



Japan International Cooperation Agency



Agriculture and Food Authority
Horticultural Crops Directorate



Ministry of Agriculture, Livestock and Fisheries
State Department for Crop Development & Agricultural Research

Smallholder Horticulture Empowerment & Promotion Project for Local and Up-Scaling (SHEP PLUS)

“Changing Farmers’ Mindset from “Grow and Sell” to “Grow to Sell””

CROP PRODUCTION & INCOME ANALYSIS DATA (CP&IAD) SHEET

Form 2-C

CROP PRODUCTION & INCOME ANALYSIS DATA (CP&IAD) SHEET
(For 12 Months)

DATE: / / County: SUB-COUNTY:

GROUP NAME:

FARMER'S NAME: MALE ☐ FEMALE ☐

TEL. NO.: Farmer Code:

A. Crop Name and Variety	B. Start & End of Production Season (Month - Month)	C. Area under the Crop (MxM/Acre)	D. Total Production (in kg/ton)	E. Net Income (KSh.)	F. Net Income (KSh.)	G. Net Income (KSh.)	H. Net Income (KSh.)	I. Net Income (KSh.)	J. Net Income (KSh.)	K. Net Income (KSh.)	L. Net Income (KSh.)	M. Net Income (KSh.)	N. Net Income (KSh.)	O. Net Income (KSh.)	P. Net Income (KSh.)	Q. Net Income (KSh.)	R. Net Income (KSh.)	S. Net Income (KSh.)	T. Net Income (KSh.)	U. Net Income (KSh.)	V. Net Income (KSh.)	W. Net Income (KSh.)	X. Net Income (KSh.)	Y. Net Income (KSh.)	Z. Net Income (KSh.)	
Crop	Season																									



DATE OF PRODUCTION	DATE OF PURCHASE	PRICE PURCHASED (KSh.)	DATE OF SALE	PRICE SOLD (KSh.)
1. 10/10/2018	10/10/2018	100.00	10/10/2018	100.00
2. 10/10/2018	10/10/2018	100.00	10/10/2018	100.00
3. 10/10/2018	10/10/2018	100.00	10/10/2018	100.00
4. 10/10/2018	10/10/2018	100.00	10/10/2018	100.00
5. 10/10/2018	10/10/2018	100.00	10/10/2018	100.00
6. 10/10/2018	10/10/2018	100.00	10/10/2018	100.00
7. 10/10/2018	10/10/2018	100.00	10/10/2018	100.00
8. 10/10/2018	10/10/2018	100.00	10/10/2018	100.00
9. 10/10/2018	10/10/2018	100.00	10/10/2018	100.00
10. 10/10/2018	10/10/2018	100.00	10/10/2018	100.00
11. 10/10/2018	10/10/2018	100.00	10/10/2018	100.00
12. 10/10/2018	10/10/2018	100.00	10/10/2018	100.00
13. 10/10/2018	10/10/2018	100.00	10/10/2018	100.00
14. 10/10/2018	10/10/2018	100.00	10/10/2018	100.00
15. 10/10/2018	10/10/2018	100.00	10/10/2018	100.00
16. 10/10/2018	10/10/2018	100.00	10/10/2018	100.00
17. 10/10/2018	10/10/2018	100.00	10/10/2018	100.00
18. 10/10/2018	10/10/2018	100.00	10/10/2018	100.00
19. 10/10/2018	10/10/2018	100.00	10/10/2018	100.00
20. 10/10/2018	10/10/2018	100.00	10/10/2018	100.00
21. 10/10/2018	10/10/2018	100.00	10/10/2018	100.00
22. 10/10/2018	10/10/2018	100.00	10/10/2018	100.00
23. 10/10/2018	10/10/2018	100.00	10/10/2018	100.00
24. 10/10/2018	10/10/2018	100.00	10/10/2018	100.00
25. 10/10/2018	10/10/2018	100.00	10/10/2018	100.00
26. 10/10/2018	10/10/2018	100.00	10/10/2018	100.00
27. 10/10/2018	10/10/2018	100.00	10/10/2018	100.00
28. 10/10/2018	10/10/2018	100.00	10/10/2018	100.00
29. 10/10/2018	10/10/2018	100.00	10/10/2018	100.00
30. 10/10/2018	10/10/2018	100.00	10/10/2018	100.00
31. 10/10/2018	10/10/2018	100.00	10/10/2018	100.00

