



Woman livestock farmer in the MENA region

(Photo Credit: i-APS)

# FINANCIAL RECORDKEEPING

*for Women Entrepreneurs*



This handbook is produced by International Advisory, Products and Systems (i-APS) and is part of a series of learning products supporting farmers worldwide with best practices in the area of agriculture development.

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## FINANCIAL RECORDKEEPING *for Women Entrepreneurs*

### LEARNING OBJECTIVES

- Overview of women businesses and challenges in the MENA region.
- Understand the role of record keeping in business.
- Understand the types of business records, including financial records.
- Identify financial indicators from records and how to use them in decision-making processes.
- Provide basic skills of financial record keeping to small business women

### INTRODUCTION

This Learning Product endeavors to complement existing learning materials on enhancing women's empowerment in developing countries through basic skills in financial record keeping, which are considered an important factor in decision-making for small business enterprises and particularly in agriculture. This Learning Product can also be used by training institutions, nongovernmental organisations (NGOs) and entities that seek to improve smallholder producer skills in business management.

In the Middle East and North Africa (MENA) region, the participation of women in employment is increasing. The agricultural sector constitutes the primary source, not only for food supply, but for income and employment, especially for rural areas in the region. For example, it has been estimated that the share of women in agriculture activities, is 40%<sup>1</sup> and by 2011 the share of women in the total agricultural labor force will account for 45%<sup>2</sup>. Despite this importance, women are facing many challenges. First, and most prevalent, women are working an unequal share of unpaid family labor. Second, women historically and culturally lack access to the most important productive assets such as land and capital. For example, women own a lower proportion of the land area compared to men. In Sub-Saharan Africa (SSA), the rate is recorded at 15%, while in MENA, it is estimated at only 5%. This implies that male landholders accounted for 85% in SSA and 95% in MENA (FAO et al, 2010). Disparate land ownership and access to capital, along with continued unpaid labor, reduces the impact of more than half the population and thus undermines efforts to eradicate hunger and poverty in the region.

Evidence shows that women are actively engaging in business activities and highly motivated to develop and sustain their business. For example, in Jordan, 56% of women between 18 to 40 years-old are

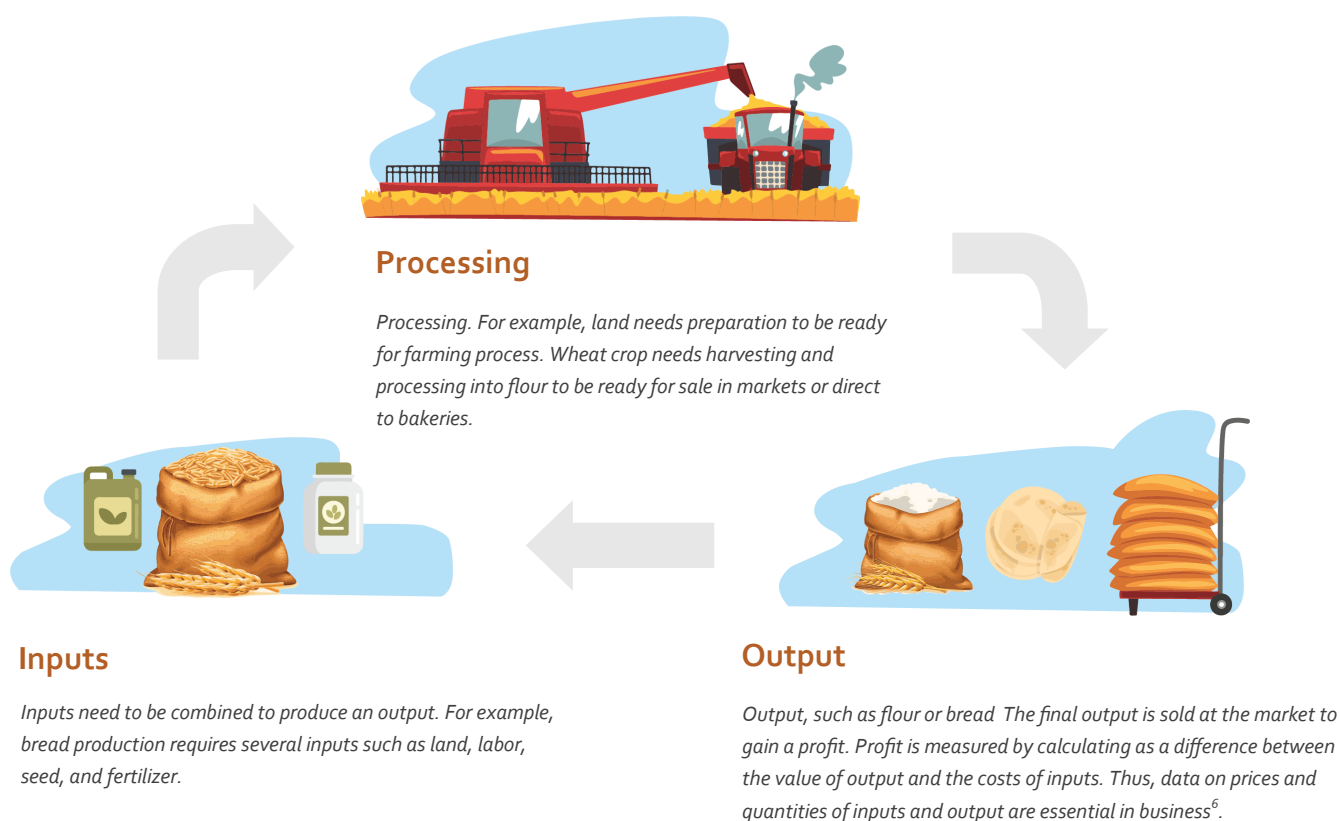
<sup>1</sup> [Gender dimensions of agricultural and rural employment: Differentiated pathways out of poverty](#)

