MDG ACHIEVEMENT FUND

Farm Operations Monitoring Manual

To Support Monitoring and Evaluation of Good Practice Options for Climate Change Adaptation in Agriculture

Theory, Monitoring forms and Instructions

Technically Cleared
For Final Reading/Editing and Presswork

MDG-F 1656 OUTCOME 3.1
Enhanced CCA Capacity of Communities
in Contiguous Fragile Ecosystems
in the Cordilleras (The Philippines)

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PART I
THEORETICAL FOUNDATION

I.1 Introduction

Impacts of climate change translate to increased production uncertainties and risks, which adversely affect the income and food security of vulnerable farming households. As observed in the field, a farmer's response to climate change is largely dependent on his available resources or assets. In most cases, he/she combines natural resources such as forest, land and water with his assets such as labor and capital goods. The type of asset owned by the farmer provides the loci of options available to him and establishes the farmer's relationship with his/her farming environment. Technological intervention is also important in helping farmers adapt although adaptation response also differs according to the socio-economic capability of the farmer. It follows that observing and recording these responses is one of the many tools in evaluating how farming households and systems respond to climate change related events. A systematic monitoring of their farm activities is therefore necessary to help articulate their vulnerabilities and determine how their current assets and activities (and their use) can increase their resilience. Monitoring and Evaluation tools provide a range of data sets that help accelerate knowledge in defining and designing "climate-resilient" development efforts.

The MDG-F 1656 Outcome 3.1 project was implemented in 2009 to 2011 and was designed as an intervention to enhance and innovate existing conventional farmers practices (CFP) by introducing scientifically released technologies (SRT) through pilot-tested field demonstrations. The field demonstrations combined CCA options that cover a range of good practices (GP) and technologies for crop and livestock production, agro-forestry, and soil and water management.

The project supported farmers in Benguet and Ifugao of the Cordillera Administrative Region (CAR) of the Northern Philippines. The eight chosen pilot municipalities represent the high, medium and low elevation agro-ecological zones in the region. Manual objectives and target users.

This farm operations manual is an annex of the project report entitled "A Framework for Monitoring and Evaluation of Good Practice Climate Change Adaptation Options in Agriculture," which is one of the self-standing reports of MDG-F 1656. It aims to facilitate reliable and comprehensive data collection which will be used as basis in analyzing the impact, effectiveness, sustainability and up-scaling potential of good practice options for climate change adaptation.

This manual aims to facilitate proper collection of appropriate data at the farm household level through a simplified recording system that is time and cost efficient. It endeavors to educate a wide-range of users on various economic principles, including farm operations costs and income. It attempts to guide field coordinators and local working groups in assessing the readiness of farmer cooperators to implement, sustain and replicate good practice options for climate change adaptation through a set of monitoring forms and clear instructions.

The target users of the manual were the farmer cooperators and members of the technical support team such as field coordinators, the Municipal Agricultural Officers, and Agricultural Technicians (AT's). The cooperators were primarily expected to fill up the forms and the technical support team's role was to insure the integrity of the data entered into the forms.

I.2 The Farm Household Model

Farming households have always been a point of interest in development projects. The farming household exemplifies intra-household activities by being both producers and consumers. Farm household production and consumption decisions are linked because the deciding entity (the farmer) is both a producer, who must decide on the allocation of labor and other farm inputs to crop and livestock production and even agro-forestry activities, and a consumer, who must choose the allocation of income from farm profit and labor sales for household consumption.

Farm household models are useful tools to study household-specific economic costs that shape the impact of exogenous policy in rural areas (Taylor and Adelman, 2002). In a typical farming household, the computed profit may not be equated to "farm profit" because implicit costs are not yet accounted for. The misrepresentation of the profit as the farm profit is the result of not accounting for the implicit (hidden) costs incurred by the farm. The household implicitly sells economic resources to the farm through: (1) family owned labor employed in the farm; (2) utilizing their land and other equipment in the farm; and (3) providing entrepreneurial skills to ensure that the farm maximizes output with the least cost possible. This relationship is shown in figure 1.

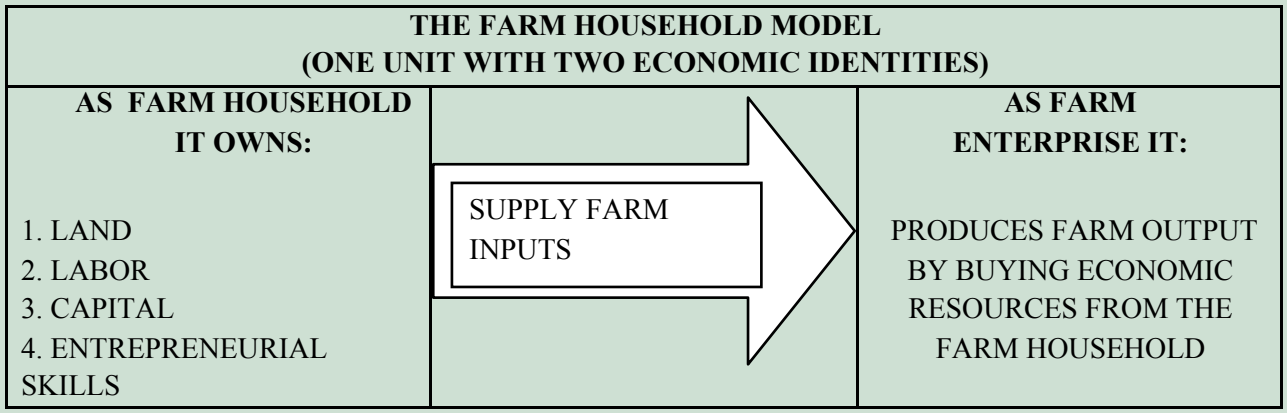

Figure 1: The Farm Household as Supplier of Factors of Production to the Farm Enterprise

As shown in figure 2, the Farm Enterprise must recognize the factors of production or farm inputs supplied by the farm household. There is an implied cost with the employment or utilization of the farm inputs supplied by the farm household. The cost must be accounted in determining the economic effectiveness and efficiency of the farm enterprise. In this case, there is a need to recognize these costs as part of the operations of the farm enterprise. Since there is no actual cash transaction, it is implied that cash transaction would have occurred if the farm household does not own the farm inputs (i.e. the costs must be accounted as implicit costs). Moreover, even if the farm inputs are supplied by the farm household these are not assumed to be free.

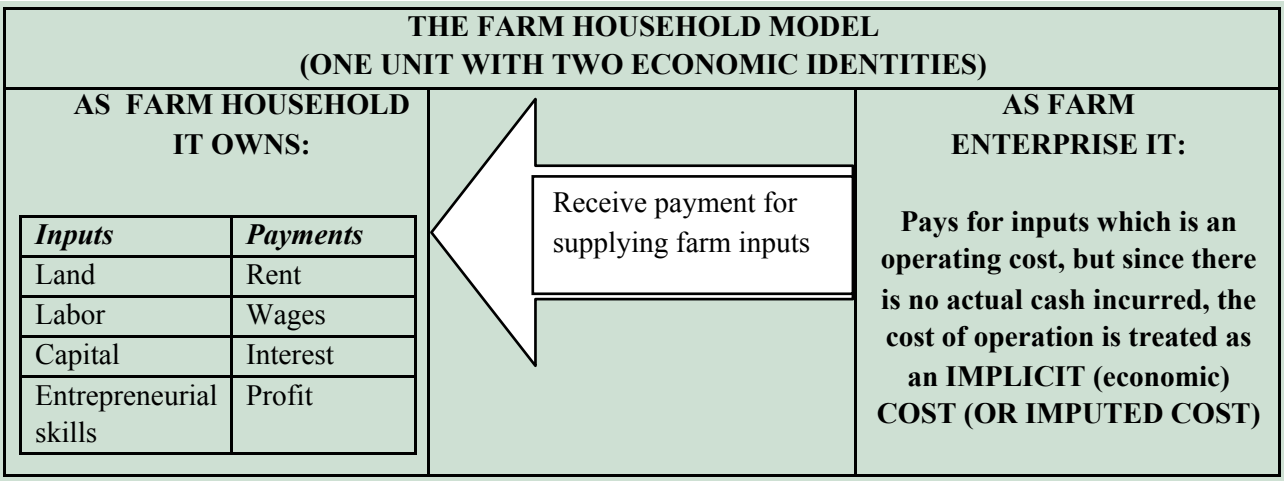

Figure 2: The Farm Enterprise as Demander of Farm Inputs from the Farm Household

If the farm inputs are purchased by the farm enterprise outside of the farm household, payments are made comprising the operating cost of the farm enterprise as shown in figure 3.