Prepared by SHEP PLUS

Training Title: Crop Production & Income Analysis Data (CP&IAD) Sheet

Objective: To provide an effective means of capturing data for income analysis

Specific objectives:

- To familiarize extension staff with obtaining production data
- To provide a guide on calculating profitability of an enterprise

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Disclaimer

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1. Background



Farmers identifying appropriate farm records

1. Background



Farmers identifying appropriate farm records

1. Background

- Smallholder farmers rarely keep documented farm records. In addition, the records are usually scanty and do not provide any meaningful information for purposes of evaluating the performance of a given enterprise.
- The extension staff face a major challenge in getting farmers to provide accurate information and data due to farmers inability to keep records.
- This training material provides skills to the extension staff and farmers on quick and effective means of obtaining crop production data using a Crop Production & Income Analysis Data (CP&IAD) Sheet.
- Periodic surveys using the Crop Production & Income Analysis Data (CP&IAD) Sheet enables determination of farmers' progress in terms of yield, income, and profit/loss assessment.

2. Introduction (1)

Handout 2-2

For Farmer

CROP PRODUCTION & INCOME ANALYSIS DATA (CP&IAD) SHEET

Part 1

DATE: ___/___/___ County: _____ SUB-COUNTY: _____

GROUP NAME: _____

FARMER'S NAME: _____ FEMALE ☐

TEL NO.: _____ Farmer Code: _____

Background Information

A. Crop Name and Variety		B. Start & End of Production Season (Month - Month)		C. Area under the Crop (M x M or Acres)	D. Total Production (Kg)	E. Net Produce (Kg)	F. Average Price per Kg (Ksh./kg)	G. Total Income (Ksh.) (ExF)	H. Total Cost of Production (Ksh.)	I. Net Income (Ksh.) (G-H)	J. If irrigated, tick (✓)
Crop	Variety	Start (Month)	End (Month)								

Part 2

Crop Production Information

2. Introduction (2)

ADDITIONAL INFORMATION:

Please indicate necessary information on data in the box below. e.g.) 1 crate of Tomato = 35 kg, 1 head of Cabbage = 2 kg, 5 pieces of Mango = 1 kg, etc. In case farmer grows fruit trees, please indicate age of the tree & number of harvestings per year.

Part 3

NOTES:

- A. **Crop Name and Variety**: Indicate name of crop and variety.
- B. **Start & End of Production**: Indicate month when production season started and a Month when production season ended. (Same Crop in different season can be entered into another row).
- C. **Area under the Crop (M or Acres)**: Indicate area under the crop. If it is difficult to measure the area, it can be given in terms of length and width of the farm. For fruit trees, indicate number of trees in the farm.
- D. **Total Production (Kg)**: farmers should indicate total production in kg for the area which has been put under the crop. Total production should include what was sold & consumed and losses. For fruits, flowers or seedling, the data can be given as pieces and stems.
- E. **Net Produce (Kg)**: this is sold and consumed produce.
- F. **Net Produce per Acre (Kg/acre)**: total sold and consumed produce per acre. (calculated by "D/C").
- G. **Average Price per Kg (Ksh/kg)**: where there are no record of Average Price per Kg, the price should be used in which largest volume produced and sold.
- H. **Total Income (Ksh.)**: average price per kg multiplied by net produce in kilos. (calculated by "E × F").
- I. **Total Cost of Production (Ksh.)**: should include the following where applicable:
 - Cost of inputs such as seed/planting material, fertilizers and manures, pesticides, etc.
 - Labor costs
 - Transportation costs
- J. **Net Income (Ksh.)**: total income minus total cost of production (calculated by "G-H").

