





Project Coffee +

Agripreneur Development Programme

> Coffee Based Farming System

Farmer's Workbook

Philippines







FOREWORD

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and local partners from Ghana, Nigeria, Côte d'Ivoire and Cameroon have developed the Farmer Business School (FBS) approach for cocoa production systems in 2010. Since then, FBS has been introduced in 18 African countries with an overall outreach of over 1 million smallholders. Major impacts are better incomes from smallholder's investments in good agricultural practice and recommended inputs, the emergence of producer organizations and better access to financial services.

The FBS Advisory Facility of the regional programme Sustainable Smallholder Agri-Business (SSAB) has supported the adaptation for smallholder coffee farmers in selected areas in Indonesia, Philippines and Thailand.

The goal of the initiative "Improving smallholder coffee farming systems in Southeast Asia" is that smallholder coffee farmers in selected areas in Indonesia, Philippines and Thailand improve the economic viability of their farming system. Introducing FBS in the coffee value chain in Southeast Asia shall contribute to achieve the following specific objectives:

- Improve incomes and living conditions of 10,500 smallholders and their families
- Increase their coffee productivity (yield/ha) on average by 20% in Indonesia and Thailand, and 50% in the Philippines.
- Smallholder farmers adopt profitable and bestintegrated and/or diversified farming systems with coffee
- Systems of/or access to local service delivery by farmer groups/organizations for smallholder coffee farmers are improved.

Only FBS-Trainers that underwent a special qualification program including classroom and learning trainings with farmers are well prepared to deliver the training in line with the principles of adult and discovery learning and the quality standards of FBS.



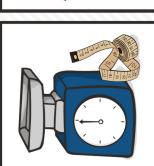
M0-A Farmer Business School: The Training

What is FBS about?



Ξ







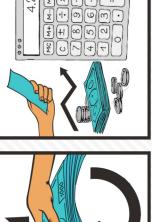
ank

a

Manage your farm for enough food Z Z

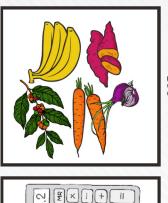


Know whether you do Money-out/Money-in: a good business **M**



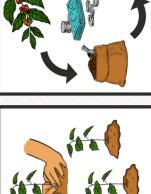
 \odot

Decisions for more income **M**



to diversify your farm Seize opportunities enterprises **M**6





Investing in rejuvenation and rehabilitation of coffee M11

farmer organization

membership in **Benefits from** M10

> with good quality coffee Make more money

How to get good financial services

Manage your money throughout the year

Z

8

E

Becoming an entrepreneur in practice M12

The skills learned at the Farmer Business School help the farmers to become better entrepreneurs who:

- Take advantage of improved technologies and market opportunities to increase income
- Plan and adapt/optimize their production to maximize farm productivity and profitability
- Lead professional negotiations with buyers, input suppliers, credit institutions and land owners.
- · Manage money, savings and loans

M1-C: Agricultural Calendar to plan the production of coffee (and other crops as may be applicable)

The times of work...

of the main activity are shown by a square of the off-season activity are shown by a circle

For this exercise, the trainer shall determine with the participants whether they are existing planters of coffee (in which case he starts with the section from maintenance, harvesting and marketing) or just starting to plant coffee (in which case, he starts from establishment, maintenance, harvesting and marketing).

				>	Year											Year						
The tasks of the entrepreneur	JAN	FEB	MAR APR MAY	APR	MAY J	r NUC	JUL A	AUG SE	SEP OC	OCT NO	NOV DEC	C JAN	N FEB	3 MAR	A APR	NAY.	NOC	JUL	AUG S	SEP 0	OCT NOV	V DEC
A. Establishment																						
Prepare the Field																						
Brushing																						
• Plowing																						
• Lay-out and Staking																						
 Hole Digging 																						
Purchase of Seedlings and																						
Inputs																						
B. Planting																						
Hauling Inputs/ Seedling																						
• Fertilization (Basal)																						
• Planting																						

				Year_	ar										\	Year						
The tasks of the entrepreneur	JAN F	FEB M	MAR A	APR MAY	AY JUN	IN JUL	L AUG	G SEP	P OCT	T NOV	/ DEC	JAN	FEB	MAR	APR	MAY .	L NUL	JUL AI	AUG SI	SEP OCT	T NOV	V DEC
C. Maintenance																						
 Weeding/Spraying 																						
 Fertilizer Application 																						
Spraying Fungicide/ insecticide																						
Pruning																						
D. Harvesting/Post Harvest																						
Picking																						
 Depulping 																						
• Drying																						
Dehulling																						
Sacking																						
Storage																						
Dehulling																						
 Sorting (optional) 																						
Re-drying																						
E. Marketing																						
 Transport 																						
 Labor/Hauling 																						



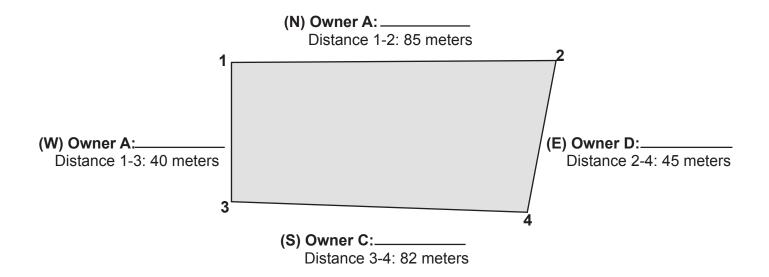
Main Lesson
For a good yield, the agricultural entrepreneur (man or woman) plans to do the necessary work in the field and apply the inputs at the right time.

M2-A: Measure and calculate the surface of a field

The size or surface area of a field is measured in square meters or hectares.

1 hectare (ha) is 10,000 square meter (m2).

Sample of Farm Lay-out and Exercise Output



Area Computation to Determine Total Area (Hectare)

Area = average length
$$(1-3+2-4)$$
 X average width $(1-2+3-4)$ 2

Example:

$$\frac{40 + 45}{2}$$
 X $\frac{85 + 82}{2}$

$$= 3,548.75 \text{ m}^2$$

so:
$$\frac{3,548.75}{10,000}$$

M2-B: Standard Measures and Units

Distance	Kilometer (km) : 1 km is 1,000 meters (m)
Length or width of a field	Meter (m) : 1 m is 100 centimeters (cm)
Surface Area	Square Meter (m²) Hectare (ha) : 1 ha is 10,000 m²
Yield per Unit Area	Yield per hectare: Formula : Harvest/Yield(kg) Area Planted(ha or m²) example : 400 kg/ha dried coffee beans
Volume	1 Liter : 1,000 ml 1 Gallon : 3.6 Liters
Weight	Grams (g) Kilograms (kg) : 1 kg is 1,000 g Metric ton (mt) : 1 Ton is 1,000 kg
Time	Minutes (min) Hour (h) = 1 hour has 60 minutes Day (D) = 1 day has 24 hours
Agricultural work	Man-day (MD): The work of an adult person in one day. Example: Work on one hectare requires 10 Man-days. (10 MD / ha). The work can be done by 1 man in 10 days or 10 men in 1 day.
	Man-animal day (MAD): the work of 1 head animal/ day and 1 person It is important to specify the number of hours in a work day.
Coffee Conversions (Robusta)	1 kg Green Coffee Beans(GCB) = 5 kgs red picked cherry
	100 kg fresh Cherry = 40-45 kg dried cherry 26 kgs dried parchment coffee Coffee Beans

M2-C : Sample Listing of Farm Assets

	Cost/Purchase Price
A. List of Equipment, tools, farm animals	
1.	
2.	
3.	
4.	
5.	
B. Inventory of Inputs (fertilizers, chemicals, herbicide, etc.)	
1.	
2.	
3.	
4.	
5.	
C. Available Labor	
Family labor: Number of Persons	
2. Outside labor: rate/day	
3. Hired Man-Animal Day: rate/day	
4. Hired Machinery or equipment	
D. Labor	
Area:hectares	
E. Crops Planted No. of Hills/Area	
1.	
2.	
3.	
4.	
5.	
F. Credit Sources: interest rate%/yr	
1.	
2.	