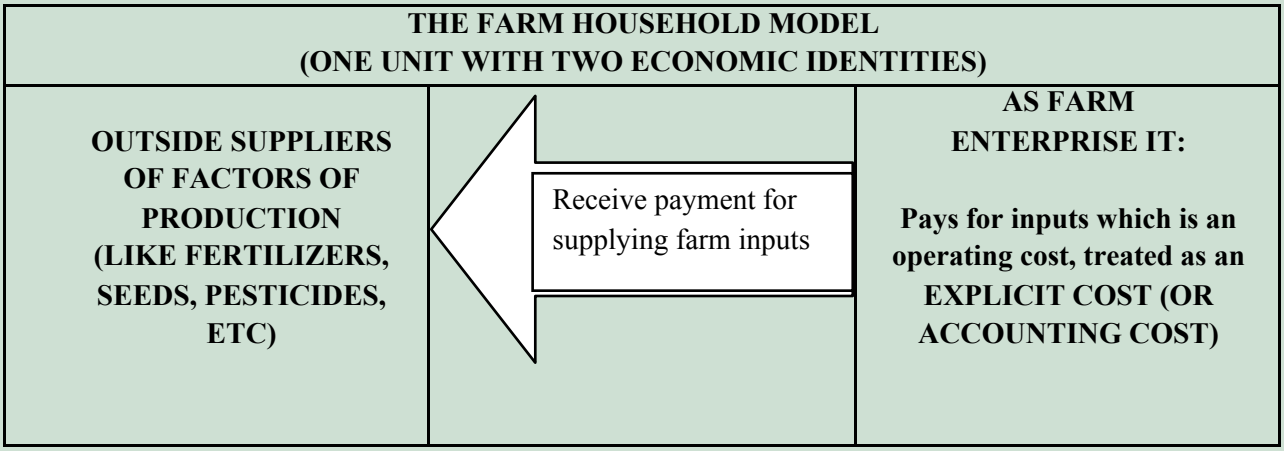

Figure 3: The Farm Enterprise as Demander of Farm Inputs from Other Suppliers

The farm household model is considered a useful concept to determine costs-benefits of implementing good practice options for climate change adaptation that were introduced to the farmer through external initiatives (e.g. multi-lateral development cooperation). When demonstration sites were setup, the cooperators were provided with farm subsidies. These too must be accounted into the profit concept. By accounting for subsidies as an additional implicit cost of the farm enterprise, the impact of the CCA options to the profit and cost per unit of output can be analyzed. This is shown in Figure 4.

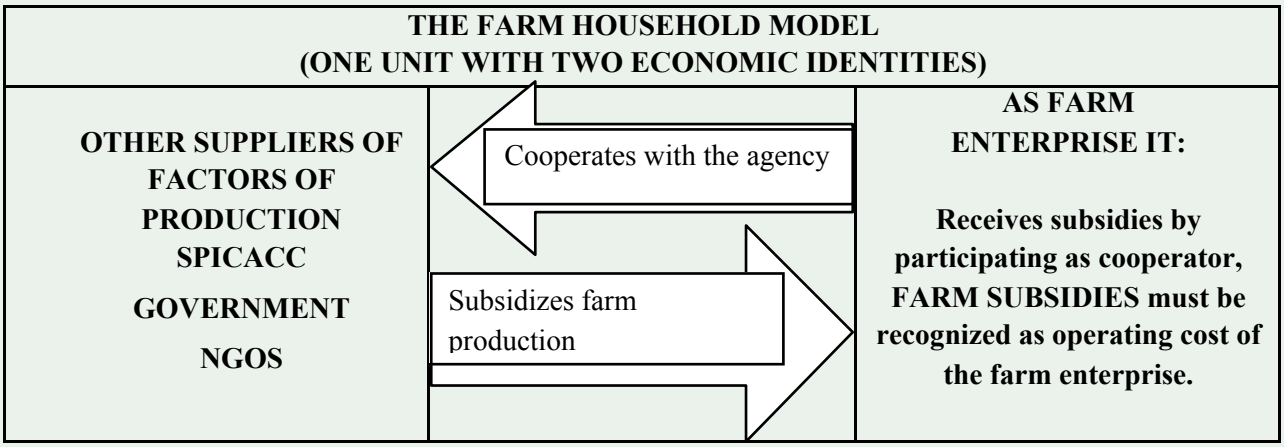

Figure 4: The relationship of the Farm Enterprise with Other Suppliers

The farm household owns factors of production, which it supplies to the farm enterprise. The farm enterprise is managed by an entrepreneur called the farmer. He makes decisions and choices on the best way to combine economic resources to maximize farm yields or output. He also negotiates with traders and ensures that all farm outputs are sold at the shortest possible time and at the highest price possible. The entrepreneur also deals with a variety of uncertainties and risks. Sound decision-making and planning therefore translate to higher output and profit. The value of an entrepreneur's skill is also a cost to the farm enterprise and is likewise accounted for.

The farm household model thus provides a basis from which project implementers and policy makers draw their economic intuition on the role of the farm household as a producer. Implicit costs and subsidies are real costs and have to be considered when analyzing the economic benefits, impacts and effectiveness of the farm enterprise.

I.3 Economic and Conceptual Basis for Inputed Costs

Some costs may be based only on estimates and farmers may not provide a corresponding value largely because there was no cash transaction involved. The absence of a physical market and the absence of actual exchange of money between two parties, such as buyer-seller, landlord-tenant, lessor-leasee, or employer-employee may lead to the undervaluation of majority of the farm costs. Farmers may realize larger accounting profits because they failed to account for the implicit or hidden costs incurred by the farm as an enterprise. The costs accounted for by the farmer may not also reflect true costs, particularly when only those cash transactions are the ones recorded as part of the farm enterprise operating costs.

Farm households may also misconstrue the profit as their income from the farm enterprise. In reality, the farm household may have failed to account for the payment of other factors of production that they own such as land, farm equipment, storage fees, and wage of family labor which are also sources of the farm household income.

The concept of economic profit is different from accounting profit, the former accounts for all the opportunity cost of economic resources, which have alternative uses if they have not been used by the farm enterprise. Therefore their alternative use can be used to impute an economic value.

Imputed costs are estimated or assigned costs to factors of production when there are cash payments made by the farm enterprise for such factors

The imputed costs are usually the IMPLICIT COSTS incurred in the operation of the farm enterprise.

Implicit Costs are costs that are inherent to the operations of the farm enterprise. They are hidden costs because there is no actual cash disbursement or payment made by the farm enterprise to the farm household.

EXAMPLE 1: Estimating or assigning a "rent expense" for the land owned by the farm households is an example of implicit cost.

The imputed value of "rent expense" is the prevailing rent agreement in the locality.

A clear distinction must be made between IMPLICIT AND EXPLICIT COST.

Explicit cost are also referred to as accounting expenses or out of pocket expenses. These refer to cash outlay incurred by the farm enterprise.

EXAMPLE2: Cash payment for purchases of fertilizers, materials, paying hired labor etc.

There are techniques of estimating or assigning costs or values factors of production supplied by the farm household. The following are helpful concepts:

1. Rent - as defined in economics is the payment for land.

To prevent costing problems, an objective way of estimating cost is to use surrogate prices for the economic resource in use in the farm. For instance, a piece of land owned by a farmer may be

considered by the farmer as free but in reality is not free. Because had the farmer not owned land, he would be renting one. Hence, the rent must be valued using the prevailing rent agreements in the locality.

In Paoay, Atok, Benguet for instance, the prevailing rent agreement is Php8.00-Php12.00 per square meter per year.

Rent = Prevailing rent in the area * number of square meters

2. Interest - as defined in economics refers to the payment of capital.

A layman's initial impression of interest is a payment for money borrowed from a lender, who could be a person or a financial institution. The farmer, as owner of the farm enterprise, uses money to buy farm inputs such as fertilizers, farm equipment, greenhouse construction materials, water tanks, and others. Often, the cost of fertilizers and other materials are accounted as expense by the farmer, but rarely, do farmers account for the cost of using farm equipment, greenhouse and water tanks.

Farm equipment and infrastructure are part of the physical capital of the farm enterprise. They have a useful life and have to be replaced once they have outlived it. Every usage of the farm equipment and infrastructure results into "wear and tear", i.e.reduces the value of the farm equipment and infrastructure. Thus, the used up portion of the farm equipment and infrastructure must be recognized as an expense. In accounting practice it is recognized as depreciation expense or capital consumption allowance.

DEPRECIATION COST = Purchase Price ÷ Useful life of the Equipment

The depreciation cost is a proxy to determine the payments for capital. In accounting, depreciation is just a paper expense concept, but in economic analysis, depreciation is treated as payment for the use of capital.

3. Wage of own-labor and family workers

In an agricultural household model, labor supply comes from family owned labor. Often, family labor is not accounted when estimating farm profits.

Wage = Prevailing wage rate the area* the number of days worked

4. Accounting Profit – is the difference between revenue and expenses. This can be computed as follows:

Accounting Profit = Sales – Explicit Costs

5. Economic profit

The true test of the viability of an enterprise is its ability to pay all economic resources that were used to produce the final output. An economic profit of "zero" indicates that the farm enterprise was able to meet all economic obligations to the owners of the factors of production that was used by the farm enterprise.

Profit also has various manifestations. The farmer as a strategist and manager/owner, chooses options that he may see fit or appropriate to attain maximum profit. Profit then is seen as payment for taking-risks in choosing options (e.g. opting to work somewhere else). The opportunity cost of choosing to be a farmer versus an alternative choice is the value of the entrepreneurial skill. Economic profit is the difference between accounting profit and implicit cost.

