Network Analysis
<b>USDA</b>	US Department of Agriculture

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# 1 EXECUTIVE SUMMARY

ACDI/VOCA and the United States Department of Agriculture (USDA) are initiating the implementation of the 5-year Philippine Coffee Advancement and Farm Enterprise (PhilCAFE) project in 25 provinces in the country. PhilCAFE commissioned a baseline study to gather information on the existing condition of the coffee farmers, producer organizations (POs) and the market system actors.

The table below lists the **key** findings and recommendations:

**Table 1: List of key findings and recommendations**

	Findings on Current Situation	Recommendation
Production	<ul style="list-style-type: none"><li>• Ageing farmers with an average of 49 years old (and average of 23 years in coffee farming)</li></ul>	<ul style="list-style-type: none"><li>• Formulate a youth and gender strategy to ensure that more women and youth members of coffee households will engage in agriculture and in coffee production. Some options include:<ul style="list-style-type: none"><li>○ Work with state universities to provide/expand scholarship program on agriculture or coffee farming.</li><li>○ Work with TESDA on technical-modular courses on coffee farming.</li><li>○ Include more youth and women in farm management training</li><li>○ Hiring and training women and youth extension agents.</li><li>○ Provide welfare support to women who attend coffee-related activities (i.e. transportation, child-care service).</li><li>○ Include topics on gender-fair governance and gender-equitable principles of leadership.</li><li>○ Support women-centric grower associations</li><li>○ Integrate gender indicators in PhilCAFE monitoring and evaluation process.</li><li>○ Advocate to have “Youth for Coffee” Strategic Plan at the national level; and support the plan’s localization.</li></ul></li><li>• Produce materials on coffee that are targeted to adult, youth and MSAs.</li><li>• Deploy PhilCAFE field technicians that are trained technically and in participatory approaches and social mobilization processes.</li><li>• Consider including agricultural farm workers (daily wage earners without own farm, offering labor only) to</li></ul>

	Findings on Current Situation	Recommendation
		participate in training on proper production and post-harvest practices.
	<ul style="list-style-type: none"> <li>• Average area for coffee is 1 hectare per household and the average total farm area for all crops is 2.2. hectares. Majority are practicing intercropping.</li> </ul>	<ul style="list-style-type: none"> <li>• Work with POs or LGUs to establish coffee demonstration farm – to illustrate intercropping better and other technologies.</li> </ul>
	<ul style="list-style-type: none"> <li>• One-fourth of the coffee households do not practice any coffee production technology</li> </ul>	<ul style="list-style-type: none"> <li>• Review the MinPACT records on training on coffee production technology that were found most effective. Correlation analysis in this baseline suggest training on disease and pest management, plant renewal, and soil-related fertility and conservation.</li> </ul>
	<ul style="list-style-type: none"> <li>• Small percentage of coffee households have access to production support: <ul style="list-style-type: none"> <li>○ 8% have external sources of planting materials</li> <li>○ 9.6% have access to subsidized fertilizers and pesticide</li> <li>○ 1.6% have access to credit</li> <li>○ 33.3% have been trained on coffee production technologies</li> <li>○ 17% are applying farm management techniques.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Strengthen POs to serve as linkage to external providers of production support. Preparatory to this is to categorize the target POs based on their capacities (resources, potentials and growth strategy), to allow for more intentional graduation to different types of coffee value chain activities. This include the POs' internal processes – organizational management, membership, financial and marketing.</li> <li>• Require each PO to identify, select and train a member who will serve as "extension agent". Serving as agent, this member will be trained technically and will be equipped with basic communication skills. If possible, this agent will be supported by PhilCAFE in terms of reasonable honorarium and traveling expenses in exchange for his/her time away from his own coffee farm.</li> <li>• Identify PO and LGUs that have interest and capacity to engage in producing quality seedlings. Support them in obtaining BPI accreditation. Also, explore ways to check on the potential demand for seedlings (those who want to replant or expand farm).</li> <li>• Identify business development services providers in the region and explore what possible support they can provide to coffee farmers/POs. Support these BDS</li> </ul>



	Findings on Current Situation	Recommendation
		in customizing packages/menu of possible services.
Post-harvest	<ul style="list-style-type: none"> <li>Majority (71.7%) of the coffee households now pick their cherries ripe.</li> </ul>	<ul style="list-style-type: none"> <li>Continue promoting the good post-harvest practices.</li> </ul>
	<ul style="list-style-type: none"> <li>Drying (34%), particularly using the trapal/canvas as drying platform, is the most prevalent post-harvest process adopted by the coffee households.</li> </ul>	<ul style="list-style-type: none"> <li>Work closely with government agencies and LGUs to enhance access to post-harvest facilities via POs with proven management capacity.</li> <li>Intensify training and demonstration on the post-harvest practices, especially washing, dehulling, polishing, grading, sorting and storage.</li> </ul>
	<ul style="list-style-type: none"> <li>Majority (71.5%) of the households do not own any post-harvest facilities.</li> </ul>	<ul style="list-style-type: none"> <li>Provide simpler and less-costly designs (particularly for dryers, pulping and hulling).</li> <li>Influence DA, BAR and DTI to review the performance and utilization of the distributed post-harvest and processing facilities and the satisfaction of the users. Let this be inputs for future support.</li> <li>Explore the feasibility of a coffee “tolling” service in each region, which provides nearly complete post-harvest service to farmers and POs</li> </ul>
	<ul style="list-style-type: none"> <li>A third of the coffee households claimed to have experienced post-harvest losses in the past, said to be caused by beans exposure to rain and from strip harvesting.</li> </ul>	<ul style="list-style-type: none"> <li>Lobby for more drying support from the LGUs.</li> <li>Produce a simplified, concise guide on the most common diseases and pest that affect coffee plants in the Philippines.</li> <li>Identify and engage a “coffee doctor”, who has very comprehensive knowledge on the diseases of coffee plants. If alone or if an institution, initial diagnosis may be done through submission evidences online. Follow-through may be done by PhilCAFE field person, PO extension agent or LGU agri-technician who specialized on pests and diseases.</li> </ul>
Yield	<ul style="list-style-type: none"> <li>Average number of trees is 1,111 per hectare.</li> </ul>	<ul style="list-style-type: none"> <li>Continue promoting the recommended planting distance, particularly for those who practice intercropping.</li> <li>Continue promoting practices that will improve yield of existing coffee plants.</li> </ul>
	<ul style="list-style-type: none"> <li>The average yield per hectare in GCB form as of 2018: <ul style="list-style-type: none"> <li>Arabica with 652.9 kg/ha</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Encourage farmers and POs to work towards producing quality and specialty coffee.</li> </ul>

	Findings on Current Situation	Recommendation
	<ul style="list-style-type: none"> <li>○ Robusta with 475 kg/ha</li> <li>○ Excelsa with 441 kg/ha</li> <li>○ Liberica with 419 kg/ha.</li> </ul>	
Income	<ul style="list-style-type: none"> <li>• The average net income from coffee activities in 2018 is Php 42,166 per hectare (from the gross income of Php 47,354 and where cost of production of Php 5,188 was deducted).</li> </ul>	<ul style="list-style-type: none"> <li>• Intensify farm management training and adoption of recommended practices.</li> </ul>
	<ul style="list-style-type: none"> <li>• Coffee contributes 38.4% to a coffee household's farm income, or in comparison to the total household income, only 12.71%.</li> <li>• The adult female members of the household play a greater role than the men in deciding who will receive the income from coffee sales. However, in matters concerning the use of the farm income, both husband and wife discuss, consult and make a conjugal decision.</li> </ul>	<ul style="list-style-type: none"> <li>• Coordinate with relevant authorities on increasing awareness on and uptake of crop insurance to cover risks</li> </ul>
Marketing	<ul style="list-style-type: none"> <li>• Majority (92%) of the coffee farmers possess no knowledge on specialty coffee.</li> </ul>	<ul style="list-style-type: none"> <li>• Introduce and encourage POs that are now capable to engage in producing and processing "specialty coffee" through training, market exposure and close coaching. Make BACOFIA and MILALITTRA as the PO inspiration.</li> <li>• Provide real-time price monitoring system on the differences of coffee prices in different forms and quality across the country – that are accessible to farmers and POs (to motivate them to follow recommended practices).</li> <li>• Promote the coffee from known local origins to coffee shops</li> </ul>
Relations and partnerships	<ul style="list-style-type: none"> <li>• There are several government agencies, the Philippine Coffee Council and its regional counterparts, local government units and other private individuals who are working for the</li> </ul>	<ul style="list-style-type: none"> <li>• Work with relevant agencies and the private sector on the review of the accomplishment, strategies, timeline and responsibilities as contained in the National Coffee Roadmap.</li> <li>• Explore the possibility of creating database online containing information on producers and buyers of quality and</li> </ul>

	Findings on Current Situation	Recommendation
	improvement of the coffee industry.	<p>specialty coffee. It will highlight the volume and quality requirements. This will serve as a business-to-business platform, a kind of “direct trade”.</p> <ul style="list-style-type: none"> <li>• Continue working the government and private sector (PCC) to have more cupping events, trade shows and other market exposure activities.</li> <li>• Explore partnership with new projects on coffee (e.g. DTI RAPID Growth).</li> <li>• Work closely with LGUs (municipal level), particularly in lobbying to support their own coffee farmers and POs (e.g. provision of seedlings, equipment, and even construction of farm-to-market roads)</li> </ul>
	<ul style="list-style-type: none"> <li>• About 41% household heads are affiliated with cooperatives/farmer organizations/</li> </ul>	<ul style="list-style-type: none"> <li>• Support POs to strengthen their membership campaign.</li> </ul>
	<ul style="list-style-type: none"> <li>• Less than half of the MSAs have participated in coffee-related projects of the government, NGOs and other organizations: <ul style="list-style-type: none"> <li>○ Only 5% among input suppliers</li> <li>○ Only 43.2% among nursery operators</li> <li>○ Only 48.1% among processors and roasters</li> <li>○ Only 37.8% among traders</li> <li>○ Only 44.4% among microfinance/lending institutions</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Explore possible areas of partnerships with MSAs not exposed to MinPACT or have worked with ACIDI/VOCA. PhilCAFE must be able to communicate well the “what’s in it for them” to the MSAs.</li> </ul>

**Table 2: Selected indicators and baseline values**

Type	Indicator	Baseline Values 2019
Outcome	Value of annual sales of farms and firms receiving USDA assistance (USD)	6,661,451
	Cherries	1,245,213
	Small holder Producers	1,102,888
	Male	667,960
	Female	434,929
	Mixed	-
	15-29	75,563
	30+	1,027,325
	Mixed Age	-
	Non-Small Holder Producers	4,592
	Male	-
	Female	4,592
	Mixed	-
	15-29	-
	30+	4,592
	Mixed Age	-
	Microenterprise	27,106.52
	Male	-
	Female	-
	Mixed	27,106.52
	15-29	-
	30+	-
	Mixed Age	27,106.52
	Small and Medium Enterprise	110,626.09
	Male	-
	Female	-
	Mixed	110,626.09
	15-29	-
	30+	-
	Mixed Age	110,626.09
	Large Enterprise or Corporation	-
	Male	-
	Female	-
	Mixed	-
	15-29	-
	30+	-
	Mixed Age	-
	Green Coffee Beans	5,416,237.26
	Small holder Producers	4,136,221.90
	Male	2,422,488.36
	Female	1,713,733.54
	Mixed	-
	15-29	534,532.34
	30+	3,601,689.56
	Mixed Age	-
	Non-Small Holder Producers	737,779.93



Type	Indicator	Baseline Values 2019
	Male	565,995.15
	Female	171,784.78
	Mixed	-
	15-29	8,459.77
	30+	729,320.15
	Mixed Age	-
	Microenterprise	311,473.26
	Male	
	Female	
	Mixed	311,473.26
	15-29	
	30+	
	Mixed Age	311,473.26
	Small and Medium Enterprise	230,762.17
	Male	
	Female	
	Mixed	230,762.17
	15-29	-
	30+	
	Mixed Age	230,762.17
	Large Enterprise or Corporation	-
	Male	-
	Female	-
	Mixed	-
	15-29	-
	30+	-
	Mixed Age	-
Outcome	Volume of commodities sold by farms and firms receiving USDA assistance (in MT)	10,539
	Cherries	5,929
	Green Coffee Beans	4,610
Outcome	Number of Jobs attributed to USDA assistance	87,129
	Full-time Employment	9,266
	Male	6,787
	Female	2,479
	Part-time Employment	77,862
	Male	70,842
	Female	7,020
Outcome	Value of coffee exported from Philippines (in USD)	<b>14,698</b>
Outcome	Yield of targeted agricultural commodities among program participants with USDA assistance (in MT-GCB)	0.49
	Small holder	0.53
	Male	0.51
	Female	0.56
	15-29	0.49
	30+	0.54
	Non-smallholder	0.22
	Male	0.23

Type	Indicator	Baseline Values 2019
	Female	0.20
	15-29	0.19
	30+	0.22
Outcome	Number of hectares under improved management practices or technologies that promote improved climate risk reduction and/or natural resources management with USDA assistance	2,330.44
Outcome	Number of hectares under improved management practices or technologies with USDA assistance	13,503.80
	Crop Land	9,434.94
	Conservation/Protected Area	2,637.55
	Farm Diversification	3,134.32
	Crop genetics	9,287.30
	Pest management	9,714.70
	Disease Management	4,309.11
	Soil-related Fertility and Conservation	2,376.78
	Harvesting & Postharvest Handling, PHH	13,027.97
Outcome	Number of individuals in the agriculture system who have applied improved management practices or technologies with USDA assistance	11,426
	Smallholder Producers	11,203
	Farm Diversification	3,802
	Crop genetics	6,716
	Pest management	3,278
	Disease Management	3,385
	Soil-related Fertility and Conservation	3,197
	Harvesting & Postharvest Handling, PHH	11,203
	Male	6,316
	Female	4,887
	15-29	1,481
	30+	9,722
	Non-Smallholder Producers	223
	Farm Diversification	76
	Crop genetics	134
	Pest management	65
	Disease Management	67
	Soil-related Fertility and Conservation	64
	Harvesting & Postharvest Handling, PHH	223
	Male	144
	Female	79
	15-29	13
	30+	210
	People in government	0
	Farm Diversification	0
	Crop genetics	0
	Pest management	0
	Disease Management	0
	Soil-related Fertility and Conservation	0

Type	Indicator	Baseline Values 2019
	Harvesting & Postharvest Handling, PHH	0
	Male	0
	Female	0
	15-29	0
	30+	0
	People in firms	0
	Farm Diversification	0
	Crop genetics	0
	Pest management	0
	Disease Management	0
	Soil-related Fertility and Conservation	0
	Harvesting & Postharvest Handling, PHH	0
	Male	0
	Female	0
	15-29	0
	30+	0
	People in civil society	0
	Farm Diversification	0
	Crop genetics	0
	Pest management	0
	Disease Management	0
	Soil-related Fertility and Conservation	0
	Harvesting & Postharvest Handling, PHH	0
	Male	0
	Female	0
	15-29	0
	30+	0

## 2 BACKGROUND/BRIEF DESCRIPTION, CONTEXT AND RATIONALE

**The PhilCAFE Project.** The United States Department of Agriculture (USDA) and ACDI/VOCA is gearing up to implement the five-year project “Philippine Coffee Advancement and Farm Enterprise” (PhilCAFE) in 25 coffee-rich provinces in the Philippines. The project aims to directly support 13,700 coffee farmers to triple their production, contribute massively to the country’s coffee production by over 50%, and possibly expand the country’s coffee export to 10 times the baseline value. To achieve this, PhilCAFE will develop the capacity and expand the service provision of about 350 value chain actors, such as the financial institutions, colleges and universities, producer organizations (POs), input suppliers, roasters and retailers. The synergy created by the economic opportunities and social inclusion processes of PhilCAFE will affect at least 54,800 indirect beneficiaries.

PhilCAFE veers away from the relatively confined value chain approach, adopting ACDI/VOCA’s more expansive market system approach in addressing the “*interconnectedness and complexity*” of bringing coffee to the market. With such a strategy, ACDI/VOCA targets relationships, ownership, capacities and incentives to change the behaviors of market system actors. The POs become the center of the service delivery system: farmers are approached via the POs and on the opposite spectrum, the POs are linked to the universities to improve extension and technology transfer, build market linkages, and enhance access to credit and other critical services with the involvement of other market system actors.

PhilCAFE is driven by its two strategic objectives: the first one is to increase agricultural productivity by training farmers, POs, and agribusiness service providers; and by providing grants. The second strategic objective is to expand the trade of coffee products by identifying market system constraints; and by improving post-harvest management, product quality, value adding smallholder products, grants provision, and market access.

To aid PhilCAFE in properly measuring its impact at the end of its project life, it needs to establish the baseline value of the indicators set in its Performance Monitoring Plan (PMP). A total of 37 indicators will be closely tracked by the project and will indicate how it is moving along vis-à-vis the envisioned changes it has proposed for the Philippine coffee market system. Further, PhilCAFE also aims to grasp the inner workings of the industry and thus needs to gather updated information on influencing factors such as attitudes, practices, relationships, constraints, rules and regulations, among others. Therefore, PhilCAFE has initiated a baseline study to capture this information.

**Context and Rationale.** Coffee is one of the most popular drinks and one of the most tradeable commodities in the world. The growth of the coffee market is expected to keep moving up, as there are conjectures that “*coffee consumption development is insensitive to economic events*”<sup>1</sup>. While the United States of America (USA) is acknowledged as the largest traditional coffee market in the world with share ranging between 16 to 17%, **Figure 1** (next page) reflects a downward trend for its coffee consumption. Nonetheless, the Philippine coffee farmers and market sector actors may still consider this as an export market worth pursuing (during the data gathering period for this baseline, we met a few coffee processors and roasters preparing for their attendance to a coffee event in Boston on April 2019).

The US imports its coffee requirements in bean form, which represents an average of 80% of its total coffee supply. In 2018, the leading suppliers of coffee to the USA are Brazil, Colombia, and Vietnam<sup>2</sup>.

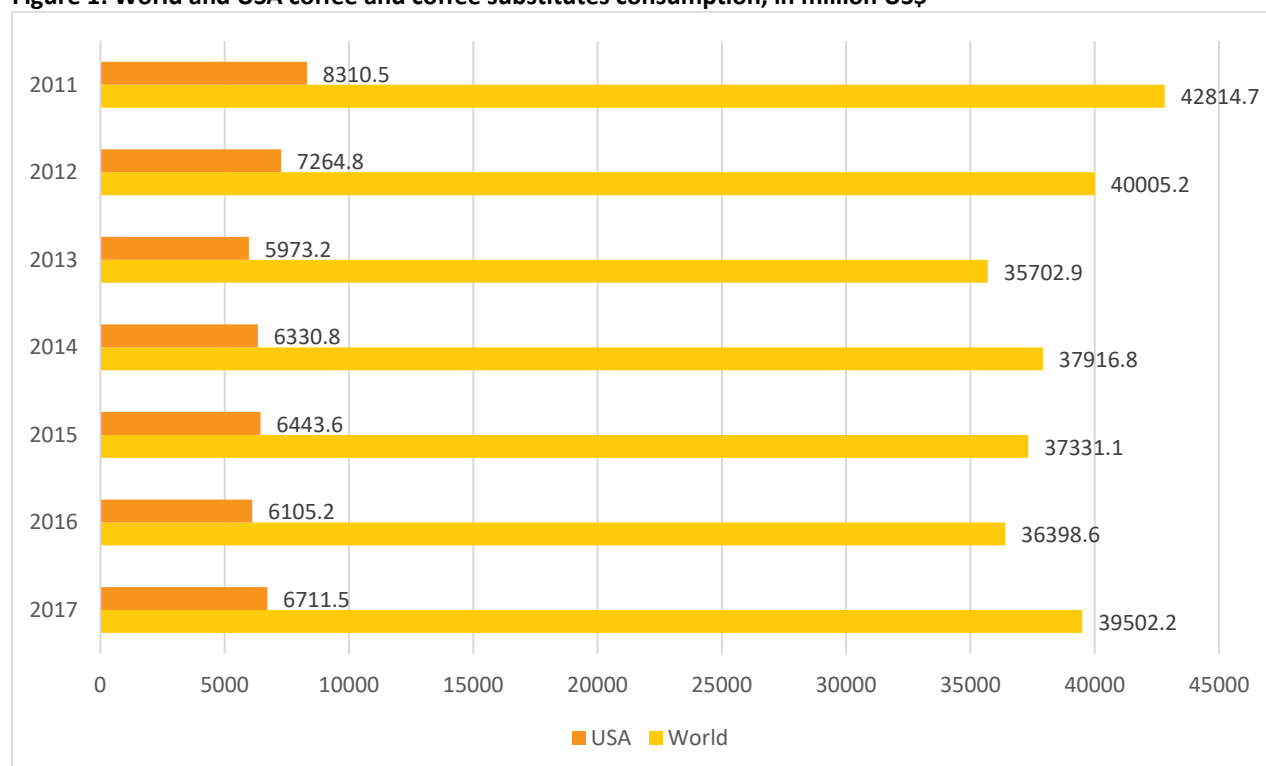
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<sup>1</sup> Nuemann, David O. The World of Coffee in 2017. Number 2012. Retrieved from <https://www.sintercafe.com/uploads/File/2012/presentations/0.neumann.pdf>

<sup>2</sup> The Philippines ranked #53 coffee supplier of the US in 2018, extracted from <https://comtrade.un.org/data>

The coffee production in the USA, with Hawaii as the sole producer, reflects an annual average of 43,889 60kg bags (2009-2018). On the other hand, the Philippines mostly imports coffee in soluble form (which composes 76% of its supply). The selected information is shown in **Table 3**, while the full tables are shown as **Annex 1** and **Annex 2**.

**Figure 1: World and USA coffee and coffee substitutes consumption, in million US\$**



Source: UN Comtrade Database<sup>3</sup>.

**Table 3: USA and Philippines, selected coffee data, in 1000 60kg bags**

	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
<b>PRODUCTION</b>									
• USA	53	53	46	42	51	45	40	33	32
• Philippines	245	460	455	455	450	475	425	475	450
<b>BEAN IMPORTS</b>									
• USA	20,240	22,460	23,700	23,360	24,550	23,525	25,100	25,810	24,450
• Philippines	450	360	510	480	160	185	685	420	560
<b>SOLUBLE IMPORTS</b>									
• USA	630	650	125	340	365	470	85	510	225
• Philippines	1,900	1,625	2,770	3,400	2,985	3,570	5,500	6,000	5,500
<b>DOMESTIC CONSUMPTION</b>									
• USA	21,391	22,383	22,946	23,027	23,811	23,568	25,083	25,522	25,835
• Philippines	2,249	2,825	3,660	4,405	3,590	4,230	6,210	6,995	6,510

Source: UN Comtrade Database

<sup>3</sup> Retrieved and filtered from the International Trade Statistics Yearbook, Volume II – Trade by Product, from years 2011 to 2017, <https://comtrade.un.org/pb/>



Looking at the trade relationship between the USA and the Philippines, the USA is a net exporter. USA's importation of coffee from the Philippines is eclipsed by the volume of coffee it exported to this Southeast Asian country. The latest available data from the UN Comtrade Database shows that the level of USA imports from the Philippines in 2017 (115,272 kg) was even smaller compared to the exports of USA to the Philippines way back in 2011 (140,036 kg). Please refer to Table 4.

**Table 4: USA Coffee Imports from and Exports to Philippines, Coffee<sup>4</sup>, 2009-2017**

Year	Reporter	Partner	USA Import from PH		USA Export to PH		USA Re-export to PH	
			In kg	In US\$	In kg	In US\$	In kg	In US\$
2017	USA	PH	115,272	542,943	168,887	1,710,305	365	3249
2016	USA	PH	76,672	285,689	254,791	2,232,991	3284	44743
2015	USA	PH	53,496	255,249	201,965	1,589,008	41731	415091
2014	USA	PH	40,032	200,168	242,349	1,445,460	646	5531
2013	USA	PH	28,442	164,893	304,700	1,803,265		
2011	USA	PH	26,506	118,575	140,036	1,145,362		
2010	USA	PH	14,686	58,597	61,923	363,284		
2009	USA	PH	9,931	41,365	91,236	679,167		

Source: UN Comtrade Database

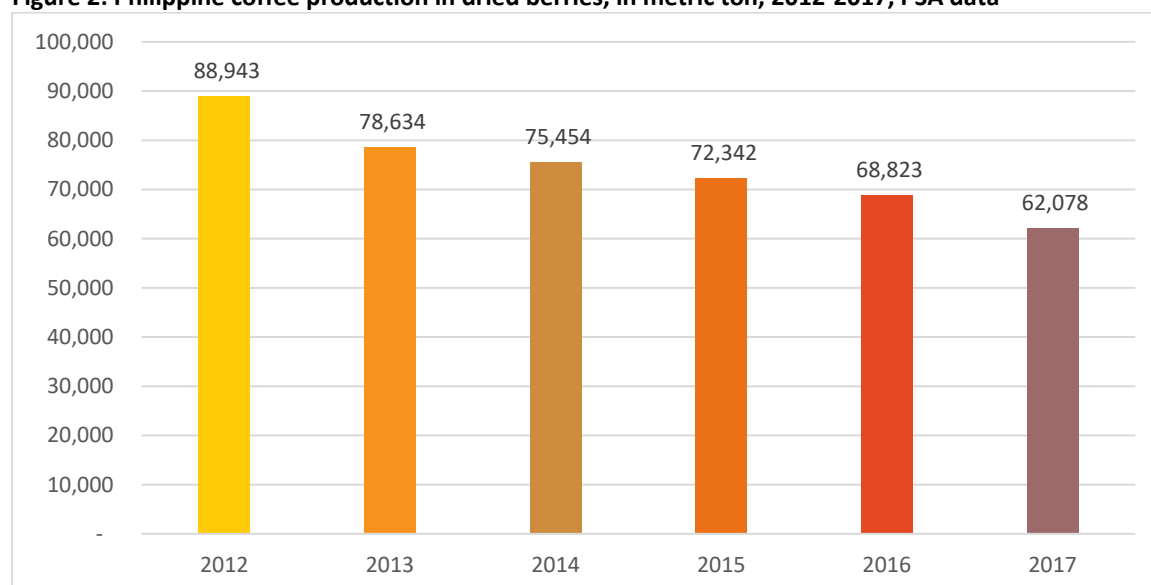
**The Philippine Coffee Situation.** The Philippines produces four (4) species of coffee: Robusta (69% of the country's production), Arabica (24%), Excelsa (6%), and Liberica (1%). The Philippine Statistics Authority (PSA) database estimates that the Philippines' total production of coffee (dried, all species) was at 62,087 metric tons in 2017; 35% of this was contributed by Region 12<sup>5</sup> (or the SOCCSKSARGEN). Sultan Kudarat has produced a total of 18,042 metric tons (29% of the country's production), making it the center of coffee production in the Philippines.

Coffee production in the country has been decreasing in the recent years – the volume in 2017 was 21% lower than the volume in 2013 (Figure 2). The reasons for the decreasing production were myriad, as highlighted in Philippine Coffee Industry roadmap. These are the following: relevant government agencies' limited technical information on coffee farming; farmers shifting to other crops; land conversion of agricultural areas to real estate, recreation areas, and urbanization; coffee farming dominated by farmers with 1 to 2 hectares of land; low yield of trees; limited knowledge of appropriate coffee technology; aged farmers; lack of equipment and inadequate post-harvest facilities; limited access to certified planting materials; and limited access and proper application of fertilizers". All these factors affected the yield at the farm level, where the yield per hectare in kg of dried beans in 2010 was 779 and this fell further in the succeeding years: 740 kg/ha in 2011; 741 kg/ha in 2012; 675 hg/ha in 2013; 642 kg/ha in 2014; and 636 kg in 2015 (PSA).

<sup>4</sup> Commodity Code 901: Coffee, whether or not roasted or decaffeinated; husks and skins; coffee substitutes containing coffee in any proportion.

<sup>5</sup> The Philippines is divided into 17 administrative region. For easy recall, the regions are numbered. The other name for Region 12 is SOCCSKSARGEN, which stands for South Cotabato, Cotabato, Sultan Kudarat, Sarangani and General Santos City, combining the initial letters of the 4 provinces and 1 city.

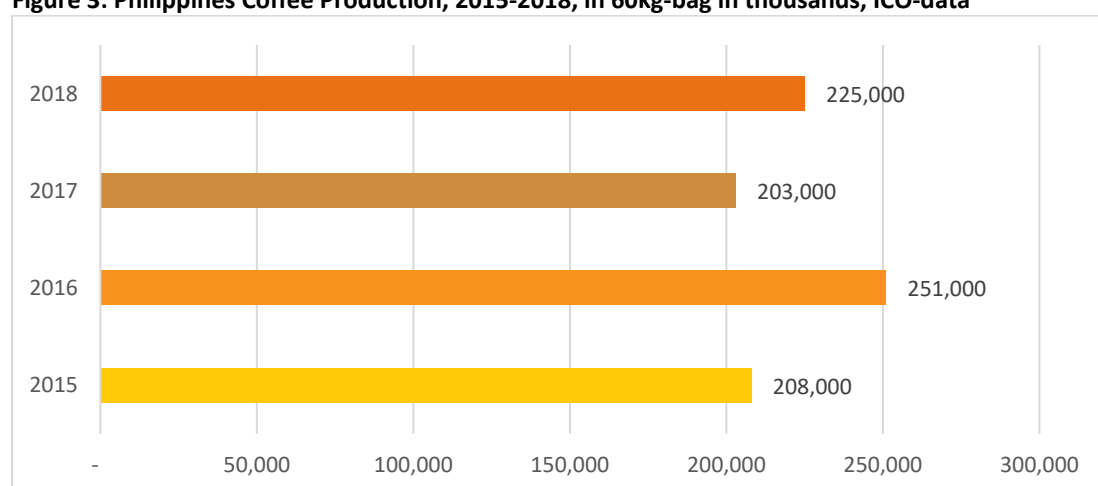
**Figure 2: Philippine coffee production in dried berries, in metric ton, 2012-2017, PSA data**



According to the estimates of the PSA, the average production costs of one hectare of coffee in 2017 was Php 36,927, while the average gross income was Php 51,330. A typical coffee farmer in 2017 made a net income of Php 14,403 from one hectare of coffee farm. Still using PSA's estimate, the average net income made by farmers in 2013 was Php 17,963, even higher than 2017. The baseline data collected, based on the coffee households' 2018 net income per hectare, the average net income of coffee farmers Php 42,166.

The database of International Coffee Organization (ICO) shows that the volume of Philippine coffee has been fluctuating over the past four (4) years. Figure 3 shows the Philippines' coffee production<sup>6</sup> in a unit of 60-kg bag in thousands based on ICO's record.

**Figure 3: Philippines Coffee Production, 2015-2018, in 60kg-bag in thousands, ICO-data**



Source: International Coffee Organization

The document "Philippine Coffee Industry Roadmap 2017-2022" states that the farm yields across the country is only 0.30 tons per hectare (green coffee beans or GCB). This "official" figure is rather low compared to neighboring countries like Indonesia which has an average yield of 0.67 tons per

<sup>6</sup> Total production by all exporting countries, in thousand 60kg bags, International Coffee Organization, retrieved from <http://www.ico.org/prices/po-production.pdf>

hectare of GCB or Vietnam with their yield of 2.4 tons per hectare<sup>7</sup>. Meanwhile the baseline data shows that the average yield per hectare in GCB are as follow: Arabica at 652.9 kg/ha; Excelsa at 441 kg/ha; Liberica at 419.79 kg/ha; and Robusta at 474.1 kg/ha.

Further, the roadmap document also identifies the reasons for the decrease in production: increased number of coffee growers shifting to other crops; old age of trees with limited or no rejuvenation; poor farm practices – limited knowledge on appropriate coffee technology of farmers; aged farmers; limited access to certified planting materials; and limited access to credit. The average farm size of coffee farmers is between 1 to 2 hectares and most farms are intercropped with vegetables, coconut, fruit trees and forest trees.

There are no official figures on the number of coffee farmers in the Philippines, but the PSA states that there are 276,000 coffee farms<sup>8</sup> in the country, with about 79.4 million trees. On the other hand, the Registry System of Basic Sector in Agriculture<sup>9</sup> (RSBSA) has registered 66,426 coffee farmers during the survey's data gathering in 2013.

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<sup>7</sup> "Towards a Roadmap/Masterplan for the Philippine coffee Industry", presented by the DA, 2015. Retrieved from [http://industry.gov.ph/wp-content/uploads/2015/09/4\\_COFFEE-PRESENTATION-DTI.pdf](http://industry.gov.ph/wp-content/uploads/2015/09/4_COFFEE-PRESENTATION-DTI.pdf)

<sup>8</sup> As cited in the 2017-2022 Philippine Coffee Industry Roadmap, page 5 and based on the 2012 Census of Agriculture.

<sup>9</sup> This is a project of the Department of Budget and Management (DMB), creating a database of baseline information concerning farmers, farm laborers and fisherfolks in 75 provinces in the country, excluding the Autonomous Region of Muslim Mindanao and the National Capital Region. RSBSA is used as a basis for DBM to target beneficiaries of some of the different agricultural support programs of the government (Philippine Crop Insurance Corporation and Agriculture and Fisheries Financing Program). It is also the basis for identifying beneficiaries of the Conditional Cash Transfer of the Department of Social Welfare and Development. The RSBSA data collection was done between January to November 2012. The RSBSA was published a year after. Retrieved from [https://pidswebs.pids.gov.ph/CDN/PUBLICATIONS/pidsdps1703\\_rev.pdf](https://pidswebs.pids.gov.ph/CDN/PUBLICATIONS/pidsdps1703_rev.pdf) -

### 3 PURPOSE, OBJECTIVES AND EXPECTED USE OF THE STUDY

The main purpose of this baseline study is to “*establish baseline values for indicators identified in the Performance Management Plan (PMP), predominantly the outcome and impact indicators, and to understand the status of the prevailing conditions and resources of farm households and coffee stakeholders in the target areas<sup>10</sup>*”.

The objectives of the study are:

1. Collect comparable data to determine the level of change on impact and outcome indicators between baseline, mid-term and final evaluations. These baseline values will be used to assess PhilCAFE progress, impact and outcomes.
2. Establish socio-economic status, cultural attitudes, behaviors and practices, and access to information, services and financial resources of the target farm households.
3. Collect both quantitative and qualitative data to gain an in-depth understanding of the coffee market system (supply/demand chain, market actors, supporting functions, policy environment, rules and regulations around coffee value chains, relationships among coffee actors, and systemic constraints affecting the coffee sectors).
4. Undertake a social network analysis (SNA) to establish the relationships between market actors in the coffee industry.

Once the baseline values and the context in which the coffee farmers and market systems operate are determined, the total picture will provide PhilCAFE and ACDI/VOCA a better guide in implementing their proposed activities for the local coffee industry.

After the submission of the Inception Report last February 22, the task of undertaking the SNA has been excluded from study team’s responsibility, although data was still gathered by the team.

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<sup>10</sup> PhilCAFE Request for Proposal, ACDI-VOCA, November 2018, p. 2.

## 4 STUDY METHODOLOGY, SURVEY SAMPLING AND DATA COLLECTION TECHNIQUES

### 4.1 STUDY METHODOLOGY

The study team employed a mix of quantitative and qualitative methods to generate the primary data needed for this baseline study. Surveys were the main tool used to solicit information from the household respondents and from the market system actors (MSAs) such as the nursery operators, input suppliers, microfinance/lending institutions, processors/roasters, and traders.

For the qualitative data, the study team conducted Key Informant Interviews (KIIs) with representatives of the Provincial Agriculturist Offices (one each per region), national government agencies<sup>11</sup>, state universities, Regional Coffee Councils (RCCs), and coffee influencers. To obtain the perspective of the producer organizations (POs), the study team gathered representatives of coffee farmers' organizations for a Focus Group Discussion (FGD). Part of the information collected from household respondents and the FGD participants were the names organizations and individuals that have been providing services such as capacity building, credit, technology transfer, market information, marketing and other business development needs (later to be used by PhilCAFE for its social network analysis).

### 4.2 SURVEY SAMPLING PROCEDURES

The study team complied with PhilCAFE's requirement to utilize a non-experimental pre/post-test design to generate the baseline sample population. This would provide foundation for a robust mid-term and endline evaluations.

**Identification of the Treatment and Comparison Groups.** The sample size calculation for proportion in multi-stage/cluster sampling was used to determine the sample needed for the baseline study. Specifically, the sample was calculated using the confidence level of 95%, margin of error of 5%, equal sample proportion of 0.5, response rate of 90% and design effect of 2. It was adjusted to finite population correction of 13,700 coffee farming households based on the target beneficiaries of the project. The result was 839 coffee farming households for the treatment group. These households were randomly selected from 24 provinces (the province of Sulu was excluded for security reasons) in 9 regions which PhilCAFE will cover based on the volume of coffee production data taken from the PSA. One (1) municipality was selected from each province using randomized probability proportional to size (PPS) as the survey area. The computed sample size for the treatment group was distributed to the sample municipalities using the provincial weight, with a respondent composition of 80% adult (30 years older) and 20% youth (15 to 29 years old) with 1:1 sex ratio in each municipality. The allocation of adult and youth is mimicked from the profile of the RSBSA list of coffee farmers. These household respondents were distributed proportionally to the top two (2) coffee producing barangays in each municipality<sup>12</sup>.

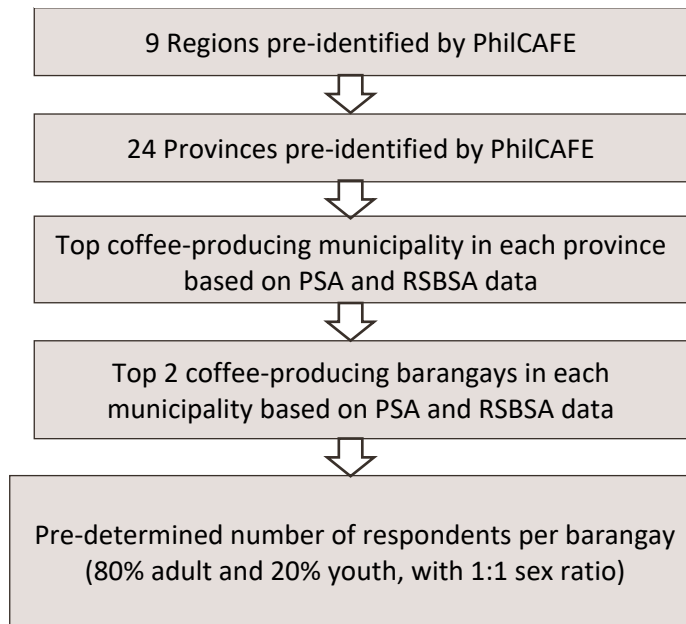
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<sup>11</sup> These are the National Council for Indigenous Peoples (NCIP), Department of Trade and Industry (DTI), Cooperative Development Authority (CDA), Department of Environment and Natural Resources (DENR), Philippine Coconut Authority (PCA), Bureau of Plant Industry (BPI), Department of Agriculture (DA) and Department of Agrarian Reform (DAR).

<sup>12</sup> The administrative divisions of the Philippines are as follows: Regions are composed of provinces; provinces are composed of municipalities/cities; and municipalities/cities are composed of barangays. Based on the Local Government Code of the Philippines, Book III.



**Figure 4: Stratification of household respondents**



The size of the comparison group was equal to the nearly one-third (29%) of the total number of household respondents (see next paragraph). The same number of respondents were interviewed in the treatment municipality and in the comparison municipality in the four (4) provinces selected for the quasi-experimental final evaluation analysis. As approved by PhilCAFE during the inception phase of this study, the selected provinces where the comparison group were taken were Davao del Sur and Sultan Kudarat for Mindanao, Negros Occidental for Visayas, and Cavite for Luzon. The selection was based on the number of coffee farmers and the presence of PhilCAFE target POs in these four (4) areas. The computed sum of comparison respondents was 346.

Thus, total target number of sample household respondents was 1,185 (839 for treatment and 346 for comparison areas). Moreover, the actual number of interviewed household respondents was 1,198 (849 for treatment and 349 for comparison areas).

After determining the number in each area, the team referred to the RSBSA database which contains the list of farmers engaged in all commodities in the country (circa 2013). The list of coffee farmers was extracted from the database and the final respondents (names, age and addresses) were randomly drawn. Please note that PhilCAFE-provinces included Lanao del Sur, Maguindanao and Sulu, which are part of the Bangsamoro Autonomous Region of Muslim Mindanao – a region that was not included in the RSBSA. In Lanao del Sur and Maguindanao provinces, the field teams obtained the list of members of the target POs and such list was the basis for the random selection of household respondents (still following 80% adult and 20% youth, with 1:1 sex ratio).

The Propensity Score Analysis was conducted in the provinces where both treatment and comparison groups were located. The propensity score is the estimated probability of being in the treatment group given the observable characteristics from a regression model of participation<sup>13</sup>. Perfect matching would require matching each individual or unit in the treatment group with a

<sup>13</sup> Rosenbaum R. and D. Rubin. The Central Role of the Propensity Score in Observational Studies for Causal Effects. 1983. Retrieved from [http://www.stat.cmu.edu/~ryantibs/journalclub/rosenbaum\\_1983.pdf](http://www.stat.cmu.edu/~ryantibs/journalclub/rosenbaum_1983.pdf)

person or unit in the comparison group that is identical on all relevant observable characteristics, such as age, education, religion, occupation, wealth, attitudes to risk, and so on<sup>14</sup>. In propensity score matching, matching is not done by every single characteristic, but on a single number which is the propensity score. The RSBSA was again used for this analysis: coffee farmers of the municipalities to receive intervention would take the value of 1 and 0 if otherwise.

The propensity score is a conditional probability obtained from the participation equation. For this baseline study, the participation equation took the following form and estimated using the probit regression.

$$Y_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 \dots \dots \dots + \beta_n X_n + e \quad (1)$$

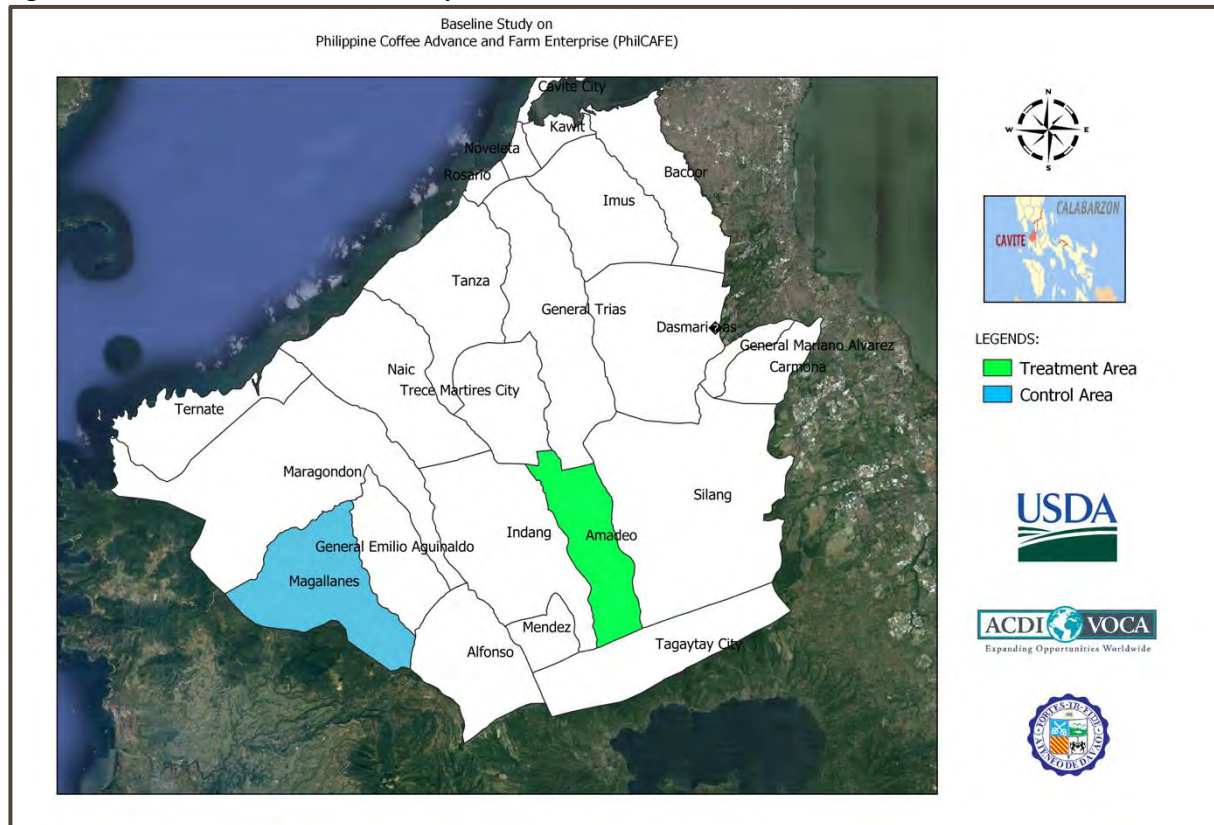
where  $Y$  is a binary variable that takes the value of 1 for those sample households in the treatment group and 0 for those households in the untreated group. The explanatory variables ( $X$ s) included all observed variables that would affect participation in the project, but that would not be affected by the intervention.

Please refer to **Annex 3** for the PhilCAFE Pre-Intervention Matching Analyses. **Figure 5 to Figure 8** show the treatment and control/comparison areas in four selected provinces. Further note that the treatment areas are not contiguous to each other (relatively distant) from the control/comparison.

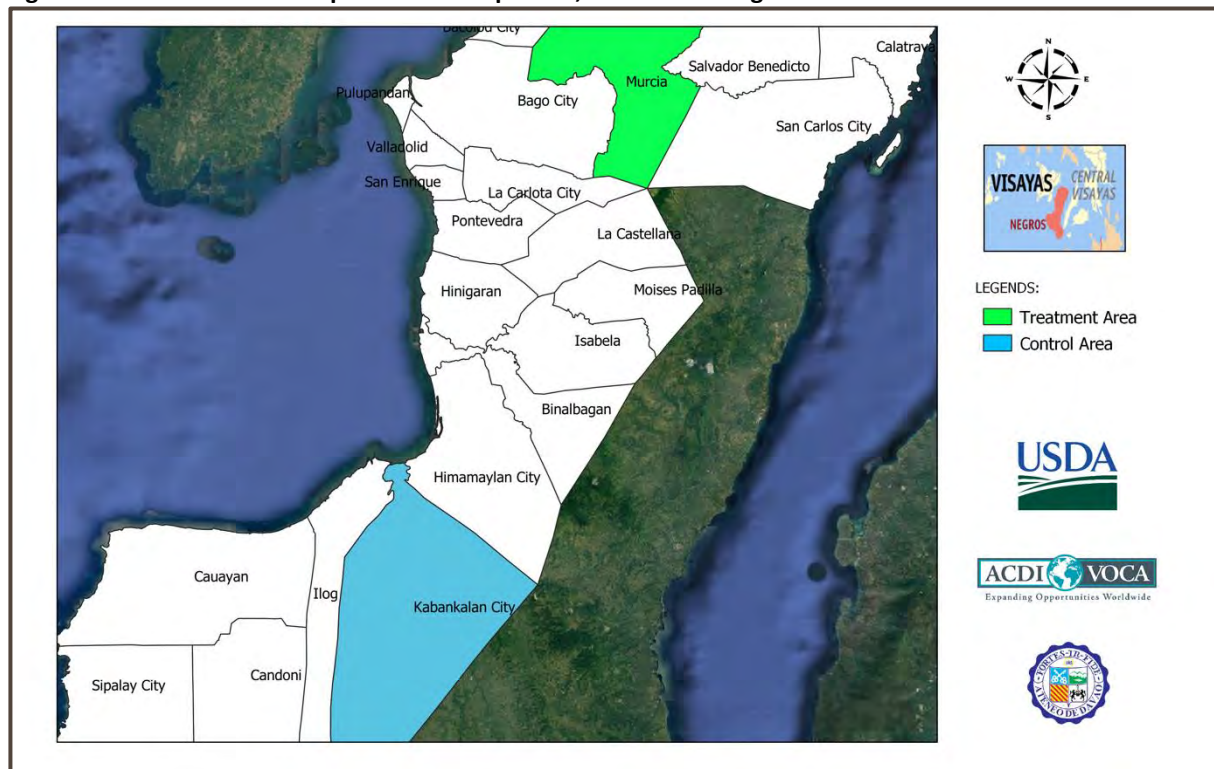
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<sup>14</sup> White, H. and D. Raitzer. Impact Evaluation of Development Interventions. 2017. Retrieved from <https://www.adb.org/sites/default/files/institutional-document/390086/guide-impact-evaluation-development-interventions.pdf>

**Figure 5: Treatment and Control Municipalities, Province of Cavite**



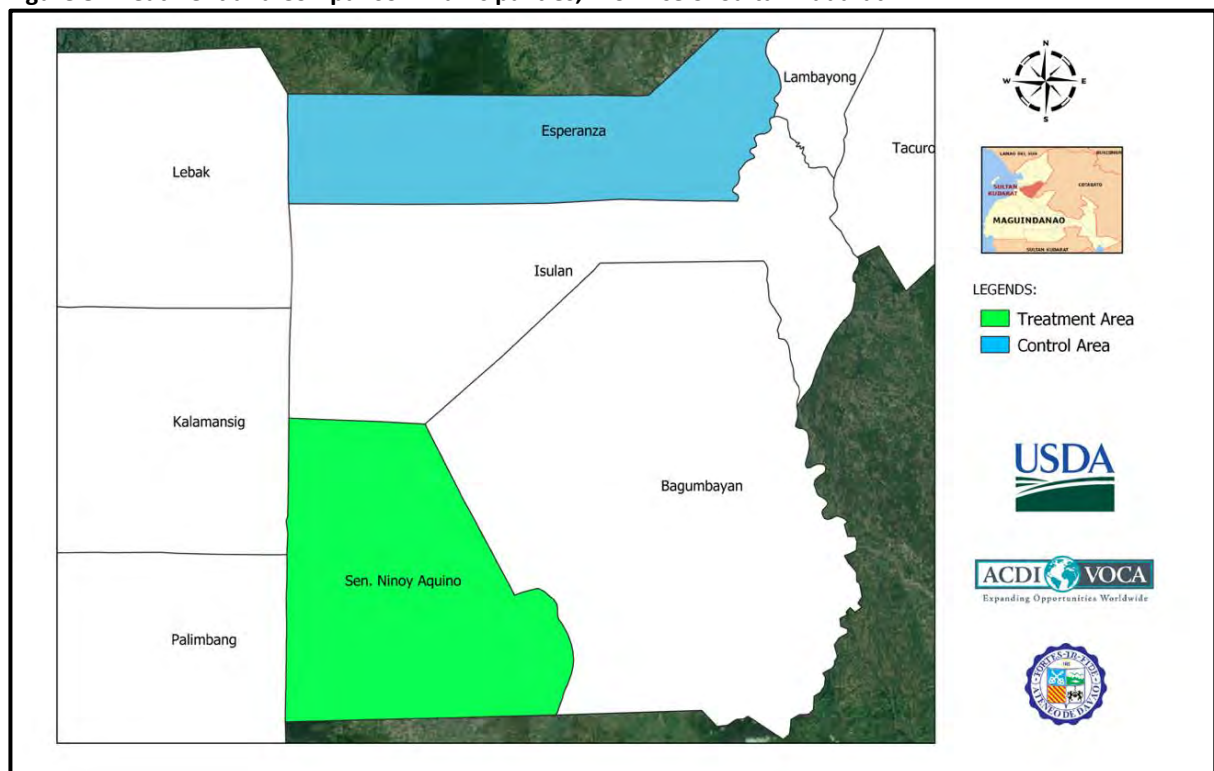
**Figure 6: Treatment and Comparison Municipalities, Province of Negros Occidental**



**Figure 7: Treatment and Comparison Barangays, City of Davao**

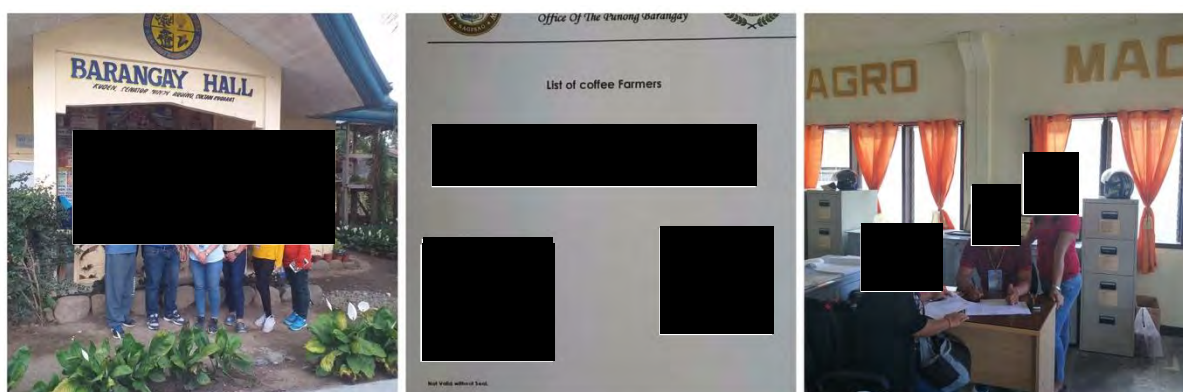


**Figure 8: Treatment and Comparison Municipalities, Province of Sultan Kudarat**





**Administration of the Farm Household Survey.** Before deployment, the field teams were furnished with a copy of the randomly selected household-respondents at the barangay level – segregated by age and sex, extracted from the RSBSA database. Learning from the pretest experience, we first approached the barangay unit to verify the names on the list (if the individuals named were still living in the area or if they had passed on). We randomly selected more than the target number of households per barangay, still from the RSBSA, so that the teams have available names for replacement (respondents could not be found or had long stopped farming coffee). When the list was already exhausted, the barangay’s own list of coffee farmers and POs was utilized. The third option was to seek information from the Municipal Agriculturist Office (MAO). Note that before the teams went household-to-household, they had a courtesy call with the local officials (i.e. Municipal Mayor and Punong Barangay; notices of visit were sent ahead) as well as with the head of the government armed forces in the area (in barangays considered as conflict zones).

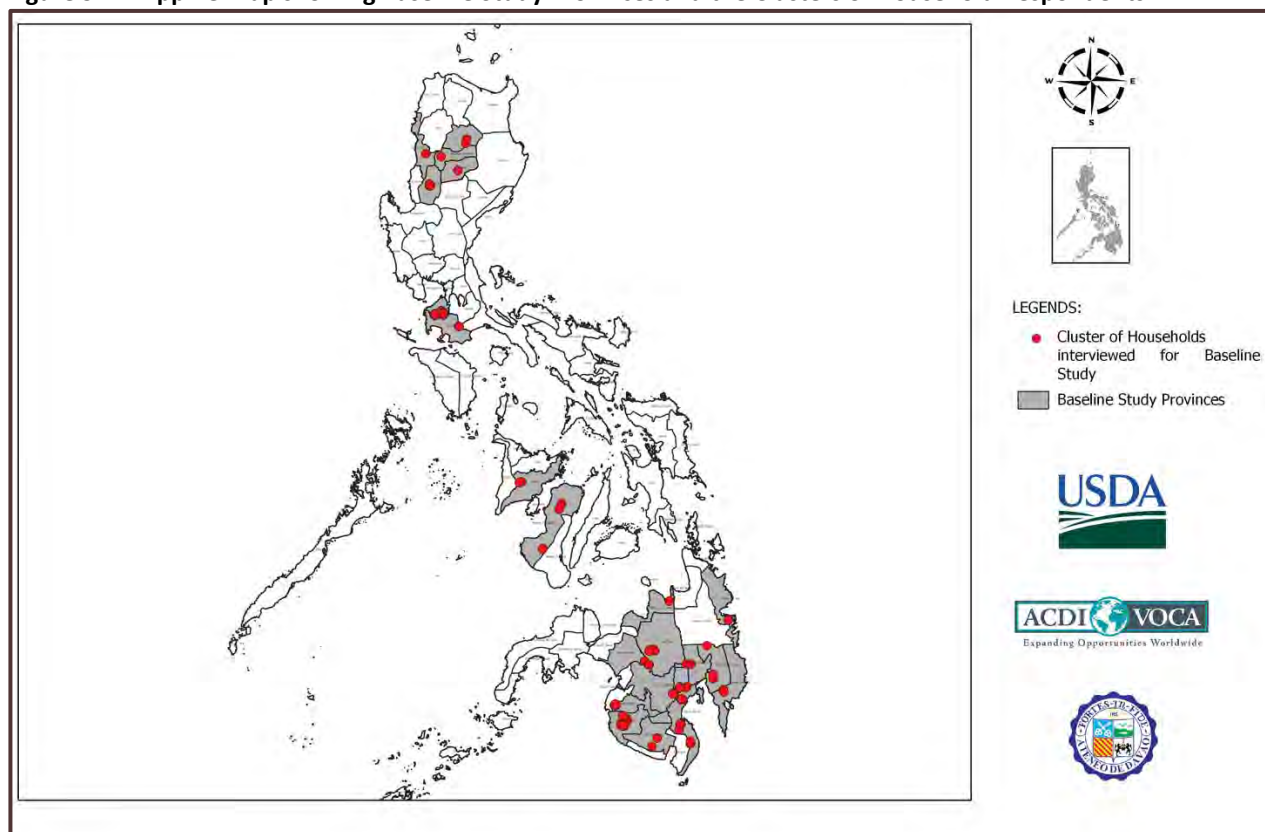


**Photo 1:** Left photo shows the team outside the barangay hall after courtesy call with Punong Barangay; middle photo shows a certificate from Punong Barangay on existing coffee farmers in their area; right photo shows ISEDi supervisor in [redacted] courtesy call with local Agricultural Officer.

Upon arrival at the target household’s residence (or farm, when the target respondent was not home), the enumerator informed the target respondent that ISEDi-AdDU had earlier asked clearance from the local authorities regarding the conduct of the baseline. Then, the enumerator provided a brief background on PhilCAFE, purpose of the baseline, and how the collected information would be used. If they agreed to be part of the survey, they signed a Consent Form prior to the start of the interview. A copy is shown as **Annex 4**. The same consent form was also signed by the key informants and the focus group participants. However, for the households located in comparison areas, they signed a consent form on their participation to a “Coffee Situationer Study” which was being undertaken by the ISEDi-AdDU. There was no mention of PhilCAFE in this letter.

In barangays where indigenous peoples live, the Field Supervisors first asked the tribal head for clearance to proceed, for which nearly all had given their approval. It was only in municipality of Balbalan in Kalinga province, which had an existing local ordinance that required prior approval and fees (see **Annex 5** and **Annex 6**), that the study team was not able to conduct household interviews. The study team sought the help of the Kalinga State University on identifying the replacement municipality. The recommendation was to proceed to City of Tabuk and municipality of Tanudan. The study team filtered the RSBSA database to get the randomly selected replacement households from these areas. **Figure 9** shows the 24 PhilCAFE-identified provinces and the clusters of household-respondents interviewed for the baseline study.

**Figure 9: Philippine Map showing Baseline Study Provinces and the Clusters of Household Respondents**



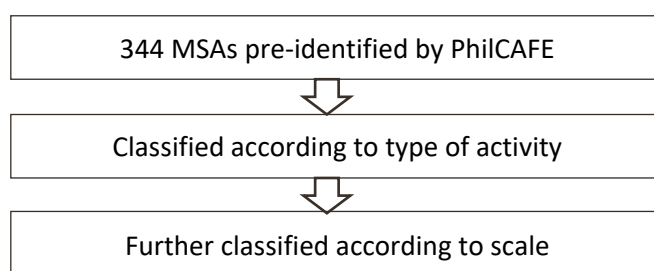
**Identification of the Market System Actor (MSA) Survey Respondents.** PhilCAFE provided the study team with the “*List of Potential PhilCAFE Market System Actors as of January 22, 2019*”, containing 344 market system actors. This list was generated by PhilCAFE long before the baseline study, using the information shared by the government agencies like the regional offices of the Department of Trade and Industry (DTI); it also contained MSAs that participated in some activities the previous MinPACT project.

The MSA list was segregated by the type of their activities: (1) nursery operators, (2) input suppliers, (3) microfinance/lending institutions, (4) processors/roasters, and (5) traders. Further, each MSA was classified according to their scale<sup>15</sup> (micro, small, medium, and large). The sample was computed based on the number 344, using 95% confidence interval, 5% margin of error, and response rate of 90% and the result was 206. In areas where the study team found that the identified MSAs (from the PhilCAFE list) had ceased operating or had transferred, the sought additional MSA referrals from the local PAOs and provincial offices of DTI.

<sup>15</sup> We use “by asset size” in determining the scale, a micro enterprise has asset up to Php 3 million; a small enterprise between Php 3 to 5 million; a medium enterprise between Php 15 to 100 million; and a large enterprise with more than Php 100 million. Retrieved from [http://www.philexport.ph/barterfli-philexport-file-portlet/download/phil-initiatives/MSME\\_Development\\_Plan\\_2011\\_2016\\_FULL\\_TEXT.pdf](http://www.philexport.ph/barterfli-philexport-file-portlet/download/phil-initiatives/MSME_Development_Plan_2011_2016_FULL_TEXT.pdf)



**Figure 10: Stratification of MSA Respondents**



**Administration of the Market System Actor Surveys.** The list of MSAs were segregated by province, type, and scale. Where possible (those with email, phones and fax numbers), the study team sent the request for interviews ahead. Many MSAs required several visits prior to conceding to an interview.

**Selection of the Key Informants.** The key informant interviews (KIIs) focused on people who represented government agencies that were mandated and private organizations that were created to support the agricultural sector and coffee industry. The first group of KIIs were with the representatives of the Provincial Agricultural Office (PAO) of the province with the highest coffee production per region. If available during the interview, the study team interviewed the PAO's point person for coffee or another authorized representative. The second group of KIIs were the coffee point person or authorized representatives of national government agencies, specifically the DA, DAR, DTI, DENR, BPI, PCA, NCIP and CDA. The third group were state universities (1 in Luzon and 2 in Mindanao). To represent the private sector, the study team also interviewed an officer of the Regional Coffee Council in nine (9) regions, and interviewed nine (9) coffee influencers, people who champion the cause of the coffee industry through advocacies, programs, creativity and trailblazing accomplishments. Eight of these influencers were based in Metro Manila and one (1) in Davao del Sur. The total target for KIIs was 38.

**Administration of the Key Informant Interviews.** Prior to the conduct of each KII, a formal letter was sent beforehand requesting for an interview with the respective organization's point person on coffee who possessed in-depth knowledge of the coffee's local situation and actors. Please note that the data from the key informant interviews were not used for indicator calculation but to obtain qualitative information regarding the coffee industry. The Field Supervisor did the interviews.

**Selection of Focus Group Discussions POs.** To round-up the sources of primary information, the study team also conducted Focus Group Discussions with selected POs from the list given by PhilCAFE. This list contained 45 POs engaged in coffee production and processing. The study team randomly selected 18 POs: five (5) POs which participated in MinPACT and 13 new POs that have not worked with ACDI/VOCA before. The 18 POs were requested to identify five (5) of their members to participate in the FGDs. To ensure that the study team covered the perspective of different types of FGD participants, the FGD sessions were divided into six (6) types: (a) adult men only, (b) adult women only, (c) youth males only, (d) youth females only, (e) indigenous males only and (f) indigenous females only.

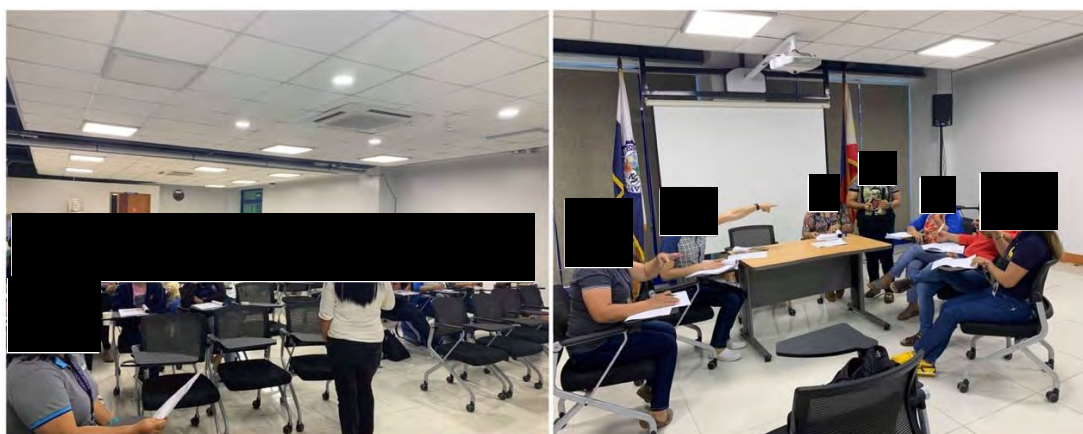
**Administration of the Focus Group Discussion.** An appointment was set after the initial request for FGD was conveyed to the Chairperson or Manager of the POs. The FGDs were done in the PO office and facilitated by the Field Supervisors.

The KIIs and the FGDs proceedings were recorded. Then, the audio recordings were transcribed by the Field Supervisors. The transcriptions were forwarded to a team of translators, who translated into English. The translated files were forwarded to a team who performed the coding and thematic analysis. For the full copy of the KII and FGD guide questions, please refer to **Annex 13** and **Annex 14**.

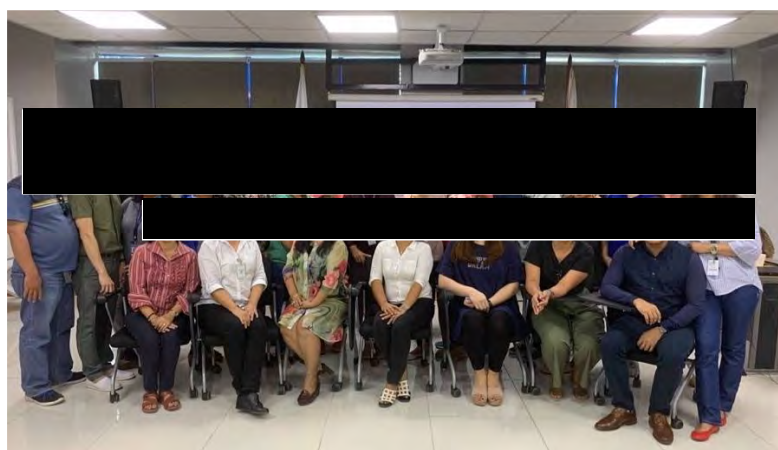
## 4.3 DATA COLLECTION TECHNIQUES

**Training of the Field Teams.** The field supervisors, enumerators and core team led by the Project Manager<sup>16</sup> attended a 2-day training held last February 27 and 28 at the Ateneo de Davao University. The PhilCAFE M&E Director and the Training Coordinator provided background on the project and helped enumerators prepare for potential technical issues.

The topics tackled during the training were: Introduction to PhilCAFE and the Purpose of the Baseline Study; Overview of the Market System Approach, Gender and Youth Issues in Coffee Production, and an Overview of the Data Gathering Tool and Target Respondents. The study team reviewed the Household Survey form in the KoboCollect application and did a mock-up of the household survey and the FGD.



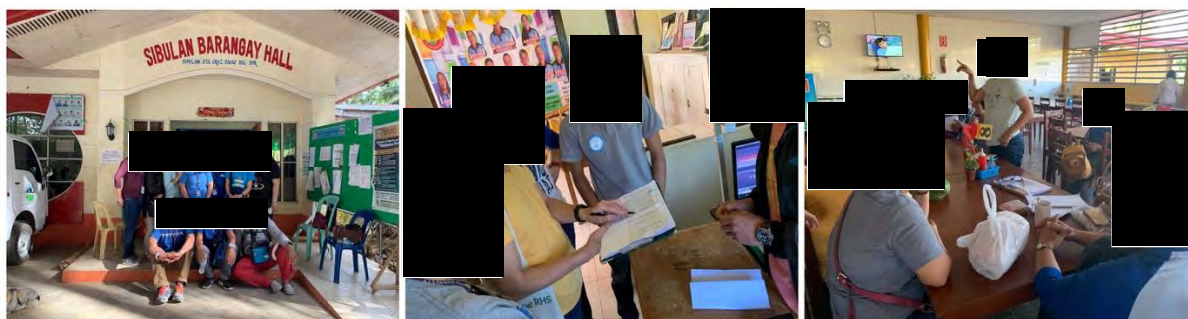
**Photo 2:** Left photo shows the PhilCAFE M&E Director giving background of the project and the purpose of the baseline study. Right photo shows the mock-up of a Focus Group Discussion.



**Photo 3:** The Core, 6 Field Teams and PhilCAFE M&E Director after the training.

<sup>16</sup> Other core team members who joined the training were Team Leader, Survey Specialist, Gender Specialist and the Market System Specialist and Social

**Pretesting of the Tools.** After the training, the survey team tested the survey tools and pilot-tested the KII and FGD guide questions. The pretest was undertaken to verify if the survey tools and the guide questions could produce valid and reliable results. It was also done to calibrate the length and logic of the questions. During this period (3 days of pre-test), the enumerators also familiarized themselves on editing, saving, finalizing (after review) and sending completed forms. For the pretest, the study team completed 71 household-respondent forms to represent the treatment group and 51 household-respondent forms for the comparison group.



**Photo 4:** Right photo shows the Team B at the pretest comparison barangay; middle photo shows the team members conferring with barangay officials on the list of farmers; and right photo shows the team discussing the pretest Day 1 activities.

The study team also piloted one (1) FGD session with the Balutakay Coffee Farmers Association (BACOFA), while for the MSA surveys we only managed to cover 1 trader, 3 processors/roasters, 1 nursery operator, and 2 input suppliers. Our Key Informant interviews were with the DTI-Region XI Coffee point person and a representative of the Provincial Agriculturist Office – Davao del Sur province.

A separate report on the pretest result was submitted to PhilCAFE.

**Survey Forms in Kobo Toolbox Application (Quantitative Data).** After the PhilCAFE approved the survey tools (households survey form and the 5 MSA survey forms), the Survey Specialist programmed the tools using the Kobo Toolbox Application. The six (6) survey forms were then installed in 17 units of Samsung Galaxy Tab A model with quad core processor and 32 BG memory. To provide back-up on GPS reading, the tablet was also installed with Navigator Free application. Apart from these and other pre-installed applications in a typical Samsung Tablet, there were no other applications installed by ISEDI in the tablets.



**Photo 5: Samsung tablets being readied before deployment.**

In the Kobo ToolBox, the Survey Specialist created the six (6) survey forms using the “Form Builder” features. These forms were revised based on the pretest technical experience and the updates in the actual survey. Since ISEDI was not a humanitarian organization and this baseline study was a “research” in nature, the data server for the study was lodged at the KoboToolBox by Harvard Humanitarian Initiative (HHI), which is physically located in USA. Only the Survey Specialist had technical access to the baseline study database. However, the Team Leader and the PhilCAFE M&E could view the progress of the survey forms and the preliminary results (based on raw data).

The KoboCollect application could collect information offline – meaning, the enumerators could access and fill-out the survey forms while out in the field without internet connectivity. The application had several features such as: (a) fill blank form; (b) edit saved form; (c) send finalized form; and (d) view sent form. The uploaded forms get synchronized when the tablets were connected to the internet.

At the end of the data gathering activities, the Survey Specialist downloaded the dataset (different dataset for each of the 6 surveys) in XLS or CSV formats. The data cleaning was done on the downloaded dataset.

For the full copy of the survey forms, please refer to **Annex 7** until **Annex 12**.

**Consent.** A background on PhilCAFE and purpose of the baseline study initiated the KII conversation or the FGD session. Should they consent to be part of the baseline study, their responses would be kept confidential. Once they understood their rights and the uses of the baseline results, the key informants and the FGD participants signed the consent form.





**Photo 6: Left photo shows a male youth signs the consent form before the start of the interview while right photo shows a woman FGD participant does the same thing before discussion.**



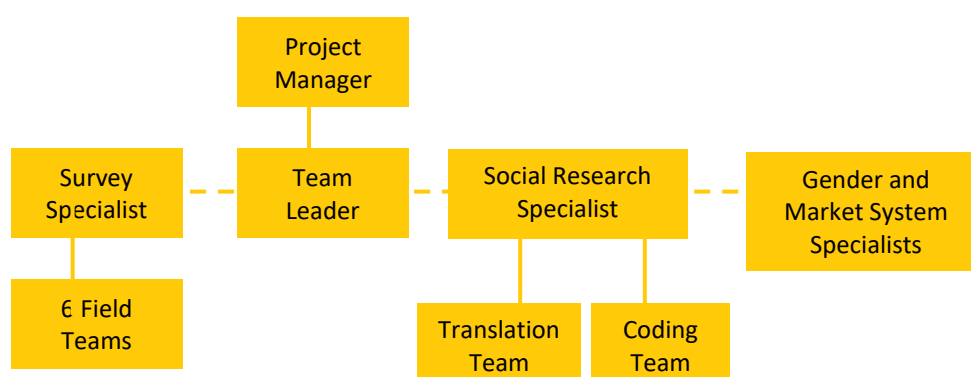
## 5 SURVEY TEAM'S MANAGEMENT AND OPERATIONS

**Team Composition.** The Project Manager for this study was [REDACTED], who also served as the [REDACTED]. [REDACTED] was the Team Leader, [REDACTED] was the Survey Specialist, [REDACTED] was the Market System Specialist, [REDACTED] was the Gender Specialist, and [REDACTED] was the Social Research Specialist.

The field teams were headed by [REDACTED] Field Supervisor for Mindanao Team 1, [REDACTED] for Mindanao Team 2, [REDACTED] for Mindanao Team 3, [REDACTED] for Mindanao Team 4, [REDACTED] for Visayas Team, and [REDACTED] for Luzon Team. The translators of transcribed KIIs and FGDs were [REDACTED]. The social researchers who did the coding were [REDACTED]. There were also 17 enumerators (12 females and 5 males).

Only the Project Manager and the Field Supervisors were staff of ISEDI – others were on-call consultants and enumerators.

**Figure 11: Team structure**



**Team Management and Operations.** For the pretest activities, there were only two (2) teams: one team for the treatment area and one team for the comparison area. A week after the pretest, the teams were divided into six (6) field teams for the actual data gathering. The time lull between the pretest and actual field activities allowed the teams time for preparation and coordination. The teams' daily progress was reported via email, text messages or the chat group. This allowed the Team Leader and the Survey Specialist to monitor field activities. The field activities were generally smooth, with expected delays caused by distance of the households, the availability of the key informants and MSAs (and thus repeated postponements of interviews), and the weather (Typhoon Chedeng suspended two-day work in some areas in Mindanao).

## 6 DATA ANALYSIS, MANAGEMENT AND PRESENTATION

### 6.1 DATA ANALYSIS METHODS AND PROCESSES

The Survey Specialist monitored the daily progress of the uploaded forms via the KoboToolbox Dashboard. Random audits for content completeness, range, and consistence were performed.

On the first three (3) days of the household survey, there were inconsistencies in the production and employment data. A guide was released to assist the enumerators and field supervisors in reviewing the specific questions so that the entries were corrected before uploading to the KoboToolbox server. At the completion of the data gathering activities, the household database received a total of 1,202 household forms and accepted 1,198 as valid (4 were rejected while the target for the household survey was 1,185). The dataset was then exported to Microsoft Excel for the final data audit and checked for errors, including transpositions, coding, consistency and range. Graphical presentation of the data was conducted in Excel while descriptive analysis was done in Stata V.10 software and Excel.

Correlation analysis among theoretically related variables was conducted to measure the strength of association between two or more variables and the direction of the relationship. Pearson correlation coefficient (Cohen, 1988) is used to measure the strength of association among the variables.

Regression analysis was used to help understand how the typical value of the dependent variable (or “criterion variable/outcomes”) changes when any one of the independent variables is varied, while the other independent variables are held fixed. Logistic analysis was also used to understand the factors of production and post-production technology adoption.

For the qualitative data, thematic analysis worksheet was used in the identification of concepts/codes and themes/categories of the translated text segments from FGDs and KIIs.

### 6.2 LIMITATIONS OF THE STUDY

This baseline study is limited to the coffee situation in the 24<sup>17</sup> provinces to be covered by PhilCAFE, encompassing the respondents and key informants’ coffee relevant information as of 2018.

Another limitation is the self-reported data used rather extensively in this study. We accepted what the respondents, key informants and the FGD participants shared at face value (there were probing on our part and we sincerely explained the purpose of this study). We did not ask for hard evidences (i.e. official documents) to support their claims of assets, income and sales (among others) however, we compared the key information with the prevailing statistics.

Similar to the treatment areas, self-reported data shared by the comparison households were also accepted at face value.

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<sup>17</sup> As stated in Section 4.2, Sulu province was omitted from the baseline study data gathering activities due to security reason.

## 6.3 CONSTRAINTS IN DATA GATHERING

The data gathering activities were expected to end by March 29 at the latest, but some of the team members were still doing the interviews until April 5. The factors that led to the extension of field activities were:

- **Distance of the household-respondents from the town center.** In some areas, the household-respondents were clustered close to each other, while in other areas their location was far from each other. There was one barangay in Sarangani that could only be reached via helicopter, otherwise it was a travel of more than 24-hours (thus, we replaced it with closer barangay). If households were clustered together, an enumerator could finish 6-8 interviews in a day and if far apart, only 2-3 interviews.



Photo 7: Road condition in most of the areas covered by the baseline study.

- **Replacement of household and MSA respondents.** The RSBSA database was done in 2012. Thus, the list is considered aged. There were respondents initially identified who migrated, found work outside the country, passed on, and had cut their coffee trees sometime after the RSBSA data collection (so they were not producing anymore). During our courtesy call with the Provincial Agriculturist Offices, some had given notice of barangays in the list no longer had coffee (this was the case in Agusan del Sur (Veruela), Cavite (Talon, Amadeo), Lanao del Sur (Brgy. Poblacion, Wao) and Negros Occidental (Murcia). For example, in Bukidnon, there is Brgy. *Capehan* (coffee in local term) in Libona municipality that was formerly teeming with coffee plants, but not anymore today. This was included in our initial list but was replaced with Brgy. Binahon, Lantapan municipality. Please see **Annex 15** for the sample letters from local Agricultural offices.

From the targeted MSA list of PhilCAFE, we had to take out 95 from the 322 because these were producers or growers (they did not fall within the 5 categories of input suppliers, nursery operators, traders, processors/roasters, and micro-finance/lending). For the remaining MSAs in the list, there were also several who could not be located and had closed shop (such target MSAs will be reported to PhilCAFE). We were told by PhilCAFE that the MSA list was a compilation of enterprises given by DTI regional offices. After the PhilCAFE/DTI list was exhausted, we looked for additional MSAs using the snowball sampling/chain referral sampling (by asking referrals from farmers).

- **Conflict of schedule.** About a third of the MSA and KII respondents could not be reached because of scheduling conflicts/timing unavailability.
- **Weather.** Typhoon Chedeng hit Mindanao on March 19. Four (4) of the 6 teams suspended their interviews even a day before this because some parts were already raining heavily and there were reports of landslides in target barangays (in Compostela Valley and Sultan Kudarat). Heavy rains also prevented other teams from hiring single motorcycles because of the difficulty of navigation.