M2-D : Coffee Farmer Information

Source: Adopted form Nestle Coffee Farmer's Handbook - Farm Identity Sheet

Person	al Information	
	Age:	Educational Attainment
Name:		
Home Address:		
Contact Number:		
Spouse:		
Name of Children:		
Farm	Information	
Farm Address		
Age of Coffee Trees	Area (ha)	
Number of bearing trees		
Total Production Coffee (kg/yr) Cropping		
Intercrop(s)	Area	Total Yield : (kg/year)
Other Crops		
FARM SKETCH MAP – Draw based on Actu	ial Parcels = tota	al all parcels added



FARM SKETCH MAP – Draw based on Actual Parcels = total all parcels added

M3-A Food Groups and their functions

Making money with agriculture is good, but the farm must provide also enough good food for your family. For this reason we want to tackle this issue.



make meals tasty

health

Source: adapted from FAO 2004. Family Nutrition Guide

tasty

and health

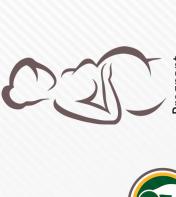
M3-C Food products and their content in energy, protein, fat, carbohydrates (food composition at 100 grams edible portion)

Foo	od	Energy (Kcal)	Protein (g)	Fat (g)	Carbohydrates (g)	
	Rice, Well milled	356	7.4	0.5	80.4	
	Corn Grits, white	357	8.3	1.5	77.5	
	Sweet Potato Yellow	135	1.1	0.4	31.8	
	Cassava	145	0.6	0.2	35.3	
	Pork Belly less fat	307	17.3	26.3	0.2	A
	Chicken	215	17.4	16.2	0	AA
	Fish Galunggong	100	20.4	2.1	0	P
	Dried Fish Tamban	215	43	4.8	0	
	Eggs	139	12.3	9.4	1.4	A
	Fruits Banana (Lacatan)	126	14	0.2	29.6	
	Vegetables (Kalabasa)	68	1.2	0.2	15.3	
	Leaves Swamp Cabbage – Kangkong	39	3.3	0.4	5.5	

Source: Philippine Food Composition Table, Food and Nutrition Research Institute, DOST

Explanation: A kilocalorie (Kcal or 1000 calories) is a measure for the energy of a food. The number of kilocalories of one kg of a given food shows you whether the food is rich or poor in energy. **100 grams = ½ cup** (Approximate)

M3-D How much energy and protein do we need per day?



Pregnant



women 2690

Energy kcal per day

grams per day

Protein



09



41



60 years or older Woman 2140

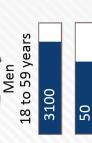






60 years or older

2500









Girls

7 to 9 years Children

4 to 6 years

1 to 3 years Children

7 to 11 months Children

0 to 6 months

524

Children

708

1022

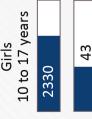
Children

1700

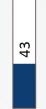
1350

10 to 17 years

Boys



2830



25









Breastfeeding



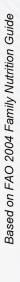




22

Breastfeeding plus 3 - 4 meals/day

2 - 3 meals/day

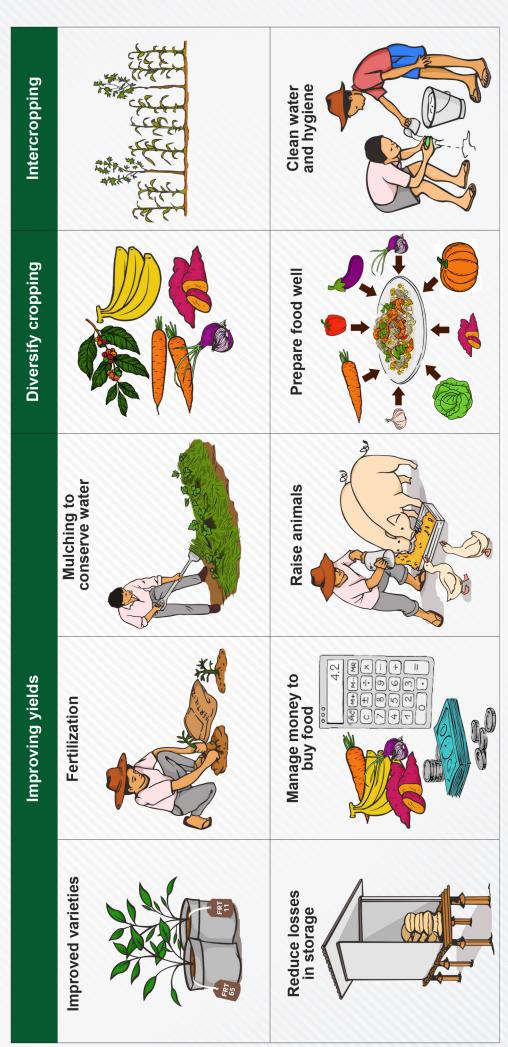


M3-E Nutritional Calendar: How do you cover the food needs of your family?

- Mark a square ☐ if the product is sold
- Mark a circle O if the product is eaten
- Mark a triangle \triangle in the months you need to buy the product
- Indicate by a line _____ how long the product is available from own production
- What are the months of high prices and the months of low prices for a food item; indicate ₱ or ₱

Product/Food Items	SELL	BUY △	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ост	NOV	DEC
Coffee														
Cassava														
Rice														
Potato														
Taro														
Corn														
Beans														
Peanut														
Meat														
Fish														
Fruits														
Vegetables														

M3-F How to have more and better food?



Source: Adapted from FAO 2004. Family Nutrition Guide

Other possibilities

- Produce crops that ripen early or that resist to drought
- Harvest water for small irrigation
- Some families might have the opportunity to establish fish ponds

Reference Materials for Module 4 Money-out, Money In: Know wether you are doing a good business

M4-A BUKIDNON: 1 Hectare Establishment Cost of Coffee (Bukidnon Condition)

As reference material for the trainer, make an example of a full blown calendar starting from land prep (establishment of coffee farm) and the 3 years cycle - till start of good harvest for coffee.

Assumptions:

Production Cost and Returns = Plantation Establishment up to 3 Years

(per hectare)

Productive years = 25 Years

Distancing: 2 m x 3 m; Total Population = 1,666 plants/hectare

1. Establishment costs		Amount (₱)
Land Clearing (piece rate or pakyaw)	@ 3,000/ha*	3,000
Lay-outing and Staking, Hole Digging	1,666 @ 5.00/hole	8,330
Herbicide	3.0 liters @ 400/per liter	1,200
	Sub-Total	12,530
2. Inputs		
Seedlings	1,666 @ 26/pc	43,316
Chicken Dung - 30 kgs/sack	40 bags @ 100/sack	4,000
• Furadan – 16 kg/bag	1 bag @ 1,200/16 kg. bag	1,200
• Fertilizer – 50 kgs/bag	5 bags complete @ 1,200/bag	6,000
Chemical/Pesticides	2 liters @ 850/ per liter	1,700
	Sub-Total	56,216
3. Labor		
Hauling	10 Man days @ 346/md**	3,460
Planting	6 Man days @ 346/md	2,076
Fertilizer Application	6 Man days @ 346/md	2,076
	Sub-Total	7,612
	Total Establishment Cost/hectare	76,358

4. Maintenance (over 3 years)		
Spraying	2 mds x 4/year x 3 years @ 346/md	8,304
Fertilization	3 mds x 4/year x 3 @ 346/md	12,456
• Fertilizer – 50 kgs/bag	10 bags/yr x 3 @ 1,200/bag	36,000
• Furadan 3,5, G – 16 kgs/bag	1 bags/yr x 3 @ 1,200/bag	3,600
• Fungicide – 1kg/box	4 kgs/yr x 3 @ 250/kg	3,000
Herbicides	6 liters/year x 3 @ 400/liter	7,200
• Pruning	3 mds/quarter x 12 @ 346/md	12,456
	Total Cost = 3 years	83,016
Total Cost of Maintenance	for 3yrs/3 = Maintenance Cost/year	27,672/yr

^{*} Based on Precleared area- not new break-in land. For newly opened areas budget P10,000/ha or use local rates.