Economic Profit = (Gross Sales – Explicit Costs) – Implicit cost

6. Subsidies – grants, donations or financial assistance of the government to the farm enterprise.

For example, the farm enterprise received subsidies from the MDG-F 1656 Outcome 3.1 project to implement good practice options for climate change adaptation.

In evaluating the good practice climate change adaptation options for economic efficiency and effectiveness, data are needed as further inputs to assess impact and sustainability.

RELATIONSHIP OF THE FORMS WITH OTHER PROJECTS DOCUMENTS

The data gathered from the farmer-cooperator using this manual were used to cross-reference other data needs of the project. The table below provides an overview of the different monitoring forms developed in the MDG-F 1656 Outcome 3.1 Project.

FORM NUMBER	*NAME OF FORM*	*Importance of the form*
FORM 1	Farm Asset Inventory	To determine the economic benefits, effectiveness and impact of CCA options on the profitability and income of the cooperators.
FORM 2	Farm Activity Forecast	The form shouldbe cross-referenced with the Automatic Weather Station (AWS) Report to facilitate better interpretation of localized weather data.
FORM 3	Imputed Costs	To establish implicit, hidden or non-market costs incurred as well as implicit income realized by the cooperators as a basis of determining the economic feasibility of the CCA options for up-scaling.
FORM 4	Farm Activity Costs	To establish explicit, out-of–pocket and market costs incurred by the cooperator as a basis of determining accounting feasibility and profitability.
FORM 5	Harvesting Record	To establish sales and revenues from the farm activity.
3.1 FORM 6	Problems	To serve as a support monitoring form to Form 2 and AWS Report. To document problems, concerns and issues faced by the farm cooperators.
3.1 FORM 7	Cooperator's Report	To provide a brief documentation of the problems encountered by the cooperator in the implementation of the CCA option

PART II

ACCOMPLISHING THE FORMS

Six Farm Operations Monitoring Forms were designed to help bridge the gap between "what the project aims to achieve" and "how to gather sound baseline data". The portfolio design of the M & E played an important role on how well the forms reflected the need of the project to: (1) Assess the effectiveness of the good practice options for climate change adaptation (2) Value and analyze the economic impact and effectiveness of the CCA options; (3) Identify and measure the benefits from the cooperators' indigenous practices as a conscious or unconscious response to climate change related impacts; and (4) determine the sustainability and up-scaling potential of the field-tested good practice options for climate change adaptation.

II.1 INSTRUCTIONS IN ACCOMPLISHING THE FORMS FOR CROP, RICE AND LIVESTOCK PRODUCTION

This manual simplified the monitoring procedure by dividing the recording process into several forms. Most of the forms were accomplished only once a year. Other forms were accomplished during the full cycle of the farm operations.

The cooperators were primarily expected to fill up the forms and the technical support team's role was to insure the integrity of the data entered into the forms.

FORM NUMBER	NAME OF FORM	Frequency of accomplishing the form	Person responsible
1. SPICACC FORM 1	Farm Asset Inventory	Once during the project cycle FGD and Meetings	Cooperator assisted by the FC or AT during the workshop
2. SPICACC FORM 2	Farm Activity Forecast	Once during the project cycle FGD and Meetings	Cooperator assisted by the FC or AT during the workshop
3. SPICACC FORM 3	Imputed Costs	Once during the project cycle FGD and Meetings	Cooperator assisted by the FC or AT during the workshop
4. SPICACC FORM 4	Farm Activity Costs	All phases of the farm operations. Individual Recording	Cooperator
5. SPICACC FORM 5	Harvesting Record	During the harvest phase of the farm operation. Individual recording	Cooperator
6. SPICACC FORM 6	Problems	Every cycle and all phases of farm operations. FGD and meetings	Cooperator and FC
7. SPICACC FORM 7	LWG Report Forms	Monthly, Accomplished before the LWG meetings FGD	Cooperator and FC

GENERAL INSTRUCTIONS IN FILLING-UP THE FORMS

1. Please use a ball pen in filling up the Farm Operations Monitoring Form.

2. Always read the instructions in the manual and review the data needed in the form.

3. Accomplish and fill up the forms as regularly as possible.

4. Some forms need to be filled-up only once, but there are also forms that are filled to track the farm operations activity.

5. The cooperator is provided with a mini-planner where he/she could write important dates, problems and concerns that he/she needs to raise during regular meetings.

DEFINITION OF TERMS

For uniformity of understanding, please refer to the following definitions:

ASSETS are defined as the "farm resources" controlled by the farm enterprise from which economic benefits, such as income and profit, are expected to flow to the farm enterprise due to their usage.

LAND is defined as the "farm lot" currently used by the farm enterprise for production of farm products.

STOCKS (for crop production) are defined as those tubers, seeds, runners, cutlets, plantlets, cuttings and the like stored by the farm enterprise either from previous harvest or purchased for use in the next cropping cycle.

STOCKS (livestock) are the breeding stocks for siring animal off-springs.

FARM INPUTS INVENTORY are the remaining farm inputs which were not used in the previous cropping cycle.

LABOR are the person-days regularly employed by the farm enterprise.

CONTRACT LABOR are farm workers paid to finish a definite task at a specific period of time.

BAYANIHAN is an exchange-labor arrangement usually practiced in rice farming areas.

PROCEDURE IN ACCOMPLISHING THE FORMS

I. FORM 1- Farm Inventory

The farm inventory is needed to account for the owned and subsidized farm resources of the household. It is a sound basis for production, cost per unit of output, income with and without the subsidy, i.e. assistance for the option.

1. Always fill-up the necessary information such as name, age, gender, educational attainment and option code.

2. The option title is appended to this manual. Please refer to the Appendix A when filling up this portion.

3. Keep in mind that the most important information in the Asset Inventory form is how much asset is owned by the household. Thus, if there are assets from SPICACC and other agencies donated or granted to the cooperator, indicate the date under 'remarks' when the grants or donations were made. Please see example below:

Farm Operations Monitoring Form
SPICACC FORM 1-FARM ASSETS INVENTORY
As of February 10, 2011

NAME:	John Domilos	**Educational Attainment : Elementary**	
AGE:	49	**OPTION CODE:**	1.1.3.1.4.1.
GENDER:	Male	***(Please refer to appendix A for the Option Code)***	

ASSETS	Quantity Write the quantity under the appropriate column			Unit of measure	# of use in Years	Estimated Market Value	Remarks
	own	spicacc	others				
1. Farm land	200			sq meters	30		Lease
2. Tractors/Microtiller	1	1		Units	4		Donated Dec. 21, 2010
3. Farm Animals (i.e carabao)	1			Head	3		
4. Greenhouse	100			sq meters	2		
5. Backpack Sprayer	5	4		Units	2		Delivered October 10, 2009
6. Hose/Rainburst	20			Meters	4		
7. Hoes/Shovels etc.	5			Pieces	6		

4. It is common for farmers to stock seedlings (and others), and farm inputs that were not used during the previous cropping cycle become unused farm stocks or inputs and should be accounted for and listed in the asset inventory form. If the cooperator or farmer receives additional inputs from SPICACC or other projects and agencies, these should also be listed. Please see the example below.

12. Stocks inventory for the next cropping cycle							
12. 1 Seedlings	40	1000		pieces			Delivered October 11, 2010
12.2 Tubers		450		pieces			
12. 3 Runners		500		pieces			
12. 4 Piglets		1		head			
12. 5 Fingerlings		1000		Pieces			
12. 6 Others		50		kilos			
13. Farm Inputs inventory before the cropping cycle							
13.1 Fertilizers							
13.1.1 Chicken Dung	30	20					Received September 11, 2010
13.1.2 14-14-14	10	24					
13. 1.3 NPK	1	4					

5. In accounting for labor requirements, account only for the family labor. The family labor must not include child workers and should include only those who are 18 years old and above. Indicate also if the family labor is seasonal but regular – meaning it is predictable during the cycle when the family member can help in the farm.