**Additional requirements.** Field Teams in Davao City and in South Cotabato were requested to file a Freedom of Information request before they could ask the staff of the DTI to verify the addresses of the MSAs. The team that went to Kalinga province was prevented by the local government from interviewing households in Balbalan. The province had a local ordinance that required researchers to comply with a formal request, a presentation with the Sanguniang Bayan, pay a certain permission fee, and do a presentation of the results to the municipality's legislative body. Thus, we changed the municipality from Balbalan to Tabuk City and Tanudan.

- Finally, we acknowledged that there were inconsistencies on coffee statistics reported by the Philippine's central statistical authority (<https://psa.gov.ph>) and the information available online at the International Coffee Organization (<http://www.ico.org>) and the United Nations (UN) Comtrade Database (<https://comtrade.un.org>). The inconsistencies stemmed from the differences in their data collection methods and reporting coverage, among others. However, secondary statistics used in this document cited always referenced the source (PSA, Comtrade or ICO).

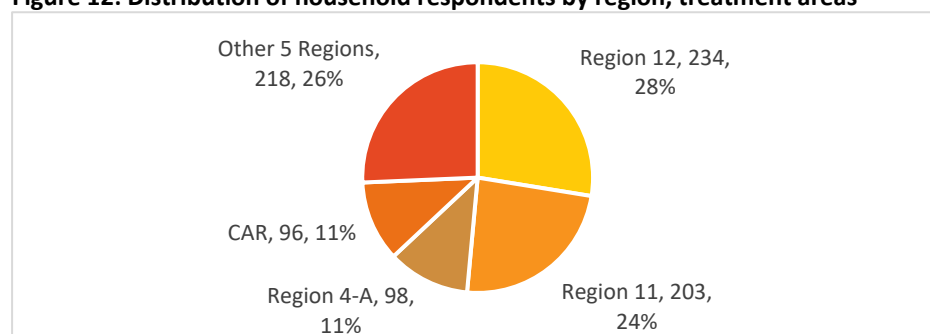
## 7 RESULTS AND DISCUSSION

### 7.1 PROFILE OF THE PRIMARY SOURCES OF INFORMATION

#### 7.1.1 HOUSEHOLDS<sup>18</sup>

**Distribution by location and category.** The baseline study covers 849 respondents in treatment areas. The biggest group of respondents is located in Region 12 (234 or 27.6%), which is the country's biggest coffee-producing region (for the names of the 17 regions, please refer to Annex 16. Adult males represent the dominant sex group, with 409 respondents (48.2%). The least represented in the baseline are the youth female respondents, numbering only 27 (3.2%). Full table is attached as **Q-Table 1** (Quantitative Table).

**Figure 12: Distribution of household respondents by region, treatment areas**



**Average age.** The average age of all coffee farmers interviewed in this study is 49 years old. The females average age is 50 years old and males is 48 years old. By age category, the average age for adults (above 30 years old respondents), is 52 years old and youths is 24 years old. As cited in several studies, the average age of farmers in the Philippines is 57 years old<sup>19</sup>. This picture illustrates a common trend in developing countries, where those engaged in farming are getting older and the younger population are opting for non-farm occupations<sup>20</sup> ( **Q-Table 2**).

*From FGD with MAGROW Multi-Purpose Cooperative: “We should not typecast the youth. There are young people who love farming and there are those who really dislike it. Others have sold their farm because they are contented with other jobs. Siblings have different lines of interest. Mine is into farming. I have young nephews/nieces and neighbors who would like to know about planting and seedlings.”*

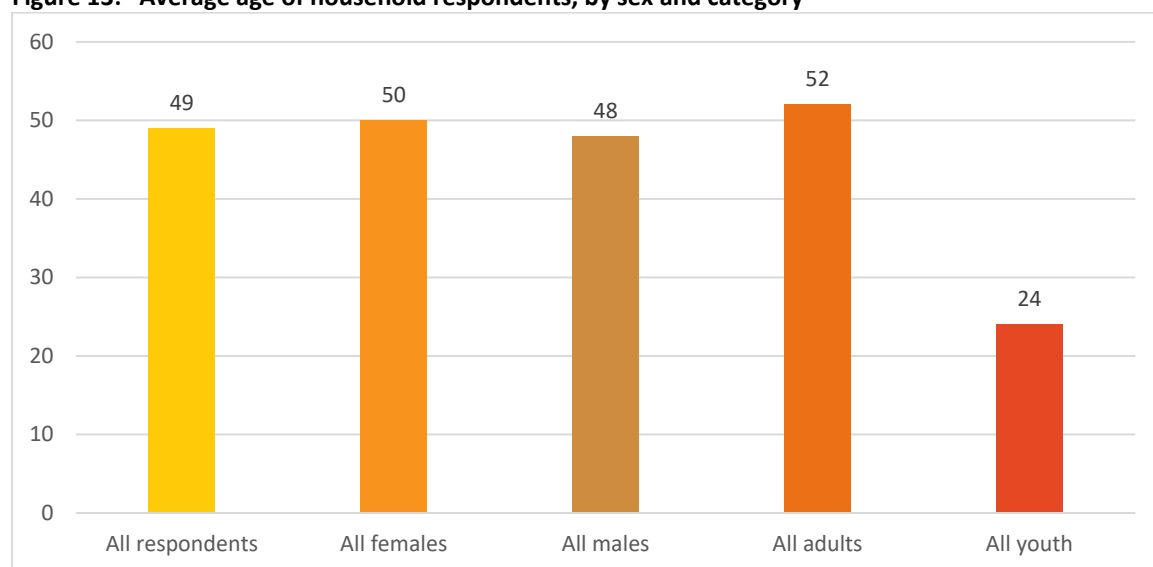
<sup>18</sup> Please note that this section focuses only on the findings of the household respondents located in treatment areas. However, findings on household respondents in comparison areas are presented in the Quantitative Tables (Q-Tables) found at the end of this report.

<sup>19</sup> Cited in one pending Congress bill, retrieved from [http://www.congress.gov.ph/legisdocs/basic\\_17/HB05336.pdf](http://www.congress.gov.ph/legisdocs/basic_17/HB05336.pdf). There is a published report on a study conducted by the Department of Agriculture, where the average age of farmers as of 2017 is 60 years old, retrieved from <https://cebudailynews.inquirer.net/191635/declining-farmer-population>

<sup>20</sup> Briones, R. Characterization of Agricultural Workers in the Philippines, 2017. Retrieved from <https://pidswebs.pids.gov.ph/CDN/PUBLICATIONS/pidsdps1731.pdf>



**Figure 13: Average age of household respondents, by sex and category**



**Photo 8: A few of the older household respondents during our interviews. Some we interviewed at their house, some at their farm.**

In the FGDs with the coffee farmers, there are several reasons why many remained in coffee farming. Some of the farmers, after inheriting their land from their parents, have also decided to continue growing their coffee (akin to honoring their parents' "gift" to them). They have not wholly shifted to other crops because there are occasions when coffee fetches a good price and that coffee is easy to sell (there are traders who regularly buy coffee and coffee is a part of Filipino's diet and will always be on demand). If one is fortunate to harvest a good volume, then it also spells good profit for the household.

*From FGD Murcia Marginal Coffee Growers: "Coffee is more advantageous (compared to other crops) because once it has started to bear fruits, it will continue to produce. That is the reason why we chose coffee."*

*From FGD IAHTCO: For us, the reason we chose coffee as a crop is to heal the soil and support it and prevent it from collapsing".*

*From FGD SURDECO: "Aside from rubber, I want to plant coffee because in my experience the price of coffee does not go down below 70 pesos per kilo. It would be around 80-100. That's why coffee is very helpful to improving our lives..."*

Coffee is not as labor intensive like other cash crops (corn or vegetables). It requires little maintenance, with harvest season (while stretching for several days) happening only once a year. The assurance of yearly harvest is also an incentive. Coffee augments the family income if it is intercropped with another crop such as coconut and rubber. It is a sturdy plant that can live for a long time (note that the average age of coffee trees is 23 years old) and can increase its yield as long as pruning and rejuvenation are part of the household's practices.

There are also coffee farmers who prefer coffee because it is not easily perishable. They say that if they want to hold on to their dried coffee because the prevailing price is still low, they can keep it for months until the price becomes favorable to them. Coffee is an ideal crop for areas in high elevation or those near mountains due to volcanic soil. Some coffee households use coffee to prevent soil erosion in their farm.

### Box 1: Encouraging More Youth to Engage in Agriculture

***“Kabataan sa Agrikultura, Para sa Bayang Masagana”*** (roughly translated to English as “Youth in Agriculture for a Prosperous Country”) is the new advocacy campaign launched by the Department of Agriculture only last March 2019 to create awareness among the youth to engage in agriculture and agri-related enterprises. The department is concerned about the ageing farmers and the falling number of enrollees in agricultural courses. This campaign aims to encourage junior and senior high school students to enroll in agricultural courses. In its caravan across the country, the agency highlights agricultural programs and new technologies.

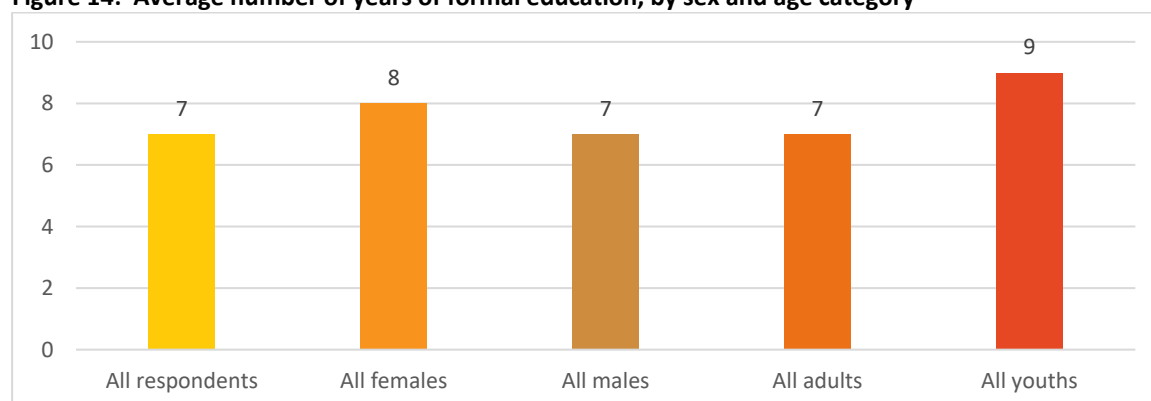
There are also local actions to convince more youth to pursue agriculture as a career or source of income. The Davao City Agriculture Office has embarked in 2018 a project “Agribeshies: The Agribix Youth Club of Davao”, which seeks to bring together and train youth into farming (particularly agribusiness). This project provides agribusiness students in the city to be exposed to actual agribusiness management and hands-on training. In the January 2019 Labor Force Survey conducted by PSA, the agricultural sector lost 1.6 million jobs between 2018 to 2019. As of May 2019, the average daily wage of agricultural worker is between Php 275 to 353 per day (excluding the National Capital Region).

In the 2017 Gender Statistics on Labor and Employment report by PSA, they estimated that around 13.876 million youth were employed in 2016 and 63.8 % of this were the male youth. By industry where they are employed in 2016, about 3.245 million were employed in “Agriculture, Hunting, Forestry and Fishing” industry (23.4% in the said industry and further by sex, 82.5% were male youths). The PSA projected the youth population for 2018 to be 14.919 million for male youth and 14.215 million for female youth.

Retrieved from : <https://pia.gov.ph/news/articles/1020435> , <https://www.sunstar.com.ph/article/1741878>; <https://psa.gov.ph/content/employment-rate-january-2019-estimated-948-percent>; <http://www.nwpc.dole.gov.ph/stats/summary-of-current-regional-daily-minimum-wage-rates-by-region-non-agriculture-and-agriculture/>; [https://psa.gov.ph/sites/default/files/attachments/hsd/pressrelease/Table4\\_9.pdf](https://psa.gov.ph/sites/default/files/attachments/hsd/pressrelease/Table4_9.pdf) and [https://psa.gov.ph/sites/default/files/2017%20Gender%20Statistics%20on%20Labor%20and%20Employment%28GSL6%29%20publication\\_0.pdf](https://psa.gov.ph/sites/default/files/2017%20Gender%20Statistics%20on%20Labor%20and%20Employment%28GSL6%29%20publication_0.pdf)

**Marital Status, Education and Ethnicity.** Majority (654 or 77%) of the household respondents are married. The average number of years in formal education is 7 years. The youths have spent an average of two (2) additional years, indicating that they have attended some years in secondary education. By sex, the women have one (1) year more in formal education compared to men.

**Figure 14: Average number of years of formal education, by sex and age category**



In the FGDs with POs, the participants say the youth who are less interested in coffee farming are more engrossed either in their studies, with their gadgets, prefer quick money through paid labor or regular salary, or work abroad.





**Photo 9: Some of the women respondents who agreed to participate in the baseline study.**

The most dominant ethnic groups are the Cebuano's (135 or 15.9%) and the Ilonggo's (126 or 14.8%), both groups originating from the Visayas group of Islands, but have now settled in Mindanao (with highest numbers in Region 12 and Region 11). A total of 32 ethnic groups (the country has about 110 ethno-linguistic groups<sup>21</sup>) are represented in the baseline study. Please refer to **Q-Table 3** and **Q-Table 4**.

From the initial list of PhilCAFE target PO-partners, many of these organizations are composed of ethnic groups – particularly those POs located in CAR region, ARMM, and Northern Mindanao (Region 10).

**Organizational Affiliation.** Majority of the respondents say that their household head belong to an organization (520 or 61.2%). By type, the most common is cooperative or farmer organization, with 354 respondents (41.7%); although these cooperatives/organizations are not exclusively related to coffee production, processing or marketing<sup>22</sup>. There are respondents who opt to be affiliated with

<sup>21</sup> The 110 ethno-linguistic groups is taken from a publication by UNDP published in 2013 and entitled "Indigenous Peoples in the Philippines" retrieved from [http://www.ph.undp.org/content/philippines/en/home/library/democratic\\_governance/FastFacts-IPs.html](http://www.ph.undp.org/content/philippines/en/home/library/democratic_governance/FastFacts-IPs.html)

<sup>22</sup> There are several types of cooperatives in the Philippines: credit cooperative, which promotes saving and lending services; producers cooperative, which undertakes joint production and processing of raw materials; multi-purpose

indigenous people group (76 or 9%), whose main reason for working together is their similarity in ethnicity rather than the services they seek (i.e. credit or marketing). The respondents belonging to indigenous people group are located in Regions 1, 10 and CAR. Please refer to **Q-Table 5**.

In the FGDs with the farmers, the POs have different services extended to their members. The most common service is the dissemination of technical information/technology about coffee production and processing. A PO in Alamada teaches its members on how to identify disease of the coffee trees, demonstrate pruning during farm visits, and they do typical processes of washing, drying, depulping, dehulling and roasting. A PO in Bukidnon teaches their members on pruning, weeding, picking red, packing and sorting. In Compostela Valley, a PO provides seedlings and fertilizers to its members, as well as assisting them in accessing financing/credit. More POs (such as those in Alamada, Gingo-og, and Tanudan) directly buy coffee from their members, process coffee, and negotiate with buyers. A few POs extend credit to their members to be used for coffee production and other family expenses.

### Box 2: Importance of Cooperatives

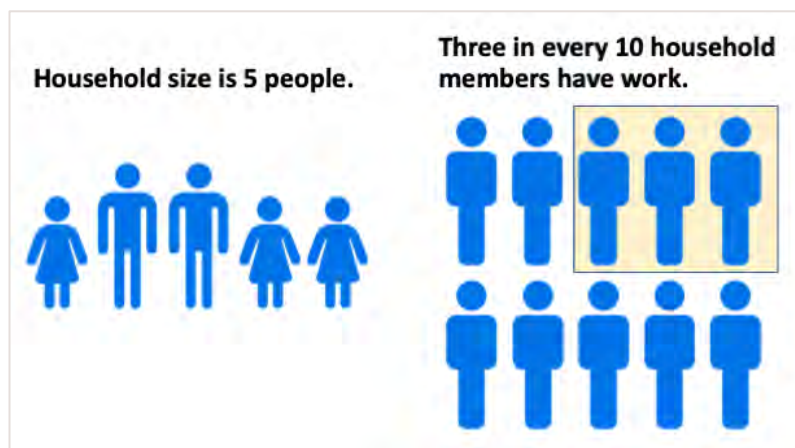
In a study entitled “Improving Marketing Efficiency through Agricultural Cooperatives”, successfully-run cooperatives can be a medium for an improved marketing efficiency. As groups, their consolidated resources and projects allow them economies of scale in production and marketing, giving them reasonable bargaining muscle when dealing with the market.

Similar efficiency is also the main reason why government agencies prefer to deal with cooperatives or organized groups. Government agencies such as DA and the Department of Agrarian Reform (DAR), which have limited manpower, prefer to work with cooperatives to for better reach. Some of the support extended are “storage and drying facilities, warehouses, credit, technical and management trainings”. Thus, DA and DAR encourage farmers to form or to affiliate with such organizations.

Retrieved from: <http://www.ffc.agnet.org/library.php?func=view&style=type&id=20160923141401> and <https://www.pna.gov.ph/articles/1021841>

### Profile of the Respondents’

**Household.** The average number of members per household<sup>23</sup> is five (5). By type, majority of the respondents belong to a single-type household (749 or 88.2%), referring to a household that is composed of parents and children. The dominant sex is male, representing 52% of the total household members population. The highest concentration of male household members is found in CAR at 55.8%, while for female household members is found in Region 1 at 63%.



cooperative which has business activities; and agrarian reform cooperatives which is a group of marginalized farmers. Retrieved from <http://www.cda.gov.ph/frequently-asks-questions-faqs>

<sup>23</sup> Household is defined as “a social unit consisting of a person living alone or a group of persons who sleep in the same housing using and have a common arrangement in the preparation and consumption of food”. Philippine Statistics Authority, retrieved from <https://psa.gov.ph/content/household>



The baseline study shows that only 3 in every 10 household members are engaged in productive activities (either in own farm, own business or working for others). Thus, one person's earning/work provides food, clothing and shelter for at least two (2) people. Please refer to **Q-Table 6** and **Q-Table 7**.

*From FGD with Atok Multi-Purpose Cooperative: "We have problem with harvesting. When the berries ripen almost at the same time, we cannot pick them all. We cannot do it by ourselves."*

### Box 3: Extra Pairs of Hands in the Farm

For small-sized families or families with anticipated high volume of harvest, they often hire additional agricultural/farm workers to help with harvesting. During off-peak season, farm workers are also hired by families to do fertilizer application, weeding, and planting.

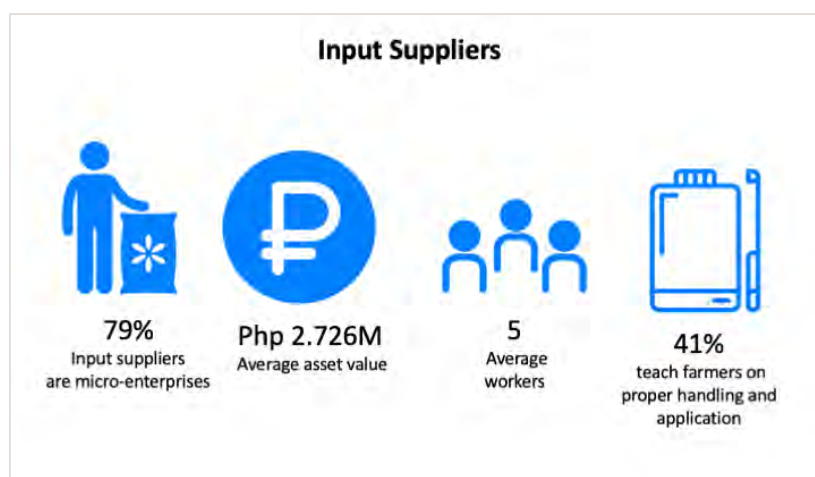
A farm worker is someone who renders service value as an employee or laborer in an agricultural enterprise or farm, regardless of whether his/her compensation is paid on a daily, weekly, monthly or *pakyaw* ("in lump") basis. In the "2017 Trends in Agricultural Wage Rates" by PSA, the salaries of agricultural workers averaged Php 280.37 per day. The male laborers received higher payment at Php 286.72 while female laborers received Php 255.80.

A decomposition analysis on the gender wage gap was recently done by R. Briones in 2018 and his conclusion was that the "wage gap can be attributed to differences in activity composition by sex of worker and differences in daily pay for the same activity". He recommended additional research to confirm his findings, given the sparse evidence available on "gender differences in equivalent daily compensation for each activity (rather than averaged over activities)".

Retrieved from <http://www.chanrobles.com/republicactno7607.htm#XPSlfS2B2WY> and <https://esa.gov.ph/content/trends-agricultural-wage-rates-0> and <https://think-asia.org/bitstream/handle/11540/8931/pidsdps1815.pdf?sequence=1>

## 7.1.2 MARKET SYSTEM ACTORS

**Input Suppliers.** The baseline study covers 34 input suppliers (short of 5 from the target of 39 supplier-respondents from five (5) regions: 4-A, 6, 10, 11 and 12. Enterprises were categorized using their declared asset value: 6 (18%) are small enterprises, 27 (79%) are micro-enterprises and 1 (3%) is a medium enterprise. On average, the input suppliers have been in operation for 13 years now; by scale, it is the micro input suppliers who are the "newest" in the business with an average of 11 years. There is one input supplier in Region 10 that has been in the business for 37 years. Micro input suppliers typically have 2 branches, while the larger ones (small and medium) typically have 1 branch. Input suppliers have an average of at least 5 workers. Please refer to **Q-Table 8**.



The average asset value of input suppliers is Php 2.726 million. Generally, input suppliers made an average of Php 2.19 million in sales in 2018 (see **Q-Table 9**). They carry a wide array of products, in different units, forms and brands, thus the prices of their items greatly vary. In general, the average price per type of input and the range of price appears as:

- Farm tools from low of Php 280 to high of Php 820
- Fertilizers for coffee plants from low of Php 494 to Php 1,200
- Pesticides for coffee plants from low of Php 294 to Php 3,600
- Personal protection equipment/safety wear from low of Php 750 to Php 2,500
- Sprayers and other application equipment from low of Ph 1,450 to Php 2,200

The level of inventory carried by the input suppliers also differs, which may be influenced by many factors (capital, market, demand, number of distributors, number of branches, etc.) which the study team no longer took into consideration during the interview. Only input suppliers in three (3) regions have obliged to share this information with us. Thus, the inventory carried by the input suppliers at the time of interview was:

- Farm tools from low of 58 to high of 200 units
- Fertilizers for coffee plant from low of 368 to 4,350 units
- Pesticides for coffee plants from low of 7 to 1,000 units
- Personal protection equipment/safety wear from low of 50 to 500 units
- Sprayers and other application equipment from low 50 to 500 units.

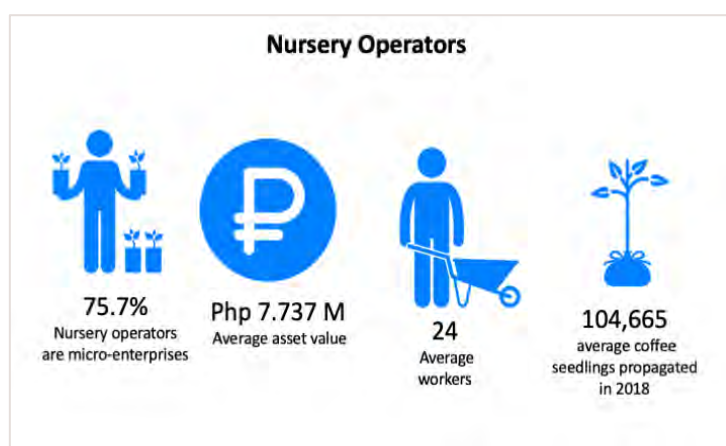
Please refer to **Q-Table 10** and **Q-Table 11**.



**Photo 10:** Left photo shows an enumerator interviewing a representative of input supplier while right photo shows a sales clerk explaining the features of their products.

**Nursery Operators.** Interviewed a total of 37 nursery operators, excess of two (2) respondents from the target of 35. Majority are micro-enterprise in scale (28 or 75.7%). There are 2 large-scale, 1 medium scale and 5 small scale nursery operators with 7 regions represented in the baseline. On average, nursery operators have been in operation for 10 years.

By the type of enterprise, we have interviewed 9 producer organizations that considers nursery as an income-generating project of their organization, 2 operated by (non-government organizations (NGOs), 5 operated by the local government unit (LGU), 16 private enterprises, 1 private/NGO joint project, and 4 others. Please see **Q-Table 12** and **Q-Table 13**.

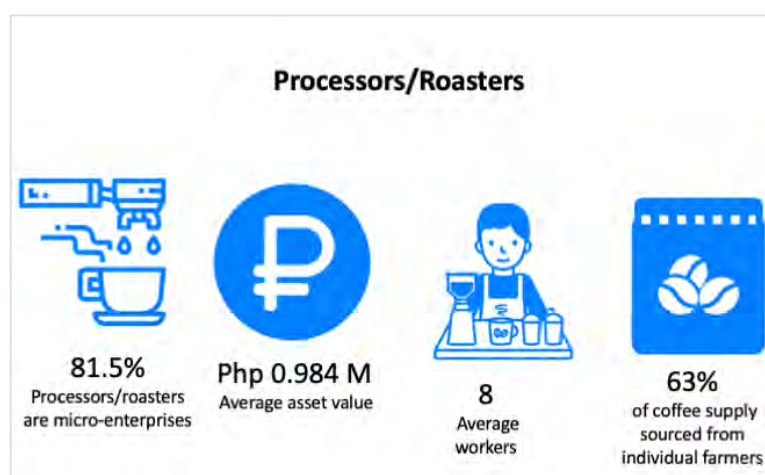


**Photo 11:** Left photo shows several workers tending coffee seedlings; right photo shows a small-scale privately-owned nursery.

The average asset value of the nursery operators in 2018 is Php 7.737 million. A large-scale nursery in Region 12 has an asset value of Php 90.5 million, while the lowest asset is declared by micro nurseries in Region 4-A. Average size of the nursery is more than 2 hectares (24,662 square meters)

**Processors/Roasters.** Interviewed a total of 81 coffee processors and roasters, 1 short from the target 82 respondents. They fall on two (2) categories only: 66 are micro in scale (81.5%) and 15 are small in scale (18.5%). Many of these processors/roasters are located in Region 12 (28 or 34.6%), which is also the country's largest coffee producing region. The average years in operation is 5.6 years, with the oldest processors/roasters located in Region 13 with 16 years in business and the youngest average are those located in Region 6 with only 3.3 years in operation

Average asset of processors/roasters in 2018 was Php 984,879, considering all scales of operation. However, the micro-processors/roaster asset was an average of





Php 645,308 for micro-processors and small-scale processors' average asset was Php 2.585 million. Therefore, the smaller the operation, the smaller is the asset size.



Photo 12: Field supervisors with representatives of coffee processors/roasters.

#### Box 4: Making Specialty Coffee More Accessible to Filipino Coffee Drinkers

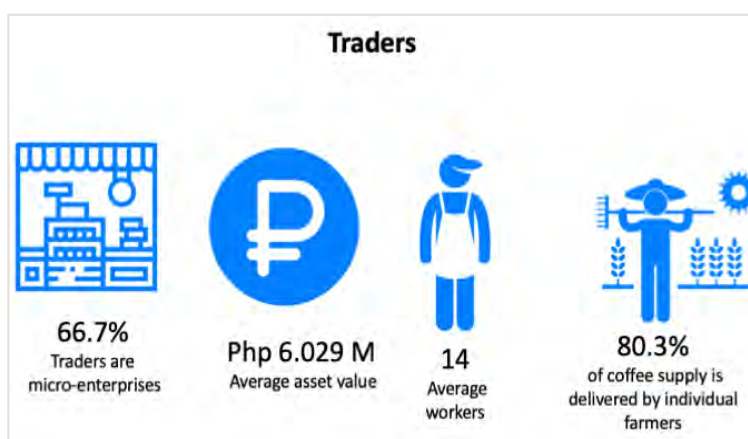
In effort to promote specialty coffee in the country, the DTI recently launched the franchise for public specialty coffee shops – the “*KAPetirya*” last March 2019. The agency is hoping that the franchise will grow up to 1,000 coffee lounges or kiosks to feature the country’s location-specific coffee species, such as the Benguet Arabica, Batangas “barako” (Liberica) and other coffees with unique flavor, good quality and less-known origin.

DTI estimates that the Philippines currently has about 15,000 coffee shops in the country and such number only provides an indication that the Filipinos are strongly embracing brewed coffee (note that majority is still into instant coffee manufactured by Nestle Philippines, Kopiko, Great Taste and other foreign brands).

Rolling out the Kapetirya franchise will be managed by the private sector but the model/concept is still owned by the government.

Retrieved from: <https://pia.gov.ph/news/articles/1020038>

**Traders.** We have interviewed a total of 45 traders, excess of 5 from the target of 40. These traders represent five (5) regions and are categorized as micro in scale (30 or 66.7%), small (10 or 22.2%) and medium (5 or 11.1%). On average, they have been operating for 15 years now, with the oldest group being the micro traders located in Region 12, which has an average of 25 years in business and the youngest is a medium trader located in CAR with only 4 years. Please see **Q-Table 17**.





On workers, traders have an average of 14 workers. They typically hire more women (5 adult women compared to 4 adult men, or 7 youth females compared to 6 youth males) than men; more women are hold full-time position compared to men. The traders claim that they intentionally hire more women to help the women earn on their own.

The traders have an average asset of Php 6.029 million in 2018. A trader in Region 11 has a Php 100 million asset which is the biggest while the trader with the smallest asset is based in CAR with only Php 450,000.

**Microfinance/Lending Institutions.** Interviewed a total of 9 microfinance/lending institutions (MFIs), which is on target. These MFIs represent 6 provinces in 3 regions. In terms of scale, we interviewed 3 with large-scale operation, 5 with micro-scale, and 1 small-scale operation. Together, they have an average of 22 years in operation, the one with longest experience has 9 years and is located in Region 12. There are four MFIs that barely have a year in operation. Please see **Q-Table 19** and **Q-Table 20**.

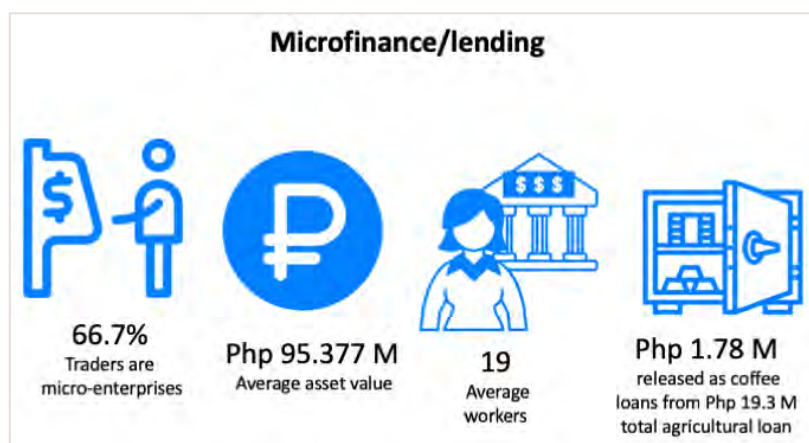


**Photo 13:** Left photo shows the price of coffee while right 3 photos show facade of traders' store.

As for the workers, MFIs hire an average of 19 workers. The baseline study finds that there are more adult women (11) than adult men (9) in the employ of these institutions (but the same average for youth males and females at 2 each). Further, there are more adult women who work fulltime (11) in MFIs compared to men (6 only); and more adult women (11) that also attended relevant training than men (7). Interviews with the management of the MFIs reveal that more women were hired because they compose the majority of the readily available workforce, and therefore, dominated the number of job applicants. This is also consistent with the MFIs' desire to improve the financial inclusion of women through regular employment. Moreover, this can be partly attributed to the higher number of years of formal education among women compared to men (as illustrated by the household respondents).

In 2018, the average asset declared by the MFIs was Php 95.377 million and nearly half of this (Php 40.544 million or 42.5%) was the average amount of loan disbursed in 2018. The region with highest

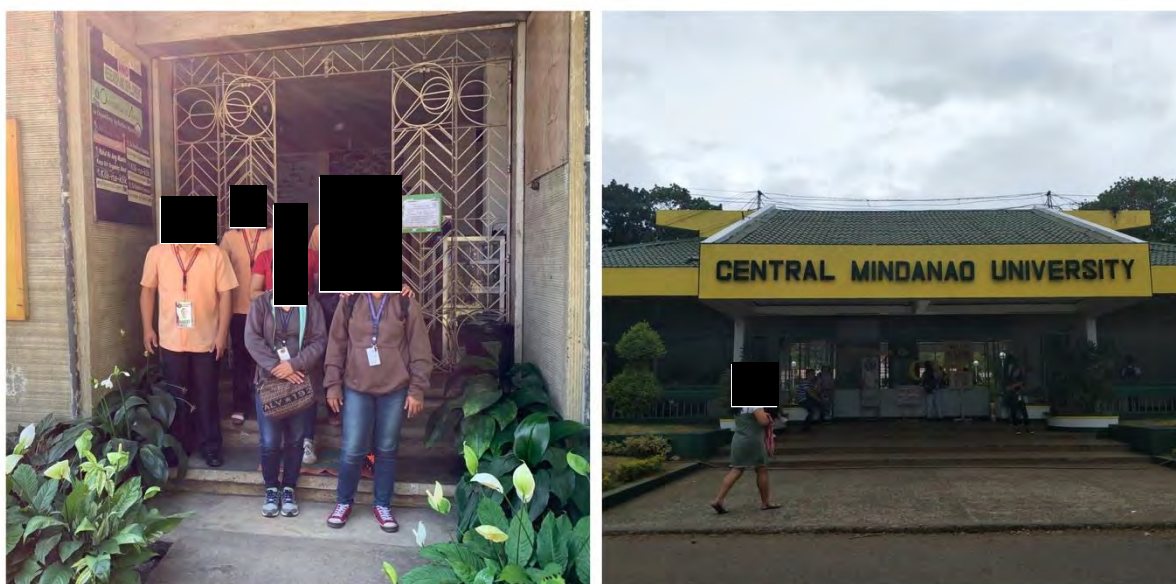
average asset value is Region 12 as reported by one large MFI with Php 341.889 million. The region also has the highest amount of loan disbursed with Php 150 million in 2018. Please see **Q-Table 21**.



### 7.1.3 KEY INFORMANTS

**State Universities.** Three (3) state universities were part of the baseline study: Benguet State University (BSU) located in Luzon, Central Mindanao University (CMU) in Bukidnon, and the Sultan Kudarat State University (SKSU) in Sultan Kudarat. These three (3) universities offer agriculture-related courses. They also conduct researches on agriculture (including coffee) that delve on production-related topics such as seed selection, germination, nursery media, different fertilizers on coffee, irrigation, and pest and diseases. The CMU, in particular, has specific courses on coffee that include post-harvest practices, bean grading, cupping quality and marketing. The same university also offers services on soil analysis, identification of types of diseases and insects affecting coffee plants. The SKSU, on the other hand, has courses that are useful to baristas. Further, SKSU, has Recently received support from DTI on a Php 10-million work of equipment related to fermentation, roasting and packaging.

BSU and CMU offer extension services but have to train new staff who just joined the universities.



**Photo 14:** Left photo shows the team with staff of Kalinga State University, who helped in finding additional respondents in Kalinga and right photo shows the facade of CMU.

**National Government Agencies.** DA is the leading agency which provides production to marketing support to coffee farmers and organizations. It has regional field offices (particularly the Agribusiness and Marketing Assistance Division and the High Davao Commercial Crops Division) that also work directly with the Agricultural Offices of the provincial and municipal local government units. It is implementing a long-term program called the Philippine Rural Development Program (PRDP) for value chain-focused development and the Agricultural Credit Policy Council (ACPC) for credit-related support.

The Bureau of Plant Industry (BPI), an attached agency of DA, accredits private and government plant nurseries. BPI also provides training on nursery management and does visits to plant demonstration sites to provide technical advice on fertilization, identification of plant diseases and the type of species suited to specific soil or elevation. The Philippine Coconut Authority (PCA) is another attached agency of DA. It promotes inter-cropping of coconut, particularly coffee (Arabica and Robusta only). The agency provides coffee seedlings and inorganic fertilizers, training, and other technical assistance.



The Department of Trade and Industry (DTI) supports the coffee sector through its National Industry Cluster Competitiveness Program, which includes coffee as the priority sector. DTI, together with DA, formulated the Coffee Roadmap 2017-2022 document, which embodies the strategies, approaches, and activities to meet coffee industry targets. At the provincial level, DTI organizes conferences/industry summits, provides technical advice on value adding, conducts technical training (cupping and Q-courses), and sponsors market encounters. It provides processing equipment through its Shared Services Facilities project. Starting 2019, it has launched Rural Agro-Industrial Partnership for Inclusive Development (RAPID) Growth project that will help agriculture-based processing enterprises and entrepreneurial communities. Coffee is one of the pilot commodities of RAPID Growth.



**Photo 15: Top and bottom left photos show the banner on the post-harvest facilities given by DTI, while top and bottom right photos show the streamers of support extended by DAR.**

The Department of Agrarian Reform (DAR) supports agrarian reform beneficiary organizations (ARBOs). One of its leading projects was the Agrarian Reform Community Connectivity and Economic Support Services (ARCESS). It provided support such as common service facilities for production and processing, agri-technology and agri-extension services, business development services, credit facilitation and land tenure improvement to agrarian beneficiary organizations engaged in coffee (among other crops). Support was given through the agrarian reform beneficiary organizations. In some areas, DAR provided equipment for processing and also funded improvement of processing facilities.

Like PCA, the Department of Environment and Natural Resources (DENR) supports the coffee industry by promoting coffee as inter-crop with forest and fruit trees via their project National Greening Program (NGP). Other agencies that provide support to coffee farmers/organizations include the National Commission on Indigenous People (NCIP) and the Cooperative Development

Authority. NCIP provides livelihood projects to indigenous groups engaged in coffee. CDA, on the other hand, accredits cooperatives.

In the KIIs, the study team asked each agency's point person to share what they thought are the main issues affecting coffee farmers:

**Table 5: Top problems of coffee sector as perceived by NGA key informants**

Agency	Top problems of the coffee sector as perceived by the agency key informants
DA	Financial/capital, market access (traders/prices), old practices (e.g. strip harvesting)
BPI	Low productivity, diseases, and lack of post-harvest facilities
PCA	Nutrient support (fertilization), farm maintenance and coffee prices
DENR	Climate change, pests and diseases, and low maintenance of the existing farms,
DTI	Low production, farm productivity, and low quality
NCIP	Lack of financial support, adoption of new technologies
CDA	Capacity building and financial data
DAR	Low productivity, low quality and low price for coffee

To alleviate the problems of the coffee farmers and POs, the national agencies provide support based on their official mandates. The DA, through their High Value Commercial Crops Program and the Philippine Rural Development Program, is able to provide funds to cooperatives engaged in coffee. The fund provided by PRDP, for instance, can be used for activities identified in the Commodity Investment Plan, such as post-harvest facility, training, and even support in obtaining a License to Operate from Food and Drugs Authority (FDA). The BPI, on the other hand, has meager budget and can only provide technical advice on fertilization and how to manage pest and diseases. They also provide technical advice to nursery operators seeking to obtain certification (nurseries can still sell seedlings without BPI certification, but these nurseries cannot participate in government procurement activities which has high demand for seedlings). BPI refers POs to DA for post-harvest facilities.

The PCA only encourages the farmers to produce their own fertilizers. The agency also refer the farmers and POs to DA for other support. The DENR has no recommendation on the changing temperature and rainfall pattern. However, they have people in the area who can provide technical advance on farm (particularly intercropped with coconut) and nursery maintenance. DTI is focused on post-production activities. In the past few years, the agency through its provincial offices, provides training related to quality and market exposure. They also have post-harvest support in some regions. The NCIP conducts assessment of the indigenous peoples group and provide small livelihood funds. The CDA conducts capacity building to strengthen cooperatives. The agency also provides enterprise development training.

The DAR provides support to POs whose members are agrarian reform beneficiaries engaged in coffee production and processing. The menu of support, through their different programs, include the conduct of trainings on improvement of farms, cultural practices, and managing their coffee activities as an enterprise. They also provide inputs like seedlings and fertilizer and assist the farmers in product development and in marketing their coffee products. DAR also has projects that provides farm-to-market road and water system to the coffee production sites.

**Provincial Agriculturist Offices.** We have interviewed nine (9) Provincial Agriculturist Offices, represented by the senior technical person or the person in-charge (5 males and 4 females) of extending support to coffee farmers and POs. For all of these provinces, coffee is part of their priority products. However, not all PAOs have given specific budget allocation for coffee sector; but for those who have data, the budget ranges from Php 50,000 (Cavite) to purchase berries (to be



used for seedling propagation) to Php 2 million (in Negros Occidental). These Offices relatively have the same menu of support to the farmers and POs: training on production and processing, community organizing, institutional building, distribution of planting materials through nursery management, rehabilitation of coffee, distribution of post-harvest facilities, and advice on labeling and packaging. There are provincial governments that build farm-to-market road connecting the coffee production sites to the market.

The PAOs have reported that they have staff who have been attending training on coffee production and have seen actual demonstrations on coffee technologies. They are still interested to attend additional trainings on coffee to be able to share updated information with the farmers. The PAOs are also the link between the DA and the farmers. Funding support and other materials from DA's HVCC and PRDP programs are distributed through the PAOs.

**Table 6: Top problems of coffee sector as perceived by PAO key informants**

Province	Top problems of the coffee sector as perceived by the PAO key informants
Davao del Sur	Lack of capital, lack of training, outdated practices
Surigao del Sur	Old technologies, reluctance to ask help from the government, politics (change of administration, change of priorities)
Negros Occidental	Lack of farm-to-market roads. Availability of quality planting materials, subsidy for inputs, and strengthening of farmer organizations
Maguindanao	Postharvest facilities (e.g. depulper, grinder, dryer, warehouse),
Cavite	Old trees need rejuvenation, land conversion of coffee farms, weak political will
Bukidnon	Seedlings (not quality), lack of inputs, pests and diseases
Ilocos Sur	Lack of (big) market
Sultan Kudarat	Farmers' hesitance to rejuvenate, few people to work as harvesters (because of the government's 4Ps that they prefer to receive welfare support), low quality of coffee (poor harvesting), poor road condition from production sites
Mountain Province	Wildfires, irrigation

Considering the breadth of the problems of the coffee farmers and POs, the different PAOs admit they can only do so much. For instance, the Davao del Sur PAO suggests "values formation training", to re-orient the farmers on the importance of maintaining their coffee farms well. The PAO Surigao del Sur echoes similar approach of providing more training to the farmers and improving their office's extension service. Negros Occidental PAO says they have recently conducted a consultative forum in order to "mediate" the problems and link the farmers to the appropriate agencies. Maguindanao PAO coordinates with the DTI on processing and labelling support. At present, they do not have clear source of funds, considering that the region has "shifted" from ARMM to BARMM. Cavite PAO provides technical assistance on coffee technology and post-production activities they coordinate with DTI provincial office. Bukidnon wants to propagate certified seedlings, even if they have to start on a small-size nursery. Ilocos Sur PAO admits they do not have specific budget for coffee and thus relies on the interventions provided by the DA-Regional Office. They also transfer technology through training. Sultan Kudarat PAO says they are waiting for the roads to be built by the Department of Public Works and Highways. They are also waiting for the approval of the coffee project to be funded by the PRDP of DA. Mt. Province PAO seeks support from other agencies, particularly the provincial government for power pumps and water hose to combat fires. They work on increasing seedlings and expanding the coverage of their training on coffee production and processing. Their office is pushing to organize the "Mt. Province Agricultural Council" that will provide advisory in addressing the problems of the coffee industry, along with the other crops.

**Regional Coffee Councils.** Interviewed representatives of Regional Coffee Councils (RCCs). In CAR, the representative said their main responsibility is to implement the Philippine Coffee Roadmap. They are also involved in policy formulation (where issues are identified and solutions are proposed), and in monitoring the coffee projects of DA and other agencies in their respective localities.

Members of the Councils serve as volunteers. However, some of their activities are funded by DA and DTI if both agencies have allocation. RCC in CAR has just completed their Strategic Planning and their Operations Manual. They wanted to have common definition of terms, set some regional standards on the processing activities. If they have funds coming, they want to go around and do a “Coffee Appreciation 101” in provinces and municipalities to educate farmers on the quality of beans through visual and taste test. RCC in Region 13 focuses on improvement of product quality (i.e. picking red cherries) and the conduct of cupping sessions. The RCC in Region 12, which they call themselves as SOCCSKSARGEN Coffee Alliance, provides/coordinates trainings and exposure trips of farmers. They also participate in coffee summits or conferences.

RCC works with the different government agencies to maximize the development resources of these agencies.

**Table 7: Top problems of coffee sector as perceived by RCC key informants**

Region	Top problems of the coffee sector as perceived by the RCC key informants
CAR	Consistency of coffee quality at the farmers’ level; increasing market demand yet production is still low; many of the farmers are still not aware of the RCC/PCC.
Region 4	Low price, high overhead cost (labor for harvesting represents 50% of the cost), too many middlemen dictate the price, land conversion
Region 6	Low adoption of recommended technologies, lack of postharvest facilities, low price for coffee
Region 10	Lack of accredited nurseries offering quality planting materials, tagging/certification of Arabica trees, lack of postharvest facilities
Region 11	Lack of capital/farmers, lack of market, low quality
Region 12	Lack of drying facilities, low market price of coffee, low quality of the beans
Region 13	Coffee quality, lack of market, lack of capability building for Ps

The different RCCs in the country do not provide direct support to the farmers, as they work on “volunteer” basis. What they use is their network, primarily referring the critical issues of the farmers and POs to the relevant national agencies and to the local government units. They also create and raise awareness about the importance and opportunities in coffee sector.

**Coffee Influencers.** Nine (9) people, identified by PhilCAFE as the coffee influencers, consented to the key informant interviews. The organizations they represent are the following:

- UCC Coffee Academy Philippines
- Barista Coffee Academy of Asia
- Commune Café
- Bo’s Coffee
- Balutakay Coffee Farmers Association
- Philippine Coffee Board
- DeLa Salle University
- Department of Agriculture (Office of the Undersecretary)
- Department of Trade and Industry (Coffee Cluster National Head)

### 7.1.4 FOCUS GROUP PARTICIPANTS

Eighteen (18) POs have been requested to send members to FGDs. As much as the study team tried to distribute equally the six types of participants, with three (3) POs of each type, the study team was not able to stick to the plan. For instance, one session each was lacking for IP males and youth females. The study team were also not able to hold session with purely youth males. The study team still proceeded the FGD, but with different composition (i.e. no IP males, but instead proceeded with the FGD with adult males). There were also two FGDs with less than 5 participants and two instances with 6 participants. However, the total number of participants was 86, counting all types of participants.

**Table 8: Number of PO members who participated in FGDs**

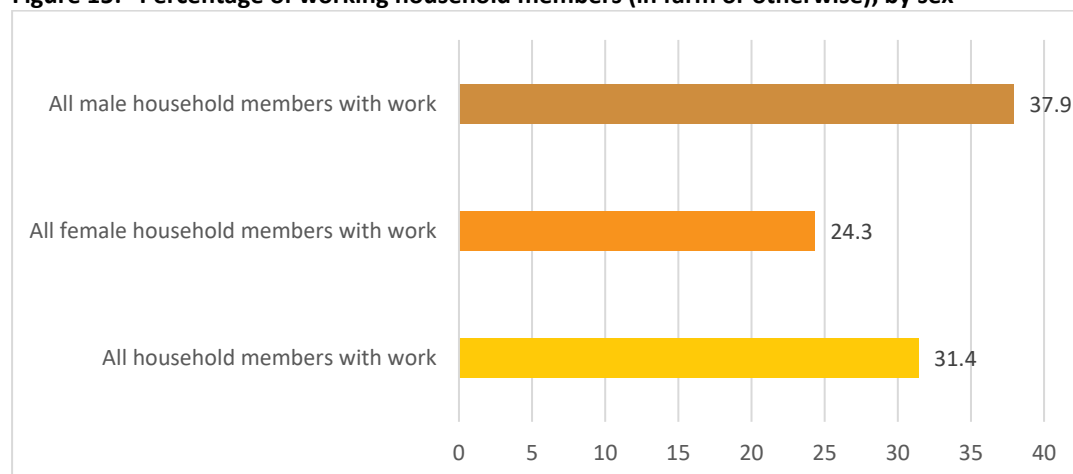
Producer Organization	Number of Participants					
	Men only	Women Only	Youth Males	Youth Females	IP Males	IP Women
1) Atok Arabica Coffee Growers Marketing Cooperative (ACOGMAC)						6
2) Sagada Multipurpose Cooperative					3	
3) Dupligan Farmer Multipurpose Cooperative (DuFAMCO)	4		1			
4) Café Amadeo Multi-purpose Cooperative		5				
5) Green Bean MPC		4				
6) Murcia Marginal Coffee Growers, Inc.		6				
7) Kauyagan Savers MPC		5				
8) IAHTCO (Itoy Amosig Higaonon Tribal Community Organization, Inc)						5
9) Mat-I Higaonon Free Farmers Association	3	2				
10) Talaingod Coffee Growers Association (TaCOFA)						4
11) MAGROW MPC	5					
12) Kuden Women Organization				5		
13) Keytodac Coffee Growers Association	4					
14) Alamada Multipurpose Coop (MPC)				4		
15) Tupi Coffee Growers Association	5					
16) Mabuhay Kahayagan Coffee Growers Cooperative	4		1			
17) South Upi Rubber Development Cooperative					5	
18) Confederation Farmers Association of Wao	5					
	30	22	2	9	8	15
<b>Total</b>	<b>86</b>					

## 7.2 PRODUCTION TECHNOLOGY

### 7.2.1 PRODUCTION INPUTS

**Household Labor Profile.** In the treatment areas, the average percentage of household members who are working (earning monetary compensation in return of his/her services) is 31.4%, covering both sexes and regardless whether they work in their own farm or not. By sex, the male household members have higher percentage with work at 37.9% while the females only have 24.3%. Please refer to **Q-Table 22**.

**Figure 15: Percentage of working household members (in farm or otherwise), by sex**



The baseline study also finds out that nearly all – at 93.1% of the households interviewed—have family members working in their own farm. In terms of number, an average of 1.87 family members (or at most 2 persons per households) work in their own farm. There are more youth males involved but those who work full-time are the adult males. In addition, nearly all of the household members working in their own farm are not paid. Very few households do pay their members for their work and those who do, the number is 0.03<sup>24</sup> per household for adult males, 0.01 for youth males and 0.06 for youth females. Please see **Q-Table 23 and Q-Table 24**.

In some areas where work related to coffee becomes overwhelming (i.e. during harvest time), half of the household respondents (50.8%) have to hire agricultural wage earners (not member of the households) to work in the farm. Please refer to **Q-Table 25**.

*From FGD Murcia Marginal Coffee Growers, Inc.: “There are many laborers who are willing to work as long as you can give the right pay. Comparing it with sugarcane farm, it is easier to work in the coffee farm as you are not exposed to too much heat. The daily rate is 250 and can go down to a friendly rate of 200. The laborer is free of meal and snack and sometimes a little drinking in the afternoon. There are available laborers but the problem is the capacity of the farm owner to finance it. If he does not have enough money then he labors himself.”*

**Jobs Generation of Market System Actors.** Market system actors hire workers depending on type of their operation and their scale. Nursery operators tend to hire more people because the work is labor-intensive. One nursery in Region XI is operated by women’s group and its members render

<sup>24</sup> We interpret this as: for every 33 households – only 1 male adult is paid for his work in the farm; 100 households for 1 male youth; and 16 households for 1 youth female.



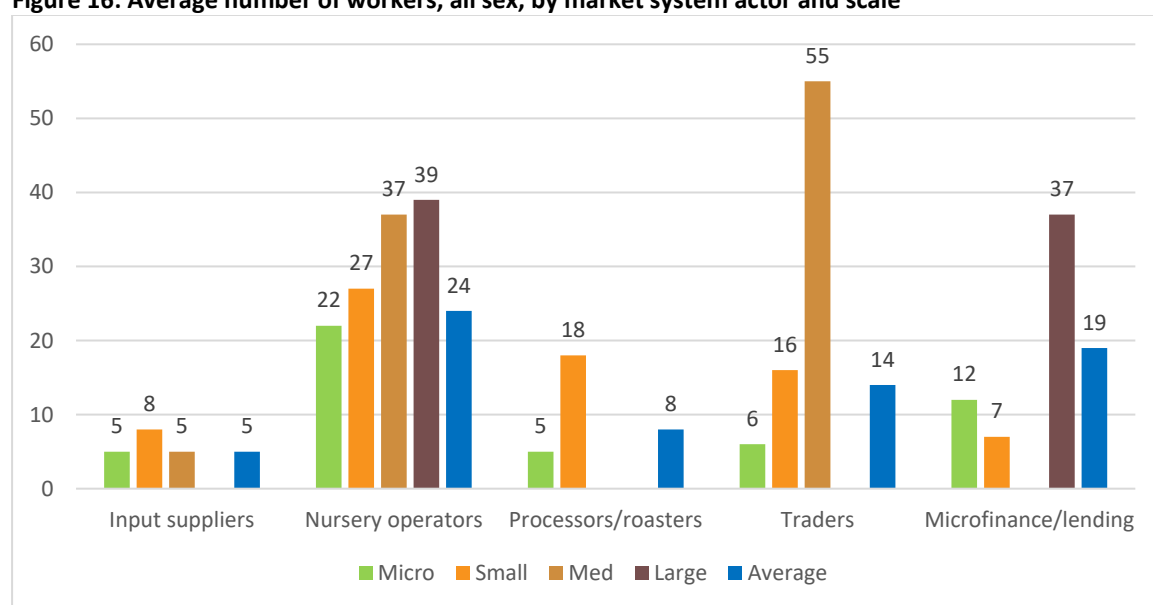
certain amount of time per week to undertake tasks such as transplanting. The blue bars in Figure 16 show the average number per MSA, but the bars in other colors are the averages per scale (size of operation). For the full tables, please refer to **Q-Table 26 to Q-Table 30**.

Nursery operation is a job-creation opportunity, with the average number of 24 workers, with the highest average noted in Region 11 for micro-scale nurseries at 69 workers while the lowest average is in CAR with only 3 workers. By gender, nurseries hire an average of 14 adult male workers and 12 adult women nursery workers. In Region 11, the average number of adult women workers of one micro-scale nursery is 120 people, all working part time (a unique arrangement because the main income-generating activity of their cooperative is nursery operation).

The processors/roaster maintain a relatively lean manpower, with an average of 8 people. The small processors/roasters have about 18 average workers, while the micro in scale processors or roasters only have 5 average workers. Please see **Q-Table 15**.

Taders have an average of 14 workers. They typically hire more women (5 adult women compared to 4 adult men, or 7 youth females compared to 6 youth males) than men; more women are holding full-time position compared to men.

**Figure 16: Average number of workers, all sex, by market system actor and scale**



Note: Averages are rounded-off to whole numbers.

**MSA Full-time and Partial Labor.** By getting the average of the group averages, there are more full-time adult women with 4.12 per MSA compared to the three other groups (4.04 full time adult men; 2.4 full time youth males and 2.74 full time youth females). One reason for this is the labor-intensive and heavy work involved in the operation of input suppliers and nursery operators (where there are more full-time men). Adult women have the highest number holding full-time job in micro-finance MSAs – given the nature of work (i.e. office job or dealing with people).

Among those who work part-time, it is the adult women with the highest average number at 3.88 per MSA (while it is 2.4 part time adult males, 1.02 part time youth males, and 0.84 part time youth females). The table below highlights the selected averages from **Q-Table 26 to Q-Table 30**.

**Table 9: Average number of full-time and part-time workers of MSAs, by group**

	Full Time (FT) Men	Part-Time (PT) Men	FT Youth Males	PT Youth Males	FT Adult Women	PT Adult Women	FT Youth Females	PT Youth Females
Input suppliers	2.2	0	2	0.1	1.6	0.4	1.7	0.2
Nursery operators	7	7	2	3	2	15	3	2
Processors/roasters	2	1	2	1	2	2	2	1
Traders	3	1	4	1	4	1	6	1
Micro-finance	6	3	2	0	11	1	1	0
	4.04	2.4	2.4	1.02	4.12	3.88	2.74	0.84

**Years in Coffee Farming, Farm Size and Area Planted with Coffee.** The household respondents for this baseline study have farmed coffee for an average of 23 years. Those in coffee farming the longest are located in Region 4-A (38 years), while the regions with the largest average number farmers recently engaged in coffee are Regions 12 and 13 (17 years). Incidentally, Batangas, located in Region 4-A, is where a Spanish Franciscan monk first introduced coffee in the 18<sup>th</sup> century<sup>25</sup>.

The average farm size (all crops) is relatively large at 3.4 hectares while the area for coffee, computed based on the planting distance declared by respondents, is 1 hectare. Region 12 has the biggest farm area with different crops at 5.7 hectares, but it is Region 6 with the largest average farm area for coffee at 2.2 hectares. Region 4-A which has farms with the longest average time into coffee farming now has the smallest total household farm area (1 hectare) and smallest average household coffee farming area (0.2 hectare). Nearly seven out of 10 (68.8%) of the household respondents say they are practicing intercropping. Please see Table 10 and for the full tables, see Q-Table 31 and Q-Table 32.

**Table 10: Average farm size and area planted with coffee (computed based on planting distance), in hectare, by region**

Region	Ave. Farm Size, All Crops	Std. Error	Ave. Farm Size, Coffee	Std. Error
1	1.55	0.293	0.83	0.156
6	4.46	0.486	2.23	0.329
10	2.42	0.244	0.83	0.069
11	3.04	0.319	1.15	0.082
12	5.66	0.440	1.92	0.167
13	2.93	0.461	1.05	0.250
4-A	1.01	0.103	0.52	0.056
ARMM	3.86	0.385	0.76	0.079
CAR	1.46	0.131	0.82	0.075
All	3.43	0.163	1.28	0.061

An interview with a PAO reveals that part of the reasons for the decline in coffee production is the conversion of farmlands. The PAO in Cavite says there are farmers who have sold their farmland planted with coffee to be converted to residential or commercial land. There are farmers who feel

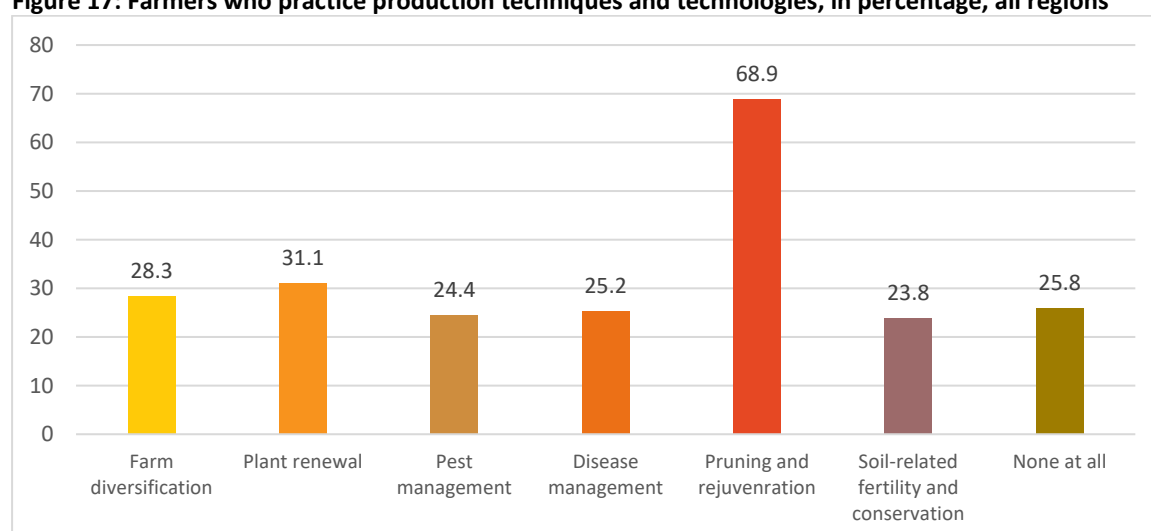
<sup>25</sup> Philippine Coffee Board, "Our Coffee Heritage", retrieved from <https://philcoffeeboard.com/philippine-coffee/>

that price for coffee is unstable and thus have shifted to other crops (in Cavite, black pepper brings in better profit than coffee).

**Coffee Production Techniques and Technology.** Pruning and rejuvenation is the most practiced coffee production techniques by farm households interviewed for this study. The highest percentages of farmers are found in Regions 1, CAR and 4-A in Luzon, and in Region 6 in Visayas. **Figure 17** shows the average percentage of farmers (all regions) who practice these techniques and technologies (for the full table, please see **Q-Table 33**).

*From FGD with SURDECO: “Compared to other plants, the beauty of coffee is that you can rejuvenate it. With other plants, once you cut them, they are already dead. On the other hand, coffee trees last for a long time, especially if you rejuvenate them. Compared to other high value crops, the life of coffee trees is very long.”*

**Figure 17: Farmers who practice production techniques and technologies, in percentage, all regions**



In the FGDs with farmers, they say that coffee needs less attention compared to other crops. Still, it helps if coffee receives proper care such as weeding to remove competition with the soil nutrients and fertilizers to improve the soil condition. In Wao, farmers reported that red ants, stem borer, *bao-bao* and rats are some of the pests that attack their coffee trees. Those with funds are able to purchase pesticides while other farmers make use of alternate mixes of detergent powder and pepper. In Misamis Occidental, they set fire under their coffee trees to drive out aphids. Somewhere in Sagada, farmers share stories of animals driven out by deforestation have started eating their coffee branches and cherries. In Dupligan, Talaingod and Tupi, farmers complain about the lack of water during summer or because of drought. Tupi coffee farmers said that they have very limited access to the water pump because crops like papaya are prioritized for irrigation. On the other hand, very strong winds also cause cherries to easily fall off from the branches. Strong typhoons also result in uprooting of coffee trees.

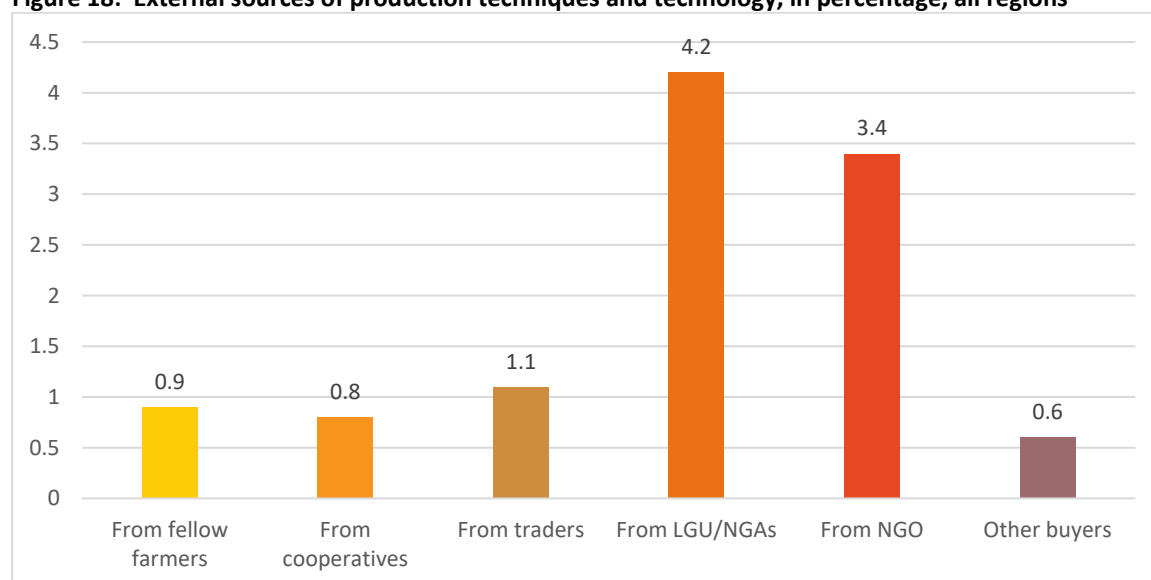
*From FGD with IAHTCO: “Some of the coffee trees bear fruit well, some have borers, which make the berries to fall during heavy winds. We just let it be since we do not know how to get rid of the borers or remedy the fruit falling off.... There are worms that enter the stem causing the leaves to dry and the fruits to fall. Some leaves have white spots and are blackened.”*

*From FGD with Talaingod : “Our main problem is water. Our location is sloping and coffee would turn yellow if not watered enough. What we do to our coffee is do round weeding to free up space around it. The problem, however, is that our coffee rots easily and is eaten by insects.”*

The coffee influencers have recommended that the government and other organizations focus on rehabilitation of existing coffee plants – considering that the country’s production is falling and yet the demand outside the country is increasing. Another coffee influencer has suggested to have at least one coffee expert per province.

The low adoption of the different techniques and technologies is partly explained by the household respondents apparent lack of support on coffee production (88.8% of the respondents). For the very small percentage of farmers who have accessed external sources of techniques and technology, the top providers are the government and the NGOs (please see **Figure 18** and **Q-Table 35**).

**Figure 18: External sources of production techniques and technology, in percentage, all regions**



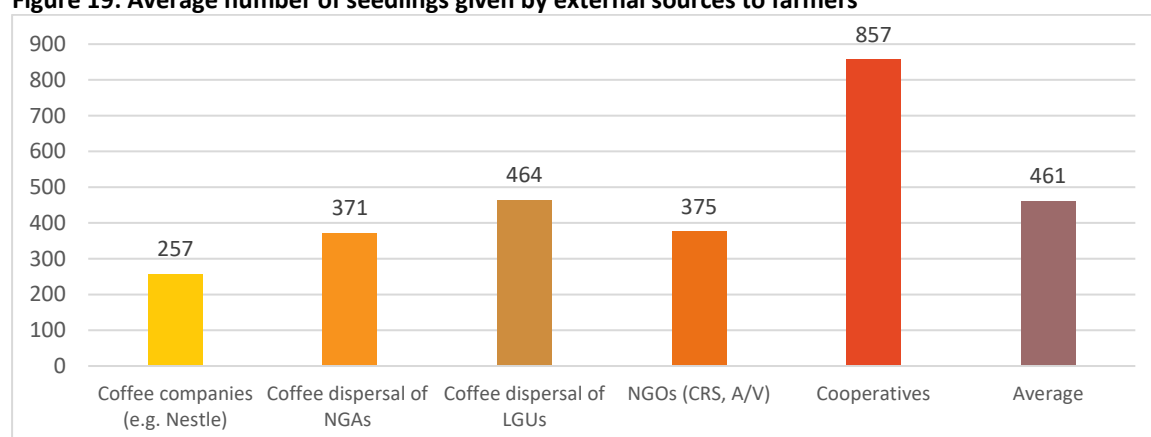
**Households’ Sources of Planting Materials.** The baseline study finds out that the very few (66 households or 7.8%) have external sources of planting materials. The sources include Nestle Philippines, which has at least two (2) demonstration/research sites in Mindanao, where they show the proper plant management and provide seedlings to trainee-farmers. Coffee seedlings dispersal projects of the NGAs and the LGUs are also production support, reforestation and inter-cropping initiatives, which are typically given free to farmers/POs. However, there are LGUs which offer seedlings on “plant-now, pay-later scheme”, where farmer beneficiaries can pay for their seedlings at a much later date. NGOs like Catholic Relief Services (CRS) and ACDI/VOCA also support coffee farmers by giving them seedlings as incentives after training participation or as a general motivation to increase coffee production. Finally, there are producer cooperatives which have nurseries as their income-generating projects. Typically, cooperatives sell their seedlings at a lower rate to encourage more members to plant coffee (or other specific crops). Please see **Q-Table 36**.

*From FGD Murcia Marginal Coffee Growers: “We were also trained by Nestle on Coffee production and processing. It went on for several months... They would come to our farm and demonstrate the right way to prune. Every organizational meeting, Sir Mario (of Nestle) would come to teach us how to cut, how to select planting materials.”*



The study team learned from the 66 household respondents that planting materials sources provide seedlings at varying numbers. **Figure 19** shows the average number of seedlings received by farmers from external sources (for full table, please refer to **Q-Table 37**.)

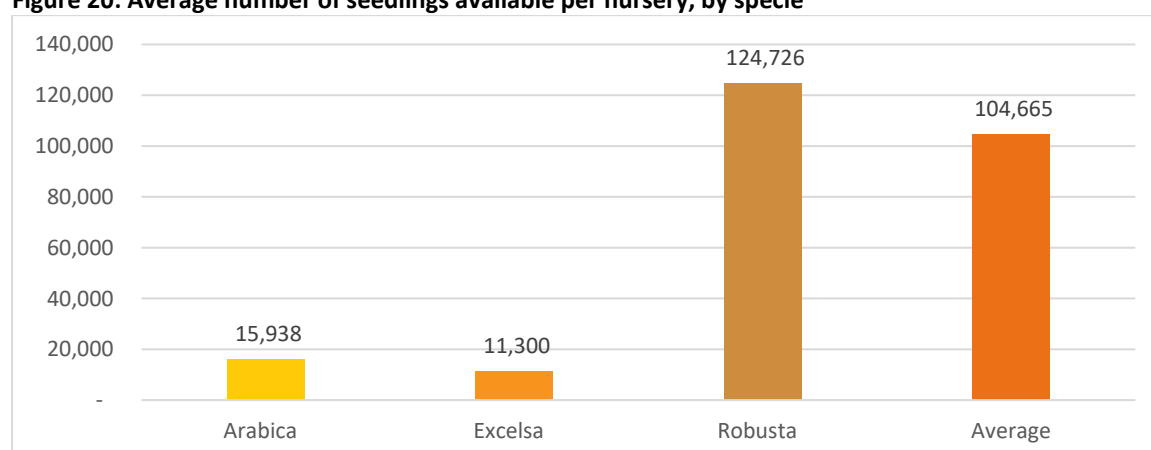
**Figure 19: Average number of seedlings given by external sources to farmers**



The representative of DA national informed the study team that they will soon require all DA regional offices to only distribute 100% certified seedlings to farmers by 2020. On the other hand, a coffee influencer shares her concern on the quality of coffee seedlings being distributed to the farmers by the government. She knows that there have been several initiatives – but she calls for a closer monitoring on how many of the seedlings have been planted and how many survived. She shares anecdotes and personal observation about coffee seedlings left abandoned/not planted because farmers are uncertain about the “quality” of the coffee trees. Another coffee influencer believes that the weakest link in the coffee value chain is the production because of the poor planting materials.

**Nursery Operation.** Majority of the nursery operators source their raw materials for propagation as seeds. The average number of seedlings available at any given time varies on the scale of operation and other factors such as area of production, market demand and operator’s capital. The baseline study finds that the average, regardless of scale, is 104,665 pieces of coffee seedlings. Robusta is the most popular specie. Please refer to **Figure 20** below for the comparison (full table is shown as **Q-Table 39**).

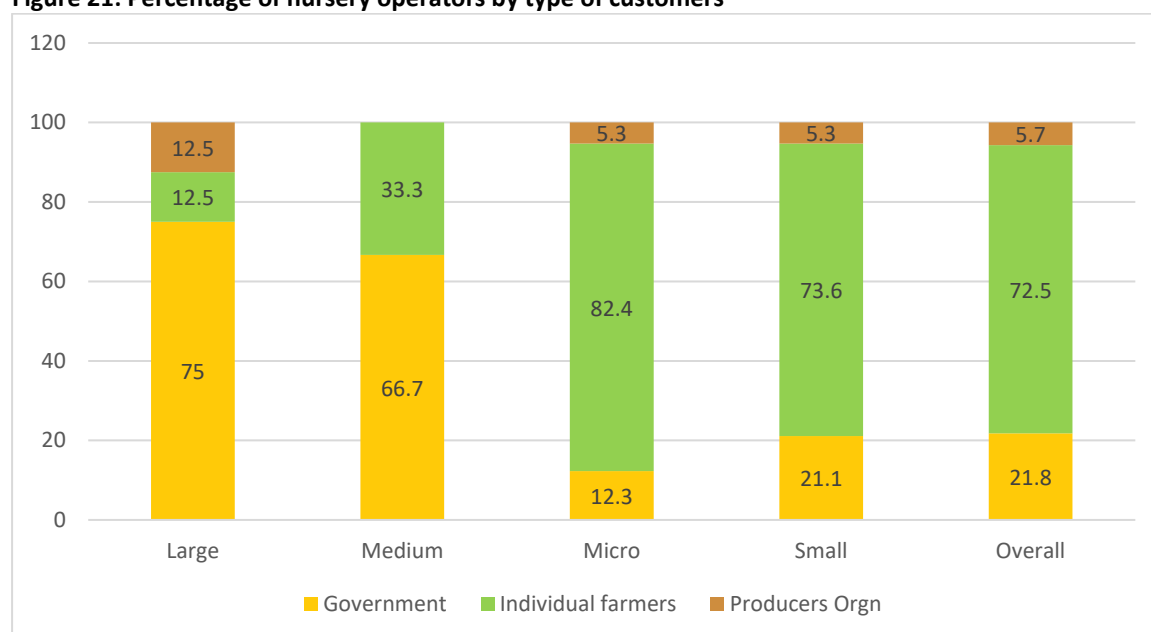
**Figure 20: Average number of seedlings available per nursery, by specie**



At the time of the baseline survey (March-April 2019), the price for each seedling by type is: Php 22.67 per piece for Arabica; Php 25.00 per piece for Excelsa and Php 15.25 per piece for Robusta. The average price for all species is Php 16.39 a piece (see **Q-Table 40**). The largest group of customers are individual farmers (72.4%).

However, large and medium-scale nursery operators sell more to government than to individual farmers. One reason is that government tend to order in volume, thus, only large and medium-scale nurseries (particularly those that have been accredited by BPI) can satisfy the procurement order (please refer to **Figure 21** and **Q-Table 41** for the full table).

**Figure 21: Percentage of nursery operators by type of customers**



Majority of the nursery operators interviewed for the baseline provide services to their customers (67.6%), in the form of technical advice (58.6%), “plant now, pay later scheme” (10.8%) and transport of seedlings to farms (16.2%). Please refer to **Q-Table 43** and **Q-Table 46**.

Majority (83.8%) of the nursery operators have people who have been trained in nursery establishment. However, only 32.4% (12 of 37) of the nursery operators have been able to satisfy the requirements set by BPI and thus claimed to have been given accreditation. Please refer to **Q-Table 44** and **Q-Table 45**.

#### Box 5: Accredited Coffee Nurseries

From the BPI’s 165 list of accredited nursery operators, only 33 are accredited to produce certified coffee seedlings with a combined area of 96 hectares. Such number is clearly too low to cater to the need for quality seedlings.

The limited access to certified planting materials is one of the concerns of the sector.

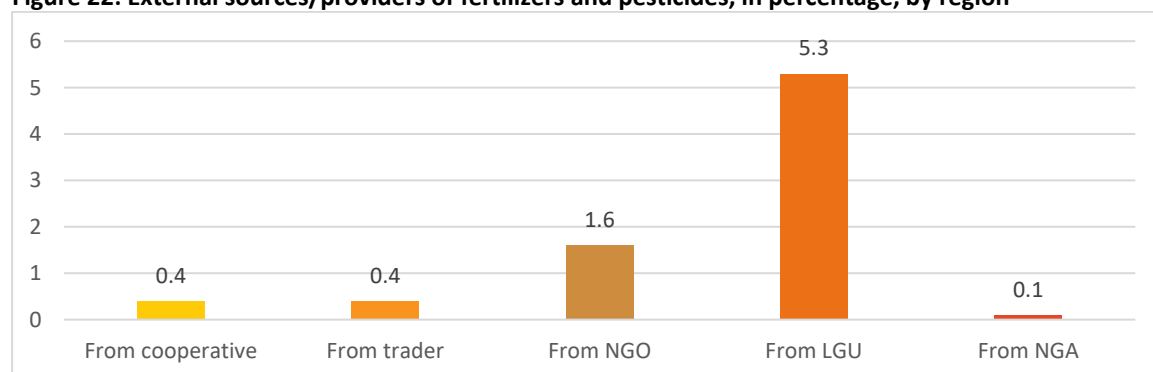
Retrieved from: <http://bpi.da.gov.ph/bpi/index.php/news/81-accredited-nursery-operators/943-accredited-private-nursery-operators-as-of-august-2017>



Photo 16: Upper left photo shows a seedling with a QR code, while lower left photo shows the seeds for propagation. Upper right photo shows a woman worker bagging seedlings, while lower right photo shows the largest nursery operator in Region 12 with her seedlings ready for sale.

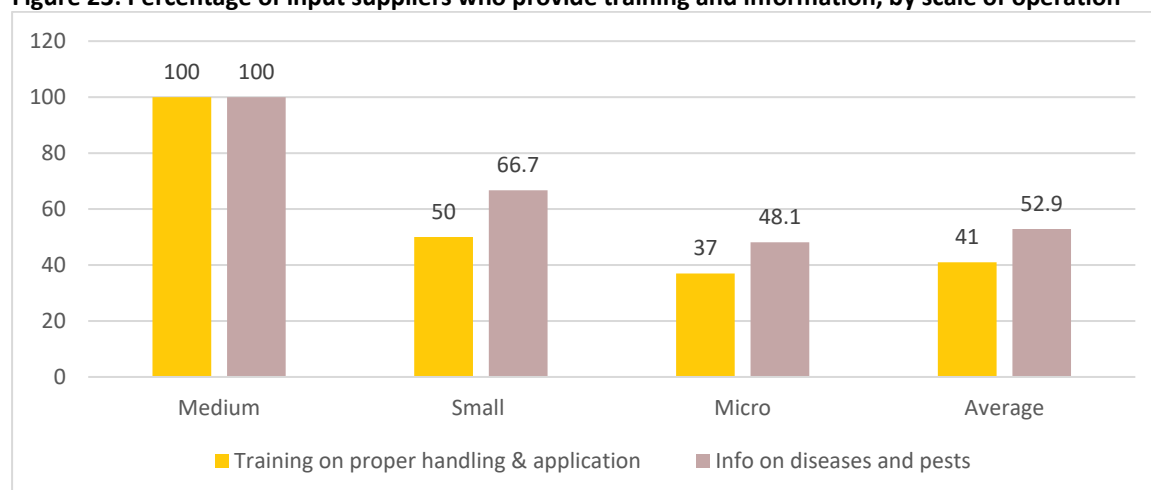
**Fertilizers and Pesticides.** The farm households interviewed for this study say that they spend their own money (91.4%) to buy fertilizers and pesticides needed for their coffee and other plants. The respondents who received fertilizers and pesticides support (either in the form of product or funds) got it from the local government. Please refer to **Figure 22, Q-Table 47** and **Q-Table 48**.

**Figure 22: External sources/providers of fertilizers and pesticides, in percentage, by region**



As additional services, there are many input suppliers who provide training on proper handling and application of fertilizers and pesticides (41.2%) as well as information on coffee plant diseases and insects/pests. Please refer to **Figure 23** and for full tables at **Q-Table 48**, **Q-Table 49** and **Q-Table 50**.