^{**} Minimum wage, Category II (DOLE -NWPC R10 Northern Mindanao Per Wage Order No. RX-20 effective Nov. 1, 2018)

Projected Yield	Selling Price @ 84/kg	Volume	Gross Sales	Net Income (₱)
@ 1.00 kg/tree	84	1,666 kgs	139,944	112,272
@ 2 kgs/tree	84	3,332 kgs	279,888	252,216
@ 2.5 kgs/tree	84	4,165 kgs	349,860	322,188

Co	ontribution Ma	rgin @ 84/kg selling pric	ce
Year	Yield Levels	Production Cost/Tree	Contribution Margin/Tree
3	1	16.60	67.40
4	2	8.30	75.70
5 upwards to 8th year	2.5	6.64	77.36

Harvesting		Amount (₱)
Handpicking (pick red)	@ 4.20/kg cherry*** x 5.0 kg/tree* x 1,666 trees	34,986.00
Drying	@ 12 MDs @ 346/MDs	4,152.00
Dehulling	@ 4.00/kg** x 1,666 kgs/ha GCB	6,664.00
	Total	45,802.00

^{*} Conversion rate of 1 kg GCB = 5 kgs of Red Cherry

^{**} Own dehuller, other local rates in Bukidnon: Pangantucan, Kalilangan, Maramag = 5.00/kg GCB; Lantapan = 5.50/kg GCB; Malaybalay = 4.50/kg GCB

^{***} Formula to determine rate of buy back(cherry) = current price GCB x 0.05%

* Refer to Production Cost details M4-A p.48-49

Refer to Production Cost details M4-A p.48-49 Table of Formulas to determine:	Sample Computation
	Sample Computation*
Value of Coffee trees up to three (3) years establishment period	= 76,358 + 83,016 1,666 @ 100% survival
Formula: Total Establishment Cost + Maintenance Cost for 3 years	159,374
Total Plant Population	1,666
Note: Consider mortality rate of planted trees that survived	= 95.66/tree @ 100% Survival Rate
2. Production Cost/Tree (Yearly)	_ 7,672
Formula:	1,666
Maintenance Cost/Year	
Number of trees	= 16.60/tree/year
3. Break-even Production/Tree (kg) BEPC (kg)	16.60/tree/year
Formula:	84/kg GCB
Production Cost/Tree/Year	= 0.193 kg/tree GCB or
Current Buying Price	193 g GCB/tree or 965 g cherry/tree
4. Break-even Production Cost/kg (GCB) BEPC (₱)	= 16.60 + 27.49
Formula: Production Cost/Tree + Harvesting Cost/kg	= 44.09/kg
5. Harvesting & Processing Cost/kg	45,802
Formula:	= 1,666 @ 100% recovery GCB
Total Harvesting and Processing Cost	
GCB recovered	= 27.49/kg
6. Net Income/Hectare/Year	= 84 - 44.09 x 1,666 kg (@
Formula:	100% recovery)
Selling Price - BEPC(₱) x GCB recovered (kgs)	= 66,490.06/ha/year
7a. Return of Investments (ROI)/Year (without depreciation)	= 66,490.06
Formula:	27,672 + 45,802
Net Income/Ha/Year	_≡ 62,691.58
Maintenance Cost + Harvest Cost	73,478
	= 0.85%/year or 85%/year
7b. ROI/Year (with depreciation)	_ 76,358
Depreciation Value/Year = Total Establishment Cost/	= 25 Years
Lifespan	= 3,054.32/year
ROI (with depreciation)	= 62,691.58
= Net income/Ha/Year	3,054 + 27,672 + 45,802
Depreciation value/year + Maintenance Cost +	= 62,691.58
Harvesting + Processing Cost	76,528
J J	= 0.82%/year

Farmers Workbook Module 4

M4-B Exercise Sheet 1: Coffee

Money-Out, Money-In: Know whether you are doing a good business (intercrop or diversified crop choices)

Here we will see how to determine if business was good or bad. We will calculate the "money-in" and "money-out" from different produce.

Steps: • Multiply the quantity with the price in each line. • Sum the money spent ("Money-Out") on inputs and labor • Multiply the yield by the price of sale ("Money-In") • Subtract the sum of "Money-Out" from the "Money-In" Determine if there was a profit or a loss 1 ha Coffee: 2x3 m distancing Unit Qty Price (₱) Total (₱) 1666 trees/hectare 1. Money-Out **Inputs** Insecticides - Furadan bag 1 1,200 1,200 4 **Fungicides** 250 1,000 kgs Herbicide 6 400 2,400 liters Fertilizers – 50 kg/bag 10 1.200 12,000 bags **Total cost of inputs** 16,600 Labor and services MD Pruning 12 346 4,152 MD 4 Fertilization (organic/inorganic) 346 1,384 Spraying (herbicide/insecticide/ MD 8 346 2,768 fungicide) Harvesting (piece rate) 8,330 4.20 34,986 per kg 20 346 6,920 Drying and bagging MD Total cost of labor needs and services 50,210 Other costs %/Yr Interest Charges @ 16%/yr 21,400 3,424 1.666 6.664 Dehulling per kg 4.-/kg Transport/Hauling per bag 33 20/bag 666 5 Coffee Bags – jute sack 50 1,700 bags Total of other cost and cost of services 12,454 Total Cost (inputs + labor and services + other costs) 79,355 2. Money-In Yield x Price of Sale 1,666 84 139,944 kg 3. Profit or loss? Money-In - Money-Out ○ or ② 60,589

Return of Investment (ROI)

- = Income/Capital Invested = 60,589 / 79,355
- $= 0.763 \times 100$
- = 76.3%/year

M4-C Exercise Sheet 1: Yellow Corn

Steps:

- Multiply the quantity with the price in each line.
- Sum the money spent ("Money-Out") on inputs and labor
- Multiply the yield by the price of sale ("Money-In")
- Subtract the sum of "Money-Out" from the "Money-In"
- Determine if there was a profit or a loss

1 ha of 2 nd crop local variety Yellow Corn Planting distance @ .20cm x 0.75cm rows planted in Furrows	Unit	Qty	Price (₱)	Total (₱)
1. Money-Out				
Inputs				
Seeds – Hybrid Variety	9kg/bag	2	6000	12,000
Inorganic Fertilizer – 50 kg/bag	Bags	10	1,200	12,000
Organic Fertilizer (Chicken Dung)	Bags	30	100	3,000
Herbicides	Liters	3	400	1,200
	Total costs of	f inputs a	nd services	28,200
Labor and Services				
Land preparation – Plowing, Harrowing and Furrowing	MAD	6	500	3,000
Fertilization (Basal and Sidedress)	MD	6	346	2,076
Manure Spreading	MD	6	346	2,076
Planting	MD	10	346	3,460
Herbicide Application	MD	2	346	692
Harvesting – piece rate	Per Kg	6,000	1.50	9,000
Shelling	Per Sack	120	15	1,800
Transport to Dryer	Per Kg	6,000	.50	3,000
Labor - Drying	MD	12	346	4,152
Labor – sacking and loading	Per Sack	120	15	1,800
Transport to Buyer	Per Kg	6,000	1	6,000
	Total cos	st labor aı	nd services	37,056
Other Costs				
Sacks – Plastic 50 kg	Piece	120	15	1,800
Interest Cost	Per Cropping	28,200	16%	4,512
		Total	Other Cost	6,312
Total costs (Costs of inputs + la	bor and other se	rvices + c	ther costs)	71,568
2. Money-In			ı	
Yield x Price of Sale	Kg	6,000	17.00	102,000
3. Profit or loss? Money-In - Mon	ney-Out	◯ or (3	30,432

Return on Investment (ROI)

- = Income/Capital Invested = 30,432 / 71,568
- = 0.42 X 100
- = 42%/cropping

M4-D Exercise Sheet 1: Ginger



Steps:

- Multiply the quantity with the price in each line.
- Sum the money spent ("Money-Out") on inputs and labor
- Multiply the yield by the price of sale ("Money-In")
- Subtract the sum of "Money-Out" from the "Money-In"
- Determine if there was a profit or a loss

500 m ² of 3rd crop local variety Ginger Planted in between coffee rows @ 0.30 x 0.30 m	Unit	Qty	Price (₱)	Total (₱)
1. Money-Out				
Inputs and services				
Seedlings	Kgs	500	40	20,000
Insecticides/Fungicides	Litres	1	800	800
Fertilizer 14-14-14, Urea	50kg Bags	2	1,400	2,800
Chicken Dung	Sack	10	100	1,000
	23,700			
Labor and Services				
Furrowing	MAD	2	500	1,000
Planting	MD	5	346	1,730
Fertilizing	MD	5	346	1,730
Weeding 1	MD	10	346	3,460
Harvesting	MD	8	346	2,768
Washing	MD	8	346	2,768
Trucking (50 kgs/sack)	Sacks	60	50	3,000
Hauling (Labor) loading	MD	2	346	692
Total cost of Labor				17,148
Other Cost Cost of Sacks	Per Sack	60	15	900
Interest Cost @ 16%/cropping @ 23,7	700			3,792
		Total	other cost	4,692
Total costs (Costs of input	s + labor and othe	er services +	other cost)	45,540
2. Money-In				
Yield x Price of Sale	Kgs	1,500	40	60,000
3. Profit or loss? Money-In - M	loney-Out	© or ⊗		14,460

Return on Investment (ROI)

- = Income/Capital Invested = 14,460 / 45,540
- = 0.317 X 100
- = 32%/cropping

M4-E Comparing Results

Please tell what is good and what is bad business and indicate reasons.*

*To be subjected to group discussion on reasons why the business is categorized as good, fairly good, not good business. Input levels of satisfaction as a factor.