REGULAR LABOR					**WAGE**	**Remarks**
1. Own Labor - Female	1				daily	Seasonal worker
- Male	1				daily	
2. Hired Labor - Female	4				daily	
3. Hired Labor - Male	5				daily	
4. Contract	Agreed price					
5. Bayanihan	Agreed price					

6. Below is an example of an accomplished asset inventory form.

Farm Operations Monitoring Form
SPICACC FORM 1-FARM ASSETS INVENTORY
As of February 10, 2011

NAME:	John Domilos	**Educational Attainment : Elementary**	
AGE:	49	**OPTION CODE:**	1.1.3.1.4.1.
GENDER:	Male	***(Please refer to appendix A for the Option Code)***	

ASSETS	**Quantity Write the quantity under the appropriate column**			**Unit of measure**	**# of use in Years**	**Estimated Market Value**	**Remarks**
	own	**spicacc**	**others**				
1. Farm land	200			sq meters	30		Lease
2. Tractors/Microtiller	1			Units	4		
3. Farm Animals (i.e carabao)	1			Head	3		
4. Greenhouse	100			sq meters	2		
5. Backpack Sprayer	5			Units	2		
6. Hose/Rainburst	20			Meters	4		
7. Hoes/Shovels etc.	5			Pieces	6		
8. Water tank/Impoundment	100			Gallon	2		
9. Transportation	1			Unit	6		
10. Storage	40			sq meters	5		
11. Thresher	1			unit	4		
12. Pig pens	1			sq meters	4		
12. Stocks inventory for the next cropping cycle							
12. 1 Seedlings	40	1000		pieces			the 1000 seedlings was delivered jan.
12.2 Tubers		450		pieces			
12. 3 Runners		500		pieces			
12. 4 Piglets		1		head			
12. 5 Fingerlings		1000		Pieces			
12. 6 Others		50		kilos			
13. Farm Inputs inventory before the cropping cycle							
13.1 Fertilizers							
13.1.1 Chicken Dung	30	20					
13.1.2 14-14-14	10	24					
13. 1.3 NPK	1	4					
13.1.4 Urea	5	7					
13.2 Stocks (Specify)							
13.2.1 Seedlings	450	450					
13.1.2 Tubers	500	456					
13.1.3 Runners	124	34					
13.1.4 Piglets	1	2					
13.1.5 Fingerlings	1000	3000					
13.1.6 Others							
13.3 Feeds		25					
13.4 Medicines, Vitamins		22	bottles				
13.5 Others							
REGULAR LABOR						**WAGE**	**Remarks**
1. Own Labor - Female	1					daily	
- Male	1					daily	
2. Hired Labor - Female	4					daily	
3. Hired Labor - Male	5					daily	
4. Contract	Agreed price						
5. Bayanihan	Agreed price						

2. FORM 2 – Farm Activity Forecast

The Farm Activity Forecast is a pre-activity form estimating the future timetable of work in the farm. This form covers an entire year divided into months and weeks.

To fill-up the form put an "X" mark on the space pertaining to the activity and the corresponding week of the month the activity is expected to be done.

Some activities may be done twice or more than twice a year, thus, an "X" mark may be placed on several weeks for a certain activity.

Also list the title and date of trainings and seminars attended.

Farm Operations Monitoring Form

SPICACC FORM 2-FARM ACTIVITY FORECAST

Draw a _____ to indicate the farm activity forecast in the calendar

FARM ACTIVITY INVENTORY	January				February				March				April				May				June				July				August				September				October				November				December			
	Weeks				Weeks				Weeks				Weeks				Weeks				Weeks				Weeks				Weeks				Weeks				Weeks				Weeks				Weeks			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1. Area Clearing																																															
2. Land Preparation																																															
2.1 Digging/bed preparation																																														
2.2 Hole Preparation																																														
3. Planting																																														
4. Cultural Management																																														
4.1 Weeding																																														
4.2 Watering																																														
4.3 Fertilizer application																																														
4.4 Spraying																																														
5. Harvesting																																														
6. Post harvest																																														
6.1 Sorting																																														
6.2 Packing																																														
6.3 Hauling/Transporting																																														
7. Marketing																																														
8. Trainings/Seminars																																														

List the title of trainings

1 _____ 5 _____

2 _____ 6 _____

3 _____ 7 _____

4 _____ 8 _____

3. FORM 3 – IMPUTED COST

Inputs pertain to contribution or participation of resources such as farmland, tractors, farm animals, and others of the like. The Imputed Cost form aims to calculate the allocated cost of farm inputs through usage. The usage is specified by checking the space where the input is applied whether in the cropping cycle, land preparation, planting, cultural management, and harvest/post marketing. To measure usage of inputs, its length or extent of use in the farm is measured through specified time measures such as days, weeks, or months.

EXAMPLE FOR COMPUTING IMPUTED COST FOR A TRACTOR

Example: A tractor was acquired for P10,000.00. The delivery of the tractor from display area to the farm cost P1,000.00. Then the total acquisition cost of the tractor is P11,000.00.

But note that the tractor will last for let's say 10 years. By applying the concept of the DEPRECIATION COST, the imputed cost of usage per cropping can be estimated as:

DEPRECIATION COST = 11,000÷10 years = 1,100,

But since it's usage is only during certain months during the cropping cycle, this should be also computed. For example, the usage is only 4 weeks, then the imputed cost must be:

IMPUTED COST OF THE USAGE OF THE TRACTOR = 1,100 ÷ 12 = 91.67

The imputed cost is entered in the IMPUTED COST column as highlighted in the SPICACC FORM 3. Below is an example of an accomplished Farm Operations Monitoring Form.

When imputing cost for the hose/rain burst and the water tank and water impoundment, the imputed cost must refer to the services provided by the hose/rain burst and the water tank and water impoundment. The amount of water used must be the basis of costing.

For purposes of imputed costing, the raw water is costed at Php5.00 per drum.

Farm Operations Monitoring Form
SPICACC FORM 3-IMPUTED COSTS

Other Inputs		Please put an X the corresponding column which inputs are used during the following farm activity						Specify duration in days, weeks month, etc	Imputed Cost
		crppng cycle	Land prep	Planting	Cult'l mgmt	Harvest/Post	Marketing		
1. Farmland		X						3 months	P2,000.00
2. Tractors			X					4 weeks	P91.67
3. Farm Animals (i.e carabao)			x					2 Weeks	P1,000.00
4. Greenhouse									P
5. Backpack Sprayer									P
6. Hose/Rainburst				x	x				P1,500.00
7. Hoes/Shovels etc.			x	x	x	x	x	2 months	P1,000.00
8. Water tank/Impoundment									P
9. Transportation (i.e. Trucks)						x	x	1 month	P750.00
10. Storage									P
11. Thresher									P
12. Others (Baskets, scals)									P
13. Stocks									P
Total									P

4. FORM 4 – FARM ACTIVITY COSTS

The Farm Activity Costs form aims to measure in monetary terms the labor and cultivating inputs such as fertilizers, pesticides, insecticides and others of the like. At the heading of the form, you may check more than one activity since some activities may be done simultaneously.

The second portion of the form pertains to the cost of labor used. Hired labor is easy to cost since actual cash payment is made. Labor cost of owner and family members are recorded at the prevailing regional labor rate of farm laborers as specified by the Department of Labor and Employment (DOLE) or the prevailing "por dia" payment arrangement in the locality.

In costing family labor, the prevailing labor rate is Php150.00-250.00 per day depending on the arrangement of the farm worker with the farm enterprise. At Php150.00 per day the farmer is provided with meals, while farm rate of Php200.00-250.00 normally does not include meals.

Cost of farm inputs are at actual cost. Actual costs are cost of acquisition and other costs than can be directly allocated to the input. The SPICACC FORM 4 can be accomplished per operation of the farm.

An example of a fully accomplished form is shown below.

Farm Operations Monitoring Form
SPICACC FORM 4-FARM ACTIVITY COSTS

Date: y 10-20, 2011

ACTIVITY (Please put an X on the activity)

Land preparation		Planting	
- Area preparation	X	Cultural management	
- Digging & bed prep	X	- weeding	
- Hole preparation	x	- watering	
		- Fertilizer application	
		- Spraying pesticide	

Labor Costs	Please put an X on the column corresponding to the # of workers involved in the farm activity Mandays						Number of days	Cost Incurred per worker	Remarks
Own Number of workers									
Family Member/Volunteer	1	2	3	4	5	Others			
Male		X					10	P2,500.00	number of hours
Female	X						5	P1,250.00	converted to
Hired Labor									days.
Male		X					10	P2,500.00	
Female		X					1	P 250.00	
Contract	one week 10 workers							P5,000.00	
Bayanihan	Specify duration and cost								
Totals								P	

Farm Inputs purchased by Farm Households	Please check the column corresponding to the # of farm inouts used in the farm activity Sacks, gallons						Cost per unit	Cost Incurred	Remarks
	5	10	15	20	25	Others			
1. Fertilizer (in sacks)								P	
1.1 Urea									
1.2 NPK									
1.3 14-14-14									
1.4 others									
2. Biorganic		x					500.00	P5,000.00	
3. Pesticide(in liters)									
3.1									
3.2								P	
3.3								P	
3.4								P	
3. Herbicide								P	
4. Chicken Dung									
5. Others							500.00	P500.00	transport costs
Total								P	

Farm Inputs from SPICACC	Please check the column corresponding to the # of farm inouts used in the farm activity Sacks, gallons						Cost per unit	Cost Incurred	Remarks
	5	10	15	20	25	Others			
1. Fertilizer (in sacks)								P	
1.1 Urea	x						1,000.00	P5,000.00	
1.2 NPK									
1.3 14-14-14	x						400.00	P2,000.00	
1.4 others								P	
2. Biorganic			x					P	
3. Pesticide(in liters)									
3.1						30	500.00	P1,500.00	
3.2								P	
3.3								P	
3.4								P	
3. Herbicide								P	
4. Chicken Dung				20			50.00	P1,000.00	
5. Others								P	
Total								P	