The reverse side of
the CP&IAD Sheet

2. Introduction (2)

ADDITIONAL INFORMATION:

Please indicate necessary information on data in the box below. e.g.) 1 crate of Tomato = 35 kg, 1 head of Cabbage = 2 kg, 5 pieces of Mango = 1 kg, etc. In case farmer grows fruit trees, please indicate age of the tree & number of harvestings per year.

Part 3

NOTES:

- Crop Name and Variety
- Start & End of Production (Month): When production season started and a Month when production season ended. (Same Crop in different seasons can be entered into another row).
- Area under the Crop (Meters/Acre): For fruit trees, it can be given in pieces for both length and width of the farm. For fruit trees, it can be given in pieces for both length and width of the farm. For fruit trees, it can be given in pieces for both length and width of the farm.
- Total Production (Kg): For fruit trees, it can be given in pieces for both length and width of the farm. For fruit trees, it can be given in pieces for both length and width of the farm. Total production should include what was sold & consumed and losses. For fruits, flowers or seedling, the data can be given as pieces and stems.
- Net Produce (Kg): this is sold and consumed produce.
- Net Produce per Acre (Kg/acre): total sold and consumed produce per acre. (calculated by "D/C")
- Average Price per Kg (Ksh/kg): where there are no record of Average Price per Kg, the price should be used in which largest volume produced and sold.
- Total Income (Ksh): average price per kg multiplied by net produce in kilos. (calculated by "E x F")
- Total Cost of Production (Ksh): should include the following where applicable:
 - Cost of inputs such as seed/planting material, fertilizers and manures, pesticides, etc.
 - Labor costs
 - Transportation costs
- Net Income (Ksh): total income minus total cost of production (calculated by "G-H")

The reverse side of the CP&IAD Sheet

2. Introduction

Parts of Crop Production & Income Analysis Data (CP&IAD) Sheet

2.3 Additional Information & Notes

Additional Information:

- Indicate necessary/ additional information on data in a box. In case a farmer grows fruit trees, indicate **age of the trees & number of harvestings per year**

Notes:

- Use the notes when you explain the CP&IAD Sheet to farmers

3. Field Practices: Estimation using Household/Farm Equipments

Household/Farm Equipments	Estimated Measure
1. Wheel barrow of manure/compost	40 kg
2. Large wooden box used in trading of Tomato	64 kg
3. Crate used for supplying bread; when full of Tomatoes	35 – 45 kg
4. A gunny bag for 50 kg of sugar; when full of Kale	35 kg
5. A gunny bag for 90 kg of maize; when full of Kale	70 kg
6. Weight of Cabbage <ul style="list-style-type: none"> – 6a. Small Size – 6b. Medium Size – 6c. Large Size 	1 – 2 kg 3 – 4 kg Over 5 kg
7. A 2 kg container of cooking fat (Kimbo, Cow-boy etc.); when full of DAP, CAN, Urea etc.	3 kg
8. A 20 litre bucket of water; when full of manure/compost	10 – 15 kg
9. Pace factor	1 m

3. Field Practices: Estimation using Household/Farm Equipments

Household/Farm Equipments	Estimated Measure
1. Wheel barrow of manure/compost	40 kg
2. Large wooden box used in trading of Tomato	64 kg
3. Crate used for supplying bread; when full of Tomatoes	35 – 45 kg
4. A gunny bag for 50 kg of sugar; when full of Kale	35 kg
5. A gunny bag for 90 kg of maize; when full of Kale	70 kg
6. Weight of Cabbage <ul style="list-style-type: none"> – 6a. Small size – 6b. Medium size – 6c. Large size 	1 – 2 kg 3 – 4 kg Over 5 kg
7. A 2 kg container of cooking fat (Kimbo, Cow-boy etc.); when full of DAP, CAN, Urea etc.	3 kg
8. A 20 litre bucket of water; when full of manure/compost	10 – 15 kg
9. Pace factor	1 m