<sup>2</sup> [Empowering Women in the Rural Labor Force with a Focus on Agricultural Employment in the Middle East and North Africa \(MENA\)](#)

actively engaged in agricultural activities<sup>3</sup>. A recent study in Syria on the value chain of wheat found that women contributed to 70% of total agricultural activities<sup>4</sup>.

For non-agricultural activities, in 2007 a survey of more than 1000 women business owners was implemented and covered five countries in the region (namely Jordan, Tunisia, Lebanon and the United Arab Emirates). Findings showed that several challenges need to be addressed, such as learning financial management skills, access to capital, finding and keeping good employees, the high cost of public services, and access to training and support to manage a business. In addition, the study found that all women-owned businesses faced access issues to formal finance institutions, with 50-70% of women unable to access formal funds. In these situations, women used their savings or borrowed from their families and friends<sup>5</sup>. Therefore, this learning product aims to contribute to build business skills amongst women, with a special focus on financial record keeping to improve access to formal financial institutions.

The transformation away from subsistence production (i.e. agricultural production to satisfy only consumption) needs to be business-oriented and requires understanding business concepts. For the sake of this learning product, a business is defined as a process to produce a certain good or service for market at a profit. The term business has three components:



<sup>3</sup> [UN WOMEN, 2018. WOMEN'S PARTICIPATION IN THE AGRICULTURAL SECTOR, RURAL INSTITUTIONS AND COMMUNITY LIFE](#)

<sup>4</sup> For detailed information contact I-APS at [info@i-aps.com](mailto:info@i-aps.com)

<sup>5</sup> [IFC, CAWTAR, 2007. Women Entrepreneurs in the Middle East and North Africa: Characteristics, Contributions and Challenges](#)

<sup>6</sup> [USAID, 2012. FARMING AS A FAMILY BUSINESS TRAINING MANUAL](#)





## GENERAL RECORDKEEPING FOR SMALL BUSINESSES

Record-keeping is one of the most important responsibilities for any small business owner or cooperative. No matter what type of business, the success or failure depends upon creating and sustaining an effective record system. Reasons for keeping good records include:

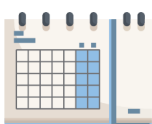


### Detail tracking:



Businesses must track many details on customers, sales, expenses and inventory. Good records support the owner's ability to make informed decisions and meet customer needs.

### Planning:



Good record-keeping helps the business understand business cycles and plan for the inputs, personnel, inventories and expenses to manage the business through the year to provide excellent products and services to customers.

### Legal Compliance:



Business owners must comply with regulations and requirements in their jurisdiction. This will include contracts, leases and other agreements; licenses, permits and insurance; payroll and personnel records.

### Tax Preparation:

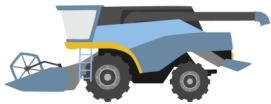


Every business needs to stay compliant and up to date on tax requirements to ensure timely filing and accurate payments.