Farm Operations Monitoring Form

SPICACC FORM 4-FARM ACTIVITY COSTS

Date: y 10-20, 2011

ACTIVITY (Please put an X on the activity)

Land preparation		Planting	
- Area preparation	X	Cultural management	
- Digging & bed prep	X	- weeding	
- Hole preparation	x	- watering	
		- Fertilizer application	
		- Spraying pesticide	

Labor Costs	Please put an X on the column corresponding to the # of workers involved in the farm activity								Remarks
	Mandays						Number of days	Cost Incurred per worker	
Own Number of workers									
Family Member/Volunteer	1	2	3	4	5	Others			
Male		X					10	P2,500.00	number of hours
Female	X						5	P1,250.00	converted to
Hired Labor									days.
Male		X					10	P2,500.00	
Female		X					1	P 250.00	
Contract	one week 10 workers							P5,000.00	
Bayanihan	Specify duration and cost								
Totals								P	

Farm Inputs purchased by Farm Households	Please check the column corresponding to the # of farm inouts used in the farm activity						Cost per unit	Cost Incurred	Remarks
	Sacks, gallons								
	5	10	15	20	25	Others			
1. Fertilizer (in sacks)								P	
1.1 Urea									
1.2 NPK									
1.3 14-14-14									
1.4 others									
2. Biorganic		x					500.00	P5,000.00	
3. Pesticide(in liters)									
3.1									
3.2								P	
3.3								P	
3.4								P	
3. Herbicide								P	
4. Chicken Dung									
5. Others								P	
Total								P	

Farm Inputs from SPICACC	Please check the column corresponding to the # of farm inouts used in the farm activity						Cost per unit	Cost Incurred	Remarks
	Sacks, gallons								
	5	10	15	20	25	Others			
1. Fertilizer (in sacks)								P	
1.1 Urea	x						1,000.00	P5,000.00	
1.2 NPK									
1.3 14-14-14	x						400.00	P2,000.00	
1.4 others								P	
2. Biorganic			x					P	
3. Pesticide(in liters)									
3.1						30	500.00	P1,500.00	
3.2								P	
3.3								P	
3.4								P	
3. Herbicide								P	
4. Chicken Dung				20			50.00	P1,000.00	
5. Others								P	
Total								P	

5. FORM 5 – HARVESTING RECORD

The Harvesting Record form's objective is to measure the labor and transportation cost of the farm produce and also to measure the farm output as well as its by-products. Certain activities may be a combined, thus one may check more than one activity. Don't forget to put the date of the activity.

The second portion of the form pertains to the cost of labor used. Hired labor is easy to cost since the actual cash payment are made. Labor cost of owner and family members are recorded at prevailing regional labor rate of farm laborer as specified by the Department of Labor and Employment (DOLE).

Transporting and hauling may be done through personal transport or through hired transport. In case of personal transport, the cost of fuel, oil, meals, and other actual costs incurred must be recorded. In case of hired transport, total costs of hire must be recorded.

Harvests are not often made in a day. The volume of sales (kilos or sacks) together with its gross sales are recorded. Gross sales pertain to the total amount received for the total volume of harvest.

In some cases, not all of the total harvest is sold. Some are consumed by the household, given to friends or neighbors, rejected, or spoiled. In this case, the items not sold must be recorded as consumed.

By-products are secondary or incidental products derived from the farm. It is not a primary product. Example: A farmer harvested 1,500 kilos of cabbage and sold its peeling to a neighbor who used the peeling to feed his pigs. The peeling is the by-product. The total kilos/sacks and the gross sales of the by-product must be measured and recorded.

Farm Operations Monitoring Form

SPICACC FORM 5-HARVESTING RECORD

	Date:	arch 1-30, 2011									
Activity	*(You may check more than one)*										
	Harvesting		X								
	Post harvest		X								
	Marketing		x								
Labor Costs		Please check the column corresponding to the # of workers involved in the farm activity Mandays						Number of days	Cost Incurred per worker	Remarks	
Own	Number of workers										
Family Member/Volunteer		1	2	3	4	5	Others				
	Male		x					15	P7,500.00	number of hours	
	Female		x					15	P7,500.00	converted to	
Hired Labor										days.	
	Male		x						P7.500.00		
	Female								P		
Contract		1000 for 4 Haulers							P	Haulers	
Bayanihan		Specify duration and cost									
Totals									P		
Transporting and Hauling		Transportation Cost per harvest								Remarks	
	Harvest	1	2	3	4	5	6				
1. Cost of Hiring		x	x	x	x			2,000.00	P8,000.00	contract	
2. Others										for all harvest	
Total											
Output	(in kilos)	Harvest in kilos						Price	Gross Sales	Remarks	
	Harvest 1	1200						10.00/kilo	P12,000.00		
	Harvest 2		1200					20.00/KILO	P24,000.00		
20.00/KILO	Harvest 3			1200				10.00/kilo	P12,000.00		
	Harvest 4				1200			20.00/KILO	P24,000.00		
	Others										
% Sold		100	80						P		
% Consumed		0	20						P		
By-products ()Specify											
1	Animal Feeds								P		
2									P		
3									P		

6. FORM 6 – PROBLEMS ASSOCIATED WITH FARM ACTIVITIES

The Problems Associated with Farm Activities form records the farming activity and the prevailing weather conditions. The form can be filled-up by checking the space that matches the activity and climatic condition.

The lower portion of the form records the rejects, mortality, stunted growth, and other adverse results observed or experienced during the cultural management and post harvest activities. Percentages are used to measure the adverse result. Some percentages can be directly measured while some cannot be measured. In cases where actual measurements cannot be done, best percentage estimates are acceptable.

Recording of other problems experienced is very much encouraged. Please see accomplished sample.

SPICACC FORM 6- PROBLEMS

Farm Operations Monitoring Form

PROBLEMS ASSOCIATED WITH FARM ACTIVITIES

AREAS (Check as many)	1. Land Preparation: 1.1. Area clearing	1.2 Digging& bed prep'n	1.3 Hole preparation	2. Planting	3. Cultural Management: 3.1 Weeding	3.2 Watering	3.3 Fertilizer application	3.4 Spraying	4. Harvesting	5. Post Harvest: 5.1 Sorting	5.2 Packaging	5.3 Hauling transporting	6 Marketing
1. CLIMATIC CONDITION													
3.1 Heavy rain	x	x	x										
3.3 Rainy													
3.4 Drizzling													
3.6 cloudy													
3.7 Frost													
3.8 Typhoon				x									x
3.9 Hail									x				
3.10 Unusually warm						x	x	x					
3.11 Others													

AREAS (Indicate Percentage)	2. Planting	3. Cultural Management: 3.1 Weeding	3.2 Watering	3.3 Fertilize application	3.4 Spraying	4. Harvesting	5. Post Harvest: 5.1 Sorting	5.2 Packing	5.3 Hauling transporting	Other Problems
4. QUALITY CROPS and LIVESTOCKS										
4.1 Rejects*	x					x				
4.2 Mortality	x									
4.3 Stunted growth	x									
4.4 Others										

* Rejects could refer to stocks (i.e. runners, seedling etc. and harvest)

7. FORM 7- LOCAL WORKING GROUP REPORT FORM

The LWG Report Form is accomplished by the cooperator and includes problems and concerns encountered during the implementation of the CCA options. It should also include what actions were taken to solve or at least minimize the problem.

The LWG Report Form must be submitted to the Field Coordinator every month for evaluation and appropriate action.

PART III

THE FARMER-COOPERATORS RECORDS

Farm Operations Monitoring Form
SPICACC FORM 1-FARM ASSETS INVENTORY
As of February 10, 2011

NAME:	John Domilos	**Educational Attainment : Elementary**	
AGE:	49	**OPTION CODE:**	1.1.3.1.4.1.
GENDER:	Male	***(Please refer to appendix A for the Option Code)***	

ASSETS	**Quantity Write the quantity under the appropriate column**			**Unit of measure**	**# of use in Years**	**Estimated Market Value**	**Remarks**
	own	**spicacc**	**others**				
1. Farm land							
2. Tractors/Microtiller							
3. Farm Animals (i.e carabao)							
4. Greenhouse							
5. Backpack Sprayer							
6. Hose/Rainburst							
7. Hoes/Shovels etc.							
8. Water tank/Impoundment							
9. Transportation							
10. Storage							
11. Thresher							
12. Pig pens							
12. Stocks inventory for the next cropping cycle							
12. 1 Seedlings							
12.2 Tubers							
12. 3 Runners							
12. 4 Piglets							
12. 5 Fingerlings							
12. 6 Others							
13. Farm Inputs inventory before the cropping cycle							
13.1 Fertilizers							
13.1.1 Chicken Dung							
13.1.2 14-14-14							
13. 1.3 NPK							
13.1.4 Urea							
13.2 Stocks (Specify)							
13.2.1 Seedlings							
13.1.2 Tubers							
13.1.3 Runners							
13.1.4 Piglets							
13.1.5 Fingerlings							
13.1.6 Others							
13.3 Feeds							
13.4 Medicines, Vitamins							
13.5 Others							
REGULAR LABOR						**WAGE**	**Remarks**
1. Own Labor - Female							
- Male							
2. Hired Labor - Female							
3. Hired Labor - Male							
4. Contract	Agreed price						
5. Bayanihan	Agreed price						