**Figure 23: Percentage of input suppliers who provide training and information, by scale of operation**



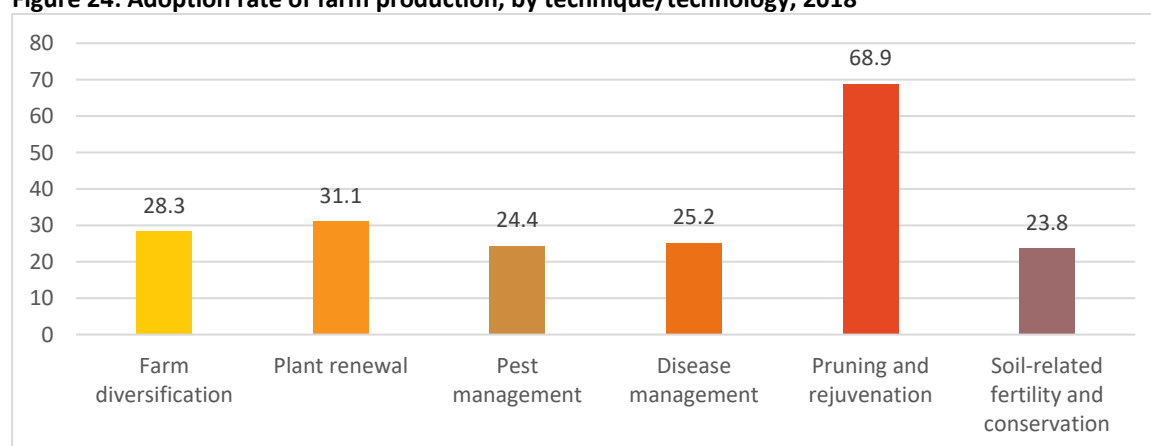
## 7.2.2 ADOPTION RATE OF FARM TECHNIQUES AND TECHNOLOGIES

**Adoption Rate and Determinations of Adoption.** Logistic regression is used to determine factors of technique/technology adoption. Participation to coffee related trainings and the level of post-harvest losses are consistently and significantly affecting adoption of coffee production technologies. Farmers who have attended trainings have higher probability to adopt production technologies, while higher post-harvest losses resulted to lower adoption.

The probability of adoption of farm diversification, pruning and rejuvenation and adoption of soil related fertility and conservation practices are higher among farmers with higher years of formal schooling and years of farming.

Male participation in coffee related trainings resulted in a higher probability of adoption of farm diversification, pest and disease management practices, while participation of women lowers adoption of farm diversification and soil-related fertility and conservation practices.. Longer work hours of men in coffee farm increases probability of adopting pruning and rejuvenation, and soil-related fertility and conservation practices. Please refer to **Figure 24** and **Table 11**.

**Figure 24: Adoption rate of farm production, by technique/technology, 2018**





**Table 11: Determinants of technology adoption, by technique/technology, 2018**

Variables	Farm diversification	Plant Renewal	Pest mgt	Disease Mgt	Pruning and rejuvenation	Soil-related fertility and conservation
Age	0.0054 <sup>ns</sup>	-0.0133 <sup>ns</sup>	0.0202 <sup>ns</sup>	0.0212 <sup>ns</sup>	-0.0101 <sup>ns</sup>	0.0133 <sup>ns</sup>
Sex	-0.4500 <sup>ns</sup>	0.2869 <sup>ns</sup>	0.1464 <sup>ns</sup>	-0.0973 <sup>ns</sup>	0.4209 <sup>ns</sup>	<b>-0.7687*</b>
Marital Status	0.5356 <sup>ns</sup>	0.1505 <sup>ns</sup>	0.1141 <sup>ns</sup>	-0.0329 <sup>ns</sup>	<b>1.4827*</b>	0.5855
Years of formal education	<b>0.1008*</b>	-0.0233 <sup>ns</sup>	0.0558 <sup>ns</sup>	0.0626 <sup>ns</sup>	<b>0.1279*</b>	<b>0.0910*</b>
Membership to farmers' cooperative	0.1828 <sup>ns</sup>	0.2795 <sup>ns</sup>	-0.0223 <sup>ns</sup>	-0.4659 <sup>ns</sup>	0.4117 <sup>ns</sup>	-0.3418 <sup>ns</sup>
Membership to women organization	0.2650 <sup>ns</sup>	-0.1605 <sup>ns</sup>	0.1271 <sup>ns</sup>	0.1130 <sup>ns</sup>	0.1576 <sup>ns</sup>	-0.0363 <sup>ns</sup>
Household Size	0.0389 <sup>ns</sup>	-0.0289 <sup>ns</sup>	-0.0486 <sup>ns</sup>	-0.0871 <sup>ns</sup>	0.0006 <sup>ns</sup>	0.1014 <sup>ns</sup>
Annual Household Income	0.0000 <sup>ns</sup>	0.0000 <sup>ns</sup>	0.0000 <sup>ns</sup>	0.0000 <sup>ns</sup>	0.0000 <sup>ns</sup>	0.0000 <sup>ns</sup>
Years of farming	<b>0.0417*</b>	0.0117 <sup>ns</sup>	<b>-0.0250*</b>	-0.0068 <sup>ns</sup>	<b>0.0601*</b>	<b>0.0439*</b>
Trained in coffee production	<b>0.7472*</b>	<b>0.8896*</b>	<b>0.5953*</b>	<b>1.2232*</b>	<b>2.3640*</b>	<b>1.1986*</b>
Area devoted to coffee	<b>-0.3332*</b>	0.0146 <sup>ns</sup>	0.0592 <sup>ns</sup>	0.0541 <sup>ns</sup>	-0.0629 <sup>ns</sup>	-0.2008 <sup>ns</sup>
Annual Cost per hectare of coffee production	<b>0.0001*</b>	0.00001 <sup>ns</sup>	0.00001 <sup>ns</sup>	0.00003 <sup>ns</sup>	0.00001 <sup>ns</sup>	<b>0.00003*</b>
External access to coffee planting material	0.5812 <sup>ns</sup>	0.1426 <sup>ns</sup>	-0.1018 <sup>ns</sup>	0.5492 <sup>ns</sup>	0.0809 <sup>ns</sup>	-0.2930 <sup>ns</sup>
External access to credit	-0.1127 <sup>ns</sup>	-0.4894 <sup>ns</sup>	-0.2261 <sup>ns</sup>	0.0307 <sup>ns</sup>	-0.4013 <sup>ns</sup>	0.5944 <sup>ns</sup>
Weekly hours of farm work of men	-0.0053 <sup>ns</sup>	-0.0105 <sup>ns</sup>	-0.0081 <sup>ns</sup>	0.0110 <sup>ns</sup>	<b>0.0236*</b>	<b>0.0266*</b>
Weekly hours of farm work of women	0.0223 <sup>ns</sup>	-0.0079 <sup>ns</sup>	-0.0024 <sup>ns</sup>	-0.0017 <sup>ns</sup>	-0.0185 <sup>ns</sup>	0.0109 <sup>ns</sup>
Post-harvest losses	<b>-0.0284*</b>	<b>-0.0168*</b>	<b>-0.0105*</b>	<b>-0.0154*</b>	<b>-0.0228*</b>	<b>-0.0319*</b>
Value adding activities	-0.0385 <sup>ns</sup>	0.4613 <sup>ns</sup>	-0.4059 <sup>ns</sup>	-0.7359 <sup>ns</sup>	-0.2325 <sup>ns</sup>	0.2951 <sup>ns</sup>
Men participation in training	<b>0.5976*</b>	0.2351	<b>0.7121*</b>	<b>0.6645*</b>	0.0502 <sup>ns</sup>	0.2832 <sup>ns</sup>
Women participation in training	<b>-1.1821*</b>	-0.1195 <sup>ns</sup>	-0.0366 <sup>ns</sup>	-0.1842 <sup>ns</sup>	-0.0716 <sup>ns</sup>	<b>-1.0255*</b>
Youth participation in training	0.3796 <sup>ns</sup>	0.0901 <sup>ns</sup>	-0.0386 <sup>ns</sup>	0.3928 <sup>ns</sup>	-0.4756 <sup>ns</sup>	-1.4185 <sup>ns</sup>
Constant	-3.1752	-0.2975	-2.1138	-2.5556	-2.6563	-5.0254
Prob>chi2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Pseudo R2	0.1930	0.1083	0.1052	0.1530	0.2754	0.2075

Note: Values in the table are the estimated coefficient (log odds) from logit model estimation. Coefficients with \* are significant at 5% level and ns are not significant.

### 7.2.3 TECHNOLOGY, FARM WORK, AFFILIATION IN ORGANIZATIONS AND LEADERSHIP POSITIONS

More males than females work in the farm and do full-time farm work. Only in part-time work do the youth (male and female) exceed the adults (please refer back to **Q-Table 24**). Adult men also spend more time in the coffee farm per week ( see **Q-Table 51** to **Q-Table 54**). Understandably adult males take the lead role in all activities related to coffee production from seed selection up to selling. Both adult women and young men participate largely in harvesting/picking, weeding, drying and pruning. Aside from these 4 activities, more than half of adult women (54%) across all 9 regions are engaged in selling of coffee, with Regions 4-A, CAR and 6 having the highest percentage of adult women involved. Young females are the least active in all activities in coffee production, but do participate mostly in harvesting/picking and drying (see **Q-Table 55** to **Q-Table 58**).

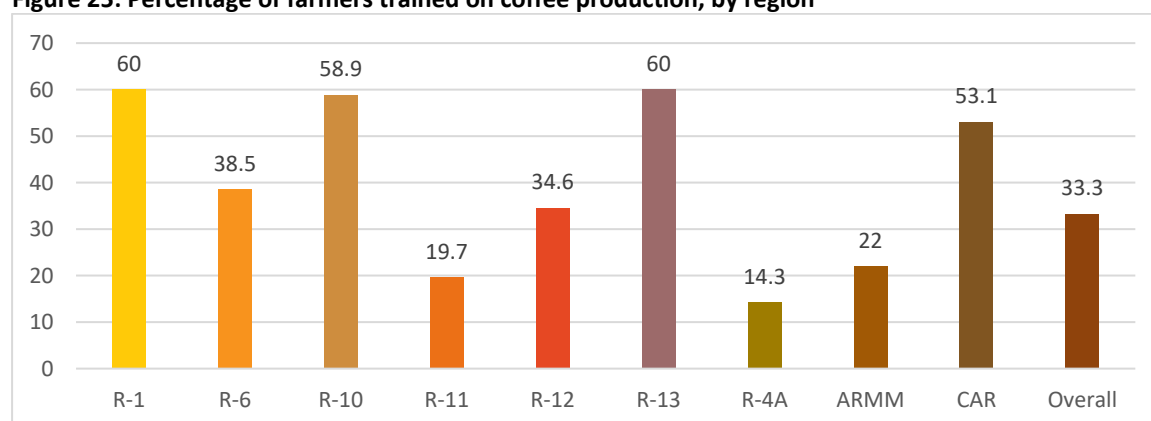
In the same vein, more adult men are affiliated/members of coffee producers' organizations and hold leadership positions in these organizations than their female counterparts and the youth (see **Q-Table 59** and **Q-Table 60**). Noticeably, affiliation or membership in producers' organizations is relatively low across many regions and only Regions 10 and 13 show a very high percentage of affiliated adult males (81.5% and 73.7% respectively). Since more adult males are affiliated or are members of the coffee growers' associations or cooperatives, it is understandable why more men than women become leaders in these organizations.

## 7.3 TRAINING AND EXTENSION SERVICES

### 7.3.1 ACCESS TO TRAINING ON COFFEE PRODUCTION

**Farmers Trained on Coffee Production.** Among the farming households interviewed for the baseline, only about a third (283 or 33.3%) have been trained on coffee production technology. Such training is typically done in a formal setting (with lectures) and supplemented with onsite/farm demonstration. Please refer to **Figure 25** and for the full table at **Q-Table 61**.

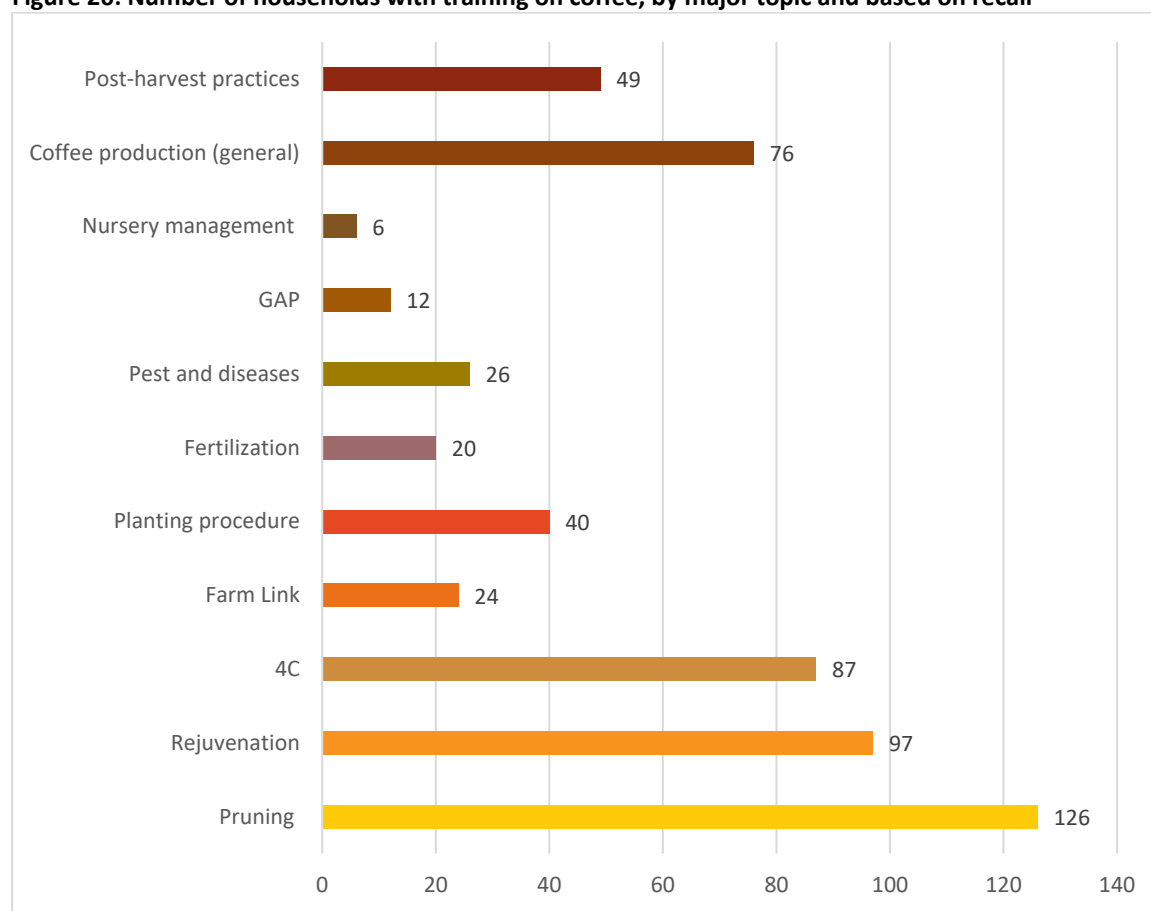
**Figure 25: Percentage of farmers trained on coffee production, by region**



*From FGD Murcia Marginal Coffee Growers, Inc.: “We made the farm a model farm where our members can practice. Because the production of the model farm is good, we are able to show the members that if they follow the practices, they too will have good production and eventually good income. It is hard to teach members even if they have been trained because of the old practices are still in their mind. With the model farm, the members are following gradually.”*

As for the types of training attended by the households, please refer to the figure below. The trainings are grouped based on the major topic and some of the households attended more than one coffee-related training.

**Figure 26: Number of households with training on coffee, by major topic and based on recall**



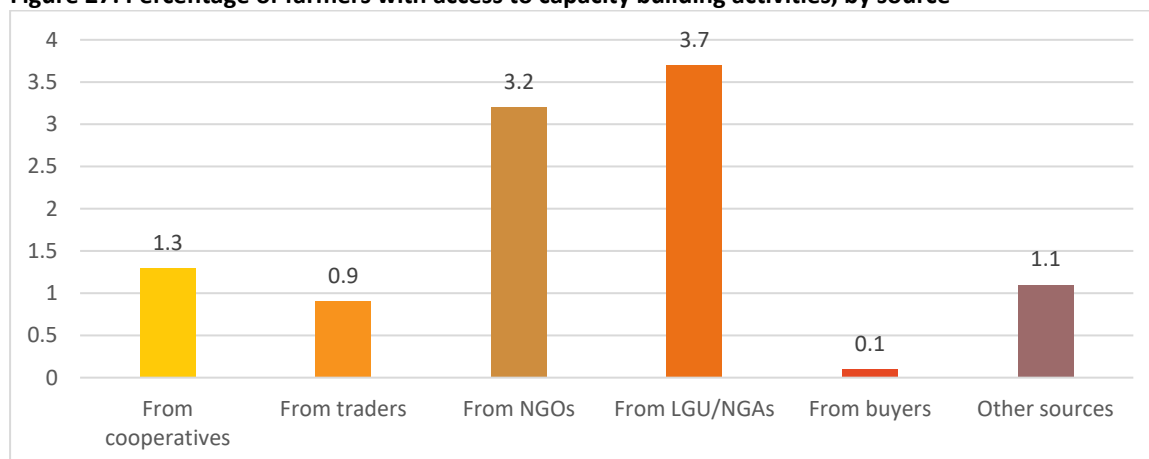
**Traders Trained on Coffee Quality.** The baseline study finds out that very few of the traders have attended training on coffee quality (21 or 46.7%). As to the types of training attended, there are 18 traders who have participated in training related to grading, cupping, classifying and barista. These trainings were provided by DTI, DAR, TESDA, BCAA, Equilibrium, and ADCDI/VOCA. Seven (7) traders sent their staff to trainings related to coffee production/farming, and the training providers were Nestle, DA, BSU and ACDI/VOCA. Six (6) traders have participated in trainings related to GMP, HACCP and warehousing; and the providers were Philippine Trade Training Center, Nestle, Equilibrium, Institute for Coffee Excellence and ACDI/VOCA. Two traders attended training on post-production handling provided by Nestle and DA. Please note that some traders attended more than one training. Please see **Q-Table 62**.

**Processors/Roasters Trained on Coffee Production and Processing.** There are 62 processors and roasters who have attended training related to coffee. By general type of training, there are 14 who benefited from production-related training, including production, nursery management (this is true for POs that also process coffee and manage nursery), and Good Agricultural Practices. There are 31 processors/roasters who benefited from attending activities that taught them about drying, dehulling, roasting, sorting, and cupping. Six (6) processors/roasters have attended trainings on entrepreneurship, marketing and promotion, and participated in coffee-related summit/conference. Finally, there are 27 processors/roasters who attended training related to brewing, bartending, machine handling, and Good Manufacturing Practices. Some processors/roasters have attended more than one type of training.

### 7.3.2 ACCESS AND PROVIDERS OF OTHER CAPACITY BUILDING ACTIVITIES

**Farmers' Access to Other Capacity Building Activities.** For other capacity-building activities such as farm management practices (not related to coffee production), the percentage of farmers with access further dips to only 9.1%. These farmers with access to such activities benefit from the support coming primarily from the local and national government and the NGOs. See **Q-Table 63** and **Q-Table 64** for full tables.

**Figure 27: Percentage of farmers with access to capacity building activities, by source**



In FGDs with the POs, the DA, DAR and DTI are repeatedly cited as the providers of training, information and other extension services. They also mention ACIDI/VOCA; foreign development aid projects funded by Germany, US and Canada; and Nestle Philippines as the non-government and private firm providers. The farmers are aware that there is a link between their attendance in training and the improvement in their coffee production, harvesting techniques and quality of their coffee. Women are included in these training.

*From FGD Keytodac Coffee Growers Association: “We started training on coffee only when Nestle and 4C arrived. Included in the trains were planting, pruning, how to increase production, how to apply fertilizer, how to rejuvenate, how to transfer a good variety to a not so good one by grafting. We also learned proper maintenance of coffee.”*

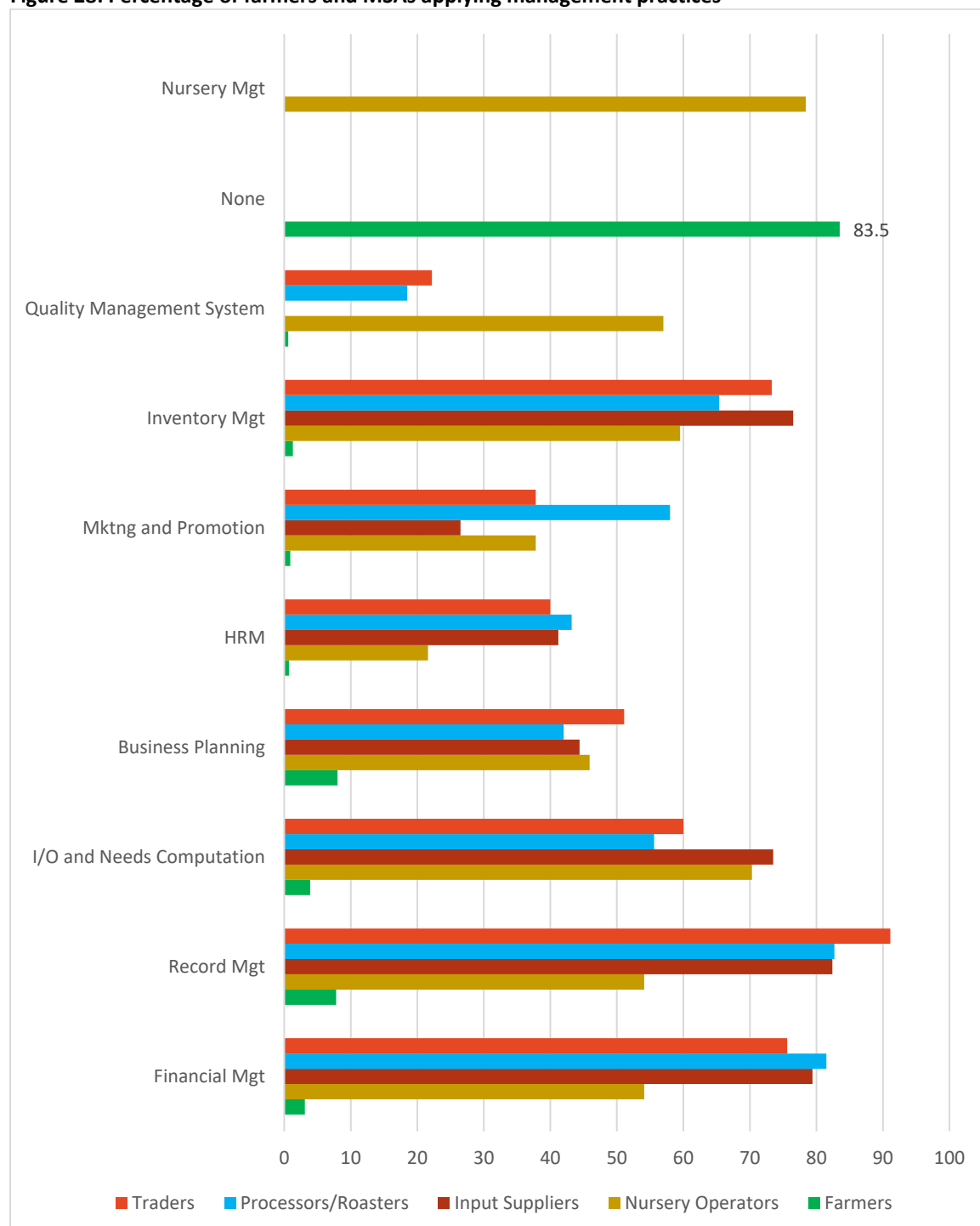
*From KII with Coffee Influencer BCAA: “Yes, we also offer café entrepreneurship. So, when we talk about that it's about setting up your business. Because we always have issues about how to set up business but there is no proper training. So, we have a very basic 5-day program or a whole consultancy program which even includes the training of the barista who are made to undergo an OJT. So, when they go to the shops, they are ready! Then we also have branding classes and marketing classes. We also have café accounting. So how do you make sure that you have proper cash flow when you're handling your business. Then, we also delve into smaller workshops for those who want to run a café as a family business. Because a café that runs as a family enterprise requires a different perspective from that of a café being ran by friends. We had one farmer-scholar in the Barista 101 course. He opened his own coffee shop and did not have to go back farming anymore.”*



**Farmers and MSAs' Management Practices.** For farmers to maximize their limited resources and run their farm activities like entrepreneurs, they also need to follow farm management practices. Similar effort should be applied by market system actors to improve their resource management and competitiveness. See full table at **Q-Table 65**.

**Figure 28** shows that 83.5% of the farmers do not apply any management practices. Among the MSAs, it is the group of input suppliers which have the highest average percentage with management practices (60.5%). Among the management practices, it is Record Management which is applied by most (77.6%). The full tables are shown at **Q-Table 65** to **Q-Table 69**.

**Figure 28: Percentage of farmers and MSAs applying management practices**





### 7.3.3 CORRELATION ANALYSIS OF TRAINING PARTICIPATION AND ADOPTION OF PRODUCTION AND POST-HARVEST PRACTICES/TECHNOLOGIES

Result of the correlation analysis shows small to moderate positive correlation between participation in trainings relevant to coffee and adoption of coffee production and post-harvest practices and technologies.

**Table 12: Correlation analysis of training participation and adoption of production and post-harvest practices/technologies, 2018**

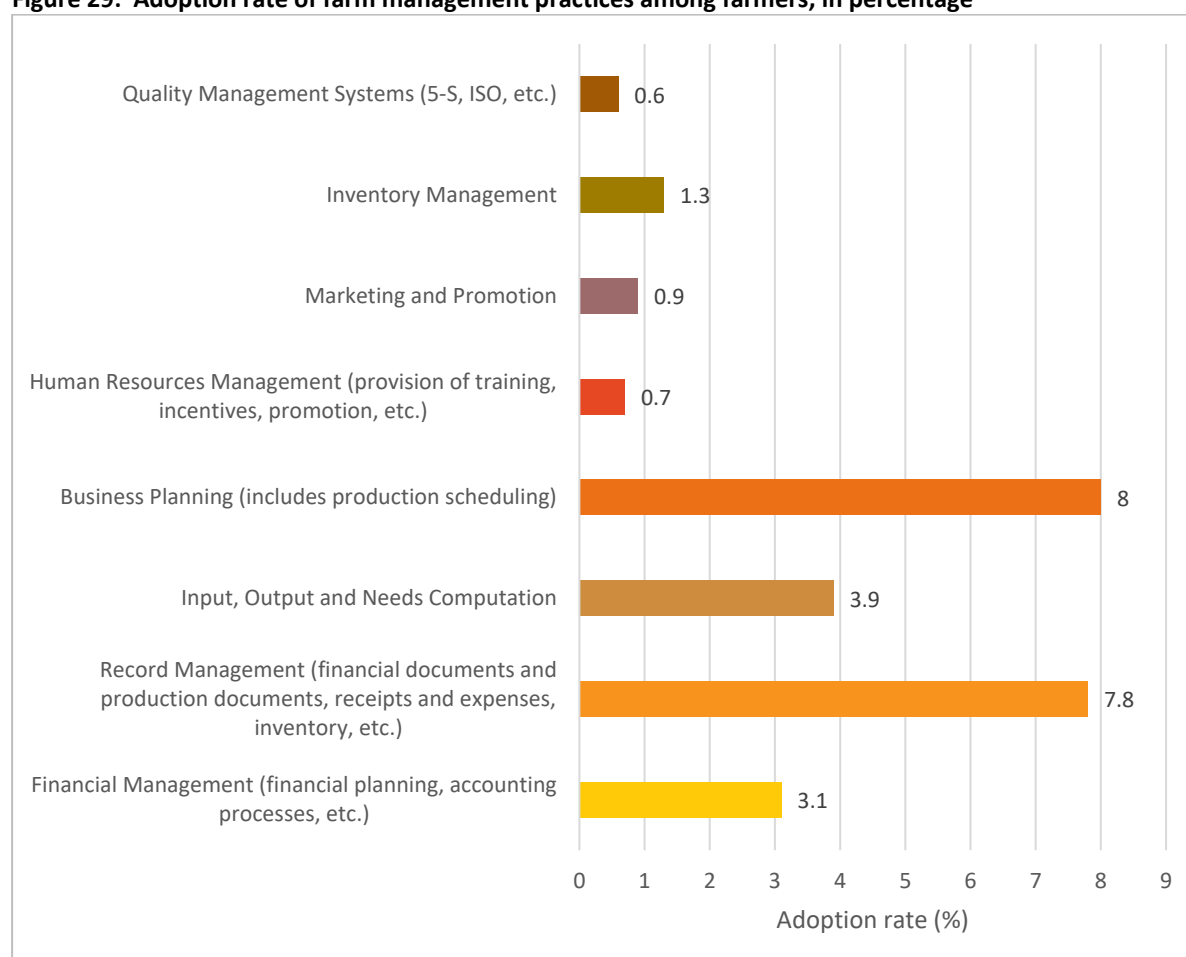
Technology/Practices	$r_{pb}$	P-value
<b>Production technology</b>		
Farm diversification	0.1227*	0.000
Plant renewal	0.2320*	0.000
Pest management	0.1809*	0.000
Disease management	0.2397*	0.000
Pruning and rejuvenation	0.3546*	0.000
Soil-related fertility and conservation (including soil sampling)	0.0930*	0.007
<b>Post-harvest practices</b>		
Depulping	0.1762*	0.000
Fermentation	0.1415*	0.000
Washing	0.1846*	0.000
Drying	0.1818*	0.000
Dehulling	0.1039*	0.003
Polishing	0.1311*	0.000
Grading	0.1630*	0.000
Sorting/Grading	0.2427*	0.000
Storage	0.1358*	0.000

Note: Values in the table are the Pearson correlation coefficient ( $r$ ) and the corresponding p-value, \*signifies significant correlation at 5% level of significance.

### 7.3.4 ADOPTION RATE OF FARM MANAGEMENT PRACTICES

**Figure 29** shows the adoption rate of farm management practices by farmers. Business planning (8%) and record management (7.8%) emerge as the practices with the relatively high adoption rates (albeit still small in comparison to the total number of household-respondents).

**Figure 29: Adoption rate of farm management practices among farmers, in percentage**



*From KII with Coffee Influencer BCAA: “I think there is a need to work on the agri-business aspect because some people associate agriculture with planting only, with credit programs. They don’t understand that agriculture is also a business. It is not just planting and then hoping that we will be able to make some profit. They should also be trained in farm management in terms of assessing which trees or plants are too old, no longer producing, and determining how we can increase yield. It goes beyond cupping and processing. We have to work on the management of the farms.”*

### 7.3.5 GENDER AND SOCIAL INCLUSION ON TRAINING AND EXTENSION SERVICES

More adult males than adult females and youth have access to agricultural extension services provided by government, NGOs, projects and private firms. Only in Region 1 and CAR are adult males outdone by both adult and young females vis-a-vis access to extension services (**Q-Table 70**). Moreover, more adult males in general participate in trainings related to coffee farming, processing and marketing compared to adult females and the youth. Again, only in CAR do adult females exceed adult males, and only in Region 1 do young females surpass both adults and young males in terms of participation in coffee-related trainings (**Q-Table 71**). Key Informants from the Provincial Agricultural Offices in Regions 6 and 11 also state that more women than men participate in their trainings because the latter are busy with their farm work. These offices appreciate the essential role women play in plant maintenance, harvesting, sorting, processing, packaging and labeling. On the other hand, FGD results confirm that while more and more women are now attending coffee-related trainings, men still dominate training participation. Given this finding, it is important to note



the ideas shared by the Office of the Provincial Agriculture in Cavite and Sultan Kudarat about the use of the Gender and Development (GAD) budget for training women.

Men participation in coffee related trainings resulted to higher probability of adoption of farm diversification, pest and disease management practices, while participation of women lowers adoption of farm diversification and soil-related fertility and conservation practices (Table 12). There is also no significant correlation between youth participation in training and the adoption of coffee farming technology (Table 12). This correlation can be attributed again to the decision-making roles that men and women play with regard to coffee production.

*From FGD with Alamada Multi-Purpose Cooperative: “On changes in farm technology, the women really take the risks. The men tend to be contented with manual labor and would not adopt any technology. The women are open-minded, tend to go along with what is new and trending.”*

*From FGD with IAHTCO: “For us, the one who attended the training is the one who has the decision if to adopt the farm technology being promoted.”*

The above survey findings indicate the patriarchal context of coffee farming (or agriculture in general) in the Philippines. The agriculture society in the Philippines is such that men take the lead in farming, and perceptions exist particularly in rural communities that men are always the primary income earners and women are home-makers, if not secondary income contributors. Survey results showing males dominating the number of workers and the hours spent in the coffee farms are to be expected in such a society. Women’s contributions to managing the household, though essential for getting their household members (especially their husbands/sons and including themselves) off to work, are ignored because these contributions are less visible to both government and non-government extension workers, agriculture students and trainers. Women who shoulder the majority of the housework and at the same time, help with farm work leads to the double burden of women. Household chores are demanding (and may even seem never-ending), resulting to women actually spending longer work hours than men daily. For instance, in one coffee cooperative in Davao del Sur, women bring with them their toddlers while sorting the coffee beans. And because the men comprise the majority in most cooperatives and even in several regional coffee councils, women become under-represented in the deliberations, and may not be as well-informed as their male partners. Because they are not as frequently trained as the men, they fail to expand their knowledge and skills in coffee farming. This was highlighted by one coffee influencer based in Makati who shared the need to train women coffee farmers. She stated that “for you to achieve (coffee) quality, it takes a lot of meticulous work of selection and sorting. The women have the patience to do this work. Here in the Philippines, we always tell farmers to pick only the ripe coffee cherries. . . but that actually requires them to go to the plant 7 to 8 times per harvest season and women have the patience to do this.” As part of the International Women’s Coffee Alliance [IWCA], she has gone around the country training 20 to 30 coffee women farmers at a time. She strongly suggests the training of women on how to achieve good quality coffee.

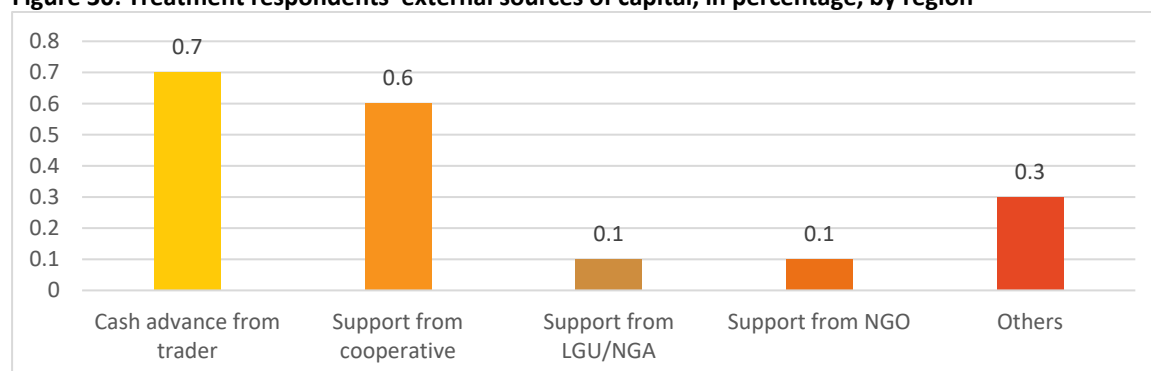
Result of the correlation analysis shows small to moderate positive correlation between participation in trainings relevant to coffee and adoption of coffee production and post-harvest practices and technologies. Similar positive correlation is seen between coffee farmers who are trained and those who will decide to avail of credit.

## 7.4 CREDIT AND FINANCING

### 7.4.1 SOURCES OF CAPITAL AND ACCESS TO CREDIT

**Sources of Capital.** Farmers have recurring farm expenses, such as paying for farm labor outside of the family members; for buying fertilizers, pesticides and farm tools; for paying production loans; and other dues, rentals and taxes. The farmers who participated in the baseline study reveal that most of them re-invest their profit from last year's production/sales or from own savings/other income (98.4%). The very few farmers (10 or 1.6%) who have external sources get it from traders in the form of cash advance<sup>26</sup> or as financial support by their cooperatives. Please refer to **Figure 30, Q-Table 72, and Q-Table 73.**

**Figure 30: Treatment respondents' external sources of capital, in percentage, by region**



For farmers who already have existing/paid loan or previous cash advance from input suppliers or traders, the average amount was Php 24,187 and the average interest was 5.7% (please see **Q-Table 74**).

*From FGD with Keytodac Coffee Growers Association: “We buy coffee of the members who want to sell to us. However, those who have current loans with the traders, we advise them not to sell all their produce to us. We give credit to the traders because they are the one who can support the members when the association has no money. The farmers can easily run to these traders to secure loan with little to no requirements at all.*

Among input suppliers interviewed for this baseline, only 10 (29.4% of input supplier-respondents) extend credit to their customers (farmers/POs), with average credit amount of Php 19,224 and at 1.1% interest rate (see **Q-Table 75**). Fourteen (14 or 17.3%) traders also offer the same service (**Q-Table 76**). Many consider “cash advance” as disadvantageous to the farmers; thus, the DA is planning to ease the “dependence” of farmers on such informal financing source.

#### Box 6: Cash Advance from the Government?

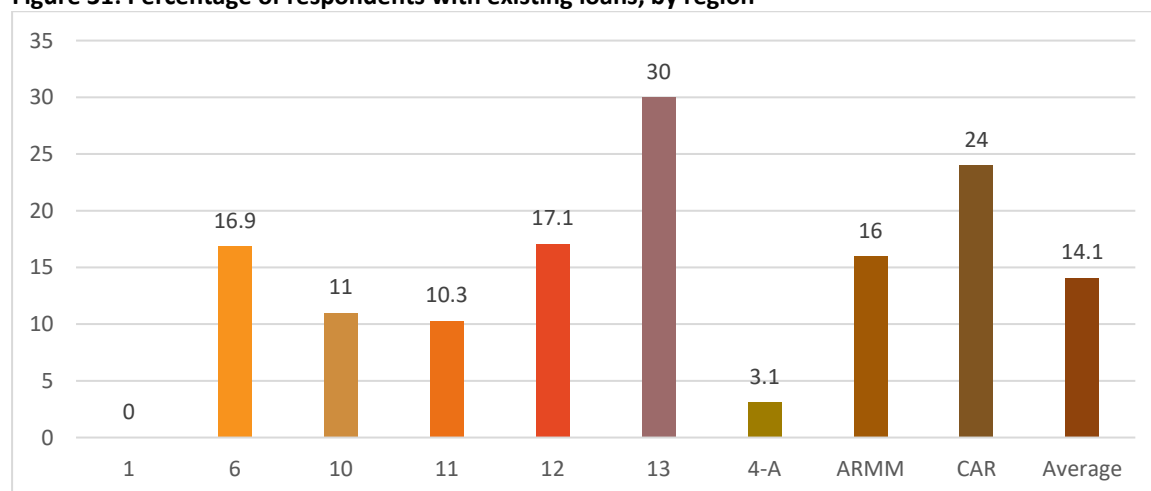
Traditionally, it is the traders who offer cash advance to farmers. Other farmers, however, turn to loan sharks – if they have no other sources – to get cash/fund for urgent need or as payment for fertilizers and farm labor. There are many complaints from farmers claiming that traders and loan sharks impose very high interest rate and shorter repayment period.

It is reported on January 2019 that the DA was exploring the possibility of offering a cash advance system for farmers and to make it collateral-free, with only 3% as service fee, payable every harvest. The funds to be tapped for this window will come from the agency's Agricultural Credit Policy and the National Food Authority. However, this system will likely benefit only the rice farmers – at least for the time being.

Retrieved from: <https://www.philstar.com/business/2019/01/14/1884778/govt-eyes-cash-advance-farmers>

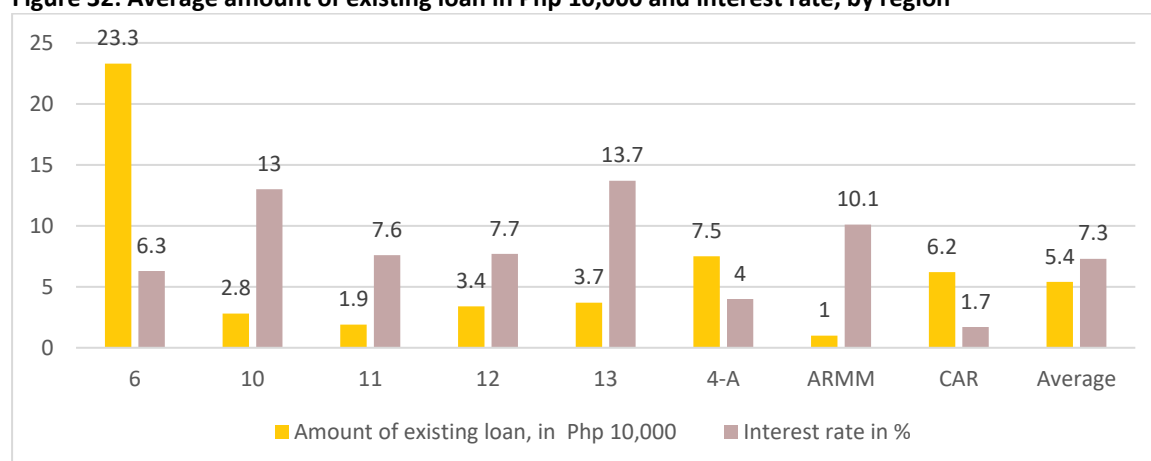
**Households with Existing Loans.** At the time of the baseline survey, only 14.1% of the household respondents have existing credit/loans, whether such financial support was used for the farm or for personal purpose. Coffee households interviewed in Region 1 reveal that they do not have existing loans and have no plans to borrow money in the future. This is partly explained by the well-known cultural trait among residents (the “Ilocanos”) in that region as “being frugal or spendthrift”<sup>27</sup>. Please see **Figure 31** and **Q-Table 77**.

**Figure 31: Percentage of respondents with existing loans, by region**



The amount of loan and the interest rates vary greatly per region. Farmers in Region 6 have the highest average loan amount at Php 233,182 while Region 13 has the highest interest rate paid at 13.7%. Please refer to **Figure 32** and **Q-Table 78** for full table.

**Figure 32: Average amount of existing loan in Php 10,000 and interest rate, by region**



*From FGD Murcia Marginal Coffee Growers, Inc.: “We need financing for weeding/cleaning (to pay for farm labor). We need to do this to maintain the cleanliness of the farm. This is important because there are many trees that cover the coffee and it will not receive the desired amount of sunshine and this will affect the production. Even if you do not need fertilizer, you need to finance the maintenance of the trees.”*

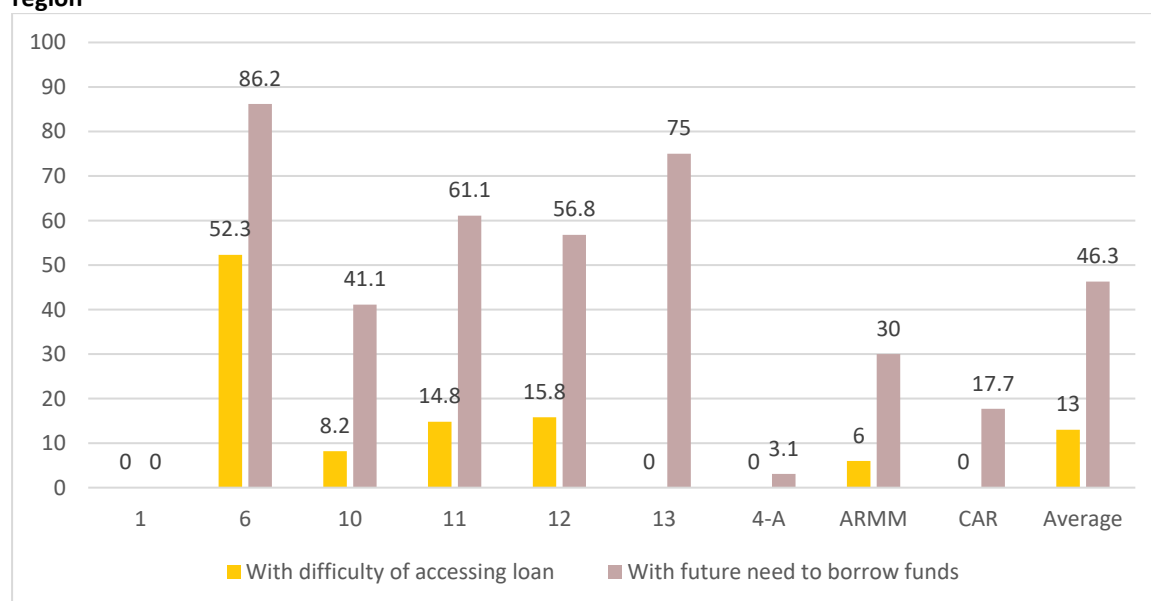
<sup>27</sup> A recent study made by the Bangko Sentral ng Pilipinas discovers that the households in Ilocos Region “presented the highest percentage of those getting assistance from overseas and domestic sources”, which may refer to having relatives sending them remittances and other financial support (thus, lesser need to take out loan). Retrieved from <https://newsinfo.inquirer.net/194771/ilcanos-told-being-stingy-holds-promise>.

**Difficulty of Accessing Credit and Future Need to Borrow Money.** One hundred ten (110) respondents (13%) reveal that they have difficulty of accessing credit. The typical reasons include: “tedious documentary and collateral requirements imposed by financial institutions, high transaction cost, some financial products are addressed to specific clients (i.e. for rice or corn farmers only), among others<sup>28</sup> “. Nearly four times (4x) this number – at 393 respondents or 46.3% -- say that they anticipate they will need to borrow money in the future. The respondents in CAR have the highest proposed amount at Php 1.88 million. The interest rate they are willing to pay for such loan ranges between 2.2 to 2.9% interest rate. If granted, the loan will be primarily used for coffee production.

*From FGD with SURDECO: LandBank hesitated to help us because of land tenure. They wanted all farmers who are members of the cooperative to have titles of their lands. Not all of the farmers here have land title. Mostly, we have timberland here while in the municipal, probably they already have titled land there. But here in South Upi, there are many timberlands here which do not have title. Tax declaration only.*

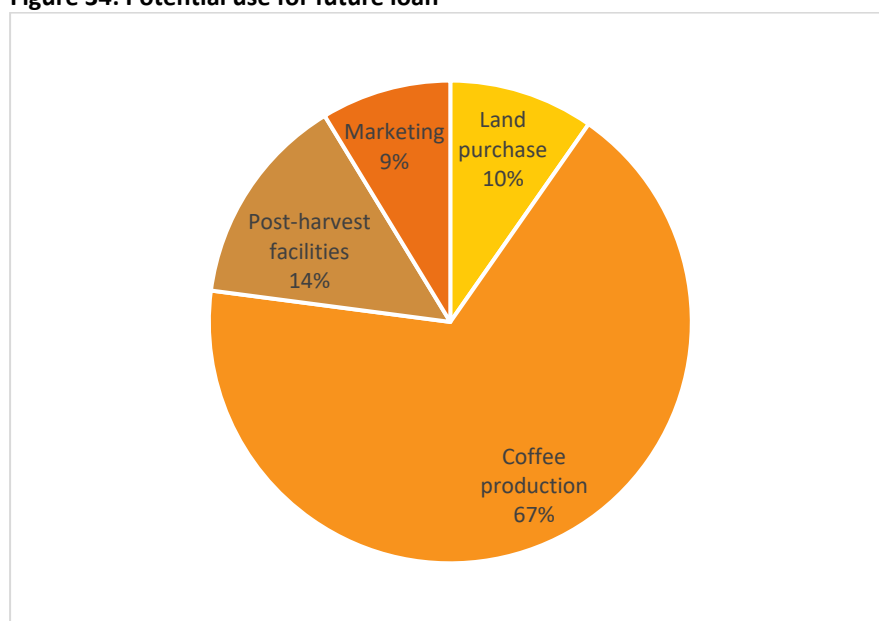
For the full tables, please refer to **Q-Table 79**, **Q-Table 80** and **Q-Table 81**.

**Figure 33: Percentage of farmers with difficulty of accessing loan and with future need to borrow funds, by region**



<sup>28</sup> P. Geron, G. Llanto and J. Badiola, “Comprehensive Study on Credit Programs to Smallholders”, Philippine Institute for Development Studies, 2016, retrieved from <https://dirp4.pids.gov.ph/websitecms/CDN/PUBLICATIONS/pidsdps1648.pdf>.

**Figure 34: Potential use for future loan**



#### 7.4.2 CORRELATION ANALYSIS ON AVAILING AND ACCESS TO CREDIT

The correlation on credit shows that among the coffee farming households that will likely take out loan are those farmers who have trained on coffee production. After gaining new information on how to improve their yield or to address problems plaguing their coffee trees, the newly-trained farmers will likely invest more in his/her coffee farm. Thus, if they do not have ready funds, they will likely access such funds from other sources. The second top variable that influences availing of credit is membership to cooperative. Based on the records of the Cooperative Development Administration, there are 17,688 cooperatives in the country as of 2017 and 2,542 (14.2%) of those are extending credit, there are 455 credit cooperatives (2.5%)<sup>29</sup>.

Another factor that pushes a household to proceed/formalize (not just consider) getting a loan is concurrence of women household members. It is a push needed by a household, particularly if part of the household's coffee profit will be used for repayment. Other influencing factors are level of household income, active in marketing their products, and number of workers in the family.

**Table 13: Correlation analysis on availing and access to credit, 2018**

Variables	$r/r_{pb}$	P-Value
Age	-0.0478	0.1665
Sex	-0.0401	0.2461
Marital Status	0.0695*	0.0442
Years of formal education	0.0375	0.2781
Membership to farmers' cooperative	0.1150*	0.0009
Membership to women organization	0.0321	0.3538
Trained in coffee production	0.1241*	0.0003
Annual household income	0.0787*	0.0227
Land ownership	0.0037	0.9144
Years of farming	-0.0668	0.0533
Annual production expenditure	0.0427	0.2164

<sup>29</sup> Operating Cooperatives as of 2017, Cooperative Development Authority, retrieved from <http://www.cda.gov.ph/resources/updates/statistics/1069-statistics-as-of-december-31-2017>.



Variables	$r/r_{pb}$	P-Value
Post-harvest losses	0.0360	0.2974
Active marketing	0.0717*	0.0379
Yield per hectare	0.0182	0.5995
Coffee Revenue	0.0301	0.3845
Major involvement of men on availing of credit decision	-0.0861*	0.0127
Major involvement of women on availing of credit decision	0.0990*	0.0041
Major involvement of male youth on availing of credit decision	-0.0664	0.0546
Major involvement of female youth on availing of credit decision	-0.0087	0.8024
Number of men workers	0.0775*	0.0248
Number of women workers	0.0728*	0.0351
Number of youth male workers	-0.0042	0.9035
Number of youth female workers	0.0565	0.102

Note: Values in the table are the Pearson correlation coefficient (r) and the corresponding p-value, \* signifies significant correlation at 5% level of significance.

### 7.4.3 GENDER AND SOCIAL INCLUSION ON CREDIT AND FINANCING

Adult males of the household make all the major decisions related to coffee farming. They decide on what crops to produce (94.7% as market decision makers), what production technology to use (93.9%), what inputs to procure (92.4%), who does and how to use farm equipment and facilities (92.3%), and which coffee equipment and facilities to purchase (92%). The youth males, on the other hand, do not have a role on whether to avail of financial assistance (55.4%), on price level to negotiate (52.2%), on who will receive income from coffee sales (54.5%) and how and where to spend the income from coffee (53.1%). For the youth female members of the household, they practically have no roles in all the decision-making related to coffee farming (see **Q-Table 82**).

The only time that the adult female members of the household play a greater role than the men is in deciding who will receive the income from coffee sale (73.5%). Important to note though that for decision issues related to whether to secure credit, where to use the borrowed funds and how/where to spend income from the farm, the difference in percentage between adult males and adult females about who makes the major decision becomes smaller, meaning that both adult men and women tend to jointly share the role in deciding about these concerns. This finding is confirmed by the FGD done with both men and women. Not a few FGD participants noted situations when both husband and wife discuss, consult each other and make a conjugal decision. This is in matters concerning: the selling price of their coffee, the use of income from the farm, changes in farm technology, new investments in the farm, and on accessing credit.

Another important finding is that when adult males make the decision, there is lower probability that they will take out a loan; in contrast, if it is the women who decide, there is higher probability that they will obtain credit. In relation to age, the older the coffee farmer, the lower probability that they will avail credit. Therefore, younger farmers will most probably decide to get a loan (**Table 12**).

*From FGD Murcia Marginal Coffee Growers, Inc. We have experienced getting financial assistance from Quedan in which you need the consent of the wife or husband. He/she should be aware of the responsibilities involved in getting a loan.*

*From FGD Alamada Multi-Purpose Cooperative: “It is the women who take the risk; they know where to borrow and also because they are the ones who budget the money of the household... Men do not want to take a loan, they want to save money. Women would want to borrow because they can earn and pay it back.”*

A higher percentage of adult women are able to access credit without the need for a co-signatory or co-maker. Regions 1 and 4-A show a huge difference between adult women and men in accessing credit (**Q-Table 83**). This reflects a certain degree of autonomy on the part of women being able to access loans without a co-maker, although the decision to avail of credit is usually done by both husband and wife. In the FGDs, women are believed to be more “risk takers” in exploring resources to meet the needs of the household. A quick review of data in RF 4 in these regions do not show distinct correlation between the number of years spent in formal education by females with the percentage of those who accessed credit.

#### 7.4.4 MSAs WITH EXISTING LOAN/DEBT

Nursery operators, processors/roasters and traders will also require additional capital infusion if they plan to expand, to procure major equipment or buildings, or to make some efficiency improvements. The figure below compares the percentage of MSAs with existing loan and the average interest rate they are paying. In terms of average loan amount per borrower, the nursery operators have Php 2,541,667; the processors/roasters have Php 1,819,083; and traders have Php 3,517,500.

Please refer to **Figure 35** and **Figure 36**, and for the full tables, please see **Q-Table 84** to **Q-Table 89**.

**Figure 35: Percentage of MSAs with existing loan and average interest rate, per MSA**



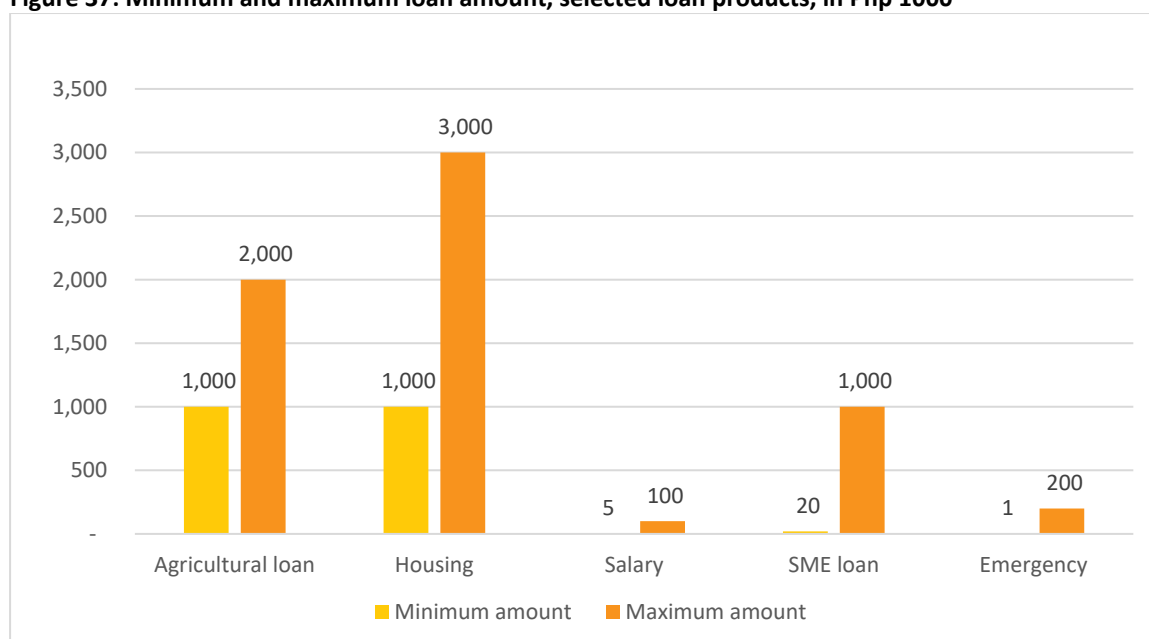
**Figure 36: Average amount of existing loans, in Php 1000, by MSA and scale**



**Services of Microfinance or Lending Institutions.** The baseline study has collected information from nine (9) MFIs (profile of MFIs are briefly discussed in Section 7.1.2). The types of financial products extended by these organizations range from agricultural loan (for production of crops and related uses), salary loan (a loan equivalent to the employed borrower's salary), housing, emergency (urgent needs), and small business/enterprise loan. **Figure 37** shows the average minimum and maximum loan amounts extended by the MFIs interviewed (for full tables **Q-Table 90** and **Q-Table 91**).

Average interest rates for all types of loan products and across all scales of MFIs is 7.9%. MFI based in Region 10 imposes the highest interest rate at 18%, while MFIs based in Region 12 averages 2.5% (**Q-Table 92**)

**Figure 37: Minimum and maximum loan amount, selected loan products, in Php 1000**

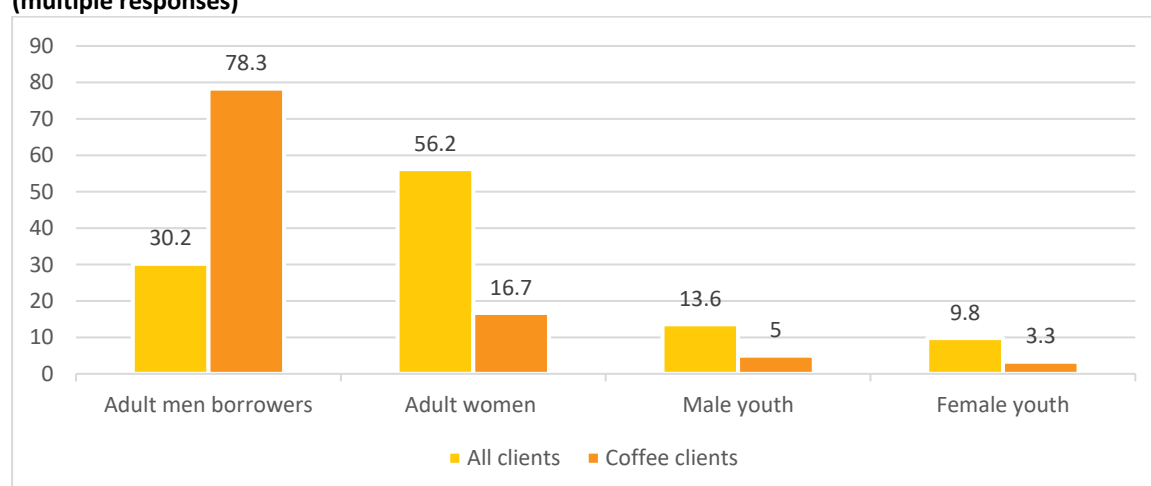


**Loans Extended to Coffee Farmers by MFIs.** Based on their 2018 records, the nine (9) MFIs lent an average of Php 19.292 million to their clients engaged in agriculture, while loan extended to coffee farmers was at the average of Php 1.78 million. All of the MFIs interviewed have revealed that their loan portfolio has grown (**Q-Table 93**) from 2017 to 2018.

MFIs also report that adult women topped as the clientele served in 2018 for all types of loan (because the women tend to seek out loan for small business, education, health and other household emergencies), but it is the adult men who topped as the “coffee borrowers” (see **Figure 38, Q-Table 94** and **Q-Table 95**).

Among the 9 MFIs interviewed, half (5 or 55.6%) actively marketing their financial products/services. Please refer to **Q-Table 96**.

**Figure 38: Distribution of MFI borrowers (all crops and coffee only), by percentage and gender, 2018 (multiple responses)**



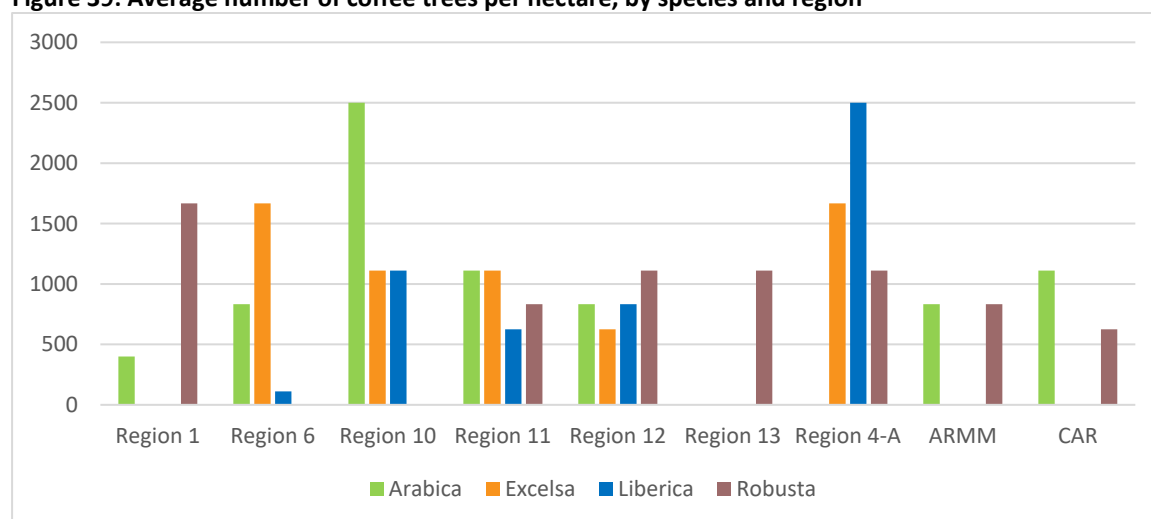
The most common reason for taking out a loan by the borrowers is for production capital (100%) and for post-harvest facilities (44%). Production capital refers to farm expenses such as labor, planting materials, fertilizers and pesticides. Only three (33.3%) of the MFIs interviewed say that they have different criteria and requirements between coffee and other crops. However, the same requirements are applied regardless of gender and age. Majority of the MFIs also say that they are interested in extending loans to more coffee farmers.

For the full tables, please refer to **Q-Table 97, Q-Table 98** and **Q-Table 99**.

## 7.5 YIELD AND SALES

**Farmers' Volume of Production.** The average number of trees per hectare in treatment area is 1,111 trees; although regions and species vary slightly in terms of distance. Arabica planted in Region 1 has an average distance of 3 x 3 meters, while Arabica planted in Region 10 only has 2 x 2 meters. Excelsa and Robusta have range between 2 x 3 meters to 4 x 4 meters. Liberica coffee has 2 x 2 meters to 4 x 4 meters. **Figure 39** show the average number of coffee trees per hectare, per species and per region (for full table, please see **Q-Table 100**).

**Figure 39: Average number of coffee trees per hectare, by species and region**



The average age of coffee across all areas and species is 23 years old. The oldest species planted by all household respondents is Liberica at 32 years old, while the youngest is Arabica at 17 years old. The number of trees and the age of coffee trees have bearing on the yield of coffee. The table next page (Table 14) the average volume per hectare based on the farmers' recall. The average GCB yield for Arabica is 652.9 kg, Robusta with 475 kg, Excelsa with 441 kg and Liberica with 419 kg (all in blue bars). Please note that official overall GCB yield of coffee in the country is only at the level of 300 kg/ha<sup>30</sup>. The same figure also shows that Arabica has the highest yield per hectare among species at 1,097 kg of GCB in Region 11, while the lowest yield is still Arabica in Region 1 at only 103.1 kg of GCB (please see **Q-Table 101** and **Q-Table 102**).

*From KII with Coffee Influencer Philippine Coffee Board: "Land area in other countries are big, 2 to 10 hectares maximum in Brazil. Here, coffee is in competition with land. The competition I guess for some would be contract growing of corn or maybe cacao. Nobody is doing contract growing with coffee because it takes so long – a minimum of 18 months to 5 years. And nobody likes to wait that long."*

<sup>30</sup> Philippine Coffee Industry Roadmap 2017-2022.





Photo 17: Left photo shows how a tall coffee tree can grow, middle photo shows the thick trunk of an old coffee tree and right photo show coffee tree barely visible amid other crops.

Table 14: Average volume (yield) of coffee production per hectare in GCB as per farmer recall, in MT, by region

Region	Arabica	Std. Error	Excelsa	Std. Error	Liberica	Std. Error	Robusta	Std. Error	Average, All	Std. Error
1	0.103	0.06	-	-	-	-	0.463	0.25	0.355	0.17
4-A	-	-	0.707	0.17	-	-	0.813	0.08	0.802	0.08
6	0.838	0.98	-	-	-	-	0.209	0.06	0.238	0.07
10	0.456	0.21	0.563	0.16	-	-	0.391	0.04	0.407	0.04
11	1.097	0.52	0.389	-	0.667	0.19	0.533	0.05	0.544	0.05
12	0.658	0.07	0.302	0.04	0.583	-	0.409	0.04	0.405	0.04
13	-	-	-	-	-	-	0.730	0.25	0.730	0.25
ARMM	0.320	0.03	-	-	-	-	0.473	0.05	0.458	0.05
CAR	0.693	0.12	-	-	-	-	0.289	0.04	0.495	0.07

#### Box 7: Yield per hectare in top coffee producing countries

The Food and Agriculture Organization's Statistical Pocketbook for Coffee 2015 includes the Philippines as the 15<sup>th</sup> in the top 20 countries with the highest coffee production quantities in 2013. The Philippines had a yield of 672 GCB kg/ha (the document uses hg/ha). The top five countries in descending order back in 2013: Vietnam with 2,499 kg/ha; Brazil with 1,422 kg/ha; Colombia with 846 kg/ha; India 845 kg/ha; and Indonesia with 563 kg/ha.

Take note that the Philippines' production has been decreasing since 2013 and the latest official average of coffee yield (all species) is now at 300 kg/ha.

Retrieved from: <http://www.fao.org/3/a-i4985e.pdf>

**Volume Sold.** The farmers sell their coffee in various forms (i.e. fresh cherries, dried cherries or GCB). To get the average, cherries was converted into GCB, using the conversion rate<sup>31</sup> recommended by International Coffee Organization (ICO). On average, coffee sold in GCB nearly tips at 400 kg for Arabica, Liberica and Robusta, while it is only 310 kg for Excelsa. The difference between yield and sold may have been retained by the farmers or used for other purpose (i.e. exchanged for other goods). Please refer to the table below while the full table, see **Q-Table 103**.

**Table 15: Average coffee yield and volume sold per hectare, in GCB and in MT, by specie**

Items	Mean, Yield	Std. Error	Mean, Sold	Std. Error
Arabica	0.653	0.09	0.400	0.05
Excelsa	0.441	0.06	0.310	0.04
Liberica	0.653	0.13	0.505	0.08
Robusta	0.475	0.02	0.395	0.02
All	0.490	0.02	0.392	0.02

**Selling Price per Kilo.** Coffee fresh cherries sell between Php 18.1 per kg to Ph 38.1 per kg; while dried cherries range between Php 38.1 per kg to Php 83.7 per kg; and GCB sell for Php 60.5 kg to Php 186 kg. Please see **Q-Table 104**.

**Table 16: Average selling price of farmers, in Php/kg, 2018, by species and region**

Items	Mean, Price	Std. Error
<b>As fresh cherries</b>	<b>21.47</b>	<b>1.55</b>
Arabica	32.70	5.87
Robusta	20.74	1.60
<b>As dried cherries</b>	<b>65.27</b>	<b>1.30</b>
Arabica	84.52	4.24
Excelsa	48.48	1.29
Robusta	64.41	1.39
<b>As green coffee beans</b>	<b>85.14</b>	<b>1.68</b>
Arabica	179.94	19.30
Excelsa	100.10	4.87
Liberica	63.00	2.29
Robusta	79.48	1.26

Pricing of coffee vary depending on the volume, quality, form and market. Traders may sell fresh cherries at Php 18.5 per kg to processors and roasters but sell this at higher price for Php 80 per kg to individuals. Green coffee beans are sold at Php 380 per kg to processors/roasters but only at Php 250 per kg to individuals. There are exporters who buy GCBs at Php 198.25 per kg. Please refer to **Q-Table 105**.

### 7.5.1 REGRESSION ANALYSIS ON COFFEE YIELD (CONVERTED TO GCB)

Regression analysis is used to determine significant determinants of coffee yield. Result shows that farmers with higher years of formal schooling have higher yield. Farmers adopting coffee monocropping has lower yield than those practicing intercropping. In terms of coffee production technology practices, it shows that coffee yield increases when farmers practice soil related fertility and conservation and decreases with plant renewal.

<sup>31</sup> 1 kg of dried cherries = 0.5 GCB and 6 kg of fresh cherries = 1 kg of GCB.

**Table 17: Regression analysis on coffee yield, 2018**

Variables	Coef.	P-Value
Household Size	-7.613 <sup>ns</sup>	0.3440
Years of formal education	23.170*	0.0000
Membership to farmers' cooperative	-31.159 <sup>ns</sup>	0.5690
Membership to women organization	-131.098 <sup>ns</sup>	0.0900
Annual Household Expenditure	0.000005 <sup>ns</sup>	0.5630
Land ownership	-17.997 <sup>ns</sup>	0.7380
Years of farming	2.965 <sup>ns</sup>	0.1300
Cropping system	-90.342*	0.0480
Trained in coffee production	-89.541 <sup>ns</sup>	0.0800
Practiced farm diversification	-97.506 <sup>ns</sup>	0.1040
Practiced Plant renewal	-133.136*	0.0140
Practiced Pest management	5.016 <sup>ns</sup>	0.9380
Practiced Disease management	38.729 <sup>ns</sup>	0.5620
Practiced Pruning and rejuvenation	-21.720 <sup>ns</sup>	0.7480
Practiced Soil-related fertility and conservation	<b>128.742*</b>	0.0460
Annual production expenditure	-0.001 <sup>ns</sup>	0.7930
Post-harvest losses	0.415 <sup>ns</sup>	0.7300
Involved in active marketing	-59.395 <sup>ns</sup>	0.5950
With external sources of planting materials	-15.425 <sup>ns</sup>	0.8790
With existing credit	37.873 <sup>ns</sup>	0.6430
Value adding activities	33.536 <sup>ns</sup>	0.6920
Weekly hours of farm work of men	-0.499 <sup>ns</sup>	0.7280
Weekly hours of farm work of youth male	3.123 <sup>ns</sup>	0.1750
Weekly hours of farm work of women	-0.592 <sup>ns</sup>	0.7820
Weekly hours of farm work of youth female	2.018 <sup>ns</sup>	0.7050
Constant	372.686	0.0010
Prob > F	0.0001	
R-squared	0.0604	

Note: Values in the table are the estimated coefficient and the corresponding P-Value. Coefficients with \* are significant at 5% level and <sup>ns</sup> are not significant.

### 7.5.2 MSA SALES

In 2018, the input suppliers in this baseline made an average of Php 2.19 million. By scale, micro scale input suppliers earned Php 1.51 million; small-scale input suppliers gained Php 2.283 million, while medium scale input supplier (only one respondent) made Php 20 million. Please refer to **Q-Table 9**.

Among the nursery operators included in this baseline, the average seedlings is 5.286 million pieces (however, if we remove the large-scale nursery of Region 12, the average seedlings is only 166,539). The average seedlings sold per nursery was 117,333 pieces while the average gross sales in 2018 was Php 2.909 million. The average sales in Region 11, CAR and 10 are very small, which confirms that they produce seedlings for members or beneficiaries. Please refer to **Q-Table 14**.

The nursery operators interviewed for this baseline produced two (2) species of coffee: the average seedlings sold last year was 37,100 for Arabica and 108,611 for Robusta for each nursery. This results in an average of 90,014 pieces of seedlings and translated to average revenue of Php 1,916,694 in sales in 2018. A little over a third (37.8%) of the operators propagate seedlings and distribute these for free (this is typical for LGU or NGA-sponsored nurseries). Please see **Q-Table 42**.

In 2018, all 81 processors/roasters earned an average of Php 380,119 in gross sales, while the coffee they processed, brewed or served was about 3,529 kg in volume. Please note that the difference in volume is extreme, with processors in Region 10 declaring to have processed 20,184 kg, while those in Region 6 only 40 kg for year 2018. Please see **Q-Table 16**.

The traders average gross sales is Php 9.060 million in 2018 and the average volume sold is 70.28 metric tons. When asked on their volume of coffee traded in 2018, 40% of the traders say the volume has decreased while another 40% say that their volume has increased; the other 20% of traders say that the volume has remained the same. Please see **Q-Table 18**.



## 7.6 POST-HARVEST

### 7.6.1 FARMERS' POST-HARVEST PRACTICES

**Value-Adding Activities.** A small fraction of the households interviewed for this baseline admits that they undertake value-adding activities (10.7%). This very small group want to produce quality coffee and thus strive to follow recommended technologies (7.3%) or implement additional processes/activities to obtain better price for their coffee and expand market (2.4%). Please refer to **Q-Table 106** and **Q-Table 107**.

Majority of the farmers interviewed for the baseline admit that they pick their coffee cherries ripe (71.7%). On the type of processing, many prefer to apply natural process (25.7%); on using a drying platform, many are using Trapal/canvass (58.8%) which is a heavy-duty plastic sheet; on storage, farmers use jute bags (8.4%). Please refer to **Q-Table 108**.

*From KII with SURDECO: “Recently, our members have already improved their harvesting techniques and the quality of their coffee. This is due to the trainings they have participated. Before, when they harvest, they just grabbed the cherries without picking. It was a one-time harvest. That was why the buyers could not give a good price to the farmer because the coffee beans were not of good quality.”*

In an FGD with a PO in Sultan Kudarat, the farmers said that they do their drying on Trapal/canvas and thus, they have to wait for “good weather condition”. They used to have an all-weather dryer given by Nestle but it is no longer usable. They just used sacks or trapal now, each person who is a 4C member given only 10-meters long space for drying.



**Photo 18:** Top photo shows coffee cherries being dried directly on pavement. Bottom pictures show cherries being dried on top of trapal/canvass.



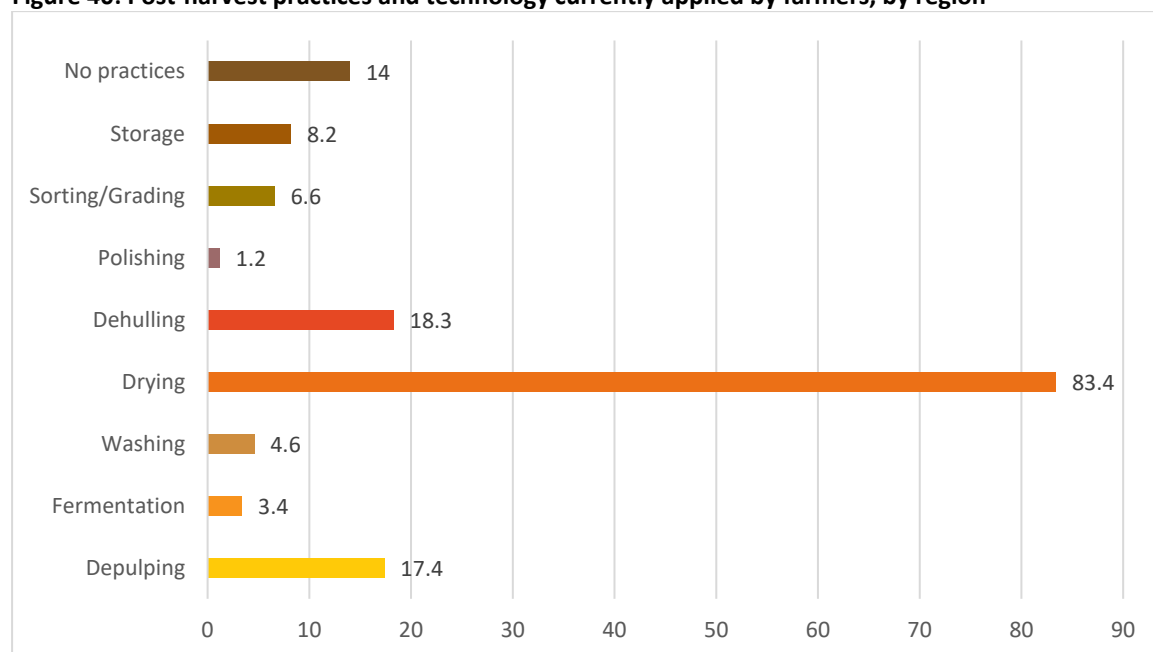
*From KII with Coffee Influencer BCAA: “From our perspective, it is helping them realize the value of their coffee outside their farms. To help them, we need to train them. Regardless of the size of your coffee farm, if you have good coffee, well sorted, well fertilized and all that, we will be able to sell your coffee at a higher price. Like with PCQC, the two who win will go into an action; it’s a different playing field altogether.”*

Prominent among the post-harvest practices currently applied by the farmers is drying (83.4%). The least practiced are fermentation (3.4%) and polishing (1.2%). Please refer to **Q-Table 109** and **Figure 40**.

In the FGDs with farmers, it was learned that there are farmers who harvest green cherries together with red cherries and they are aware that this has effect on the quality of coffee after it is processed (the coffee tastes acidic). There are also farmers who mix their old beans that are still not fully dried with newly picked cherries on the drying bed. But in WAO, some farmers do not really follow the pick ripe recommendation because traders – where they sell their coffee – do not set the price based on quality. It is also a recurring claim in the FGDs where farmers are aware that proper sorting of coffee beans ensures good quality of coffee.

One coffee influencer shares her observation that farmers find the sorting of beans to be quite laborious – which is a critical step for specialty coffee.

