

Planning and Record Book

Mango Production (Conventional)

Name of Producer:

Name of Plot Recorded in this Book:

Use one Book per Plot!



Ministry of
Food & Agriculture



Ghanaian-German
Development Co-operation



Market-Oriented
Agriculture Programme

General Information about the Mango Farm

Name of owner of the farm:		Certification type:	
Name of farm manager/instructor:		Certification number:	
Period of record keeping: from - to		First certification date:	
Association name:		Last certification renewal date:	
Region:			
District:			
Village or town:			
Location of mango farm:			
Total size of planted mango farm (acres):			
Available land for further future mango production (acres):			
Total number of different plots:			
Name of plot recorded in this book:			
Amount of dues you have paid to your association this year (GH¢):			
Amount of dues you have paid to your association last year (GH¢):			

Record-Keeping: Farm Activities, Costs of Inputs and Labour

Farm Activity		Date(s)	Costs of Inputs				Family and Hired Labour					
No.	Description and Operator		Input Active Ingredient and Pest/Disease Targeted	Unit	Quantity	Price per Unit (GH¢)	Amount (GH¢)		Unit	Quantity	Value per Unit (GH¢)	Amount (GH¢)
								Hired Labour or Services				
								Family Labour	Person-days			
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						Total Inputs (GH¢):		Hired Labour or Services	Total (PD):		Total (GH¢):	
								Family Labour	Total (PD):		Total (GH¢):	

1 PD (Person-day)
= 5 hours of work

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1 PD (Person-day)
= 5 hours of work

Gross Margin Calculation of Plot representing acre(s)

Planned Gross Margin (Data from Planning)

PLANNED GROSS REVENUE

A. Planned Gross Revenue (GH¢) = (from page 5)	
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PLANNED VARIABLE COSTS

B. Total Planned Costs of Inputs (GH¢) =	
C. Total Planned Costs of Hired Labour or Services (GH¢) =	
D. Total Planned Value of Family Labour (GH¢) =	
E. Total Planned Variable Costs (GH¢) = B + C + D =	

PLANNED GROSS MARGIN

F. Planned Gross Margin (GH¢) = A – E =	
G. Planned Gross Margin per Acre (GH¢) = F / size of plot =	
H. Planned Gross Margin per Own Working Day (GH¢) = (A – B – C) / PD Family Labour	

Actual Gross Margin (Data from Record-Keeping)

ACTUAL GROSS REVENUE

A. Actual Gross Revenue (GH¢) = (from page 5)	
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ACTUAL VARIABLE COSTS

B. Total Actual Costs of Inputs (GH¢) =	
C. Total Actual Costs of Hired Labour or Services (GH¢) =	
D. Total Actual Value of Family Labour (GH¢) =	
E. Total Actual Variable Costs (GH¢) = B + C + D =	

ACTUAL GROSS MARGIN

F. Actual Gross Margin (GH¢) = A – E =	
G. Actual Gross Margin per Acre (GH¢) = F / size of plot =	
H. Actual Gross Margin per Own Working Day (GH¢) = (A – B – C) / PD Family Labour	

Fixed Costs Calculation

PLANNED FIXED COSTS

A. Total Depreciations for the Plot (GH¢) = (from page 28)	
B. Total Planned Certification Costs for the Plot (GH¢) =	
C. Total Planned Consulting Fees for the Plot (GH¢) =	
D. Lease of Land for the Plot (GH¢) =	
E. Interest Rates on Loan for the Plot (GH¢) =	
F. Other Fixed Cost for the Plot (GH¢) =	
G. Other Fixed Cost for the Plot (GH¢) =	
H. Total Planned Fixed Costs for the plot (GH¢) = A+B+C+D+E+F+G =	

ACTUAL FIXED COSTS

A. Total Depreciations for the Plot (GH¢) = (from page 28)	
B. Total Actual Certification Costs for the Plot (GH¢) =	
C. Total Actual Consulting Fees for the Plot (GH¢) =	
D. Lease of Land for the Plot (GH¢) =	
E. Interest Rates on Loan for the Plot (GH¢) =	
F. Other Fixed Cost for the Plot (GH¢) =	
G. Other Fixed Cost for the Plot (GH¢) =	
H. Total Planned Fixed Costs for the plot (GH¢) = A+B+C+D+E+F+G =	