		1 ha of Coffee	1 ha Yellow Corn	500m ² Ginger
Yield	kg/ha	1,666	6,000	1,500 kgs
1. Money-Out	pesos/area	79,355	71,568	45,540
2. Money-In	pesos/area	139,944	102,000	60,000
3. Profit or Loss?	pesos/area	60,589	30,432	14,460
Return on Investment (ROI)		85% per year	42 % per cropping	32 % per cropping
⊙ or 🤄)	Good Business*	Good Business*	Fairly Good Business*

Farmers Workbook Module 5 Decisions for doing good business

How to do better business? In this section we will see the possible improvements and how to make good decisions. We will use our results and do the same calculations for improved techniques. The calculations are explained on page 62.

M5-A Exercise 1 : Comparing Results - 2 Scenarios, Coffee

		Coffee without Fertilizer and pruning (1 ha)		Coffee with Pruning and Fertilizer (1 ha)			
	Unit	Qty	Price (₱)	Total (₱)	Qty	Price (₱)	Total (₱)
1. Money-Out							
Inputs							
Insecticides	liters	1	1,200	1,200	1	1,200	1,200
Herbicides	litres	6	400	2,400	6	400	2,400
Fungicides	sachets	0			4	250	1,000
Fertilizer	50 kg bags	0			10	1,200	12,000
Bags - Jute sacks	pcs	3	50	150	34	50	1,700
Cost of Inputs			3,750			18,300	
Labor							
Pruning	MD	0			12	346	4,152
Fertilization	MD	0			4	346	1,384
Spraying	MD	8	346	2,768	8	346	2,768
Harvesting	MD	750	4.20	3,150	8,330	4.20	34,986
Drying, bagging	MD	6	346	2,076	20	346	6,920
Labor needs and costs				7,994			50,210
Money-Out (Pesos)				11,744			68,510
2. Money-In							
Yield x Price of Sale	kg	150	84	15,600	1,666	84	139,944
3. Profit or Loss Money-In - Money-	-Out	<u></u> 01	· 😕	856			71,434

M5-B Exercise 2 : Comparing Results - 2 Scenarios, Corn

		Witho	crop Yello ut Fertiliz local vari	er (1 ha)		p Yellow ertilizer (1	Corn with ha)
	Unit	Qty	Price (₱)	Total (₱)	Qty	Price (₱)	Total (₱)
1. Money-Out							
Inputs and services							
Seeds – Hybrid Variety	9 kg/bag	2	17	2,754	2	6,000	12,000
Inorganic Fertilizer 50 kg/bag	bags				10	1,200	12,000
Organic Fertilizer (Chicken Dung) 30 kg/bag	bags				30	100	3,000
Herbicides	liters				2	800	1,600
Cost of Inputs				2.754			28,200
Labor and Services							
Land preparation – Planting, Harrowing and Furrowing	MAD	6	500	3,000	6	500	3,000
Fertilization (Basal and Sidedress)	MD				6	346	2,076
Manure Spreading	MD				6	346	2,076
Planting	MD	10	346	3,460	10	346	3,460
Herbicide Application	MD				2	346	692
Harvesting	per kg	2,500	1.50	3,750	6,000	1.50	9,000
Shelling	per bag	50	15	750	120	15	1,800
Transport to Sheller and Drying	per kg	2,500	.50	1,250	6,000	.50	3000
Labor – Drying	MD	3	346	1,038	12	346	4,152
Labor – sacking and loading	per sack	50	15	750	120	15	1,800
Transport to Buyer	per kg	2,500	1	2,500	6,000	1.00	6,000
Labor and Services				16,498			37,056
Other Cost							
Sacks – Plastic 50 kg	piece	50	15	750	120	15	1,800
Interest Cost	per cropping				28,200	16%	4,512
Total Other Cost				750			6,312
Money-Out (Pesos)				20,002			71,568
2. Money-In							
Yield x Price of Sale	kg	2,500	17	42,500	6,000	17.00	102,000
3. Profit or Loss Money-In - Money-C *Bukidnon Conditions		or 🕃		22,498			30,432

^{*}Bukidnon Conditions

M5-C Exercise 3 : Comparing Results - 2 Scenarios, Ginger

		3rd cr	op Ginge Fertiliz (500 m			crop Ginç ertilizer (5	
0.30 x 0.30 m 500 m ² 3rd crop local variety	Unit	Qty	Price (₱)	Total (₱)	Qty	Price (₱)	Total (₱)
1. Money-Out							
Inputs and services							
Seedlings	kgs	500	40	20,000	500	40	20,000
Insecticides/ Fungicides	liters				1	800	800
Fertilizer 14-14-14, Urea	bags				2	1,400	2,800
Chicken Dung	sack				10	100	1,000
Cost of Inputs				20,000			23,700
Labor		·					
Furrowing	MD	1	500	500	2	500	1000
Planting	MD	5	346	1,730	5	346	1,730
Fertilizing	MD				5	346	1,730
Weeding 1	MD				10	346	3,460
Harvesting	MD	2	346	692	8	346	2,768
Washing	MD	1	346	346	8	346	2,768
Trucking (50 kgs sack)	sacks	20	50	1,000	60	50	3,000
Hauling (Labor) loading	MD	1	346	346	346	2	692
Labor needs + costs	MD			4,614			17,148
Other Cost: sacks	piece	20	15	300	60	15	900
Interest Costs @ 16%/cropping		20,000		3,200	23,700		3,792
Total other costs				8,114			4,692
Money-Out (Pesos)				28,114			45,540
2. Money-In			'				
Yield x Price of Sale	kg	800	40	32,000	1,500	40	60,000
Total Money-In	pesos			32,000			60,000
3. Profit or Loss Money-In - Money-C		or 😢		3,886			14,460

^{*}Based on farmer interview from Bagong Silang, Maramag.

Module 5: Reminder on business concepts

Calculation	Explanations				
Money-out (Variable Costs) = Cost of Inputs + Cost of Labour	The variable costs are the money spent on Inputs and Labour for the crop.				
	They are called "variable" because they increase with the size of the field. If you plant 2 hectares instead of 1; the variable costs are multiplied by 2. You will need 2 times as much inputs and labour. If you plant 0.5 hectare instead of 1, the variable costs are divided by 2. You need half as much inputs and labour.				
	To finance the next season an entrepreneur must save enough money to cover the "variable costs"				
Money-in					
(Gross Revenue) = Yield x Sale Price	The Gross Revenue is the income from the sale of the crop. In case of home consumption, it is the value of the harvest if you had to purchase it.				
Profit or loss					
(Gross margin) = Gross Revenue – Variable Costs	The Gross Margin is the benefit of using the land expressed in money terms. It indicates whether there was profit or loss. The comparison between the gross margins of different crops or agricultural production techniques helps to choose the best form of production to generate income.				
Unit Cost = Variable Costs/Yield	The Unit Cost is the cost of producing one kilogram of product.				
	If the Unit Cost of producing a crop is greater than the Sale Price, it is better to simply purchase the crop. The production of the crop is only a good business if the Unit Cost of the crop produced on the farm is smaller than the Purchase Price of the crop.				
Explanation of Fixed Costs	Certain costs are called (fixed costs) These are costs for equipment and tools that the farmer owns and are used on multiple crops or over multiple years, such as sprayers or irrigation pumps. The Fixed Costs do not vary with the size of the field. To recover the value of fixed cost items, it is assigned a depreciation value. Depreciation value is computed by dividing the purchase cost of a fixed cost item by the number of years it is usable				

M6-A Comparative Productivity/Profitability - 3 Crops

What crops will you choose?