**Figure 40: Post-harvest practices and technology currently applied by farmers, by region**



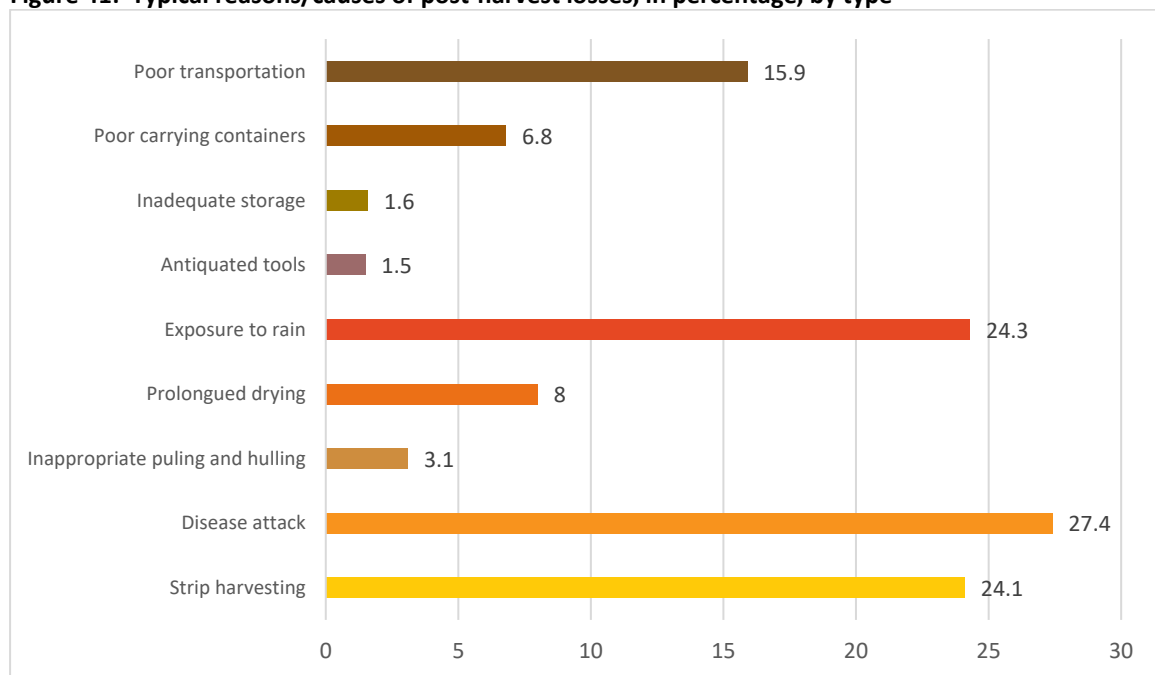


**Photo 19: Elevated dryers with plastic cover.**

**Post-Harvest Losses.** A third (34%) of the coffee farmers interviewed for this baseline recall having experienced post-harvest losses. Among the 9 regions, Region 13 has the highest percentage of respondents who experienced losses at 49.8%. Top reason is exposure to rain (24.3%) and strip harvesting – ripe and unripe cherries harvested together (24.1%). Please see the full tables at **Q-Table 110 and Q-Table 111**.

In the FGD with the POs, the farmers admit that prolonged rainy period affects the drying of their coffee (they only have access to solar dryer). In addition, beans that have been harvested in the farm and remains there for days due to hauling delays turn black before drying, which affects the quality and price of coffee.

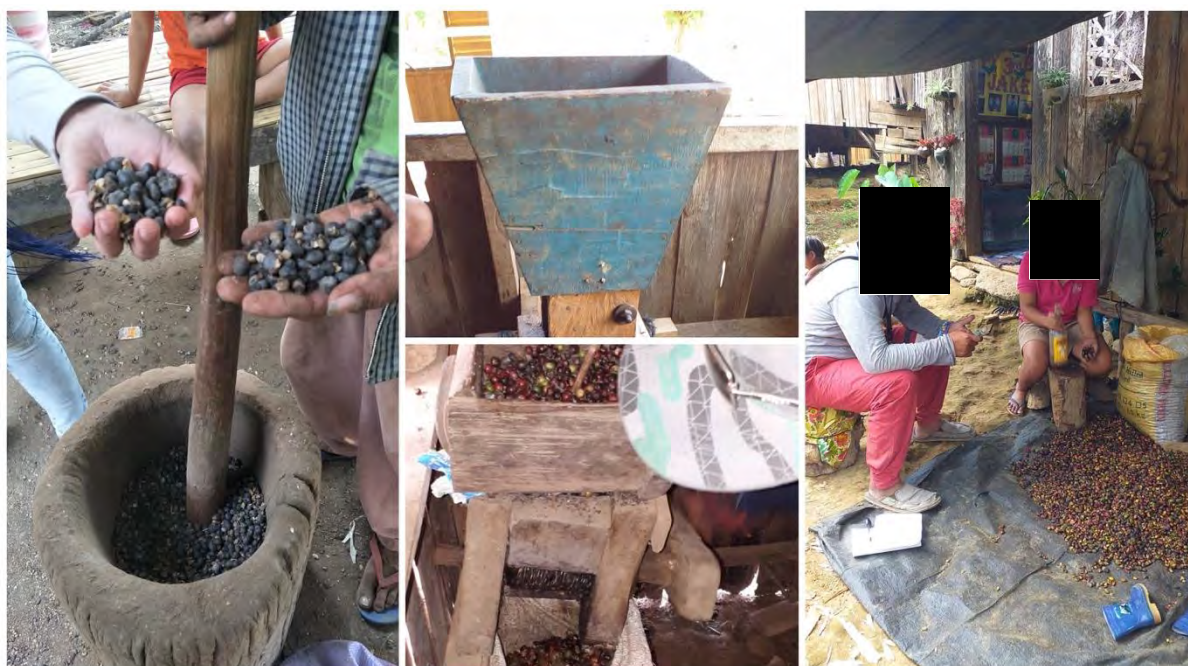
**Figure 41: Typical reasons/causes of post-harvest losses, in percentage, by type**



**Access to Post-Harvest Facilities.** Majority of the coffee farmers interviewed do not own any post-harvest facilities (71.5%). Farmers who do have their own facilities have solar dryer (11.5%), dehullers (3.9%), pulpers (2.9%) and fermenters (0.6%). Please refer to **Q-Table 112**.

In the FGDs with POs, some of the farmers recall the specific post-harvest facilities that were provided by national government agencies. DA, through its program Mindanao Rural Development Program (MRDP), the predecessor of Philippine Rural Development Program, has provided some POs with solar dryer, nursery facility and even working capital. DTI has also given some POs processing equipment (dehuller and roasters).

*From FGD with Tupi Coffee Growers Association: “We received Php 5 million from the DA. We used it for machineries and equipment, building, electrification of our buildings, especially for our roasting facilities. We also have a vehicle – an Isuzu Elf Truck – which you saw. We have two buildings, a dehuller building and processing building. We also got a License to Operate from the Food and Drug Administration. We are the only facility here in South Cotabato and Region 12 with FDA license.”*



**Photo 20:** Left photo shows life-size mortar and pestle, middle photos are makeshift wooden dehullers , and rightmost photo shows a woman using an empty wine bottle to crush the cherries.

Thus, there are some farmers, wishing to add more value to their coffee, who have to access post-harvest facilities externally (15%). As to the type of facilities they want to use (with service fee), the top facilities are milling machine (3.8%), dehullers (3.5%) and solar dryer. Please refer **Q-Table 113** and

**Q-Table 114.**

The national government (i.e. DA, DAR and DTI) are known to provide processing equipment to the farmers. However, the presence of these facilities for use by farmers does not automatically guarantee high profit. One coffee influencer gives an example of government-provided roaster that did not have the right specification and incomplete fittings – which have resulted to minor accidents and batches of coffee spoiled. Another concern for the POs that have been given machineries by the

government is the lack of related skills in using and repairing broken down/faulty machineries. If not repaired or recalibrated, these post-harvest machineries become useless.

## 7.6.2 CORRELATION ANALYSIS OF POST-HARVEST LOSSES AND ADOPTION OF POST-HARVEST PRACTICES/TECHNOLOGIES

The table below shows that farms that use trapal or canvass dryer experience high post-harvest losses. On the other hand, people who practice drying using elevated platform has the relatively lower losses.

**Table 18: Correlation analysis of post-harvest losses and adoption of post-harvest practices/technologies, 2018**

Technology/Practices Adopted	$r_{pb}$	P-Value
Depulping	-0.1307*	0.000
Fermentation	-0.0714*	0.039
Washing	-0.0796*	0.021
Drying	-0.0221	0.522
Dehulling	-0.1174*	0.001
Polishing	0.0469	0.175
Grading	0.0336	0.332
Sorting/Grading	-0.0625	0.070
Harvesting: Pick ripe	0.0085	0.806
Coffee processing: Wet Process	-0.1538*	0.000
Coffee processing: Natural Process	-0.0300	0.386
Coffee processing: Honey Process	-0.0210	0.545
Drying: Pavement/patio	-0.1460*	0.000
Drying: Elevated dryer	-0.1069*	0.002
Drying: Trapal/ canvass dryer	<b>0.1135*</b>	0.001
Drying: GrainPro collapsible dryer	0.0534	0.122
Storage: Proper storage/warehouse	-0.0458	0.185
Access to post-harvest facilities	-0.0673	0.052
Membership to farmers' cooperative	0.0374	0.280
Membership to women organization	-0.1302*	0.000
Trained on coffee related technologies	-0.0383	0.269
Doing value-adding activities	0.1221*	0.0004

Note: Values in the table are the point biserial correlation coefficient ( $r_{pb}$ ) and the corresponding p-value, \* signifies significant correlation at 5% level of significance.



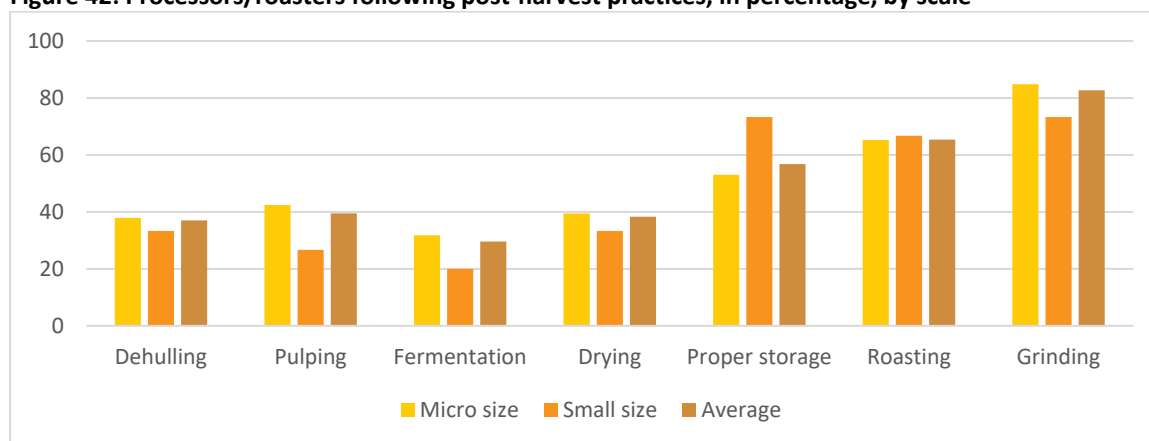


**Photo 21:** Left photo shows coffee being roasted on a pan over firewood while right photo shows a farmer packing his ground coffee at home.

### 7.6.3 MARKET SYSTEM ACTORS' POST-HARVEST PRACTICES

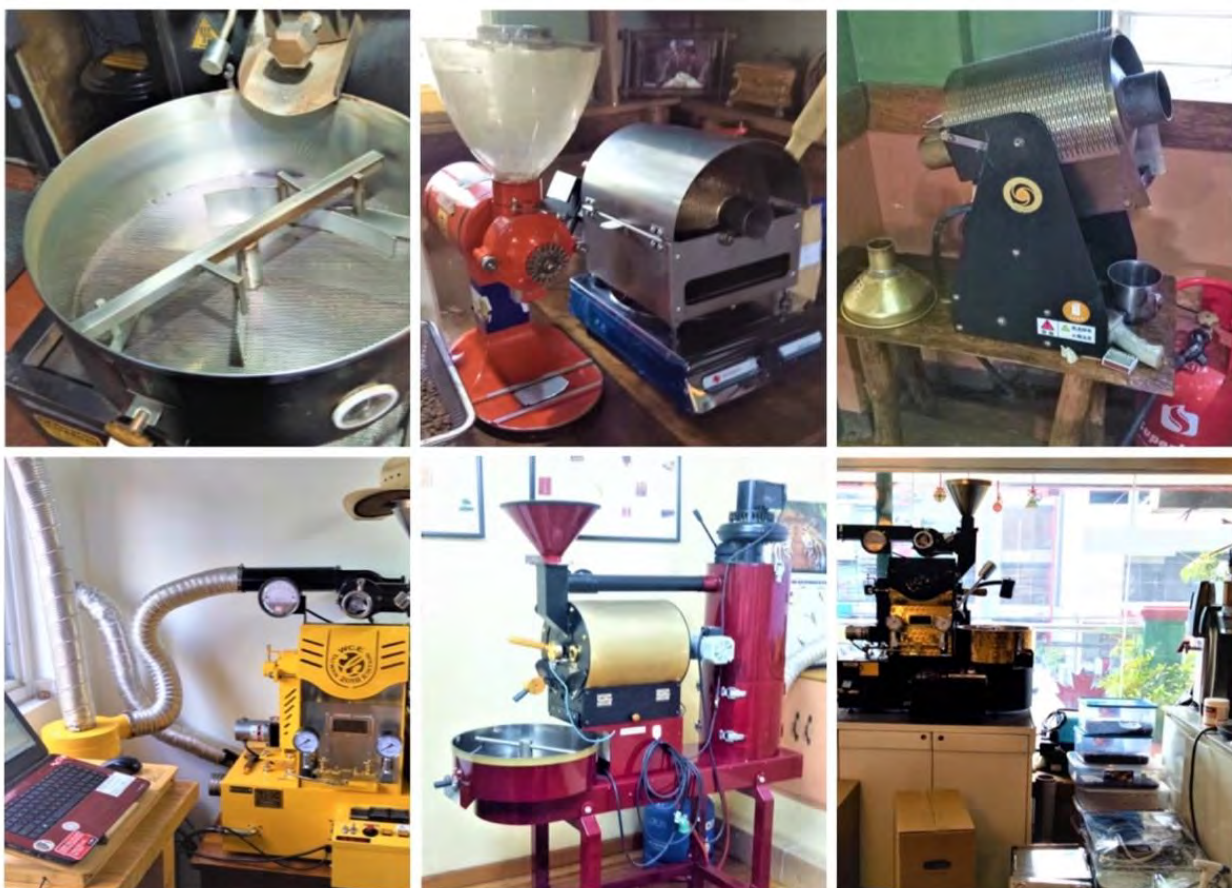
**Post-Harvest Practices and Ownership of Equipment/Facilities.** Among the processors and roasters interviewed for this baseline, majority grind coffee (82.7%) and roast (56.8%) their coffee products. Nearly a third (29.6%) undertakes the fermentation. By size of operation, micro-sized processors/roasters have higher percentages in terms of practicing post-harvest activities. Please refer to **Figure 42** and **Q-Table 115**.

**Figure 42:** Processors/roasters following post-harvest practices, in percentage, by scale



Market system actors such as processors/roasters have their own processing equipment or facilities. Each processor/roaster has at least 2 pieces of depulper and at least 1 piece of grinder. For other equipment or facilities, the ratio is 1:2 – meaning at least 1 piece of dehuller, 1 piece of fermenter, 1 piece of dryer, 1 piece of storage, and 1 piece of roaster for every 2 processor/roaster. Please refer to **Q-Table 116**.



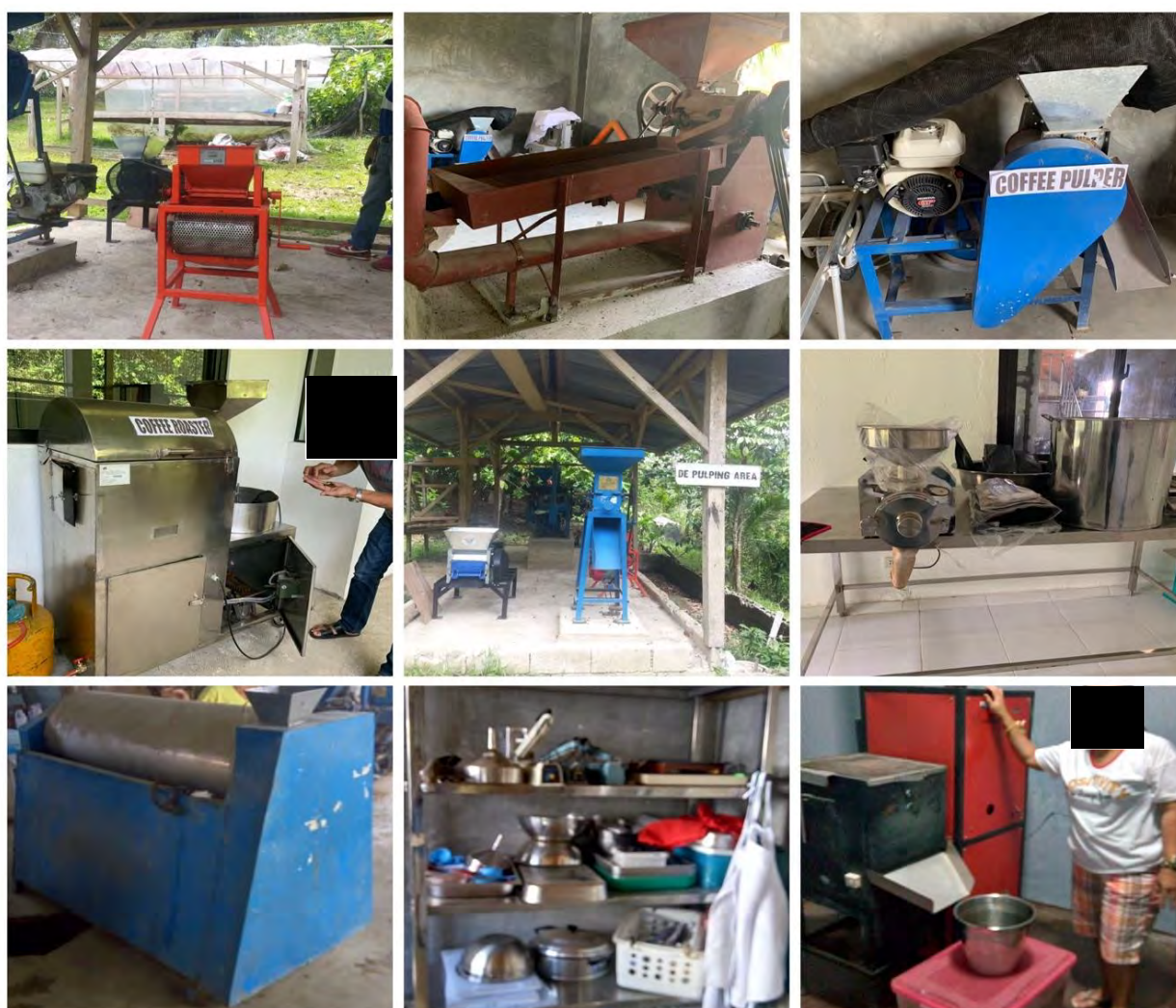
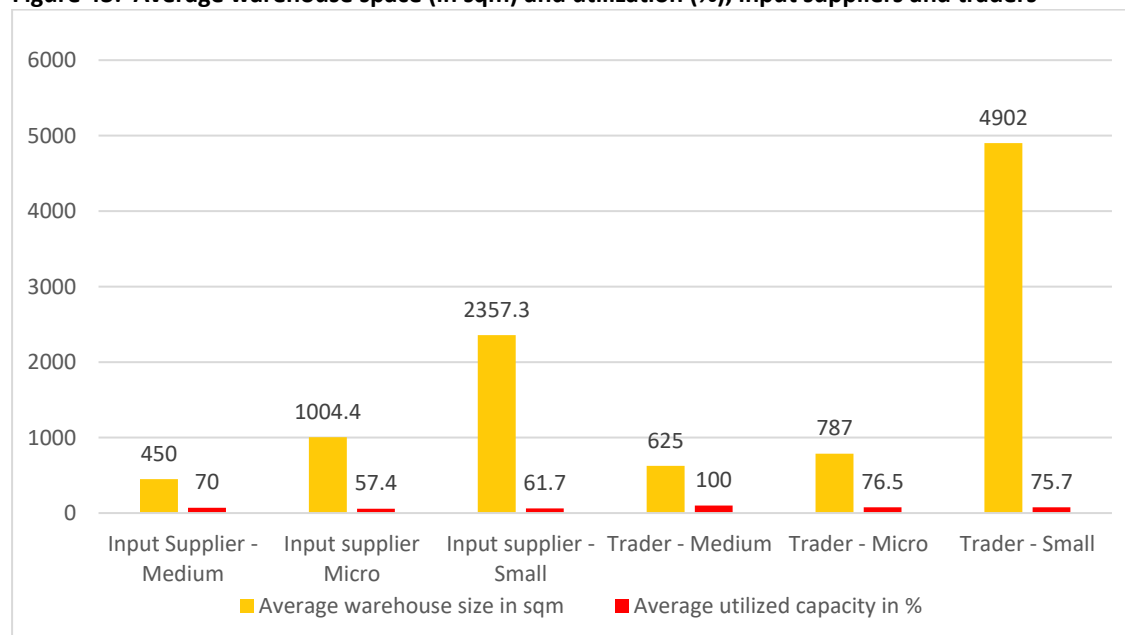


**Photo 22:** Upper row: Left photo is locally fabricated roasting machine by [REDACTED]. Middle and right photo are Cordillera Green Network's roasting equipment. Bottom row photos are imported roasting machines, left photo owned by The Red Soil Cafe, middle photo by Bean Central Roastery and right photo by [REDACTED].

The interviews with the coffee influencers have yielded a few recommendations on post-harvest practices of the processors and roasters. One recommendation is to conduct an audit or assessment to ensure that all those who passed the Q grading classes have been calibrated and that the skills learned are being applied. Another recommendation is the setting-up of premier laboratory for grading. Such laboratory is not limited to testing, but also in teaching Q-grading, good processing, harnessing sensory skills, roasting, among others. A third recommendation is on the establishment of a registry or database, which will provide information on the coffee producers, their volume and their quality as well as a list of buyers with their quality, volume and delivery requirements. Such database will allow buyers to directly from farmers/POs; it will also allow traceability of the coffee products.

**Warehouse Space and Capacity Utilization.** Input suppliers – those who sell fertilizers, pesticides and other farm tools – have a warehouse with an average size of 1,227 square meters and an average utilization of 58.5% of the space. Traders who are in the business of buy-and-sell of agricultural products also have their own warehouse. Traders have slightly bigger space at 1,882 square meters and 78.8% utilization rate. Please refer to **Figure 43**, **Q-Table 117**, and **Q-Table 118**.

**Figure 43: Average warehouse space (in sqm) and utilization (%), input suppliers and traders**



**Photo 23: Sample of the post-harvest facilities for use by POs' members.**

## 7.7 MARKETING

### 7.7.1 FARMERS' MARKETING PRACTICES

Nearly all (94.2%) of the coffee farmers interviewed in this baseline do not possess knowledge on specialty coffee, coffee cupping and specialty market. Only 4% of the farmers know about coffee cupping, 2.8% know about specialty market, and 2% specialty coffee.

Therefore, majority of them sell to all-in market<sup>32</sup> (67.6%) and a third (31.3%) sell to commercial market. Pricing for coffee is based on availability, and thus can be flexible specially if there is more supply at the market.

Only about 2.2% of the farmers interviewed have receive business development support (i.e. harvesting/producing quality coffee), while less than 1% of the farmers have received support on coffee cupping and on serving the specialty market.

Only one in every 10 farmers is actively marketing their products. Only 5 in all of 849 farmers interviewed have a formal agreement/contract with buyers; and as such, they are legally bound to fulfill the volume (and quality) conditions stated in the contract. Please see **Q-Table 119 to Q-Table 123**.

In the FGDs with the farmers, a PO in Sultan Kudarat has a “marketing officer” who does the collective marketing for the group. They have received support from the DTI, which have assisted them in conceptualizing the brand name of the coffee. However, it is not always and not all members of the said PO are inclined to sell their coffee to the cooperative; they have to pay their existing loans with the traders with their coffee produce.

One limiting factor for POs intending to market their members' produce is the level of their procurement capital – they can only buy their members' produce depending on their funds – unless the farmers are willing to wait until the coffee is processed and sold. With limited procurement capital, the POs resort to rotation or prioritization.

*From FGD Murcia Marginal Coffee Growers, Inc: “Last year, we decided to pool our resources to raise Php 30,000 to 50,000 as capital. We will buy the coffee of our members. Our buying price would be the prevailing price in Bacolod plus Php 5 pesos per kilo. It is to encourage the members that they have to maintain good quality coffee.”*

*From FGD with Atok Multi-Purpose Cooperative: “The cooperative should be the market of our coffee. However, due to lack of financing, the members sometimes are forced to sell to individual traders in order to have funds to pay the laborers during harvest.”*

Other POs sell their produce at their cooperative's office (usually, they have glass stand/cabinet to display their coffee products), some sell it at the DTI's Negosyo Centers and DTI-organized local trade fairs. Some give out free coffee samples, some sell at their local market, and others online. Other POs encourage their members to sell their roasted and ground coffee individually, particularly the members which own coffee shop.

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<sup>32</sup> All-in locally means everything is bought by the traders, regardless of the quality or volume. Sometimes, the traders impose a single price for all types of quality. Thus, in other crops, the farmers are not encouraged to pursue activities that improve quality, because the traders only have one price. There is no premium price for “quality”.



Some of the farmers shared that there are buyers who have expressed interest to directly buy coffee products from the farmers. A middleman in Negros Occidental prefers to buy newly harvested coffee (cherries) from farmers. In several FGDs, the farmers mentioned the importance of having Nestle buying stations, and perhaps the need to have something similar to that by other private firms or organizations in the future (so they will have other options where to sell, depending on the price and other arrangement).

In the interviews with coffee influencers, they said that there are already farmers and POs who produce specialty coffee. Since they are still few and the volume is still low by international standards, the Philippine specialty coffee's strongest suit is its "rarity", making it easy to market. When coffee influencers bring Philippine coffee to international trade shows, it is quickly sold out. Now they even find sourcing local coffee for international trade shows a challenge. Coffee influencers know of baristas who have worked outside the country and came back to put up own coffee shops to be personally sourcing from farmers who produce good coffee.

In addition, the coffee influencers also propose to bring the farmers and POs to market encounters, trade fairs, cupping sessions and even market auctions. These events demonstrate that good quality beans can fetch premium prices at the specialty markets. Farmers will continue farming coffee because they know there are buyers who are willing to pay premium price for good coffee. The government should continue holding the Philippine Coffee Quality Competition because it encourages the farmers to produce quality coffee and it generates international awareness of the country's burgeoning specialty coffee. Traders, processors and roasters need to reward good quality coffee with good price, a great motivator for farmers and POs.

*From KII with Coffee Influencer Commune Café: "The best assurance we could give local coffee farmers are that they have assured buyers or market. They appreciate it when they know that you own a coffee shop. But you must go to where they are located. Or, when they know that you operate a big coffee roaster and supply roasted coffee to supermarkets. They really want market access to if buyers could reach them even though farm-to-market roads are non-existent, big burden is lifted off their shoulders. Sometimes, it involves paying coffee on a promise. This is because you give a promise to buy their coffee at a given price even though you haven't seen the products yet."*

#### **Box 8: Specialty coffee producer from Davao del Sur**

One of the ACDI/VOCA's PO partners in coffee – the Balutakay Coffee Farmers Association – has been featured in the Specialty Coffee Expo held in the USA last April 2019. The association recently bagged the Philippine Coffee Quality Competition (PCQC) for its Arabica coffee before it jetted off to represent the Philippines, along with the 23 other coffee selections.

The coffee from Balutakay group, harvested from the foot of Mt. Apo in Davao del Sur, is said to have "notes of hibiscus, pineapple, lemon, green apple, thyme and basil". Balutakay was the PO pilot tested for the FGD in the PhilCAFE baseline study.

Another PO, also supported by ACDI/VOCA, during the MinPACT and now with the PhilCAFE project, is the Millennium Multi-Purpose Cooperative, which also won in the PCQC 2019 and joined the Specialty Coffee Expo.

Retrieved from <https://usa.inquirer.net/28436/top-ph-coffees-featured-in-boston-specialty-coffee-expo> and <https://www.philstar.com/lifestyle/allure/2019/05/12/1917023/philippine-coffee-perks-boston-expo>

### 7.7.2 INPUT SUPPLIERS MARKETING PRACTICES

Only a third (12 or 35.3%) of the input suppliers interviewed for this baseline study say that they actively market fertilizers, pesticides and other related supplies. Further, only 4 (or 11.8%) of the suppliers say that they have sale/procurement agreement to supply products to POs, LGUs or other coffee-funded projects. Please refer to **Q-Table 124** and **Q-Table 125**.

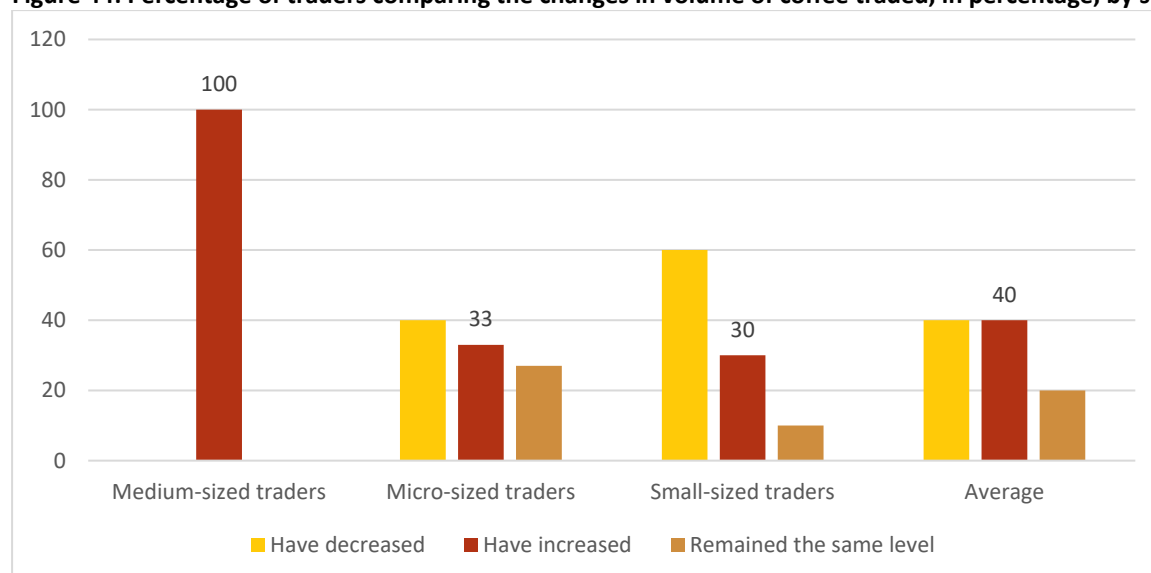
### 7.7.3 NURSERY OPERATORS' MARKETING PRACTICES

For those who operate nurseries, more than half (23 or 62.2%) are actively marketing their seedlings. Those who have procurement agreements on the supply of seedlings are 8 operators (or 21.6%). Please refer to **Q-Table 126** and **Q-Table 127**.

### 7.7.4 TRADERS' MARKETING PRACTICES

**Volume of Coffee Bought-and-Sold.** From the 45 traders we have interviewed for the baseline, all medium-sized traders have revealed that they have experienced an increase in their volume of coffee (comparing 2018 to 2017) while only about a third for micro-sized and small-sized traders (33.3% and 30% respectively) observed an increase. Please refer to the **Figure 44** and **Q-Table 128**.

**Figure 44: Percentage of traders comparing the changes in volume of coffee traded, in percentage, by scale**

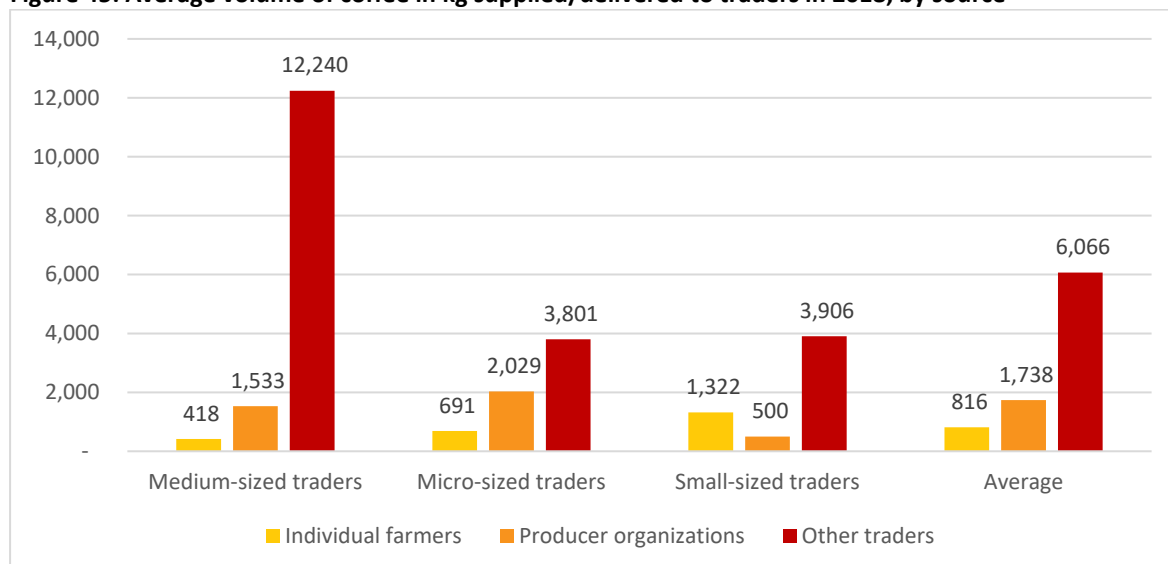


Traders accept whatever volume is delivered to their store by the farmers or POs. In CAR, there is a medium-sized trader who allows farmers to sell at least 5 kg of coffee while in Region 11, there is a medium-sized trader who can absorb as much as 12,000 kg of delivery – most likely from POs – at a given time. The volume of coffee accepted by traders will depend on the available supply, on the capacity of their warehouse, and the forward market. Please refer to **Q-Table 129** for the full table.

**Sources of Coffee Products for Buy-and-Sell.** Traders have three (3) major suppliers of coffee: these are individual farmers, who make up 70.8%; other traders (17.9%) and producer organizations (11.3%). Volume-wise, it is the “other traders” (therefore, traders also sell to each other) who deliver in considerable quantity. Based on the volume sold, those who deliver in large quantity are the other traders, to mid-sized traders as much as 12,240 kg in 2018. Please refer to **Figure 45**, **Q-Table 130** and **Q-Table 131**

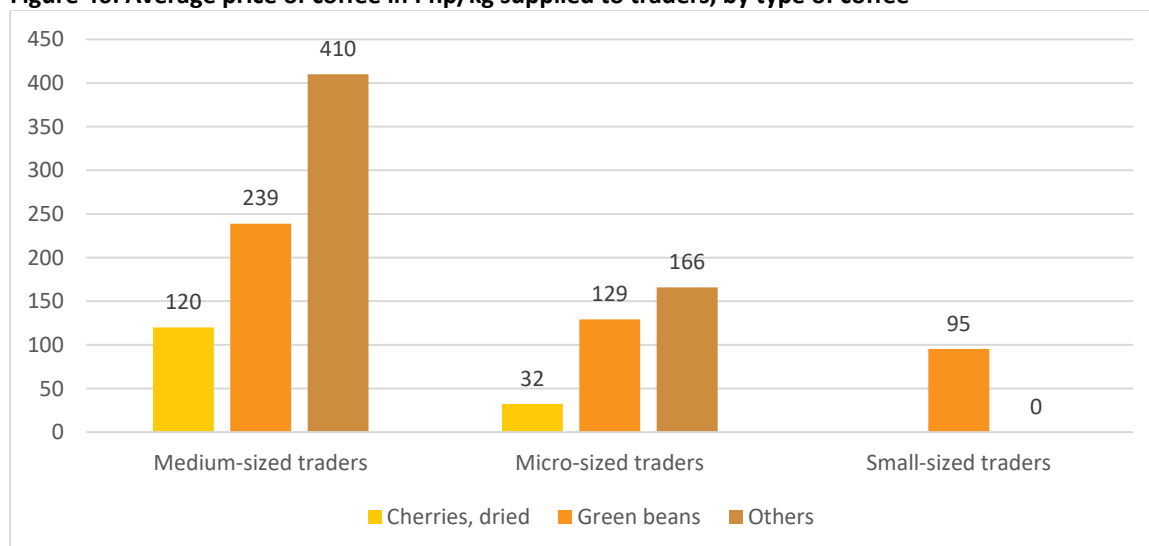


**Figure 45: Average volume of coffee in kg supplied/delivered to traders in 2018, by source**



The price of coffee supplied also differs by form and by type of suppliers. Rounded-off to nearest peso, medium-sized traders pay the highest for other forms of coffee at an average of Php 410/kg. GCBs sold to traders fetch between Php 129 to 239 per kg. Please refer to **Figure 46 and Q-Table 132**.

**Figure 46: Average price of coffee in Php/kg supplied to traders, by type of coffee**



**Destination of Coffee Bought-and-Sold.** Traders pass on the coffee they bought from farmers/POs to their forward markets: exporters, individuals, and processors/roasters. Exporters sell coffee to markets outside the Philippines, individuals are on-the-spot buyers, and processors/roasters are those who undertake value-adding activities, including roasting/grinding, packaging and serving.

In 2018, processors/roasters are the biggest market of traders – where an average of 19,331 kg was delivered by a typical trader. One exporter bought 1,119 kg of GCB last year in one of the traders. Traders, in most cases, sell coffee in the form of GCBs to their forward markets. Please see **Q-Table 133**.

From KII Coffee Influencer UCC: “It’s aggressive now. Like, I mean, I thought, I don’t think we’d put up an academy if the coffee industry isn’t looking up. Consumer’s level is picking up. When the consumer level is picking up, the number of retailers is opening, the number of roasters is booming, micro roasters. There are distributors across the, so from the consumer side it’s very aggressive, very aggressive. I think, that consumers are increasing. We have more tourism; we have more Millennials are growing up. You have younger students, population’s increasing”



Photo 24: Coffee traders located selling different coffee products.

The baseline study finds out that processors/roasters generally offer to buy GCBs with higher price compared to individuals. Below shows the comparison of prices paid by the traders’ forward markets. Please see **Figure 47** and **Q-Table 134**.

**Figure 47: Price/kg of GCB sold by traders to forward markets, by scale**

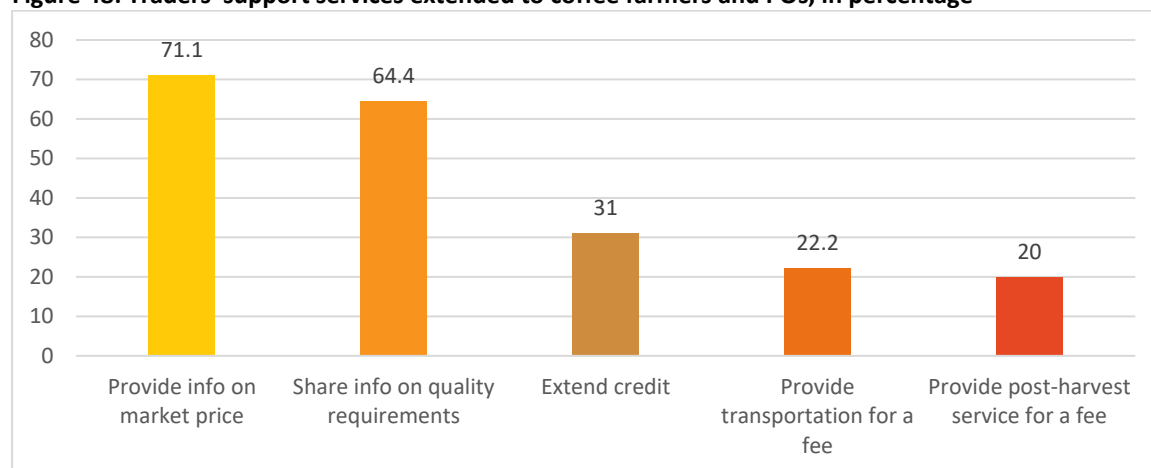


Note: Figures in decimals rounded off.

**Traders' Marketing-Related Activities.** Only a third (15 or 33.3%) of the traders actively market their products, using social media (17.8%) and website (11.1) as their main tools. Only 6 of 45 traders (13.13%) have existing buying agreement with their forward markets.

To increase the number of suppliers, the traders extend additional services, such as sharing of information on the prevailing price of coffee and the quality requirements of buyers. Better informed, the individual farmers, POs and other coffee suppliers can make decision on where, when and whom to sell their coffee products. Please refer to **Figure 48**.

**Figure 48: Traders' support services extended to coffee farmers and POs, in percentage**

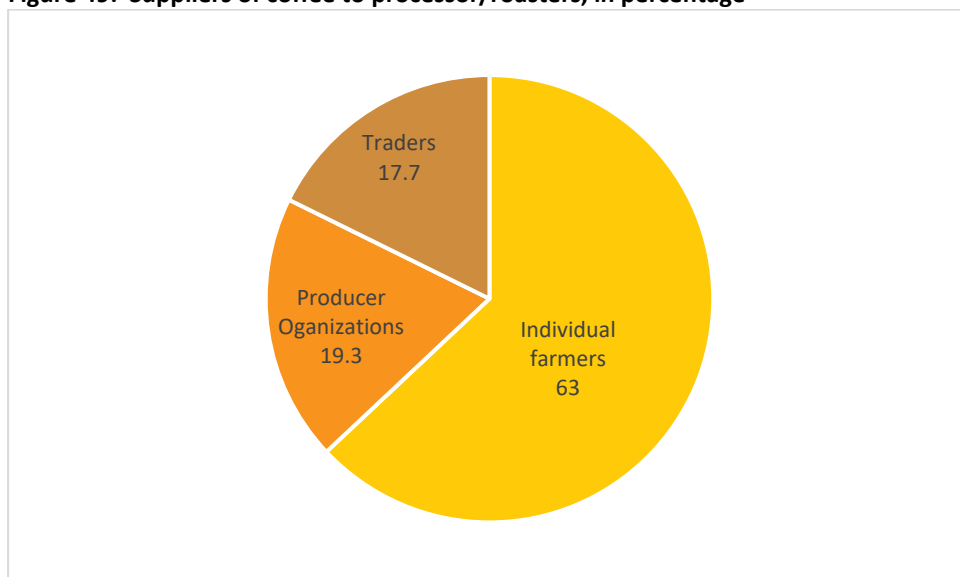


While there are 14 (31%) of traders who extend credit (see above), there are only 13 (28.9%) who provide cash advance. Cash advance binds the farmer (borrower) to sell his/her produce to the trader. For the full tables, please refer to **Q-Table 135 to Q-Table 139**.

### 7.7.5 PROCESSORS/ROASTERS' MARKETING PRACTICES

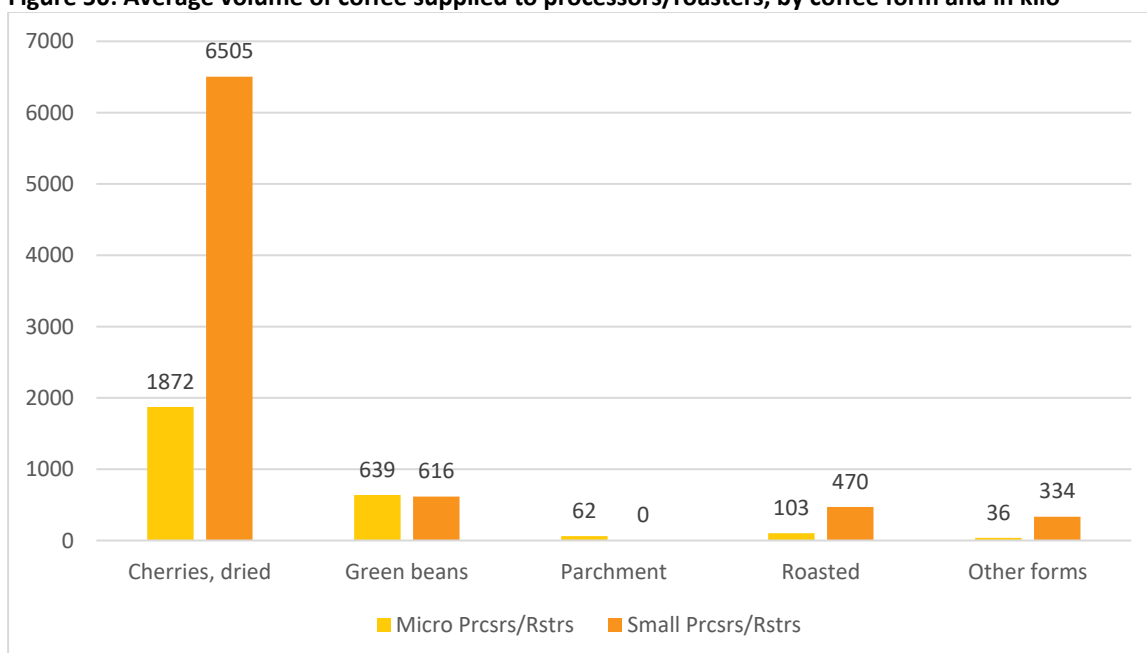
**Sources of Coffee Products for Processing/Roasting.** Processors and roasters accept deliveries from three main sources of coffee: from individual farmers with a share of 63%; from producer organizations (POs consolidate their members' produce and deliver as a group) which represents 19.3%, and from traders at 17.8%. Individual farmers can just deliver their coffee products to the processors/roasters based on the availability of their coffee products and their need. The POs likely consolidate first the produce of their members and deliver the coffee once a target volume is reached. Traders, who are in the business of buy-and-sell, may deliver coffee to processors and roasters depending on their supply. Please refer to **Figure 49** and full table at **Q-Table 140**.

**Figure 49: Suppliers of coffee to processor/roasters, in percentage**

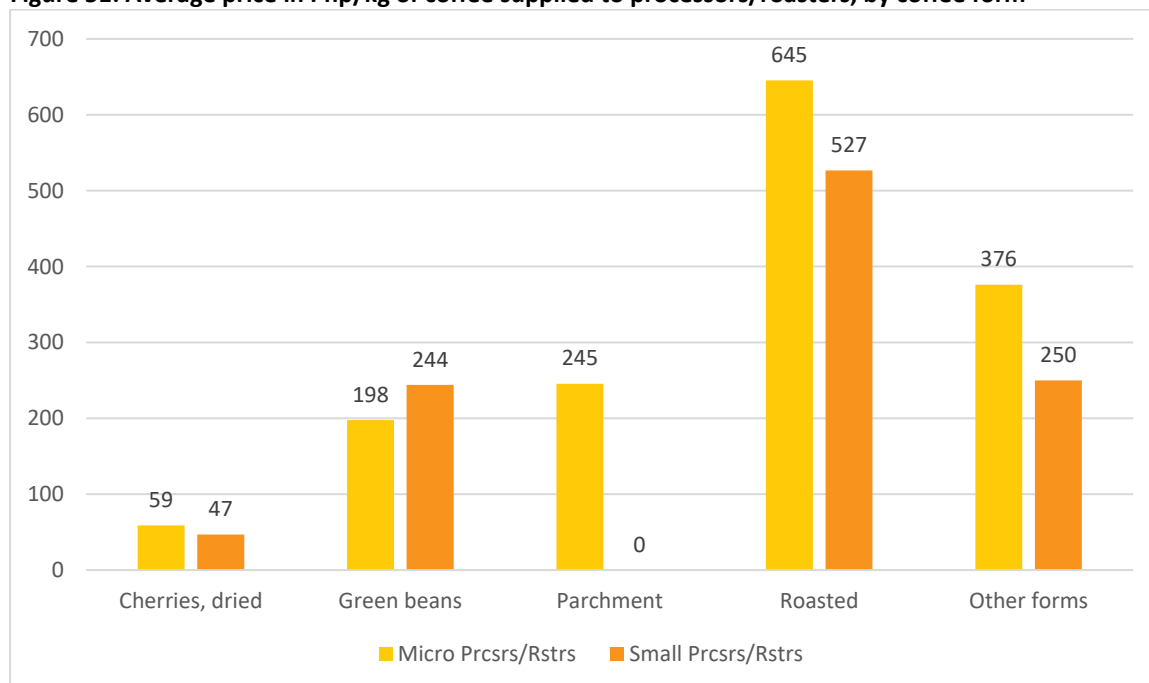


The average volume of coffee delivered varies greatly. **Figure 50** shows that suppliers of coffee have delivered higher volume to small processors/roasters with an average of 6,508 kg of fresh cherries in 2018. From the baseline, sources like producer organizations and traders deliver in large quantities. On the other hand, **Figure 51** shows the price paid per kilo of coffee supplied in different forms to processors and roasters. Please refer to **Q-Table 141** and **Q-Table 142**.

**Figure 50: Average volume of coffee supplied to processors/roasters, by coffee form and in kilo**



**Figure 51: Average price in Php/kg of coffee supplied to processors/roasters, by coffee form**



Note: Figures in decimal rounded off.

Processors/roasters said that half (51.9%) of their individual suppliers are women coffee farmers. Nearly one-fifth (18.5%) of these processors/roasters offer premium price for coffee sourced from women farmers. Nearly half (49.5%) of women coffee farmers are said to be willing to increase the volume of production and delivery to processors/roasters. Please refer to **Q-Table 143 to Q-Table 145**.

**Destination of Processed/Roasted Coffee.** Many of the processors/roasters say that they produce and sell specialty coffee (46.9%). Specialty coffee represents a third (34.5%) of the coffee sold, and almost the same level of customers purchase specialty coffee products (32.1%).

These customers of processed/roasted coffee are local (institutional) buyers such as supermarkets, which represent 49% of their market, followed by individual customers (48.3%) and the remaining are exporters (2.7%). Average volume of coffee delivered in 2018 to these buyers are 115 kg for individual buyers, 606 kg for exporters, and 2,260 kg to local (Institutional buyers). Please refer to **Q-Table 146 to Q-Table 148**.

**Marketing and Buying Agreements of Processors/Roasters.** Half of the processors/roasters say that they actively market their operation (41%), using primarily social media (29.6%) and participation to exhibits/fairs (19.8%) to create awareness. Twenty-five (25 or 30.9%) of the processors/roasters are doing research and development to create more coffee-based products.

Please refer to **Q-Table 149, Q-Table 150 and Q-Table 151**.



## 7.8 INCOME

### 7.8.1 AVERAGE ANNUAL HOUSEHOLD INCOME

The average annual household income of coffee farmers in 2018 is Php 186,451. Income from farm accounts for 43%, while the remaining 57% comes from non-farm income. Farm income is generated from two sources: first is the income that comes from crop production and/or processing and livestock/poultry raising (called as on-farm); and second, from doing farm work in other's farms (called as off-farm).

Non-farm income is derived from small business activities, skilled and unskilled labor, employment, practice of profession (by members of the households), and other sources (pension, remittances or assistance from the government. Take note that Region 4A has the highest income, coming from employment, professional fees, remittances, and business activity.

The comparison for the regional averages is shown below as **Figure 52** and for the full table as **Q-Table 152**.

**Figure 52: Average annual household income, in Php, 2018, by region**

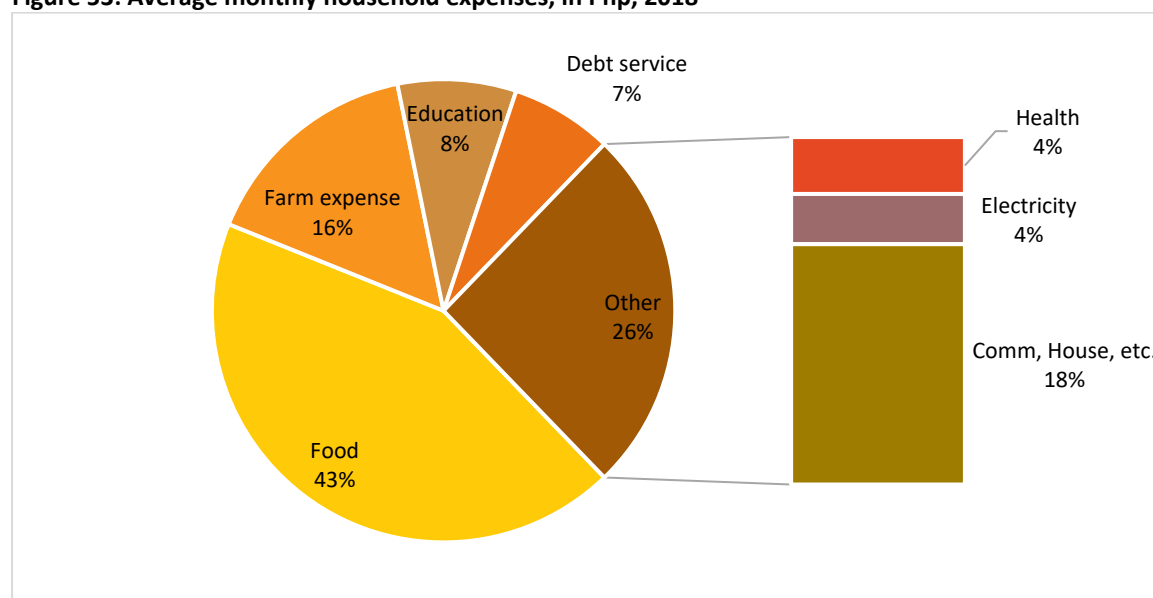


### 7.8.2 AVERAGE ANNUAL HOUSEHOLD EXPENDITURES

The respondents provide basis for obtaining the average annual expenditures of a typical coffee-farming household. Household expenditures refer to the expenses made by the household members for their personal/household consumption as well as payment for house, health, debt, and other expenses. The baseline study also considered farm expense as part of the household expenditures.

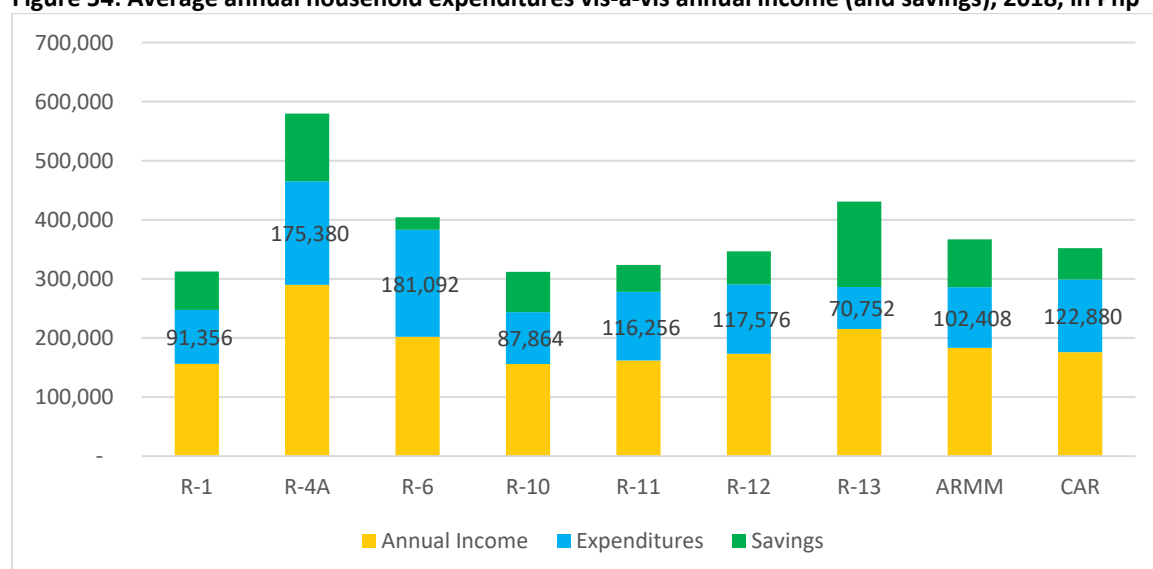
For 2018 and among the 849 household respondents, the average annual expenditures per household is Php 124,548. Food emerges as the top expense of the household and followed by farm expenses and education. Please refer to **Figure 53** and **Q-Table 153**

**Figure 53: Average monthly household expenses, in Php, 2018**



Further, **Figure 54** presents the regional averages on annual expenditures and compared these with the regional averages on annual income. The difference is the household savings (if in the negative, dis-saving or the household spent more than what it earned).

**Figure 54: Average annual household expenditures vis-a-vis annual income (and savings), 2018, in Php**



#### Box 9: Average Family Income and Expenditure

Based on the 2015 Family Income and Expenditure Survey, the average Filipino family income per year was Php 267,000 while the average family expenditure was Php 215,000. This resulted to an average savings per family of Php 52,000.

Based on the same survey and citing from another source, an average Filipino farmer was earning only Php 108,800 in 2015.

Retrieved from: <https://psa.gov.ph/sites/default/files/attachments/hsd/article/tab1.pdf> and <http://bworldonline.com/content.php?section=Opinion&title=how-are-filipino-farmers-faring-versus-thai-farmers&id=143569>

### 7.8.3 AVERAGE ANNUAL COFFEE INCOME, COST AND NET INCOME PER HECTARE

Farm income generally represents 43% of the total household income, which includes coffee and if the households intercrop, income from other crops and farm labor too. The baseline study has collected information on the income derived from and expenses related to **coffee production** (thus, excluding income from other crops and from doing farm labor in other farms). Household respondents vary in the type of coffee form produced – some are producing and then selling coffee in fresh cherries form, some are drying their cherries first before selling, and some are performing additional steps to sell their coffee as GCB.

The average income from coffee is Php 47,354 per hectare in 2018 less average cost of Php 5,188 per hectare, and the average net income per hectare is Php 42,166. Region 4-A has the highest average income and cost per hectare, while Region 6 has the lowest income and Region 1 has the lowest cost per hectare. Dried cherries appear to have the highest income per hectare, at Php 70,668 in 2018. Income from GCB is Php 42,129 per hectare while income from fresh cherries is only Php 30,137 per hectare.

Please refer to **Figure 55** and **Q-Table 154**.

**Figure 55: Average gross income, cost and net income per hectare from coffee, in Php, 2018 and by region**



#### Box 10: PSA Estimates on Coffee Production Costs and Returns

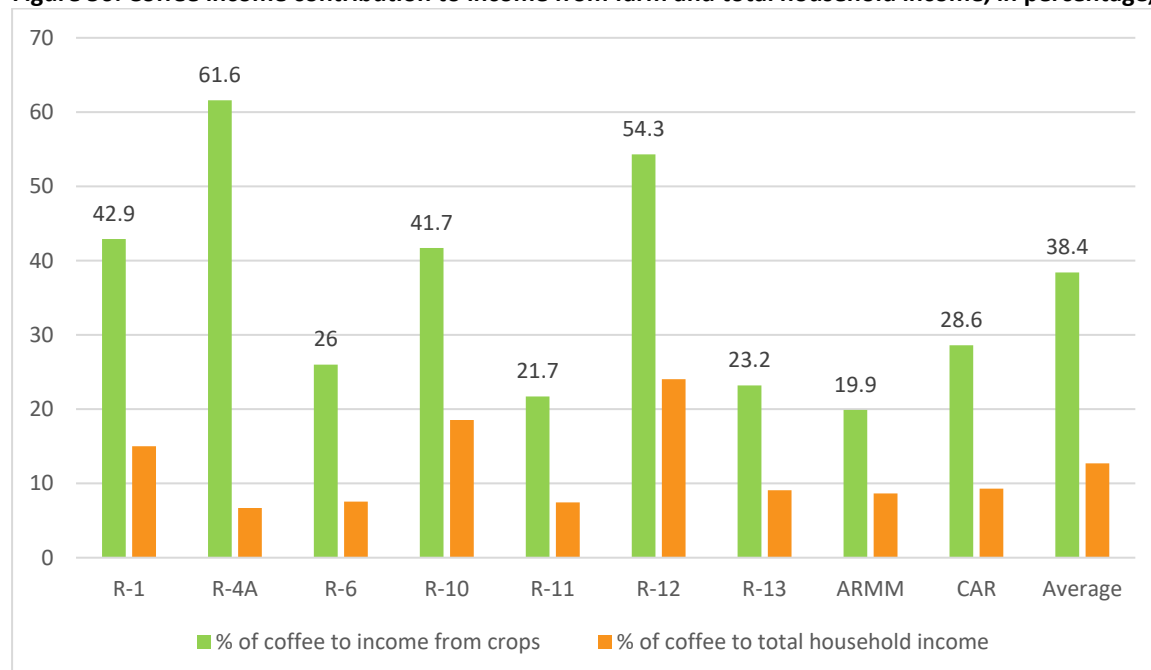
The PSA released an estimate on the 2017 average production cost of a one-hectare coffee farm. The annual total cost was estimated at Php 51,330 and the gross returns was estimated at Php 51,330. PSA used an average yield of 550 kilos per hectare and farm gate price of Php 93/kg. An average coffee farmer made a net profit of Ph 14,403 per hectare in 2017.

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### 7.8.4 COFFEE CONTRIBUTION TO FARM AND TOTAL HOUSEHOLD INCOME

Coffee contributes 38.4% to on-and off-farm income and shares about 12.71% to the total household income. It makes the highest contribution to income of farmers in Region 4-A at 61.6%, while lowest contribution to the income of farmers in ARMM at 19.9%. Please refer to the regional comparison in **Figure 56 and Q-Table 155**

**Figure 56: Coffee income contribution to income from farm and total household income, in percentage, 2018**



In the FGDs with POs, female participants acknowledge the contribution of coffee in sending their children to school. However, income from coffee is realized only during limited time of the year, necessitating the households to have other sources.

### 7.8.5 CORRELATION ANALYSIS ON COFFEE SALES, 2018

The table below shows that the factors that will have effect on sales are the area devoted to coffee, the level of expenditures, the number of workers in the farm, and the number of people who can be hired to help with work during busy seasons. Further, intercropping, practices of pest and disease management, and picking up of red cherries will also help in getting good sales from coffee.

**Table 19: Correlation analysis on coffee sales, 2018**

Variables	$r / r_{pb}$	P-Value
Age	0.0209	0.5462
Sex	0.0524	0.1300
Marital Status	0.0466	0.1778
Years of formal education	0.1134*	0.0010
Membership to farmers' cooperative	0.046	0.1833
Membership to women organization	-0.0376	0.2764
Household size	-0.0149	0.6657
Land ownership	0.0189	0.5845
Land area devoted to coffee	0.5604*	0.0000

Variables	$r/r_{pb}$	P-Value
Years of farming	0.0189	0.5852
Cropping system	0.2457*	0.0000
Annual production expenditure	0.3623*	0.0000
Post-harvest losses	0.0791*	0.0221
With external sources of planting materials	0.0182	0.5981
With existing credit	0.0301	0.3845
With knowledge on specialty coffee	-0.0085	0.8050
With knowledge on coffee cupping	0.0978*	0.0046
With knowledge on specialty market	-0.0085	0.8064
With Access to post harvest facilities	0.0891*	0.0099
Value adding activities	0.0690*	0.0457
number of laborers	0.3025*	0.0000
Number of family labor	0.0636	0.0658
Number of wage earner labor	0.2935*	0.0000
Trained in coffee production	0.1077*	0.0018
Practiced farm diversification	-0.0808*	0.0193
Practiced Plant renewal	0.0651	0.0595
Practiced Pest management	0.1570*	0.0000
Practiced Disease management	0.1520*	0.0000
Practiced Pruning and rejuvenation	0.064	0.0642
Practiced Soil-related fertility and conservation	-0.0481	0.1638
Practiced Depulping	0.0286	0.4078
Practiced Fermentation	0.0657	0.0573
Practiced Washing	0.1038*	0.0026
Practiced Drying	0.1424*	0.0000
Dehulling	0.012	0.7295
Polishing	0.0029	0.9337
Grading	0.0512	0.1383
Sorting/Grading	0.0692*	0.0453
Storage	0.1088*	0.0016
Harvesting: Pick ripe	0.1515*	0.0000
Coffee processing: Wet Process	0.0535	0.1220
Coffee processing: Natural Process	-0.0406	0.2404
Coffee processing: Honey Process	0.0199	0.5659
Drying: Pavement/patio	0.0368	0.2871
Drying: Elevated dryer	0.0619	0.0733
Drying: Trapal/ canvass dryer	0.1136*	0.0010
Drying: GrainPro collapsible dryer	-0.0119	0.7306
Storage: Proper storage/warehouse	0.1220*	0.0004
Weekly hours of farm work of men	0.0275	0.4591
Weekly hours of farm work of women	0.0094	0.8323
Men participation in training	0.1221*	0.0004
Male youth participation in training	-0.0177	0.6088
Women participation in training	0.0676	0.0505
Female youth participation in training	0.0059	0.8644



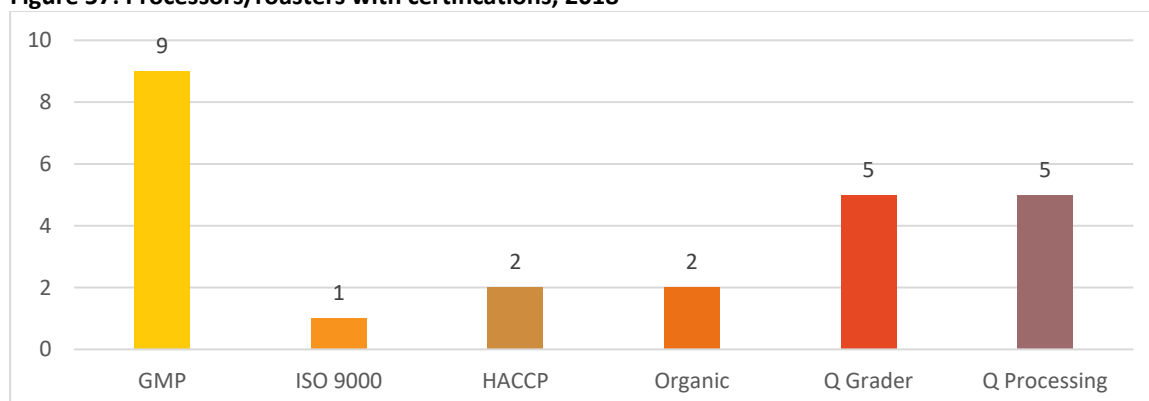
Variables	$r/r_{pb}$	P-Value
Major involvement of men in availing of credit decision	0.1398*	0.0000
Major involvement of women in availing of credit decision	-0.0365	0.2908
Major involvement of male youth in availing of credit decision	0.0079	0.8183
Major involvement of female youth in availing of credit decision	-0.0164	0.6347
Number of men workers	0.2672*	0.0000
Number of women workers	0.1055*	0.0022
Number of youth male workers	0.1888*	0.0000
Number of youth female workers	0.0186	0.5918

Note: Values in the table are the Pearson correlation coefficient (r) and the corresponding p-value, \* signifies significant correlation at 5% level of significance.

### 7.8.6 CERTIFICATION

From the 81 processors/roasters interviewed for the baseline study, only 19 have obtained quality certifications (23.5%). By type, there are 9 processors/roasters who have Good Manufacturing Practice (GMP) and there are 5 processors/roasters licensed Q-grader and attended Q-processing. Please refer to **Figure 57** and **Q-Table 156**.

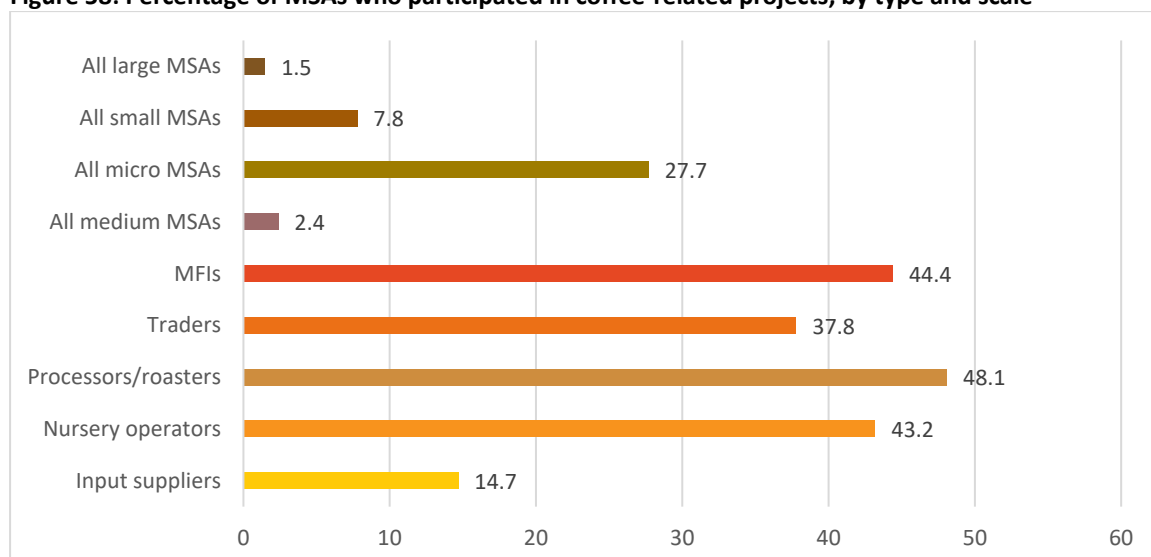
**Figure 57: Processors/roasters with certifications, 2018**



### 7.8.7 PARTICIPATION IN COFFEE-RELATED PROJECTS OF GOVERNMENT, NGOs AND PRIVATE SECTOR

Some of the input suppliers, nursery operators, processors/roasters, traders and the MFIs have participated in coffee-related projects funded/coordinated by the government (national agencies and LGUs), NGOs and the private sector. The figure below shows the participation of the MSAs in terms of percentage. For the full tables, please refer to **Q-Table 158** to **Q-Table 162**.

**Figure 58: Percentage of MSAs who participated in coffee-related projects, by type and scale**



### 7.8.8 YOUTH POPULATION AND COFFEE FARM INVOLVEMENT

On the average, a large number (32.2%) of the household members in all 9 regions belong to the 15-29 years old age range. This indicates a huge youth population that can be potentially harnessed for coffee production and its marketing. However, FGD participants from multi-purpose cooperatives, IP and coffee growers' associations in as far as Sagada and Kalinga in the north to Maguindanao and Surigao in the south are divided on how they perceive the youth. Some FGD discussants share how the youth provide valuable support to coffee farming through their labor (Atok, Tupi, Kalinga Dupligan, Sultan Kudarat, Wao), and particularly in Tupi, and Atok, how they help in the marketing of coffee. However, other FGD participants (from Maragusan, Talaingod, Kaugayan, Higaonon, Murcia and Kahayagan) perceive the youth as disinterested in coffee farming because they allegedly see coffee farming as unprofitable; they are more interested in their studies, in their gadgets, or in paid labor and blue-collar jobs here and abroad. The respondents opine that the youth should be exposed more and trained in coffee farming in order to develop a love for it. The cooperative members in Murcia and Maragusan express their concern for the future of coffee farming if very few of the youth will continue what their parents have started.

This concern is supported by the survey finding that both male and female youth hardly participate in trainings about coffee farming (refer back to **Q-Table 70**). This can be attributed to the absence of a youth development strategy aimed at increasing the youth's role in and appreciation for coffee farming. None of the coffee growers' associations and cooperatives mentioned having a youth strategy or youth development plan that seeks to strengthen youth participation in coffee production. While a few coffee farmers groups mentioned having youth programs such as scholarships, youth laboratory, savings schemes and immersion, many of these are not focused on coffee production. One cooperative in Mindanao cited that although they have on-the-job trainings for the youth, it is not for coffee but for cacao and banana. Among the 18 coffee growers associations and cooperatives nationwide who were included in the FGD, only two multi-purpose cooperatives stated training interventions directed at increasing the youth's appreciation for coffee – one mentioned training them in coffee bean roasting while another stated training the youth in coffee plant propagation, processing and packaging. (Atok MPC and Kahayagan MPC).

*From FGD with Atok Multi-Purpose Cooperative: “We were taught by our parents to plant coffee and it is also our desire to hand down to our children the same knowledge. It is important that our children will now that coffee is livelihood. We involve them in the farm during weekends to do weeding or pruning. They need to know how to run the farm so they can manage it on their own when we are gone.”*

Sadly, the provincial and regional government offices, coffee councils and coffee influencers do not provide a significantly better approach towards youth involvement in coffee production. Like the coffee growers and farmers associations/cooperatives, almost all of these stakeholders do not have a strategy or development plan targeting the youth’s role in coffee enhancement. The Offices of the Provincial Agriculturist in the different provinces, for instance, do recognize the importance of the youth, even designate youth-in-charge personnel, promote *Gulayan sa Paaralan* and hold Provincial Youth Achievement Day annually to recognize the children and youth of farmers. However, all these are directed at the youth in general (e.g., members of the 4H Club) and not at the youth of coffee farmers. No comprehensive strategic plan has been developed to ensure an increase in the number of enthusiastic young people knowledgeable specifically about coffee farming. Only one PAO in Northern Luzon claims to have a specific strategy to consciously engage the youth in coffee production. Even state universities do not have programs that intentionally target young coffee farmers; researches, demonstration farms and coffee laboratories are indeed established but the target learners are either the students themselves (who may not be children of coffee growers) or the adult coffee farmers in general.

The absence of a strategy directed at the children-youth of coffee farmers may slow down the implementation of the Philippine Coffee Industry Roadmap mentioned by one Regional Coffee Council during the interview. The Philippine Coffee Industry Roadmap 2017-2022 is expected to “guarantee a coffee industry that is cost-competitive, aligned with global quality standards, reliable and environment-friendly, which will provide sustainable benefits to farmers, processors, traders, and exporters, and attain food security and poverty alleviation.” The lead agencies for this road map are the Department of Agriculture and Department of Trade & Tourism. It was developed in consultation with the regional coffee councils.

#### **7.8.9 COFFEE MARKET SYSTEM**

**Rules, Roles, Relationships, Responsibility and Results.** Most of the coffee farmers do not have access to relevant information and technology. Majority (88.8%) of the respondents say that they rely on their own efforts to source out coffee production technology, 3.9% said that they have external support while 7.3% said that they also exerted effort to access new technology (Q-Table 34). Sources of external support is mostly from the LGU/national government (4.2%), support from NGO (3.4%), 1.1% support from a trader (Q-Table 35).

A large majority of the coffee farmers still do not have much appreciation for specialty coffee and coffee quality and standards. Overall, only 2% has knowledge of specialty coffee, 4% on coffee cupping and 2.8% on specialty market. While there are a number of market systems actors that are offering farm inputs and technical information to farmers, only a very small number of farmers are able to access the resources. In the same manner, there are a number of government programs that are offering technical assistance to coffee farmers but only a few farmers benefited from these government programs. The ability to access resources such as inputs, technology and market information may be affected by the modalities of information dissemination used. Baseline data show that some of the factors that affected the farmers’ ability to access resources may be their level of education, their access to communication technology, the roles played by women and men

in decision-making and the organizational affiliation of the farmers. These factors should be considered when choosing modalities of information dissemination.

*From FGD with Atok Multi-Purpose Cooperative: “I am the one who attend the meetings, so I make the decision; but I talk to my husband about it. The farm is now entrusted to me, so I make the decisions. My husband has another job. “*

Based on Table 17, the roles and responsibilities played by the members of the household members in decision-making may affect productivity. For instance, more women and youth involvement in the farm have significant positive impact on production, more women involved cooperatives and financing groups may increase access to credit, while greater involvement in men in making decisions to access credit may have significant positive impact on productivity

Working relationships established at the community level may have significant impact on the ability of the farmers to access resources and the market. Areas which have higher organizational affiliation tend to have higher production rate per hectare and have higher sales volume. This may be due to the fact that organizations such as cooperatives served as farm financiers, farm input providers and product buyers at the community level.

**Value Creation and Market Linkages – Cooperatives.** Regions with lowest sales rate do not sell to cooperatives (Region 11 and ARMM) while regions with highest sales rate trade with coops (CAR and Region 10). Regions with highest sales rate have high to medium range educational attainment but lower ethnicity and with the highest rate of organizational affiliation. Regions with lowest sales rate have high to medium educational attainment with high ethnicity and medium to low organizational affiliation. This means that the level of education does not necessary affect productivity and sales. However, ethnicity and organizational affiliation may have some effect on the production and sales level. Cultural practices especially in the areas of decision-making and involvement of women may have impact on the production rate.

Access to credit and external support is minimal in all areas. Overall, 98% of the farmers said that they used their previous year’s sale as capital for their present business operations and only 1% (Q-Table 72) of the respondents said that their business capital came from external support.

Only 14.1% (Q-Table 77) said that they have existing credit/loans. This may because only 13% (Q-Table 72) of the farmers said that they have difficulty accessing credit. Most of these farmers who had difficulty in access credit facilities came from Region 6 (52.3%), Region 12 (15.8%) and Region 11 (14.8%). Overall, 46.3% (Q-Table 80) said that they have future need to borrow money. As it is, there is a huge gap between the number of farmers who were able to get loans as compared to the number of farmers who want to borrow money.

**Market Linkages – Business Incubators and Business Development Services.** Overall, only 16.5% of the respondents across all sites received or are still receiving support from social/business development program. A large chunk of these are in Region 13 (80%), Region 6 (36.9%), Region 10 (27.4%). The type of business development program received by farmers are good quality coffee (2.2%), specialty market (0.5%), others (0.4%) and coffee cupping (0.1%) (Ref tab 67). Overall, only 10.7% of the farmers are doing value-adding activities. A large chunk of these farmers can be found in Region 6 (49.9%) while small groups can be found in Region 12 (12.8%), Region 1 (10%) and Region 11 (9.9%) (Q-Table 106). This means that the is a huge gap in terms of access to information and technology.

**Market Linkages – Producers and Processors.** Thirty-one percent (31.3%) of the coffee farmers are catering to the commercial market, 0.7% are selling to premium market and 0.4% are selling to the specialty market (Q-Table 119). A large chunk (68.7%) are catering to the all-in market. The current

coffee market adheres to the principles of supply and demand. Prices of coffee is flexible or is based on the existing supply and demand (98%). Only 0.8% of the sellers based their prices on the coffee cupping score. This means that at present, when it comes to pricing, the Philippine coffee market still do not take much consideration on the quality of the coffee but rather, the market is still driven by the traditional supply and demand factors.

**Market Linkages – Models of Communication.** There are no clean models of information established among coffee farmers. External sources of market information is 4.2% support from traders, 2.2% shared by fellow coffee farmers, 1.4% from other buyers, 0.8% from other sources and 0.1% from NGO (Q-Table 35). This goes to show trade information sharing is very minimal between the farmers and the market systems actors which resulted to weak market linkages and low sales volume.

**Quality and Standards.** Around 39.1% (Q-Table 81) of the respondents borrow money for coffee production, 8.2% for post-harvest facilities, 5.7% for purchase of land for expansion and 5.1% for marketing. Majority (88.8%) of the respondents said that they rely on their own efforts to source out coffee production technology, 3.9% said that they has external support while 7.3% said that they had external support and they also exerted effort to access new technology (Q-Table 34). Sources of external support is mostly from the LGU/national government (4.2%), support from NGO (3.4%), 1.1% support from a trader. Overall, only 2% has knowledge of specialty coffee, 4% on coffee cupping and 2.8% on specialty market (Q-Table 119). Overall, only 15% of the farmers have external access to post-harvest facilities (Q-Table 113).

Nature of the value adding activities improve the quality of existing coffee products by following recommended technologies (7.3%), adding value to coffee products by implementing processes to increase price and expand market (2.4%) and improving post-production efficiency by adopting appropriate tools/equipment and processes (dehulling, fermentation and others) (Q-Table 107).

Overall, 81% of the farmers interviewed want to engage in value-adding (Q-Table 164).



