

FarmlnABox

Single 10KI system with multiage stocking of 250 male fish per month first harvest at 6months

Fish Growth over 180 days																									
Day	0	30	60	90	120	150	180																		
Weight in grams after every 30 days	5	56	107	158	209	260	311	Production Parameter																	
							Harvest	1,70	Expected Average Weight gain Per Day over the production Cycle per fish in grams																
Stocking and Production Cycle																									
	Initial Stocking		Month 1		Month 2		Month 3		Month 4		Month 5		Month 6		Month 6 onwards										
Number of fish stocked per month	Start Weight (grams)		Average weight in grams	Total accumulated mass kg	Average weight in grams	Total accumulated mass kg	Average weight in grams	Total accumulated mass kg	Average weight in grams	Total accumulated mass kg	Average weight in grams	Total accumulated mass kg	Average weight in grams	Total accumulated mass kg	Average weight in grams	Total accumulated mass kg									
	Individual fish	Total accumulated mass kg																							
250	5,0	1,3																							
250			56,0	14,0																					
250					107,0	26,8																			
250							158,0	39,5																	
250									209,0	52,3															
1500											260,0	65,0													
Total mass of fish																14,0	26,8	39,5	52,3	65,0	77,8	311,0	77,8	311,0	77,8

Information

Total number of fish in System at Month 6	1 500	Fish	275kg	Holding mass of all fish in system
Total Bio Mass in System at Month 6	275	Kgs Fish in System	77.8kg	Weight of the 250 fish harvested after 6 months
Water in System	10	m3 water		
Stocking Denisty	28	Kgs Fish/m3 Water		
First harvest 6months monthly thereafter = 250 fish per month at 311g each	78	Kgs		
Year 1 # Harvests	6	78	467	Kgs
Year 2+ # Harvests	12	78	933	Kgs
Sales in Year 1	467 x R45/kg	R	25 515,00	
Sales in Year 2 +	933 x R45/kg	R	41 985,00	

Costs for 6 month production cycle

Fingerlings Cost	R	4 500,00	R3 per fingerling
Food costs	R	4 800,00	20 days x 4kg of feed per day = 80kg @ R10/kg
Electricity costs	R	1 500,00	Equivalent to 2 light bulbs 24 hours per day - 200 watts
Water	R	5 400,00	200 litres per week
FIAB system	R	30 000,00	
Total invested	R	46 200,00	

Other Considerations

Cost of green house manufactured by DFA	R	8 000,00	6m x 6m gum pole and plastic structure
Water Heating			Swimming pool solar panels or a heat pump
Staff			Either farmer/owner or part time worker i.e gardener

Notes

David Fincham Aquaculture will purchase fish produced at ruling marketing rate - currently R45/kg (Sep 2016)