Draw a _____ to indicate the farm activity forecast in the calendar

FARM ACTIVITY INVENTORY	January				February				March				April				May				June				July				August				September				October				November				December			
	Weeks				Weeks				Weeks				Weeks				Weeks				Weeks				Weeks				Weeks				Weeks				Weeks				Weeks				Weeks			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1. Area Clearing																																															
2. Land Preparation																																															
2.1 Digging/bed preparation																																														
2.2 Hole Preparation																																														
3. Planting																																														
4. Cultural Management																																														
4.1 Weeding																																														
4.2 Watering																																														
4.3 Fertilizer application																																														
4.4 Spraying																																														
5. Harvesting																																														
6. Post harvest																																														
6.1 Sorting																																														
6.2 Packing																																														
6.3 Hauling/Transporting																																														
7. Marketing																																														
8. Trainings/Seminars																																														

List the title of trainings

1 _____ 5 _____

2 _____ 6 _____

3 _____ 7 _____

4 _____ 8 _____

Farm Operations Monitoring Form

SPICACC FORM 3-IMPUTED COSTS

Other Inputs	Please check the corresponding column which inputs are used during the following farm activity						Specify duration in days, weeks month, etc	Imputed Cost
	crppng cycle	Land prep	Planting	Cult'l mgmt	Harvest/Post Marketing			
1. Farmland								P
2. Tractors								P
3. Farm Animals (i.e carabao)								P
4. Greenhouse								P
5. Backpack Sprayer								P
6. Hose/Rainburst								P
7. Hoes/Shovels etc.								P
8. Water tank/Impoundment								P
9. Transportation (i.e. Trucks)								P
10. Storage								P
11. Thresher								P
12. Others (Baskets, scals)								P
13. Stocks								P
Total								P

Prepared by:

_____ _____

Name and Signature of Cooperator Date

Farm Operations Monitoring Form

SPICACC FORM 4-FARM ACTIVITY COSTS

Date: _____

ACTIVITY (Please put an X on the activity)

Land preparation		Planting	
- Area preparation		Cultural management	
- Digging & bed prep		- weeding	
- Hole preparation		- watering	
		- Fertilizer application	
		- Spraying pesticide	

Labor Costs	Please put an X on the column corresponding to the # of workers involved in the farm activity Mandays						Number of days	Cost Incurred per worker	Remarks
Own Number of workers									
Family Member/Volunteer	1	2	3	4	5	Others			
Male									
Female									
Hired Labor									
Male									
Female									
Contract	one week 10 workers								
Bayanihan	Specify duration and cost								
Totals								P	

Farm Inputs purchased by Farm Households	Please check the column corresponding to the # of farm inouts used in the farm activity Sacks, gallons						Cost per unit	Cost Incurred	Remarks
	5	10	15	20	25	Others			
1. Fertilizer (in sacks)									
1.1 Urea								P	
1.2 NPK								P	
1.3 14-14-14								P	
1.4 others								P	
2. Biorganic								P	
3. Pesticide(in liters)									
3.1								P	
3.2								P	
3.3								P	
3.4								P	
3. Herbicide								P	
4. Chicken Dung								P	
5. Others								P	
Total								P	

Farm Inputs from SPICACC	Please check the column corresponding to the # of farm inouts used in the farm activity Sacks, gallons						Cost per unit	Cost Incurred	Remarks
	5	10	15	20	25	Others			
1. Fertilizer (in sacks)								P	
1.1 Urea								P	
1.2 NPK								P	
1.3 14-14-14								P	
1.4 others								P	
2. Biorganic								P	
3. Pesticide(in liters)									
3.1								P	
3.2								P	
3.3								P	
3.4								P	
3. Herbicide								P	
4. Chicken Dung								P	
5. Others								P	
Total								P	

Farm Operations Monitoring Form
SPICACC FORM 4-FARM ACTIVITY COSTS

Date: _____

ACTIVITY (Please put an X on the activity)

Land preparation		Planting	
- Area preparation		Cultural management	
- Digging & bed prep		- weeding	
- Hole preparation		- watering	
		- Fertilizer application	
		- Spraying pesticide	

Labor Costs	Please put an X on the column corresponding to the # of workers involved in the farm activity Mandays						Number of days	Cost Incurred per worker	Remarks
	1	2	3	4	5	Others			
Own Number of workers									
Family Member/Volunteer									
Male									
Female									
Hired Labor									
Male									
Female									
Contract	one week 10 workers								
Bayanihan	Specify duration and cost								
Totals								P	

Farm Inputs purchased by Farm Households	Please check the column corresponding to the # of farm inouts used in the farm activity Sacks, gallons						Cost per unit	Cost Incurred	Remarks
	5	10	15	20	25	Others			
1. Fertilizer (in sacks)									
1.1 Urea								P	
1.2 NPK								P	
1.3 14-14-14								P	
1.4 others								P	
2. Biorganic								P	
3. Pesticide(in liters)									
3.1								P	
3.2								P	
3.3								P	
3.4								P	
3. Herbicide								P	
4. Chicken Dung								P	
5. Others								P	
Total								P	

Farm Inputs from SPICACC	Please check the column corresponding to the # of farm inouts used in the farm activity Sacks, gallons						Cost per unit	Cost Incurred	Remarks
	5	10	15	20	25	Others			
1. Fertilizer (in sacks)								P	
1.1 Urea								P	
1.2 NPK								P	
1.3 14-14-14								P	
1.4 others								P	
2. Biorganic								P	
3. Pesticide(in liters)									
3.1								P	
3.2								P	
3.3								P	
3.4								P	
3. Herbicide								P	
4. Chicken Dung								P	
5. Others								P	
Total								P	

Farm Operations Monitoring Form

SPICACC FORM 4-FARM ACTIVITY COSTS

Date: _____

ACTIVITY (Please put an X on the activity)

Land preparation		Planting	
- Area preparation		Cultural management	
- Digging & bed prep		- weeding	
- Hole preparation		- watering	
		- Fertilizer application	
		- Spraying pesticide	

Labor Costs	Please put an X on the column corresponding to the # of workers involved in the farm activity Mandays						Number of days	Cost Incurred per worker	Remarks
	1	2	3	4	5	Others			
Own Number of workers									
Family Member/Volunteer									
Male									
Female									
Hired Labor									
Male									
Female									
Contract	one week 10 workers								
Bayanihan	Specify duration and cost								
Totals								P	

Farm Inputs purchased by Farm Households	Please check the column corresponding to the # of farm inouts used in the farm activity Sacks, gallons						Cost per unit	Cost Incurred	Remarks
	5	10	15	20	25	Others			
1. Fertilizer (in sacks)									
1.1 Urea								P	
1.2 NPK								P	
1.3 14-14-14								P	
1.4 others								P	
2. Biorganic								P	
3. Pesticide(in liters)									
3.1								P	
3.2								P	
3.3								P	
3.4								P	
3. Herbicide								P	
4. Chicken Dung								P	
5. Others								P	
Total								P	

Farm Inputs from SPICACC	Please check the column corresponding to the # of farm inouts used in the farm activity Sacks, gallons						Cost per unit	Cost Incurred	Remarks
	5	10	15	20	25	Others			
1. Fertilizer (in sacks)								P	
1.1 Urea								P	
1.2 NPK								P	
1.3 14-14-14								P	
1.4 others								P	
2. Biorganic								P	
3. Pesticide(in liters)									
3.1								P	
3.2								P	
3.3								P	
3.4								P	
3. Herbicide								P	
4. Chicken Dung								P	
5. Others								P	
Total								P	

Farm Operations Monitoring Form

SPICACC FORM 4-FARM ACTIVITY COSTS

Date: _____

ACTIVITY (Please put an X on the activity)

Land preparation		Planting	
- Area preparation		Cultural management	
- Digging & bed prep		- weeding	
- Hole preparation		- watering	
		- Fertilizer application	
		- Spraying pesticide	

Labor Costs	Please put an X on the column corresponding to the # of workers involved in the farm activity Mandays						Number of days	Cost Incurred per worker	Remarks
	1	2	3	4	5	Others			
Own Number of workers									
Family Member/Volunteer									
Male									
Female									
Hired Labor									
Male									
Female									
Contract	one week 10 workers								
Bayanihan	Specify duration and cost								
Totals								P	

Farm Inputs purchased by Farm Households	Please check the column corresponding to the # of farm inouts used in the farm activity Sacks, gallons						Cost per unit	Cost Incurred	Remarks
	5	10	15	20	25	Others			
1. Fertilizer (in sacks)									
1.1 Urea								P	
1.2 NPK								P	
1.3 14-14-14								P	
1.4 others								P	
2. Biorganic								P	
3. Pesticide(in liters)									
3.1								P	
3.2								P	
3.3								P	
3.4								P	
3. Herbicide								P	
4. Chicken Dung								P	
5. Others								P	
Total								P	