Surface Area	Unit	Coffee without Fertilizer + without pruning	Coffee with Pruning and Fertilizer	Yellow Corn Local variety without Fertilizer	Yellow Corn Improved variety with fertilizer	Ginger Local variety without Fertilizer	Ginger Improved variety with fertilizer
	ha						
1. Money-Out	Pesos/ha						
2. Money-In	Pesos/ha						
3. Profit or Loss? Without risk ⊙or®	Pesos/ha						
4. Profit or Loss? Without risk ⊙orઊ	Pesos/ha						

M6-B Sayote: Cost and Return as Diversification Crop**

Sayote Distancing: 4 x 5m @ 3 seed pieces/hill crop 500 m²	Unit	Quantity	Price (₱)	Total (₱)
1. Money-Out			1	
Inputs				
Seed	pcs	75	5.00	375
Insecticide/Fungicide	liters	1	6.00	600
Fertilizer (inorganic) 50 kgs/bag	bags	1	1,200	1,200
Chicken Dung	bags	5	100	500
Propping twine	roll	6	350	2,100
Bamboo stakes and poles	pcs	25	50	1,250
Total cost of inputs	6,025			
Labor - Establishment Period			1	
Hole digging	MD	2	346	692
Planting and fertilization	MD	1	346	346
Trellis construction	MD	6	346	2,076
Labor - Harvesting			1	
Harvesting	MD	cycle*	346	692
Hauling (field)	MD	1	346	346
Trucking (to market)	per kg	750	0.50	375
Other Cost Cost of Sacks	рс	13	15	195
Total labor needs and costs	1,608			
Total harvesting cost	1,608			
Total costs (Costs of inputs and se	10,747**			
2. Money-In				
Yield x Price of Sale	kgs per 2 weeks	750	3.00	2,250
3. Profit or loss? Money-In — Money-Out *every 2 weeks	(⊕or®		515.00

^{*}every 2 weeks

Note:

Depreciation cost = 9,139/3 years production period = 3,046.33/year/12 months per year = 223.86/month/2 harvest/month

= 127.00/harvest

Cost of harvesting = 1,608/harvest

Depreciation Cost + Harvest Cost = 1,608 + 127

Depreciation Cost + Harvest Cost = 1,735.00/harvest cycle of 2 weeks

Depreciation Cost + Harvest Cost = 1.735 ÷ 750 kgs

= 2.31/kg

^{**}Data comes from Maramag, Bukidnon- Farmer's Interview(Sandy Agustina)

M6-C Atsal(Bell Pepper): Cost & Return as Alternative Diversification Crop

Atsal(Bell Pepper) Planting Distance: 0.30 x 0.30 x 1.0m double raw system	Unit	Qty	Price (₱)	Total (₱)	
1. Money-Out					
Inputs and services					
Plowing	MAD	4	500	2,000	
Harrowing/Pulverising	MAD	2	500	1,000	
Bed Forming	MAD	2	500	1,000	
Transplanting	MD	4	346	1,384	
Fertilization	MD	2	346	692	
Seeds	can 250g	1	1,800	1,800	
Chicken dung	bags - 30kg	10	100	1,000	
Hydrated lime	bags - 30kg	2	200	400	
Furadan Granulated Insecticide	packs @ 100 g/pack	3	250	750	
Fertilizer Inorganic 14-14-14 46-0-0 Foliar Fertilizer Insecticide	50 kg bag 50 kg bag 50 kg bag liter	1 1 5	1,200 1,100 300 600	1,200 1,100 1,500 600	
Fungicide	kg	2	380	760	
Total cost of inputs and services					
Labor					
Spraying	MD	10	346	3,460	
Fertilization	MD	2	346	692	
Harvesting/Hauling	MD	10	346	3,460	
Total Cost - Labor	l			7,612	
Other Cost					
Cost of Sacks	pcs	38	30	1,140	
Total other cost				1,140	
Total costs (Costs of inputs and	services costs o	f labor Intere	est Cost)	23,938	
2. Money-In					
Yield x Price of Sale	kgs	1,120	40	44,800	
3. Profit or loss? Money-In — Money-Out		or 🗵		20,862	

^{*}Data Source: Farmer Interviewee- Impasug-ong, Bukidnon

Note:

Production Cost = 20,862 **÷** 1,120

= 18.62/kg

M6-D Intercropping in Coffee: Guidelines

A. Rationale/Objectives of Intercropping

- 1. Increase land productivity by optimizing land use, labor, fertility and inputs.
- 2. Secure a more regular income, provide year round employment for the household
- 3. Reduce the risks of financial loss due to price fluctuations from a single crop or from coffee prices
- 4. Climate adaptation to weather pattern changes- heat, rainfall changes, wind protection

B. General Considerations on the choice of intercrops

- 1. Crops should not compete for fertility and water with the coffee plants.
- 2. Crops should not harbor or host to coffee pests and parasites.
- 3. Competition to sunlight from lateral shading to young coffee plants should be avoided.
- 4. Considerations to erosion particularly to areas with slopes beyond 15% should be avoided.
- 5. Adequate spacing must be considered between the coffee plants and the chosen intercrop.
- 6. Weed control and adequate fertilizer supplement to compensate the nutrient removal.
- 7. The choice of intercrops should consider availability of a ready market and production technology.
- 8. Tenurial status of the landholding should be considered (ownership of land)

C. Type of intercropping

	Place	Time of Establishment	
	Between rows	Within rows	
1. Temporary intercrops or catch cropping (short term) ≤ 4 months	Beans Soybeans Vegetables Peanuts Sweet potato Yams Ginger Upland rice Corn	Ginger Squash Melons	≤3 yrs. Old Coffee Plantings
2. Permanent intercropping or strip cropping (mediumlong term)	Coconut Bananas table and cooking type Black pepper Pineapple	Black pepper Avocado Papaya Rambutan Durian	During establishment, Before Establishment or During Rejuvenation
	Perimeters	Between and within rows	
3. Agroforestry (long term)	Narra Rubber Falcata Mosese Fruit trees Coconuts	Falcata Ipil-ipil Coconuts	During farm establishment

M6-E Examples of Intercropping Mixes

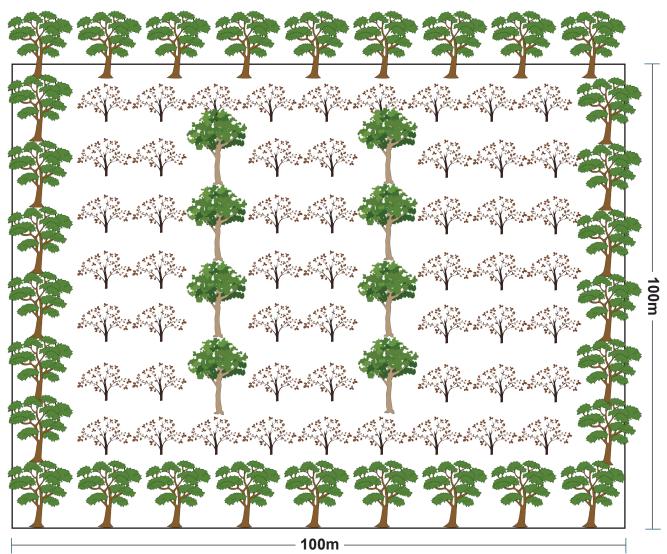
Intercropping Model 1: Coffee + Falcata + Narra (1 hectare lot)

Crop	Spacing	Trees/ hectare	Production/ crop	Total Production	Price/Unit	Total Income (gross)
Coffee	3x3m	1,111	1 kg GCB	1,111	84.00	93,333
Falcata	8x8	156	0.83 m ³	129 cu. m.*	3,000	387,000
Narra	5m along the perimeter	80		80**	6,000	480,000
Total	,			,		960,333

Source: Pure Nescafe Plan - agroforestry to create shared values, 2013

* : In 7 years time** : In 15-20 years time

Layout:



Legend:

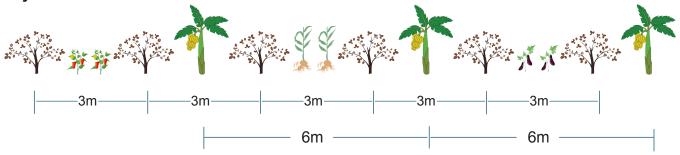


Intercropping Model 2: Coffee + Table Banana + Mixed vegetable *(Ginger, Yam, Bell Pepper, Eggplant*)*

Crop	Spacing	Trees/ hectare	Production/ crop	Total Production	Price/ Unit	Total Income (gross)
Coffee	3x3m	1,111	1 kg GCB	1,111 kgs	84.00	93,333/yr
Table Banana	6x3m	555	20 kgs/tree	11,000 kgs	15	166,666 / 18 months
Ginger	500m ² @ 30cmx30cm	555	1 kg/hill	555 kgs	40	5,400/4months
Yams	(within row) 0.5mx0.5m	1,200	0.3 kgs	360 kgs	15	5,400/4months
Bell Pepper	0.3mx0.3mx 1m(row)	333	2.5 kgs	840 kgs	40	33,600/ 4months
Eggplant	0.5mx0.5mx 0.75m (row)	300	1 kg	300 kgs	15	4,500/ 4 months
Total						

^{*} choices of intercropping by farmer

Layout:



Legend:











Farmers Workbook Module 7 Manage your money throughout the year

Bad management of money

- How does one know if the money is managed badly?
- What are the causes?
- How to manage money well during the year?

One must Plan! The person, who fails to plan, plans to fail!

M7-A First step: Foresee household expenditure

Below are the expenditures of a Household of __ persons Can we foresee these expenditures? When is the money needed? Let's calculate how much money is needed for the household in one year.