## 8 SUMMARY OF KEY FINDINGS

In relation to the PhilCAFE Results Framework	Summary of findings
<b>Production:</b> <ul style="list-style-type: none"> <li>Increased use of improved agricultural techniques and technologies</li> <li>Improved farm management (operations, financial)</li> <li>Improved quality of land and water resources</li> </ul>	<ul style="list-style-type: none"> <li>Ageing coffee farmers with an average age of 49-year-old (and the average years in coffee farming is 23 years old)</li> <li>Coffee farming households have at least two (2) members working in their own coffee farm. However, during peak season, half of the households hire agricultural workers.</li> <li>Less than half (41%) of the coffee households have heads who are members of cooperative or farmer organization.</li> <li>Average area planted with coffee is one hectare and the average total farm area for all crops is 2.2 hectares. Majority (70%) of the coffee households are now practicing intercropping.</li> <li>One-fourth (25.8%) of the coffee households do not practice any coffee production technology.</li> <li>Very few coffee households have access to production support: <ul style="list-style-type: none"> <li>Only 8% have access to external sources of planting materials.</li> <li>Only 9.6% have access to fertilizers and pesticide support (e.g. subsidized by the national and local government)</li> <li>Only 1.6% have access to credit.</li> <li>Only 33.3% have been trained specific to coffee production technologies.</li> <li>Only 17% are applying farm management practices (i.e. record keeping, farm planning, etc.)</li> </ul> </li> <li>Nearly all (98.4%) of the coffee households re-invest last year's profit back into their farm.</li> </ul>
<b>Post-harvest:</b> <ul style="list-style-type: none"> <li>Increased value added to post-production agricultural products</li> </ul>	<ul style="list-style-type: none"> <li>Majority of the coffee households (71.7%) pick their cherries ripe.</li> <li>Very few (10.7%) of the coffee households undertake value adding activities.</li> <li>Drying (83.4%) is the most prevalent post-harvest process adopted by the coffee households.</li> <li>About a third (34%) of the coffee households claim they have experienced post-harvest losses. The top reasons for the losses are the beans exposure to rain while in the process being dried (24.3%) and from strip harvesting (24.1%).</li> <li>Majority (71.5%) of the coffee households do not own any type of post-harvest facilities. Some households, however, have external access to post-harvest facilities. For households with own facility, solar dryer (11.5%) is the most common.</li> <li>MSAs have simple to sophisticated post-harvest equipment, particularly roasting and grinding machines.</li> </ul>
<b>Yield</b>	<ul style="list-style-type: none"> <li>The average number of trees is 1,111 per hectare.</li> <li>On average, the age of coffee trees 23 years old.</li> <li>The average yield per hectare in GCB form: <ul style="list-style-type: none"> <li>Arabica with 652.9 kg/ha</li> <li>Robusta with 475 kg/ha</li> <li>Excelsa with 441 kg/ha</li> </ul> </li> </ul>

In relation to the PhilCAFE Results Framework	Summary of findings
	<ul style="list-style-type: none"> <li>○ Liberica with 419 kg/ha.</li> <li>● Factors that have positive effect on the yield are: <ul style="list-style-type: none"> <li>○ Higher years of formal schooling</li> <li>○ Intercropping practice</li> </ul> </li> <li>Soil-related fertility and conservation practice</li> </ul>
<b>Income</b>	<ul style="list-style-type: none"> <li>● The average net income from coffee activities in 2018 is Php 42,166 per hectare (from the gross income of Php 47,354 less cost of 5,188).</li> <li>● Coffee contributes 38.4% to a coffee household's farm income, or in comparison to the total household income, only 12.71%.</li> <li>● Top factors that have positive effect on income are: <ul style="list-style-type: none"> <li>○ Land area develop to coffee</li> <li>○ Annual production expenditures</li> <li>○ Number of household and hired workers</li> <li>○ Number of men and youth male workers</li> <li>○ Cropping system</li> <li>○ Practice of pest and disease management</li> <li>○ Pick ripe</li> <li>○ Drying practice</li> <li>○ Major involvement of men on availing of credit decision</li> <li>○ Men participation in training</li> </ul> </li> </ul>
<b>Relations and partnerships</b>	<ul style="list-style-type: none"> <li>● Less than half of the MSAs have participated in coffee-related projects of the government, NGOs and other organizations: <ul style="list-style-type: none"> <li>○ Only 5% among input suppliers</li> <li>○ Only 43.2% among nursery operators</li> <li>○ Only 48.1% among processors and roasters</li> <li>○ Only 37.8% among traders</li> <li>○ Only 44.4% among microfinance/lending institutions</li> </ul> </li> <li>● DA, DTI and DAR are the most active government agencies extending support to coffee farmers and organizations.</li> <li>● State universities are offering agriculture-related courses and providing extension services.</li> <li>● Provincial Agricultural Offices have identified coffee as part of their priority crops and as such, they provide support (albeit small from Php 50,000 to Php 2 million per year) to fund training on production, community organizing, distribution of planting materials, and distribution of post-harvest facilities.</li> <li>● Regional Coffee Councils are composed of the government and private sector stakeholders. Each region charts its own priority activities for the year. Their main function is to assist the implementation and monitoring the activities proposed in the Philippine Coffee Industry Roadmap.</li> <li>● Coffee influencers are advocating for increase of yield and improvement of coffee quality. They put emphasis on the access to quality planting materials, the adoption of coffee production and post-harvest technologies,</li> </ul>

## 9 LESSONS LEARNED

The baseline study confirms the following:

1. The relatively low productivity and quality at the farmer's level is a confluence of many factors – more prominently their limited access to training, information, credit and other services. Addressing these concerns and gaps will be overwhelming for PhilCAFE and its partners; however, the remaining four (4) years will be sufficient to generate good practices and engender lasting relationships.
2. There is a growing interest among the private sector to contribute in propping up the local coffee industry and such should be tapped to allow coffee experience revival and become one of the reasons to lure the youth to engage in agriculture.
3. Coffee is a “friendly” crop – it is not labor intensive, such as women and youth are able to participate in many of the farm activities; it is a source of income to indigenous people living in the uplands; it helps in preventing soil erosion. When taken care of well, coffee trees will keep on bearing cherries and providing sustainable income to coffee households.

## 10 FULL PMP TABLES WITH BASELINE VALUES

The baseline values in the below PMP table is the current state of the population and none of these results were achieved via PhilCAFE assistance.

Indicator No.	Indicator Level	PERFORMANCE INDICATOR	Baseline Values
1	Output	Number of individuals participating in USDA food security programs	65
		Male	37
		Female	28
		Age 15-29	8
		Age 30+	57
		People in the Government	0
		Proprietors of USDA-private sector firms	0
		People in Civil Society	0
		Producers	0
		Small holder	35
		Non- Small Holder	30
2	Output	Number of individuals benefiting indirectly as a result of USDA assistance	258
3	Output	Number of individuals who have received short-term agricultural sector productivity or food security training as a result of USDA assistance	55
		New	0
		Continuing	55
		Male	32
		Female	23
		Producers	55
		People in firms	9
		People in government	0
		People in civil society	0
4	Outcome	Value of annual sales of farms and firms receiving USDA assistance (USD)	6,661,451
		Cherries	1,245,213
		Small holder Producers	1,102,888
		Male	667,960
		Female	434,929
		Mixed	-
		15-29	75,563
		30+	1,027,325
		Mixed Age	-
		Non-Small Holder Producers	4,592
		Male	-
		Female	4,592
		Mixed	

Indicator No.	Indicator Level	PERFORMANCE INDICATOR	Baseline Values
		15-29	-
		30+	4,592
		Mixed Age	
		Microenterprise	27,106.52
		Male	27,004.35
		Female	102.17
		Mixed	-
		15-29	-
		30+	27,106.52
		Mixed Age	-
		Small and Medium Enterprise	110,626.09
		Male	110,626.09
		Female	-
		Mixed	-
		15-29	-
		30+	110,626.09
		Mixed Age	-
		Large Enterprise or Corporation	-
		Male	-
		Female	-
		Mixed	-
		15-29	-
		30+	-
		Mixed Age	-
		Green Coffee Beans	5,416,237.26
		Small holder Producers	4,136,221.90
		Male	2,422,488.36
		Female	1,713,733.54
		Mixed	-
		15-29	534,532.34
		30+	3,601,689.56
		Mixed Age	-
		Non-Small Holder Producers	737,779.93
		Male	565,995.15
		Female	171,784.78
		Mixed	
		15-29	8,459.77
		30+	729,320.15
		Mixed Age	
		Microenterprise	311,473.26
		Male	-
		Female	-



Indicator No.	Indicator Level	PERFORMANCE INDICATOR	Baseline Values
		Mixed	311,473.26
		15-29	-
		30+	-
		Mixed Age	311,473.26
		Small and Medium Enterprise	230,762.17
		Male	-
		Female	-
		Mixed	230,762.17
		15-29	-
		30+	-
		Mixed Age	218,655.51
		Large Enterprise or Corporation	-
		Male	-
		Female	-
		Mixed	-
		15-29	-
		30+	-
		Mixed Age	-
5	Outcome	Volume of commodities sold by farms and firms receiving USDA assistance (in MT)	10,539
		Cherries	5,929
		Green Coffee Beans	4,610
6	Outcome	Number of Jobs attributed to USDA assistance	87,129
		Full-time Employment	9,266
		Male	6,787
		Female	2,479
		Part-time Employment	77,862
		Male	70,842
		Female	7,020
7	Outcome	Value of coffee exported from Philippines (in USD)	42,157
8	Outcome	Yield of targeted agricultural commodities among program participants with USDA assistance (in MT-GCB)	0.49
		Small holder	0.53
		Male	0.51
		Female	0.56
		15-29	0.49
		30+	0.54
		Non-smallholder	0.22
		Male	0.23
		Female	0.20
		15-29	0.19
		30+	0.22

Indicator No.	Indicator Level	PERFORMANCE INDICATOR	Baseline Values
9	Outcome	Number of hectares under improved management practices or technologies that promote improved climate risk reduction and/or natural resources management with USDA assistance	2,330.44
10	Outcome	Number of hectares under improved management practices or technologies with USDA assistance	13,503.80
		Crop Land	9,434.94
		Conservation/Protected Area	2,637.55
		Farm Diversification	3,134.32
		Crop genetics	9,287.30
		Pest management	9,714.70
		Disease Management	4,309.11
		Soil-related Fertility and Conservation	2,376.78
11	Outcome	Harvesting & Postharvest Handling, PHH	13,027.97
		Number of individuals in the agriculture system who have applied improved management practices or technologies with USDA assistance	11,426
		Smallholder Producers	11,203
		Farm Diversification	3,802
		Crop genetics	6,716
		Pest management	3,278
		Disease Management	3,385
		Soil-related Fertility and Conservation	3,197
		Harvesting & Postharvest Handling, PHH	11,203
		Male	6,316
		Female	4,887
		15-29	1,481
		30+	9,722
		Non-Smallholder Producers	223
		Farm Diversification	76
		Crop genetics	134
		Pest management	65
		Disease Management	67
		Soil-related Fertility and Conservation	64
		Harvesting & Postharvest Handling, PHH	223
		Male	144
		Female	79
		15-29	13
		30+	210
		People in government	0
		Farm Diversification	0
		Crop genetics	0
		Pest management	0

Indicator No.	Indicator Level	PERFORMANCE INDICATOR	Baseline Values
		Disease Management	0
		Soil-related Fertility and Conservation	0
		Harvesting & Postharvest Handling,PHH	0
		Male	0
		Female	0
		15-29	0
		30+	0
		People in firms	0
		Farm Diversification	0
		Crop genetics	0
		Pest management	0
		Disease Management	0
		Soil-related Fertility and Conservation	0
		Harvesting & Postharvest Handling,PHH	0
		Male	0
		Female	0
		15-29	0
		30+	0
		People in civil society	0
		Farm Diversification	0
		Crop genetics	0
		Pest management	0
		Disease Management	0
		Soil-related Fertility and Conservation	0
		Harvesting & Postharvest Handling,PHH	0
		Male	0
		Female	0
		15-29	0
		30+	0
12	Outcome	Number of enterprises established or strengthened to supply improved inputs to coffee farmers	14
13	Output	Number of individuals accessing agriculture-related financing as a result of USDA assistance	220
		Debt	220
		Cash	220
		In-kind	0
		Individuals/Microenterprises	220
		Small and medium enterprises	0
		Large enterprise and corporations	0
		Male	125
		Female	95
		Mixed	220

Indicator No.	Indicator Level	PERFORMANCE INDICATOR	Baseline Values
		15-29	27
		30+	193
		Mixed Age	220
		Non-debt	0
		Cash	0
		In-kind	0
		Individuals/Microenterprises	0
		Small and medium enterprises	0
		Large enterprise and corporations	0
		Male	0
		Female	0
		Mixed	0
		15-29	0
		30+	0
		Mixed Age	0
14	Output	Number of individuals participating in group-based savings, microfinance, or lending programs with USDA assistance	0
15	Output	Number of loans disbursed as a result of USDA assistance.	3,130
16	Output	Value of agriculture-related financing accessed as a result of USDA assistance (in USD)	226,404.71
		Debt	226,404.71
		Cash	226,404.71
		In-kind	-
		Individuals/Microenterprises	26,404.71
		Small and medium enterprises	-
		Large enterprise and corporations	-
		Male	128,718.77
		Female	97,685.94
		Mixed	-
		15-29	27,524.77
		30+	198,879.94
		Mixed Age	-
		Non-debt	0
		Cash	0
		In-kind	0
		Individuals/Microenterprises	0
		Small and medium enterprises	0
		Large enterprise and corporations	0
		Male	0
		Female	0

Indicator No.	Indicator Level	PERFORMANCE INDICATOR	Baseline Values
		Mixed	0
		15-29	0
		30+	0
		Mixed Age	0
17	Output	Number of technologies, practices, and approaches under various phases of research, development	0
18	Output	Number of farmers able to mention at least three farm management practices	5,324
19	Output	Number of host government or community derived risk management plans formally proposed, adopted, implemented or institutionalized with USDA assistance	0
		Government	0
		Community	0
		Proposed	0
		Adopted	0
		Implemented	0
		Institutionalized	0
20	Output	Number of organizations with increased performance with USDA assistance	0
		Research and educational	0
		Private sector firms	0
		Producer associations	0
		Extension organizations	0
		Government agencies	0
		Non-governmental and not-for-profit organizations	0
		Women's group	0
21	Outcome	Value of new USG commitments and new public and private sector investment leveraged by USDA to support food security and nutrition	0
		Host Government	0
		Other public sector	0
		Private	0
		New USG commitment	0
		Leveraged by USDA	0
22	Outcome	Number of farmers and firms adding value to postproduction agricultural products	2,894
23	Outcome	The volume of specialty coffee certified as meeting international standards (in MT).	2,069.66
24	Output	Number of registered firms (inc POs and enterprises) n target sectors that obtain certifications.	10
25	Output	Number of supported POs and enterprises reporting increased efficiency in their post-production processes	0



Indicator No.	Indicator Level	PERFORMANCE INDICATOR	Baseline Values
26	Output	Number of POs and enterprises who are using at least three improved practices like dehulling, fermentation, pulping, drying, proper storage, etc for coffee	129
27	Output	Total increase in installed storage capacity (dry or cold storage) as a result of USDA	0
28	Output	Number of enterprises that invest in improved post-harvest infrastructure (inc grant support).	0
29	Output	Number of enterprises using improved media in marketing products	119
30	Output	Number of agreements signed between buyers and sellers as a result of project facilitation	0
31	Output	Number of supported firms reporting increased efficiency in their transaction	0
32	Output	Number of supported buyer/seller groups with increased management capacity	0
33	Output	Number of government staff including university employees and extension agents, trained on coffee production, processing and trade	5
34		Number of policies, regulations and/or administrative procedures in each of the following stages of development as a result of USDA assistance (FTF 8).	0
		Stage 1	0
		Stage 2	0
35	Output	Number of agricultural producers reporting access to at least one source of current agricultural market information.	16
36	Outcome	Number of private enterprises, producer organizations, water user associations, women's groups, trade and business associations, and community-based organizations (CBOs) that applied improved techniques and technologies as a result of USDA assistance (FTF).	274
		Producer organizations	0
		Private enterprise	274
37	Output	Number of public-private partnerships formed as a result of USDA assistance	8
		Agricultural production	3
		Agricultural post-harvest transformation	0
		Multi-focus	5







# Annexes

**Annex 1: USA coffee production, consumption and trade data, in 1000 60kg bags**

Attribute	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018
Beginning Stocks	5,333	4,250	4,580	5,100	5,450	6,025	6,117	6,199	7,190
Arabica Production	53	53	46	42	51	45	40	33	32
Robusta Production	0	0	0	0	0	0	0	0	0
Other Production	0	0	0	0	0	0	0	0	0
Production	53	53	46	42	51	45	40	33	32
Bean Imports	20,240	22,460	23,700	23,360	24,550	23,525	25,100	25,810	24,450
Roast & Ground Imports	0	0	0	0	0	0	0	160	115
Soluble Imports	630	650	125	340	365	470	85	510	225
Imports	20,870	23,110	23,825	23,700	24,915	23,995	25,185	26,480	24,790
<b>Total Supply</b>	<b>26,256</b>	<b>27,413</b>	<b>28,451</b>	<b>28,842</b>	<b>30,416</b>	<b>30,065</b>	<b>31,342</b>	<b>32,712</b>	<b>32,012</b>
Bean Exports	0	0	0	0	0	0	0	0	0
Roast & Ground Exports	615	450	405	365	580	380	60	0	0
Soluble Exports	0	0	0	0	0	0	0	0	0
Exports	615	450	405	365	580	380	60	0	0
Rst,Ground Dom. Consum	20,761	21,733	22,821	22,687	23,446	23,098	24,998	25,012	25,610
Soluble Dom. Cons.	630	650	125	340	365	470	85	510	225
Domestic Consumption	21,391	22,383	22,946	23,027	23,811	23,568	25,083	25,522	25,835
Ending Stocks	4,250	4,580	5,100	5,450	6,025	6,117	6,199	7,190	6,177
<b>Total Distribution</b>	<b>26,256</b>	<b>27,413</b>	<b>28,451</b>	<b>28,842</b>	<b>30,416</b>	<b>30,065</b>	<b>31,342</b>	<b>32,712</b>	<b>32,012</b>

Source: Extracted from <https://comtrade.un.org/Data/>

**Annex 2: Philippine coffee production, consumption and trade data, in 1000 60kg bags**

Attribute	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018
Beginning Stocks	124	470	90	165	95	100	100	500	400
Arabica Production	20	35	30	30	25	25	25	25	25
Robusta Production	225	425	425	425	425	450	400	450	425
Other Production	0	0	0	0	0	0	0	0	0
Production	245	460	455	455	450	475	425	475	450
Bean Imports	450	360	510	480	160	185	685	420	560
Roast & Ground Imports	0	0	0	0	0	0	0	0	0
Soluble Imports	1,900	1,625	2,770	3,400	2,985	3,570	5,500	6,000	5,500
Imports	2,350	1,985	3,280	3,880	3,145	3,755	6,185	6,420	6,060
<b>Total Supply</b>	<b>2,719</b>	<b>2,915</b>	<b>3,825</b>	<b>4,500</b>	<b>3,690</b>	<b>4,330</b>	<b>6,710</b>	<b>7,395</b>	<b>6,910</b>
Bean Exports	0	0	0	0	0	0	0	0	0
Roast & Ground Exports	0	0	0	0	0	0	0	0	0
Soluble Exports	0	0	0	0	0	0	0	0	0
Exports	0	0	0	0	0	0	0	0	0
Rst,Ground Dom. Consum	125	125	100	100	100	100	200	250	400
Soluble Dom. Cons.	2,124	2,700	3,560	4,305	3,490	4,130	6,010	6,745	6,110
Domestic Consumption	2,249	2,825	3,660	4,405	3,590	4,230	6,210	6,995	6,510
Ending Stocks	470	90	165	95	100	100	500	400	400
<b>Total Distribution</b>	<b>2,719</b>	<b>2,915</b>	<b>3,825</b>	<b>4,500</b>	<b>3,690</b>	<b>4,330</b>	<b>6,710</b>	<b>7,395</b>	<b>6,910</b>

Source: Extracted from <https://comtrade.un.org/Data/>



### Annex 3: PhilCAFE Pre-Intervention Matching Analyses

#### PHILCAFE PRE-INTERVENTION MATCHING ANALYSES

Perfect matching would require matching each individual or unit in the treatment group with a person or unit in the comparison group that is identical on all relevant observable characteristics, such as age, education, religion, occupation, wealth, attitudes to risk, and so on. Clearly, this is not possible. But nor is it necessary. However, there are other matching methods which are practical and do ensure balance, of which one of the most common approaches is propensity score matching. In propensity score matching, matching is not on every single characteristic but on a single number: the propensity score.

The propensity score is the estimated probability of being in the treatment group given the observable characteristics from a regression model of participation (Rosenbaum and Rubin 1983). It creates a comparison group from untreated observations by matching treatment observations to one or more observations from the untreated sample, based on observable characteristics. Treated units are matched to untreated units with a similar propensity score.

The propensity score is a conditional probability. More specifically, it is the likelihood of a person taking part in the intervention given their observable characteristics. This probability is obtained from the “participation equation”: a probit regression in which the dependent variable is dichotomous, taking the value of 1 for those who will take part in the intervention, and 0 if they will not. Table A shows the estimated coefficients of the PhilCAFE participation equation needed to generate propensity score.

Table A Estimated coefficients of the participation equation

Probit regression			Number of obs		=	699
			LR chi2(19)		=	59.33
			Prob > chi2		=	0.0000
Log likelihood = -454.83664			Pseudo R2		=	0.0612
type	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
age	.0133989	.0038438	3.49	0.000	.0058651	.0209327
sex	-.012423	.100039	-0.12	0.901	-.2084957	.1836498
maritalstatus	-.1978344	.1307642	-1.51	0.130	-.4541275	.0584586
org_hhead	-.4134047	.1354858	-3.05	0.002	-.678952	-.1478574
farmorg_hhead	.1103251	.1381745	0.80	0.425	-.160492	.3811421
educt	.0465364	.0140791	3.31	0.001	.0189418	.074131
hh_size	.0376793	.0228392	1.65	0.099	-.0070846	.0824433
land_ownership	-.2323556	.1273372	-1.82	0.068	-.4819319	.0172208
crop_system	-.1283995	.153455	-0.84	0.403	-.4291658	.1723668
farm_size	-.003775	.0162368	-0.23	0.816	-.0355987	.0280486
coffee_farm_size	.0274259	.0427476	0.64	0.521	-.0563579	.1112097
active_marketing	.2595092	.2365438	1.10	0.273	-.2041081	.7231266
acces_explanting	-.0771777	.1872536	-0.41	0.680	-.4441881	.2898327
with_credit	.0656966	.1465609	0.45	0.654	-.2215575	.3529508
dif_acc_credit	.1747665	.1316049	1.33	0.184	-.0831744	.4327074
acces_postfaci	.0666142	.1412331	0.47	0.637	-.2101975	.3434259
with_value_add	-.0733883	.154371	-0.48	0.635	-.3759498	.2291732
dprodtech	.0693159	.1058739	0.65	0.513	-.1381932	.2768249
dposttech	.7206737	.2268242	3.18	0.001	.2761065	1.165241
_cons	-.7628782	.3255418	-2.34	0.019	-1.400928	-.124828

Using the propensity score, we examine the common support region (Table B). Result suggest that 97% of the observations of treatment and comparison are matched, only 20 observations of the treated are unmatched and should be drop in the statistical comparison of the outcomes.

Table B. Matching of the treatment and comparison groups, PhilCAFE

psmatch2: Treatment assignment	psmatch2: Common support		Total
	Off suppo	On suppor	
Untreated	0	348	348
Treated	20	331	351
Total	20	679	699

Figure A and Table C are the graphical and statistical evaluation of the matching. The graphical analysis shows that both groups are well fitted. The mean of the variables of the control and comparison groups are presented with the corresponding biases, at 5% level of significance, the biases are statistically insignificant implying good matching.

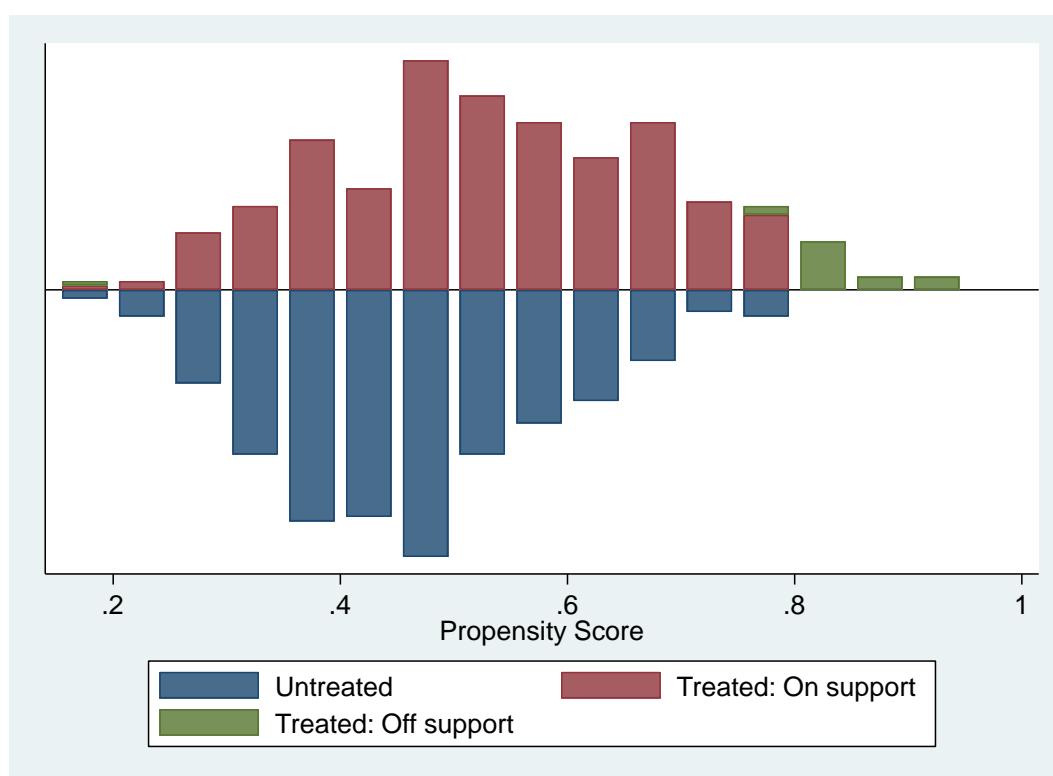


Figure A. Graphical Evaluation of the Matching, All

Table C. Statistical test for matching evaluation

Variable	Mean		%bias	t-test		V(T) / V(C)
	Treated	Control		t	p> t	
age	51.94	53.079	-8.1	-1.06	0.288	1.06
sex	.54683	.58308	-7.3	-0.94	0.348	.
maritalstatus	.79456	.75831	9.4	1.12	0.264	.
org_hhead	.52568	.54985	-4.9	-0.62	0.534	.
farmorg_hhead	.35045	.38973	-8.1	-1.05	0.296	.
educt	7.4622	7.3112	4.1	0.51	0.613	0.80*
hh_size	4.4743	4.432	1.7	0.27	0.786	1.60*
land_ownership	.77039	.71601	13.5	1.60	0.110	.
crop_system	.13293	.16616	-9.5	-1.20	0.231	.
farm_size	3.9418	4.3827	-8.3	-0.90	0.370	0.82
coffee_farm_size	1.5379	1.7918	-12.8	-1.31	0.191	0.70*
active_marketing	.05136	.02719	10.8	1.60	0.110	.
acces_explanting	.07855	.08459	-2.2	-0.28	0.777	.
with_credit	.13897	.08761	14.8	2.09	0.037	.
dif_acc_credit	.20544	.21752	-3.0	-0.38	0.704	.
acces_postfaci	.19033	.20242	-3.0	-0.39	0.696	.
with_value_add	.14502	.18127	-9.8	-1.26	0.207	.
dprodtech	.51057	.50755	0.6	0.08	0.938	.
dposttech	.06344	.04834	6.3	0.85	0.398	.

### Analysis of the Outcomes

Several outcome variables were tested using the matched and unmatched observation, corresponding t-statistic were presented for each indicator. Outcome indicators include farm employment, post-harvest losses, cost per hectare, revenue (aggregate and by form of coffee produced), farm income, total income, and yield per hectare (aggregate and by form of coffee produced). Results were presented below.

#### 1. Farm Employment

Variable	Sample	Treated	Controls	Difference	S.E.	T-stat
total_labor	Unmatched	5.36752137	6.04597701	-.678455644	.380250005	-1.78
	ATT	5.28700906	5.70996979	-.422960725	.596837851	-0.71

#### 2. Coffee Post-harvest Losses

Variable	Sample	Treated	Controls	Difference	S.E.	T-stat
losses	Unmatched	23.6438746	26.6522989	-3.00842421	1.88684568	-1.59
	ATT	24.1510574	24.4320242	-.280966767	2.67998259	-0.10

#### 3. Annual Coffee Production Cost per hectare

Variable	Sample	Treated	Controls	Difference	S.E.	T-stat
totalannualcos~a	Unmatched	7854.32593	6437.66954	1416.65639	802.722575	1.76
	ATT	7680.05224	9965.18731	-2285.13508	1206.98806	-1.89

#### 4. Coffee Revenue

Variable	Sample	Treated	Controls	Difference	S.E.	T-stat
coffee_sales	Unmatched	32966.7419	45999.8131	-13033.0712	20264.1476	-0.64
	ATT	32151.1251	131154.821	-99003.6961	47716.2953	-2.07

#### 4-a. Coffee Revenue-Fresh Cherries

Variable	Sample	Treated	Controls	Difference	S.E.	T-stat
coffee_sales	Unmatched	7260.4369	12209.6486	-4949.21174	3479.8723	-1.42
	ATT	7611.12083	8094.70833	-483.5875	10692.2235	-0.05

#### 4-b. Coffee Revenue-Dried Beans

Variable	Sample	Treated	Controls	Difference	S.E.	T-stat
coffee_sales	Unmatched	19043.9505	74854.6226	-55810.6721	65292.6516	-0.85
	ATT	17679.0857	18612.1952	-933.109524	6002.98564	-0.16

#### 4-c. Coffee Revenue-Green Coffee Beans

Variable	Sample	Treated	Controls	Difference	S.E.	T-stat
coffee_sales	Unmatched	53612.8618	35042.2015	18570.6602	7279.34978	2.55
	ATT	52586.3485	37488.0061	15098.3424	8252.65828	1.83

#### 5. Income from all farm crops

Variable	Sample	Treated	Controls	Difference	S.E.	T-stat
income_product	Unmatched	65622.7151	86867.8966	-21245.1815	20637.9299	-1.03
	ATT	64934.0272	172067.287	-107133.26	47847.9401	-2.24

#### 6. Total Household Income

Variable	Sample	Treated	Controls	Difference	S.E.	T-stat
annualtotalinc~e	Unmatched	220681.393	235291.083	-14609.6902	28531.9353	-0.51
	ATT	217068.861	398566.462	-181497.601	61325.7123	-2.96

#### 7. Coffee Yield per Hectare (Converted to Fresh Cherries in Kgs)

Conversion: 1 kg fresh cherries produce 0.33 Kgs of dried beans<sup>33</sup> and 6 kgs fresh cherries produce 1 kg green bean<sup>34</sup>.

Variable	Sample	Treated	Controls	Difference	S.E.	T-stat
yield_fc	Unmatched	3018.65479	4867.80819	-1849.1534	673.512202	-2.75
	ATT	2826.1541	5093.83459	-2267.68049	669.160836	-3.39

<sup>33</sup> Abrar Sualeh, Jafer Dawid: Relationship of Fruit and Bean Sizes and Processing Methods on the Conversion Ratios of Arabica Coffee (*Coffea arabica*) Cultivars. Time Journals of Agriculture and Veterinary Sciences, Vol. 2(2):70-74, February 2014. p. 4)

<sup>34</sup> (<http://www.thecoffeeguide.org/ga-108/>)

### A. Fresh Cherries

```
Number of obs      =      121
LR chi2(19)        =      35.01
Prob > chi2         =      0.0139
Pseudo R2          =      0.2350
```

Pseudo R2 = 0.2350

Note: 0 failures and 1 success completely determined.

**PHILCAFE BASELINE STUDY REPORT**  
VERSION 4, JUNE 2019



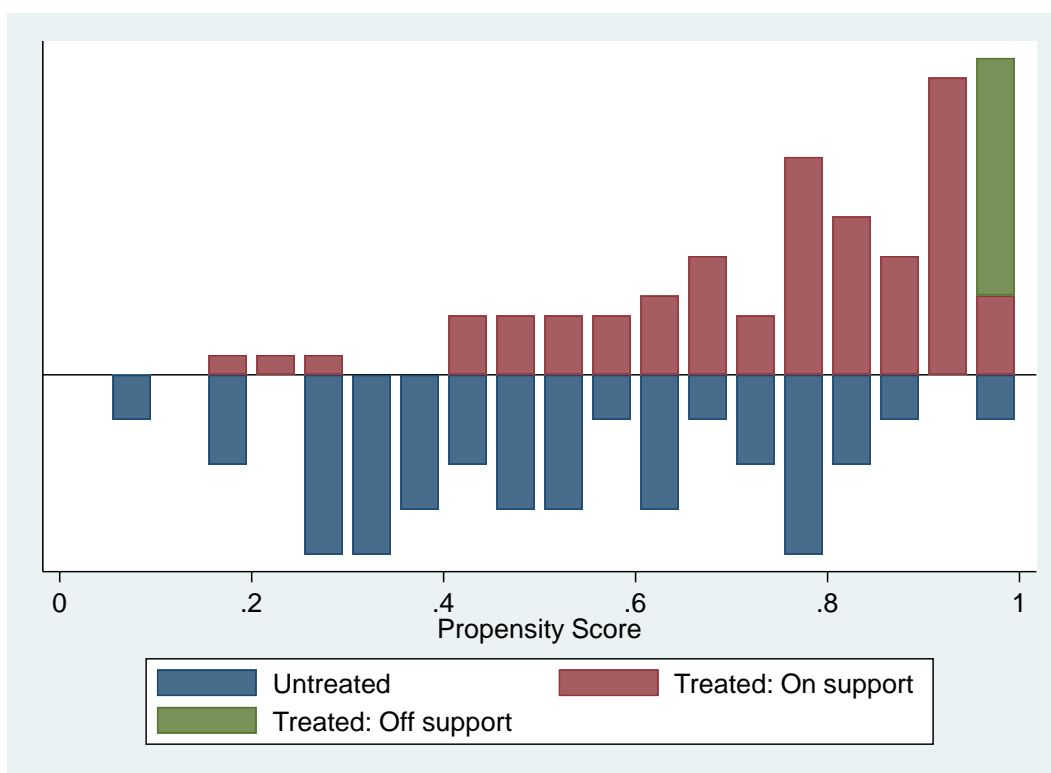


Figure B. Graphical Evaluation of the Matching, Fresh Cherries

Variable	Mean		%bias	t-test		V(T) / V(C)
	Treated	Control		t	p> t	
age	50.278	47.736	16.7	1.08	0.282	1.08
sex	.52778	.44444	16.6	1.00	0.321	.
maritalstatus	.77778	.65278	28.5	1.67	0.098	.
org_hhead	.5	.55556	-11.0	-0.66	0.508	.
farmorg_hhead	.33333	.38889	-12.2	-0.69	0.491	.
educt	6.3056	5.4306	24.2	1.68	0.095	1.18
hh_size	4.4722	5.2222	-21.0	-2.04	0.043	0.67
land_ownership	.90278	.80556	35.4	1.66	0.100	.
crop_system	.13889	.25	-32.1	-1.69	0.093	.
farm_size	2.2208	2.4139	-9.6	-0.68	0.498	1.11
coffee_farm_size	.84778	.71736	17.3	1.14	0.258	3.34*
active_marketing	.125	.04167	26.0	1.82	0.071	.
acces_explanting	.08333	.13889	-21.8	-1.06	0.292	.
with_credit	.20833	.31944	-26.2	-1.51	0.132	.
dif_acc_credit	.38889	.47222	-18.0	-1.01	0.316	.
acces_postfaci	.08333	.05556	10.4	0.65	0.515	.
with_value_add	.06944	.02778	14.9	1.16	0.248	.
dprodtech	.43056	.55556	-26.2	-1.50	0.135	.
dposttech	.11111	.04167	23.6	1.57	0.118	.

\* if variance ratio outside [0.63; 1.60]

Variable	Sample	Treated	Controls	Difference	S.E.	T-stat
coffee_yield	Unmatched	1883.649	1354.11784	529.531169	786.735209	0.67
	ATT	1690.62706	1638.09525	52.5318179	979.228828	0.05

## B. Dried Beans

Probit regression

Number of obs = 214  
 LR chi2(19) = 70.29  
 Prob > chi2 = 0.0000  
 Pseudo R2 = 0.2384

Log likelihood = -112.25069

type	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
age	.0328787	.009352	3.52	0.000	.0145492	.0512083
sex	.2348077	.2105159	1.12	0.265	-.1777959	.6474112
maritalstatus	-.4062337	.2410289	-1.69	0.092	-.8786417	.0661742
org_hhead	-.3120363	.2629694	-1.19	0.235	-.8274468	.2033742
farmorg_hhead	-.7287802	.2662555	-2.74	0.006	-1.250631	-.2069291
educ	.1044664	.0304995	3.43	0.001	.0446884	.1642444
hh_size	.0322959	.0439648	0.73	0.463	-.0538736	.1184654
land_ownership	.0492307	.2184082	0.23	0.822	-.3788417	.477303
crop_system	-.0446801	.5045115	-0.09	0.929	-1.033504	.9441442
farm_size	-.117919	.1200116	-0.98	0.326	-.3531374	.1172994
coffee_farm_size	-.1628419	.187548	-0.87	0.385	-.5304293	.2047454
active_marketing	-1.427938	.7978397	-1.79	0.073	-2.991675	.1357986
acces_explanting	-.3710776	.2956783	-1.26	0.209	-.9505965	.2084413
with_credit	-.4745667	.368785	-1.29	0.198	-1.197372	.2482385
dif_acc_credit	-.1084286	.5208048	-0.21	0.835	-1.129187	.9123299
acces_postfaci	.4428769	.5681091	0.78	0.436	-.6705964	1.55635
with_value_add	.7416538	.6518021	1.14	0.255	-.5358548	2.019163
dprodtech	.1728878	.2498648	0.69	0.489	-.3168381	.6626138
dposttech	-.0435227	.626422	-0.07	0.945	-1.271287	1.184242
_cons	-2.389365	.7949009	-3.01	0.003	-3.947342	-.8313876

Note: 1 failure and 0 successes completely determined.

psmatch2: Treatment assignment	psmatch2: Common support		Total
	Off suppo	On suppor	
Untreated	0	117	117
Treated	13	84	97
Total	13	201	214

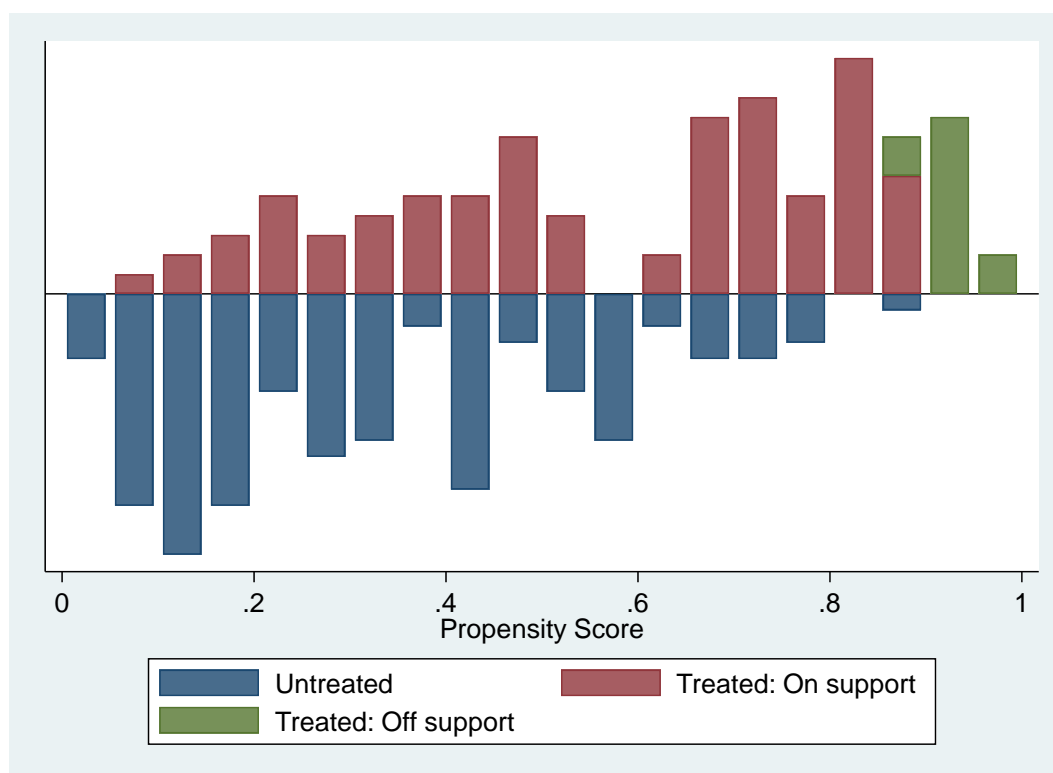


Figure C. Graphical Evaluation of the Matching, Dried Beans

Variable	Mean		%bias	t-test		V (T) / V (C)
	Treated	Control		t	p> t	
age	59.083	58.393	5.4	0.42	0.672	1.63*
sex	.55952	.45238	21.4	1.39	0.167	.
maritalstatus	.72619	.63095	21.6	1.32	0.188	.
org_hhead	.5	.5119	-2.5	-0.15	0.878	.
farmorg_hhead	.22619	.33333	-23.5	-1.55	0.123	.
educt	9.2619	10.345	-30.9	-1.68	0.094	0.51*
hh_size	4.3571	4.5238	-7.1	-0.45	0.654	2.68*
land_ownership	.63095	.75	-24.6	-1.67	0.096	.
crop_system	.11905	.15476	-10.8	-0.67	0.504	.
farm_size	1.2386	1.6701	-12.7	-2.14	0.033	1.06
coffee_farm_size	.71213	1.0612	-23.6	-2.52	0.013	0.68
active_marketing	.0119	.0119	0.0	0.00	1.000	.
acces_explanting	.09524	.07143	7.1	0.56	0.579	.
with_credit	.05952	.08333	-8.2	-0.60	0.552	.
dif_acc_credit	.03571	.08333	-22.8	-1.30	0.194	.
acces_postfaci	.14286	.19048	-13.2	-0.82	0.411	.
with_value_add	.17857	.32143	-35.2	-2.15	0.033	.
dprodtech	.79762	.55952	57.2	3.40	0.001	.
dposttech	.02381	.08333	-33.9	-1.72	0.088	.

\* if variance ratio outside [0.65; 1.54]

Variable	Sample	Treated	Controls	Difference	S.E.	T-stat
coffee_yield	Unmatched	1476.12985	3443.20154	-1967.0717	656.712444	-3.00
	ATT	1422.51904	3414.47315	-1991.95411	2160.43299	-0.92

### C. Green Coffee Beans

Probit regression

Number of obs = 364

LR chi2(19) = 71.36

```
Prob > chi2      =      0.0000
```

Pseudo R2 = 0.1419

Log likelihood = -215.83609

type	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
age	.0129538	.0058543	2.21	0.027	.0014795	.024428
sex	-.1249192	.1473699	-0.85	0.397	-.4137588	.1639203
maritalstatus	-.2387339	.2283455	-1.05	0.296	-.6862829	.2088151
org_hhead	-.487282	.2020592	-2.41	0.016	-.8833107	-.0912533
farmorg_hhead	.4167864	.2093866	1.99	0.047	.0063962	.8271766
educt	.0348752	.0223012	1.56	0.118	-.0088344	.0785848
hh_size	-.0090083	.0421608	-0.21	0.831	-.0916419	.0736253
land_ownership	-1.150712	.2465606	-4.67	0.000	-1.633962	-.6674616
crop_system	-.6803907	.2457281	-2.77	0.006	-1.162009	-.1987725
farm_size	-.0014905	.0191005	-0.08	0.938	-.0389269	.0359458
coffee_farm_size	.0742443	.0562673	1.32	0.187	-.0360376	.1845261
active_marketing	-.0122681	.3908047	-0.03	0.975	-.7782312	.753695
acces_explanting	1.008621	.4366564	2.31	0.021	.1527898	1.864451
with_credit	-.0035947	.2236667	-0.02	0.987	-.4419734	.434784
dif_acc_credit	-.1454486	.183422	-0.79	0.428	-.5049492	.214052
acces_postfaci	.0421459	.170445	0.25	0.805	-.2919202	.376212
with_value_add	-.0381288	.2165117	-0.18	0.860	-.4624839	.3862263
dprodtech	.0426422	.1678345	0.25	0.799	-.2863074	.3715918
dposttech	.930941	.3477804	2.68	0.007	.249304	1.612578
_cons	.4046097	.5058291	0.80	0.424	-.5867972	1.396016

psmatch2: Treatment assignment	psmatch2: Common support		Total
	Off suppo	On suppor	
Untreated	0	194	194
Treated	5	165	170
Total	5	359	364

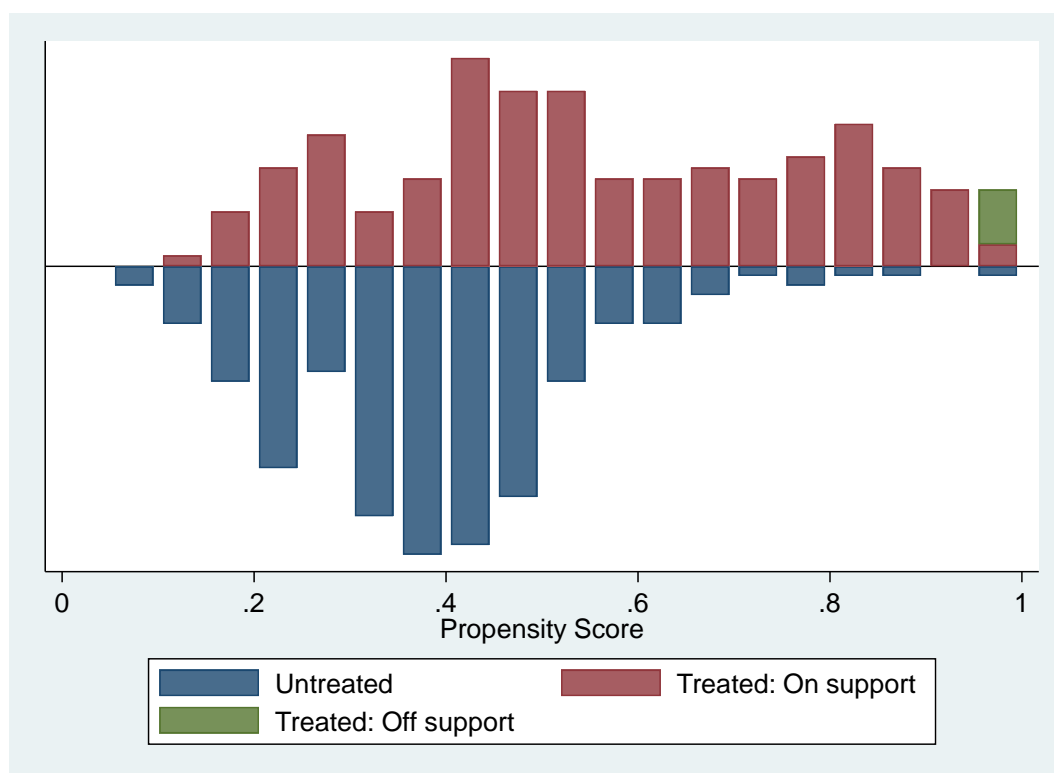


Figure D. Graphical Evaluation of the Matching, Green Coffee Beans

Variable	Mean		%bias	t-test		V(T) / V(C)
	Treated	Control		t	p> t	
age	48.152	45.915	17.6	1.57	0.117	0.91
sex	.57576	.49091	17.2	1.55	0.123	.
maritalstatus	.86061	.81818	13.2	1.05	0.295	.
org_hhead	.56364	.63636	-14.7	-1.35	0.179	.
farmorg_hhead	.4303	.49091	-12.5	-1.10	0.271	.
educt	6.8424	6.6182	6.5	0.59	0.554	1.01
hh_size	4.6182	4.3879	12.3	1.13	0.260	1.22
land_ownership	.78788	.79394	-1.7	-0.13	0.893	.
crop_system	.12121	.13939	-5.1	-0.49	0.625	.
farm_size	6.4166	5.4248	15.9	1.53	0.127	3.36*
coffee_farm_size	2.2629	2.0056	11.2	1.10	0.272	1.94*
active_marketing	.07879	.10303	-10.8	-0.76	0.445	.
acces_explanting	.06061	.05455	2.8	0.24	0.814	.
with_credit	.16364	.13939	7.0	0.61	0.541	.
dif_acc_credit	.2303	.1697	13.9	1.38	0.170	.
acces_postfaci	.26667	.26667	0.0	-0.00	1.000	.
with_value_add	.1697	.12727	11.4	1.08	0.280	.
dprodtech	.34545	.34545	0.0	-0.00	1.000	.
dposttech	.10909	.1697	-23.8	-1.59	0.113	.

\* if variance ratio outside [0.74; 1.36]

Variable	Sample	Treated	Controls	Difference	S.E.	T-stat
coffee_yield	Unmatched	447.188373	362.518092	84.6702804	50.4564822	1.68
	ATT	457.653565	384.533412	73.1201527	74.3083492	0.98



#### Annex 4: Sample of the Informed Consent Form

##### Philippine Coffee Advancement and Farm Enterprise (PhilCAFE) Informed Consent Form

I, \_\_\_\_\_ (name), \_\_\_\_ years old, am being invited to participate in the:

- ☐ Household interview
- ☐ Key informant interview
- ☐ Focus group discussion

related to the Baseline Study of Philippine Coffee Advancement and Farm Enterprise (PhilCAFE) project. The study is conducted by Institute for Socio-Economic Development Initiatives of the Ateneo de Davao University.

PhilCAFE is a five-year project to be implemented by ACIDI-VOCA and being funded by the U.S. Department of Agriculture. It aims to increase the agricultural productivity of coffee farmers and increase the trade of coffee-based agricultural products. It will work in 25 provinces across the country and will support 13,700 farmers and their families.

As respondent, I understand that this study aims to collect/establish baseline information on the project indicators, specifically related to production and marketing of coffee in the Philippines. Further, I understand that:

- All my responses will be treated confidential and will not be taken against me.
- All my personal information will be treated strictly confidential and will not be revealed in any of the reports on the study.
- No risk is involved as participant in this survey/interview/discussion.
- I am entitled to refuse questions that I feel I should not respond to.
- I have opportunity to ask questions for clarification.

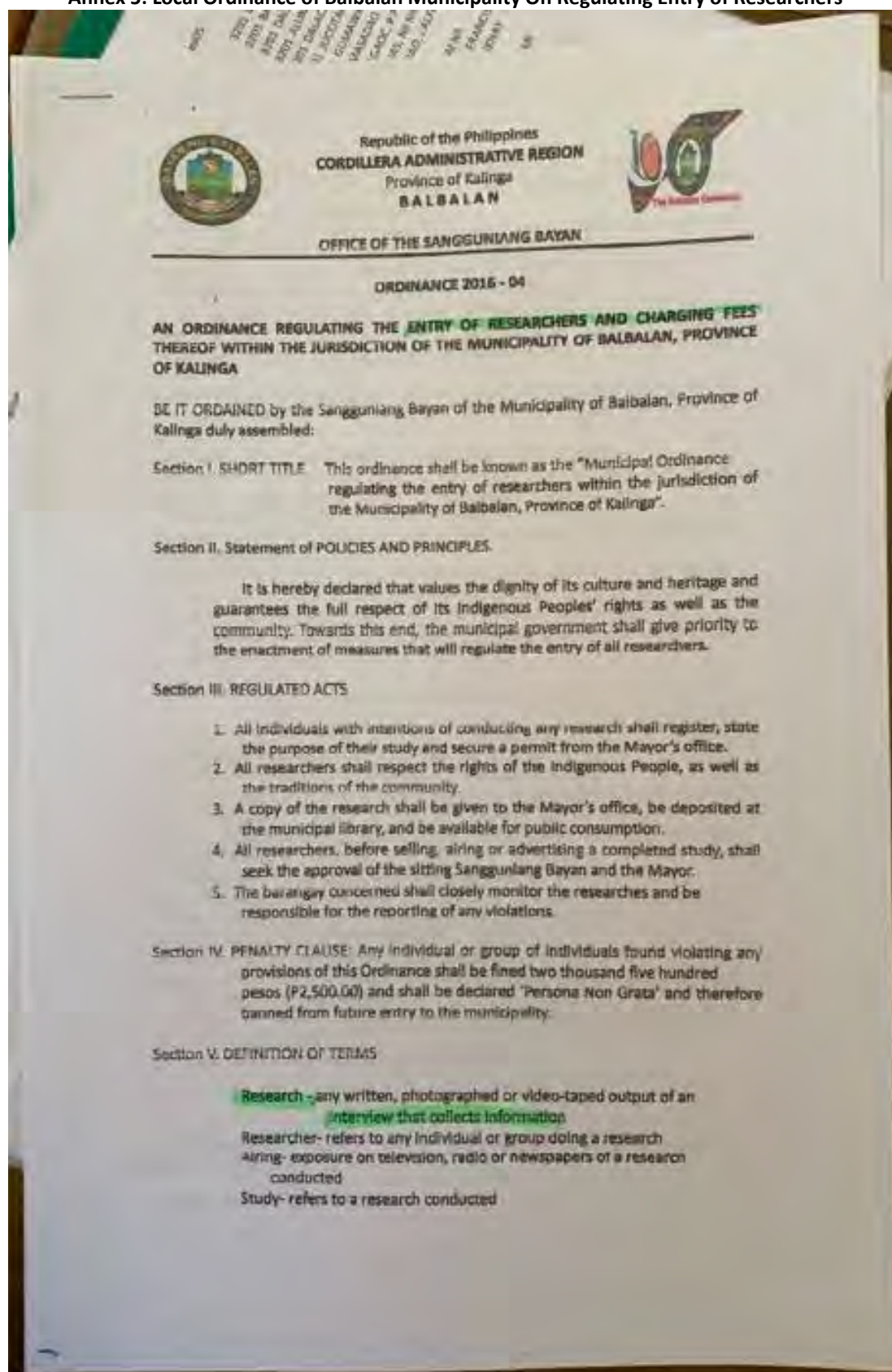
Given above, I voluntarily give my consent to participate in this evaluation study.

Name of the participant:	
Signature of the participant:	
Date:	


(If participant is not literate): I have witnessed the accurate reading of the consent form to the potential participant and the individual has had the opportunity to ask questions. I confirm that the individual has given consent freely.

Name of the witness:				Thumbprint of respondent	
Signature of the witness:					
Date:					

## Annex 5: Local Ordinance of Balbalan Municipality On Regulating Entry of Researchers



Annex 6: Resolution from Province of Kalinga Supporting the Ordinance of Balbalan.



Republic of the Philippines  
Cordillera Administrative Region  
**PROVINCE OF KALINGA**  
City of Tabuk

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**SANGGUNIANG PANLALAWIGAN**

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**EXCERPT FROM THE MINUTES OF THE REGULAR SESSION OF THE SANGGUNIANG PANLALAWIGAN OF THE PROVINCE OF KALINGA HELD AT THE LEGISLATIVE BUILDING, CAPITOL HILLS, BULANAO, CITY OF TABUK, PROVINCE OF KALINGA ON AUGUST 16, 2016 AT 9:00 IN THE MORNING.**

**RESOLUTION No. 2016 – 078**

**DECLARING MUNICIPAL ORDINANCE NO. 2016-04 OF THE MUNICIPALITY OF BALBALAN, KALINGA, OPERATIVE, VALID AND CONSISTENT WITH LAW.**

WHEREAS, presented before this Body in session assembled for legislative consideration is the committee report of the Sangguniang Panlalawigan Committee on Rules and Ethics relative to Municipal Ordinance No. 2016-04 of the Municipality of Balbalan entitled, *“An Ordinance Regulating the Entry of Researchers and Charging Fees Thereof Within the Jurisdiction of the Municipality of Balbalan, Province of Kalinga”*;

WHEREAS, after due deliberation, the Body concurs with the findings and recommendations of committee that the aforesaid ordinance is consistent with the provisions of pertinent laws, rules and issuances and therefore be declared operative;

**NOW THEREFORE:**

Be it **RESOLVED**, as it is hereby done, to declare Municipal Ordinance No. 2016-04 of the Municipality of Balbalan, Kalinga, Operative, Valid and Consistent with Law;

**RESOLVED FINALLY**, to furnish copies hereof the Municipal Mayor and the Sangguniang Bayan, all of the Municipality of Balbalan for information and appropriate action.

Adopted this 16<sup>th</sup> day of August 2016, on motion of Honorable [REDACTED] duly seconded in the Regular Session of the Sangguniang Panlalawigan of Kalinga, Legislative Building, Capitol Hills, Bulanao, City of Tabuk, Province of Kalinga.

---

**UNANIMOUSLY APPROVED.**

---

**CERTIFIED CORRECT:**

[REDACTED]

[REDACTED]

1 Resolution No. 2016-078 [Balbalan Ordinance - Researchers]

## Annex 7: Household Survey (Final Version)

### Household Survey

Final version, 23 February 2019

#### Preliminaries

##### Introduction:

We are (Name of Supervisor) and (Name of Enumerator) from the Institute for Socio-Economic Development Initiatives (ISED) of the Ateneo de Davao University. Our team is commissioned by ACDI/VOCA to undertake the Baseline Survey for Philippine Coffee Advancement and Farm Enterprise (PhilCAFE) project to collect information to better understand the situation and how to improve the coffee industry in the Philippines.

If you agree to be part of this undertaking, you will be asked to answer questions on household information; livelihood activities; coffee production and marketing practices; family income and spending; access to credit and financing; and concerns and expectations related to coffee industry as a whole.

Your participation in this study is completely voluntary. If you choose to be in the study, you can withdraw at any time without consequences of any kind. Participating in this study does not mean that you are giving up any of your legal rights. All of the information generated through this instrument will be treated with high degree of confidentiality. Research records will be kept in a locked file, and all electronic information will be coded and secured using a password protected file. Any report of this research that is made available to the public will not include your name or any other individual information by which you could be identified.

1. Name of Interviewer:		
2. Date of Interview:		
3. Interview is: <input type="checkbox"/> First Visit <input type="checkbox"/> Second Visit <input type="checkbox"/> Replacement		
4. Time Started:	5. Time Ended:	
6. Province:	7. Municipality:	8. Barangay:
9. Respondent Type : <input type="checkbox"/> Treatment <input type="checkbox"/> Comparison		
10. Household Respondent Number/Code:		
11. GPS Coordinates:		

#### I. Respondent Information

1. What is the respondent's name? 1) Last Name 2) First Name 3) Middle Name
2. What is the respondent's current address? 1) Province: 2) Municipality: 3) Barangay:
3. What is the respondent's contact number?
4. What is the respondent's ethnicity?
5. What is the respondent's birth date? 1) Month 2) Day 3) Year
6. What is the respondent's gender? 1) Male 2) Female 3) Others, specify:

7. What is the respondent's marital status?
1) Single
2) Married
3) Widow/Widower
4) Separated/Divorced
5) Common Law/Live-in
6) Annulled
8. What is the respondent's number of years of completed education? (Note: 6 years for elementary, 4 years for high school and 4 years for college)
9. Is the respondent the head of this household?
1) Yes, skip to #12.
2) No
10. If not the household head, what is the gender of the household head?
1) Male
2) Female
3) Others (specify):
11. If not the household head, what is your relationship with the head of this household?
1) Spouse
2) Son/Daughter
3) Father/Mother
4) Brother/Sister
5) Grandson/Granddaughter
6) Nephew/Niece
7) Non-relative (e.g. helper)
8) Others (specify)
12. Is the household head a member of organizations?
1) Yes
2) No, skip to #14
13. If the household head is the member of organizations, please check all that apply.
1) Cooperative Farmer association
2) Women's group
3) Political group (e.g. party list)
4) Religious group
5) Youth group
6) Cultural association
7) Indigenous people group
8) Others (specify)

## II. Household Information

14. How many members are there in your household? (Note: This is the total count of the members.)			
Age Group	Male	Female	Others (specify)
Below 14 years old			
15-29 years old			
30 to 45 years old			
45 to 60 years old			
More than 60 years old			
Total HH Members			



15. How many families are living within this household? (Note: Philippine Statistics Authority defines single nuclear family as “composed of a father and mother with unmarried children or a parent with children”. A household is a social unit consisting of a person living alone or a group of persons who sleep in the same housing unit and have a common arrangement in the preparation and consumption of food.)

16. How many members of the household are now working? (Note: This is the count of family members with work.)

Age Group	Male	Female	Others (specify)
15-29 years old			
30 to 45 years old			
45 to 60 years old			
More than 60 years old			
Total members with work			

17. What are the household’s sources of income?

Income Source		Annual Income
<b>A. On-Farm Income</b>		
1) Products from crop farming/production and/or processing		
2) Livestock and poultry raising		
<b>B. Off-Farm Income</b>	<b>Monthly Income</b>	
1) Farm labor for other farms doing land preparation, input application, weeding, harvesting, hauling and others		
<b>C. Non-Farm Income</b>		
1) Micro/small enterprise (business activity)		
2) Skilled labor (carpenter, mason, mechanic)		
3) Unskilled (household help, store helper)		
4) Driving (motorcycles, jeeps, buses)		
5) Employment (government or private)		
6) Professional services (as doctor, teacher, lawyer, accountant, etc.)		
7) Remittances		
8) Pension, relief (assistance from government such as 4Ps)		
<b>D. Other sources not mentioned</b>		
<b>Total Income</b>		

<b>Percentage of the on-farm to total sources (Kobo application will then calculate)</b>		
--	--	--

(Note: Income from crop, livestock and poultry production will be on annual basis, while the rest of the income sources will be on monthly basis and then to be computed annually).

**18. What are household's monthly expenditures?**

	Monthly Expenses	Multiplier		Annual Expenses
		If monthly, multiply by 12	Other estimated multiplier	
Food				
Education				
Water				
Electricity				
Transportation				
Clothing				
Communications (including mobile phone and internet)				
House Rental/Amortization				
Leisure/Entertainment				
Other expenses not mentioned				
<b>Total Monthly Expenditures</b>				

### III. Coffee Farming

**19. FARM OWNERSHIP**  
On the ownership of the land, is the household the:

- 1) Landowner (with land title)
- 2) Share tenant (household cultivates the farm and shares the produce with the landowner), skip to #21
- 3) Leasehold tenant (household cultivates the farm and pays the landowner in fixed amount or percentage), skip to #21
- 4) Caretaker (household cultivates the farm and is paid daily or in other arrangements by the landowner), skip to #21
- 5) Others (specify) and then skip to #21

**20.** If the land is owned by the household, to whom is the title named to?

- 1) Male member of the household
- 2) Female member of the household
- 3) Both

**21.** How many years have you been farming coffee?

**22. CROPPING SYSTEM**

- 1) Monocropping (coffee only), skip to #24
- 2) Intercropping (coffee under coconut trees)
- 3) Others (specify)

**23. OTHER THAN COFFEE, WHAT OTHER CROPS ARE PLANTED IN THE FARM?**

**24. FARM AREA**  
What is the household's total farm area in hectares?

25. How big is the area planted with coffee (in hectares)?

26. **PLANT DISTANCE**  
What is the distance between coffee trees (in meters)?

27. **SPECIES PLANTED AND DENSITY**  
What species of coffee are planted in your farm? How many trees for each specie?

	Number of coffee trees in farm
Excelsa	
Arabica	
Robusta	
Liberica	
Others (specify)	

28. **AGE OF COFFEE TREES**  
How old are the coffee trees?

29. **CERTIFICATION**  
Is your coffee farm certified?  
1) Yes  
2) No, skip to #32

30. If the coffee farm is certified, please check all that apply:  
1) Organic Certified  
2) Fair Trade Certified  
3) Rainforest Alliance/UTZ Certified  
4) 4-C Common Code (now known as Baseline Common Code)  
5) Others (specify)

31. If coffee farm is certified, what is the volume of coffee (in kg ) that meets the specific standards of the certification?

32. **EMPLOYMENT**  
Please indicate the number of people working in your coffee farm as to whether they are family member or not, wage, status, and age range.

Gender	Family Member		Wage		Status		Age Range	
	Yes	No	With pay	Not Paid	Full time	Part-time	15-29 y/o	30 y/o & above
Male								
Female								
Others (specify)								
Total								

33. **TRAINING ON COFFEE PRODUCTION TECHNOLOGY**  
Have you been trained in coffee production technology?  
1) Yes  
2) No

34. **IF YES, KINDLY ENUMERATE THE TRAININGS PARTICIPATED.**

35. **WHAT COFFEE-RELATED TECHNIQUES AND TECHNOLOGY DO YOU PRACTICE IN THE FARM? CHECK ALL THAT APPLY:**  
1) Farm diversification  
2) Plant renewal  
3) Pest management by type  
4) Disease management by type  
5) Pruning and rejuvenation  
6) Soil-related fertility and conservation (including soil sampling)  
7) Harvesting and post-harvest handling  
8) Others (specify) \_\_\_\_\_

36. **FARM MANAGEMENT PRACTICES**  
What farm management practices do you currently practice in coffee farming? Please check all that apply:  
1) Financial Management (financial planning, accounting processes, etc.)

- 2) Record Management (financial documents and production documents, receipts and expenses, inventory, etc.)
- 3) Input, Output and Needs Computation
- 4) Business Planning (includes production scheduling)
- 5) Human Resources Management (provision of training, incentives, promotion, etc.)
- 6) Marketing and Promotion
- 7) Inventory Management
- 8) Quality Management Systems (5-S, ISO, etc.)
- 9) Others, please specify:

**37. POST-HARVEST PRACTICES**

Do you practice the following coffee post-harvest technologies? Check all that apply.

- 1) Pulping
- 2) Fermentation
- 3) Washing
- 4) Drying
- 5) Hulling
- 6) Polishing
- 7) Grading
- 8) Sorting/Grading
- 9) Storage
- 10) Others (specify)

**38. WHICH OF THESE PRE- AND POST-HARVEST COFFEE PROCESSING AND HANDLING PRACTICES DO YOU FOLLOW/USE? CHECK ALL THAT APPLY.**

- 1) Pick ripe
- 2) Coffee processing
  - a. Wet process
  - b. Natural process
  - c. Honey process
- 3) Drying
  - a. Pavement/patio
  - b. Elevated dryer
  - c. Trapal/canvass dryer
  - d. GrainPro collapsible dryer
  - e. Humidity meters
- 4) Sorting, green grading and bean sizing
- 5) Storage
  - a. **USE OF GRAINPRO BAGS**
  - b. **USE OF JUTE BAGS**
  - c. **PROPER STORAGE/WAREHOUSE**
  - d. **USE OF WOODEN PALLETS**
  - e. **OTHERS (SPECIFY)**

**39. WHAT QUALITY-RELATED ACTIVITIES DO YOU PRACTICE?**

- 1) **COFFEE CUPPING**
- 2) **OTHERS (SPECIFY)**

**40. ANNUAL COST OF COFFEE PRODUCTION**

What is your estimated cost of coffee production per hectare, per year?

Item	Cost per Hectare per Year
Planting materials	
Paid labor	
Fertilizers and pesticides	
Tools and equipment	
Transport of materials and produce	

Interest on loans	
Taxes	
Rentals	
Others (specify)	
<b>Total</b>	

**41. POST-HARVEST LOSSES**  
Do you typically experience post-harvest losses, specifically the degradation in quantity and quality of coffee?  
1) Yes  
2) No, skip to #42.

**42. WHAT IS THE ESTIMATED LOSS IN TERMS OF PERCENTAGE?**

**43. WHAT ARE THE TYPICAL REASONS/CAUSES FOR THE LOSS?**  
1) Strip harvesting of coffee (ripe and unripe cherries are harvested from the branches)  
2) Disease attack  
3) Inappropriate pulping and hulling process  
4) Prolonged drying  
5) Exposure to rain  
6) Antiquated/old tools (i.e. mortar and pestle for Depulping)  
7) Inadequate storage/containers  
8) Poor carrying containers  
9) Poor transportation  
10) Others (specify)

**44. COFFEE PRODUCTION, YIELD PER TREE, VOLUME SOLD AND AVERAGE PRICE PER KILO**  
In what form do you harvest and sell your coffee? How many kg per tree did you harvested and the total volume of your production? How many kg did you sell and how much per kilo?

Form	Total volume of production	Average yield per tree, in kilo (2018)	Volume sold, in kilo (2018)	Average Selling price per kilo (2018)
As cherries				
As green coffee beans				
Both forms				
Others (specify)				

*(Note: There is difference between total volume of production and volume sold, as the household may retain some for own consumption and other purpose.)*

**45. Did you get the target sales of your coffee?**  
1) Yes, skip to #45.  
2) No

**46. If you were not able to attain your sales target, what were the possible causes?**  
1) Poor/limited markets  
2) Poor farm-to-market access (i.e. connecting the production site to main roads)  
3) Postharvest losses  
4) Absence/insufficient post-harvest facilities

**47. EXISTING MARKETS**  
To whom do you sell your coffee? Please share their details such as names, company/organizations, location and contact details.

Form	My Cooperative	Individual Consolidator	Traders/Buy-and-Sell	Local Roasters/Processors	Nestle and similar companies
Cherries					
Dried cherries					



Green beans					
Parchment					
Others					

48. **WHICH MARKET SEGMENTS DO YOU CATER? CHECK ALL THAT APPLY.**

- 1) **SPECIALTY MARKET**
- 2) **PREMIUM MARKET**
- 3) **COMMERCIAL MARKET**
- 4) **ALL-IN**

49. **WHAT IS YOUR PRICING STRATEGY?**

- 1) **USE OF COFFEE CUPPING SCORE TO DETERMINE THE BUYING PRICE**
- 2) **AVAILABILITY (FLEXIBLE)**
- 3) **OTHERS (SPECIFY)**

50. **BUYING AGREEMENTS**

Have you or your organization signed a formal agreement with buyers?

- 1) Yes, we have formal agreement/contract with buyers.
- 2) No formal agreement/contract, please skip to #49
- 3) Others (specify)

51. If you have buying agreements, what percentage of your gross sales is covered by formal agreements?

52. If there is/are formal agreement/s, these were facilitated/brokered/arranged:

Facilitator/Broker	Name of Agency/NGO/Organization	Point Person
By a Government agency		
By a local government unit		
By an NGO		
Others (specify)		

53. **MARKETING AND PROMOTING COFFEE PRODUCTS**

Do you actively market your coffee products?

- 1) Yes
- 2) No, skip to #51.

54. Which of the following methods did you use?

Method	Details (name)
Radio station	Station name/ID, location:
TV station	TV station name, location:
Newspaper Ads	Name of newspaper:
Posters/flyers	
Attendance to exhibits/fairs	Name of exhibits/fairs:
Participation to trade missions	Name and location of missions
Website	Website address:
Social media	Facebook Page/Twitter Handle:
Others, please specify:	

55. **CONFIDENCE IN COFFEE FARMING**

Considering your earnings in 2018 and other factors, are you:

- 1) Optimistic about coffee in the next 3-5 years?
- 2) Pessimistic about coffee in the next 3-5 years? Skip to #53.
- 3) No comment. Skip to #54

56. If optimistic, please elaborate.

57. If pessimistic, please elaborate.

58. What are your household's top three problems related to coffee farming?

#### IV. Access to Services Related to Coffee Farming

##### 59. **PLANTING MATERIALS**

Who were the sources of your coffee planting materials?

Source	Identify the Organization	Contact Address	Number of seedlings provided
Accredited private nursery (bought with own funds)			
Coffee dispersal provided by the local government – municipal or provincial			
Coffee dispersal provided by special projects of national government such as PRDP of Dept. of Agriculture; NGP of Dept. of Environment and Natural Resources; RAPID of Dept. of Trade and Industry; ARCESS or CONVERGE of Dept. of Agrarian Reform; or COCOBED of Philippine Coconut Authority <sup>35</sup>			
Non-government Organization such as Catholic Relief Services and ACDI-VOCA			
Producer cooperatives			
Local traders			
Coffee companies (such as Nestle)			
Others (specify)			

##### 60. **FERTILIZERS AND PESTICIDES**

Who were the sources of your fertilizers and pesticides?

Source	Identify the Organization	Contact Address
Bought with my own funds		
Support from the local government		
Support from the national government		
Support from an NGO		
Support from a cooperative		
Support from a trader		
Others (specify)		

##### 61. **PRODUCTION CAPITAL FOR COFFEE**

What were the sources of your production capital?

Source	Identify the Source	Contact Address
From my profit last year		
Support from a relative (state relationship)		

<sup>35</sup> PRDP - Philippine Rural Development Program; NGP – National Greening Program; RAPID - Rural Agro-Industrial Partnership for Inclusive Development; ARCESS – Agrarian Reform Communities Connectivity and Economic Support Services; CONVERGE – Convergence on Value Chain Enhancement for Rural Growth and Empowerment; COCOBED – Coconut-Coffee-Based Enterprise Development.

Support from LGU/government		
Support from NGO		
Support from a cooperative		
Borrowed from microfinance/banks (details at #54)		
Cash advance from a trader (details at #59)		
Others (specify)		

62. **CREDIT**  
Do you have an existing credit/loan from a microfinance institution or bank?  
1) Yes  
2) No, skip to #70

63. **PLEASE PROVIDE DETAILS ON EXISTING CREDIT/LOAN.**  
1) **AMOUNT**  
2) **INTEREST**  
3) **PAYMENT TERMS**  
4) **PURPOSE**

64. **DO YOU HAVE DIFFICULTY IN ACCESSING CREDIT?**  
1) Yes  
2) No, skip to #62

65. **IF YOU HAVE DIFFICULTY IN ACCESSING CREDIT, WHAT ARE THE REASONS?**

66. **DO YOU HAVE ADDITIONAL/FUTURE NEED TO BORROW MONEY?**  
1) **YES**  
2) **NO, SKIP TO #70**

67. **IF YOU PLAN FOR BORROW MONEY IN THE FUTURE, FOR WHAT PURPOSE? CHECK ALL THAT APPLY.**  
1) Land purchase for coffee expansion  
2) Coffee production  
3) Post-Harvest facilities  
4) Marketing  
5) Others (specify)

68. **HOW MUCH DO YOU NEED?**

69. **ARE YOU WILLING TO PAY INTEREST?**  
1) **YES**  
2) **NO, SKIP TO #67**

70. **IF YES, AT WHAT RATE?**

71. **IF NOT WILLING TO PAY INTEREST, WHAT DO YOU PROPOSE TO COVER YOUR LOAN?**

72. **DO YOU HAVE AN EXISTING CREDIT/CASH ADVANCE FROM INPUT SUPPLIERS OR TRADERS?**  
1) **YES**  
2) **NO, SKIP TO #70**

73. **PLEASE PROVIDE DETAILS ON EXISTING CREDIT FROM INPUT SUPPLIERS OR TRADERS.**  
1) **AMOUNT:**  
2) **INTEREST RATE:**  
3) **REPAYMENT TERMS (PAYMENT PERIOD, FREQUENCY OF PAYMENT):**  
4) **PURPOSE:**

74. **PRODUCTION TECHNOLOGY**  
Who provided you with coffee production technology?

Source	Identify the Provider	Contact Person
No one- rely on my own efforts		
Shared by fellow coffee farmer		
Support from LGU/national government		

Support from NGO		
Support from a cooperative		
Support from a trader		
Other buyers		
Others (specify)		

75. Do you have knowledge/skills and access to private business development service providers related to coffee production?

	With Knowledge and Skills on:		With Access to Business Development Service Organization who can provide:	
	Yes	No	Yes (identify)	No
Good quality coffee				
Coffee cupping				
Specialty market				
Others				

76. **POST-HARVEST FACILITIES**

Do you own yourself or avail or own yourself any of the following?

Source	Own (check only)	If availed from other individuals/organizations:	
		Identify the Provider/Location	Contact Person
Solar dryer			
Mechanical dryer			
Fermentary			
Pulpers			
Dehullers			
Warehouse/storage			
Others (specify)			

77. **MARKET/PRICE INFO**

Who provides you with market/price information?

Source	Identify the Provider	Contact Person
No one- rely on my own efforts		
Shared by fellow coffee farmers		
LGU/national government		
Support from NGO		
Support from a cooperative		
Support from a trader		
Other buyers		
Others (specify)		

78. **CAPACITY-BUILDING ACTIVITIES**

Who provides you with capacity-building activities (training, exposure trips, industry-wide gatherings)?

Source	Identify the Provider	Contact Person
No one- rely on my own efforts		
Taught by fellow coffee farmers		
LGU/national government		
Support from NGO		
Support from a cooperative		
Support from a trader		

Other buyers		
Others (specify)		

79. **SOCIAL SUPPORT/BUSINESS DEVELOPMENT PROGRAMS**  
Have you or your group (cooperative/association) received or are still receiving support from social support/business development program/s?  
1) Yes  
2) No, skip to #76

80. Can you identify these programs?

81. **ADDING VALUE TO COFFEE PRODUCTS**  
Are you adding value to your coffee products? Check all that apply.

Activity	Adding Value		If "yes", please elaborate on how you are implementing it
	No	Yes	
Improving the quality of existing coffee products by following recommended technologies			
Adding value to coffee products by implementing processes to increase price and expand market			
Acquiring certification for coffee farm practices and products (e.g. sustainability and food safety)			
Improving post-production efficiency by adopting appropriate tools/equipment and processes (dehulling, fermentation and others)			

82. If not currently doing the value-adding activities, are you interested to learn more about these?  
1) Yes  
2) No

## I. Gender and Youth Inclusion

83. **FARM ACTIVITIES BY GENDER**  
In your household, which of the following are the activities of men and women (youth and those above 30 years old)? Check all that apply.

	Men	Male Youth	Women	Female Youth
Seed/plant selection				
Nursery establishment				
Land preparation				
Planting				
Transplanting				
Weeding				
Fertilizer application				
Soil and water conservation				
Pruning				
Harvesting/picking				



Drying				
Hulling				
Sorting				
Storage				
Packing				
Selling				
Others (specify)				

84. **DECISION-MAKING**

Who are the major and minor decision-makers in the household on matters related to coffee farming, processing and marketing? Write "Major", "Minor" or "No role at all" on

	Men	Male Youth	Women	Female Youth
What crops to plant or produce?				
What production technology to use?				
Whether to avail of financial assistance or credit?				
Where to use the borrowed funds				
What inputs to procure				
Where and quantity of produce to sell (selling decision)				
What price level to negotiate				
Whether to add value to the coffee production (e.g. process cherry to green coffee beans)?				
Who will receive the income from the coffee sale				
How and where to spend the income from coffee?				
Decide on which coffee-related equipment and facilities to purchase				
Who will use and how to use farm equipment and facilities				
Who to hire, how many to hire and how much wages to pay for coffee-related labor				

85. **AVERAGE TIME SPENT ON COFFEE FARMING**

What is the average time spent per week on coffee farming by members of the household?

	Men	Male Youth	Women	Female Youth
Number of hours spent on coffee farming <i>per week</i>				

86. **WAGES PAID FOR COFFEE FARMING WORK**

How are members of the household compensated for their work in the coffee farm? Fill the appropriate/relevant rows. Check all that apply.

	Men	Male Youth	Women	Female Youth
Receive wages (indicate amount/rate in Php per day)				
Get share in the profit (indicate the percentage, if any)				
Do not receive wages at all				
Get other benefits (specify)				

87. **ACCESS TO AGRICULTURAL EXTENSION SERVICES**

Who among the household members have access to agricultural extension services provided by the government, NGOs, projects and private firms? Check all that apply.