3. Conversion Factors and Estimation

- Smallholder farmers do not readily have access to standard equipment for weights and measures for daily farm operations.
- However, over time, farmers have adopted reusing certain common household packaging containers and farm equipment as units of weights and measures.
- It is therefore imperative that one is conversant with the calibrations of the commonly used household packaging containers and farm equipment.
- The table shows the estimation of some of the most common household containers and farm equipment used by smallholder farmers in regular farm operations.

4. Procedure for Completing the CP&IAD Sheet



Extension staff supporting farmers to complete the CP&IAD sheet



Members of farmer group filling out the CP&IAD sheet

4. Procedure for Completing the CP&IAD Sheet



Extension staff supporting farmers to complete the CP&IAD sheet



Members of farmer group filling out the CP&IAD sheet

4. Procedure for Completing the Crop Production & Income Analysis Data (CP&IAD) Sheet

- Mobilize and sensitize farmers on importance of the exercise so that they prepare necessary records
- Assemble farmer group members in a venue with sitting facilities
- Provide a flip chart for noting group contributions during deliberation
- Outline the day's programme and the importance of the exercise
- Identify major horticultural crops grown by the members.
- Go through the field practices/calibration sheet with the farmers and build consensus especially on the two (2) priority crops
- Reorganize farmers sitting sequence with a view of ensuring that literate farmers can easily support those who need guidance
- Distribute the sheets, pencils, and erasers
- The facilitator should explain the three (3) parts of the sheet and discuss column by column in a language that is most familiar with the farmers before the filling in of the sheet commences
- Since there is need for consensus when completing the Crop Production and Income Analysis Data (CP&IAD) Sheet, the facilitator has to ensure that all farmers have answered a particular question before proceeding to the next one

8. CP&IAD Sheet:

8.1 Background Information

CROP PRODUCTION & INCOME ANALYSIS DATA (CP&IAD) SHEET
(For 12 Months)

DATE: ____/____/____ County: _____ SUB-COUNTY: _____

GROUP NAME: _____

FARMER'S NAME: _____ MALE ☐ / FEMALE ☐

TEL NO.: _____ Farmer Code: _____

A. Crop Name and Variety		B. Start & End of Production Season (Month - Month)		C. Area under the Crop (M x M or Acres)	D. Total Production (Kg)	E. Net Produce (Kg)	F. Average Price per Kg (Ksh./kg)	G. Total Income (Ksh.) (ExF)	H. Total Cost of Production (Ksh.)	I. Net Income (Ksh.) (G-H)	If irrigated, tick (✓)
Crop	Variety	Start (Month)	End (Month)								

Crop Production Analysis Table

8. CP&IAD Sheet:

8.1 Background Information

Handout 2-2-2 For Farmer

CROP PRODUCTION & INCOME ANALYSIS DATA (CP&IAD) SHEET
(For 12 Months)

DATE: ____/____/____ County: _____ SUB-COUNTY: _____

GROUP NAME: _____

FARMER'S NAME: _____ MALE ☐ / FEMALE ☐

TEL NO.: _____ Farmer Code: _____

A. Crop Name and Variety		B. Start & End of Production Season (Month - Month)		C. Area under the Crop (M x M or Acres)	D. Total Production (Kg)	E. Net Produce (Kg)	F. Average Price per Kg (Ksh./kg)	G. Total Income (Ksh.) (ExF)	H. Total Cost of Production (Ksh.)	I. Net Income (Ksh.) (G-H)	J. If irrigated, tick (✓)
Crop	Variety	Start (Month)	End (Month)								

5. Crop Production & Income Analysis Data (CP&IAD) Sheet

5.1 Background Information

- Background information is vital for traceability
- Farmers must therefore be consistent when providing this information for different surveys