	Combo		Mone	ey-Out	
Money Needs	Can be foreseen	Period	Pesos per month	Pesos per year	
Food	Yes	Each month			
Clothing	Yes	Each month			
House Repair/ Maintenance	Yes	Each month			
Medical	Yes	Each month			
Other Costs					
Sub-total	Yes	Each month			
School fees (500 Pesos per child, 3 times a year)	Yes	January, April, September			
Clothing	Yes	Once a year			
Happy events Social/Cultural/Religious events (Fiesta)					
Birthday	Yes	Depends on month with birthday			
Christmas	Yes	Once a year (December)			
Total expend	iture for ho	usehold per year that	can be foreseen		

M7-B Second Step: Fill financial calendar on p. 87-88

- Let us put these numbers into a financial calendar.
- · How much money is left at the end of each month?
- How much money is left at the end of the year?

M7-CThird Step:

Fill out the second financial calendar p. 89-90. The expenditures for Inputs and Labour are those from the Exercise Sheets in Module 5 – using improved practices. p. 59-61

M7-B Financial Calendar - Exercise based on a farm using current practices

					_ Y2							
Money-Out	Jan	Feb	Mar	April	May	June	Jul	Aug	Sept	Oct	Nov	Dec
Coffee (1 ha)												
Inputs												
Labor												
2 nd crop (1 ha)						_						
Inputs												
Labor												
3rd crop (1 ha)												
Inputs												
Labor												
Household												
School Fees												
Happy Events Social/ Cultural/ Religious events (Fiesta)												
Clothing												
Total per month												

	Dec								
	Nov								
	Oct								
	Sept								
	Aug								
	Jul								
	June								
_ }	Мау								
	April								
	Mar								
	Feb								
	Jan								
	Money-In	Coffee	2 nd crop	3 rd crop	Money-In from other sources	Remittance Received	Total per month	Balance Money-In Minus Money-Out	Cumulative balance

M7- C Financial Calendar - Exercise based on a farm using improved practices

	Jul Aug Sept Oct Nov														
CY	May June	_						-							
	Feb Mar April							-							
	Money-Out Jan Fe	Coffee (1 ha)	Inputs	Labor	2 nd crop (1 ha)	Inputs	Labor	3rd crop (1 ha)	Inputs	Labor	Household	School Fees	Happy Events Social/ Cultural/ Religious events (Fiesta)	Clothing	Total per

£ s
Remittance Received Total per month Balance Money-In Minus Money-Out Cumulative balance

M7- D Fourth Step: Discussion

Which situation is preferable? What changes are necessary?			With current	With improved
	Can be foreseen?	Period-month	production techniques per year (Pesos)	production techniques per year (Pesos)
Money-Out for household	yes	each month		
Money-Out for Production (inputs and labour)	yes	different months		
Money-Out for household and production	yes	different months		
Money-In from production and other sources	yes, but can change	different months		
Money available for savings, other expenditure Money-In from Production and other sources minus Money-Out for Household and inputs				
Difference between the two situations (Pesos)				

M7-E Financial Calendar - Solution

What to do for deficit months and what to do for the months of surplus What other activities can be done to improve liquidity throughout the year

Months	Surplus/Deficit (-)	What to do on Surplus or Deficit Months
January		
February		
March		
April		
May		
June		
July		
August		
September		
October		
November		
December		

Optimizing my Farm Business: Investments in New Crops*

	Existing Farm Business	n Business			Investing in New Crops*	lew Crops*	
Crop	Coffee	Intercrop 1	Intercrop 2	Crop 1	Crop 2	Crop 3	Crop 4
Money-out							
Yield Projections							
Money In (Sales)							
Total Income							
My old Farm income (<i>Total of Coffee + Intercrop</i> 1 + Intercrop 2)				My new Farm income (<i>Total of Coffee + income from crops chosen as new crops</i>)			

*New crops have to undergo the basic analysis of Profitability, Risk etc. (Module 4, 5)

M8-B Bank deposits

Collection of money from the people

Commercial Banks, Rural Banks, Development Banks and Savings and Loans Companies, Micro Finance Institutions collect money from people who have it to spare or who are saving it from their income. They keep the money safe on your account.

If you want to put your money in the bank, you can choose one of the following accounts:

A Current Account or a Checking Account is an account for business people like you. Money put in this account can be taken out without telling the bank to be prepared for your coming to take out money. You use a cheque to take out money or to pay a bill. The bank pays no interest on this account, rather charges commission for the services it has given to you.

Savings Account

You will open a savings account to save money to keep it safe or with objective to get a loan. You can take money only when you are present at the bank. The bank pays interest on the money in this account every three months, every six months or every year. As owner of a savings account you receive passbook or an ATM card (Automatic Teller Machine) from the bank into which money put in and money taken out is recorded.

The Fixed Deposit Account helps you to keep money safe and to earn more interest. You can only take out your money at a time you have agreed with the bank, let us say six months. The interest that is paid on the amount in this account depends on how long the money will be in this account. If for any reason, you want to take out the money before the time you have agreed with the bank, the bank charges you a fee. This type of account could be used by a farmer business person planning to put in money into the replanting of Coffee.

M8-C What is Credit (Lending)

It is money you borrow from a person or a bank promising to pay back this money. A credit is a service you get and you pay this service with money on top of the amount you have borrowed. This is called interest rate.

The bank gives you a letter telling you it has agreed to give you the money you have asked for. The bank also shows when you have to pay back the total amount of money.

You, the borrower and the bank know what will be the payments of the loan and how much interest is being paid, and when is it to be paid. This makes planning very simple for all.



EXAMPLE:

Mr. Dolor is a farmer in Pangantucan. He needs Php 72,000 to buy fertilizer for his 2nd crop (1 hectare). He decides to go to the bank to borrow this money.

The bank agrees to give Mr. Dolor the money but told him, he has to pay back Php 78,300 in 7 months.

The Php 72,000 Mr. Dolor borrowed is the credit. The 6,300 Pesos Mr. Dolor will have to add to the money he borrowed is the interest (8.75% of Php 72,000).

The 7 months is how long it will take Mr. Dolor to pay back the money.

A common example of Credit is a Loan

- A loan is money you borrow (credit) from a person or a bank.
- Money can be borrowed for a very short time (1 month to 12 months).
- Money can be borrowed for a short time (1 to 2 years).
- Money can also be borrowed for a long time 3 years onwards.
- Interest can be charged every week or every two weeks, every month or every year on the money you borrowed.

There are two common types of loans

- Business loans
- Personal loans

Business Loan

This loan is given to business men and women like farmers to make their business (farming) better or to increase the size of their business (farm increasing from 1 ha to 2 ha).

	Examples of farm business loans are
Inputs Loan	This is a very short time loan that can be used to buy planting material, seeds, fertilizer, insecticides, and herbicides.
Expansion Loan	This loan helps farmers to increase their farming business by increasing the cropping area.
Other investment loans	For planting or replanting of Coffee or other tree crops, you might need a loan for at least 2 years (see Module 11 Investment calendar)

Personal Loan

This type of loan is not for business. It is rather used to buy things that are needed for the home like a fridge or to pay school fees, or medical needs.

Ways by which money can be borrowed

- You can borrow money as a single person (individual loan). In this case, the bank always asks for things like a building, a car or land to be put down before giving out the money. This is called a collateral or security against your loan. If you pay the loan back and the interest in time, the bank will be happy to serve you in the future.
- You can borrow money as a member of Group (*group solidarity loan*). The group can be a cooperative or a registered Farmers' Association. If you pay the loan back and the interest in time, the other group members will be happy to keep you in the group.

2018
ecember
Area) as of
ukidnon
ces (B
t Servi
uppor
tance and Suppo
Assis
Funding
overnment
D List of G
M8-D

Agency	Support provided	Support type	Farmer level or group level	Requirements to access	Duration of program	Contact persons for information (region 10)	Contact Numbers	Comments
ACPC thru AMAD	(PLEA) 50K funding	Loan	both	membership to conduit agency	until funds run out	Runy Crusion/ Kirstine Gregorio	0906 891 5536 / 0955 955 7333	6% per annum (req insurance, on-going discussion for making gov subsidize for insurance
ACPC thru AMAD	(CLEA) 5m Working capital	Loan	Group	membership to conduit agency	until funds run out	Runy Crusio / Kirstine Gregorio	0906 891 5536 / 0955 955 7333	6% per annum (See Iending Conduit
ACPC thru AMAD	Machinery funding (MLEA)	Loan	Group	membership to conduit agency	until funds run out	Runy Crusion/ Kirstine Gregorio	0906 891 5536 / 0955 955 7333	2% per annum (See Iending Conduit
АТІ	Learning Site Center	Training	Group	Intent	Annual	Cristine A. Galupo	0917 240 9312	6% per annum (See lending Conduit
АТІ	Technical Service Provider	Service	Group	Intent	Annual	Teodosia Jaraba	0917 526 6311	see list of LSC
ATI	Training fund budget	Funding	Group	Intent / Collaboration / Proposal	Annual	Teodosia Jaraba	0917 526 6311	support fot TOT
АТІ	Agriculture Technical training	Training	Group	Slot reservation	see website and FB page for updates	ATI FB		
АТІ	Farm business school	Training	Group	Intent	Annual	Teodosia Jaraba	0917 526 6311	fb - ATI northern mindanao / ati.
АТІ	Agri Mechanization training	Training	Group	Intent	Annual	Teodosia Jaraba	0917 526 6311	
АТІ	Soft skills development	Training	Group	Intent	Annual	Teodosia Jaraba	0917 526 6311	