Farm Inputs from SPICACC	Please check the column corresponding to the # of farm inouts used in the farm activity Sacks, gallons						Cost per unit	Cost Incurred	Remarks
	5	10	15	20	25	Others			
1. Fertilizer (in sacks)								P	
1.1 Urea								P	
1.2 NPK								P	
1.3 14-14-14								P	
1.4 others								P	
2. Biorganic								P	
3. Pesticide(in liters)									
3.1								P	
3.2								P	
3.3								P	
3.4								P	
3. Herbicide								P	
4. Chicken Dung								P	
5. Others								P	
Total								P	

Farm Operations Monitoring Form

SPICACC FORM 4-FARM ACTIVITY COSTS

Date: _____

ACTIVITY (Please put an X on the activity)

Land preparation		Planting	
- Area preparation		Cultural management	
- Digging & bed prep		- weeding	
- Hole preparation		- watering	
		- Fertilizer application	
		- Spraying pesticide	

Labor Costs	Please put an X on the column corresponding to the # of workers involved in the farm activity Mandays						Number of days	Cost Incurred per worker	Remarks
Own Number of workers									
Family Member/Volunteer	1	2	3	4	5	Others			
Male									
Female									
Hired Labor									
Male									
Female									
Contract	one week 10 workers								
Bayanihan	Specify duration and cost								
Totals								P	

Farm Inputs purchased by Farm Households	Please check the column corresponding to the # of farm inouts used in the farm activity Sacks, gallons						Cost per unit	Cost Incurred	Remarks
	5	10	15	20	25	Others			
1. Fertilizer (in sacks)									
1.1 Urea								P	
1.2 NPK								P	
1.3 14-14-14								P	
1.4 others								P	
2. Biorganic								P	
3. Pesticide(in liters)									
3.1								P	
3.2								P	
3.3								P	
3.4								P	
3. Herbicide								P	
4. Chicken Dung								P	
5. Others								P	
Total								P	

Farm Inputs from SPICACC	Please check the column corresponding to the # of farm inouts used in the farm activity Sacks, gallons						Cost per unit	Cost Incurred	Remarks
	5	10	15	20	25	Others			
1. Fertilizer (in sacks)								P	
1.1 Urea								P	
1.2 NPK								P	
1.3 14-14-14								P	
1.4 others								P	
2. Biorganic								P	
3. Pesticide(in liters)									
3.1								P	
3.2								P	
3.3								P	
3.4								P	
3. Herbicide								P	
4. Chicken Dung								P	
5. Others								P	
Total								P	

Farm Operations Monitoring Form

SPICACC FORM 5-HARVESTING RECORD

Date: _____

Activity	*(You may check more than one)*	
	Harvesting	
	Post harvest	
	Marketing	

Labor Costs		Please check the column corresponding to the # of workers involved in the farm activity Mandays						Number of days	Cost Incurred per worker	Remarks
Own	Number of workers									
Family Member/Volunteer		1	2	3	4	5	Others		P	
	Male								P	
	Female								P	
Hired Labor										
	Male								P	
	Female								P	
Contract		Specify duration and cost							P	
Bayanihan		Specify duration and cost								
Totals									P	

Transporting and Hauling		Transportation Cost per harvest								Remarks
	Harvest	1	2	3	4	5	6			
1. Cost of Hiring		x	x	x	x			2,000.00	P8,000.00	contract
2. Others										for all harvest
Total										

Output	(in kilos)	Harvest in kilos						Price	Gross Sales	Remarks
	Harvest 1								P	
	Harvest 2								P	
20.00/KILO	Harvest 3								P	
	Harvest 4								P	
	Others									
% Sold									P	
% Consumed									P	
By-products ()Specify										
1	Animal Feeds								P	
2									P	
3									P	

Prepared by:

Name and Signature of Cooperator

Noted by:

Field Coordinator/AT

Farm Operations Monitoring Form

SPICACC FORM 5-HARVESTING RECORD

Date: _____

Activity	*(You may check more than one)*	
	Harvesting	
	Post harvest	
	Marketing	

Labor Costs		Please check the column corresponding to the # of workers involved in the farm activity Mandays						Number of days	Cost Incurred per worker	Remarks
		1	2	3	4	5	Others			
Own	Number of workers									
Family Member/Volunteer									P	
	Male								P	
	Female								P	
Hired Labor										
	Male								P	
	Female								P	
Contract		Specify duration and cost							P	
Bayanihan		Specify duration and cost								
Totals									P	

Transporting and Hauling		Transportation Cost per harvest								Remarks
	Harvest	1	2	3	4	5	6			
1. Cost of Hiring		x	x	x	x			2,000.00	P8,000.00	contract
2. Others										for all harvest
Total										

Output	(in kilos)	Harvest in kilos						Price	Gross Sales	Remarks
	Harvest 1								P	
	Harvest 2								P	
20.00/KILO	Harvest 3								P	
	Harvest 4								P	
	Others									
% Sold									P	
% Consumed									P	
By-products ()Specify										
1	Animal Feeds								P	
2									P	
3									P	

Prepared by:

Name and Signature of Cooperator

Noted by:

Field Coordinator/AT

Farm Operations Monitoring Form

PROBLEMS ASSOCIATED WITH FARM ACTIVITIES

AREAS (Check as many)	1. Land Preparation			2. Planting	3. Cultural Management				4. Harvesting	5. Post Harvest			6 Marketing
	1.1. Area clearing	*1.2 Digging & bed prep'n*	*1.3 Hole preparation*		*3.1 Weeding*	*3.2 Watering*	*3.3 Fertilizer application*	*3.4 Spraying*		*5.1 Sorting*	*5.2 Packaging*	*5.3 Hauling transporting*	
1. CLIMATIC CONDITION													
3.1 Heavy rain													
3.3 Rainy													
3.4 Drizzling													
3.6 cloudy													
3.7 Frost													
3.8 Typhoon													
3.9 Hail													
3.10 Unusually warm													
3.11 Others													

AREAS (Indicate Percentage)		3. Cultural Management					5. Post Harvest				
	2. Planting	*3.1 Weeding*	*3.2 Watering*	*3.3 Fertilize application*	*3.4 Spraying*	4. Harvesting	*5.1 Sorting*	*5.2 Packing*	*5.3 Hauling transporting*	Other Problems	
4. QUALITY CROPS and LIVESTOCKS											
4.1 Rejects*											
4.2 Mortality											
4.3 Stunted growth											
4.4 Others											

* Rejects could refer to stocks (i.e. runners, seedling etc. and harvest)

Prepared by:

Name and Signature of Cooperator

Noted by:

Field Coordinator/AT

SPICACC FORM 7 – LWG REPORT FORM
(Please perforate and submit to the Field Coordinator)

DATE: _____
Name of Cooperator: _____
CCA Option: _____

PROBLEMS

ACTIONS TAKEN

OTHERS

Noted by:

Field Coordinator

NOTES

SPICACC FORM 8
Narrative report

The data collector administers the following narrative report after the interview.

1. Who chose the CCA option?

_____

2. Have you been doing this practice (cite the practice or chosen option)? For how long?

_____

_____

3. During the visits of the agricultural technicians, what are the innovations that were introduced in the CCA options? Can you identify them? Help the co-operators recall by identifying their farm activities such as land preparation, choice of seeds, fertilizer usage etc. Ask them to rate the effectiveness of the innovation introduced by the AT's. The expected responses must be along (because the notice an increase in yield; minimum farm management; minimum water usage etc).

_____

_____

4. Do you think that the CCA option is resilient to climate change? Why?(Probe why does the co-operator say so –lead him to economic benefit, environment, technical etc) Ask them to rate the CCA option in terms of resiliency- ask them reason for the low or high rating.

_____

_____

_____

5. How had the local government unit supported the project? Ask them to rate the LGU support in a scale of 1-5. Ask them why they gave low or high scores.

_____

_____

_____

6. Have you attended trainings? What are these trainings? What did you learn? Was its helpful? How are you using the training in your farm? Ask them to rate (1-5) the extent to which they are using their training in the farm.

_____

_____

7. In your opinion, how does the CCA option help in preserving the environment? (Enumerate to the co-operator if he cannot think i.e. did it enhance fertility of the soil, were they able to conserve water, were they able help reduce the emission of green house due to reduce fertilizer use?)Ask the respondent to rate environmental effectiveness due to the CCA option in a scale of 1-5. Ask them why they give high or low rating.

_____

_____

_____

8. How had the changes in climate affected your farm activities? How did you adjust?

_____

_____

9. Was the chosen option helpful? (ask the respondent to rate helpfulness in a scale of 1-5) In what way do you say so?

_____

_____

_____

10. How many in the community practices the CCA option chosen?

_____

11. In what way was the subsidy coming from the SPICACC helpful in your ability to adapt to the climate change? (Lead them to answer the question along economic benefits, environmental benefits, technical benefits etc)

_____

_____

SPICACC FORM 9
LIVESTOCK MONITORING FORM

Name:
_____Age:_____Gender:_____
Educational Attainment: _____
Option Title _____
Municipality/Barangay: _____

1. Livestock husbandry practices

1.1. What do you feed your farm animals? Where do you get/gather their food?

_____
1.2 Where do the farm animals stay? _____
1.3 What are the main problems encountered in raising the livestock? (Allow the co-operator to answer lead them to diseases, growth, ask them what month did the disease occur etc). What did you do to solve the problem?