For Example:

- Date: ____/____/____
- County: _____
- Sub-county: _____
- Group Name: _____
- Farmer's Name: _____
- Male/Female: _____
- Telephone No.: _____ - _____
- Farmer code : _____

8.2 Crop Production Analysis Table

Handout 2-2

For Farmer

Crop Production Analysis Tables

(For 12 Months)

DATE: ____/____/____ County: _____ SUB-COUNTY: _____

GROUP NAME: _____

FARMER'S NAME: _____

MALE ☐ / FEMALE ☐

TEL NO.: _____

Farmer Code: _____

A. Crop Name and Variety		B. Start & End of Production Season (Month - Month)		C. Area under the Crop (M x M or Acres)	D. Total Production (Kg)	E. Net Produce (Kg)	F. Average Price per Kg (Ksh./kg)	G. Total Income (Ksh.)	H. Total Cost of Production (Ksh.)	I. Net Income (Ksh.)	J. If irrigated, tick (✓)
Crop	Variety	Start (Month)	End (Month)					(ExF)		(G-H)	

8.2 Crop Production Analysis Table

Crop Production Analysis Tables

[illegible]

5. Crop Production & Income Analysis Data (CP&IAD) Sheet

5.2 Crop Production Analysis Table

- Crop Production Analysis Table has ten (10) items with twelve (12) columns.
- Farmers are requested and guided to fill the sheet with correct data.
- Columns that require standardization can be completed manually or through an excel spread sheet back in the office.

9. Crop Production Analysis Table:

Column A. (Crop name and variety), B. (Start & End of Production Season) and C. (Area under the crop)

A. Crop Name and Variety		B. Start & End of Production Season (Month - Month)		C. Area under the Crop (M x M or Acres)	D. Total Production (Kg)	E. Net Produce (Kg)	F. Average Price per Kg (Ksh./kg)	G. Total Income (Ksh.)	H. Total Cost of Production (Ksh.)	I. Net Income (Ksh.)	If irrigated, tick (✓)
Crop	Variety	Start (Month)	End (Month)					(ExF)		(G-H)	

9. Crop Production Analysis Table:

Column A. (Crop name and variety), B. (Start & End of Production Season) and C. (Area under the crop)

A. Crop Name and Variety		B. Start & End of Production Season (Month - Month)		C. Area under the Crop (M x M or Acres)	D. Total Production (Kg)	E. Net Produce (Kg)	F. Average Price per Kg (Ksh./kg)	G. Total Income (Ksh.)	H. Total Cost of Production (Ksh.)	I. Net Income (Ksh.)	If irrigated, tick (✓)
Crop	Variety	Start (Month)	End (Month)					(ExF)		(G-H)	

A. Crop Name and Variety: Indicate name of the crop & variety. e.g. Tomato (Rio Grande).

B. Start & End of Production Season (Month – Month): fill the period of the cropping seasons within past 12 months (starting month and ending month)

C. Area under the Crop (M x M or Acres):

- M x M: Area under the Crop (M x M)
- Area under the Crop (Acres)

9. Crop Production Analysis

Table: Column D. (Total production) & E. (Net produce)

A. Crop Name and Variety		B. Start & End of Production Season (Month - Month)		C. Area under the Crop (M x M or Acres)	D. Total Production (Kg)	E. Net Produce (Kg)	F. Average Price per Kg (Ksh./kg)	G. Total Income (Ksh.)	H. Total Cost of Production (Ksh.)	I. Net Income (Ksh.)	If irrigated, tick (✓)
Crop	Variety	Start (Month)	End (Month)					(ExF)		(G-H)	

9. Crop Production Analysis Table: Column D. (Total production) & E. (Net produce)

A. Crop Name and Variety		B. Start & End of Production Season (Month - Month)		C. Area under the Crop (M x M or Acres)	D. Total Production (Kg)	E. Net Produce (Kg)	F. Average Price per Kg (Ksh./kg)	G. Total Income (Ksh.)	H. Total Cost of Production (Ksh.)	I. Net Income (Ksh.)	If irrigated, tick (✓)
Crop	Variety	Start (Month)	End (Month)					(ExF)		(G-H)	

D. Total Production (Kg): The figure includes sold, consumed (including gifts), and losses/ rejects. The number of harvests and unit of measure must be taken into account.