	Men	Male Youth	Women	Female Youth
With access to agricultural extension services (i.e. direct interaction with extension staff from different organizations)				

88. **ACCESS TO CREDIT**

Who among the household members have access to credit? Check all that apply.

	Men	Male Youth	Women	Female Youth
With access to credit <b>without</b> co-maker/co-signatory				
With access to credit but <b>requires</b> co-maker/co-signatory				

89. **PARTICIPATION TO COFFEE-RELATED TRAINING**

Who among the household members have participated in training related to coffee farming, processing and marketing? Check all that apply.

	Men	Male Youth	Women	Female Youth
Attendance/participation to training on coffee farming, processing and marketing				

90. **MEMBERSHIP TO PRODUCER ORGANIZATIONS**

Who among the household members are affiliated/member of producer organizations? Check all that apply.

	Men	Male Youth	Women	Female Youth
Member of producer organization/s				
Have held or currently holding leadership position in the producer organization/s				

**91. INTEREST IN CONTINUING OR EXPANDING COFFEE FARM/COFFEE ACTIVITIES**

Apart from the household head, who among the household members are interested in continuing or expanding their coffee farm/activities?

	Men	Male Youth	Women	Female Youth
With interest in continuing or expanding coffee farm/activities				

- End of Household Survey Form -

**Annex 8: Input Supplier Survey Form (Final Version)**

**Input Suppliers**

Final Version

**I. Preliminaries**

**Introduction:**

We are (Name of Supervisor) and (Name of Enumerator) from the Institute for Socio-Economic Development Initiatives (ISEDI) of the Ateneo de Davao University. Our team is commissioned by ACDI/VOCA to undertake the Baseline Survey for Philippine Coffee Advancement and Farm Enterprise (PhilCAFE) project to collect information to better understand the situation and how to improve the coffee industry in the Philippines.

If you agree to be part of this undertaking, you will be asked to answer questions on household information; livelihood activities; coffee production and marketing practices; family income and spending; access to credit and financing; and concerns and expectations related to coffee industry as a whole.

Your participation in this study is completely voluntary. If you choose to be in the study, you can withdraw at any time without consequences of any kind. Participating in this study does not mean that you are giving up any of your legal rights. All of the information generated through this instrument will be treated with high degree of confidentiality. Research records will be kept in a locked file, and all electronic information will be coded and secured using a password protected file. Any report of this research that is made available to the public will not include your name or any other individual information by which you could be identified.

1. Name of Interviewer:		
2. Date of Interview:		
3. Interview is: <input type="checkbox"/> First Visit <input type="checkbox"/> Second Visit <input type="checkbox"/> Replacement		
4. Time Started:	5. Time Ended:	
6. Province:	7. Municipality:	8. Barangay:
9. MSA Respondent Number/Code:		
10. GPS Coordinates:		

## II. Respondent Information

1. Name of the Respondent
1) Last Name
2) First Name
3) Middle Name
2. Current Address
1) Province:
2) Municipality:
3) Barangay:
3. Contact Number and or email address
4. Ethnicity
5. Date of Birth
1) Month
2) Day
3) Year
6. Gender
1) Male
2) Female
3) Others, specify:
7. Position in the Company/Enterprise

## III. Enterprise Profile

8. Name of store/enterprise/organization:																																									
9. Store/enterprise/organization Address:																																									
10. <u>PRESENCE IN THE PROVINCE</u> In what year was this enterprise established?																																									
11. <u>How many branches do you have in this province? Please tell us the location/municipality?</u>																																									
12. <u>EMPLOYEES</u> How many workers do you have? Please classify according to status of employment and age of workers:																																									
<table border="1"> <thead> <tr> <th rowspan="2">Gender</th> <th colspan="2">Status</th> <th colspan="2">Age</th> <th colspan="2">Attended Work-related Training</th> </tr> <tr> <th>Full time</th> <th>Part time</th> <th>15-29 y/old</th> <th>30 and above</th> <th>Yes</th> <th>No</th> </tr> </thead> <tbody> <tr> <td>Male</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Female</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Others, specify</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Total</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Gender	Status		Age		Attended Work-related Training		Full time	Part time	15-29 y/old	30 and above	Yes	No	Male							Female							Others, specify							Total						
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Male																																									
Female																																									
Others, specify																																									
Total																																									
13. <u>ASSET SIZE</u> What was the total value of your assets as of December 2018? This included cash, investment, accounts receivable, inventory, supplies, land, building, equipment and vehicles.																																									
14. <u>SALES</u> What was your gross sales in 2018? All products.																																									

15. **PRODUCTS ON SALE**

Do you sell the following at your store (fill in all that apply):

	<u>Selling Price (range)</u>	<u>Inventory on hand</u>	<u>Suppliers</u>
<u>Fertilizers specific to coffee</u>			
<u>Pesticides specific to coffee?</u>			
<u>Sprayers and other application equipment</u>			
<u>Personal protection equipment/safety wear</u>			
<u>Farm tools</u>			
<u>Others (specify)</u>			

16. **SERVICES TO CLIENTS**

Do you provide training on proper handling and application?

- 1) Yes
- 2) No

17. Do you provide information about coffee plant diseases and insect pests?

- 1) Yes
- 2) No

18. Do you extend credit to farmers?

- 1) Yes
- 2) No, skip to #20

19. If you extend credit, what are your terms?

- 1) Average amount
- 2) Interest rate
- 3) Repayment period (years to pay and frequency of payment)

20. **MARKET**

What crops do most of your customers engaged in?

21. How does selling to individual farmers and to coffee producer organization differ?

22. Do you actively market your fertilizers, pesticides and other related supplies?

- 1) Yes
- 2) No, skip to #24

23. If yes, through what methods? Check all that apply.

<b>Method</b>	<b>Details (name)</b>
Radio station	Station name/ID, location:
TV station	TV station name, location:
Newspaper Ads	Name of newspaper:
Posters/flyers	
Attendance to exhibits/fairs	Name of exhibits/fairs:
Participation to trade missions	Name and location of missions
Website	Website address:
Social media	Facebook Page/Twitter Handle:
Others, please specify:	

24. **AGREEMENTS**



Do you have a sale/procurement agreement with producer organizations, local government units and coffee-funded projects?

- 1) Yes
- 2) No, please proceed to #26.

25. If yes, please provide details on:

	Number	Names and Location
Producer Organizations		
Local Government Units		
Coffee-funded projects		
Others, please specify:		

26. **STORAGE CAPACITY**

What is the size of your warehouse? In cubic meters

27. **How much of this capacity is utilized? In percentage**

28. **POST-HARVEST INFRASTRUCTURE**

Which of the following coffee post-harvest facilities do you have?

- 1) Dehullers
- 2) Fermentary
- 3) Roasters
- 4) Dryers
- 5) Warehouse
- 6) Others, please specify

29. **CREDIT:**

Do you have an existing loan/debt?

- 1) Yes
- 2) No, skip to #31

30. If yes, please provide details on:

- 1) Source of credit (institution/individual):
- 2) Amount:
- 3) Interest rate:
- 4) Payment period:

31. **MANAGEMENT PRACTICES**

Which of the following management practices the nursery is implementing (check all that apply):

- 1) Financial Management (financial planning, accounting processes, etc.)
- 2) Record Management (financial documents and production documents, receipts and expenses, inventory, etc.)
- 3) Input, Output and Needs Computation
- 4) Business Planning (includes production scheduling)
- 5) Human Resources Management (provision of training, incentives, promotion, etc.)
- 6) Marketing and Promotion
- 7) Inventory Management
- 8) Quality Management Systems (5-S, ISO, etc.)
- 9) Others, please specify:

32. **COFFEE PROJECTS**

Have you participated in government, non-government or private firms-funded projects on coffee production, processing and marketing?

- 1) Yes
- 2) No, please proceed to #36.

33. If yes, please provide details:

Name of Project	Funding Organization/Partner

34. [What are the challenges associated with serving/selling inputs to coffee farmers?](#)

35. [How did you address those challenges?](#)

36. [SUPPORT NEEDED TO IMPROVE/EXPAND TRADING OPERATION](#)

What support do you need to improve or expand your operation?

37. [RELATIONSHIPS AND COLLABORATION](#)

First, list down below between 5 to 10 organizations/groups that your organization/enterprise is presently interacting. Second, check the type of activity you do with these organizations and enterprises.

Organization	Information Sharing (through visits, meetings, training, workshops, etc.)	Resource Sharing (through shared projects, exchanged staff, provided funding counterparts, space, etc.)	Advocacy Activities (Support quality enhancement efforts, policy changes, resolve industry issues, etc.)

38. [COMMENTS](#)

What other comments/message do you want to share/express regarding the selling of fertilizers and pesticides to coffee farmers and producer organizations?

- End of Input Supplier Survey –

## Annex 9: Nursery Operator Survey Form (Final Version)

### Nursery Operators

Final Version

#### I. Preliminaries

Introduction:

We are (Name of Supervisor) and (Name of Enumerator) from the Institute for Socio-Economic Development Initiatives (ISEDI) of the Ateneo de Davao University. Our team is commissioned by ACDI/VOCA to undertake the Baseline Survey for Philippine Coffee Advancement and Farm Enterprise (PhilCAFE) project to collect information to better understand the situation and how to improve the coffee industry in the Philippines.

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Your participation in this study is completely voluntary. If you choose to be in the study, you can withdraw at any time without consequences of any kind. Participating in this study does not mean that you are giving up any of your legal rights. All of the information generated through this instrument will be treated with high degree of confidentiality. Research records will be kept in a locked file, and all electronic information will be coded and secured using a password protected file. Any report of this research that is made available to the public will not include your name or any other individual information by which you could be identified.

1. Name of Interviewer:		
2. Date of Interview:		
3. Interview is: <input type="checkbox"/> First Visit <input type="checkbox"/> Second Visit <input type="checkbox"/> Replacement		
4. Time Started:	5. Time Ended:	
6. Province:	7. Municipality:	8. Barangay:
9. MSA Respondent Number/Code:		
10. GPS Coordinates:		

#### II. Respondent Information

1. Name of the Respondent
1) Last Name
2) First Name
3) Middle Name
2. Current Address
4) Province:
5) Municipality:
6) Barangay:
3. Contact Number
4. Ethnicity
5. Date of Birth
4) Month
5) Day
6) Year

6. Gender
4) Male
5) Female
6) Others, specify:
7. Position in the Enterprise/organization

### III. Enterprise Profile

8. Name of the nursery enterprise?																																										
9. Address of the nursery																																										
10. TYPE OF OPERATION																																										
1) Private enterprise																																										
2) Income-generating project of a producer organization																																										
3) Operated by the local government unit																																										
4) Research project of a state college/university																																										
5) Non-government organization project																																										
6) Others (specify)																																										
11. EMPLOYEES																																										
How many workers do you have? Please classify according to status of employment and age of workers:																																										
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12. ASSET SIZE																																										
What was the total value of your assets as of December 2018? This included cash, investment, accounts receivable, inventory, supplies, land, building, equipment and vehicles.																																										
13. SALES																																										
What was your gross sales in in 2018?																																										
14. VOLUME																																										
What is the size of your nursery (in square meters)? Capacity in number of seedlings?																																										
15. How many seedlings did you sell in 2018?																																										
1) All types (total) _____																																										
16. SOURCES OF PLANTING MATERIALS																																										
Where do you source your planting materials?																																										
17. In what form do you buy these planting materials?																																										
1) As seeds																																										
2) As seedlings																																										
18. TOP SEEDLINGS																																										
What are the top five (5) plant seedlings that you propagate and sell in your nursery?																																										
19. If coffee is among the top 5, why is it considered bestselling/fast-moving?																																										
1) Yes																																										
2) No, skip to #21																																										
20. If coffee is among the top, why is it considered bestselling/fast-moving?																																										
21. If coffee is not among the top, why?																																										

22. What coffee species do you sell in your nursery? How many do you usually have on stock and what is the price per seedling?? Fill in all that apply.

Species	Average Number of Seedlings Available	Selling Price per Seedling
Arabica		
Robusta		
Excelsa		
Liberica		

23. How many coffee seedlings did you sell in 2018?

24. What coffee species is the most purchased?

25. How much revenue did you get from selling the coffee seedlings?

26. CUSTOMERS

Who are your customers? Where do they come from? Fill-in rows that apply.

Customers	Name	Origin/Location
1) Individual farmers	(names will not be included if too many)	
2) Producer organizations		
3) Government		

27. SUPPORT SERVICES EXTENDED TO CUSTOMERS

Do you provide support services to your customers?

- 1) Yes
- 2) No, skip to #29

28. If yes, what are these services?

- 1) Technical advice (e.g. replanting)
- 2) Plant-now, pay later
- 3) Transport of seedlings to farm
- 4) Others (specify)

29. NURSERY TECHNOLOGY/MANAGEMENT

Have you been trained in nursery establishment and management?

- 3) Yes
- 4) No, skip to #31

30. If you were trained, who provided the training? And from where?

- 1) Training Provider:
- 2) Origin of the provider:

31. CERTIFICATION

Is your nursery accredited by the Bureau of Plant Industry?

- 1) Yes
- 2) No

32. RESEARCH

Do you conduct your own research or experiments on plant propagation?

- 1) Yes
- 2) No

33. MARKET

Do you actively market your seedlings?

- 1) Yes
- 2) No, skip to #35



34. If yes, through what methods? Check all that apply.

Method	Details (name)
Radio station	Station name/ID, location:
TV station	TV station name, location:
Newspaper Ads	Name of newspaper:
Posters/flyers	
Attendance to exhibits/fairs	Name of exhibits/fairs:
Participation to trade missions	Name and location of missions
Website	Website address:
Social media	Facebook Page/Twitter Handle:
Others, please specify:	

35. CREDIT:

Do you have an existing credit?

5) Yes

6) No, skip to #37

36. If yes, please provide details on:

5) Source of credit (institution/individual)

6) Amount:

7) Interest rate:

8) Repayment period:

9) Purpose of the credit:

37. AGREEMENTS

Do you have a sale/procurement agreement with producer organizations or local government units to supply planting materials?

3) Yes

4) No, please proceed to #36

38. If yes, please provide details on:

	Number	Names and Location
Producers Organizations		
Local government units		
Individuals		
Private firms		
Others, please specify:		

39. MANAGEMENT PRACTICES

Which of the following management practices the nursery is implementing (check all that apply):

1) Financial Management (financial planning, accounting processes, etc.)

2) Record Management (financial documents and production documents, receipts and expenses, inventory, etc.)

3) Input, Output and Needs Computation

4) Business Planning (includes production scheduling)

5) Human Resources Management (provision of training, incentives, promotion, etc.)

6) Marketing and Promotion

7) Quality Management Systems (5-S, ISO, etc.)

8) Proper Nursery Operation (water source, pest control, storage for chemicals and other supplies, presence of propagating equipment)

9) Others, please specify:

40. COFFEE PROJECTS

Have you participated in government, non-government or private firms-funded projects on coffee production, processing and marketing?

1) Yes

2) No, please proceed to #39.

41. If yes, please provide details:

Name of Project	Funding Organization/Partner

42. PROBLEMS OF THE COFFEE FARMERS AND ORGANIZATIONS

Based on what you know about the local coffee industry, what are the top three problems coffee farmers and organizations encounter?

43. If you are affected by these problems, how did you address these?

44. What are your recommendations in addressing these problems?

45. RELATIONSHIPS AND COLLABORATION

First, list down below between 5 to 10 organizations/groups that your organization/enterprise is presently interacting. Second, check the type of activity you do with these organizations and enterprises.

Organization	Information Sharing (through visits, meetings, training, workshops, etc.)	Resource Sharing (through shared projects, exchanged staff, provided funding counterparts, space, etc.)	Advocacy Activities (Support quality enhancement efforts, policy changes, resolve industry issues, etc.)

46. SUPPORT NEEDED TO IMPROVE/EXPAND NURSERY OPERATION

What support do you need to improve or expand your nursery operation?

47. COMMENTS

What other comments/message do you want to share/express regarding propagation and selling of coffee seedlings?

- End of Nursery Operator Survey -

## PROCESSORS/ROASTERS

### Final Version

#### I. Preliminaries

##### Introduction:

We are (Name of Supervisor) and (Name of Enumerator) from the Institute for Socio-Economic Development Initiatives (ISED) of the Ateneo de Davao University. Our team is commissioned by ACDI/VOCA to undertake the Baseline Survey for Philippine Coffee Advancement and Farm Enterprise (PhilCAFE) project to collect information to better understand the situation and how to improve the coffee industry in the Philippines.

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1. Name of Interviewer:		
2. Date of Interview:		
3. Interview is: <input type="checkbox"/> First Visit <input type="checkbox"/> Second Visit <input type="checkbox"/> Replacement		
4. Time Started:	5. Time Ended:	
6. Province:	7. Municipality:	8. Barangay:
9. MSA Respondent Number/Code:		
10. GPS Coordinates:		

#### II. Respondent Information

1. Name of the Respondent
1) Last name
2) First name
2. Current Address
7) Province:
8) Municipality:
9) Barangay:
3. Contact Number
4. Ethnicity
5. Date of Birth
7) Month
8) Day
9) Year
6. Gender
7) Male
8) Female

9) Others, specify:
7. Position in the Company/Organization

### III. Enterprise Profile

8. Name of the Enterprise/Processing/Roastery Company																																									
9. Address of the Company																																									
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Male																																									
Female																																									
Others, specify																																									
Total																																									
11. <b>TYPES OF TRAINING ATTENDED</b> What type of coffee-related training has your staff attended in the past three years?																																									
12. <b>ASSET SIZE</b> What was the total value of your assets as of December 2018? This included cash, investment, accounts receivable, inventory, supplies, land, building, equipment and vehicles).																																									
13. <b>SALES</b> What was your gross sales in 2018? All products, including coffee?																																									
14. <b>MARKET</b> What was volume of coffee processed/brewed in 2018? In kg .																																									
15. Who are your suppliers of coffee? <table border="1"> <thead> <tr> <th></th> <th>Name</th> <th>Location</th> <th>Form of Coffee Supplied</th> <th>Varieties Offered</th> <th>Average Volume Delivered</th> <th>Price/kg</th> <th>Payment Scheme or Method</th> </tr> </thead> <tbody> <tr> <td>Individuals</td> <td>(do not fill up if too many)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Producers Organizations</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Traders</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>(Codes for Form: cherries or green beans. Codes for Payment: Cash or other forms).</p>		Name	Location	Form of Coffee Supplied	Varieties Offered	Average Volume Delivered	Price/kg	Payment Scheme or Method	Individuals	(do not fill up if too many)							Producers Organizations								Traders																
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16. Do you source from women coffee farmers? 1) Yes 2) No																																									

17. Do you offer/set premium price for coffee sourced from women coffee farmers?  
 1) Yes  
 2) No

18. Are these women coffee farmers willing to increase their volume of production and/or delivery to you?  
 1) Yes  
 2) No

19. Do you extend financial services (such as cash advance) to your suppliers?  
 1) Yes  
 2) No

20. Who are your buyers of coffee?

	Names	Location	Forms of Coffee Sold	Buying Scheme	Average Volume Delivered in kg	Payment Scheme or Method	Coffee Specifications
Individuals							
Local buyers							
Exporters							

(Codes: For forms – cherry or green coffee beans. For buying scheme – in tranches or in one lot. For payment scheme – in cash, post-dated checks, or others. For coffee specification – in terms of moisture, bean count, colors, etc.)

21. Do you, buy, process, sell and/or serve specialty coffee?  
 1) Yes  
 2) No

22. What percent of your coffee is sold as specialty?

23. What percent of your customers are purchasing specialty coffee products?

24. Do you actively market coffee processing/roasting operation?  
 3) Yes  
 4) No, skip to #26

25. If yes, through what methods? Check all that apply.

Method	Details (name)
Radio station	Station name/ID, location:
TV station	TV station name, location:
Newspaper Ads	Name of newspaper:
Posters/flyers	
Attendance to exhibits/fairs	Name of exhibits/fairs:
Participation to trade missions	Name and location of missions
Website	Website address:
Social media	Facebook Page/Twitter Handle:
Others, please specify:	

26. IMPROVED POST-PRODUCTION PRACTICES  
 Do you practice any of the following? Please check all that apply.  
 1) Dehulling  
 2) Pulping  
 3) Fermentation



- 4) Drying
- 5) Proper storage
- 6) Roasting
- 7) Grinding

27. Do you own any of the following and how many?

Type of Processing Equipment	Number
Dehuller	
Pulper machines	
Fermentary	
Dryers	
Storage (cold; warehouse)	
Grinders	
Roasters	
Others, please specify:	

28. CERTIFICATION

Have you obtained any quality management certifications?

- 1) Yes
- 2) No, please skip to #30

29. If yes, what are these?

- 1) Good Manufacturing Practices
- 2) Halal Certification
- 3) ISO 9000 series
- 4) Hazard Analysis and Critical Control Points
- 5) Kosher
- 6) UTZ
- 7) Organic
- 8) Q Grader
- 9) Q Processing
- 10) Others, please specify:

30. AGREEMENTS

Do you have a sale/procurement agreement with producer organizations or supermarkets/groceries?

- 5) Yes
- 6) No, please skip to #32.

31. If yes, please provide details on:

	Number	Names and Location
Producer organizations		
Supermarkets/groceries		
Exporters		
Others, please specify:		

32. RESEARCH AND DEVELOPMENT

Do you conduct research and development to create more coffee-based products?

- 1) Yes
- 2) No

33. CREDIT:

Do you have an existing credit?

- 7) Yes
- 8) No, skip to #35

34. If yes, please provide details on:

10) Source of credit (institution/individual)

11) Amount:

12) Interest rate:

13) Payment period:

35. MANAGEMENT PRACTICES

Which of the following management practices the nursery is implementing (check all that apply):

10) Financial Management (financial planning, accounting processes, etc.)

11) Record Management (financial documents and production documents, receipts and expenses, inventory, etc.)

12) Input, Output and Needs Computation

13) Business Planning (includes production scheduling)

14) Human Resources Management (provision of training, incentives, promotion, etc.)

15) Marketing and Promotion

16) Inventory Management

17) Quality Management Systems (5-S, ISO, etc.)

18) Others, please specify:

36. COFFEE PROJECTS

Have you participated in government, non-government or private firms-funded projects on coffee production, processing and marketing?

3) Yes

4) No, please proceed to #34.

37. If yes, please provide details:

Name of Project	Funding Organization/Partner

38. PROBLEMS AFFECTING COFFEE INDUSTRY

Based on what you know about the local coffee industry, what are the top 3 projects coffee processors/roasters encounter?

39. If you are affected by these problems, have you addressed these projects? In what way?

40. What are your recommendations in addressing these problems?

41. RELATIONSHIPS AND COLLABORATION

First, list down below between 5 to 10 organizations/groups that your organization/enterprise is presently interacting. Second, check the type of activity you do with these organizations and enterprises.

Organization	Information Sharing (through visits, meetings, training, workshops, etc.)	Resource Sharing (through shared projects, exchanged staff, provided funding counterparts, space, etc.)	Advocacy Activities (Support quality enhancement efforts, policy changes, resolve industry issues, etc.)

42. SUPPORT NEEDED TO IMPROVE/EXPAND PROCESSING OPERATION

What support do you need to improve or expand your processing/roasting/brewing operation?
43. COMMENTS What other comments/message do you want to share/express regarding processing/roasting/brewing operations?

- End of Processors/Roaster Survey Form -

## Annex 11: Trader Survey Form (Final Version)

### Traders Final Version

#### I. Preliminaries

##### Introduction:

We are (Name of Supervisor) and (Name of Enumerator) from the Institute for Socio-Economic Development Initiatives (ISED) of the Ateneo de Davao University. Our team is commissioned by ACDI/VOCA to undertake the Baseline Survey for Philippine Coffee Advancement and Farm Enterprise (PhilCAFE) project to collect information to better understand the situation and how to improve the coffee industry in the Philippines.

If you agree to be part of this undertaking, you will be asked to answer questions on household information; livelihood activities; coffee production and marketing practices; family income and spending; access to credit and financing; and concerns and expectations related to coffee industry as a whole.

Your participation in this study is completely voluntary. If you choose to be in the study, you can withdraw at any time without consequences of any kind. Participating in this study does not mean that you are giving up any of your legal rights. All of the information generated through this instrument will be treated with high degree of confidentiality. Research records will be kept in a locked file, and all electronic information will be coded and secured using a password protected file. Any report of this research that is made available to the public will not include your name or any other individual information by which you could be identified.

1. Name of Interviewer:		
2. Date of Interview:		
3. Interview is: <input type="checkbox"/> First Visit <input type="checkbox"/> Second Visit <input type="checkbox"/> Replacement		
4. Time Started:	5. Time Ended:	
6. Province:	7. Municipality:	8. Barangay:
9. MSA Respondent Number/Code:		
10. GPS Coordinates:		

## II. Respondent Information

1. Name of the Respondent
1) Last Name
2) First Name
3) Middle Name
2. Current Address
1) Province:
2) Municipality:
3) Barangay:
3. Contact Number
4. Ethnicity
5. Date of Birth
10) Month
11) Day
12) Year
6. Gender
10) Male
11) Female
12) Others, specify:
7. Position in the Enterprise/organization

## III. Enterprise Profile

8. Name of enterprise/organization																													
9. Address of the Enterprise/organization																													
10. EMPLOYEES How many workers do you have? Please classify according to status of employment and age of workers:																													
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11. ASSET SIZE What was the total value of your assets as of December 2018? This included cash, investments, accounts receivable, inventory, supplies, land, building, equipment and vehicles.																													
12. SALES What was your gross sales in 2018? All crops, including coffee.																													
13. How does your sales in 2018 compare to 2017?																													
14. MARKET What was volume of coffee sold in 2018? In metric tons?																													
15. What are the agricultural crops you commonly purchase?																													
16. How is coffee compared to other crops purchased in terms of value and volume?																													

17. Who are your suppliers of coffee?

	Names	Location	Form of Coffee Supplied	Average Volume Delivered	Price/kg	Payment Scheme/ Method	Coffee specifications
Individuals	(Do not fill up if too many)						
Producers Organizations							

(Codes: For forms – cherry or green coffee beans. For payment scheme – in cash, post-dated checks, or others. For coffee specification – in terms of moisture, bean count, colors, etc.)

18. In buying from these suppliers, what is your basis in setting the price?

	Basis for Setting the Price
In buying from suppliers	
In selling to buyers	

19. What is the minimum and maximum volume you can purchase/accept at a given time?

	In Kilo
Minimum delivery per supplier	
Maximum deliver per supplier	

20. What are the differences between buying coffee from individual farmers and from producer organizations?

21. What trends have you seen in recent years in terms of coffee volume and quality?

22. Can you describe the quality of beans that the farmers and producer organizations are supplying?

23. What are the support services you extend to coffee farmers and producers?

- 1) Provide information on market price
- 2) Share information on quality requirements
- 3) Extend credit
- 4) Provide transportation for a fee
- 5) Provide post-harvest equipment/services for a fee
- 6) Others (specify)

24. Who are your buyers of coffee?

	Names	Location	Forms of Coffee Bought	Average Volume Bought	Price/kg	Payment Scheme/ Method	Coffee Specifications
Individuals							
Processors/Roasters							
Exporters							

(Codes: For forms – cherry or green coffee beans. For payment scheme – in cash, post-dated checks, or others. For coffee specification – in terms of moisture, bean count, colors, etc.)

25. Do you actively market your coffee products?

- 1) Yes
- 2) No, skip to #27

26. If yes, through what methods? Check all that apply.

Method	Details (name)
Radio station	Station name/ID, location:
TV station	TV station name, location:
Newspaper Ads	Name of newspaper:
Posters/flyers	
Attendance to exhibits/fairs	Name of exhibits/fairs:
Participation to trade missions	Name and location of missions
Website	Website address:
Social media	Facebook Page/Twitter Handle:
Others, please specify:	

27. STORAGE CAPACITY

What is the size of your warehouse? In cubic meters

28. How much of this capacity is utilized? In percentage

29. CREDIT

Do you have an existing credit?

- 1) Yes
- 2) No, skip to #31

30. If yes, please provide details on:

- 1) Source of credit (institution/individual)
- 2) Amount:
- 3) Interest rate:
- 4) Payment period:
- 5) Purpose of the credit (e.g. for buying coffee, inputs?):

31. Do extend financial services such as cash advance to your suppliers?

- 1) Yes
- 2) No

32. STAFF TRAINING

Have you or any of your staff received training related to coffee quality?

- 1) Yes
- 2) No

33. If you have received training, please provide more details.

Type of Training	Training Provider	Location

34. AGREEMENTS

Do you have a sale/procurement agreement with local processors/roasters, coffee shops or exporters?

- 1) Yes
- 2) No, skip to #36

35. If yes, please provide details on:

	Number	Names and Location/Country
Local processors/roasters		
Coffee shops		
Exporters		
Others, please specify:		



36. MANAGEMENT PRACTICES

Which of the following management practices the nursery is implementing (check all that apply):

- 1) Financial Management (financial planning, accounting processes, etc.)
- 2) Record Management (financial documents and production documents, receipts and expenses, inventory, etc.)
- 3) Input, Output and Needs Computation
- 4) Business Planning (includes production scheduling)
- 5) Human Resources Management (provision of training, incentives, promotion, etc.)
- 6) Marketing and Promotion
- 7) Inventory Management
- 8) Quality Management Systems (5-S, ISO, etc.)
- 9) Others, please specify:

37. COFFEE PROJECTS

Have you participated in government, non-government or private firms-funded projects on coffee production, processing and marketing?

- 1) Yes
- 2) No, please proceed to #34.

38. If yes, please provide details:

Name of Project	Funding Organization/Partner

39.

40. RELATIONSHIPS AND COLLABORATION

First, list down below between 5 to 10 organizations/groups that your organization/enterprise is presently interacting. Second, check the type of activity you do with these organizations and enterprises.

Organization	Information Sharing (through visits, meetings, training, workshops, etc.)	Resource Sharing (through shared projects, exchanged staff, provided funding counterparts, space, etc.)	Advocacy Activities (Support quality enhancement efforts, policy changes, resolve industry issues, etc.)
a.			
b.			
c.			
d.			
e.			
f.			
g.			
h.			
i.			
j.			

41. SUPPORT NEEDED TO IMPROVE/EXPAND TRADING OPERATION

What do you need to improve or expand your trading (buy-and-sell) operation?

42. COMMENTS

What other comments/message do you want to share/express regarding propagation and selling of coffee seedlings?

- End of Trader Survey Form -

## Annex 12: Micro-finance/Lending Institutions (Final Version)

### Micro-Finance/Lending Institutions Final Version

#### I. Preliminaries

##### Introduction:

We are (Name of Supervisor) and (Name of Enumerator) from the Institute for Socio-Economic Development Initiatives (ISED) of the Ateneo de Davao University. Our team is commissioned by ACDI/VOCA to undertake the Baseline Survey for Philippine Coffee Advancement and Farm Enterprise (PhilCAFE) project to collect information to better understand the situation and how to improve the coffee industry in the Philippines.

If you agree to be part of this undertaking, you will be asked to answer questions on household information; livelihood activities; coffee production and marketing practices; family income and spending; access to credit and financing; and concerns and expectations related to coffee industry as a whole.

Your participation in this study is completely voluntary. If you choose to be in the study, you can withdraw at any time without consequences of any kind. Participating in this study does not mean that you are giving up any of your legal rights. All of the information generated through this instrument will be treated with high degree of confidentiality. Research records will be kept in a locked file, and all electronic information will be coded and secured using a password protected file. Any report of this research that is made available to the public will not include your name or any other individual information by which you could be identified.

1. Name of Interviewer:		
2. Date of Interview:		
3. Interview is: <input type="checkbox"/> First Visit <input type="checkbox"/> Second Visit <input type="checkbox"/> Replacement		
4. Time Started:	5. Time Ended:	
6. Province:	7. Municipality:	8. Barangay:
9. MSA Respondent Number/Code:		
10. GPS Coordinates:		

#### II. Respondent Information

1. Name of the Respondent
1) Last Name
2) First Name
3) Middle Name
2. Current Address
1) Province:
2) Municipality:
3) Barangay:
3. Contact Number and or email address
4. Ethnicity
5. Date of Birth
4) Month
5) Day
6) Year
6. Gender
4) Male
5) Female

6) Others, specify:
7. Position in the Organization/MFI

### III. Enterprise Profile

8. Name of Agency/organization:																																									
9. Address of the Agency/organization:																																									
10. TYPE OF OPERATION Please indicate the type of your operation. 1) Micro-finance institutions 2) Producer organizations extending loans to members 3) Rural/community banks 4) Money lenders 5) Others please specify:																																									
11. YEARS IN THE PROVINCE When did you start your operation in the province? What year?																																									
12. How many branches are now operating in this province? Please tell us the location/municipality?																																									
13. EMPLOYEES How many employees does your organization have? Please classify according to status of employment and age of workers:																																									
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14. ASSET SIZE What was this branch's total value of assets as of December 2018? This included cash, investments, accounts receivables, inventory supplies, land, building, equipment and vehicles.																																									
15. LOANS DISBURSED What was this branch's total loan disbursed in 2018?																																									
16. What are the primary crops in this branch's lending portfolio?																																									
17. What was the total value of agricultural loan you disbursed in 2018?																																									
18. What was the amount of loan disbursed to coffee-farmers and coffee-related enterprises/activities?																																									
19. To what extent has your loan portfolio in the province grown compared to 2017?																																									
20. How many clients were served in 2018?																																									
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Exporters																																									
21. What is the percentage (or number) of women clients? Youth? Female Youth?																																									
22. FINANCIAL SERVICES OFFERED RELATED TO COFFEE - ACTIVITIES What type of activities do you finance? 1) Land acquisition/expansion 2) Production capital (labor, planting materials and other inputs) 3) Farm machineries (tractors, trucks, etc.) 4) Post-harvest facilities 5) Warehouse and other storage options 6) Marketing and promotions																																									

7) Others, please specify:																				
23. What are the criteria and typical requirements to avail of an agricultural loan?																				
24. Are the criteria and requirements different for male and female borrowers? Youth borrowers? 1) Yes 2) No																				
25. COFFEE BORROWERS Are the criteria and requirements different for coffee and other crops? 1) Yes 2) No																				
26. If you have different loan products for coffee borrowers, please provide details, in terms of interest rate, amount of loan available, and repayment period.																				
<table border="1"> <thead> <tr> <th>Loan Product</th> <th>Interest Rate</th> <th>Range of Loan (Amount Offered)</th> <th>Repayment Period</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	Loan Product	Interest Rate	Range of Loan (Amount Offered)	Repayment Period																
Loan Product	Interest Rate	Range of Loan (Amount Offered)	Repayment Period																	
27. What is the percentage of coffee borrowers against your total clients?																				
28. How many of your coffee borrowers are women?																				
29. How many of your coffee borrowers are below 30 years old? Female borrowers below 30 years old?																				
30. How many of your coffee borrowers are farms less than 2 hectares?																				
31. How do you compare the repayment rates of individual coffee farmers compared to coffee-producing organizations?																				
32. What are the risks for coffee borrowers whose loans have been approved? What are the common reasons for defaulting on loan?																				
33. What are the reasons for loan applications to be declined?																				
34. What have you done to mitigate these risks and problems?																				
35. Is your company/organization interested in loaning to more coffee farmers? 1) Yes 2) No, skip to #37																				
36. If so, what is the strategy for growing this loan portfolio?																				
37. If not, why?																				
38. Do you actively market your financial products/services? 5) Yes 6) No, skip to #40																				
39. If yes, through what methods? Check all that apply.																				
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Website	Website address:																			
Social media	Facebook Page/Twitter Handle:																			
Others, please specify:																				

40. Where else do you operate in the country?																																												
41. How many branches in all?																																												
42. COFFEE PROJECTS Have you participated in or partnered with government, non-government or private firms-funded projects on coffee production, processing and marketing? 5) Yes 6) No, please proceed to #17.																																												
43. If yes, please provide details:																																												
<table border="1"> <thead> <tr> <th>Name of Project</th> <th>Funding Organization/Partner</th> <th>Contact Address</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	Name of Project	Funding Organization/Partner	Contact Address																																									
Name of Project	Funding Organization/Partner	Contact Address																																										
44. SUPPORT NEEDED TO IMPROVE/EXPAND FINANCIAL/LENDING OPERATION What support do you need to improve or expand your financial/lending operation?																																												
45. RELATIONSHIPS AND COLLABORATION First, list down below between 5 to 10 organizations/groups that your organization/enterprise is presently interacting. Second, check the type of activity you do with these organizations and enterprises.																																												
<table border="1"> <thead> <tr> <th>Organization</th> <th>Information Sharing (through visits, meetings, training, workshops, etc.)</th> <th>Resource Sharing (through shared projects, exchanged staff, provided funding counterparts, space, etc.)</th> <th>Advocacy Activities (Support quality enhancement efforts, policy changes, resolve industry issues, etc.)</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	Organization	Information Sharing (through visits, meetings, training, workshops, etc.)	Resource Sharing (through shared projects, exchanged staff, provided funding counterparts, space, etc.)	Advocacy Activities (Support quality enhancement efforts, policy changes, resolve industry issues, etc.)																																								
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46. COMMENTS What other comments/message do you want to share/express regarding financing/lending to coffee farmers, enterprises and organizations?																																												

- End of Micro-Finance/Lending Survey Form-

## Annex 13: Key Informant Interview Guide Questions

### Provincial Agriculturist Office - KII

#### I. Instructions

1. Before the interview, check if the audio recorder is working.
2. Questions in this interview protocol are descriptive and exploratory. Hence probing is necessary or encouraged.
3. After the interview, check the quality of the recording.
4. Prepare process notes after the interview.

#### II. Preliminaries

##### Introduction:

We are (Name of Supervisor) and (Name of Enumerator) from the Institute for Socio-Economic Development Initiatives (ISEDI) of the Ateneo de Davao University. Our team is commissioned by ACDI/VOCA to undertake the Baseline Survey for Philippine Coffee Advancement and Farm Enterprise (PhilCAFE) project to collect information to better understand the situation and how to improve the coffee industry in the Philippines.

If you agree to be part of this undertaking, you will be asked to share information about your organization and operation and your activities that are related to coffee production, processing and marketing. We will also ask you to share your expectations related to coffee industry as a whole.

Your participation in this study is completely voluntary. If you choose to be in the study, you can withdraw at any time without consequences of any kind. Participating in this study does not mean that you are giving up any of your legal rights. All of the information generated through this instrument will be treated with high degree of confidentiality. Research records will be kept in a locked file, and all electronic information will be coded and secured using a password protected file. Any report of this research that is made available to the public will not include your name or any other individual information by which you could be identified.

#### III. Respondent Information

1. Name of the Respondent
1) Last Name
2) First Name
3) Middle Name
2. Current Address
1) Province:
2) Municipality:
3) Barangay
3. Contact Number and or email address
4. Ethnicity
5. Date of Birth
1) Month
2) Day
3) Year
6. Gender
1) Male
2) Female
3) Others, specify:
7. Position in the PAO



## I. Questions

### COFFEE BENEFICIARIES OF THE PROVINCE

1. What are the priority crops of the provincial government?  
Probe:
  - 1.1. (If coffee is not identified) Why is coffee not among the priority crops?
  - 1.2. (If coffee is identified) Why is coffee considered a priority crop here?
2. Based on your records (*if no record, ask for estimate*), how many farmers in your municipality are engaged in coffee production?
3. Based on records, how many producer organizations are:
  - 3.1. Engaged in coffee production?
  - 3.2. Engaged in coffee processing?

### PROVINCIAL AGRICULTURIST OFFICE SERVICES TO LOCAL COFFEE INDUSTRY

4. How much of the Provincial Agriculturist Office's budget is allocated to coffee-related activities?
5. What are the support services your office provides to coffee farmers and producer organizations?
6. Based on what you know about the local coffee industry, what are the top three problems farmers/organizations encounter?
  - 6.1. In what way did your office or the provincial government address these problems?
  - 6.2. What progress have you made with your coffee initiatives?
7. What are the technical services or activities undertaken by your extension staff related to coffee production and processing?
8. What are the trainings or seminars related to the coffee industry/farming that you or your staff have attended in the past 5 years?
  - 8.1. What type of trainings or seminar your extension staff and office may need so you can better perform and reach more people?
9. In supporting the coffee sector (or the entire farming industry), does your office have:
  - 9.1. A gender strategy? Such as improving the access to services by women, indigenous peoples, people with disabilities.
  - 9.2. A youth strategy? Such as introducing activities that will encourage the youth to pursue careers in agriculture or continue the farming activities of their parents/relatives.

### RELATIONSHIPS AND COLLABORATION

10. Please name government, non-government organizations and private firms which your office believes are contributing significant effort to promote the local coffee industry.
  - 10.1. What projects have you partnered with them in the past?
  - 10.2. Identify what type of partnership do you have?
  - 10.3. What are the areas of potential collaboration?

(Note: This table may be used.)

Organization	Contact Person and Address	Project Partner in (state project name)	Partnership			Potential areas of collaboration	Frequency of Interaction	Strength of Relationship	Quality of Relationship
			Information Sharing (through visits, meetings, training, workshops, etc.)	Resource Sharing (shared staff, funding, network, etc.)	Advocacy Activities (Support quality enhancement efforts, policy changes, resolve industry issues, etc.)				


#### Codes for Frequency of Interaction

- 5 – Several times a month
- 4 – Once each quarter
- 3 – Twice a year
- 2 – Once a year
- 1 – Never

#### Codes for Strength of Relationship

- 5 – Extremely influential (in relation to coffee farming)
- 4 – Very influential
- 3 – Somewhat influential
- 2 – Slightly influential
- 1 – Not at all influential

#### Codes for Quality of Relationship

- 5 – Complete trust
- 4 – Moderate trust
- 3 – Neutral
- 2 – Incomplete trust
- 1 – No trust

## National Government Agencies - KII

(Note: Similar Instruction, Preliminaries and Respondent Information with Provincial Agriculturist Office).

### I. Questions

#### AGENCY RESOURCES AND SERVICES

1. How much is allocated for the coffee industry support and activities based on the recent budget of your agency?
2. Please enumerate the support services you extend to coffee farmers and producer organizations.
3. Based on what you know about the local coffee industry, what are the top three problems farmers/organizations encountered?
  - 3.1. In what way did your agency contribute to address these problems?
  - 3.2. What progress have you made with your coffee initiatives?

#### AGENCY POLICIES AND INITIATIVES TO ADDRESS INDUSTRY ISSUES

4. What policies are your advocating to improve the competitiveness of the local coffee industry?
5. What does your agency need to improve your support/work with the coffee industry?
  - 5.1. What trainings have your or your staff attended related to coffee industry in the past 5 years?
  - 5.2. Are there specific capacity-buildings or resources that your extension staff or organization need to enhance your service delivery to coffee farmers and organization?
  - 5.3. What can make these improvements happen?

#### RELATIONSHIPS AND COLLABORATION

6. Please name government, non-government organizations and private firms which your office believes are contributing significant effort to promote the local coffee industry.
  - 6.1. What projects have you partnered with them in the past?
  - 6.2. Identify what type of partnership do you have?
  - 6.3. What are the areas of potential collaboration?

(Note: This table may be used.)

Organization	Contact Person and Address	Project Partner in (state project name)	Partnership			Potential areas of collaboration	Frequency of Interaction	Strength of Relationship	Quality of Relationship
			Information Sharing (through visits, meetings, training, workshops, etc.)	Resource Sharing (shared staff, funding, network, etc.)	Advocacy Activities (Support quality enhancement efforts, policy changes, resolve Industry Issues, etc.)				

## State Universities - KII

(Note: Similar Instruction, Preliminaries and Respondent Information with Provincial Agriculturist Office).

### I. Questions

1. What agriculture-related programs/courses are being offered by your college/university?
  - 1.1. Which of these programs/courses are related to coffee production/processing/marketing?
  - 1.2. What is the level of enrollment for these coffee-related programs/courses in school year 2017-2018?  
What is the percentage of female students?
2. What researches were completed by the college/university related to coffee, specifically on:
  - 2.1. Improving coffee technology?
  - 2.2. Improving extension services?
  - 2.3. Advocating specific policy?
3. Does the college/university:
  - 3.1. Deliver extension services direct to coffee farmers/producer organizations?
  - 3.2. Have a demonstration farm?
4. What type of coffee-related trainings the college/university staff have attended in the past? (indicate what trainings and who provided the trainings)?
5. Please name government, non-government organizations and private firms which your office believes are contributing significant effort to promote the local coffee industry.
  - 5.1. What projects have you partnered with them in the past?
  - 5.2. Identify what type of partnership do you have?
  - 5.3. What are the areas of potential collaboration?

(Note: This table may be used.)

Organization	Contact Person and Address	Project Partner in (state project name)	Partnership			Potential areas of collaboration	Frequency of Interaction	Strength of Relationship	Quality of Relationship
			Information Sharing (through visits, meetings, training, workshops, etc.)	Resource Sharing (shared staff, funding, network, etc.)	Advocacy Activities (Support quality enhancement efforts, policy changes, resolve industry issues, etc.)				

## Coffee Sectoral Organization - KII

(Note: Similar Instruction, Preliminaries and Respondent Information with Provincial Agriculturist Office).

### I. Questions

1. How many members do you have?
  - 1.1. What proportion of your members are women? Youth? Female Youth?
  - 1.2. How many of women occupy officer/leadership position? For youth (male and female)?
2. What support services do you offer to your members?
3. What are the sources of funds to run the organization?
4. What type of coffee-related training has your staff has attended in the past three years?
  - 4.1. What types of training/capacity-building does your organization feel it needs to improve further?
5. Based on what you know about the local coffee industry, what are the top three problems coffee industry face?
  - 5.1. Is your organization working to address those problems? How?
  - 5.2. What are your additional recommendations in addressing these problems?
6. Please name government, non-government organizations and private firms which your office believes are contributing significant effort to promote the local coffee industry.
  - 6.1. What projects have you partnered with them in the past?
  - 6.2. Identify what type of partnership do you have?
  - 6.3. What are the areas of potential collaboration?

(Note: This table may be used.)

Organization	Contact Person and Address	Project Partner in (state project name)	Partnership			Potential areas of collaboration	Frequency of Interaction	Strength of Relationship	Quality of Relationship
			Information Sharing (through visits, meetings, training, workshops, etc.)	Resource Sharing (shared staff, funding, network, etc.)	Advocacy Activities (Support quality enhancement efforts, policy changes, resolve industry issues, etc.)				

# Coffee Influencers

## I. Preliminaries

### Introduction:

I am (XXXXX) from the Institute for Socio-Economic Development Initiatives (ISED) of the Ateneo de Davao University. Our team is commissioned by ACDI/VOCA to undertake the Baseline Survey for Philippine Coffee Advancement and Farm Enterprise (PhilCAFE) project to collect information to better understand the situation and how to improve the coffee industry in the Philippines.

If you agree to be part of this undertaking, you will be asked to answer questions on your organization's and your personal insights on the current situation of the coffee industry, particularly the factors that enhance its competitiveness as well as those that limit its growth. We will also ask you questions on how you see the coffee industry in the next four (4) years, and what areas of collaboration should the stakeholders need to pursue or support.

Your participation in this study is completely voluntary. If you choose to be in the study, you can withdraw at any time without consequences of any kind. Participating in this study does not mean that you are giving up any of your legal rights. All of the information generated through this instrument will be treated with high degree of confidentiality. Research records will be kept in a locked file, and all electronic information will be coded and secured using a password protected file. Any report of this research that is made available to the public will not include your name or any other individual information by which you could be identified.

1. Name of Interviewer:		
2. Date of Interview:		
3. Interview is: <input type="checkbox"/> First Visit <input type="checkbox"/> Second Visit		
4. Time Started:	5. Time Ended:	
6. Province:	7. Municipality:	8. Barangay:
9. Key Informant Number/Code:		
10. GPS Coordinates:		

## II. Respondent Information

1. Name of the Respondent 1) Last Name 2) First Name 3) Middle Name
2. Current Address 1) Province: 2) Municipality: 3) Barangay:
3. Contact Number
4. Ethnicity
5. Date of Birth 1) Month 2) Day 3) Year
6. Gender 1) Male 2) Female 3) Others, specify:



7. Name of the Organization Represented:
8. Position in the Enterprise/organization:

## Guide Questions

1. What is your organization's key mandate or goals in relation to the coffee industry?
2. From your organization's perspective, is the coffee industry competitive vis-à-vis other commercial crops in the country, and vis-à-vis other coffee-producing countries in South East Asia?
3. Which part of the coffee value chain is proving to be its weakest link and which part of the chain is a source of competitiveness?  
Probe:
  - How do we help the weakest link/actors?
  - How do we maximize the strongest link/actors?
4. What is the best linkage model to help small and medium sized producers, traders and post-harvest market actors expand their operation/business? What is the best way to link these small coffee actors with "big" actors?
5. What policies or services should the government introduce and strengthen to encourage people in the industry adopt and practice quality standards? How can the private sector support an industry-wide quality standards compliance?
6. From your perspective, what is the best-case scenario for the coffee industry three-to-five years from now? How do we get there? What is the worst-case scenario, and how to we counter that from happening?
7. What areas of collaboration are you interested in to work with PhilCAFE?
8. Please name government, non-government organizations and private firms which your organization believes are contributing significant effort to promote the local coffee industry.
  - What projects have you partnered with them in the past?
  - Identify what type of partnership do you have?
  - What are the areas of potential collaboration?

(Note: This table may be used.)

Organization	Contact Person and Address	Project Partner in (state project name)	Partnership			Potential areas of collaboration	Frequency of Interaction	Strength of Relationship	Quality of Relationship
			Information Sharing (through visits, meetings, training, workshops, etc.)	Resource Sharing (shared staff, funding, network, etc.)	Advocacy Activities (Support quality enhancement efforts, policy changes, resolve industry issues, etc.)				

- End of the KII Guide Questions -

## Annex 14: Focus Group Discussion Guide Questions

### FGD Guide Questions

#### I. Instruction

- 1) Explain to the participants the purpose of the study and mention your institutional affiliation.
- 2) Seek the participants' permission to record the interview for data retrieval and analysis.
- 3) Explain to the participants the ethic of confidentiality and informed consent.
- 4) The questions in this interview protocol are descriptive and exploratory. Hence, probing is necessary/encouraged.
- 5) After the interview, check the quality of the recording.
- 6) Prepare process notes after the interview.
- 7) Document the following information before the interview.

#### II. Preliminaries

1. Name of Interviewer:	
2. Name of Documenter:	
3. Date of Interview:	
4. Interview is: <input type="checkbox"/> First Visit <input type="checkbox"/> Second Visit <input type="checkbox"/> Replacement	
5. Time Started:	6. Time Ended:
7. Province:	8. Municipality:
9. Venue of the FGD Session	
10. FGD Session Number/Code:	
11. GPS Coordinates:	

#### III. FGD Participants Information

1. Organization Name:				
Name	Position	Gender	Birthdate	Contact Number
1)				
2)				
3)				
4)				
5)				
2. FGD Type				
<input type="checkbox"/> Men only participants (30 years above) <input type="checkbox"/> Female only participants (30 y/old above)				
<input type="checkbox"/> Male youth only participants <input type="checkbox"/> Female youth only participants				
<input type="checkbox"/> Male indigenous only participants <input type="checkbox"/> Female indigenous only participants				

#### IV. Questions

##### REASONS FOR ENGAGING IN COFFEE PRODUCTION/ACTIVITIES

1. Why do you engage in coffee production?
2. Through your producer organization, what were the coffee-related trainings you have attended?
3. Who provided funds to implement the organization's coffee-related activities?

##### PROBLEMS AND CHALLENGES

4. What are the key problems you encountered in your coffee production?
  - 4.1. What did you do to address those problems or difficulties?

5. How is the producer organization helping you address challenges on:
  - 5.1. Access to inputs and financing
  - 5.2. Yield
  - 5.3. Coffee quality
  - 5.4. Productivity or increasing productivity
  - 5.5. Harvesting and post-harvest processing techniques
  - 5.6. Knowledge of best practices or technologies
  - 5.7. Market information
  - 5.8. Marketing/branding
  - 5.9. Farm labor

#### **COFFEE QUALITY AND MARKETING**

6. What steps have you taken to improve the quality of your coffee?
7. How do you currently sell your coffee? How do you inform existing and potential buyers of your coffee when you are interested in selling?
8. Where and how do you get information on a specific buyer's volume requirements, quality specification and their buying price?

#### **GENDER AND COFFEE**

9. As coffee farmers, what are your responsibilities when it comes to the different activities in coffee farming/production (e.g. land preparation, planting, fertilizer application, pruning, harvesting, postharvest handling, loan repayment, marketing, among others)?
  - 9.1. Which among these responsibilities you consider as your primary responsibility?
10. As coffee farmers, who in your household make decisions regarding the following:
  - 10.1. Which farming activities to do
  - 10.2. Use of income and who decides in the HH
  - 10.3. New investments in the farm
  - 10.4. Changes in farm technology
  - 10.5. Access to financial assistance or credit
  - 10.6. Marketing (price negotiation, when to sell and to whom, storage vs immediate selling)
  - 10.7. Probe: Who has more influence when it comes to decision making and why?
11. What are your thoughts on the youth's involvement in coffee farming?
12. Does your organization have gender and youth strategy?
  - 12.1. Does the organization have gender and youth development plan and budget?
  - 12.2. What projects or activities have been/being implemented by your producer organization that provide women with equal opportunities in coffee farming?
  - 12.3. Does the organization have other projects or regular activities that promote gender equality?
  - 12.4. Do women members occupy leadership positions in the organization and how much influence do they exert?
  - 12.5. Do youth members occupy leadership positions in the organization and how much influence do they exert?
13. What projects and activities have been/being implemented by your organization that encourage more youth to participate in or continue coffee farming?

#### **OTHER SERVICES RELATED TO COFFEE**

14. Do you have access to support services (e.g., farm machinery, seedlings and fertilizers, microfinance, processing facilities, among others) given to coffee farmers or producer organizations by government organizations, non-government organizations and private firms?

- 14.1. Which organizations provide what type of support services? Where are they located?
- 14.2. Describe the quality of your working relationship with these private firms, GOs and NGOs and their frequency of interaction, quality and strength of relationship.
- 14.3. (After filling-out the table below...) Who has easy or immediate access to these services? (comparing male adults, women more than 30 years old, and the youth).

*(NOTE: In answering #14, this table may be used.)*

Name of Organization or Individual	Address	Contact Person	Frequency of Visit	Strength of Relationship	Quality of Relationship

**End of Interview**

Annex 15: Sample Letters from the Agricultural Offices Regarding Replacement of Barangays



Republic of the Philippines  
Province of Sarangani

**MUNICIPALITY OF MALUNGON**

**OFFICE OF THE MUNICIPAL AGRICULTURIST**

March 14, 2019

Ma'am:

This is in relation to your intention to conduct baseline study with the pre-identified respondents in the two barangays in the municipality, namely, Barangay Tamban and Barangay San Miguel.

We would like to recommend **Barangay Malungon Gamay** in lieu of *Barangay Tamban* for the conduct of the said study considering the distance and other circumstances of the said barangay.

Rest assured that the recommended barangay will be a good source of whatever information you may need relevant to coffee farming in the municipality.

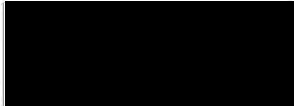
Godspeed.



Republic of the Philippines  
**OFFICE OF THE CITY AGRICULTURIST**  
Gingoog City

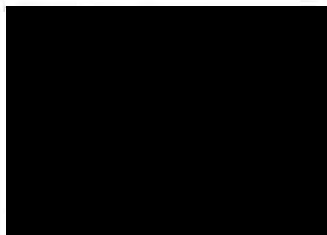
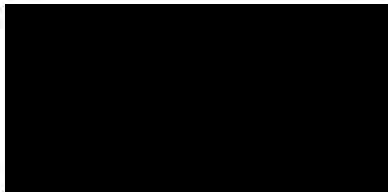


March 22, 2019



In response to the letter from the Institute for Socio Economic development Initiatives ( ISEDI ) received this 22<sup>nd</sup> day of March 2019. That Barangay Kalipay was chosen as the respondent of the baseline survey of PhilCAFE.

However, this office recommend Barangay Mimbunga as replacement to Barangay Kalipay for one valid reason, most of the coffee trees of the said area is subject for rehabilitation/ rejuvenation.





### Annex 16: Regional Names and Numbers

The Philippines is divided into 17 administrative regions. Each region is composed of provinces; each province is composed of municipalities and cities; each municipality/city is composed of barangays.

For easy recall, the table below shows the regional designation and their assigned number/name:

Region's Name in Number	Regional Designation
1	Ilocos Region
2	Cagayan Valley
3	Central Luzon
4	Southern Tagalog or CALABARZON (Calamba – Cavite - Laguna – Lucena - Batangas – Quezon – Rizal)
5	Bicol Region
6	Western Visayas
7	Central Visayas
8	Eastern Visayas
9	Zamboanga Peninsula
10	Northern Mindanao
11	Davao Region
12	SOCCSKSARGEN (South Cotabato – Cotabato – Sultan Kudarat – Sarangani – General Santos city)
13	Caraga Region
14	National Capital Region
15	Cordillera Administrative Region (CAR)
16	Bangsamoro Autonomous Region in Muslim Mindanao (BARMM)
17	Southwestern Tagalog Region

# Quantitative Tables

## Household Profile

Q-Table 1: Distribution of respondents, by sex and by region

Type	Region									Total	%
	1	6	10	11	12	13	4-A	ARMM	CAR		
<b>Treatment</b>											
<b>Adult</b>	<b>9</b>	<b>58</b>	<b>56</b>	<b>175</b>	<b>204</b>	<b>19</b>	<b>96</b>	<b>42</b>	<b>86</b>	<b>745</b>	<b>87.8</b>
Female	4	29	24	82	92	7	42	21	35	336	39.6
Male	5	29	32	93	112	12	54	21	51	409	48.2
<b>Youth</b>	<b>1</b>	<b>7</b>	<b>17</b>	<b>28</b>	<b>30</b>	<b>1</b>	<b>2</b>	<b>8</b>	<b>10</b>	<b>104</b>	<b>12.2</b>
Female		2	6	3	10			3	3	27	3.2
Male	1	5	11	25	20	1	2	5	7	77	9.1
<b>Grand Total</b>	<b>10</b>	<b>65</b>	<b>73</b>	<b>203</b>	<b>234</b>	<b>20</b>	<b>98</b>	<b>50</b>	<b>96</b>	<b>849</b>	
<b>%</b>	<b>1.2</b>	<b>7.7</b>	<b>8.6</b>	<b>23.9</b>	<b>27.6</b>	<b>2.4</b>	<b>11.5</b>	<b>5.9</b>	<b>11.3</b>		<b>100</b>
<b>Comparison</b>											
<b>Adult</b>		<b>30</b>		<b>67</b>	<b>130</b>		<b>88</b>			<b>315</b>	<b>90.3%</b>
Female		15		32	49		45			141	40.4%
Male		15		35	81		43			174	49.9%
<b>Youth</b>				<b>13</b>	<b>21</b>					<b>34</b>	<b>9.7%</b>
Female				2	9					11	3.2%
Male				11	12					23	6.6%
<b>Grand Total</b>		<b>30</b>		<b>80</b>	<b>151</b>		<b>88</b>			<b>349</b>	
<b>%</b>		<b>8.6</b>		<b>22.9</b>	<b>43.3</b>		<b>25.2</b>				<b>100.0</b>

Q-Table 2: Average age of respondents by region

Regions	Ave. Age	Age by Sex		Age by Category	
		Female	Male	Adult	Youth
<b>Treatment</b>					
1	52	51	52	55	25
6	47	48	46	50	24
10	44	43	44	51	21
11	49	51	47	53	24
12	46	45	46	49	24
13	49	46	50	50	25
4-A	63	66	60	64	22
ARMM	47	49	45	51	25
CAR	47	46	47	49	24
<b>Overall</b>	<b>49</b>	<b>50</b>	<b>48</b>	<b>52</b>	<b>24</b>
<b>Comparison</b>					
6	54	51	58	54	
11	46	47	45	51	22
12	44	43	44	46	27
4-A	58	58	58	58	
<b>Overall</b>	<b>49</b>	<b>49</b>	<b>48</b>	<b>51</b>	<b>25</b>

**Q-Table 3: Respondents average number of years of formal education by region and gender**

Region	Ave. Years of Education	Years of Educ. by Sex		Years of Educ. By Age Category	
		Female	Male	Adult	Youth
<b>Treatment</b>					
1	7	8	7	6	12
6	6	6	6	6	6
10	8	9	7	7	11
11	7	7	7	6	8
12	7	7	7	7	8
13	8	10	7	8	4
4-A	9	9	10	9	10
ARMM	9	9	8	9	9
CAR	9	9	8	8	11
<b>Overall</b>	<b>7</b>	<b>8</b>	<b>7</b>	<b>7</b>	<b>9</b>
<b>Comparison</b>					
6	4	6	3	4	
11	6	7	5	6	8
12	6	7	6	6	5
4-A	9	9	9	9	
<b>Overall</b>	<b>7</b>	<b>7</b>	<b>6</b>	<b>7</b>	<b>6</b>

**Q-Table 4: Distribution of respondents by ethnicity and by region**

Ethnicity	Regions (Freq.)									Overall	
	1	6	10	11	12	13	4-A	ARMM	CAR	F	%
<b>Treatment</b>											
Aplay									9	9	1.1
Ata				5						5	0.6
Ayangan									10	10	1.2
Bagobo				15						15	1.8
Bagobo-Tagabawa				58	1					59	6.9
Batanginyo								10		10	1.2
Blaan				28	2					30	3.5
Boholano			8	10	8	6				32	3.8
Cebuano		1	29	41	51	7	1	5		135	15.9
Ibaloy									5	5	0.6
Igorot	10								60	70	8.2
Ilocano				1	13			3		17	2.0
Ilonggo		34		2	72	3		15		126	14.8
Karay-a		29								29	3.4
Leytenio			1	4						5	0.6
Mandaya				6						6	0.7
Manobo			9		9					18	2.1
Manobo Biit			5							5	0.6
Manobo Dulangan					10					10	1.2
Manobo/Ubo			10		23	1				34	4.0
Mansaka				19						19	2.2
Others			3		11	2		2	3	21	2.5
Pangol									9	9	1.1
Samal		1								1	0.1
Subanon						1				1	0.1

Ethnicity	Regions (Freq.)									Overall	
	1	6	10	11	12	13	4-A	ARMM	CAR	F	%
<b>Treatment</b>											
Tagakaolo				8	8					16	1.9
Tagalog							97	1		98	11.5
Talaandig			8							8	0.9
Tausog				1						1	0.1
Tboli					23					23	2.7
Tiduray					2			14		16	1.9
Waray				5	1					6	0.7
<b>Comparison</b>											
Antiqueño					2					2	0.6
Bagobo				25						25	7.2
Bagobo-clata				3						3	0.9
Bawa				2						2	0.6
Bisaya					2					2	0.6
Bol-anon				8						8	2.3
Cebuano		21		9	9					39	11.2
Dyangan klata				2						2	0.6
Guingan/Clata				9						9	2.6
Igorot							1			1	0.3
Ilocano					7		1			8	2.3
Ilonggo		9		1	25					35	10.0
Lambangian					1					1	0.3
Manobo					7					7	2.0
Manobo-Ubo				16	6					22	6.3
Manobo-Dulangan					48					48	13.8
Palaweno					1					1	0.3
Tagabawa				1						1	0.3
Tagalog							85			85	24.4
Tagolo							1			1	0.3
Tiduray					43					43	12.3
Ubo				4						4	1.1

Q-Table 5: Distribution of respondents by organizational affiliation of the household head, by region

Region	No	Yes	% Yes	Cooperative/ Farmer association		Women's group		Political group		Religious group		Indigenous people group		Others	
				f	%	f	%	f	%	f	%	F	%	f	%
<b>Treatment</b>															
1	3	7	70.0	7	70.0	1	10.0	0	0	0	0.0	3	30.0	0	0.0
6	27	38	58.5	37	56.9	0	0.0	0	0	0	0.0	0	0.0	2	3.1
10	18	55	75.3	42	57.5	13	17.8	0	0	0	0.0	13	17.8	5	6.8
11	76	127	62.6	85	41.9	0	0.0	3	1.5	9	4.4	15	7.4	45	22.2
12	97	137	58.5	90	38.5	5	2.1	4	1.7	19	8.1	13	5.6	30	12.8
13	5	15	75.0	5	25.0	0	0.0	0	0	1	5.0	1	5.0	10	50.0
4-A	63	35	35.7	13	13.3	1	1.0	3	3.1	1	1.0	0	0.0	22	22.4
ARMM	26	24	48.0	16	32.0	6	12.0	0	0	1	2.0	1	2.0	3	6.0
CAR	14	82	85.4	59	61.5	17	17.7	4	4.2	0	0.0	30	31.3	22	22.9
Overall	329	520	61.2	354	41.7	43	5.1	14	1.6	31	3.7	76	9.0	139	16.4

Region	No	Yes	% Yes	Cooperative/ Farmer association		Women's group		Political group		Religious group		Indigenous people group		Others	
				<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>F</i>	%	<i>f</i>	%
<b>Comparison</b>															
6	19	11	36.7	8	26.7	1	3.3		0.0	1	3.3		0.0		
11	29	51	63.8	29	36.3		0.0		0.0	7	8.8	9	11.3		
12	66	85	56.3	48	31.8	2	1.3	1	0.7	11	7.3	27	17.9		
4-A	21	67	76.1	50	56.8		0.0	2	2.3		0.0		0.0		
<b>Overall</b>	<b>135</b>	<b>214</b>	<b>61.3</b>	<b>135</b>	<b>38.7</b>	<b>3</b>	<b>0.9</b>	<b>3</b>	<b>0.9</b>	<b>19</b>	<b>5.4</b>	<b>36</b>	<b>10.3</b>		

Q-Table 6: Distribution of respondents by household size, household type and region

Region	Ave. Number of Household Members	Type of Household			
		Single		Extended	
		<i>f</i>	%	<i>f</i>	%
<b>Treatment</b>					
1	4	9	90.0	1	10.0
6	5	53	81.5	12	18.5
10	4	67	91.8	6	8.2
11	5	178	87.7	25	12.3
12	5	223	95.3	11	4.7
13	4	19	95.0	1	5.0
4-A	4	76	77.6	22	22.4
ARMM	4	40	80.0	10	20.0
CAR	4	84	87.5	12	12.5
<b>Overall</b>	<b>5</b>	<b>749</b>	<b>88.2</b>	<b>100</b>	<b>11.8</b>
<b>Comparison</b>					
6	4	29	96.7	1	3.3
11	4	76	95.0	4	5.0
12	5	148	98.0	3	2.0
4-A	4	69	78.4	19	21.6
<b>Overall</b>	<b>4</b>	<b>322</b>	<b>92.3</b>	<b>27</b>	<b>7.7</b>

Q-Table 7: Distribution of household members by sex, in percentage

Region	Female	Male
<b>Treatment</b>		
1	63.0	37.0
6	45.3	54.7
10	51.6	48.4
11	48.7	51.3
12	46.5	53.3
13	50.6	49.4
4-A	50.2	49.5
ARMM	50.0	50.0
CAR	44.2	55.8
<b>Overall</b>	<b>48.0</b>	<b>52.0</b>
<b>Comparison</b>		
6	48.4	51.6
11	45.0	55.0
12	52.8	47.2
4-A	50.5	49.5
<b>Overall</b>	<b>50.0</b>	<b>50.0</b>



Q-Table 8: Input suppliers' location, years of operation and number of branches

Region	Size			Total
	Small Enterprise	Micro Enterprise	Medium Enterprise	
A. Number of input suppliers covered by the survey, by size and region				
6		1		1
10	1	2		3
11	4	15		19
12	1	8	1	10
4-A		1		1
Total	6	27	1	34
B. Average years of operation, by size and region				
6	5			5
10	6	37		16
11	11	20		13
12	14	8	21	14
4-A	9			9
Total	11	21	21	13
C. Average number of branches, by size and region				
6	5			5
10	6	37		16
11	11	20		13
12	14	8	21	14
4-A	9			9
Total	11	21	21	13

Q-Table 9: Average asset value in 2018 and annual gross sales in 2018 of input suppliers, by type and region

Region	Size			Average
	Micro Enterprise	Small Enterprise	Medium Enterprise	
A. Average asset value in 2018				
6	1,005,000			1,005,000
10	2,750,000	4,000,000		3,166,667
11	1,063,333	3,500,000		1,576,316
12	1,056,250	3,800,000	40,000,000	5,225,000
4-A	No Response			No Response
Ave.	1,144,630	3,633,333	40,000,000	2,726,618
B. Average annual gross sales in 2018				
6	180,000			180,000
10	1,100,000	2,500,000		1,566,667
11	2,024,267	1,675,000		1,950,737
12	1,004,375	4,500,000	20,000,000	3,253,500
4-A	No Response			No Response
Ave.	180,000			180,000

**Q-Table 10: Average selling price per unit of input, input suppliers, by region**

Items	Unit	Region				Ave.
		10	11	12	4-A	
Medium Enterprise						
Farm tools	piece			280		280
Fertilizers specific to coffee	sack			1,200		1,200
Foliar fertilizers	liter			380		380
Personal protection equipment/safety wear	piece			2,500		2,500
Pesticides specific to coffee?				490		490
Sprayers and other application equipment	piece			2,200		2,200
Micro Enterprise						
African night crawler (vermie worm)	sack			500		500
Espresso machine, grinders, roasters, barista small wares (Set)	set				407,500	407,500
Farm tools	piece		820			820
Feeds	sack		1,240			1,240
Fertilizer applicable to any crops (universal)	sack		1,250			1,250
Fertilizer for all crop (Ammonium)	sack		570			570
fertilizer for all crops (potash)	sack		1,030			1,030
Fertilizer for all crops (universal)	sack		1,200			1,200
Fertilizer for all crops (urea)	sack		1,100			1,100
fertilizers for all crops (16-20)	sack		920			920
fertilizers for all types of crop (14-14H)	sack		1,060			1,060
Fertilizers specific to coffee	sack	1,240	494	994		806
Fertilizer for all crop (14-14PH)	sack		1,200			1,200
Grinders	piece				75,400	75,400
Organic fertilizer	sack		350	300		325

Items	Unit	Region				Ave.
		10	11	12	4-A	
Personal protection equipment/safety wear	piece		750			750
Pesticide for all crops (buster 1/4)			160			160
Pesticide for all crops (decis 1/4 bot)			300			300
Pesticide for all crops (karate 1/4 bot)			250			250
Pesticides specific to coffee?		625	294	448		413
Roasters (125g to 4 kgs)					484,000	484,000
Small barista wares					4,555	4,555
Sprayers and other application equipment	piece	1,450	1,526	2,863		1,998
Vegetable seedlings	piece		45			45
<b>Small Enterprise</b>						
Fertilizers specific to coffee	sack		1,020	1,100		1,036
Pesticides specific to coffee?	sack		750	3,600		1,320
Sprayers and other application equipment	piece		2,150			2,150

**Q-Table 11: Average inventory (quantity) of inputs, inputs suppliers, by region**

Items	Unit	Region				Ave.
		10	11	12	4-A	
Medium Enterprise						
Farm tools	piece			200		200
Fertilizers specific to coffee	sack			5,000		5,000
Foliar fertilizers	liter			2,000		2,000
Personal protection equipment/safety wear	piece			500		500
Pesticides specific to coffee?				1,000		1,000

Items	Unit	Region				Ave.
		10	11	12	4-A	
Sprayers and other application equipment	piece			500		500
<b>Micro Enterprise</b>						
African night crawler (vermicast worm)	sack			30		30
Espresso machine, grinders, roasters, barista small wares	set				100	100
Farm tools	piece		58			58
Feeds	sack		4,350			4,350
Fertilizer applicable to any crops (universal)	sack		50			50
Fertilizer for all crop (Ammonium)	sack		15			15
Fertilizer for all crops (potash)	sack		10			10
Fertilizer for all crops (universal)	sack		50			50
Fertilizer for all crops (urea)	sack		10			10
fertilizers for all crops (16-20)	sack		10			10
fertilizers for all types of crop (14-14H)	sack		10			10
Fertilizers specific to coffee	sack	175	697	95		368
Fertilizer for all crop (14-14PH)	sack		9			9
Grinders	piece				300	300
Organic fertilizer	sack		35,000	50		17,525
Personal protection equipment/safety wear	piece		50			50
Pesticide for all crops (buster 1/4)			10			10
Pesticide for all crops (decis 1/4 bot)			8			8
Pesticide for all crops (karate 1/4 bot)			7			7

Items	Unit	Region				Ave.
		10	11	12	4-A	
Pesticides specific to coffee?		100	79	400		217
Roasters (125g to 4 kgs)					4	4
Small barista wares					2,000	2,000
Sprayers and other application equipment	piece	50	10	10		17
Vegetable seedlings	piece		50			50
<b>Small Enterprise</b>						
Fertilizers specific to coffee	sack		4,218	20		3,378
Pesticides specific to coffee?	sack		1,627	20		1,306
Sprayers and other application equipment	piece		57			57

## Nursery Operators Profile

**Q-Table 12: Number of nursery operators covered by the baseline, by scale and region**

Region	Enterprise Scale				Total
	Large	Medium	Micro	Small	
6			2		2
10				1	1
11			4		4
12	2	1	19	4	26
13				1	1
4-A			1		1
CAR			2		2
Total	2	1	28	6	37

**Q-Table 13: Type of nursery operators and average years of operation, by scale and region**

Size/ Region	Type of Enterprise (Frequency)						Total	Average of Years of operation
	Income-generating project of a PO	NGO project	Operated by LGU	Private enterprise	Private enterprise & NGO project	Others		
<b>Large</b>				2			2	18
12				2			2	18
<b>Medium</b>				1			1	6
12				1			1	6
<b>Micro</b>	7	1	5	11	1	3	28	10
6		1		1			2	8
11	2					2	4	2
12	4		5	9		1	19	11
4-A	1						1	2
CAR				1	1		2	13
<b>Small</b>	2	1		2		1	6	8
10	1						1	3
12	1			2		1	4	11
13		1					1	1
Total	9	2	5	16	1	4	37	10

**Q-Table 14: Average asset value, nursery size, number of seedlings sold, and gross sales in 2018, by scale and region**

Size/ Region	Ave. Value of Assets (2018)	Ave. Nursery Size (in Sq. meter)	Ave. number of seedlings	Ave. seedlings sold in 2018 (All Types of Seedlings)	Ave. gross sales in 2018
<b>Large</b>	<b>90,500,000</b>	<b>77,500</b>	<b>95,315,497</b>	<b>1,000,000</b>	<b>27,500,000</b>
12	90,500,000	77,500	95,315,497	1,000,000	27,500,000
<b>Medium</b>	<b>41,000,000</b>	<b>500,000</b>	<b>750,000</b>	<b>154,000</b>	<b>4,620,000</b>
12	41,000,000	500,000	750,000	154,000	4,620,000
<b>Micro</b>	<b>865,536</b>	<b>3,819</b>	<b>93,054</b>	<b>26,726</b>	<b>522,439</b>
6	521,000	2,250	100,000	28,000	250,000
11	700,750	890	40,250	15,708	12,675
12	957,368	5,033	114,605	32,316	733,820
4-A	100,000	150	15,000	5,000	125,000
CAR	1,050,000	2,150	26,000	5,250	5,000
<b>Small</b>	<b>6,460,000</b>	<b>20,100</b>	<b>267,500</b>	<b>239,833</b>	<b>5,570,000</b>
10	5,000,000	400	45,000	35,000	80,000
12	9,100,000	26,667	384,000	351,000	8,335,000
13			24,000		
<b>Ave.</b>	<b>7,737,083</b>	<b>24,662</b>	<b>5,286,257</b>	<b>117,333</b>	<b>2,909,954</b>



Q-Table 15: Number of processors/roasters and years in operation, by scale and region

Region	Scale		Total
	Micro Enterprise	Small Enterprise	
A. Number of processors/roasters			
6	3	5	8
10	10	2	12
11	11	1	12
12	24	4	28
13		1	1
4-A	2		2
CAR	16	2	18
Total	66	15	81
B. Average years of operation			
6	1.7	4.2	3.3
10	5.4	5.0	5.3
11	5.2	3.0	5.0
12	5.8	3.3	5.4
13		16.0	16.0
4-A	13.0		13.0
CAR	6.1	5.5	6.1
Ave.	5.7	4.9	5.6

Q-Table 16: Average asset value, gross sales and volume of coffee processed/brewed(2018) , by scale and region

Size/ Region	Ave. Asset value (in PhP)	Ave. Gross Sales (in PhP)	Ave. volume of coffee processed/brewed (in Kgs)
<b>Micro Enterprise</b>	<b>645,308</b>	<b>310,580</b>	<b>3,490</b>
6	-	106,667	40
10	488,000	175,000	374
11	207,727	456,773	570
12	756,056	265,215	7,275
4-A	1,650,000	502,300	5,566
CAR	873,750	377,125	2,155
<b>Small Enterprise</b>	<b>2,585,714</b>	<b>686,090</b>	<b>3,701</b>
6	-	360,000	450
10	6,500,000	1,570,177	20,184
11	6,500,000	300,000	800
12	2,500,000	62,750	497
13	3,500,000	3,500,000	100
CAR	3,200,000	650,001	5,001
<b>Ave.</b>	<b>984,879</b>	<b>380,119</b>	<b>3,529</b>

Q-Table 17: Number of traders covered by the survey, and years of operation, by scale and region

Region	Scale			Total
	Medium Enterprise	Micro Enterprise	Small Enterprise	
A. Number of traders				
10		5		5
11	1	8	4	13
12		7	6	13
4-A	3	6		9
CAR	1	4		5
Total	5	30	10	45
B. Average years of operation				
10		9		9
11	21	16	16	16
12		25	24	25
4-A	6	7		6
CAR	4	7		6
Average	8	14	21	15

Q-Table 18: Average asset value, gross sales and volume of coffee traded (2018), by scale and region

Size/ Region	Ave. Asset value (in PhP)	Ave. Gross Sales (in PhP) All Products	Ave. volume of coffee sold (in MTs)
<b>Medium Enterprise</b>	<b>38,423,764</b>	<b>67,299,656</b>	<b>121.56</b>
11	100,000,000	180,000,000	36.00
4-A	23,333,333	52,000,000	188.00
CAR	22,118,820	498,278	7.80
<b>Micro Enterprise</b>	<b>897,239</b>	<b>888,179</b>	<b>52.60</b>
10	849,435	311,178	129.00
11	1,316,250	1,046,063	46.17
12	685,714	1,135,714	65.31
4-A	923,333	1,239,167	10.16
CAR	450,000	333,999	0.79
<b>Small Enterprise</b>	<b>5,230,000</b>	<b>4,460,000</b>	<b>135.50</b>
11	6,000,000	3,075,000	89.00
12	4,716,667	5,383,333	166.50
<b>Average</b>	<b>6,029,689</b>	<b>9,060,970</b>	<b>79.28</b>

Q-Table 19: Number of microfinance and lending institutions covered in the survey

Count of Size	Enterprise Scale			Total
	Large Enterprise	Micro Enterprise	Small Enterprise	
<b>10</b>		<b>1</b>		<b>1</b>
Bukidnon		1		1
<b>11</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>4</b>
Davao del Norte			1	1
Davao del Sur	1	2		3
<b>12</b>	<b>1</b>	<b>1</b>		<b>2</b>
South Cotabato	1	1		2
<b>CAR</b>	<b>1</b>	<b>1</b>		<b>2</b>
Benguet		1		1
Mountain Province	1			1
<b>Total</b>	<b>3</b>	<b>5</b>	<b>1</b>	<b>9</b>

Q-Table 20: Average years of operation and number of branches, by scale and region

Size/ region	Average Years of operation	Average number of branches in the province
Large Enterprise	29	2
11	4	0
12	29	5
CAR	53	1
Micro Enterprise	18	2
10	41	1
11	15	1
12	10	9
CAR	9	1
Small Enterprise	19	0
11	19	0
Average	22	2

Q-Table 21: Average asset value and amount of loan disbursed in 2018, by scale and region

Size/ Region	Ave. Asset value (in PhP)	Average of loan disbursed in 2018
<b>Large Enterprise</b>	<b>282,335,179.34</b>	<b>114,157,232.11</b>
11	300,000,000.00	150,000,000.00
12	341,899,625.79	73,471,696.33
CAR	205,105,912.22	119,000,000.00
<b>Micro Enterprise</b>	<b>512,817.80</b>	<b>4,364,900.00</b>
10	-	20,000,000.00
11	1,100,000.00	550,000.00
CAR	364,089.00	724,500.00
<b>Small Enterprise</b>	<b>8,828,380.00</b>	<b>600,356.00</b>
11	8,828,380.00	600,356.00
<b>Average</b>	<b>95,377,556.33</b>	<b>40,544,061.37</b>

## Household Farm Labor and MSA Employment Generation

Q-Table 22: Percentage of working household members, by sex

Regions	Female	Male	Overall
<b>Treatment</b>			
1	23.5	40.0	29.6
6	34.7	39.3	37.2
10	11.5	17.9	14.6
11	14.4	32.6	23.7
12	28.0	41.7	35.3
13	33.3	47.4	40.3
4-A	35.0	53.2	43.9
ARMM	16.2	31.3	23.7
CAR	34.2	41.5	38.3
<b>Overall</b>	<b>24.3</b>	<b>37.9</b>	<b>31.4</b>
<b>Comparison</b>			
6	37.0	42.9	40.0
11	12.9	36.5	25.9
12	32.5	30.7	31.6
4-A	20.0	40.8	30.3
<b>Overall</b>	<b>25.5</b>	<b>35.6</b>	<b>30.5</b>

Note: Working household members is define as any member of the household that is earning monetary compensation in return of his/her services.