_____
_____
_____

1.4 How do you compare the growth of the farm animal from SPICACC with other domesticated farm animal? (Which animal is more resilient)? Why?

_____
_____
_____

2. What is the reason why do you raise livestock? (Expected answer is as safety net due to climate change)

_____
_____
_____

3. Have you sold the livestock? How much did you sell the livestock? (if not yet sold, ask the co-operator when do they intend to sell and the expected selling price).

_____
_____
_____

4. In what way does livestock raising help you cope with climate change? (Validating question for number 2 in case they were not able to answer as expected).

_____
_____
_____

5. Have you always raised livestock? Was there an innovation introduced by the project in raising livestock? How does it differ from your usual way of raising livestock?

_____
_____

6. How many hours do you usually spend to tend to your livestock? Who usually tend to the livestock (men, women, female child, male child etc).

_____
_____
_____

7. As a CCA option how had it helped you adjust to climate change?

_____
_____

8. Other concerns

SPICACC FORM 10
FISHERY MONITORING FORM

Name:
_____Age:_____Gender:_____
Educational Attainment: _____
Option Title _____
Municipality/Barangay: _____

1. Fishery practices

1.1. What do you feed your fish? Where do you get/gather their food? _____

1.2 What are the main problems encountered in raising the fishes? (Allow the co-operator to answer lead them to diseases, growth, ask them what month did the disease occur etc). What did you do to solve the problem?

_____
_____
_____

1.3 How do you compare the growth of the fishes from SPICACC with other fishes in the area? (Which is more resilient)? Why?

_____
_____
_____

2. What is the reason why do you choose fishery? (Expected answer is as safety net due to climate change)

_____
_____
_____

3. Have you sold the fishes yet? How much did you sell? (if not yet sold, ask the co-operator when do they intend to sell and the expected selling price).

_____
_____
_____

4. In what way does fishery raising help you cope with climate change? (Validating question for number 2 in case they were not able to answer as expected).

_____
_____
_____

5. Have you always been into fishery? Was there an innovation introduced by the project in fishery? How does it differ from your usual way of raising livestock?

_____
_____

6. How many hours do you usually spend to tend to your fishery? Who usually tend to the fishery (men, women, female child, male child etc).

_____
_____
_____

7. As a CCA option how had it helped you adjust to climate change?

_____
_____

8. Other concerns

SPICACC FORM 11
AGRO-FORESTRY MONITORING FORM

Name: _____Age:_____Gender:_____
Educational Attainment: _____
Option Title _____
Municipality/Barangay: _____

1. How many seedlings have you availed from the project? When did you avail of the seedlings?_____
_____

2. Briefly describe the slope, terrain or soil condition of the area where the seedlings were planted? How far is the agro-forestry area from your farm?_____
_____

3. In what way do you see the benefits of agro-forestry to your farm? (The expected answers are: protection from harsh climatic conditions; pest control etc)_____
_____

4. Were you helped in the technical lay-out of your agro-forestry area? By whom? How?_____
_____

5. In how many years time do you expect returns from the agro-forestry?
_____

6. In the community, have you heard from others, who have agro-forestry, the economic benefit of having one? In your honest opinion, what is the estimated income from your agro-forestry when harvested at maturity?_____ Do you perceived agro-forestry as your major source of income? _____

7. How many hours do you usually tend to your agro-forestry? Who tend the agro-forestry most of the time (men, women, male child, female child)?
_____

8. What are the innovative practices introduced by the project? To what extent are you implementing them?
_____
_____

9. What were the problems encountered in your agro-forestry project? What were the reasons why this occurred?_____
_____

10. As a CCA option what benefits are you aware of from the agro-forestry project?
_____
_____

11. What were the sources of this awareness?
_____

SPICACC FORM 12
NURSERY & GREENHOUSE

Name: _____Age:_____Gender:_____
Educational Attainment: _____
Option Title _____
Municipality/Barangay: _____

Procedure:
1. Conduct the narrative interview first. During the interview, the expected responses of the co-operators must be along the four clusters of good practices. Deduce the qualitative and quantitative data required with best effort as possible.
2. Insure that inventory and costing of seedlings planted in the nursery is made after the interview.

1. Kindly narrate the reason why the nursery was established? Was the nursery existing even prior to the intervention of the
SPICACC?_____
_____
_____

2. What were the new crops, seedlings and other varieties of crops, forest trees that were propagated with the intervention of SPICACC?
_____
_____

3. What forms of assistance were given to you by the SPICACC? (i.e.Were you helped in the technical lay-out of your agro-forestry area? By whom?)
How?_____
_____

4. Aside from the SPICACC were there other assistance given by the local government unit, the community and other agencies? How had the assistance complemented the SPICACC project?
_____
_____

5. Describe in what way do you see the benefits of having the nursery versus having none at all? (i.e. how had the establishment of nursery helped them adapt to climate change?)
_____
_____

6. Do you have any plans of making the nursery income generating? Describe how you intend to do this? _____
_____

7. In the community, have you heard from others, who have nursery, the economic benefit of having one?

8. How many hours do you usually tend to you the nursery? Who tend the nursery most of the time (men, women, male child, female child)?
_____

8. What are the innovative practices introduced by the project? To what extent are you implementing them?
_____
_____

9. What were the problems encountered in the nursery project? What were the reasons why this occurred?_____
_____

10. As a CCA option what benefits are you aware of from the agro-forestry project?
_____
_____

11. What were the sources of this awareness?
_____

SPICACC FORM 13
WATER MANAGEMENT

Name: _____Age:_____Gender:_____
Educational Attainment: _____
Option Title _____
Municipality/Barangay: _____

Procedure:
1. Conduct the narrative interview first. During the interview, the expected responses of the co-operators must be along the four clusters of good practices.
2. Proceed with the interview. Insure that qualitative data is always followed by quantitative measure (i.e. scale or continuous) of vice-versa.
3. Insure to gather data on the size of the water system, volume of water discharge, how many farms benefits from it.

1. Kindly narrate the reason why the _____(identify the project for the respondent, refer to the CCA option list) was established? Was there an existing _____even prior to the intervention of the SPICACC?_____
_____
_____
2. Where is the source of water? _____
3. What forms of assistance were given to you by the SPICACC? (i.e.Were you helped in the technical preparation?)
Describe._____
_____
4. Aside from the SPICACC were there other assistance given by the local government unit, the community and other agencies? How had the assistance complemented the SPICACC project?
_____
_____
5. Describe in what way do you see the benefits of having the water system versus having none at all? (i.e. how had the establishment of project helped them adapt to climate change?)
_____
_____

6. Do you have any plans of making the water management system income generating? Describe how you intend to do this?
_____
_____

7. In the community, have you heard from others, who have water system, the economic benefit of having one?
_____
_____
8. How many hours do you usually maintaining the project? Who tend to the composting most of the time (men, women, male child, female child)?
_____

8. What are the innovative practices introduced by the project (i.e. on the water impoundment or as a complement to crops?) To what extent are you implementing them?
_____
_____

9. What were the problems encountered in the project? What were the reasons why this occurred?_____
_____

SPICACC FORM 14
SOIL MANAGEMENT

Name: _____Age:_____Gender:_____
Educational Attainment: _____
Option Title _____
Municipality/Barangay: _____

Procedure:
1. Conduct the narrative interview first. During the interview, the expected responses of the co-operators must be along the four clusters of good practices.
2. Proceed with the interview. Insure that qualitative data is always followed by quantitative measure (i.e. scale or continuous) of vice-versa.

1. Kindly narrate the reason why the _____(identify the project for the respondent, refer to the CCA option list) was established? Was there an existing _____even prior to the intervention of the SPICACC?
_____
_____

2. What forms of assistance were given to you by the SPICACC? (i.e.Were you helped in the technical preparation?) Describe.
_____
_____

4. Aside from the SPICACC were there other assistance given by the local government unit, the community and other agencies? How had the assistance complemented the SPICACC project?
_____
_____

5. Describe in what way do you see the benefits of having the soil management project system versus having none at all? (i.e. how had the establishment of project helped them adapt to climate change?)_____
_____

6. Do you have any plans of making the soil management system income generating? Describe how you intend to do this?
_____
_____

7. In the community, have you heard from others, who have practice soil management, the economic benefit of having one?
_____
_____

8. How many hours do you usually spend for composting? Who tend to the composting most of the time (men, women, male child, female child)?
_____

9. What are the innovative practices introduced by the project (i.e. on the soil management or as a complement to crops?) To what extent are you implementing them?
_____
_____

10. What were the problems encountered in the project? What were the reasons why this occurred?
_____
_____

11. As a CCA option what benefits are you aware of from proper soil management?
_____
_____

12. What were the sources of this awareness?
_____

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