E. Net Produce (Kg): The amount sold and consumed.

9. Crop Production Analysis Table: Column F. (Average price per kg) & G. (Total income)

A. Crop Name and Variety		B. Start & End of Production Season (Month - Month)		C. Area under the Crop (M x M or Acres)	D. Total Production (Kg)	E. Net Produce (Kg)	F. Average Price per Kg (Ksh./kg)	G. Total Income (Ksh.)	H. Total Cost of Production (Ksh.)	I. Net Income (Ksh.)	If irrigated, tick (✓)
Crop	Variety	Start (Month)	End (Month)				(ExF)			(G-H)	

9. Crop Production Analysis Table: Column F. (Average price per kg) & G. (Total income)

A. Crop Name and Variety		B. Start & End of Production Season (Month - Month)		C. Area under the Crop (M x M or Acres)	D. Total Production (Kg)	E. Net Produce (Kg)	F. Average Price per Kg (Ksh./kg)	G. Total Income (Ksh.)	H. Total Cost of Production (Ksh.)	I. Net Income (Ksh.)	If irrigated, tick (✓)
Crop	Variety	Start (Month)	End (Month)				(Ksh./kg)	(ExE)		(G-H)	

F. Average Price per Kg (Ksh./kg): This is the average selling price of the produce.
e.g. Ksh. 20/kg of Tomato. Where the unit of sale is **NOT** in Kg, make the necessary conversion (see page 4/16).

G. Total Income (Ksh.): The total amount of income from the produce
(E. Net Produce (Kg) x F. Average Price per Kg (Ksh./kg).)

9. Crop Production Analysis Table: Column H. (Total cost of production) & I. (Net income)

A. Crop Name and Variety		B. Start & End of Production Season (Month - Month)		C. Area under the Crop (M x M or Acres)	D. Total Production (Kg)	E. Net Produce (Kg)	F. Average Price per Kg (Ksh./kg)	G. Total Income (Ksh.)	H. Total Cost of Production (Ksh.)	I. Net Income (Ksh.)	If irrigated, tick (✓)
Crop	Variety	Start (Month)	End (Month)					(ExF)		(G-H)	

9. Crop Production Analysis Table: Column H. (Total cost of production) & I. (Net income)

A. Crop Name and Variety		B. Start & End of Production Season (Month - Month)		C. Area under the Crop (M x M or Acres)	D. Total Production (Kg)	E. Net Produce (Kg)	F. Average Price per Kg (Ksh./kg)	G. Total Income (Ksh.)	H. Total Cost of Production (Ksh.)	I. Net Income (Ksh.)	If irrigated, tick (✓)
Crop	Variety	Start (Month)	End (Month)					(ExF)		(G-H)	

H. Total Cost of Production (Ksh.) include:

- Cost of inputs e.g. seed/planting material, fertilizers/manures, pesticides, tools etc.
- Cost of labour which may include nursery establishment/maintenance, ploughing, manures/fertilizer application, weeding, pest & disease control (spraying), and harvesting.
- Cost of transportation & marketing.