### Access to Creditors:

Information available from record-keeping can be used to apply for finance.



### Access to services:

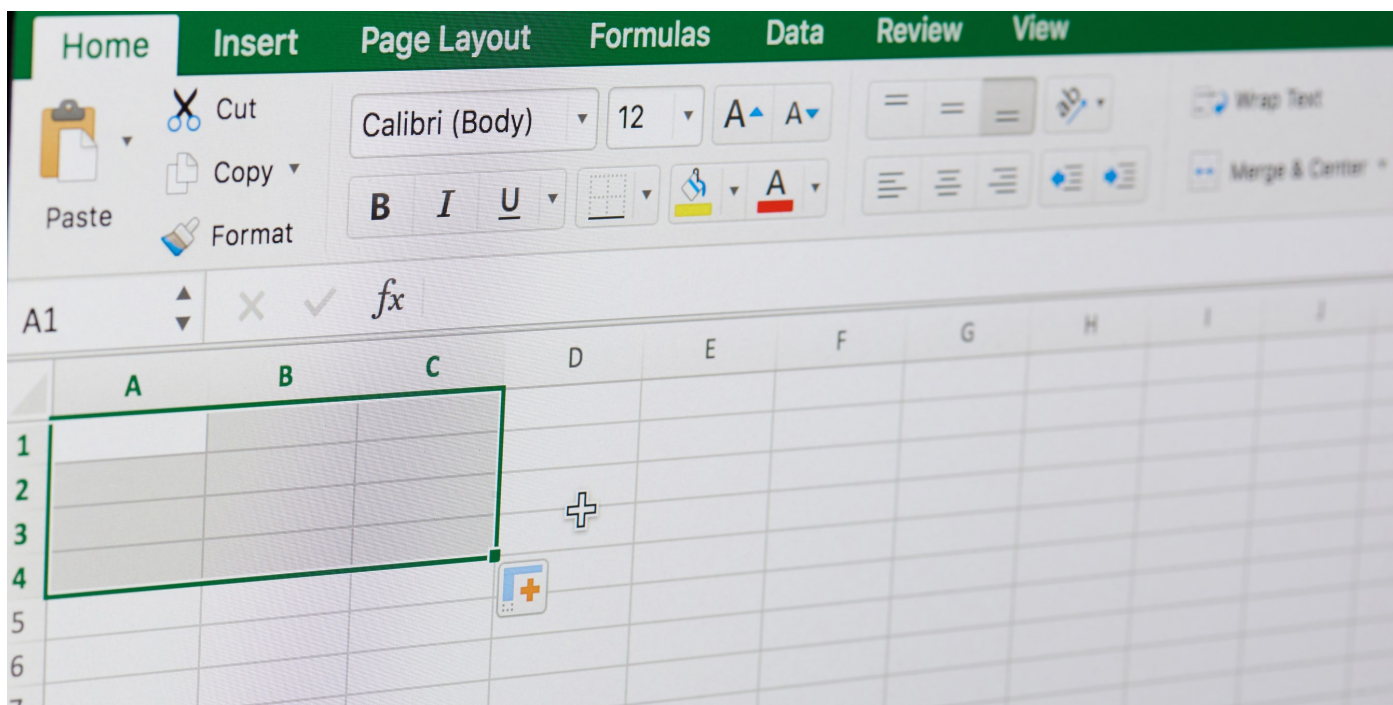
For example, in the case of a farm business, good record-keeping would assist to provide extension services for the farmer.

In addition, businesses must develop a records retention schedule that establishes the timing and record retention policies for the business for: accounting and fiscal data, personnel and payroll records, business and corporate operating records, and tax filings, employee withholding and all tax records.



Women wheat farmers in the MENA region protecting harvested crops in the field.

(Photo Credit: i-APS)



## FINANCIAL SYSTEM AND RECORDKEEPING:



It is important to develop a financial record-keeping system that is accurate, efficient and adapted to the business circumstances. Recordkeeping may be done using a paper ledger, but it is more efficient if the business can keep records on a computerized system using standard software to manage accounts.