Net Income Calculation of Plot representing acre(s)

Planned Net Income (Data from Planning)

PLANNED GROSS REVENUE

A. Planned Gross Revenue (GH¢) = (from page 5)	
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TOTAL PLANNED COSTS

B. Total Planned Variable Costs (GH¢) = (from page 27)	
C. Total Planned Fixed Costs for the Plot (GH¢) = (from page 29)	
D. Total Planned Costs (GH¢) = B + C =	

PLANNED NET INCOME

E. Planned Net Income (GH¢) = A - D =	
F. Planned Net Income per Acre (GH¢) = E / Size of Plot =	

Actual Net Income (Data from Record-Keeping)

ACTUAL GROSS REVENUE

A. Actual Gross Revenue (GH¢) = (from page 5)	
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TOTAL ACTUAL COSTS

B. Total Actual Variable Costs (GH¢) = (from page 27)	
C. Total Actual Fixed Costs for the Plot (GH¢) = (from page 29)	
D. Total Actual Costs (GH¢) = B + C =	

ACTUAL NET INCOME

E. Actual Net Income (GH¢) = A - D =	
F. Actual Net Income per Acre (GH¢) = E / Size of Plot =	

Auto-Evaluation and Lessons Learnt

Have you achieved your expected gross margin? If not, why?	
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Production:

Have you achieved your expected yield? If no, why?	
With which farm activities were you late? Why? How to improve on it?	
What pests or diseases have affected your farm? What did you do against it? How did it work? How to improve on it?	
What other problems have affected your production? What did you do? How to improve on it?	
How could you reduce the costs of inputs?	

Training:

Which training or technical support do you need?	
Which training do your workers need?	

Marketing:

To whom did you sell?	For what market/what use? (e.g. export, fresh cuts)	Where did you sell? (Farm gate, factory gate...)	What kind of contract did you have with the buyer?

How would you qualify the relation with the buyer? (From very good to very bad)	
How did you agree on the sales price? Did you stick to it? Did the buyer stick to it?	
How could you get a higher price for your produce?	
If there have been any problems with the buyer, what were they? How to improve on them?	

☞ Checklist: Did you ...?

- Do stumping
- Do fire belts
- Scout regularly
- Scout with pheromone traps
- Do manure or compost application
- Do mineral fertilizer application
- Do weed control
- Do pruning
- Spray insecticide
- Spray fungicide
- Spray against fruit abortion
- Do flower induction
- Collect the dropped fruits
- Harvest properly
- Do group purchasing of inputs
- Do group selling
- Respect the contract with the buyer

☞ What needs to be improved next year?

- Do stumping
- Do fire belts
- Scout regularly
- Scout with pheromone traps
- Do manure or compost application
- Do mineral fertilizer application
- Do weed control
- Do pruning
- Spray insecticide
- Spray fungicide
- Spray against fruit abortion
- Do flower induction
- Collect the dropped fruits
- Harvest properly
- Do group purchasing of inputs
- Do group selling
- Respect the contract with the buyer

What are the 5 key points to improve on?

1.

2.

3.

4.

5.

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Photos of Mango Pests and Diseases

(Provided mainly by former USAID / TIPSEE project if not mentioned separately. Get a copy of TIPSEE's training guide: Mango Pests and Diseases!)

Mango Mealy Bugs



A cluster of mealy bugs on the under side of leaves



Sooty mould on mango leaves



Mango fruits with mealy bugs



Mealy bug from www.thelittlegreenapple.com

Mango Scales



Scale attack on under side of leaves



Fruits infected with scale



A cluster of scale eggs.

Mango Stone Weevil



Infested fruit with weevil



Mango Stone Weevil from www.bitterrootrestoration.com

Mango Fruit Flies



A punctured fruit oozing gum.



Extensive fruit pulp damage by fruit fly maggots.

Anthracnose



Photos by Scot Nelson, Wayne Nishijima, University of Hawaii

Edition July 2012

**Market-Oriented Agriculture Programme
Component 3, implemented by AFC Consultants International
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**Design by AFC Consultants International
Cover pictures by Matthias Plewa**