I. Net Income (Ksh.) = (G. Total Income - H. Total Cost of Production)

9. Crop Production Analysis

Table: irrigation tick box

A. Crop Name and Variety		B. Start & End of Production Season (Month - Month)		C. Area under the Crop (M x M or Acres)	D. Total Production (Kg)	E. Net Produce (Kg)	F. Average Price per Kg (Ksh./kg)	G. Total Income (Ksh.)	H. Total Cost of Production (Ksh.)	I. Net Income (Ksh.)	If irrigated, tick (✓)
Crop	Variety	Start (Month)	End (Month)					(ExF)		(G-H)	

9. Crop Production Analysis Table: irrigation tick box

A. Crop Name and Variety		B. Start & End of Production Season (Month - Month)		C. Area under the Crop (M x M or Acres)	D. Total Production (Kg)	E. Net Produce (Kg)	F. Average Price per Kg (Ksh./kg)	G. Total Income (Ksh.)	H. Total Cost of Production (Ksh.)	I. Net Income (Ksh.)	If irrigated, tick (✓)
Crop	Variety	Start (Month)	End (Month)					(ExF)		(G-H)	

If the crop was produced with Irrigation, the boxes in the last column need to be ticked.

10. Example

A. Crop Name and Variety		B. Start & End of Production Season (Month - Month)		C. Area under the Crop (M x M or Acres)	D. Total Production (Kg)	E. Net Produce (Kg)	F. Average Price per Kg (Ksh./kg)	G. Total Income (Ksh.)	H. Total Cost of Production (Ksh.)	I. Net Income (Ksh.)	If irrigated, tick (✓)
Crop	Variety	Start (Month)	End (Month)					(ExF)		(G-H)	
Tomato	Rio Grande	9	12	40x50	10,000	9,000	20	180,000	28,510	151,490	

10. Example

* The following are the theoretical data.

A. Crop Name and Variety		B. Start & End of Production Season (Month - Month)		C. Area under the Crop (M x M or Acres)	D. Total Production (Kg)	E. Net Produce (Kg)	F. Average Price per Kg (Ksh./kg)	G. Total Income (Ksh.)	H. Total Cost of Production (Ksh.)	I. Net Income (Ksh.)	J. If irrigated, tick (✓)
Crop	Variety	Start (Month)	End (Month)					(ExF)		(G-H)	
Tomato	Rio Grande	9	12	40x50	10,000	9,000	20	180,000	28,510	151,490	

[Note]

Total Cost of Production (column G.)

for 0.5 acre of Tomato (Rio Grande) is [28,510 Ksh.](#)

Detailed Costs of Production are:

- 1) Seed 50 g = **400 Ksh.**
- 2) Fertilizer: 1 bag of DAP = **3,000 Ksh.**
- 3) Fertilizer: 2 bags of CAN = **4,000 Ksh.**
- 4) Fungicide: 500 gm of Dithane M45 = **400 Ksh.**
- 5) Fungicide: 500 gm of Ridomil = **260 Ksh.**
- 6) Insecticide: 200 ml of Bulldock 250 EC = **600 Ksh.**
- 7) Insecticide: 200 ml of Duduthrin = **200 Ksh.**
- 8) Ploughing = **1,500 Ksh.**
- 9) Nursery Establishment & Management = **800 Ksh.**
- 10) Transplanting = **1,500Ksh.**
- 11) Weeding = **3,000 Ksh.**
- 12) Top-dressing = **3,000 Ksh.**
- 13) Spraying = **1,200 Ksh.**
- 14) Harvesting = **1,200 Ksh.**
- 15) Transportation = **3,750 Ksh.**
- 16) Other Costs = **3,700 Ksh.**

11. Types of Records Supportive to CP&IAD Sheet:

11.1 Input Cost & Other Cost

Crop: Tomato

Name: John L. Mwanza

Year: 2015

Date	Type of Input	Quantity	Cost (Ksh)
1 Oct	Tomato seeds (Rio Grande)	75mg	500 Ksh
3 Oct	Fertilizer (DAP)	50kg	2,000 Ksh
12 Nov	Pesticide (Duduthrin)	200ml	200 Ksh
...
5 Dec	Crates	20	120 Ksh
Grand Total			10,700 Ksh

11. Types of Records Supportive to CP&IAD Sheet: 11.1 Cost of Farm Inputs

Crop: Tomato

Name: John L. Mwanza

Year: 2015

Date	Type of Input	Quantity	Cost (Ksh)
1 Oct	Tomato seeds (Rio Grande)	75mg	500 Ksh
3 Oct	Fertilizer (DAP)	50kg	2,000 Ksh
12 Nov	Pesticide (Duduthrin)	200ml	200 Ksh
...
5 Dec	Crates	20	120 Ksh
Grand Total			10,700 Ksh

11. Types of Records Supportive to CP&IAD Sheet

- To calculate the Total Cost of Production (column I.), there are three (3) types of records that assist farmers. Farmers must strive to keep these records.