As a business grows, more specialized business and tax accounting software can be adopted. It is also important for business owners (and their bookkeeping and accounting staff) to get appropriate training to make sure the team has the skills to effectively manage bookkeeping and accounting. The basic goals of financial record keeping are:

- Record all transactions: Every transaction that occurs should be recorded on a journal as a debit or credit.
- Transactions are transferred from the journal to a ledger classified by type of financial transaction.
- Enable the extraction of financial information that documents the financial position of the business.
- Help managers make good decisions based on sound data.
- Provide information and data for both internal and external needs.

Arzeno 2004, has defined four stages of record-keeping for a farm business in decision-making process (Figure 1). The first phase is the process of recording all receipts or revenues and total costs of the firm at a given period of time. The second stage is keeping inventories in order to use them accurately to calculate financial indicators of a firm such as net income. Inventories take many forms such as money or in-kind such as crops, livestock, and property at a specific period of time.



The third phase is determining a suitable method to be used in order to organize all relevant data and information. This stage is essential for analysis and planning for future activities. The final stage is the process of analyzing a farm as a business. For example, sources of income as well as strengths and weaknesses of the business and the change in net worth of the farm may be key indicators to consider.

## Recordkeeping Phases



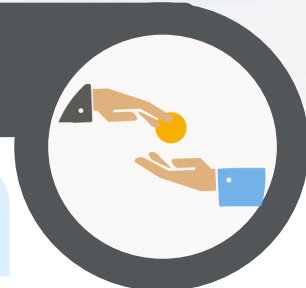
Figure1: Record Keeping Phases, Source: Arzeno, 2004<sup>7</sup>



<sup>7</sup> [Agustin Arzeno, 2004. Record Keeping in Farm Management.](#)

EA (NT\$)	CV (NT\$)	CV (%)	SV (NT\$)	SV (%)	CPI	SPI	ETC	EAC	VAC (%)	VAC (NT\$)	INDEX
(1230)	-16%	(870)	-11%	0.85	0.89	(7980)	0	0%	0	0.87	
(300)	-11%	(90)	-3%	0.90	0.97	(3000)	0	0%	0	0.93	
(300)	-18%	(150)	-9%	0.83	0.91	(1800)	0	0%	0	0.87	
(120)	-31%	30	8%	0.78		(540)	0	0%	0	0.93	
120	16%	30	4%	1.18	4	(660)	0	0%	0	1.11	
(930)	-19%	(780)	-16%	0.84		(4980)	0	0%	0	0.83	
(600)	-22%	(360)	-13%	0.87		(3000)	0	0%	0	0.83	
(300)	30%	(450)	15%								

## TYPES OF ACCOUNTS USED IN BOOKKEEPING



### Asset Accounts:



An asset account represents the business property and assets in a specific period, usually a year. Assets are categorized into: a) current assets (such as available cash); b) machinery and working assets, usually have expected lives more than one year (such as animals used for land preparation or tractors); and c) long-term assets such as land and buildings. There are different methods to calculate assets. For example, assessing assets at market price, or net selling price (defined as the difference between market price and selling costs)<sup>8</sup>.

### Liabilities Accounts:



A liabilities account documents the financial obligations of the business towards third parties in the given year. Liabilities are classed into a) current liabilities such as payment to be paid immediately (e.g. loan) or within coming year; b) medium-term liabilities which used to finance working assets such as equipment or breeding livestock; and c) long term liabilities include debts that to be paid over a period of more than five years such as long term land lease.

<sup>8</sup> [Anaman, A, Kwabena, 1988. African Farm Management Principles and Applications with Examples.](#)





## The Balance Sheet:

The balance sheet is a statement that details the financial position of the business on a specific date. The structure of the balance sheet is based on assets and liabilities accounts described above and may take may different forms.

**Table 1: Sample Format of the Balance Sheet<sup>9</sup>**

Assets		Liabilities	
Current			
Cash on hand and Deposit		Operating loans	
Accounts Receivable		Accounts payable	
Grains and Forage		Cash advanced payment	
Market livestock		Accrued Interest	
Investment in growing crops		Current portion of intermediate Debts	
Marketable securities		Current portion of long term Debts	
Other current assets			
Total current assets		Total current liabilities	
Intermediate			
Machinery and Equipment		Subtotal intermediate debts	
Breeding Stock		Less current problem of intermediate debt	
Other intermediate			
Total Intermediate Asset		Total intermediate debts	
Long Term			
Land		Sub total long-term debts	
Buildings		Less current portion of long term debts	
Non farm real estate		Total long term debts	
Other long term		Total liabilities	
Total long term assets		Net worth	
Total Assets		Total liabilities + Networth	

Source: Oseni, 2010

For simplicity, Table 2 provides a hypothetical example of an aggregate balance sheet in order to estimate and interpret financial position indicators.

