



TENTATIVE CUSTOMIZED TRAINING PROGRAM (HANDS-ON)

Introduction

I developed this program due to the large number of inquiries that I receive from new and upcoming fish farmers who want to acquire some practical knowledge that they can apply to their fish farm investments. Though I have been able to visit some of them on their farms, others still prefer to have prior experience before starting off. In brief, this is not a formal certificate training but a short form of apprenticeship. The approach is as flexible as your requirements. To achieve this, I am assisted by technical experts with years of experience in fish farming promotion.

Where are we

Our activities are based in Western Kenya, between Kisumu and Busia, about 400km from Nairobi (8 hours drive by bus). My colleagues offer technical advice and extension to fish farmers within this region through various government and private programs

Our Program

The aim of this program is to help you understand fish farming in a way that will enable you to achieve your planned activities. The main objective is to give you a forum where learn new ideas and apply them at the same time – and you are free to ask as many questions as possible. Our sessions are enriched with video illustrations and discussions (English or Swahili only) for ease of understanding. For fully in-depth and productive discussions, we only take a maximum of 4 people per session.

At the end of the program, you will be provided with some reading materials and DVDs to help you back at home. We try as much as possible to avoid using the classroom approach where you are given information that is too academic and less applicable to your situation. *Learning does not have to be boring!!*

On the way forward, we can agree to make follow-ups by visiting your farm and assisting you to set it up, or you can do it on your own and only seek for advice.

At the moment, our discussions with you will be held at 2 locations which have been carefully selected to give you maximum exposure.

Program Duration

Currently, we can have a one week program and a two week program. For those who are short on time, a one week program will be ideal – ***but it is very intensive (because we have to cover all the topics anyway!)***. Attached below is a program for the 2-week period. The first week is designed to be quite intensive to take advantage of the fresh mind.

Requirements

It is advisable to carry a camera, some casual fieldwork clothes, and water resistant shoes. Payments for training costs can be paid upon arrival. We handle the rest of your stay after this.



WEEK 1 (VENUE 1)		
	MORNING	AFTERNOON
WEEKEND		Arrival and settling down
Monday	<ul style="list-style-type: none"> Understanding your planned fish farming activities Discussion about your expectations Setting targets to be achieved during apprenticeship period Basic fish requirements for cultured fish Factors to consider before getting into fish farming Site selection and Farm design (Discussions) 	<ul style="list-style-type: none"> Visit to a small fish farm for general overview discussions and site selection discussions VIDEO TO WATCH IN HOTEL ROOM (<i>Pond construction</i>)
Tuesday	<ul style="list-style-type: none"> Construction of (earthen/lined) pond Water diversion Hypothetical Exercise Catfish propagation theory and discussions 	<p>PRACTICAL DEMONSTRATION/EXERCISE:</p> <ul style="list-style-type: none"> Broodstock harvesting, handling, selection Extraction of pituitary and injection of female catfish Preparation of saline solution VIDEO TO WATCH IN HOTEL ROOM (<i>Catfish propagation</i>)
Wednesday	<p>FIELD DEMONSTRATIONS ON:</p> <ul style="list-style-type: none"> Selecting a good site Pegging an earthen fish pond (demo) Water diversion demo Fitting of stand-pipe 	<p>PRACTICAL DEMONSTRATION/EXERCISE:</p> <ul style="list-style-type: none"> Stripping female catfish, removal of testes from male catfish, fertilization Preparation of substrate Incubation Practical Exercise continued Post-exercise discussions
Thursday	<p>FISH FARM MANAGEMENT</p> <ul style="list-style-type: none"> Daily/weekly checklist Feeding – Methods, types of feeds, timing, quantity Weed/predator/disease control Pond repairs 	<p>PRACTICAL DEMONSTRATION/EXERCISE:</p> <ul style="list-style-type: none"> Fish sampling demonstration Removing pond scum Feeding fish Observations on the incubated eggs for any developments VIDEO TO WATCH IN HOTEL ROOM (<i>Fish farm management</i>)
Friday	<p>WATER QUALITY MANAGEMENT:</p> <ul style="list-style-type: none"> Pond fertilization How to maintain good water quality (What to look out for) 	<p>PRACTICAL DEMONSTRATION/EXERCISE:</p> <ul style="list-style-type: none"> How to apply fertilizer/liming How to carry out basic water quality measurements Prepare Nursery pond in readiness for stocking hatched fry