Q-Table 23: Percentage of households with members working in their own farm, by type

Region	% of household with family members working in the farm	% of household hiring wage earners to work in the farm
<b>Treatment</b>		
1	90.0	0.0
6	95.4	76.9
10	94.5	39.7
11	94.1	58.1
12	97.4	59.0
13	100.0	55.0
4-A	77.6	43.9
ARMM	92.0	42.0
CAR	92.7	21.9
<b>Overall</b>	<b>93.1</b>	<b>50.8</b>
<b>Comparison</b>		
6	90.0	33.3
11	97.5	75.0
12	100.0	82.8
4-A	85.2	42.0
<b>Overall</b>	<b>94.8</b>	<b>66.5</b>

**Q-Table 24: Details of the number of family members working in the family coffee farm, by region**

		Regions									
		1	6	10	11	12	13	4-A	ARMM	CAR	Overall
Treatment											
Ave. Family Labor		1.80	1.71	1.88	1.83	2.18	2.20	1.08	2.04	1.97	1.87
Adult Male	Ave. No.	1.14	1.02	1.05	1.13	1.14	1.00	1.11	1.12	1.12	1.11
	Ave. No. of Paid	0.00	0.04	0.00	0.06	0.04	0.00	0.02	0.00	0.01	0.03
	Full-time	0.86	0.63	1.05	0.82	0.83	0.84	0.59	0.79	0.73	0.80
	Part-time	0.29	0.38	0.20	0.25	0.24	0.16	0.50	0.33	0.39	0.29
Youth Male	Ave. No.	1.00	1.23	1.00	1.37	1.36	1.33	1.14	1.45	1.29	1.31
	Ave. No. of Paid	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.04	0.01
	Full-time	0.25	0.14	0.53	0.50	0.60	1.00	0.00	0.82	0.42	0.50
	Part-time	0.75	1.09	0.47	0.81	0.76	0.33	1.00	0.64	0.88	0.78
Adult Female	Ave. No.	1.20	1.00	1.00	1.00	1.03	1.06	1.04	1.06	0.98	1.02
	Ave. No. of Paid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00
	Full-time	0.40	0.19	0.63	0.63	0.50	0.13	0.42	0.53	0.42	0.49
	Part-time	0.80	0.81	0.37	0.37	0.53	0.94	0.63	0.53	0.58	0.53
Youth Female	Ave. No.	1.00		1.00	1.11	1.19	1.00		1.00	1.43	1.16
	Ave. No. of Paid	0.00		0.00	0.11	0.05	0.00		0.00	0.14	0.06
	Full-time	0.00		0.00	0.33	0.19	0.00		0.00	0.29	0.17
	Part-time	1.00		1.00	0.56	0.95	1.00		1.00	1.14	0.93
Comparison											
Ave. Family Labor			1.8		2.0	2.0		1.4			1.8
Adult Male	Ave. No.		1.1		1.0	1.1		1.2			1.1
	Ave. No. of Paid		0.0		0.0	0.0		0.0			0.0
	Full-time		1.0		0.7	0.9		0.7			0.8
	Part-time		0.3		0.3	0.2		0.5			0.3
Youth Male	Ave. No.		1.3		1.3	1.3		0.9			1.2
	Ave. No. of Paid		0.1		0.0	0.0		0.0			0.0
	Full-time		0.4		0.3	0.5		0.3			0.4
	Part-time		0.9		1.0	0.8		0.6			0.8
Adult Female	Ave. No.		1.0		1.0	1.0		1.0			1.0
	Ave. No. of Paid		0.0		0.0	0.0		0.0			0.0
	Full-time		0.7		0.2	0.4		0.3			0.4
	Part-time		0.3		0.8	0.6		0.7			0.6
Youth Female	Ave. No.		1.0		1.0	1.1		1.0			1.1
	Ave. No. of Paid		0.0		0.0	0.2		0.0			0.2
	Full-time		0.0		0.0	0.5		0.5			0.4
	Part-time		1.0		0.8	0.6		0.5			0.7

Note: Values less than 1 implies very few members of the household working in the farm

**Q-Table 25: Details of wage earners working in others' coffee farm, by type**

Item		Regions									
		1	6	10	11	12	13	4-A	ARMM	CAR	Overall
<b>Treatment</b>											
Ave. No of Wage Earners			5.78	3.24	4.71	6.34	3.91	2.14	3.33	4.10	4.88
Adult Male	Ave. No.		3.62	2.62	3.28	4.61	2.55	1.84	3.00	2.90	3.51
	Full-time		0.18	0.03	0.18	0.33	1.45	0.09	1.14	0.05	0.28
	Part-time		3.44	2.28	3.19	4.28	1.09	1.74	1.81	2.86	3.22
Youth Male	Ave. No.		1.08	0.07	1.10	1.33	1.27	0.12	0.24	0.33	0.93
	Full-time		0.00	0.00	0.04	0.12	0.91	0.00	0.00	0.00	0.07
	Part-time		1.08	0.07	1.13	1.21	0.36	0.12	0.24	0.33	0.87
Adult Female	Ave. No.		0.92	0.52	0.31	0.38	0.09	0.19	0.10	0.86	0.41
	Full-time		0.00	0.00	0.00	0.02	0.09	0.05	0.00	0.05	0.02
	Part-time		0.92	0.48	0.37	0.36	0.00	0.14	0.10	0.81	0.41
Youth Female	Ave. No.		0.16	0.03	0.03	0.03	0.00	0.00	0.00	0.00	0.04
	Full-time		0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
	Part-time		0.16	0.03	0.02	0.03	0.00	0.00	0.00	0.00	0.03
<b>Comparison</b>											
Ave. No of Wage Earners			3.0		6.1	8.0		2.1			6.3
Adult Male	Ave. No.		1.9		4.1	5.5		1.8			4.4
	Full-time		0.6		0.0	0.1		0.2			0.1
	Part-time		1.3		4.1	5.4		1.6			4.3
Youth Male	Ave. No.		0.2		1.8	1.8		0.3			1.5
	Full-time		0.0		0.0	0.0		0.0			0.0
	Part-time		0.2		1.8	1.8		0.3			1.5
Adult Female	Ave. No.		0.9		0.1	0.6		0.1			0.4
	Full-time		0.0		0.0	0.0		0.0			0.0
	Part-time		0.9		0.1	0.6		0.1			0.4
Youth Female	Ave. No.		0.0		0.1	0.1		0.0			0.1
	Full-time		0.0		0.0	0.0		0.0			0.0
	Part-time		0.0		0.1	0.1		0.0			

Note: Values less than 1 implies very few members of the household working in the farm



**Q-Table 26: Average number of workers of input suppliers, by gender, type and region**

Items	Ave. Number of Workers	Men				Youth Male				Women				Youth Female			
		No. of Workers	Fulltime	Part-time	Attended trainings	No. of Workers	Fulltime	Part-time	Attended trainings	No. of Workers	Fulltime	Part-time	Attended trainings	No. of Workers	Fulltime	Part-time	Attended trainings
<b>Micro Enterprise</b>	<b>4.9</b>	<b>1.9</b>	<b>1.9</b>	<b>0.0</b>	<b>1.8</b>	<b>2.0</b>	<b>1.9</b>	<b>0.1</b>	<b>0.6</b>	<b>2.6</b>	<b>1.5</b>	<b>0.6</b>	<b>1.1</b>	<b>1.6</b>	<b>1.4</b>	<b>0.2</b>	<b>0.7</b>
6	15.0	5.0	5.0	0.0	8.0					10.0	0.0	10.0	5.0				
10	6.0	3.0	3.0	0.0	3.0	1.5	1.5	0.0	0.5	1.5	1.5	0.0	1.0	3.0	3.0	0.0	1.0
11	4.9	1.6	1.6	0.0	1.3	2.5	2.4	0.2	0.6	2.0	1.9	0.1	0.9	1.5	1.5	0.0	0.5
12	3.0	1.3	1.3	0.0	0.8	1.3	1.1	0.1	0.3	3.2	1.0	0.0	0.8	1.5	0.8	0.8	1.0
4-A	6.0	3.0	3.0	0.0	3.0	2.0	2.0	0.0	2.0	1.0	1.0	0.0	1.0				
<b>Small Enterprise</b>	<b>7.8</b>	<b>2.7</b>	<b>2.7</b>	<b>0.0</b>	<b>1.5</b>	<b>2.8</b>	<b>2.8</b>	<b>0.0</b>	<b>1.3</b>	<b>2.0</b>	<b>2.0</b>	<b>0.0</b>	<b>1.3</b>	<b>3.5</b>	<b>3.5</b>	<b>0.0</b>	<b>3.5</b>
10	17.0	4.0	4.0	0.0	2.0	6.0	6.0	0.0	4.0	2.0	2.0	0.0	2.0	5.0	5.0	0.0	5.0
11	6.5	2.8	2.8	0.0	1.5	2.0	2.0	0.0	0.5	2.0	2.0	0.0	1.0	2.0	2.0	0.0	2.0
12	4.0	1.0	1.0	0.0	1.0	1.0	1.0	0.0	0.0	2.0	2.0	0.0	2.0				
<b>Medium Enterprise</b>	<b>5.0</b>	<b>5.0</b>	<b>5.0</b>	<b>0.0</b>	<b>5.0</b>												
12	5.0	5.0	5.0	0.0	5.0												
<b>Average</b>	<b>5.4</b>	<b>2.2</b>	<b>2.2</b>	<b>0.0</b>	<b>1.9</b>	<b>2.1</b>	<b>2.0</b>	<b>0.1</b>	<b>0.7</b>	<b>2.5</b>	<b>1.6</b>	<b>0.4</b>	<b>1.2</b>	<b>1.9</b>	<b>1.7</b>	<b>0.2</b>	<b>1.1</b>

Note: Values less than 1 implies very few members of the household working in the farm

**Q-Table 27: Average number of workers of nursery operators, by gender, by scale and region**

Items	Ave. Number of Workers	Men				Youth Male				Women				Youth Female			
		No. of Workers	Fullti me	Part- time	Attended trainings	No. of Workers	Fullti me	Part- time	Attended trainings	No. of Workers	Fullti me	Part- time	Attended trainings	No. of Workers	Fullti me	Part- time	Attended trainings
<b>Large</b>	<b>39</b>	<b>22</b>	<b>9</b>	<b>14</b>	<b>9</b>	<b>20</b>	<b>0</b>	<b>20</b>	<b>20</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>10</b>	<b>10</b>	<b>0</b>	<b>10</b>
12	39	22	9	14	9	20	0	20	20	2	2	0	2	10	10	0	10
<b>Medi um</b>	<b>37</b>	<b>28</b>	<b>6</b>	<b>22</b>	<b>28</b>	<b>9</b>	<b>0</b>	<b>9</b>	<b>9</b>								
12	37	28	6	22	28	9	0	9	9								
<b>Micr o</b>	<b>22</b>	<b>13</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>5</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>12</b>	<b>8</b>	<b>5</b>	<b>3</b>	<b>5</b>	<b>3</b>	<b>3</b>	<b>1</b>
6	59	70	0	70	70	7	1	0	6	14	1	14	14	7	0	7	7
11	69	28	27	2	2	11	11	0	11	120	0	120	0	20	20	0	0
12	11	7	2	4	3	3	1	2	1	5	1	4	1	3	0	2	1
4-A	14	10	0	10	10					4	0	4	4				
CAR	3	2	1	1	2					1	1	0	1	1	0	1	1
<b>Small</b>	<b>27</b>	<b>16</b>	<b>10</b>	<b>6</b>	<b>9</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>13</b>	<b>4</b>	<b>10</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>
10	1	1	1	0	1												
12	35	20	12	9	12	5	3	3	0	16	3	13	2	1	0	1	0
13	21	15	15	0	5	1	1	0	1	5	5	0	0				
<b>Aver age</b>	<b>24</b>	<b>14</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>6</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>12</b>	<b>2</b>	<b>15</b>	<b>2</b>	<b>5</b>	<b>3</b>	<b>2</b>	<b>2</b>

**Q-Table 28: Average number of workers of processors and roasters, by gender, by scale and region**

Items	Ave. Number of Workers	Men				Youth Male				Women				Youth Female			
		No. of Workers	Fulltime	Part-time	Attended trainings	No. of Workers	Fulltime	Part-time	Attended trainings	No. of Workers	Fulltime	Part-time	Attended trainings	No. of Workers	Fulltime	Part-time	Attended trainings
<b>Micro Enterprise</b>	<b>5</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>1</b>
6	4					3	3	0	2	2	2	0	1	2	2	0	1
10	7	2	1	1	1	1	1	1	0	6	2	4	6	3	2	1	2
11	6	2	2	0	1	3	3	0	1	2	1	1	0	2	2	0	1
12	6	3	1	2	2	2	2	0	2	3	1	2	3	4	2	2	3
4-A	6	1	0	0	1					5	0	5	3	1	0	1	0
CAR	4	2	1	1	2	2	0	1	1	3	1	3	2	2	1	1	1
<b>Small Enterprise</b>	<b>18</b>	<b>5</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>6</b>	<b>4</b>	<b>2</b>	<b>4</b>	<b>5</b>	<b>4</b>	<b>1</b>	<b>4</b>	<b>6</b>	<b>3</b>	<b>3</b>	<b>3</b>
6	16	6	6	0	2	5	5	0	2	7	7	0	5	4	4	0	3
10	33	7	0	7	3	6	1	6	3	9	4	5	7	11	1	10	6
11	15	5	4	1	1	5	5	0	0	5	5	0	1				
12	15	3	2	1	1	8	7	1	5	3	2	0	2	4	4	0	3
13	6	1	1	0	1	1	1	0	1	2	1	1	0	2	2	0	0
CAR	23	5	2	3	5	6	0	6	6	4	1	3	4	18	0	10	2
<b>Average</b>	<b>8</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>2</b>	<b>1</b>	<b>2</b>

**Q-Table 29: Average number of workers of traders, by gender, scale and region**

Items	Ave. Number of Workers	Men				Youth Male				Women				Youth Female			
		No. of Workers	Fullt ime	Part-time	Attended trainings	No. of Workers	Fullt ime	Part-time	Attended trainings	No. of Workers	Fullt ime	Part-time	Attended trainings	No. of Workers	Fullt ime	Part-time	Attended trainings
<b>Medium Enterprise</b>	<b>55</b>	<b>8</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>13</b>	<b>12</b>	<b>1</b>	<b>13</b>	<b>13</b>	<b>13</b>	<b>0</b>	<b>13</b>	<b>18</b>	<b>17</b>	<b>0</b>	<b>18</b>
11	88	10	10	0	10	23	23	0	23	10	10	0	10	22	22	0	22
4-A	60	9	8	0	8	9	9	1	9	17	17	0	17	16	16	0	16
CAR	8	3	3	3	3					5	5	0	5				
<b>Micro Enterprise</b>	<b>6</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>4</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>
10	7	4	1	3	3	2	0	2	2	3	0	3	3	1	0	1	1
11	5	3	2	1	1	2	2	0	2	2	1	1	2	1	0	1	0
12	6	3	1	2	0	5	2	3	0	2	1	0	1	1	1	0	0
4-A	4	3	1	2	1					1	1	2	1	2	1	1	1
CAR	9	3	3	0	2	5	0	5	5	3	3	1	3				
<b>Small Enterprise</b>	<b>16</b>	<b>5</b>	<b>4</b>	<b>1</b>	<b>2</b>	<b>4</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>5</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>4</b>	<b>0</b>	<b>4</b>
11	19	5	5	0	5	6	6	0	5	2	2	0	2	6	6	0	6
12	13	5	4	2	1	2	0	2	1	7	3	4	4	1	0	1	1
<b>Average</b>	<b>14</b>	<b>4</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>6</b>	<b>4</b>	<b>1</b>	<b>5</b>	<b>5</b>	<b>4</b>	<b>1</b>	<b>4</b>	<b>7</b>	<b>6</b>	<b>1</b>	<b>6</b>

**Q-Table 30: Average number of workers of microfinance/lending institutions, by gender, by scale and region**

Items	Ave. Number of Workers	Men				Youth Male				Women				Youth Female			
		No. of Workers	Fulltime	Part-time	Attended trainings	No. of Workers	Fulltime	Part-time	Attended trainings	No. of Workers	Fulltime	Part-time	Attended trainings	No. of Workers	Fulltime	Part-time	Attended trainings
Large Enterprise	37	14	14	0	14					22	22	0	22	2	1	1	1
11	16	8	8	0	8					7	7	0	7	1	0	1	0
12	84	31	31	0	31					53	53	0	53				
CAR	10	2	2	0	2					6	6	0	6	2	2	0	2
Micro Enterprise	12	7	2	6	3	2	2	0	1	5	4	1	4	2	2	0	0
10	8	3	3	0	3	2	2	0	2					3	3	0	0
11	9	5	1	4	5					6	6	0	6	1	1	0	1
12	6	1	1	0	0	2	2	0	0	1	1	0	0	2	1	1	0
CAR	27	20	2	20	5					7	2	5	5				
Small Enterprise	7	1	1	0	1					5	5	0	5	1	1	0	1
11	7	1	1	0	1					5	5	0	5	1	1	0	1
Average	19	9	6	3	7	2	2	0	1	11	11	1	11	2	1	0	1

## Coffee Farm, Area and Cropping System

Q-Table 31: Average years in coffee farming, farm size and area planted with coffee, by region

Region	Ave. Years of Farming Coffee	Ave. Farm Size (in Ha)	Ave. Farm Size for Coffee (in Ha), respondent self-declaration	Ave. Farm Size for Coffee (Computed based on planting distance)	% of land allotted for coffee
<b>Treatment</b>					
1	26	1.6	0.8	0.7	53.5
6	23	4.5	2.2	2.0	50.0
10	19	2.4	0.8	0.8	34.3
11	25	3.0	1.2	0.7	38.0
12	17	5.7	1.9	1.6	33.9
13	17	2.9	1.0	0.8	35.7
4-A	38	1.0	0.5	0.2	51.7
ARMM	19	3.9	0.8	0.7	19.6
CAR	21	1.5	0.8	0.7	56.2
<b>Overall I</b>	<b>23</b>	<b>3.4</b>	<b>1.3</b>	<b>1.0</b>	<b>37.2</b>
<b>Comparison</b>					
6	28	2.3	0.7		32.1
11	23	2.5	0.7		27.2
12	14	6.7	2.5		37.1
4-A	28	1.4	0.9		67.7
<b>Overall I</b>	<b>21</b>	<b>4.0</b>	<b>1.5</b>		<b>38.2</b>

Q-Table 32: Cropping system by region, in percentage

Region	Intercropping	Monocropping (coffee only)	Others	%
<b>Treatment</b>				
1	40.0	60.0	0.0	100
6	92.3	7.7	0.0	100
10	21.9	74.0	4.1	100
11	80.3	7.4	12.3	100
12	47.9	41.9	10.3	100
13	100.0	0.0	0.0	100
4-A	99.0	1.0	0.0	100
ARMM	78.0	22.0	0.0	100
CAR	76.0	24.0	0.0	100
<b>Overall</b>	<b>68.8</b>	<b>25.1</b>	<b>6.1</b>	<b>100</b>
<b>Comparison</b>				
6	83.3	16.7	0.0	100
11	72.5	2.5	25.0	100
12	25.2	50.3	24.5	100
4-A	100.0	0.0	0.0	100
<b>Overall</b>	<b>59.9</b>	<b>23.8</b>	<b>16.3</b>	<b>100</b>



## Coffee Production Technology

**Q-Table 33: Coffee-related techniques and technology practiced by farmers (in percentage), by region**

Items	Regions									Overall
	1	6	10	11	12	13	4-A	ARMM	CAR	
<b>Treatment</b>										
Farm diversification	50.0	1.5	11.0	30.5	9.4	0.0	83.7	14.0	55.2	<b>28.3</b>
Plant renewal	0.0	86.2	58.9	27.1	29.1	5.0	12.2	28.0	15.6	<b>31.1</b>
Pest management	10.0	10.8	45.2	18.2	31.2	10.0	27.6	20.0	17.7	<b>24.4</b>
Disease management	30.0	3.1	42.5	15.8	29.5	40.0	35.7	16.0	27.1	<b>25.2</b>
Pruning and rejuvenation	90.0	96.9	76.7	56.7	53.0	80.0	90.8	50.0	91.7	<b>68.9</b>
Soil-related fertility and conservation (including soil sampling)	50.0	0.0	0.0	17.7	6.8	35.0	84.7	4.0	55.2	<b>23.8</b>
None	0.0	3.1	19.2	39.9	38.5	20.0	2.0	46.0	3.1	<b>25.8</b>
<b>Comparison</b>										
Farm diversification		3.3		83.8	9.3		69.3			<b>41.0</b>
Plant renewal		63.3		43.8	31.1		34.1			<b>37.5</b>
Pest management		10.0		13.8	28.5		22.7			<b>22.1</b>
Disease management		0.0		7.5	24.5		33.0			<b>20.6</b>
Pruning and rejuvenation		90.0		85.0	52.3		97.7			<b>74.5</b>
Soil-related fertility and Conservation (including soil sampling)		3.3		30.0	9.9		85.2			<b>33.0</b>
None		10.0		16.3	47.0		0.0			<b>24.9</b>

Note: Multiple answers

**Q-Table 34: Sources of coffee production technology (in percentage), by region**

Items	Regions									Overall
	1	6	10	11	12	13	4-A	ARMM	CAR	
<b>Treatment</b>										
From external supports	30.0	6.2	2.7	3.9	0.9	0.0	3.1	0.0	11.5	3.9
My own efforts + external supports	0.0	29.2	12.3	3.4	9.0	0.0	2.0	0.0	4.2	7.3
No one- rely on my own efforts	70.0	64.6	84.9	92.6	90.2	100.0	94.9	100.0	84.4	88.8
<b>Comparison</b>										
From external supports		0.0		2.5	0.0		1.1			0.9
My own efforts + external supports		6.7		0.0	2.6		1.1			2.0
No one- rely on my own efforts		93.3		97.5	97.4		97.7			97.1

**Q-Table 35: Sources of external support for coffee production technology (in percentage), by region**

Items	Regions							Overall
	1	6	10	11	12	4-A	CAR	
Treatment								
Shared by fellow coffee farmer	0.0	0.0	0.0	0.0	3.4	0.0	0.0	0.9
Support from a cooperative	0.0	1.5	2.7	1.5	0.0	0.0	1.0	0.8
Support from a trader	0.0	3.1	9.6	0.0	0.0	0.0	0.0	1.1
Support from LGU/national government	30.0	9.2	4.1	3.4	3.0	5.1	5.2	4.2
Support from NGO	0.0	24.6	2.7	2.0	1.7	0.0	3.1	3.4
Other buyers	0.0	0.0	2.7	0.0	1.3	0.0	0.0	0.6

Items	Regions							Overall
	1	6	10	11	12	4-A	CAR	
<b>Comparison</b>								
Shared by fellow coffee farmer		0.0		0.0	0.7	0.0		0.3
Support from LGU/national government		3.3		1.3	0.0	2.3		1.1
Support from NGO		0.0		0.0	2.0	0.0		0.9

## Planting Materials

**Q-Table 36: Percentage of farmers with external sources of planting materials, by region**

Region	No	Yes	% Yes
<b>Treatment</b>			
1	10		0.0
6	58	7	10.8
10	72	1	1.4
11	178	25	12.3
12	221	13	5.6
13	20		0.0
4-A	93	5	5.1
ARMM	47	3	6.0
CAR	84	12	12.5
Total	783	66	7.8
<b>Comparison</b>			
6	30		0.0
11	72	8	10.0
12	151		0.0
4-A	71	17	19.3
Total	324	25	7.2

**Q-Table 37: Average number of planting materials given to farmers, by source and region**

Item	Region							
	6	10	11	12	4-A	ARMM	CAR	Overall
<b>Treatment</b>								
Coffee companies (such as Nestle)			500	147			100	257
Coffee dispersal provided by special projects of national government such as PRDP of Dept. of Agriculture; NGP of Dept. of Environment and Natural Resources; RAPID of Dept. of Trade and Industry; ARCESS or CONVERGE of Dept. of Agrarian Reform; or COCOBED of Philippine Coconut Authority	1,000		352	150			275	371
Coffee dispersal provided by the local government – municipal or provincial	131		750	733	213	200	484	464
Non-government Organization such as Catholic Relief Services and ACDI-VOCA			700	50				375
Producer cooperatives	200	500	300	4,000			400	857
Overall	<b>275</b>	<b>500</b>	<b>470</b>	<b>681</b>	<b>213</b>	<b>467</b>	<b>365</b>	<b>461</b>

## Nursery Operation

Q-Table 38: Type of products bought by the nurseries, by scale and region

Size/Region	As seedlings only	As seeds only	As seeds and as seedlings
Large	0.0	0.0	100.0
12	0.0	0.0	100.0
Medium	0.0	0.0	100.0
12	0.0	0.0	100.0
Micro	35.7	60.7	3.6
6	100.0	0.0	0.0
11	50.0	50.0	0.0
12	26.3	68.4	5.3
4-A	0.0	100.0	0.0
CAR	50.0	50.0	0.0
Small	50.0	50.0	0.0
10	0.0	100.0	0.0
12	50.0	50.0	0.0
13	100.0	0.0	0.0
Average	35.1	54.1	10.8

Q-Table 39: Average number of seedlings available, by coffee specie, by scale and region

Size/ Region	Coffee Species			Average
	Arabica	Excelsa	Robusta	
Large			<b>2,000,000</b>	<b>2,000,000</b>
12			2,000,000	2,000,000
Medium			<b>100,000</b>	<b>100,000</b>
12			100,000	100,000
Micro	<b>9,583</b>	<b>11,300</b>	<b>33,580</b>	<b>28,918</b>
11	22,500	22,500	3,000	16,000
12	3,125		35,189	32,136
4-A		100		100
Small	<b>35,000</b>		<b>124,000</b>	<b>106,200</b>
10	35,000			35,000
12			124,000	124,000
Average	<b>15,938</b>	<b>11,300</b>	<b>124,726</b>	<b>104,665</b>

Q-Table 40: Average selling price of coffee seedlings by specie, by scale and region

Size/ Region	Coffee Species			Average
	Arabica	Excelsa	Robusta	
Large			<b>25.00</b>	<b>25.00</b>
12			25.00	25.00
Medium			<b>31.00</b>	<b>31.00</b>
12			31.00	31.00
Micro	<b>30.00</b>	<b>25.00</b>	<b>11.76</b>	<b>14.25</b>
11				
12	30.00		11.76	13.68
4-A		25.00		25.00
Small	<b>8.00</b>		<b>19.75</b>	<b>17.40</b>

Size/ Region	Coffee Species			Average
	Arabica	Excelsa	Robusta	
10	8.00			8.00
12			19.75	19.75
<b>Average</b>	<b>22.67</b>	<b>25.00</b>	<b>15.25</b>	<b>16.39</b>

Q-Table 41: Percentage of nursery operators by type of customers

Size /Region	Type of Customers		
	Government	Individual farmers	Producer organizations
<b>Large Enterprise</b>	<b>75.0</b>	<b>12.5</b>	<b>12.5</b>
12	75.0	12.5	12.5
<b>Medium Enterprise</b>	<b>66.7</b>	<b>33.3</b>	<b>0.0</b>
12	66.7	33.3	0.0
<b>Micro Enterprise</b>	<b>12.3</b>	<b>82.5</b>	<b>5.3</b>
6	50.0	50.0	0.0
11	0.0	75.0	25.0
12	12.8	85.1	2.1
4-A	0.0	100.0	0.0
CAR	0.0	66.7	33.3
<b>Small Enterprise</b>	<b>21.1</b>	<b>73.7</b>	<b>5.3</b>
10	0.0	100.0	0.0
12	30.8	61.5	7.7
13	0.0	100.0	0.0
<b>Overall</b>	<b>21.8</b>	<b>72.4</b>	<b>5.7</b>

Q-Table 42: Average number of seedlings sold, revenue, and percentage provided free seedlings in 2018, by specie, scale and region

Size/ Region	Ave. number of seedlings sold		Average Sold	Ave. revenue from coffee seedlings (in PhP)	% of nurseries provided free seedlings
	Arabica	Robusta			
Large		1,000,000	1,000,000	12,640,000.0	0.0
12		1,000,000	1,000,000	12,640,000.0	0.0
Medium		100,000	100,000	1,700,000.0	0.0
12		100,000	100,000	1,700,000.0	0.0
Micro	37,333	20,079	25,625	545,848.8	46.4
6	4,000	46,000	25,000	200,000.0	50.0
11	10,833	10,000	10,625	10,000.0	75.0
12	93,000	20,031	31,553	699,048.3	42.1
4-A		5,000	5,000	125,000.0	0.0
CAR	10,250		10,250	10,000.0	50.0
Small	35,000	95,600	85,500	2,057,200.0	16.7
10	35,000		35,000	280,000.0	0.0
12		114,000	114,000	3,333,333.3	25.0
13		22,000	22,000	6,000.0	0.0
<b>Average</b>	<b>37,100</b>	<b>109,611</b>	<b>90,014</b>	<b>1,916,649.2</b>	<b>37.8</b>

Q-Table 43: Percentage of nursery operators providing services to customers, by region

Size/ Region	No	Yes	% Yes
<b>Large</b>	<b>1</b>	<b>1</b>	<b>50.0</b>
12	1	1	50.0
<b>Medium</b>		<b>1</b>	<b>100.0</b>
12		1	100.0
<b>Micro</b>	<b>10</b>	<b>18</b>	<b>64.3</b>
6	1	1	50.0
11	2	2	50.0
12	4	15	78.9
4-A	1		0.0
CAR	2		0.0
<b>Small</b>	<b>1</b>	<b>5</b>	<b>83.3</b>
10		1	100.0
12	1	3	75.0
13		1	100.0
<b>Overall</b>	<b>12</b>	<b>25</b>	<b>67.6</b>

Q-Table 44: Percentage of nursery operators trained in nursery establishment and management, by region

Size/ Region	No	Yes	% Yes
<b>Large</b>		<b>2</b>	<b>100.0</b>
12		2	100.0
<b>Medium</b>		<b>1</b>	<b>100.0</b>
12		1	100.0
<b>Micro</b>	<b>6</b>	<b>22</b>	<b>78.6</b>
6	1	1	50.0
11	1	3	75.0
12	3	16	84.2
4-A		1	100.0
CAR	1	1	50.0
<b>Small</b>		<b>6</b>	<b>100.0</b>
10		1	100.0
12		4	100.0
13		1	100.0
<b>Overall</b>	<b>6</b>	<b>31</b>	<b>83.8</b>

Q-Table 45: Percentage of nursery operators accredited by the BPI, by region

Size/ Region	No	Yes	% Yes
<b>Large</b>		<b>2</b>	<b>100.0</b>
12		2	100.0
<b>Medium</b>		<b>1</b>	<b>100.0</b>
12		1	100.0
<b>Micro</b>	<b>22</b>	<b>6</b>	<b>21.4</b>
6		2	100.0
11	4		0.0
12	15	4	21.1
4-A	1		0.0
CAR	2		0.0
<b>Small</b>	<b>3</b>	<b>3</b>	<b>50.0</b>

10	1		0.0
12	1	3	75.0
13	1		0.0
<b>Overall</b>	<b>25</b>	<b>12</b>	<b>32.4</b>

**Q-Table 46: Type of support services provided to customers by nursery operators, by region**

Size/ Region	Support Services		
	Technical advice (e.g. replanting)	Plant-now, pay later	Transport of seedlings to farm
<b>Large</b>	<b>50.0</b>	<b>0.0</b>	<b>0.0</b>
12	50.0	0.0	0.0
<b>Medium</b>	<b>100.0</b>	<b>0.0</b>	<b>100.0</b>
12	100.0	0.0	100.0
<b>Micro</b>	<b>50.0</b>	<b>10.7</b>	<b>14.3</b>
6	50.0	0.0	0.0
11	25.0	25.0	50.0
12	63.2	10.5	10.5
4-A	0.0	0.0	0.0
CAR	0.0	0.0	0.0
<b>Small</b>	<b>83.3</b>	<b>16.7</b>	<b>16.7</b>
10	100.0	100.0	100.0
12	75.0	0.0	0.0
13	100.0	0.0	0.0
<b>Overall</b>	<b>56.8</b>	<b>10.8</b>	<b>16.2</b>



**Q-Table 47: Sources of fertilizers and pesticides, by region**

Items	Regions									Overall
	1	6	10	11	12	13	4-A	ARMM	CAR	
<b>Treatment</b>										
Bought + External Sources	0.0	0.0	1.4	1.5	5.6	0.0	14.3	0.0	13.5	5.2
Bought with my own funds	100.0	100.0	97.3	92.6	94.0	100.0	77.6	98.0	80.2	91.4
External sources only	0.0	0.0	1.4	5.9	0.4	0.0	8.2	2.0	6.3	3.4
<b>Comparison</b>										
Bought + External Sources		0.0		1.3	0.0		43.2			11.2
Bought with my own funds		100.0		97.5	100.0		38.6			84.0
External sources only		0.0		1.3	0.0		18.2			4.8

**Q-Table 48: External sources of fertilizers and pesticides, in percentage, by region**

Items	Regions						Overall
	10	11	12	4-A	ARMM	CAR	
<b>Treatment</b>							
Support from a cooperative	0.0	1.5	0.0	0.0	0.0	0.0	0.4
Support from a trader	1.4	0.0	0.9	0.0	0.0	0.0	0.4
Support from an NGO	0.0	1.0	0.4	0.0	0.0	11.5	1.6
Support from the local government	0.0	4.4	3.8	22.4	2.0	4.2	5.3
Support from the national government	1.4	0.0	0.0	0.0	0.0	0.0	0.1
<b>Comparison</b>							
Support from the local government		0.0		62.5	0.0	0.0	15.8
Support from the national government		2.5		0.0	0.0	0.0	0.6

**Q-Table 49: Percentage of inputs suppliers who provide training to buyers on proper handling and application, by region**

Size/Region	No	Yes	% Yes
<b>Medium Enterprise</b>		<b>1</b>	<b>100.0</b>
12		1	100.0
<b>Micro Enterprise</b>	<b>17</b>	<b>10</b>	<b>37.0</b>
6	1		0.0
10	1	1	50.0
11	9	6	40.0
12	6	2	25.0
4-A		1	100.0
<b>Small Enterprise</b>	<b>3</b>	<b>3</b>	<b>50.0</b>
10	1		0.0
11	1	3	75.0
12	1		0.0
<b>Total/Average</b>	<b>20</b>	<b>14</b>	<b>41.2</b>

**Q-Table 50: Percentage of input suppliers who provide information to buyers on coffee plant diseases and insects/pests, by region**

Size/Region	No	Yes	% Yes
<b>Medium Enterprise</b>		<b>1</b>	<b>100.0</b>
12		1	100.0
<b>Micro Enterprise</b>	<b>14</b>	<b>13</b>	<b>48.1</b>
6	1		0.0
10	1	1	50.0
11	9	6	40.0
12	2	6	75.0
4-A	1		0.0
<b>Small Enterprise</b>	<b>2</b>	<b>4</b>	<b>66.7</b>
10	1		0.0
11	1	3	75.0
12		1	100.0
<b>Total/Average</b>	<b>16</b>	<b>18</b>	<b>52.9</b>

## Compensation of Household Members For Work in Coffee Farm

**Q-Table 51: Compensation of men household members working in own coffee farm, by region**

Region	Ave. time (Hours) spent per week on coffee farming	Do not receive wages at all (%)	Get share in the profit (%)	% Share of the profit	Receive wages	Ave. Daily Wage (PhP)
1	32.3	100.0	0.0		0.0	
6	24.6	98.1	0.0		1.9	200.00
10	20.1	100.0	0.0		0.0	
11	32.8	97.1	0.6	1.0	2.3	212.50
12	29.1	99.5	0.0		0.5	250.00
13	35.1	100.0	0.0		0.0	
4-A	29.6	98.6	0.0		1.4	300.00
ARMM	27.7	95.7	4.3	45.0	0.0	
CAR	29.0	98.8	1.2	10.0	0.0	
Overall	28.9	98.5	0.5	25.3	1.0	228.57

**Q-Table 52: Compensation of youth male household members working in own coffee farm, by region**

Region	Ave. time (Hours) spent per week on coffee farming	Do not receive wages at all (%)	Get share in the profit (%)	% Share of the profit
1	28.0	100.0	0.0	
6	16.7	100.0	0.0	
10	17.5	84.2	15.8	1.0
11	21.1	100.0	0.0	
12	17.4	100.0	0.0	
13	30.7	83.3	16.7	1.0
4-A	23.7	100.0	0.0	
ARMM	23.3	90.9	9.1	50.0
CAR	26.4	95.7	4.3	10.0
Overall	20.1	97.7	2.3	10.7

**Q-Table 53: Compensation of women household members working in own coffee farm, by region**

Region	Ave. time (Hours) spent per week on coffee farming	Do not receive wages at all (%)	Get share in the profit (%)	% Share of the profit	Receive wages	Ave. Daily Wage (PhP)
1	17.6	100.0	0.0		0.0	
6	14.9	100.0	0.0		0.0	
10	12.4	100.0	0.0		0.0	
11	19.6	99.0	0.0		1.0	250.00
12	16.6	100.0	0.0		0.0	
13	13.8	100.0	0.0		0.0	
4-A	20.6	100.0	0.0		0.0	
ARMM	14.3	100.0	0.0		0.0	
CAR	21.5	98.6	1.4	10.0	0.0	
Overall	17.2	99.6	0.2	10.0	0.2	250.00

**Q-Table 54: Compensation of youth female household members working in own coffee farm, by region**

Region	Ave. time (Hours) spent per week on coffee farming	Do not receive wages at all (%)	Get share in the profit (%)	% Share of the profit
1	8.0	100.0	0.0	
6				
10	5.6	100.0	0.0	
11	16.5	100.0	0.0	
12	10.5	100.0	0.0	
13	3.0	0.0	100.0	1.0
4-A				
ARMM	15.7	100.0	0.0	
CAR	20.4	85.7	14.3	10.0
Overall	11.6	97.8	2.2	5.5

**Q-Table 55: Participation of adult men household members in farm activities, by region**

Items	Regions									Overall
	1	6	10	11	12	13	4-A	ARMM	CAR	
Seed/plant selection	28.6	78.8	9.2	27.2	23.5	5.3	28.2	0.0	31.8	26.5
Nursery establishment	0.0	0.0	1.5	16.7	6.6	0.0	6.4	0.0	2.4	7.0
Land preparation	28.6	63.5	44.6	36.1	40.4	26.3	38.5	31.3	24.7	38.3
Planting	28.6	86.5	56.9	70.6	63.8	52.6	46.2	47.9	43.5	60.6
Transplanting	14.3	36.5	53.8	30.6	39.0	5.3	21.8	29.2	24.7	32.9
Weeding	57.1	86.5	80.0	68.9	84.5	94.7	53.8	85.4	57.6	74.3
Fertilizer application	57.1	1.9	30.8	25.6	50.2	63.2	75.6	43.8	44.7	41.2
Soil and water conservation	85.7	0.0	3.1	20.6	23.0	21.1	51.3	0.0	64.7	25.8
Pruning	100.0	98.1	90.8	76.1	77.5	89.5	78.2	79.2	83.5	81.1
Harvesting/picking	100.0	100.0	87.7	86.7	82.6	94.7	84.6	85.4	97.6	87.8
Drying	100.0	76.9	95.4	63.9	88.3	94.7	82.1	89.6	87.1	81.8
Hulling	0.0	63.5	46.2	32.2	10.8	52.6	0.0	27.1	7.1	23.2
Sorting	0.0	0.0	15.4	11.7	0.9	10.5	0.0	2.1	2.4	5.1
Storage	0.0	0.0	18.5	11.7	7.5	15.8	1.3	12.5	0.0	7.9
Packing	0.0	0.0	20.0	58.3	27.7	0.0	0.0	2.1	0.0	23.8
Selling	57.1	69.2	41.5	64.4	72.3	47.4	84.6	47.9	68.2	66.0

**Q-Table 56: Participation of youth male household members in farm activities, by region**

Items	Regions									Overall
	1	6	10	11	12	13	4-A	ARMM	CAR	
Seed/plant selection	0.0	18.2	0.0	9.3	7.1	7.7	25.0	0.0	16.0	9.3
Nursery establishment	0.0	0.0	0.0	4.7	0.9	0.0	0.0	0.0	0.0	1.5
Land preparation	50.0	21.2	11.5	18.6	17.0	15.4	16.7	15.4	20.0	17.9
Planting	50.0	39.4	30.8	31.4	35.7	15.4	25.0	38.5	36.0	33.6
Transplanting	25.0	18.2	38.5	14.0	16.1	7.7	8.3	23.1	24.0	17.9
Weeding	50.0	57.6	65.4	47.7	62.5	46.2	33.3	84.6	32.0	54.9
Fertilizer application	50.0	0.0	23.1	14.0	18.8	15.4	41.7	38.5	44.0	19.8
Soil and water conservation	75.0	0.0	3.8	5.8	6.3	7.7	41.7	0.0	52.0	10.8
Pruning	100.0	54.5	61.5	38.4	43.8	30.8	50.0	46.2	76.0	47.8
Harvesting/picking	100.0	60.6	69.2	72.1	66.1	46.2	58.3	84.6	100.0	70.1
Drying	100.0	45.5	84.6	47.7	63.4	46.2	50.0	84.6	92.0	61.4

Hulling	0.0	27.3	23.1	14.0	7.1	15.4	0.0	30.8	8.0	13.3
Sorting	0.0	0.0	15.4	5.8	0.0	0.0	0.0	0.0	4.0	3.1
Storage	0.0	0.0	11.5	5.8	2.7	0.0	0.0	7.7	0.0	3.7
Packing	0.0	0.0	3.8	39.5	12.5	0.0	0.0	0.0	0.0	15.1
Selling	50.0	21.2	7.7	33.7	28.6	15.4	41.7	7.7	40.0	27.8

**Q-Table 57: Participation of adult women household members in farm activities, by region**

Items	Regions									Overall
	1	6	10	11	12	13	4-A	ARMM	CAR	
Seed/plant selection	0.0	0.0	3.3	7.9	5.5	0.0	0.0	2.2	1.4	4.1
Nursery establishment	0.0	0.0	1.7	7.9	2.7	0.0	0.0	0.0	0.0	2.7
Land preparation	0.0	2.3	10.0	15.9	6.6	5.0	5.7	8.9	5.6	8.5
Planting	0.0	20.9	43.3	35.7	21.3	5.0	17.1	22.2	15.5	25.0
Transplanting	0.0	4.7	43.3	8.7	8.2	0.0	2.9	17.8	5.6	11.4
Weeding	80.0	44.2	55.0	26.2	48.1	25.0	48.6	57.8	52.1	44.6
Fertilizer application	20.0	0.0	10.0	13.5	12.6	5.0	28.6	13.3	36.6	15.3
Soil and water conservation	60.0	0.0	3.3	8.7	3.3	0.0	28.6	0.0	45.1	10.9
Pruning	80.0	34.9	46.7	31.7	33.9	30.0	51.4	48.9	74.6	42.2
Harvesting/picking	100.0	69.8	73.3	61.9	74.3	75.0	60.0	71.1	98.6	73.3
Drying	100.0	39.5	86.7	38.9	66.7	75.0	74.3	75.6	88.7	65.1
Hulling	0.0	9.3	11.7	21.4	2.2	15.0	0.0	2.2	5.6	8.5
Sorting	0.0	0.0	15.0	4.0	1.6	5.0	0.0	0.0	2.8	3.4
Storage	0.0	0.0	6.7	3.2	2.7	5.0	0.0	2.2	0.0	2.6
Packing	0.0	0.0	10.0	38.9	19.1	0.0	0.0	0.0	0.0	15.3
Selling	40.0	62.8	36.7	42.1	61.2	45.0	80.0	46.7	64.8	54.4

**Q-Table 58: Participation of youth female household members in farm activities, by region**

Items	Regions									Overall
	1	6	10	11	12	13	4-A	ARMM	CAR	
Seed/plant selection	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.5
Nursery establishment	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.5
Land preparation	0.0	0.0	0.0	0.0	3.9	0.0	0.0	0.0	14.3	2.1
Planting	0.0	0.0	15.4	0.0	13.0	0.0	0.0	0.0	42.9	8.0
Transplanting	0.0	0.0	15.4	2.3	2.6	0.0	0.0	0.0	0.0	2.7
Weeding	0.0	0.0	38.5	4.5	28.6	0.0	0.0	33.3	28.6	18.6
Fertilizer application	0.0	0.0	7.7	2.3	3.9	0.0	0.0	8.3	14.3	3.7
Soil and water conservation	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	42.9	2.1
Pruning	0.0	0.0	15.4	6.8	13.0	0.0	0.0	25.0	57.1	11.7
Harvesting/picking	100.0	0.0	61.5	13.6	45.5	12.5	0.0	41.7	100.0	33.5
Drying	100.0	0.0	69.2	9.1	48.1	12.5	0.0	66.7	100.0	35.6
Hulling	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0	14.3	1.1
Sorting	0.0	0.0	30.8	0.0	0.0	0.0	0.0	0.0	14.3	2.7
Storage	0.0	0.0	0.0	2.3	1.3	0.0	0.0	0.0	0.0	1.1
Packing	0.0	0.0	0.0	6.8	9.1	0.0	0.0	0.0	0.0	5.3
Selling	0.0	8.0	15.4	2.3	29.9	0.0	0.0	50.0	42.9	19.7

**Q-Table 59: Percentage of household members who are affiliated/member of producer organizations, by region**

Items	Regions									Overall
	1	6	10	11	12	13	4-A	ARMM	CAR	
Men	28.6	48.1	81.5	23.9	39.4	73.7	5.1	33.3	38.8	36.7
Youth Male	0.0	3.0	7.7	4.7	3.6	0.0	0.0	0.0	20.0	4.9
Women	20.0	34.9	45.0	15.9	18.6	45.0	2.9	28.9	33.8	24.5
Youth Female	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	28.6	1.6

**Q-Table 60: Percentage of household members holding leadership position in a producer organization, by region**

Items	Regions									Overall
	1	6	10	11	12	13	4-A	ARMM	CAR	
Men	0.0	13.5	16.9	16.7	16.0	47.4	3.8	10.4	11.8	14.6
Youth Male	0.0	0.0	0.0	2.3	2.7	0.0	0.0	7.7	8.0	2.5
Women	0.0	9.3	11.7	11.9	9.8	30.0	2.9	11.1	12.7	11.1
Youth Female	0.0	0.0	7.7	0.0	2.6	0.0	0.0	0.0	0.0	1.6



## Access to Training and Other Capacity Building Activities

Q-Table 61: Percentage of farmers trained in coffee production technology, by region

Region	No	Yes	% Yes
<b>Treatment</b>			
1	4	6	60.0
6	40	25	38.5
10	30	43	58.9
11	163	40	19.7
12	153	81	34.6
13	8	12	60.0
4-A	84	14	14.3
ARMM	39	11	22.0
CAR	45	51	53.1
Overall	<b>566</b>	<b>283</b>	<b>33.3</b>
<b>Control</b>			
6	29	1	3.3
11	64	16	20.0
12	96	55	36.4
4-A	59	29	33.0
Overall	<b>248</b>	<b>101</b>	<b>28.9</b>

Q-Table 62: Percentage of traders who received training related to coffee quality, by scale and region

Size/ Region	No	Yes	% Yes
<b>Medium Enterprise</b>		<b>5</b>	<b>100.0</b>
11		1	100.0
4-A		3	100.0
CAR		1	100.0
<b>Micro Enterprise</b>	<b>18</b>	<b>12</b>	<b>40.0</b>
10	1	4	80.0
11	6	2	25.0
12	6	1	14.3
4-A	2	4	66.7
CAR	3	1	25.0
<b>Small Enterprise</b>	<b>6</b>	<b>4</b>	<b>40.0</b>
11	3	1	25.0
12	3	3	50.0
<b>Average</b>	<b>24</b>	<b>21</b>	<b>46.7</b>

**Q-Table 63: Access to capacity building activities, by region**

Item	Region									Overall
	1	6	10	11	12	13	4-A	ARMM	CAR	
<b>Treatment</b>										
External sources only	0.0	1.5	1.4	8.9	0.4	0.0	1.0	0.0	6.3	<b>3.3</b>
No one- rely on my own efforts	100.0	70.8	93.2	88.7	93.6	100.0	98.0	100.0	86.5	<b>90.9</b>
Own efforts + external sources	0.0	27.7	5.5	2.5	6.0	0.0	1.0	0.0	7.3	<b>5.8</b>
<b>Comparison</b>										
External sources only				11.25	0.7		0.0			<b>11.25</b>
No one- rely on my own efforts		100.0		88.75	96.0		96.6			<b>88.75</b>
Own efforts + external sources				0	3.3		3.4			<b>0</b>

**Q-Table 64: Treatment group external sources of capacity building activities, by region**

Item	Region						Overall
	6	10	11	12	4-A	CAR	
LGU/national government	4.6	0.0	6.4	3.8	2.0	4.2	3.7
Others (specify)	0.0	0.0	2.0	0.4	0.0	4.2	1.1
Support from a cooperative	0.0	4.1	3.0	0.4	0.0	1.0	1.3
Support from a trader	10.8	1.4	0.0	0.0	0.0	0.0	0.9
Support from NGO	18.5	0.0	2.0	2.1	0.0	6.3	3.2
Other buyers	0.0	0.0	0.0	0.4	0.0	0.0	0.1

## Management Practices

**Q-Table 65: Farm management practices applied by farmers, in percentage, by region**

Items	Regions									Overall
	1	6	10	11	12	13	4-A	ARMM	CAR	
<b>Treatment</b>										
Financial Management (financial planning, accounting processes, etc.)	0.0	1.5	2.7	4.9	2.6	20.0	2.0	0.0	1.0	<b>3.1</b>
Record Management (financial documents and production documents, receipts and expenses, inventory, etc.)	0.0	9.2	30.1	5.9	3.4	35.0	4.1	0.0	7.3	<b>7.8</b>
Input, Output and Needs Computation	0.0	0.0	2.7	3.4	3.0	15.0	8.2	0.0	6.3	<b>3.9</b>
Business Planning (includes production scheduling)	30.0	0.0	0.0	3.0	3.0	10.0	22.4	0.0	29.2	<b>8.0</b>
Human Resources Management (provision of training, incentives, promotion, etc.)	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0	1.0	<b>0.7</b>
Marketing and Promotion	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.0	1.0	<b>0.9</b>
Inventory Management	0.0	0.0	0.0	2.5	1.7	0.0	1.0	0.0	1.0	<b>1.3</b>
Quality Management Systems (5-S, ISO, etc.)	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	<b>0.6</b>
None	70.0	90.8	72.6	88.7	94.9	65.0	68.4	100.0	60.4	<b>83.5</b>
<b>Comparison</b>										
Financial Management (financial planning, accounting processes, etc.)		0.0		1.3	1.3		1.1			<b>1.1</b>
Record Management (financial documents and production documents, receipts and expenses, inventory, etc.)		3.3		0.0	2.6		3.4			<b>2.3</b>
Input, Output and Needs Computation		0.0		3.8	0.7		4.5			<b>2.3</b>
Business Planning (includes production scheduling)		0.0		1.3	2.0		33.0			<b>9.5</b>
Human Resources Management (provision of training, incentives, promotion, etc.)		0.0		0.0	0.7		1.1			<b>0.6</b>
Marketing and Promotion		0.0		1.3	0.7		0.0			<b>0.6</b>
Inventory Management		0.0		0.0	1.3		0.0			<b>0.6</b>
None		96.7		97.5	96.0		59.1			<b>87.1</b>

**Q-Table 66: Percentage of nursery operators practicing management techniques, by size and region**

Size/ Region	Management Practices								
	Financial Mgt <sup>a</sup>	Record Mgt <sup>b</sup>	Input, Output and Needs Computation	Business Planning <sup>c</sup>	Human Resources Mgt <sup>d</sup>	Marketing and Promotion	Inventory Management	Quality Management Systems	Proper Nursery Operation <sup>e</sup>
<b>Large</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
12	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Medium</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
12	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Micro</b>	<b>39.3</b>	<b>42.9</b>	<b>60.7</b>	<b>32.1</b>	<b>7.1</b>	<b>32.1</b>	<b>50.0</b>	<b>14.3</b>	<b>75.0</b>
6	100.0	100.0	0.0	0.0	0.0	0.0	50.0	0.0	100.0
11	0.0	50.0	0.0	25.0	0.0	50.0	50.0	0.0	50.0
12	42.1	31.6	84.2	36.8	10.5	36.8	47.4	21.1	84.2
4-A	0.0	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
CAR	50.0	50.0	0.0	50.0	0.0	0.0	100.0	0.0	50.0
<b>Small</b>	<b>100.0</b>	<b>83.3</b>	<b>100.0</b>	<b>83.3</b>	<b>50.0</b>	<b>33.3</b>	<b>83.3</b>	<b>50.0</b>	<b>83.3</b>
10	100.0	100.0	100.0	100.0	100.0	0.0	100.0	0.0	100.0
12	100.0	75.0	100.0	100.0	50.0	50.0	100.0	75.0	100.0
13	100.0	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Overall</b>	<b>54.1</b>	<b>54.1</b>	<b>70.3</b>	<b>45.9</b>	<b>21.6</b>	<b>37.8</b>	<b>59.5</b>	<b>27.0</b>	<b>78.4</b>

NOTE: a- financial planning, accounting processes, etc, b-financial documents and production documents, receipts and expenses, inventory, etc., c- includes production scheduling, d-provision of training, incentives, promotion, etc., and e-water source, pest control, storage for chemicals and other supplies, presence of propagating equipment

**Q-Table 67: Percentage of input suppliers applying management practices, by size and region**

Size/Region	Financial Mgt <sup>a</sup>	Record Mgt <sup>b</sup>	Input, Output and Needs Computation	Business Planning <sup>c</sup>	Human Resources Mgt <sup>d</sup>	Marketing and Promotion	Inventory Management
<b>Medium Enterprise</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
12	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Micro Enterprise</b>	<b>81.5</b>	<b>85.2</b>	<b>74.1</b>	<b>44.4</b>	<b>37.0</b>	<b>25.9</b>	<b>81.5</b>
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	100.0	100.0	100.0	0.0	100.0	50.0	100.0
11	86.7	93.3	80.0	60.0	40.0	33.3	86.7
12	75.0	75.0	75.0	25.0	25.0	0.0	75.0
4-A	100.0	100.0	0.0	100.0	0.0	100.0	100.0
<b>Small Enterprise</b>	<b>66.7</b>	<b>66.7</b>	<b>66.7</b>	<b>33.3</b>	<b>50.0</b>	<b>16.7</b>	<b>50.0</b>
10	100.0	100.0	100.0	0.0	100.0	100.0	100.0
11	75.0	75.0	75.0	50.0	50.0	0.0	50.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Overall</b>	<b>79.4</b>	<b>82.4</b>	<b>73.5</b>	<b>44.1</b>	<b>41.2</b>	<b>26.5</b>	<b>76.5</b>

**Q-Table 68: Percentage of processors and roasters applying management practices, by size and region**

Size/ Region	Management Practices							
	Financial Mgt <sup>a</sup>	Record Mgt <sup>b</sup>	Input, Output and Needs Computation	Business Planning <sup>c</sup>	Human Resources Mgt <sup>d</sup>	Marketing and Promotion	Inventory Management	Quality Management Systems
<b>Micro Enterprise</b>	<b>80.3</b>	<b>80.3</b>	<b>56.1</b>	<b>36.4</b>	<b>39.4</b>	<b>54.5</b>	<b>63.6</b>	<b>16.7</b>
6	100.0	100.0	0.0	33.3	33.3	33.3	100.0	0.0
10	90.0	60.0	80.0	30.0	60.0	50.0	70.0	10.0
11	81.8	90.9	90.9	72.7	81.8	72.7	90.9	27.3
12	70.8	91.7	54.2	33.3	37.5	54.2	58.3	29.2
4-A	100.0	100.0	50.0	50.0	50.0	100.0	100.0	0.0
CAR	81.3	62.5	31.3	18.8	0.0	43.8	37.5	0.0
<b>Small Enterprise</b>	<b>86.7</b>	<b>93.3</b>	<b>53.3</b>	<b>66.7</b>	<b>60.0</b>	<b>73.3</b>	<b>73.3</b>	<b>26.7</b>
6	100.0	100.0	20.0	60.0	80.0	80.0	80.0	40.0
10	100.0	100.0	50.0	50.0	0.0	50.0	50.0	0.0
11	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
12	75.0	100.0	75.0	75.0	50.0	75.0	75.0	25.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CAR	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0
<b>Average</b>	<b>81.5</b>	<b>82.7</b>	<b>55.6</b>	<b>42.0</b>	<b>43.2</b>	<b>58.0</b>	<b>65.4</b>	<b>18.5</b>

NOTE: a- financial planning, accounting processes, etc., b-financial documents and production documents, receipts and expenses, inventory, etc., c- includes production scheduling, and d-provision of training, incentives, promotion, etc.

**Q-Table 69: Percentage of traders applying management practices, by size and region**

Size/ Region	Management Practices							
	Financial Mgt <sup>a</sup>	Record Mgt <sup>b</sup>	Input, Output and Needs Computation	Business Planning <sup>c</sup>	Human Resources Mgt <sup>d</sup>	Marketing and Promotion	Inventory Management	Quality Management Systems
<b>Medium Enterprise</b>	<b>100.0</b>	<b>100.0</b>	<b>40.0</b>	<b>100.0</b>	<b>80.0</b>	<b>100.0</b>	<b>100.0</b>	<b>80.0</b>
11	100.0	100.0	0.0	100.0	100.0	100.0	100.0	100.0
4-A	100.0	100.0	33.3	100.0	100.0	100.0	100.0	100.0
CAR	100.0	100.0	100.0	100.0	0.0	100.0	100.0	0.0
<b>Micro Enterprise</b>	<b>70.0</b>	<b>86.7</b>	<b>60.0</b>	<b>43.3</b>	<b>23.3</b>	<b>26.7</b>	<b>60.0</b>	<b>13.3</b>
10	60.0	100.0	100.0	40.0	0.0	20.0	60.0	0.0
11	100.0	100.0	100.0	87.5	62.5	50.0	100.0	25.0
12	57.1	71.4	28.6	28.6	0.0	0.0	42.9	14.3
4-A	50.0	83.3	16.7	16.7	33.3	33.3	50.0	16.7
CAR	75.0	75.0	50.0	25.0	0.0	25.0	25.0	0.0
<b>Small Enterprise</b>	<b>80.0</b>	<b>100.0</b>	<b>70.0</b>	<b>50.0</b>	<b>70.0</b>	<b>40.0</b>	<b>100.0</b>	<b>20.0</b>
11	100.0	100.0	75.0	25.0	100.0	25.0	100.0	25.0
12	66.7	100.0	66.7	66.7	50.0	50.0	100.0	16.7
<b>Average</b>	<b>75.6</b>	<b>91.1</b>	<b>60.0</b>	<b>51.1</b>	<b>40.0</b>	<b>37.8</b>	<b>73.3</b>	<b>22.2</b>

NOTE: a- financial planning, accounting processes, etc., b-financial documents and production documents, receipts and expenses, inventory, etc., c- includes production scheduling, and d-provision of training, incentives, promotion, etc.

**Q-Table 70: Percentage of household members who have access to agricultural extension services provided by government, NGOs, projects and private firms, by region**

Items	Regions									Overall
	1	6	10	11	12	13	4-A	ARMM	CAR	
Men	57.1	44.2	56.9	66.1	38.5	31.6	44.9	41.7	43.5	48.6
Youth Male	50.0	3.0	7.7	24.4	5.4	0.0	0.0	0.0	20.0	11.4
Women	100.0	30.2	38.3	62.7	16.4	30.0	40.0	26.7	54.9	37.6
Youth Female	100.0	0.0	15.4	9.1	1.3	0.0	0.0	8.3	71.4	7.4

**Q-Table 71: Percentage of household members who have participated in training related to coffee farming, processing, and marketing, by region**

Items	Regions									Overall
	1	6	10	11	12	13	4-A	ARMM	CAR	
Men	28.6	38.5	55.4	33.3	45.5	63.2	24.4	31.3	35.3	39.0
Youth Male	25.0	3.0	3.8	12.8	2.7	0.0	0.0	7.7	20.0	7.1
Women	20.0	34.9	46.7	31.0	23.5	45.0	14.3	22.2	42.3	31.5
Youth Female	100.0	0.0	15.4	2.3	1.3	0.0	0.0	0.0	28.6	3.7

Q-Table 72: Sources of households' capital, in percentage, by region

Item	Region									Overall
	1	6	10	11	12	13	4-A	ARMM	CAR	
<b>Treatment</b>										
External support only	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.1
From my profit last year (Own funds)	100.0	98.5	95.9	97.5	98.7	100.0	99.0	100.0	99.0	98.4
Own funds + external support	0.0	1.5	4.1	2.5	1.3	0.0	0.0	0.0	1.0	1.5
<b>Comparison</b>										
From my profit last year (Own funds)		100.0		98.7	100.0		100.0			98.7
Own funds + external support				1.3						1.3

Q-Table 73: Treatment farmers' external sources of capital, in percentage, by region

Item	Region						
	6	10	11	12	4-A	CAR	Overall
Treatment							
Cash advance from a trader	0.0	0.0	1.0	1.7	0.0	0.0	0.7
Support from a cooperative	0.0	4.1	1.0	0.0	0.0	0.0	0.6
Support from LGU/government	0.0	0.0	0.0	0.0	1.0	0.0	0.1
Support from NGO	1.5	0.0	0.0	0.0	0.0	0.0	0.1
Others (specify)	0.0	0.0	0.5	0.4	0.0	1.0	0.3

Q-Table 74: Percentage of farmers with existing credit/cash advance from inputs suppliers or traders, by region

Region	No	Yes	% Yes	Ave. amount (in Php)	Ave. interest rate (%)
<b>Treatment</b>					
1	10		0.0		
6	59	6	9.2	7,083	1.7
10	71	2	2.7	5,750	4.0
11	187	16	7.9	31,188	7.8
12	227	7	3.0	43,771	11.7
13	19	1	5.0	1,000	10.0
4-A	97	1	1.0	10,000	0.0
ARMM	50		0.0		
CAR	84	12	12.5	18,167	1.9
Overall	804	45	5.3	24,187	5.7
<b>Comparison</b>					
6	30		0.0		
11	78	2	2.5	5,000	12.5
12	114	37	24.5	36,349	8.7
4-A	87	1	1.1	2,500	0.0
Overall	309	40	11.5	33,935	8.7



**Q-Table 75: Percentage of input suppliers that provide credit to buyers (farmers/POs), by scale and region**

Size/Region	No	Yes	% Yes	Ave. Amount	Ave. interest rate
<b>Medium Enterprise</b>		<b>1</b>	<b>100.0</b>	<b>50,000</b>	<b>0.0</b>
12		1	100.0	50,000	0.0
<b>Micro Enterprise</b>	<b>20</b>	<b>7</b>	<b>25.9</b>	<b>21,059</b>	<b>0.6</b>
6		1	100.0	1,000	6.0
10	2		0.0	-	0.0
11	11	4	26.7	4,507	0.3
12	7	1	12.5	37,500	0.6
4-A		1	100.0	200,000	0.0
<b>Small Enterprise</b>	<b>4</b>	<b>2</b>	<b>33.3</b>	<b>5,833</b>	<b>3.3</b>
10	1		0.0	-	0.0
11	2	2	50.0	8,750	5.0
12	1		0.0	-	0.0
<b>Total/Ave.</b>	<b>24</b>	<b>10</b>	<b>29.4</b>	<b>19,224</b>	<b>1.1</b>

**Q-Table 76: Percentage of processors/roasters that provide credit to their coffee suppliers, by scale and region**

Size/ Region	No	Yes	%Yes
<b>Micro Enterprise</b>	<b>57</b>	<b>9</b>	<b>13.6</b>
6	3		0.0
10	9	1	10.0
11	10	1	9.1
12	21	3	12.5
4-A	1	1	50.0
CAR	13	3	18.8
<b>Small Enterprise</b>	<b>10</b>	<b>5</b>	<b>33.3</b>
6	5		0.0
10	1	1	50.0
11		1	100.0
12	3	1	25.0
13		1	100.0
CAR	1	1	50.0
<b>Average</b>	<b>67</b>	<b>14</b>	<b>17.3</b>

**Q-Table 77: Percentage households with existing credit/loans, by region**

Region	No	Yes	% Yes
<b>Treatment</b>			
1	10		0.0
6	54	11	16.9
10	65	8	11.0
11	182	21	10.3
12	194	40	17.1
13	14	6	30.0
4-A	95	3	3.1
ARMM	42	8	16.0
CAR	73	23	24.0
<b>Total</b>	<b>729</b>	<b>120</b>	<b>14.1</b>

Region	No	Yes	% Yes
<b>Comparison</b>			
6	18	12	40.0
11	55	25	31.3
12	146	5	3.3
4-A	83	5	5.7
Total	302	47	13.5

**Q-Table 78: Average amount and interest rate of existing credit/loan, by region**

Region	Treatment		Comparison	
	Amount (in PhP)	Interest rate (%)	Amount (in PhP)	Interest rate (%)
6	233,182	6.3	16,885	7.2
10	28,111	13		
11	19,150	7.6	29,673	8.5
12	33,677	7.7	57,500	10.3
13	36,650	13.7		
4-A	75,000	4	108,750	13.8
ARMM	10,000	10.1		
CAR	63,048	1.7		
<b>Overall</b>	<b>53,525</b>	<b>7.3</b>	<b>36,143</b>	<b>8.8</b>

**Q-Table 79: Percentage of farmers with difficulty of accessing credit, by region**

Region	No	Yes	% Yes
<b>Treatment</b>			
1	10		0.0
6	31	34	52.3
10	67	6	8.2
11	173	30	14.8
12	197	37	15.8
13	20		0.0
4-A	98		0.0
ARMM	47	3	6.0
CAR	96		0.0
Total	739	110	13.0
<b>Comparison</b>			
6	28	2	6.7
11	61	19	23.8
12	101	50	33.1
4-A	88		0.0
Total	278	71	20.3

**Q-Table 80: Percentage of households with future need to borrow money, amount and interest rate, by region**

Region	No	Yes	% Yes	Ave. Amount needed (in PhP)	Ave. interest rate (%) willing to pay
<b>Treatment</b>					
1	10		0		
6	9	56	86.2	56,089	2.2
10	43	30	41.1	35,333	3.4
11	79	124	61.1	103,129	3.4
12	101	133	56.8	57,361	2.3
13	5	15	75	52,000	2.2
4-A	95	3	3.1	6,667	2.3
ARMM	35	15	30	147,200	2.9
CAR	79	17	17.7	1,885,588	1.6
<b>Overall</b>	<b>456</b>	<b>393</b>	<b>46.3</b>	<b>151,860</b>	<b>2.7</b>
<b>Comparison</b>					
6	6	24	80.0	22,583	1.6
11	15	65	81.3	53,815	3.3
12	32	119	78.8	86,555	2.3
4-A	85	3	3.4	43,333	4.7
<b>Overall</b>	<b>138</b>	<b>211</b>	<b>60.5</b>	<b>68,578</b>	<b>2.5</b>

**Q-Table 81: Purpose of the needed borrowing, in percentage, by region**

Item	Region									Overall
	1	6	10	11	12	13	4-A	ARMM	CAR	
<b>Treatment</b>										
Land purchase for coffee expansion	0.0	0.0	14.3	11.1	7.0	9.5	0.0	20.6	22.2	9.7
Coffee production	0.0	100.0	66.7	48.1	80.3	71.4	100.0	38.2	72.2	67.3
Post-Harvest facilities	0.0	0.0	14.3	25.3	7.6	14.3	0.0	20.6	5.6	14.2
Marketing	0.0	0.0	4.8	15.4	5.1	4.8	0.0	20.6	0.0	8.7
<b>Comparison</b>										
Land purchase for coffee expansion		0.0		2.3	16.6		0.0			10.7
Coffee production		95.8		64.4	65.7		100.0			68.2
Post-Harvest facilities		4.2		20.7	17.1		0.0			17.0
Marketing		0.0		12.6	0.6		0.0			4.2

**Q-Table 82: Participation of household members in decision making, by gender**

Items	Men			Youth Male			Women			Youth Female		
	Major	Minor	No role at all	Major	Minor	No role at all	Major	Minor	No role at all	Major	Minor	No role at all
What crops to plant or produce?	94.7	3.9	1.5	11.7	48.1	40.2	39.7	52.4	7.9	5.5	25.6	68.9
What production technology to use?	93.9	4.7	1.5	11.7	49.3	39.0	37.9	54.2	7.9	5.0	24.7	70.3
Whether to avail of financial assistance or credit?	79.0	14.4	6.6	10.6	34.0	55.4	59.1	33.8	7.0	7.8	23.7	68.5
Where to use the borrowed funds	77.8	16.2	6.0	9.1	33.4	57.5	60.9	32.3	6.7	7.8	21.9	70.3
What inputs to procure	92.4	6.1	1.5	11.7	42.8	45.5	41.3	50.7	7.9	6.4	23.3	70.3
Where and quantity of produce to sell (selling decision)	90.7	7.3	2.0	10.9	40.8	48.4	48.7	46.4	4.9	7.3	26.5	66.2
What price level to negotiate	89.2	8.5	2.3	10.9	37.0	52.2	50.0	43.7	6.3	6.8	23.7	69.4
Whether to add value to the coffee production (e.g. process cherry to green coffee beans)?	89.6	8.2	2.1	10.6	44.6	44.9	43.3	49.4	7.3	5.9	25.1	68.9
Who will receive the income from the coffee sale	71.1	27.0	1.9	7.6	37.8	54.5	73.5	22.9	3.6	12.8	18.7	68.5
How and where to spend the income from coffee?	73.9	23.8	2.3	8.2	38.7	53.1	70.8	25.4	3.7	10.0	21.0	68.9
Decide on which coffee-related equipment and facilities to purchase	92.0	6.3	1.7	10.6	42.2	47.2	38.6	52.2	9.1	6.8	21.9	71.2
Who will use and how to use farm equipment and facilities	92.3	6.1	1.6	10.6	45.2	44.3	35.2	55.7	9.1	5.9	22.8	71.2
Who to hire, how many to hire and how much wages to pay for coffee-related labor	88.6	7.4	4.0	10.3	37.8	51.9	36.2	51.8	12.0	6.4	21.0	72.6

**Q-Table 83: Percentage of household members with access to credit without co-maker/co-signatory, by region**

Items	Regions									Overall
	1	6	10	11	12	13	4-A	ARMM	CAR	
Men	28.6	92.3	30.8	77.2	26.8	26.3	44.9	41.7	42.4	48.5
Youth Male	0.0	6.1	7.7	24.4	0.9	0.0	25.0	15.4	0.0	9.6
Women	60.0	100.0	31.7	92.1	20.8	35.0	97.1	40.0	45.1	54.9
Youth Female	0.0	8.0	7.7	20.5	6.5	0.0	100.0	25.0	14.3	14.9

**Q-Table 84: Percentage of nursery operators with existing loan/debt, by region**

Size/ Region	No	Yes	% Yes
<b>Large</b>		<b>2</b>	<b>100.0</b>
12		2	100.0
<b>Medium</b>		<b>1</b>	<b>100.0</b>
12		1	100.0
<b>Micro</b>	<b>23</b>	<b>5</b>	<b>17.9</b>
6	2		0.0
11	4		0.0
12	14	5	26.3
4-A	1		0.0
CAR	2		0.0
<b>Small</b>	<b>3</b>	<b>3</b>	<b>50.0</b>
10	1		0.0
12	1	3	75.0
13	1		0.0
<b>Overall</b>	<b>26</b>	<b>11</b>	<b>29.7</b>

**Q-Table 85: Average amount and interest of existing loan/credit, nursery operators, by scale and region**

<b>Region/ Size</b>	<b>Average amount (in PhP)</b>	<b>Average interest rate (in %)</b>
<b>12</b>	<b>2,541,667</b>	<b>8.33</b>
Large Enterprise	4,500,000	6.75
Medium Enterprise	200,000	2.00
Micro Enterprise	1,966,667	12.50
Small Enterprise	2,066,667	10.50
Overall	2,541,667	8.33

**Q-Table 86: Percentage of processors and roasters with existing loan/debt, by scale and region**

<b>Size/ Region</b>	<b>No</b>	<b>Yes</b>	<b>% Yes</b>
<b>Micro Enterprise</b>	<b>58</b>	<b>8</b>	<b>12.1</b>
6	3		0.0
10	9	1	10.0
11	10	1	9.1
12	20	4	16.7
4-A	1	1	50.0
CAR	15	1	6.3
<b>Small Enterprise</b>	<b>10</b>	<b>5</b>	<b>33.3</b>
6	5		0.0
10		2	100.0
11	1		0.0
12	2	2	50.0
13	1		0.0
CAR	1	1	50.0
<b>Average</b>	<b>68</b>	<b>13</b>	<b>16.0</b>

**Q-Table 87: Average amount and interest rate of processors/roasters, by scale and region**

<b>Size/ Region</b>	<b>Ave. amount (in PhP)</b>	<b>Ave. interest rate (%)</b>
<b>Micro</b>	<b>441,222</b>	<b>2.3</b>
10	400,000	4.0
11	35,000	0.0
12	542,000	2.2
4-A	250,000	6.0
CAR	576,000	0.0
<b>Small</b>	<b>5,916,667</b>	<b>4.4</b>
10	875,000	3.7
12	16,000,000	6.0
<b>Average</b>	<b>1,810,083</b>	<b>2.9</b>

**Q-Table 88: Percentage of traders with existing loan/debt, by scale and region**

Size/ Region	No	Yes	% Yes
<b>Medium Enterprise</b>	<b>2</b>	<b>3</b>	<b>60.0</b>
11	1		0.0
4-A		3	100.0
CAR	1		0.0
<b>Micro Enterprise</b>	<b>26</b>	<b>4</b>	<b>13.3</b>
10	5		0.0
11	7	1	12.5
12	5	2	28.6
4-A	5	1	16.7
CAR	4		0.0
<b>Small Enterprise</b>	<b>6</b>	<b>4</b>	<b>40.0</b>
11	4		0.0
12	2	4	66.7
<b>Average</b>	<b>34</b>	<b>11</b>	<b>24.4</b>

**Q-Table 89: Average amount of credit/loan and interest of traders, by scale and region**

Size/ Region	Average amount (in PhP)	Average interest rate (in %)
<b>Medium Enterprise</b>	<b>150,000</b>	<b>21.0</b>
4-A	150,000	21.0
<b>Micro Enterprise</b>	<b>2,151,429</b>	<b>10.4</b>
11	3,676,667	8.0
12	1,540,000	6.5
4-A	475,000	18.0
<b>Small Enterprise</b>	<b>6,750,000</b>	<b>3.5</b>
12	6,750,000	3.5
<b>Average</b>	<b>3,517,500</b>	<b>9.0</b>

Q-Table 90: Average minimum loan per product of MFIs, by scale and region

Items	Average Minimum amount of loan				
	Region				Average
	10	11	12	CAR	
Large Enterprise		1,000,000		290,286	379,000
Agricultural				10,000	10,000
Agricultural loan for banana production		1,000,000			1,000,000
Emergency				1,000	1,000
Equity-based				1,000	1,000
Financing				1,000,000	1,000,000
Housing				1,000,000	1,000,000
Micro-finance				10,000	10,000
Salary				10,000	10,000
Micro Enterprise	30,000	251,000	20,000	200	97,033
Agri loan, livelihood, personal loan, small business			20,000		20,000
Agricultural production		2,000			2,000
Consumer, production loan and additional capital, livelihood loan				200	200
Production Loan and related to agriculture	40,000				40,000
SME Loan		500,000			500,000
Small Enterprise		7,200			7,200
Consumer loan		1,000			1,000
Emergency loan		5,000			5,000
Production loan		20,000			20,000
Regular loan		5,000			5,000
Salary loan		5,000			5,000
Average	30,000	192,250	20,000	254,025	192,116



**Q-Table 91: Average maximum loan per product, by scale and region**

Items	Average Maximum amount of loan				
	Region				Average
	10	11	12	CAR	
<b>Large Enterprise</b>		<b>2,000,000</b>		<b>748,571</b>	<b>905,000</b>
Agricultural				50,000	50,000
Agricultural loan for banana production		2,000,000			2,000,000
Emergency				20,000	20,000
Equity-based				20,000	20,000
Financing				2,000,000	2,000,000
Housing				3,000,000	3,000,000
Micro-finance				50,000	50,000
Salary				100,000	100,000
<b>Micro Enterprise</b>	<b>375,000</b>	<b>502,500</b>	<b>300,000</b>	<b>20,000</b>	<b>345,833</b>
Agri, livelihood, personal loan, msme (small business loan) pension loan			300,000		300,000
Agricultural production		5,000			5,000
Consumer, production loan and additional capital, livelihood loan				20,000	20,000
Production Loan and related to agriculture	500,000				500,000
Sme		1,000,000			1,000,000
SME Loan	250,000				250,000
<b>Small Enterprise</b>		<b>13,400</b>			<b>13,400</b>
Consumer loan		5,000			5,000
Emergency loan		10,000			10,000
Production loan		22,000			22,000
Regular loan		20,000			20,000
Salary loan		10,000			10,000
<b>Average</b>	<b>375,000</b>	<b>384,000</b>	<b>300,000</b>	<b>657,500</b>	<b>493,789</b>

**Q-Table 92: Average interest rate per product, by scale and region**

Items	Average interest rate of loan				
	10	11	12	CAR	Average
<b>Large Enterprise</b>		5.0		10.8	10.0
Agricultural				15.0	15.0
Agricultural loan for banana production		5.0			5.0
Emergency				10.0	10.0
Equity-based				7.3	7.3
Financing				10.0	10.0
Housing				8.0	8.0
Micro-finance				15.0	15.0
Salary				10.0	10.0
<b>Micro Enterprise</b>	18.0	6.5	2.5	3.0	9.1
Agri, livelihood, personal loan, msme (small business loan) pension loan			2.5		2.5
Agricultural production		3.0			3.0
Consumer, production loan and additional capital, livelihood loan				3.0	3.0
Production Loan and related to agriculture	18.0				18.0
Sme		10.0			10.0
SME Loan	18.0				18.0
<b>Small Enterprise</b>		3.0			3.0
Consumer loan		3.0			3.0
Emergency loan		3.0			3.0
Production loan		3.0			3.0
Regular loan		3.0			3.0
Salary loan		3.0			3.0
<b>Average</b>	18.0	4.1	2.5	9.8	7.9

**Q-Table 93: Average value of disbursed agricultural loan, disbursed to coffee farmers and growth in portfolio, MFIs, by scale and region**

Size/ Region	Average value (in PHP) of agricultural loan MFI disbursed	Average amount of loan disbursed to coffee-farmers and coffee-related enterprises/activities	Average growth in portfolio from 2017 to 2018
Large Enterprise	55,070,191	5,000,000	57.0
11	100,000,000	-	50.0
12	5,210,574	-	106.0
CAR	60,000,000	15,000,000	15.0
Micro Enterprise	1,564,900	204,900	37.0
10	6,000,000	200,000	25.0
11	550,000	50,000	25.0
CAR	724,500	724,500	110.0
Small Enterprise	600,356	-	100.0
11	600,356	-	100.0
<b>Average</b>	19,292,826	1,780,500	50.7

**Q-Table 94: Type of clientele served for all products of MFIs in 2018, by scale and region**

Size/ Region	Adult men clients to total clients served	Adult women clients to total clients served	Male clients to total clients served	Female youth clients to total clients served
Large Enterprise	25.00	54.3	20.7	19.3
11	50.00	50.0	-	-
12	-	53.0	47.0	48.0
CAR	25.00	60.0	15.0	10.0
Micro Enterprise	31.40	56.6	12.0	6.0
10	20.00	70.0	10.0	5.0
11	56.00	44.0	-	-
12	10.00	45.0	45.0	10.0
CAR	15.00	80.0	5.0	15.0
Small Enterprise	40.00	60.0	-	-
11	40.00	60.0	-	-
<b>Average</b>	30.22	56.2	13.6	9.8

**Q-Table 95: Details of coffee sector borrowers of MFIs, by scale and region**

Size/ Region	Ave. percentage of coffee borrowers against your total clients	Percentage coffee borrowers are men	Percentage coffee borrowers are women	Percentage coffee borrowers are youth	Percentage coffee borrowers are female youth
<b>Large Enterprise</b>	<b>5.0</b>	<b>91.7</b>	<b>3.3</b>	<b>5.0</b>	<b>3.3</b>
11	0.0	100.0	0.0	0.0	0.0
12	0.0	100.0	0.0	0.0	0.0
CAR	15.0	75.0	10.0	15.0	10.0
<b>Micro Enterprise</b>	<b>21.0</b>	<b>66.0</b>	<b>28.0</b>	<b>6.0</b>	<b>4.0</b>
10	5.0	10.0	70.0	20.0	0.0
11	0.0	100.0	0.0	0.0	0.0
12	0.0	100.0	0.0	0.0	0.0
CAR	100.0	20.0	70.0	10.0	20.0
<b>Small Enterprise</b>	<b>0.0</b>	<b>100.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
11	0.0	100.0	0.0	0.0	0.0
<b>Average</b>	<b>13.3</b>	<b>78.3</b>	<b>16.7</b>	<b>5.0</b>	<b>3.3</b>

Q-Table 96: Percentage of MFIs that actively market their financial products/services, by scale and region

Size/ region	No	Yes	% Yes
<b>Large Enterprise</b>	<b>1</b>	<b>2</b>	<b>66.7</b>
11	1		0.0
12		1	100.0
CAR		1	100.0
<b>Micro Enterprise</b>	<b>2</b>	<b>3</b>	<b>60.0</b>
10		1	100.0
11	1	1	50.0
12		1	100.0
CAR	1		0.0
<b>Small Enterprise</b>	<b>1</b>		<b>0.0</b>
11	1		0.0
<b>Average</b>	<b>4</b>	<b>5</b>	<b>55.6</b>

Q-Table 97: Type of coffee-related activities financed by MFIs, by scale and region

Size/Region	Land acquisition/ expansion	Production capital (labor, planting materials and other inputs)	Farm machineries (tractors, trucks, etc.)	Post-harvest facilities	Warehouse and other storage options	Marketing and promotions
<b>Large Enterprise</b>	<b>33.3</b>	<b>100.0</b>	<b>33.3</b>	<b>66.7</b>	<b>33.3</b>	<b>33.3</b>
11	0.0	100.0	0.0	100.0	100.0	0.0
12	0.0	100.0	0.0	0.0	0.0	0.0
CAR	100.0	100.0	100.0	100.0	0.0	100.0
<b>Micro Enterprise</b>	<b>0.0</b>	<b>100.0</b>	<b>40.0</b>	<b>40.0</b>	<b>40.0</b>	<b>0.0</b>
10	0.0	100.0	100.0	100.0	100.0	0.0
11	0.0	100.0	50.0	50.0	50.0	0.0
12	0.0	100.0	0.0	0.0	0.0	0.0
CAR	0.0	100.0	0.0	0.0	0.0	0.0
<b>Small Enterprise</b>	<b>0.0</b>	<b>100.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
11	0.0	100.0	0.0	0.0	0.0	0.0
<b>Average</b>	<b>11.1</b>	<b>100.0</b>	<b>33.3</b>	<b>44.4</b>	<b>33.3</b>	<b>11.1</b>

Q-Table 98: Percentage of MFIs that set different criteria and requirements for coffee and other crops, by scale and region

Size/ region	No	Yes	% Yes
<b>Large Enterprise</b>	<b>3</b>		<b>0.0</b>
11	1		0.0
12	1		0.0
CAR	1		0.0
<b>Micro Enterprise</b>	<b>2</b>	<b>3</b>	<b>60.0</b>
10		1	100.0
11	1	1	50.0
12	1		0.0
CAR		1	100.0
<b>Small Enterprise</b>	<b>1</b>		<b>0.0</b>
11	1		0.0
<b>Average</b>	<b>6</b>	<b>3</b>	<b>33.3</b>

Note: Same requirements are applied regardless of gender and age.