<sup>9</sup> [Dr.J.O. Oseni, Farm Business Organization](#)

Table 2: Balance Sheet of a Farm at 31<sup>st</sup> December 2018 (Hypnotical Figures)

Item	Total Value \$
<b>Assets</b>	
Total current assets (A)	2000
Total working assets (B)	3000
Total long-term assets (C)	5000
Total assets D=(A+B+C)	10000
<b>Liabilities</b>	
Total current liabilities E	1000
Total medium liabilities F	2000
Total long-term liabilities G	2500
Total liabilities H= (E+F+G)	5500
<b>Net worth= D - H</b>	<b>4500</b>

Derivation from test ratios of the Balance Sheet:

1/ Current Ratio is measured the liquidity of the farm, its equation as below:

$$[Current\ Ratio = Total\ current\ assets\ (A) / Total\ current\ liabilities\ (E)]$$

$$= (2000/1000) = 2$$

In general, a ratio value of more than one indicates a favourable run of the business and indicates an ability to pay back short-term debts which is the case of the current example.

2/ Intermediate Ratio = Total current assets (A) + Total working assets (B)

$$Total\ current\ liabilities\ E + Total\ medium\ liabilities\ F$$

$$= (2000 + 3000) / (1000 + 2000) = 5000 / 3000 = 1.6$$

Intermediate/ Working Ratio measures the liquidity and financial strength of the farm business for a period of time ranging between 2 to 5 years. A ratio more than one reflects a strong financial capital situation in mid-term period for the farm.

3/ [Net Capital Ratio = Total Assets D / Total Liabilities H] = 10000/5500 = 1.8

This indicator gives long-term liquidity for the farmer. A value of more than one indicates that funds are safe for the business.

4/ [Leverage Ratio= Total Liabilities H/ Total Assets D] = 5500/10000 = 0.55

This ratio measures the rate of the total assets that can be used to pay for all long-term obligations such as debts. Here, a ratio less than one indicates a strong capacity of the farm to meet long-term debts. This ratio is very helpful for lending institutions since it enables them to assess risk involved in providing credit to the business. Moreover, it is useful in determining the needed amount of the credit.



*"I share the land with my husband's family and any profit I make goes on food and clothes. I don't have any money to spend on my family that I love. But I was able to save enough money after I used the balance sheet for my financial records and control of spending and it has helped me immeasurably. And now I can keep track of my income, and manage to buy the needs of my beloved family."*

***Woman livestock farmer from the MENA region***



### Expense Accounts:

Expenses are the amounts paid to other entities for goods and services from them. An expense account comprises operating and fixed costs. Operating (or variable) costs are costs that relate to the level of production, such as seeds, fertilizers, and fuel. Fixed costs are costs that have to be paid whether there is production or not, such as land rent or equipment upkeep costs. It is important to estimate all components as accurately as possible. To do so, two types of data are required, namely quantity and price. The following equation shows how total costs can be estimated for a small farm business:

$$[Total\ Costs\ (TC) = Total\ Variable\ Costs\ (TVC) + Total\ Fixed\ Costs\ (TFC)]$$

For simplicity and to avoid repetition the same equation can be rewritten as below:

$$[TC = TVC + TFC]$$

Variable costs refer to items that required to run the activity. For a farm business, in order to produce, for example, wheat, a farmer needs different inputs as described above (i.e. seeds and fertilizers, etc.). TVC would calculate as below:

$$[TVC = Quantity\ unit\ (e.g.\ kilo)\ of\ a\ specific\ input\ (e.g.\ Fertilizer) * Price\ of\ input\ (fertilizer) + Quantity\ unit\ (e.g.\ seed) * price\ of\ seed].$$

Similarly, the same concept can be used for fixed costs. Fixed costs refer to costs that occur whether there is production or not.



### Revenue Accounts:

Revenue accounts are the amount paid to the business by third parties for goods and services sold to them. For example, in return from selling products such as crops, milk, or eggs. Similar to expenses accounts, data on quantities of a sold product and price are needed to estimate revenues.

$$[Total\ Revenue\ TR = Quantity\ sold\ of\ a\ product * price]$$



### Income Statement:

The income statement is a financial statement that shows, in a systematic way, revenues and expenses of a business (farm) over a period of time. An income statement has different shapes. Table 3 provides a simple hypothetical example of an income statement. It will assist to analyse income statement indicators and their explanation.