ATI	Youth	Daigier	2	Intent		Teodosia Jaraba	0917 526 6311	
	Empowerment	ב פ פ	d noi noi noi noi noi noi noi noi noi noi		Z = 100			
CDA	Basic coop strengthening	Training	Group	Intent / Validation	Annual	Neneth Pabaslan / Rubie Bullecer	0917 305 7812 / 0917 506 3389	focused for the out-of- school youth (OSY) and high school graduates to equip them with knowledge
)						and skills in agriculture and entrepreneurship technology.
DA	Vegetable seedlings	Supply	Farmer level	Walk-in	Supply last	Kersten Pagalan	0917 491 4713	Advise to sent intent to CDA region(policy, business permit, tax exemption)
DA	Fertilizer Inputs	Supply	Group	Intent / endorse / SEC-CDA- DOLE-DTI reg / Eligibility	Annual	Kersten Pagalan	0917 491 4713	
DA	Coffee seedlings	Supply	Group	Intent / endorse / SEC-CDA- DOLE-DTI reg / Eligibility	Annual	Kersten Pagalan	0917 491 4713	
DA	Package of Techonology fund	Funding	Group	Intent / endorse / SEC-CDA- DOLE-DTI reg / Eligibility	Annual	Kersten Pagalan	0917 491 4713	
DA	Techno Demo Establishment	Funding	Group	Intent / endorse / SEC-CDA- DOLE-DTI reg / Eligibility	Annual	Kersten Pagalan	0917 491 4713	
DA	Machineries / Facilities (refer HVCDP interventions 2019)	Loan	Group	Intent / endorse / SEC-CDA- DOLE-DTI reg / Eligibility	Annual	Kersten Pagalan	0917 491 4713	
DA thru AMAD	Agripreneurship training	Training	Group	Intent	Annual	Jenny Alcobilla	0917 710 0978	

DAR	Machine grant	Supply	Group		N/a	Chona Bahian	0916 525 9034	
DAR	Capacity Dev and Coop strengthening training	Training	Group	based of Schedule	Negotiable	Betty	0917 887 7279	focus on CARP beneficiaries
DAR	Technical provider for Cooperative strenthening	Service	Group	Intent	Negotiable	Secenia Gadian	0905 169 1032	
DAR	Enterprise Training course	Training	Group	Intent	annual	Chona Bahian	0916 525 9034	
DENR	Agroforestry Planting Materials	Supply	group	apply for CBFM accreditation	annual	DENR X	0975 643 0041	
DENR	Agriculture inputs	Supply	group	apply for CBFM accreditation	annual	DENR X	0975 643 0041	only covers timberland area/public land
DOLE	Organizational Training	Training	Group	Intent to ACP	Annual	Archie Batica / Alice Tinhay	0975 388 3328 / 0917 855 8911	only covers timberland area/public land
DOLE	Mechanization	Supply	Group	Intent to ACP	Annual	Archie Batica / Alice Tinhay	0975 388 3328 / 0917 855 8911	grant thru acp, be an accredit ACP or submit intent to ACP Agency (accreditted co-partners) must be Sec/CDA/DOLE reg.
DOST	Machinery thru LGU	Supply	GRoup	Intent / Proposal	Annual (on Q3)	Dr. Meriam B. Alondia	0915 416 1614 / 0922 803 0059	grant thru acp, be an accredit ACP or submit intent to ACP Agency (accreditted co-partners)
DOST	Research fund (Pos. for demo plot)	Funding	Farmer	Intent / Proposal	Arrangement	Dr. Meriam B. Alondia	0915 416 1614 / 0922 803 0059	
DTI	Weekly coaching sessions	Training	Group	Intent / Apply for slot	Weekly	walk-in		Collaboration with academe

DTI	Business Literacy training	Training	Group	Intent	Annual	Robert Sual	0915 048 2721	
DTI	Machine grant (SSF Progam)	Supply	Group	Intent	Annual	Robert Sual	0915 735 6220	
DTI	Business Plan training	Training	Group	Intent	Annual	Danielle Baula	0917 804 5408	
DTI	Marketing Plan training	Training	Group	Intent	Annual	Danielle Baula	0917 804 5408	
NEDA	Proposal Project Training	Training	Group	Intent	as per re- quest	nedardc10@ yahoo.com / ne- dardc10@gmail. com		
PhilFida	Abaca Planting Material	Supply	Group	Intent / site validation	Annual	Boy Salinas	0926-345-8644	
PhilFida	Grading & Clas- sification	Training	Group	Intent	Annual	Boy Salinas	0926-345-8644	
PhilFida	Abaca Technical Orientation	Training	Group	Intent	Annual	Boy Salinas	0926-345-8644	
PhilFida	PhilFida Abaca Trader License	Service	Group	Intent	Always	Boy Salinas	0926-345-8644	

M8-E List of Financial Institutions

Bukidnon		
1. Landbank of the Philippines (all branches)	 100 Cacao Program Agrarian Production Credit Program (APCP) Banana Financing Program Agricultural Credit Support Program (ACSP) Rubber Financing Program Attainable and Accessible Lending Program for Small Farmers PLEA Program Sikat Saka (rice only) 	
2. RCBC (Valencia and Cagayan de Oro)	Agri Finance c/o conduit branch Rizal Microfinance Commercial Window	
3. Mindanao Consolidated Cooperative Bank (Malaybalay)	LBP assisted conduit bank for all Landbank programs including agri-financing	
4. Bank of Philippine Islands (Malaybalay)	Agri-financing under commercial banking	
5. One Network Bank (all branches)	Agri-financing Personal loans Commercial loans	
6. MetroBank (Malaybalay)	Commercial loans Personal loans	
7. AUB (Malaybalay)	Commercial/Industrial loans Personal loans	
8. Development Bank of the Philippines (all branches)	Conduit bank for government projectsNo direct access for Peoples OrganizationsFinancing	
9. First Valley Bank (all branches)	Agri-financing (rice, corn, sugar, plantation crops under contract growing with agri-companies)	
10. D'Asian Hills Bank	Agri financing Personal Loans	
11. Rural Bank of Manolo Fortich	Agri-financing (rice, corn and vegetable production)	
12. FICCO (all branches)	Personal Loan Cooperative membership needed	
13. Agronomika Finance (Davao Based)	Cacao, Coffee, Abaca allied with Kennemer Foods	

M10-B Exercise Sheet Group sales







2nd	Crop	Imp	roved
/ariet	y wit	h Fe	rtilizer



3rd Crop Improved variety with Fertilizer

			11201	Tarroty With		varioty with	
	Unit	Individual Sale	Group Sale	Individual Sale	Group Sale	Individual Sale	Group Sale
Surface Area	ha	1	1	1	1	1	1
1. Money-Out	pesos						
Production	kg						
Price	pesos/ kg						
2. Money-In	pesos						
3. Profit of sales	pesos						

M10-C Exercise Sheet - Group Purchase of Inputs

Calculation of the profit of group purchase of Inputs – in the case of Improved farming techniques Inputs can be provided less 10% less expensive through grouped purchase Cite/identify institutions/companies that grant this discount



with pruning and Fertilizer



2nd Crop Improved variety with Fertilizer



3rd Crop Improved variety with Fertilizer

	Unit	Individual Purchase	•	Individual Purchase	Group Purchase	Individual Purchase	•
Surface Area	ha	1	1	1	1	1	1
Cost of Inputs and services	pesos						
Profit of purchase	pesos						

Total Benefit of group purchase of inputs	Pesos
Total Benefit of group sales	Pesos
Total Benefit of group business (group sales and input purchase)	Pesos



Main Lessons

- **1.** Agricultural entrepreneurs *(men or women)* form groups or associations to do things they are not able to do alone.
- **2.** Groups or associations of agricultural entrepreneurs *(men or women)* have a common business objective. To achieve their common goal, the members learn together, from each other and support each other.
- **3.** For service providers, it is easier and cheaper to work with farmer groups or associations than with individuals. A group of agricultural entrepreneurs (men or women) can more easily seek financial services or information on production techniques from extension.
- **4.** For input suppliers, it is easier and cheaper to work with farmer groups or associations than with individuals. A group of agricultural entrepreneurs *(men or women)* can organize group purchases of agricultural inputs and can negotiate better prices from the input supplier.
- **5.** For buyers of agricultural products, it is easier and cheaper to work with farmer groups or associations than with individuals. A group of agricultural entrepreneurs *(men or women)* can organize group sales of coffee and of other agricultural products.
 - The group can get better prices from the buyer if the quality of the product is acceptable.
- **6.** Associations or groups of agricultural entrepreneurs that function well have clear rules that are respected. When the rules are broken by members, sanctions are applied.
- **7.** Good leaders of farmer associations play their role to improve the business of all members.
- **8.** Agricultural entrepreneurs *(men or women)* that are members of well-functioning associations or groups do better business.
- **9.** Agricultural entrepreneurs that are doing better business with the support of their association pay their membership fees without reluctance.