**Q-Table 99: Percentage of MFIs interested in lending to more coffee farmers, by scale and region**

<b>Size/ region</b>	<b>No</b>	<b>Yes</b>	<b>% Yes</b>
<b>Large Enterprise</b>	<b>1</b>	<b>2</b>	<b>66.7</b>
11		1	100.0
12	1		-
CAR		1	100.0
<b>Micro Enterprise</b>	<b>1</b>	<b>4</b>	<b>80.0</b>
10		1	100.0
11		2	100.0
12		1	100.0
CAR	1		-
<b>Small Enterprise</b>		<b>1</b>	<b>100.0</b>
11		1	100.0
<b>Average</b>	<b>2</b>	<b>7</b>	<b>77.8</b>

Q-Table 100: Average number of coffee trees per hectare, by region

Region	Length	Width	Number of Trees Per Hectare
<b>Treatment</b>	<b>3</b>	<b>3</b>	<b>1,111</b>
<b>1</b>	<b>3</b>	<b>3</b>	<b>1,111</b>
Arabica	5	5	400
Robusta	2	3	1,667
<b>6</b>	<b>3</b>	<b>3</b>	<b>1,111</b>
Arabica	3	4	833
Excelsa	2	3	1,667
Robusta	3	3	1,111
<b>10</b>	<b>3</b>	<b>3</b>	<b>1,111</b>
Arabica	2	2	2,500
Excelsa	3	3	1,111
Robusta	3	3	1,111
<b>11</b>	<b>3</b>	<b>3</b>	<b>1,111</b>
Arabica	3	3	1,111
Excelsa	3	3	1,111
Liberica	4	4	625
Robusta	3	4	833
<b>12</b>	<b>3</b>	<b>3</b>	<b>1,111</b>
Arabica	3	4	833
Excelsa	4	4	625
Liberica	3	4	833
Robusta	3	3	1,111
<b>13</b>	<b>3</b>	<b>3</b>	<b>1,111</b>
Robusta	3	3	1,111
<b>4-A</b>	<b>3</b>	<b>3</b>	<b>1,111</b>
Excelsa	3	2	1,667
Liberica	2	2	2,500
Robusta	3	3	1,111
<b>ARMM</b>	<b>3</b>	<b>4</b>	<b>833</b>
Arabica	3	4	833
Robusta	3	4	833
<b>CAR</b>	<b>3</b>	<b>3</b>	<b>1,111</b>
Arabica	3	3	1,111
Robusta	4	4	625
<b>Comparison</b>			
<b>6</b>	<b>3</b>	<b>4</b>	<b>833</b>
Arabica	3	3	1,111
Excelsa	3	3	1,111
Robusta	4	4	625
<b>11</b>	<b>3</b>	<b>4</b>	<b>833</b>
Arabica	3	4	833
Excelsa	4	4	625
Robusta	3	4	833
<b>12</b>	<b>3</b>	<b>3</b>	<b>1,111</b>
Arabica	2	3	1,667
Liberica	3	3	1,111

Robusta	3	3	1,111
<b>4-A</b>	<b>2</b>	<b>2</b>	<b>2,500</b>
Excelsa	2	2	2,500
Liberica	2	2	2,500
Robusta	2	2	2,500
<b>Total</b>	<b>3</b>	<b>3</b>	<b>1,111</b>

Q-Table 101: Average age of coffee trees per specie, in years, by region

Region	Ave. Age of coffee trees (in Years)	By Coffee Species			
		Arabica	Excelsa	Liberica	Robusta
<b>Treatment</b>					
1	36	41			34
6	25	17	2		26
10	20	7	17		21
11	26	11	8	37	26
12	16	7	25	4	15
13	13				13
4-A	36		26	30	38
ARMM	22	43			19
CAR	22	17			28
Overall	<b>23</b>	<b>17</b>	<b>23</b>	<b>32</b>	<b>23</b>
<b>Comparison</b>					
6	25	33	2		26
11	26	9	29		26
12	12	18		4	12
4-A	24		23	30	25
Overall	<b>20</b>	<b>17</b>	<b>24</b>	<b>17</b>	<b>19</b>

Q-Table 102: Average volume (yield) of coffee production per hectare as per farmer recall, in kg, by region

Item	Region									
	1	6	10	11	12	13	4-A	ARMM	CAR	Overall
<b>Average Yield per Hectare (Green Coffee Beans)</b>										
<b>Treatment</b>										
Arabica	103.1	837.6	455.6	1,097.2	657.6			319.5	692.8	652.9
Excelsa			563.1	388.9	301.9		706.8			441.0
Liberica				671.31	583.3					419.79
Robusta	462.8	208.6	390.9	532.9	409.4	730.1	813.4	473.3	289.5	475.1
<b>Comparison</b>										
Arabica		279.6		250.0	234.8					255.8
Excelsa				428.1			684.60			825.6
Liberica					70.7					70.7
Robusta		246.6		363.1	329.6		824.64			506.7



**Q-Table 103: Average volume of coffee sold (GCB) per hectare, in kg, by region**

Item	Region									
	1	6	10	11	12	13	4-A	ARMM	CAR	Overall
<b>Average Sold per Hectare (Green Coffee Beans)</b>										
<b>Treatment</b>										
Arabica	103.1	832.9	455.6	1,097.2	370.4			169.5	372.4	399.8
Excelsa			233.9	250.0	302.4		379.9			310.0
Liberica				466.88	416.7					397.94
Robusta	189.7	186.3	395.9	442.6	308.4	328.4	826.5	334.5	202.2	395.3
<b>Comparison</b>										
Arabica		276.6		88.9	234.8					222.3
Excelsa				105.7			367.02			449.4
Liberica					70.7					70.7
Robusta		235.0		202.4	328.8		580.46			379.8

Note: Conversion: 1 kg dried beans = 0.5 GCB, 6 kgs fresh cherries = 1 kg GCB: source from ICO

**Q-Table 104: Average selling price by farmers, in Php/kg, 2018, by region**

Item	Region									
	1	6	10	11	12	13	4-A	ARMM	CAR	Overall
<b>Treatment</b>										
<b>Arabica</b>										
As dried cherries	88.3				70.0				83.7	83.7
As fresh cherries		15.0	22.5						49.0	38.1
As green coffee beans		81.5	90.0	141.7	82.5			76.0	259.7	186.0
<b>Excelsa</b>										
As dried cherries							48.5			48.5
As green coffee beans			56.7	55.0	112.8					100.1
<b>Liberica</b>				59.6	65.0					60.5
As green coffee beans				59.6	65.0					60.5
<b>Robusta</b>										
As dried cherries	110.7		80.0	65.8	76.5	50.0	56.1	75.6	90.3	67.5
As fresh cherries		14.9	18.1	17.3	14.6		35.8	13.0	27.5	18.1
As green coffee beans		81.8	98.8	67.6	77.7	67.2	100.0	76.9	116.7	80.1
<b>Comparison</b>										
<b>Arabica</b>										
As dried cherries				110.0						110.0
As fresh cherries		11.0								11.0
As green coffee beans					77.5					77.5
<b>Excelsa</b>										
As dried cherries				57.5			46.8			48.5
<b>Liberica</b>										
As green coffee beans					78.0					78.0
<b>Robusta</b>										
As dried cherries		50.0		79.7	79.6		47.4			58.2
As fresh cherries		13.9		20	15.0		20.0			28.3
As green coffee beans		93.7		80.11	76.3					78.0

**Q-Table 105: Average selling price (Php/kg) of traders, per coffee type, by scale and region**

Size	Type of Buyers			Average
	Exporters	Individuals	Processors/Roasters	
<b>Medium Enterprise</b>				
Green coffee beans		250.00	380.00	<b>347.50</b>
<b>Micro Enterprise</b>				
Cherry		80.00	18.50	<b>39.00</b>
Green coffee beans	198.25	146.88	214.15	<b>195.34</b>
<b>Small Enterprise</b>				
Green coffee beans		125.60	84.33	<b>103.09</b>

Q-Table 106: Percentage of farmers with value-adding activities, by region

Region	No	Yes	% Yes
<b>Treatment</b>			
1	9	1	10.0
6	33	32	49.2
10	70	3	4.1
11	183	20	9.9
12	204	30	12.8
13	20		0.0
4-A	98		0.0
ARMM	50		0.0
CAR	91	5	5.2
<b>Overall</b>	<b>758</b>	<b>91</b>	<b>10.7</b>
<b>Comparison</b>			
6	30		0.0
11	53	27	33.8
12	117	34	22.5
4-A	86	2	2.3
<b>Overall</b>	<b>286</b>	<b>63</b>	<b>18.1</b>

Q-Table 107: Nature of farmers' value adding activities, by region

Items	Region						Overall
	1	6	10	11	12	CAR	
<b>Treatment</b>							
Adding value to coffee products by implementing processes to increase price and expand market	0	0	1.4	7.9	0.9	1	2.4
Improving post-production efficiency by adopting appropriate tools/equipment and processes (dehulling, fermentation and others)	10	1.5	1.4	1	0	3.1	0.9
Improving the quality of existing coffee products by following recommended technologies	0	47.7	0	1	11.5	2.1	7.3
<b>Comparison</b>							
Adding value to coffee products by implementing processes to increase price and expand market				32.5			7.4
Improving the quality of existing coffee products by following recommended technologies					22.5		10.3

**Q-Table 108: Pre- and post-harvest practices on coffee processing and handling by farmers, in percentage, by region**

Item	Region									Overall
	1	6	10	11	12	13	4-A	ARMM	CAR	
<b>Treatment</b>										
Pick ripe	70.0	73.8	71.2	58.1	82.5	45.0	87.8	62.0	67.7	<b>71.7</b>
Coffee processing: Wet Process	0.0	0.0	42.5	3.0	0.4	0.0	0.0	0.0	11.5	<b>5.8</b>
Coffee processing: Natural Process	40.0	3.1	39.7	41.9	2.1	25.0	43.9	22.0	35.4	<b>25.7</b>
Coffee processing: Honey Process	0.0	0.0	0.0	1.5	0.0	0.0	2.0	0.0	1.0	<b>0.7</b>
Drying: Pavement/patio	10.0	0.0	37.0	3.9	13.2	0.0	40.8	20.0	14.6	<b>15.4</b>
Drying: Elevated dryer	20.0	0.0	5.5	1.5	5.1	5.0	31.6	2.0	13.5	<b>7.9</b>
Drying: Trapal/ canvass dryer	60.0	83.1	72.6	35.0	77.8	95.0	25.5	66.0	58.3	<b>58.8</b>
Drying: GrainPro collapsible dryer	0.0	0.0	1.4	0.0	1.3	0.0	0.0	0.0	0.0	<b>0.5</b>
Moisture Meter	0.0	0.0	2.7	1.5	0.0	0.0	0.0	0.0	0.0	<b>0.6</b>
Sorting, green grading and bean sizing	0.0	0.0	1.4	2.0	0.0	5.0	0.0	0.0	7.3	<b>1.5</b>
Storage: Use of GrainPro bags	0.0	0.0	0.0	0.5	0.0	0.0	2.0	0.0	0.0	<b>0.4</b>
Storage: Use of jute bags	0.0	0.0	0.0	1.0	29.1	0.0	1.0	0.0	0.0	<b>8.4</b>
Storage: Proper storage/warehouse	0.0	0.0	1.4	0.5	0.9	0.0	0.0	4.0	0.0	<b>0.7</b>
Storage: Use of wooden pallets	0.0	0.0	41.1	3.0	4.7	5.0	0.0	22.0	0.0	<b>6.9</b>
None	0.0	16.9	2.7	3.9	0.4	5.0	1.0	16.0	1.0	<b>3.9</b>
<b>Comparison</b>										
Pick ripe		43.3		67.5	99.3		69.3			<b>79.7</b>
Coffee processing: Wet Process		0.0		8.8	0.0		0.0			<b>2.0</b>
Coffee processing: Natural Process		0.0		33.8	0.0		33.0			<b>16.0</b>
Coffee processing: Honey Process		0.0		0.0	0.0		0.0			<b>0.0</b>
Drying: Pavement/patio		0.0		6.3	19.2		35.2			<b>18.6</b>
Drying: Elevated dryer		0.0		0.0	0.7		20.5			<b>5.4</b>
Drying: Trapal/ canvass dryer		36.7		66.3	82.1		36.4			<b>63.0</b>
Drying: GrainPro collapsible dryer		0.0		0.0	0.0		1.1			<b>0.3</b>
Moisture Meter		0.0		0.0	0.0		0.0			<b>0.0</b>
Sorting, green grading and bean sizing		0.0		0.0	0.0		0.0			<b>0.0</b>
Storage: Use of GrainPro bags		0.0		1.3	0.0		0.0			<b>0.3</b>
Storage: Use of jute bags		0.0		0.0	40.4		0.0			<b>17.5</b>
Storage: Proper storage/warehouse		0.0		0.0	0.0		0.0			<b>0.0</b>
Storage: Use of wooden pallets		0.0		0.0	0.0		0.0			<b>0.0</b>
None		46.7		0.0	0.7		11.4			<b>7.2</b>

**Q-Table 109: Post-harvest practices and technology applied by farmers, in percentage, by region**

Item	Region									Overall
	1	6	10	11	12	13	4-A	ARMM	CAR	
<b>Treatment</b>										
Depulping	0.0	69.2	56.2	12.3	4.7	5.0	0.0	0.0	26.0	17.4
Fermentation	0.0	0.0	16.4	2.5	0.0	5.0	0.0	2.0	10.4	3.4
Washing	0.0	0.0	13.7	4.4	1.7	5.0	0.0	0.0	15.6	4.6
Drying	100.0	83.1	95.9	52.7	94.9	85.0	100.0	84.0	91.7	83.4
Dehulling	0.0	73.8	64.4	10.3	7.3	10.0	1.0	16.0	11.5	18.3
Polishing	0.0	0.0	1.4	3.0	0.4	5.0	0.0	0.0	1.0	1.2
Sorting/Grading	0.0	0.0	26.0	8.8	3.8	10	0.0	0.0	8.3	6.6
Storage	0.0	0.0	27.4	3.4	9.8	15.0	7.1	18.0	1.0	8.2
None	0.0	16.9	2.7	44.3	0.4	15.0	0.0	16.0	4.2	14.0
<b>Comparison</b>										
Depulping		0.0		20.0	0.0		0.0			4.6
Fermentation		0.0		1.3	0.0		0.0			0.3
Washing		0.0		1.3	0.0		1.1			0.6
Drying		43.3		68.8	96.7		96.6			85.7
Dehulling		23.3		40.0	0.7		0.0			11.5
Polishing		0.0		0.0	0.0		0.0			0.0
Sorting/Grading		10.0		10.1	0.0		0.0			3.2
None		0.0		0.0	0.0		5.7			1.4

**Q-Table 110: Percentage of farmers who have experienced post-harvest losses, by region**

Region	No	Yes	% Yes	Ave. post-harvest losses (%)
<b>Treatment</b>				
1	10		0.0	
6	13	52	80.0	20.0
10	18	55	75.3	11.0
11	40	163	80.3	40.3
12	71	163	69.7	42.5
13	8	12	60.0	49.8
4-A	80	18	18.4	19.3
ARMM	11	39	78.0	26.7
CAR	80	16	16.7	31.0
Overall	<b>331</b>	<b>518</b>	<b>61.0</b>	<b>34.0</b>
<b>Comparison</b>				
6	13	17	56.7	28.1
11	28	52	65.0	31.5
12	16	135	89.4	50.4
4-A	78	10	11.4	35.7
Overall	<b>135</b>	<b>214</b>	<b>61.3</b>	<b>43.3</b>

**Q-Table 111: Typical reasons/causes of losses, in percentage, by type and region**

Item	Region									Overall
	1	6	10	11	12	13	4-A	ARMM	CAR	
<b>Treatment</b>										
Strip harvesting of coffee (ripe and unripe cherries are harvested from the branches)	0.0	67.7	56.2	31.5	10.3	0.0	9.2	46.0	0.0	<b>24.1</b>
Disease attack	0.0	63.1	28.8	40.4	19.2	40.0	12.2	38.0	5.2	<b>27.4</b>
Inappropriate pulping and hulling process	0.0	29.2	4.1	1.5	0.4	0.0	0.0	0.0	0.0	<b>3.1</b>
Prolonged drying	0.0	0.0	9.6	19.7	5.6	0.0	0.0	16.0	0.0	<b>8.0</b>
Exposure to rain	0.0	44.6	23.3	27.6	38.5	0.0	4.1	12.0	4.2	<b>24.3</b>
Antiquated/old tools (i.e. mortar and pestle for Depulping)	0.0	3.1	6.8	2.5	0.0	0.0	1.0	0.0	0.0	<b>1.5</b>
Inadequate storage/containers	0.0	0.0	5.5	3.0	0.4	0.0	0.0	6.0	0.0	<b>1.6</b>
Poor carrying containers	0.0	0.0	42.5	1.5	5.1	0.0	0.0	24.0	0.0	<b>6.8</b>
Poor transportation	0.0	49.2	45.2	9.4	17.1	0.0	0.0	22.0	0.0	<b>15.9</b>
<b>Comparison</b>										
Strip harvesting of coffee (ripe and unripe cherries are harvested from the branches)		26.7		16.3	0.0		0.0			<b>6.0</b>
Disease attack		10.0		23.8	8.6		4.5			<b>11.2</b>
Inappropriate pulping and hulling process		0.0		3.8	0.0		0.0			<b>0.9</b>
Prolonged drying		3.3		12.5	29.8		0.0			<b>16.0</b>
Exposure to rain		0.0		15.0	62.3		0.0			<b>30.4</b>
Antiquated/old tools (i.e. mortar and pestle for Depulping)		0.0		3.8	0.0		1.1			<b>1.1</b>
Inadequate storage/containers		0.0		2.5	0.0		0.0			<b>0.6</b>
Poor carrying containers		0.0		1.3	0.0		0.0			<b>0.3</b>
Poor transportation		0.0		2.5	1.3		0.0			<b>1.1</b>

**Q-Table 112: Percentage of farmers who own post-harvest facilities, by region**

Item	Region									Overall
	1	6	10	11	12	13	4-A	ARMM	CAR	
<b>Treatment</b>										
Solar dryer	30	0	4.1	3.4	4.7	0	38.8	10	32.3	<b>11.5</b>
Fermentary	0	0	0	0.5	0	0	0	0	4.2	<b>0.6</b>
Pulpers	0	1.5	4.1	6.4	0	0	0	2	7.3	<b>2.9</b>
Dehullers	0	1.5	1.4	13.8	0	0	0	0	3.1	<b>3.9</b>
Warehouse/storage	0	1.5	0	2.5	2.1	0	0	4	0	<b>1.5</b>
None	70.0	27.7	83.6	71.4	81.6	100.0	61.2	90.0	62.5	<b>71.5</b>
<b>Comparison</b>										
Solar dryer				1.3	4.6					<b>11.2</b>
Fermentary				-	-					<b>-</b>
Pulpers				17.5	-					<b>4</b>
Dehullers				7.5	-					<b>1.7</b>
Warehouse/storage				-	0.7					<b>0.3</b>
None		100		62.5	78.1					<b>73.1</b>

**Q-Table 113: Percentage of farmers with external access to post-harvest facilities, by region**

Region	No	Yes	% Yes
<b>Treatment</b>			
1	10		0.0
6	61	4	6.2
10	53	20	27.4
11	158	45	22.2
12	190	44	18.8
13	19	1	5.0
4-A	98		0.0
ARMM	48	2	4.0
CAR	85	11	11.5
Overall	<b>722</b>	<b>127</b>	<b>15.0</b>
<b>Comparison</b>			
6	30		0.0
11	43	37	46.3
12	114	37	24.5
4-A	88		0.0
Overall	<b>275</b>	<b>74</b>	<b>21.2</b>

**Q-Table 114: Types of post-harvest facilities accessed externally by farmers, in percentage, by region**

Item	Region							Overall
	6	10	11	12	13	ARMM	CAR	
<b>Treatment</b>								
All weather dryer	0	1.4	0	2.1	0	0	0	<b>0.7</b>
Coffee grinder	3.1	0	1.5	0.9	0	0	7.3	<b>1.6</b>
Dehullers	3.1	20.5	3.4	2.1	0	0	1	<b>3.5</b>
Elevated Dryer	0	0	0	0.4	0	0	0	<b>0.1</b>
Fermentary	0	0	0	0	0	0	1	<b>0.1</b>
Mechanical dryer	0	0	0.5	0	0	0	0	<b>0.1</b>
Milling machine	0	0	11.3	3.8	0	0	0	<b>3.8</b>
Pulpers	0	6.8	4.9	0.4	0	0	2.1	<b>2.1</b>
Solar dryer	0	4.1	1.5	8.1	5	2	0	<b>3.2</b>
Warehouse/storage	0	1.4	0	0	0	2	0	<b>0.2</b>
Others	0	0	0	0.4	0	0	0	<b>0.1</b>
<b>Treatment</b>								
Dehullers			21.3	0.0				<b>4.9</b>
Pulpers			5.0	0.0				<b>1.1</b>
Solar dryer			0.0	6.0				<b>2.6</b>
Others			20.0	19.2				<b>12.9</b>



Q-Table 115: Percentage of processors/roasters following processing practices, by scale and region

Size/ Region	Processing practices						
	Dehulling	Pulping	Fermentation	Drying	Proper storage	Roasting	Grinding
<b>Micro Enterprise</b>	<b>37.9</b>	<b>42.4</b>	<b>31.8</b>	<b>39.4</b>	<b>53.0</b>	<b>65.2</b>	<b>84.8</b>
6	0.0	0.0	0.0	0.0	100.0	33.3	100.0
10	20.0	20.0	10.0	20.0	60.0	50.0	50.0
11	9.1	18.2	9.1	9.1	18.2	54.5	81.8
12	29.2	37.5	16.7	33.3	29.2	62.5	95.8
4-A	100.0	100.0	100.0	50.0	100.0	100.0	100.0
CAR	81.3	81.3	81.3	87.5	93.8	87.5	87.5
<b>Small Enterprise</b>	<b>33.3</b>	<b>26.7</b>	<b>20.0</b>	<b>33.3</b>	<b>73.3</b>	<b>66.7</b>	<b>73.3</b>
6	0.0	0.0	0.0	0.0	100.0	60.0	80.0
10	100.0	100.0	50.0	100.0	100.0	50.0	50.0
11	0.0	0.0	0.0	100.0	100.0	100.0	100.0
12	25.0	0.0	0.0	0.0	0.0	50.0	50.0
13	0.0	0.0	0.0	0.0	100.0	100.0	100.0
CAR	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Average</b>	<b>37.0</b>	<b>39.5</b>	<b>29.6</b>	<b>38.3</b>	<b>56.8</b>	<b>65.4</b>	<b>82.7</b>

Q-Table 116: Average number of production equipment and facilities per processor/roaster, by scale and region

Size/ Region	Production Equipment/ Facilities						
	Dehuller	Pulper	Fermentary	Dryers	Storage (cold, warehouse)	Grinders	Roasters
<b>Micro Enterprise</b>	<b>0.6</b>	<b>2.3</b>	<b>0.7</b>	<b>0.6</b>	<b>0.4</b>	<b>1.2</b>	<b>0.8</b>
6	0.0	0.0	0.0	0.0	1.0	1.0	0.3
10	0.4	0.4	0.3	0.2	0.2	0.8	0.4
11	0.0	0.3	0.0	0.5	0.2	1.0	0.3
12	0.5	0.6	0.9	0.6	0.3	1.7	0.9
4-A	1.0	0.5	1.0	1.0	1.5	1.0	1.5
CAR	1.3	8.0	1.3	1.0	0.6	1.0	1.1
<b>Small Enterprise</b>	<b>0.3</b>	<b>3.1</b>	<b>0.1</b>	<b>0.5</b>	<b>0.6</b>	<b>1.5</b>	<b>1.0</b>
6	0.0	0.0	0.0	0.0	1.0	0.8	0.6
10	1.0	1.0	0.0	2.0	0.5	0.5	0.5
11	0.0	0.0	0.0	0.0	0.0	6.0	2.0
12	0.3	0.0	0.0	0.0	0.0	1.3	1.0
13	0.0	0.0	0.0	0.0	1.0	3.0	1.0
CAR	1.0	22.0	0.5	1.5	1.0	2.0	2.0
<b>Average</b>	<b>0.5</b>	<b>2.4</b>	<b>0.6</b>	<b>0.6</b>	<b>0.4</b>	<b>1.3</b>	<b>0.8</b>

**Q-Table 117: Input suppliers' average warehouse capacity (in cubic meter) and utilization rate (in %), by region**

<b>Size/Region</b>	<b>Ave. size of warehouse (in cubic meters)</b>	<b>Ave. Utilized capacity (in %)</b>
<b>Medium Enterprise</b>	<b>450.0</b>	<b>70.0</b>
12	450.0	70.0
<b>Micro Enterprise</b>	<b>1,004.4</b>	<b>57.4</b>
6	-	0.0
10	8,550.0	85.0
11	551.5	44.7
12	143.3	81.3
4-A	600.0	60.0
<b>Small Enterprise</b>	<b>2,357.3</b>	<b>61.7</b>
10	12,000.0	60.0
11	476.0	65.0
12	240.0	50.0
<b>Total</b>	<b>1,226.8</b>	<b>58.5</b>

**Q-Table 118: Traders' average capacity of warehouse capacity (in cubic meter) and utilization rate (in %), by scale and region**

Size/ Region	Average warehouse size (in cubic meters)	Average capacity is utilized (in %)
<b>Medium Enterprise</b>	<b>625</b>	<b>100.0</b>
11	1,000	100.0
4-A	500	100.0
<b>Micro Enterprise</b>	<b>787</b>	<b>76.5</b>
10	2,425	75.0
11	1,722	64.3
12	99	76.7
4-A	100	75.0
CAR	51	100.0
<b>Small Enterprise</b>	<b>4,902</b>	<b>75.7</b>
11	11,385	83.8
12	580	70.3
<b>Average</b>	<b>1,882</b>	<b>78.8</b>

Q-Table 119: Percentage of farmers with knowledge on specialty coffee, market or cupping, by region

Item	Region									Overall
	1	6	10	11	12	13	4-A	ARMM	CAR	
<b>Treatment</b>										
Specialty coffee	0.0	0.0	1.4	5.4	0.0	0.0	0.0	0.0	5.2	2.0
Coffee cupping	0.0	0.0	2.7	5.4	6.0	5.0	1.0	0.0	5.2	4.0
Specialty market	0.0	1.5	2.7	5.4	0.4	0.0	2.0	2.0	6.3	2.8
None	100.0	98.5	95.9	90.1	94.0	95.0	98.0	98.0	91.7	94.1
<b>Comparison</b>										
Specialty coffee				1.3	0.0					0.3
Coffee cupping				0.0	0.7					0.3
Specialty market				1.3	2.6					1.4
None		100.0		98.8	97.4		100.0			98.6

Note: This is a multiple response question

Q-Table 120: Market segments served and pricing strategy of farmers, in percentage, by region

Item	Region									
	1	6	10	11	12	13	4-A	ARMM	CAR	Overall
<b>Treatment</b>										
<b>Market Segment</b>										
Specialty market	0	0	0	0	0	5	0	0	2.1	0.4
Premium market	0	0	0	0.5	0	0	0	0	5.2	0.7
Commercial market	0	78.5	16.4	20.7	49.1	90	1	52	1	31.3
All-in	100	21.5	83.6	78.8	50.9	5	99	48	91.7	67.6
<b>Pricing Strategy</b>										
fellow score to determine the buying price	0	0	5.5	0.5	0	10	0	0	0	0.8
Availability (flexible)	100	100	94.5	98.5	96.6	90	99	100	97.9	97.4
Others	0	0	0	1	3.4	0	1	0	2.1	1.8
<b>Comparison</b>										
Market Segment										
Specialty market		0		0	0		0			0
Premium market		0		8.8	0		0			2
Commercial market		50		33.8	25.2		0			22.9
All-in		50		57.4	74.8		100			75.1
<b>Pricing Strategy</b>										
Use of coffee cupping score to determine the buying price		0		1.3	0.7		0			0.6
Availability (flexible)		100		98.7	99.3		100			99.4

**Q-Table 121: Type of business development program received by farmers, in percentage, by region**

Item	Region						Overall
	6	10	11	13	4-A	CAR	
<b>Treatment</b>							
Coffee cupping	0	0	0	0	0	1	0.1
Good quality coffee	1.5	5.5	5.4	5	1	1	2.2
Specialty market	0	1.4	1	0	0	1	0.5
Others	3.1	0	0.5	0	0	0	0.4
<b>Comparison</b>							
Good quality coffee	3.3						0.3
Specialty market			1.3				0.3

**Q-Table 122: Percentage of farmers actively marketing their products, by region**

Region	No	Yes	% Yes
<b>Treatment</b>			
1	10		0.0
6	14	51	78.5
10	70	3	4.1
11	200	3	1.5
12	221	13	5.6
13	17	3	15.0
4-A	98		0.0
ARMM	44	6	12.0
CAR	96		0.0
Overall	770	79	9.3
<b>Control</b>			
6	21	9	30.0
11	77	3	3.8
12	151		0.0
4-A	88		0.0
Overall	337	12	3.4

**Q-Table 123: Percentage of farmers with formal agreement/contract with buyers, by region**

Region	No formal agreement/ contract	With formal agreement/ contract with buyers	% With formal agreement/ contract with buyers	% gross sales covered by formal agreements
<b>Treatment</b>				
1	10	0	0.0	
6	65	0	0.0	
10	69	4	5.5	32.5
11	203	0	0.0	
12	234	0	0.0	
13	20	0	0.0	
4-A	98	0	0.0	
ARMM	50	0	0.0	
CAR	95	1	1.0	100.0
Overall	844	5	0.6	46.0
<b>Comparison</b>				
All	349	0	0	

## Marketing Practices of Input Suppliers

**Q-Table 124: Input suppliers who actively market fertilizers, pesticides and other related supplies, in percentage, by scale and region**

Size/Region	No	Yes	% Yes
<b>Medium Enterprise</b>		<b>1</b>	<b>100.0</b>
12		1	100.0
<b>Micro Enterprise</b>	<b>17</b>	<b>10</b>	<b>37.0</b>
6	1		0.0
10	1	1	50.0
11	10	5	33.3
12	5	3	37.5
4-A		1	100.0
<b>Small Enterprise</b>	<b>5</b>	<b>1</b>	<b>16.7</b>
10		1	100.0
11	4		0.0
12	1		0.0
<b>Total/Ave.</b>	<b>22</b>	<b>12</b>	<b>35.3</b>

**Q-Table 125: Input suppliers with sale/procurement agreement with POs, LGUs and coffee-funded project projects, in percentage, by scale and region**

Size/Region	No	Yes	% Yes
<b>Medium Enterprise</b>		<b>1</b>	<b>100.0</b>
12		1	100.0
<b>Micro Enterprise</b>	<b>26</b>	<b>1</b>	<b>3.7</b>
6	1		0.0
10	2		0.0
11	14	1	6.7
12	8		0.0
4-A	1		0.0
<b>Small Enterprise</b>	<b>4</b>	<b>2</b>	<b>33.3</b>
10		1	100.0
11	3	1	25.0
12	1		0.0
<b>total/Ave.</b>	<b>30</b>	<b>4</b>	<b>11.8</b>



Q-Table 126: Nursery operators who actively market their seedlings, in percentage, by scale and region

Size/ Region	No	Yes	% Yes
<b>Large</b>		<b>2</b>	<b>100.0</b>
12		2	100.0
<b>Medium</b>		<b>1</b>	<b>100.0</b>
12		1	100.0
<b>Micro</b>	<b>11</b>	<b>17</b>	<b>60.7</b>
6		2	100.0
11	3	1	25.0
12	6	13	68.4
4-A	1		0.0
CAR	1	1	50.0
<b>Small</b>	<b>3</b>	<b>3</b>	<b>50.0</b>
10	1		0.0
12	1	3	75.0
13	1		0.0
<b>Overall</b>	<b>14</b>	<b>23</b>	<b>62.2</b>

Q-Table 127: Nursery operators with sale/procurement agreements, by scale and region

Size/ Region	No	Yes	% Yes
<b>Large</b>		<b>2</b>	<b>100.0</b>
12		2	100.0
<b>Medium</b>		<b>1</b>	<b>100.0</b>
12		1	100.0
<b>Micro</b>	<b>26</b>	<b>2</b>	<b>7.1</b>
6	1	1	50.0
11	3	1	25.0
12	19		0.0
4-A	1		0.0
CAR	2		0.0
<b>Small</b>	<b>3</b>	<b>3</b>	<b>50.0</b>
10	1		0.0
12	1	3	75.0
13	1		0.0
<b>Overall</b>	<b>29</b>	<b>8</b>	<b>21.6</b>

Q-Table 128: Traders' perception on the changes in the volume of coffee traders in 2018 compared to 2017, by scale and region

Size/ Region	Decrease	Increase	Same
<b>Medium Enterprise</b>	<b>0.0</b>	<b>100.0</b>	<b>0.0</b>
11	0.0	100.0	0.0
4-A	0.0	100.0	0.0
CAR	0.0	100.0	0.0
<b>Micro Enterprise</b>	<b>40.0</b>	<b>33.3</b>	<b>26.7</b>
10	40.0	40.0	20.0
11	50.0	37.5	12.5
12	28.6	28.6	42.9
4-A	33.3	33.3	33.3
CAR	50.0	25.0	25.0
<b>Small Enterprise</b>	<b>60.0</b>	<b>30.0</b>	<b>10.0</b>
11	75.0	25.0	0.0
12	50.0	33.3	16.7
<b>Average</b>	<b>40.0</b>	<b>40.0</b>	<b>20.0</b>

Q-Table 129: Average minimum and maximum volume of coffee that can be accommodated by traders at a given time, by scale and region

Size/ Region	Ave. minimum volume (in Kgs) purchased/accepted at a given time	Ave. maximum volume (in Kgs) purchased/accepted at a given time
<b>Medium Enterprise</b>	<b>207.0</b>	<b>7,450.0</b>
11	1,000.0	12,000.0
4-A	5.0	8,383.3
CAR	20.0	100.0
<b>Micro Enterprise</b>	<b>460.9</b>	<b>4,057.5</b>
10	1,862.0	10,320.0
11	263.6	3,470.0
12	57.2	4,600.0
4-A	47.0	700.0
CAR	22.8	83.8
<b>Small Enterprise</b>	<b>722.1</b>	<b>5,575.0</b>
11	1,515.0	9,500.0
12	193.5	2,958.3
<b>Average</b>	<b>493.7</b>	<b>4,841.3</b>

Q-Table 130: Traders' sources of coffee, by scale and region

Size/ Region	Sources of Coffee		
	Individuals	Producers Organizations	Traders
<b>Medium Enterprise</b>	<b>35.7</b>	<b>28.6</b>	<b>35.7</b>
11	25.0	25.0	50.0
4-A	33.3	33.3	33.3
CAR	100.0	0.0	0.0
<b>Micro Enterprise</b>	<b>80.3</b>	<b>10.6</b>	<b>9.1</b>
10	100.0	0.0	0.0
11	73.3	20.0	6.7
12	75.0	0.0	25.0
4-A	41.7	33.3	25.0
CAR	100.0	0.0	0.0
<b>Small Enterprise</b>	<b>65.4</b>	<b>3.8</b>	<b>30.8</b>
11	57.9	5.3	36.8
12	85.7	0.0	14.3
<b>Average</b>	<b>70.8</b>	<b>11.3</b>	<b>17.9</b>

Q-Table 131: Average volume in kg delivered to traders, by type of source, by scale and region

Size/ Region	Sources of Coffee			Average
	Individuals	Producers Organizations	Traders	
<b>Medium Enterprise</b>	<b>418</b>	<b>1,538</b>	<b>12,240</b>	<b>4,960</b>
Cherries	120			120
Green beans	646	1,538	11,300	4,844
Other	30		16,000	8,015
<b>Micro Enterprise</b>	<b>691</b>	<b>2,029</b>	<b>3,801</b>	<b>1,115</b>
Cherries	2,319	1,000		2,055
Green beans	569	2,200	5,245	1,061
Other	10		913	612
<b>Small Enterprise</b>	<b>1,322</b>	<b>500</b>	<b>3,906</b>	<b>2,085</b>
Green beans	1,322	500	3,906	2,085
<b>Average</b>	<b>816</b>	<b>1,738</b>	<b>6,066</b>	<b>1,861</b>

Q-Table 132: Average price in Php/kg delivered to traders, by source, by scale and region

Size/ Region	Sources of Coffee			Average
	Individuals	Producers Organizations	Traders	
<b>Medium Enterprise</b>	<b>162.00</b>	<b>342.50</b>	<b>277.30</b>	<b>254.75</b>
Cherries	120.00			120.00
Green beans	156.67	342.50	196.63	238.77
Other	220.00		600.00	410.00
<b>Micro Enterprise</b>	<b>107.92</b>	<b>201.71</b>	<b>169.92</b>	<b>123.50</b>
Cherries	16.75	95.00		32.40
Green beans	116.30	219.50	148.00	129.16
Other	70.00		213.75	165.83
<b>Small Enterprise</b>	<b>88.29</b>	<b>340.00</b>	<b>79.63</b>	<b>95.31</b>
Green beans	88.29	340.00	79.63	95.31
<b>Average</b>	<b>107.07</b>	<b>260.17</b>	<b>160.16</b>	<b>133.92</b>

Q-Table 133: Average volume in kg delivered by traders to their buyers, by scale and region

Size	Type of Buyers			Average
	Exporters	Individuals	Processors/Roasters	
<b>Medium Enterprise</b>		<b>13</b>	<b>1,474</b>	<b>1,149</b>
Green coffee beans		13	1,474	1,149
<b>Micro Enterprise</b>	<b>1,119</b>	<b>2,060</b>	<b>19,208</b>	<b>12,731</b>
Cherry		2	7,500	5,001
Green coffee beans	1,119	2,318	20,379	13,456
<b>Small Enterprise</b>		<b>2,860</b>	<b>33,522</b>	<b>22,571</b>
Green coffee beans		2,860	33,522	22,571
<b>Average</b>	<b>1,119</b>	<b>2,054</b>	<b>19,331</b>	<b>13,309</b>

Q-Table 134: Average selling price set by traders, by type of buyers, by scale and region

Size	Type of Buyers			Average
	Exporters	Individuals	Processors/Roasters	
<b>Medium Enterprise</b>		<b>250.00</b>	<b>380.00</b>	<b>347.50</b>
Green coffee beans		250.00	380.00	347.50
<b>Micro Enterprise</b>	<b>198.25</b>	<b>139.44</b>	<b>196.36</b>	<b>181.94</b>
Cherry		80.00	18.50	39.00
Green coffee beans	198.25	146.88	214.15	195.34
<b>Small Enterprise</b>		<b>125.60</b>	<b>84.33</b>	<b>103.09</b>
Green coffee beans		125.60	84.33	103.09
<b>Average</b>	<b>198.25</b>	<b>148.94</b>	<b>209.00</b>	<b>190.41</b>

Q-Table 135: Percentage of traders actively marketing their products, by scale and region

Size/ Region	No	Yes	% Yes
<b>Medium Enterprise</b>	<b>1</b>	<b>4</b>	<b>80.0</b>
11		1	100.0
4-A		3	100.0
CAR	1		0.0
<b>Micro Enterprise</b>	<b>22</b>	<b>8</b>	<b>26.7</b>
10	5		0.0
11	7	1	12.5
12	4	3	42.9
4-A	3	3	50.0
CAR	3	1	25.0
<b>Small Enterprise</b>	<b>7</b>	<b>3</b>	<b>30.0</b>
11	3	1	25.0
12	4	2	33.3
<b>Average</b>	<b>30</b>	<b>15</b>	<b>33.3</b>

Q-Table 136: Type of marketing media used by traders, by scale and region

Size/ Region	Type of Marketing Media				
	Attendance to exhibits/fairs	Social media	TV station	Website	Others
<b>Medium Enterprise</b>	<b>40.0</b>	<b>60.0</b>	<b>0.0</b>	<b>60.0</b>	<b>40.0</b>
11	100.0	100.0	0.0	100.0	0.0
4-A	33.3	66.7	0.0	66.7	66.7
<b>Micro Enterprise</b>	<b>0.0</b>	<b>13.3</b>	<b>3.3</b>	<b>3.3</b>	<b>13.3</b>
11	0.0	12.5	0.0	0.0	0.0
12	0.0	0.0	14.3	0.0	14.3
4-A	0.0	33.3	0.0	16.7	50.0
CAR	0.0	25.0	0.0	0.0	0.0
<b>Small Enterprise</b>	<b>10.0</b>	<b>10.0</b>	<b>0.0</b>	<b>10.0</b>	<b>10.0</b>
11	25.0	25.0	0.0	25.0	0.0
12	0.0	0.0	0.0	0.0	16.7
<b>Average</b>	<b>6.7</b>	<b>17.8</b>	<b>2.2</b>	<b>11.1</b>	<b>15.6</b>

Q-Table 137: Percentage of traders with sale/procurement agreement with producer organizations or supermarkets/groceries, by scale and region

Size/ Region	No	Yes	% Yes
<b>Medium Enterprise</b>	<b>3</b>	<b>2</b>	<b>40.0</b>
11		1	100.0
4-A	2	1	33.3
CAR	1		0.0
<b>Micro Enterprise</b>	<b>28</b>	<b>2</b>	<b>6.7</b>
10	5		0.0
11	8		0.0
12	7		0.0
4-A	5	1	16.7
CAR	3	1	25.0
<b>Small Enterprise</b>	<b>8</b>	<b>2</b>	<b>20.0</b>
11	3	1	25.0
12	5	1	16.7
<b>Average</b>	<b>39</b>	<b>6</b>	<b>13.3</b>

**Q-Table 138: Percentage of traders extending support services to coffee farmers and producers, by scale and region**

Size/ Region	Support Services				
	Provide information on market price	Share information on quality requirements	Extended credit	Provide transportation for a fee	Provide post-harvest equipment/services for a fee
<b>Medium Enterprise</b>	<b>100.0</b>	<b>100.0</b>	<b>40.0</b>	<b>40.0</b>	<b>40.0</b>
11	100.0	100.0	100.0	0.0	0.0
4-A	100.0	100.0	33.3	66.7	33.3
CAR	100.0	100.0	0.0	0.0	100.0
<b>Micro Enterprise</b>	<b>66.7</b>	<b>53.3</b>	<b>16.7</b>	<b>16.7</b>	<b>13.3</b>
10	100.0	80.0	20.0	20.0	20.0
11	62.5	25.0	37.5	12.5	12.5
12	57.1	57.1	0.0	0.0	14.3
4-A	66.7	83.3	16.7	50.0	16.7
CAR	50.0	25.0	0.0	0.0	0.0
<b>Small Enterprise</b>	<b>70.0</b>	<b>80.0</b>	<b>70.0</b>	<b>30.0</b>	<b>30.0</b>
11	75.0	100.0	75.0	75.0	0.0
12	66.7	66.7	66.7	0.0	50.0
<b>Average</b>	<b>71.1</b>	<b>64.4</b>	<b>31.1</b>	<b>22.2</b>	<b>20.0</b>

**Q-Table 139: Percentage of traders who extend cash advance to their suppliers, by scale and region**

Size/ Region	No	Yes	% Yes
<b>Medium Enterprise</b>	<b>2</b>	<b>3</b>	<b>60.0</b>
11		1	100.0
4-A	1	2	66.7
CAR	1		0.0
<b>Micro Enterprise</b>	<b>26</b>	<b>4</b>	<b>13.3</b>
10	4	1	20.0
11	6	2	25.0
12	7		0.0
4-A	5	1	16.7
CAR	4		0.0
<b>Small Enterprise</b>	<b>4</b>	<b>6</b>	<b>60.0</b>
11	2	2	50.0
12	2	4	66.7
<b>Average</b>	<b>32</b>	<b>13</b>	<b>28.9</b>

## Marketing Practices of Processors/Roasters

Q-Table 140: Suppliers of coffee to processors/roasters, by scale and region

Size/ Region	Sources (%)		
	Individuals	Producers Organizations	Traders
<b>Micro</b>	<b>68.9</b>	<b>17.5</b>	<b>13.6</b>
6	0.0	0.0	100.0
10	70.8	16.7	12.5
11	50.0	18.8	31.3
12	65.7	28.6	5.7
4-A	66.7	0.0	33.3
CAR	95.5	4.5	0.0
<b>Small</b>	<b>43.8</b>	<b>25.0</b>	<b>31.3</b>
6	0.0	0.0	100.0
10	81.8	9.1	9.1
11	33.3	50.0	16.7
12	20.0	40.0	40.0
13	0.0	0.0	100.0
CAR	50.0	50.0	0.0
<b>Average</b>	<b>63.0</b>	<b>19.3</b>	<b>17.8</b>

Q-Table 141: Average volume of coffee in kg supplied to processors/roasters, by scale and region

Size/ Region	Types of Coffee Supplied (in Kgs)					Average
	Cherries	Green beans	Parchment	Other	Roasted	
<b>Micro</b>	<b>1,872</b>	<b>639</b>	<b>62</b>	<b>36</b>	<b>103</b>	<b>575</b>
Individuals	785	799	62	43	103	601
Producers Organizations	3,337	108			28	620
Traders	4,000	41		12	160	390
<b>Small</b>	<b>6,508</b>	<b>616</b>		<b>334</b>	<b>470</b>	<b>1,680</b>
Individuals	6,508	486				3,067
Producers Organizations		624			1,200	696
Traders		812		334	105	527
<b>Average</b>	<b>3,611</b>	<b>633</b>	<b>62</b>	<b>148</b>	<b>156</b>	<b>837</b>

Q-Table 142: Average price in Php/kg of coffee supplied to the processors/roaster, by scale and region

Size/ Region	Price of Coffee Supplied (Php/Kg)					Average
	Cherries	Green beans	Parchment	Roasted	Other	
<b>Micro</b>	59.01	197.60	245.45	645.33	376.00	276.38
Individuals	55.01	157.80	245.45	795.00	275.00	206.07
Producers Organizations	60.00	340.00		518.33		352.78
Traders	80.00	325.00		665.75	780.00	534.71
<b>Small</b>	46.83	244.05		526.67	250.00	234.13
Individuals	46.83	172.25				118.50
Producers Organizations		305.00		600.00		341.88
Traders		273.60		490.00	250.00	309.80
<b>Average</b>	<b>54.44</b>	<b>209.51</b>	<b>245.45</b>	<b>628.38</b>	<b>328.75</b>	<b>266.36</b>



**Q-Table 143: Percentage of processors/roasters buying coffee from women coffee farmers, by scale and region**

Size/ Region	No	Yes	%Yes
<b>Micro Enterprise</b>	<b>31</b>	<b>35</b>	<b>53.0</b>
6	3		0.0
10	3	7	70.0
11	9	2	18.2
12	12	12	50.0
4-A		2	100.0
CAR	4	12	75.0
<b>Small Enterprise</b>	<b>8</b>	<b>7</b>	<b>46.7</b>
6	5		0.0
10		2	100.0
11		1	100.0
12	3	1	25.0
13		1	100.0
CAR		2	100.0
<b>Average</b>	<b>39</b>	<b>42</b>	<b>51.9</b>

**Q-Table 144: Percentage of processors/roasters who offer/set premium price for coffee sourced from women coffee farmers, by scale and region**

Size/ Region	No	Yes	%Yes
<b>Micro Enterprise</b>	<b>56</b>	<b>10</b>	<b>15.2</b>
6	3		0.0
10	5	5	50.0
11	10	1	9.1
12	21	3	12.5
4-A	2		0.0
CAR	15	1	6.3
<b>Small Enterprise</b>	<b>10</b>	<b>5</b>	<b>33.3</b>
6	5		0.0
10	1	1	50.0
11	1		0.0
12	3	1	25.0
13		1	100.0
CAR		2	100.0
<b>Total/Ave.</b>	<b>66</b>	<b>15</b>	<b>18.5</b>

**Q-Table 145: Percentage of women coffee farmers willing to increase volume of production and delivery, by scale and region**

Size/ Region	No	Yes	%Yes
<b>Micro Enterprise</b>	<b>34</b>	<b>32</b>	<b>48.5</b>
6	3		0.0
10	3	7	70.0
11	9	2	18.2
12	14	10	41.7
4-A		2	100.0
CAR	5	11	68.8
<b>Small Enterprise</b>	<b>7</b>	<b>8</b>	<b>53.3</b>
6	5		0.0
10		2	100.0
11		1	100.0
12	2	2	50.0
13		1	100.0
CAR		2	100.0
<b>Average</b>	<b>41</b>	<b>40</b>	<b>49.4</b>

**Q-Table 146: Percentage of processors/roasters that produce specialty coffee, average sold and % of customers buying specialty coffee, by scale and region**

Size/ Region	No	Yes	%Yes	Ave. coffee is sold as specialty (%)	Ave. percentage of customers purchasing specialty coffee products
<b>Micro Enterprise</b>	<b>39</b>	<b>27</b>	<b>40.9</b>	<b>27.3</b>	<b>25.7</b>
6	1	2	66.7	36.7	36.7
10	4	6	60.0	29.0	34.0
11	4	7	63.6	56.4	52.7
12	17	7	29.2	26.0	21.9
4-A	2		0.0	0.0	0.0
CAR	11	5	31.3	9.8	8.9
<b>Small Enterprise</b>	<b>4</b>	<b>11</b>	<b>73.3</b>	<b>66.0</b>	<b>60.3</b>
6	1	4	80.0	60.0	60.0
10		2	100.0	55.0	57.5
11		1	100.0	100.0	100.0
12	2	2	50.0	45.0	30.0
13		1	100.0	100.0	100.0
CAR	1	1	50.0	100.0	85.0
<b>Average</b>	<b>43</b>	<b>38</b>	<b>46.9</b>	<b>34.5</b>	<b>32.1</b>

**Q-Table 147: Buyers of processed coffee from processors and roasters, by scale and region**

Size/ Region	Buyers (%)		
	Exporters	Individuals	Local Buyers
<b>Micro</b>	<b>1.7</b>	<b>46.7</b>	<b>51.7</b>
6	0.0	100.0	0.0
10	10.5	52.6	36.8
11	0.0	84.6	15.4
12	0.0	30.2	69.8
4-A	0.0	0.0	100.0
CAR	0.0	66.7	33.3
<b>Small</b>	<b>8.7</b>	<b>56.5</b>	<b>34.8</b>
6	0.0	100.0	0.0
10	16.7	50.0	33.3
11	0.0	50.0	50.0
12	0.0	40.0	60.0
13	0.0	0.0	100.0
CAR	25.0	50.0	25.0
<b>Average</b>	<b>2.7</b>	<b>48.3</b>	<b>49.0</b>

**Q-Table 148: Average volume in kg delivered/sold to buyers by processors/roasters, by scale and region**

Size/ Region	Buyers (in Kgs)		
	Exporters	Individuals	Local Buyers
<b>Micro</b>		<b>64</b>	<b>1,883</b>
Cherry		50	10,000
Green coffee beans		10	1,093
Green coffee beans, Roasted Beans and Ground Coffee			300
Ground Coffee		75	2,754
Roasted Beans		7	35
Roasted Beans Ground Coffee		265	29
<b>Small</b>	<b>1,150</b>	<b>333</b>	<b>5,182</b>
Cherry			14
Green coffee beans	300	100	13,383
Ground Coffee		1,010	
Roasted Beans		8	603
Roasted Beans and Ground Coffee	2,000	2,000	43
<b>Average</b>	<b>606</b>	<b>115</b>	<b>2,260</b>

**Q-Table 149: Percentage of processors/roasters who actively market coffee processing/roasting operation, by scale and region**

Size/ Region	No	Yes	%Yes
<b>Micro Enterprise</b>	<b>32</b>	<b>34</b>	<b>51.5</b>
6		3	100.0
10	6	4	40.0
11	6	5	45.5
12	11	13	54.2
4-A		2	100.0
CAR	9	7	43.8
<b>Small Enterprise</b>	<b>8</b>	<b>7</b>	<b>46.7</b>
6	1	4	80.0
10	2		0.0
11		1	100.0
12	4		0.0
13		1	100.0
CAR	1	1	50.0
<b>Average</b>	<b>40</b>	<b>41</b>	<b>50.6</b>

**Q-Table 150: Type of marketing media used by processors/roasters, by scale and region**

Size/ Region	Marketing Media (%)					
	Attendance to exhibits/fairs	Posters/flyers	Radio station	Social media	Website	Others
<b>Micro Enterprise</b>	<b>22.7</b>	<b>4.5</b>	<b>3.0</b>	<b>27.3</b>	<b>0.0</b>	<b>16.7</b>
6	0.0	0.0	0.0	100.0	0.0	0.0
10	10.0	10.0	20.0	30.0	0.0	10.0
11	9.1	0.0	0.0	27.3	0.0	27.3
12	25.0	8.3	0.0	20.8	0.0	16.7
4-A	100.0	0.0	0.0	100.0	0.0	0.0
CAR	31.3	0.0	0.0	12.5	0.0	18.8
<b>Small Enterprise</b>	<b>6.7</b>	<b>0.0</b>	<b>0.0</b>	<b>40.0</b>	<b>6.7</b>	<b>6.7</b>
6	0.0	0.0	0.0	80.0	20.0	20.0
11	0.0	0.0	0.0	100.0	0.0	0.0
13	0.0	0.0	0.0	100.0	0.0	0.0
CAR	50.0	0.0	0.0	0.0	0.0	0.0
<b>Average</b>	<b>19.8</b>	<b>3.7</b>	<b>2.5</b>	<b>29.6</b>	<b>1.2</b>	<b>14.8</b>

**Q-Table 151: Percentage of processors/roasters who conduct research and development to create more coffee-based products, by scale and region**

<b>Size/ Region</b>	<b>No</b>	<b>Yes</b>	<b>% Yes</b>
<b>Micro Enterprise</b>	<b>44</b>	<b>22</b>	<b>33.3</b>
6	3		0.0
10	8	2	20.0
11	4	7	63.6
12	14	10	41.7
4-A	2		0.0
CAR	13	3	18.8
<b>Small Enterprise</b>	<b>12</b>	<b>3</b>	<b>20.0</b>
6	5		0.0
10	2		0.0
11		1	100.0
12	3	1	25.0
13	1		0.0
CAR	1	1	50.0
<b>Total</b>	<b>56</b>	<b>25</b>	<b>30.9</b>

## Household Income

**Q-Table 152: Average annual household income in Php, 2018, by sources and region**

Income Sources	Regions									Overall
	1	6	10	11	12	13	4-A	ARMM	CAR	
<b>Treatment</b>										
<b>On-farm Income (Annual)</b>										
Products from crop farming/production and/or processing	54,630	59,380	72,341	51,777	78,378	84,113	37,874	79,754	58,598	63,068
Livestock and poultry raising	2,200	13,265	5,111	2,255	4,962	5,715	2,418	4,214	7,586	4,907
<b>Average Annual On-farm Income</b>	<b>56,830</b>	<b>72,645</b>	<b>77,452</b>	<b>54,032</b>	<b>83,340</b>	<b>89,828</b>	<b>40,292</b>	<b>83,968</b>	<b>66,184</b>	<b>67,975</b>
<b>Off-farm Income (Monthly)</b>										
Farm labor for other farms doing land preparation, input application, weeding, harvesting, hauling and others	800	815	1,845	1,333	999	669	127	1,158	1,520	1,095
<b>Average Annual Off-farm Income</b>	<b>9,600</b>	<b>9,780</b>	<b>22,140</b>	<b>15,996</b>	<b>11,988</b>	<b>8,028</b>	<b>1,524</b>	<b>13,896</b>	<b>18,240</b>	<b>13,140</b>
<b>Total Farm Income</b>	<b>66,430</b>	<b>82,425</b>	<b>99,592</b>	<b>70,028</b>	<b>95,328</b>	<b>97,856</b>	<b>41,816</b>	<b>97,864</b>	<b>84,424</b>	<b>81,115</b>
<b>Non-farm Income (Monthly)</b>										
Micro/small enterprise (business activity)	320	2,720	1,056	2,118	1,886	700	2,097	1,100	866	1,750
Skilled labor (carpenter, mason, mechanic)	1,600	478	640	644	482	480	1,146	92	474	600
Unskilled (household help, store helper)	1,300	433	377	180	245	30	316	180	279	271
Driving (motorcycles, jeeps, buses)	-	857	247	234	611	525	969	230	686	527
Employment (government or private)	1,300	2,407	1,317	2,243	1,246	2,427	5,550	2,172	3,204	2,381
Professional services (as doctor, teacher, lawyer, accountant, etc.)	-	769	219	394	179	5,000	4,133	840	594	933
Remittances	2,000	477	137	585	343	75	3,439	1,336	721	865
Pension, relief (assistance from government such as 4Ps)	960	935	635	1,008	963	398	1,340	721	490	906
Other sources not mentioned	-	896	68	244	543	160	1,689	460	324	545
<b>Total Annual Non-farm Income</b>	<b>89,760</b>	<b>119,664</b>	<b>56,352</b>	<b>91,800</b>	<b>77,976</b>	<b>117,540</b>	<b>248,148</b>	<b>85,572</b>	<b>91,656</b>	<b>105,336</b>
<b>Total Annual Income</b>	<b>156,190</b>	<b>202,089</b>	<b>155,944</b>	<b>161,828</b>	<b>173,304</b>	<b>215,396</b>	<b>289,964</b>	<b>183,436</b>	<b>176,080</b>	<b>186,451</b>
<b>Comparison</b>										
<b>On-farm Income (Annual)</b>										
Products from crop farming/production and/or processing		48,208		45,858	135,450		56,958			87,622
Livestock and poultry raising		2,128		2,341	1,619		13,724			4,880
<b>Average Annual On-farm Income</b>		<b>50,336</b>		<b>48,199</b>	<b>137,069</b>		<b>70,682</b>			<b>92,502</b>
<b>Off-farm Income (Monthly)</b>										
Farm labor for other farms doing land preparation, input application, weeding, harvesting, hauling and others		2,287		994	792		637			928
<b>Average Annual Off-farm Income</b>		<b>27,444</b>		<b>11,928</b>	<b>9,504</b>		<b>7,644</b>			<b>11,136</b>
<b>Total Farm Income</b>		<b>77,780</b>		<b>60,127</b>	<b>146,573</b>		<b>78,326</b>			<b>103,638</b>
<b>Non-farm Income (Monthly)</b>										
Micro/small enterprise (business activity)		1,020		1,413	2,811		4,815			2,842
Skilled labor (carpenter, mason, mechanic)		65		611	253		97			280
Unskilled (household help, store helper)		67		204	43		91			94
Driving (motorcycles, jeeps, buses)		733		666	1,113		173			741
Employment (government or private)		288		5,021	1,077		6,622			3,311
Professional services (as doctor, teacher, lawyer, accountant, etc.)		333		-	788		2,159			914
Remittances		323		1,194	697		1,864			1,073
Pension, relief (assistance from government such as 4Ps)		1,023		706	824		3,306			1,440
Other sources not mentioned		853		846	29		282			351
<b>Total Annual Non-Farm Income</b>		<b>56,460</b>		<b>127,932</b>	<b>91,620</b>		<b>232,908</b>			<b>132,552</b>
<b>Total Annual Income</b>		<b>134,240</b>		<b>188,059</b>	<b>238,193</b>		<b>311,234</b>			<b>236,190</b>

**Q-Table 153: Average annual household expenditures in Php, 2018, by region**

Monthly Expenditures	Regions									Overall
	1	6	10	11	12	13	4-A	ARMM	CAR	
<b>Treatment</b>										
Food	4,600	6,795	3,888	4,590	3,761	2,875	4,953	3,844	5,226	4,500
Education	60	1,201	726	858	1,003	595	911	655	577	860
Water	-	14	41	30	50	119	315	79	43	74
Electricity	180	325	291	383	270	516	844	360	307	384
Transportation	860	724	326	773	637	294	963	450	913	702
Clothing	29	305	190	164	172	81	269	219	115	186
Communications (including mobile phone and internet)	96	189	90	123	106	123	713	214	261	209
House Rental/Amortization	-	-	-	52	31	-	-	-	52	27
Leisure/Entertainment	400	123	49	138	229	68	785	179	323	254
Health related expenses	465	591	121	357	158	124	1,426	498	431	435
Debt Services ("Bayad Utang")	-	854	573	815	1,085	425	48	481	784	741
Farm Expenses	923	2,404	993	1,133	2,013	421	2,674	1,352	1,118	1,631
Other expenses not mentioned	-	1,566	34	272	283	255	714	203	90	376
<b>Average Annual Expenditures</b>	<b>91,356</b>	<b>181,092</b>	<b>87,864</b>	<b>116,256</b>	<b>117,576</b>	<b>70,752</b>	<b>175,380</b>	<b>102,408</b>	<b>122,880</b>	<b>124,548</b>
<b>Savings/ Dis-savings</b>	<b>64,834</b>	<b>20,997</b>	<b>68,080</b>	<b>45,572</b>	<b>55,728</b>	<b>144,644</b>	<b>114,584</b>	<b>81,028</b>	<b>53,200</b>	<b>61,903</b>
<b>Comparison</b>										
Food		4,558		4,370	4,290		5,378			4,606
Education		440		894	928		736			830
Water		276		229	56		210			153
Electricity		307		425	189		644			368
Transportation		344		661	766		1,019			770
Clothing		138		245	161		140			173
Communications (including mobile phone and internet)		109		107	132		273			160
House Rental/Amortization		14		73	108		243			126
Leisure/Entertainment		132		274	205		482			284
Health related expenses		302		288	230		1,152			482
Debt Services ("Bayad Utang")		1,082		1,365	864		288			852
Farm Expenses		1,317		596	2,290		1,957			1,734
Other expenses not mentioned		777		282	668		173			464
<b>Average Annual Expenditures</b>		<b>117,552</b>		<b>117,708</b>	<b>130,644</b>		<b>152,340</b>			<b>132,024</b>
<b>Savings/ Dis-savings</b>		<b>16,688</b>		<b>70,351</b>	<b>107,549</b>		<b>158,894</b>			<b>104,166</b>



**Q-Table 154: Average income, cost and net income per hectare, in Php, 2018, by region**

Item	Region									
	1	6	10	11	12	13	4-A	ARMM	CAR	Overall
<b>Treatment</b>										
<b>Average Income/Ha.</b>	<b>45,715.30</b>	<b>18,390</b>	<b>63,421</b>	<b>38,406</b>	<b>26,785</b>	<b>22,796</b>	<b>113,785</b>	<b>27,204</b>	<b>73,636</b>	<b>47,354</b>
As dried cherries	45,715.30		31,572	37,120	44,784	33,333	102,871	29,287	59,624	70,668
As fresh cherries		6,150	22,613	15,002	6,012		294,827	104,000	62,403	30,137
As green coffee beans		21,510	69,951	52,655	27,671	22,242	146,875	24,148	93,540	42,129
<b>Average Cost/Hectare</b>										
Planting materials	-	-	75	-	238	45	-	-	-	75
Paid labor	-	1,823	1,853	3,410	2,242	2,150	2,995	1,550	1,564	2,397
Fertilizers and pesticides	1,600	342	144	606	765	245	4,643	336	3,110	1,326
Tools and equipment	-	436	482	198	473	225	33	194	-	274
Transport of materials and produce	-	739	560	586	635	53	15	90	-	429
Interest on loans	-	-	137	545	228	-	-	-	-	205
Taxes	140	-	36	385	431	-	1,317	121	269	405
Rentals	-	-	-	-	-	-	-	-	-	-
Others cost not mentioned	-	11	274	65	125	-	-	-	18	76
<b>Total Cost/Ha.</b>	<b>1,740</b>	<b>3,350</b>	<b>3,561</b>	<b>5,794</b>	<b>5,137</b>	<b>2,718</b>	<b>9,004</b>	<b>2,291</b>	<b>4,961</b>	<b>5,188</b>
<b>Net Income/Ha.</b>	<b>43,975</b>	<b>15,040</b>	<b>59,860</b>	<b>32,612</b>	<b>21,648</b>	<b>20,078</b>	<b>104,781</b>	<b>24,913</b>	<b>68,675</b>	<b>42,166</b>
<b>Comparison</b>										
<b>Average Income/Ha.</b>		34,435		21,726	139,683		143,654			116,728
As dried cherries		9,723		45,982	16,164		23,680			23,489
As fresh cherries		36,000		21,202	24,336					24,346
As green coffee beans		21,057		25,290	27,656		142,291			55,046
<b>Average Cost/Hectare</b>										
Planting materials		-		-	75		-			75
Paid labor		948		3,450	3,407		2,772			3,045
Fertilizers and pesticides		123		1,166	176		4,387			1,460
Tools and equipment		226		454	834		91			507
Transport of materials and produce		242		324	797		19			444
Interest on loans		-		334	295		-			206
Taxes		107		163	34		1,935			549
Rentals		-		-	-		-			-
Others cost not mentioned		133		365	171		28			176
<b>Total Cost/Ha.</b>		<b>1,780</b>		<b>6,257</b>	<b>5,788</b>		<b>9,232</b>			<b>6,464</b>
<b>Net Income/Ha.</b>		<b>32,655</b>		<b>18,326</b>	<b>21,868</b>		<b>132,000</b>			<b>48,126</b>

Note: Computed based on the averages per region per product

**Q-Table 155: Coffee contribution to farm and total household income, 2018**

Income Sources	Regions									Overall
	1	6	10	11	12	13	4-A	ARMM	CAR	
HH Total Annual Income	156,190	203,944	150,539	171,907	171,380	215,394	311,603	183,425	179,069	190,830
Income from Coffee	23,426	15,422	27,900	12,794	41,176	19,547	20,856	15,870	16,644	24,248
% of coffee income to total income from crops	42.9	26.0	41.7	21.7	54.3	23.2	61.6	19.9	28.6	38.4
% of coffee income to total household income	15.00	7.56	18.53	7.44	24.03	9.08	6.69	8.65	9.29	12.71

## Certification

Q-Table 156: Percentage of processors and roasters with certification, by scale and region

Size/ Region	No	Yes	% Yes
<b>Micro Enterprise</b>	<b>50</b>	<b>16</b>	<b>24.2</b>
6	3		0.0
10	8	2	20.0
11	7	4	36.4
12	15	9	37.5
4-A	2		0.0
CAR	15	1	6.3
<b>Small Enterprise</b>	<b>12</b>	<b>3</b>	<b>20.0</b>
6	5		0.0
10	1	1	50.0
11		1	100.0
12	3	1	25.0
13	1		0.0
CAR	2		0.0
<b>Total</b>	<b>62</b>	<b>19</b>	<b>23.5</b>

Q-Table 157: Type of certifications obtained by processors/roasters, by scale and region

Size/ Region	Types of Certification (Frequency)					
	Good Manufacturing Practices	ISO 9000 series	Hazard Analysis and Critical Control Points	Organic	Q Grader	Q Processing
<b>Micro Enterprise</b>	<b>8</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>3</b>
10	2	0	0	1	0	0
11	0	0	0	0	0	0
12	6	1	1	1	3	3
CAR	0	0	0	0	0	0
<b>Small Enterprise</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>2</b>
10	0	0	0	0	1	1
11	0	0	1	0	1	1
12	1	0	0	0	0	0
<b>Total</b>	<b>9</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>5</b>	<b>5</b>

## Participation in Government, NGO or Private-Firm Funded Projects on Coffee Production, Processing and Marketing

Q-Table 158: Input suppliers who participated in government, NGO or private firm funded projects on production, processing and marketing, in percentage, by scale and region

Size/Region	No	Yes	% Yes
<b>Medium Enterprise</b>	<b>1</b>		<b>0.0</b>
12	1		0.0
<b>Micro Enterprise</b>	<b>23</b>	<b>4</b>	<b>14.8</b>
6	1		0.0
10	2		0.0
11	12	3	20.0
12	8		0.0
4-A		1	100.0
<b>Small Enterprise</b>	<b>5</b>	<b>1</b>	<b>16.7</b>
10	1		0.0
11	4		0.0
12		1	100.0
<b>Overall</b>	<b>29</b>	<b>5</b>	<b>14.7</b>

Q-Table 159: Nursery operators who participated in government, NGO or private firms-funded projects on coffee production, processing and marketing, in percentage, by scale and region

Size/ Region	No	Yes	% Yes
<b>Large</b>		<b>2</b>	<b>100.0</b>
12		2	100.0
<b>Medium</b>		<b>1</b>	<b>100.0</b>
12		1	100.0
<b>Micro</b>	<b>19</b>	<b>9</b>	<b>32.1</b>
6	2		0.0
11	1	3	75.0
12	14	5	26.3
4-A	1		0.0
CAR	1	1	50.0
<b>Small</b>	<b>2</b>	<b>4</b>	<b>66.7</b>
10		1	100.0
12	2	2	50.0
13		1	100.0
<b>Overall</b>	<b>21</b>	<b>16</b>	<b>43.2</b>

**Q-Table 160: Processors and roasters who participated in government, non-government or private firms-funded projects on coffee production, processing and marketing, in percentage, by scale and region**

Size/ Region	No	Yes	% Yes
<b>Micro Enterprise</b>	<b>34</b>	<b>32</b>	<b>48.5</b>
6	3		0.0
10	7	3	30.0
11	8	3	27.3
12	8	16	66.7
4-A		2	100.0
CAR	8	8	50.0
<b>Small Enterprise</b>	<b>8</b>	<b>7</b>	<b>46.7</b>
6	5		0.0
10		2	100.0
11		1	100.0
12	3	1	25.0
13		1	100.0
CAR		2	100.0
<b>Average</b>	<b>42</b>	<b>39</b>	<b>48.1</b>

**Q-Table 161: Traders who participated in government, non-government or private firms-funded projects on coffee production, processing and marketing, in percentage, by scale and region**

Size/ Region	No	Yes	% Yes
<b>Medium Enterprise</b>	<b>1</b>	<b>4</b>	<b>80.0</b>
11		1	100.0
4-A	1	2	66.7
CAR		1	100.0
<b>Micro Enterprise</b>	<b>21</b>	<b>9</b>	<b>30.0</b>
10	2	3	60.0
11	8		0.0
12	4	3	42.9
4-A	4	2	33.3
CAR	3	1	25.0
<b>Small Enterprise</b>	<b>6</b>	<b>4</b>	<b>40.0</b>
11	4		0.0
12	2	4	66.7
<b>Average</b>	<b>28</b>	<b>17</b>	<b>37.8</b>

**Q-Table 162: Microfinance/lending institutions who participated in government, non-government or private firms-funded projects on coffee production, processing and marketing, by scale and region**

Size/ region	No	Yes	% Yes
<b>Large Enterprise</b>	<b>2</b>	<b>1</b>	<b>33.3</b>
11	1		0.0
12	1		0.0
CAR		1	100.0
<b>Micro Enterprise</b>	<b>2</b>	<b>3</b>	<b>60.0</b>
10		1	100.0
11		2	100.0
12	1		0.0
CAR	1		0.0
<b>Small Enterprise</b>	<b>1</b>		<b>0.0</b>
11	1		0.0
<b>Average</b>	<b>5</b>	<b>4</b>	<b>44.4</b>

### Interest in Continuing or Expanding Coffee Farm/Activities

**Q-Table 163: Percentage of household members who are interested in continuing or expanding their coffee farm/activities, by region**

Items	Regions									Overall
	1	6	10	11	12	13	4-A	ARMM	CAR	
Men	14.3	9.6	64.6	52.2	84.5	84.2	16.7	43.8	30.6	53.3
Youth Male	100.0	51.5	84.6	43.0	51.8	23.1	100.0	61.5	100.0	66.7
Women	80.0	83.7	55.0	57.1	87.4	70.0	20.0	62.2	46.5	65.8
Youth Female	100.0	32.0	92.3	20.5	35.1	12.5	100.0	25.0	428.6	50.5

**Q-Table 164: Percentage of farmers not doing the value adding activities, but interested to learn, by region**

Region	No	Yes	% Yes
1	1	9	90.0
6	4	61	93.8
10	20	53	72.6
11	30	173	85.2
12	28	206	88.0
13	1	19	95.0
4-A	53	45	45.9
ARMM	14	36	72.0
CAR	11	85	88.5
Overall	161	688	81.0