Table3: Income statement of a hypothetical Farm from 01.01.2020 to 31.12.2020

Description	Units	Quantity	Price per units	Values
Product sold crop	sack	100	50	5000
<b>Gross Income (Revenue) A</b>				<b>5000</b>
Seeds (b)	kilo	2	100	200
Fertilizers c	kilo	2	200	400
Insecticides (d)	litter	5	300	1500
<b>Total Variable Costs (E= b+c+d)</b>				<b>2100</b>
<b>Total Fixed Costs (F)</b>				<b>500</b>
<b>Total Costs (G)= E+F</b>				<b>2600</b>

1. Net Farm Income is one of the indicators that measure farm profitability. It is calculating as below:

$$[Net\ Farm\ Income\ NFI = Total\ Farm\ Revenue - Total\ Farm\ Costs]$$

$$From\ the\ table\ NFI = 5000 - 2600 = 2400\$$$



2. Operation Ratio shows the size of operating (variable) costs to derive a money unit (\$) of gross income and it should be less than one to reflect good performance. Mathematically equal  $(TVC/TR) = (2100/5000) = 0.42$

3. Fixed Ratio calculates the magnitude of fixed costs to derive one \$ of a gross income and it should be less than 1. Mathematically equal  $(TFC/TR) = (500 / 5000) = 0.1$

Working with the bookkeeping journal that has all financial activities recorded and transferred to a ledger that documents each account, it is possible to then create several tools that help the business to make sound financial decisions. The data can also be used to calculate cash flow over a period of time and the ability to compare expenses and revenues against the financial plan.

This also provides the tools to conduct a cost/benefit analysis that can then guide the business in making decisions. Accounting systems can be kept fairly simple, especially for small businesses. The important point is to have an organized, accurate financial picture of the business.

*"Bookkeeping for livestock business management practices allowed us to improve managing practices for our livestock enterprises. It improved our ability to approach farming as a business, to understand the overall production costs, the cost and benefits of specific decisions, and to invest in both livestock rearing and dairy processing activities to generate greater income."*

**Women Livestock Farmers from the MENA region**



### Other Records:



There are other types of supplementary records that can be helpful measures of farming performance assessment. Examples of the most commonly applied records are production records and labor records.

Production records introduce information on the production of crops or livestock at a specific period of time. For crops, data on cultivating area and land characteristics such as fertility of

soil for production are recorded. Additionally, detailed information on crop growing from planting through time of harvest, as well as all quantities of all inputs, are recorded. Livestock production records contain information on the class of the product (sheep, goat, or poultry) as well as quantities of all inputs used such as feed intake. Table 4 provides a hypothetical example of livestock records.

**Table 4: A General Simple Livestock Records Book for a Small Livestock Farm**

Month: January				Year: 2020			
Class of Animal	No. at the beginning (A)	Bought or received as a gift (B)	Born (C)	Total (D) = A+B+C	Died or Slaughtered (E)	Sales (F)	Present (G) = D – (E+F)
Goats	15	1	2	18	2	6	10

Source: Anaman, 1989



**Table 5: A Labor Chart for Hired Farm Workers on a Farm**

Date	Worker's Name	Work duration (hours)	Nature of work	Payments in kind \$	Payments in cash \$	Total payments \$
15..05.2019	A	6	Land preparation	5	10	15
1.06.2019	B	8	planting	6	12	18
15.09.2019	C	7	Weeding	5	15	20
30.09.2019	D	5	Harvesting	4	13	17
Total Cropping season				20	50	70

Source: Anaman, 1989



Labor records are helpful in estimating labor requirements for future farm activities. Records include different items such as personal worker information (names), nature of work, duration, and wages (in-kind or cash). Table 5 introduces a hypothetical example of labor records used on the farm.

Financial statement information is crucial for proper business management. Its analysis and interpretation, relying on proper and accurate record keeping, can both sustain the business activity and improve business outcomes.



Women farmers preparing fodder for livestock.

(Photo Credit: i-APS)

i-APS Agriculture and Food Security work focuses on implementing practical, relevant and innovative solutions for more efficient and sustainable agricultural production to enhance local food security, income, and nutrition.



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