Template for the Action Plan/Commitment by Farmer-trainee

I, FBS graduate	, commits to:
Activity/Action	When?
Adoption of improved planting materials/seeds	
Bank Savings	
Keep Records	
Apply agrochemicals	
Group Formation	
Others(Specify)	
Recommendation to	

Template for the Action Plan/Commitment by Group

impove training

						Time I	Frame					
Activity	Mor	nth 3 _			Mor	nth 2 _			Moi	nth 3 _		
	1	2	3	4	1	2	3	4	1	2	3	4

Proof of delivered Farmer Business School Training – Coffee production system

Community				Region			
State				Farmer organization	on		
Start Date				End Date			
Name of FBS Trainer							
			Men		Wc	omen	Total
Number parti	cipants fir	rst day:				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	10101
Number parti							
Number parti		-					
Number parti	cipants fo	ourth day:					
Number parti	cipants la	st day:					
Smileys 🙂 r	eceived 1	rom participants					
Most importa		Adoption of impre	oved	planting mat	eria	ıls/seeds	
by FBS gradu		Bank savings					
		☐ Keep records					
		Apply agrochemi	icals				
		Group formation					
		Others (specify)					
		Recommendation to i	impov	e training:			
Complete nar	of FBS						
Phone contact FBS focal per							
Address of Fl focal person	BS						
		ect delivery of the above of satisfaction	ment	ioned Farmo	er B	usiness Scl	nool Training and
Signatu	re of FB	S focal person		Signa	atur	e of Traine	er's superior

Identity sheet of farmers that received the FBS training

FBS trainer provides the filled sheets together with proof of delivery and list of participants

Name of head of farm :	Telephone number
man woman	Age:
Salaried employment? Yes No	
Number of people to feed	
Location of farm (Barangay, Municipality)	Area of the entire farm (Size)
Surface area of the farm plots (size)	
Plot 1.	Plot 4.
Plot 2.	Plot 5.
Plot 3.	Plot 6.
Member of a farmer organization? Yes \(\subseteq \text{No } \subseteq \)	Name of the farmer organization
FBS – graduate Yes No	Registered? Yes No
	Number of Registration

Attachments 1: Forms & Work Sheets

Use the following templates to

- Plan production
- Record Money-Out and Money-In
- Calculate whether you make Profit or Loss
- Plan expenditure and income from sales and
- Schedule the payment of loans (if any)

Farmers Workbook Templates for Application Planning for Business and Evaluation of Production

Farmers Workbook Module 1 - Agricultural Calendar to plan the production of a crop mix/integrated system for business

The times of work...

of the main season are shown by a square of the off-season are shown by a circle

			Dec						
			Nov						
			Oct						
			Sept						
			Aug						
	Variety	Intercrop 2	Jul						
_	S S	<u>=</u>	Jun						
for plot			Мау						
calendar			Apr						
Cropping calendar for plot 1			Mar						
ō			Feb						
	Main Crop	Intercrop 1	Jan						
	Main	Interd							
	(field)								
	Size of the Plot (field)		anned						
	Size of		Work Planned						

Profit or Loss plot 1

		Expected	before pro	oduction	Evaluat	ion after h	arvest
Plot area :	Unit	Qty	Price (Pesos)	Total (Pesos)	Qty	Price (Pesos)	Total (Pesos)
1. Money-Out		1				1	
Inputs							
Total cost of inputs							
Labor (Man-Days)							
	MD						
	MD						
	MD						
	MD						
	MD						
	MD						
	MD						
	MD						
	MD						
	MD						
	MD						
Total Labor needs and costs	MD						
Total Money-Out Costs of inputs + Cost of La	abor		Pesos				
2. Money-In Production X sales price			Pesos				
3. Profit or Loss? Money-In MINUS Money-	-Out		Pesos				
4. Unit Cost (Pesos/kg) Money-Out / Production			Peso/kg				

Tracking Money-Out for plot 1

Date	Reason	Amount « money out »
	Total	

Tracking Money-In for plot 1

Date	Reason	Amount « money in »
	Total	

My Financial Calendar for Planning

Money-Out

Crop		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept Oct	Nov	Dec
	Inputs											
	Labor											
	Inputs											
	Labor											
	Inputs											
	Labor											
	Inputs											
	Labor											
	Inputs											
	Labor											
	Inputs											
	Labor											
Equipment and tools												
Household												
School fees												
Happy Events Social/Cultural/Religious events (Fiesta)	Sn											
Clothing												
Total Money-Out per month												

			Dec						
			Nov						
			Oct I						
			Sept						
			Aug						
	ety	Intercrop 2	Jul						
	Variety	Inter	Jun						
for plot 2			Мау						
alendar	Srop		Apr						
Cropping calendar for plot 2			Mar /						
		1 do	Feb						
			Jan						
	Main Crop	Intercrop 1							
	field)								
	Size of the Plot (field)		anned						
	Size of t		Work Planned						

Profit or Loss plot 2

		Expected	before pro	oduction	Evaluat	ion after h	arvest
Plot area :	Unit	Qty	Price (Pesos)	Total (Pesos)	Qty	Price (Pesos)	Total (Pesos)
1. Money-Out							
Inputs							
Total cost of inputs							
Labor (Man-Days)	-						
, , ,	M/D						
	M/D						
	M/D						
	M/D						
	M/D						
	M/D						
	M/D						
	M/D						
	M/D						
	M/D						
	M/D						
Total Labor needs and costs	M/D						
Total Money-Out Costs of inputs + Cost of La	abor		Pesos				
2. Money-In Production X sales price			Pesos				
3. Profit or Loss? Money-In MINUS Money	-Out		Pesos				
4. Unit Cost (Pesos/kg) Money-Out / Production			Peso/kg				

Tracking Money-Out for plot 2

Petsa	Rason	Kantidad « money out »
	Total	

Tracking Money-In for plot 2

Date	Reason	Amount « money in »
	Total	

			ō	opping	Cropping calendar for plot 3	for plot	က						
Size of the Plot (field)	Main Crop	d					>	Variety					
	Intercrop 1	-					<u>C</u>	Intercrop 2					
Work Planned	Jan		Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sept	Oct	Nov	Dec

Profit or Loss plot 3

		Expected	l before pro	oduction	Evaluat	tion after h	arvest
Plot area :	Unit	Qty	Price (Pesos)	Total (Pesos)	Qty	Price (Pesos)	Total (Pesos)
1. Money-Out	1	1	-1	I		1	1
Inputs							
Total cost of inputs							
Labor (Man-Days)							
	M/D						
	M/D						
	M/D						
	M/D						
	M/D						
	M/D						
	M/D						
	M/D						
	M/D						
	M/D						
	M/D						
Total Labor needs and costs	M/D						
Total Money-Out Costs of inputs + Cost of La	abor		Pesos				
2. Money-In Production X sales price			Pesos				
3. Profit or Loss? Money-In MINUS Money	-Out		Pesos				
4. Unit Cost (Pesos/kg) Money-Out / Production			Peso/kg				

Tracking Money-Out for plot 3

Petsa	Rason	Kantidad « money out »
	Total	

Tracking Money-In for plot 3

Date	Reason	Amount « money in »
	Total	

My Financial Calendar for Planning

Crop		Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sept	Oct	Nov	Dec
	Inputs												
	Labor												
	Inputs												
	Labor												
	Inputs												
	Labor												
	Inputs												
	Labor												
	Inputs												
	Labor												
	Inputs												
	Labor												
Equipment and tools													
Household													
School fees													
Happy Events Social/Cultural/Religious events (Fiesta)													
Clothing													
Total Money-Out per month													

Money-In

Crop	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Other revenues												
Total Money-In per month												
Monthly balance Money In – Money Out												
Cumulative Balance												

Purpose of Ioan	
Interest Rate	
Date of loan	
Final Repayment date	
Amount received	
Amount to Pay	
Date	Amount reimbursed/repayment