Saturday	<p>FISH FEED FORMULATION</p> <ul style="list-style-type: none"> • Fish nutrient requirements • Selection of feed ingredients • Ingredient preparation • Fish formulation methods 	<p>FISH FEED FORMULATION</p> <ul style="list-style-type: none"> • Practical demonstrations/exercises on the farm • Visit a small group that produces locally made fish feeds • VIDEO TO WATCH IN HOTEL ROOM (<i>Fish feed formulation</i>)
Sunday	<p>RESTING DAY (Re-scheduling possible on request)</p>	<p>TRAVEL TO VENUE 2</p>

WEEK 2 (VENUE 2)		
	MORNING	AFTERNOON
Monday	<ul style="list-style-type: none"> • Hatchery design and management • Broodstock management 	<p>PRACTICAL DEMONSTRATION/EXERCISE:</p> <ul style="list-style-type: none"> • Overview of a modern hatchery – tools and equipment needed
Tuesday	<p>Tilapia propagation/Nursing of fingerlings theory and discussions</p>	<ul style="list-style-type: none"> • Counting, handling/packaging, transportation and stocking of fingerlings
Wednesday	<ul style="list-style-type: none"> • Aquaculture systems: Tanks, raceways, cages, aquaponics, happa nets • WHICH WAY: Intensive vs Semi-intensive aquaculture 	<ul style="list-style-type: none"> • Common challenges experienced by fish farmers and possible solutions e.g uncontrolled breeding of tilapia
Thursday	<ul style="list-style-type: none"> • Types of records and record keeping • Value addition and marketing of farmed fish 	<ul style="list-style-type: none"> • Feed handling and storage on the farm • Common mistakes in fish farming
Friday	<ul style="list-style-type: none"> • Developing an enterprise budget/business plan development 	<ul style="list-style-type: none"> • Travel back to VENUE 1 • Harvesting hatched fry and transferring them to nursery pond
Saturday	<p>TRAINING SUMMARY:</p> <ul style="list-style-type: none"> • Discussing your proposed farm layout • Setting up you own fish farm – sketching a layout for your proposed fish farm back at home • General discussions on arising issues 	<p>FIELD DAY:</p> <ul style="list-style-type: none"> • Visit to a small group hatchery • Visit to an personal tilapia/catfish hatchery • Way forward • On-site discussions with group members • SITE SEEING
Sunday	<p>TRAVEL BACK HOME</p>	

NOTE:

- i. You are advised to carry a laptop (if you can) to help with discussions and storage of reading materials
- ii. Discussions are aimed at addressing what is relevant to the clients' planned farm activities
- iii. Field visits involve going to different farms to learn from their achievements and challenges
- iv. Practical exercises require full participant ion from the client/student
- v. Depending on your preference, the program can be adjusted to take a shorter period – BUT COVER ALL



**COSTING BREAKDOWN
(2 WEEKS)**

Item	Description	COSTS (US\$)		
		RATE 1	RATE 2	RATE 3
Training facilitation (professional fees)	Allowances for trainers, field venues, demo assistants (casual labour)	150	150	150
Transport logistics	Visits to selected sites and between venues	100	100	100
Training materials and Samples	Purchase of demo broodstock, feed ingredients, fertilizers, training aids, etc	80	80	80
Accommodation*	Single room including meals	320	370	--
	Double room	--	--	620
TOTAL		650	700	950

Lunch (snack), will mostly be taken out in the field.

NOTE:

WEEK 1: FIRST VENUE

RATE 1: Accommodation in single (simple) room with a shared bathroom/lavatory adjacent to it (outside the room)

RATE 2: Accommodation in single self-contained room (spacious bed with TV)

RATE 3: Accommodation in a stand-alone self-contained cubicle with flat screen TV, study area

WEEK 2: SECOND VENUE

Accommodation will be offered in a single self-contained room overlooking fish ponds. Most activities during the week will be based on this farm. Our main aim is to make you get as much exposure as possible