11.1 Cost of Farm Inputs Record

- This record sheet captures all purchases of farm inputs.
- The farmer needs to provide the following information for each purchase: **1. Date of Purchase; 2. Types of Input; 3. Quantity (kg/gm/ml); and 4. Cost (Ksh.).**

11.2 Labour Cost

Crop: Tomato

Name: John L. Mwanza

Year: 2015

Date	Farm Activity	Cost (Ksh)
3 Oct	Land Preparation	250 Ksh
6 Oct	Nursery Establishment	1,100 Ksh.
23 Oct	Transplanting	600 Ksh.
27 Oct	Weeding	300 Ksh.
...
19 Oct	Harvesting	1,300 Ksh
20 Oct	Transportation	350 Ksh.
Grand Total		5,700 Ksh.

11.2 Labour Cost

Crop: Tomato

Name: John L. Mwanza

Year: 2015

Date	Farm Activity	Cost (Ksh)
3 Oct	Land Preparation	250 Ksh
6 Oct	Nursery Establishment	1,100 Ksh.
23 Oct	Transplanting	600 Ksh.
27 Oct	Weeding	300 Ksh.
...
19 Oct	Harvesting	1,300 Ksh
20 Oct	Transportation	350 Ksh.
Grand Total		5,700 Ksh.

11. Types of Records Supportive to CP&IAD Sheet

11.2 Cost of Labour Record

- This record sheet captures all costs of farm activities.
- The farmer needs to provide the following information for each activity: **1. Date**; **2. Farm Activity**; and **3. Cost (Ksh.)**.

11.3 Production & Sales Record

Crop: Tomato

Name: John L. Mwanza

Year: 2015

Date	Total Production (kg) (Yield)	Net Production (kg) (sold & consumed)	Price per kg (Ksh/kg)	Total Income (Ksh)
1 Dec	80kg	75kg	35Ksh	2,625Ksh
5 Dec	323kg	309kg	35Ksh	10,815Ksh
8 Dec	168kg	160kg	37Ksh	5,920Ksh
10 Dec	13kg	12kg	38Ksh	456Ksh
...
27 Dec	28kg	25kg	45Ksh	456Ksh
Grand Total	868kg	772kg		32,424Ksh

11.3 Production & Sales Record

Crop: Tomato

Name: John L. Mwanza

Year: 2015

Date	Total Production (kg) (Yield)	Net Production (kg) (sold & consumed)	Price per kg (Ksh/kg)	Total Income (Ksh)
1 Dec	80kg	75kg	35Ksh	2,625Ksh
5 Dec	323kg	309kg	35Ksh	10,815Ksh
8 Dec	168kg	160kg	37Ksh	5,920Ksh
10 Dec	13kg	12kg	38Ksh	456Ksh
...
27 Dec	28kg	25kg	45Ksh	456Ksh
Grand Total	868kg	772kg		32,424Ksh

11. Types of Records Supportive to CP&IAD Sheet

11.3 Production & Sales Record

- This record sheet captures date and quantity harvested, quantity sold and consumed, and amount earned.
- The farmer needs to provide the following information for each harvesting: **1. Date; 2. Quantity Harvested/ Total Production (kg); 3. Quantity Sold and consumed/ Net production (kg); 4. Price per kg (Ksh.); and Total Income (Ksh)** (calculated by multiplying Net production with Price per kg).