

FarInABox

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

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		

	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) Individual fish	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		
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					
250												260,0	65,0			
1500														311,0	77,8	
Total mass of fish					14,0		26,8		39,5		52,3		65,0		77,8	275,3

Information			
Total number of fish in System at Month 6		1 500	Fish
Total Bio Mass in System at Month 6		275	Kgs Fish in System
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 R50/kg	R	23 250,00
Sales in Year 2 +	933 x R50/kg	R	46 650,00
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
Total Annual Cost	R	16 200,00	
One tank system excl VAT	R	30 000,00	
Other Considerations			
Cost of green house	(we can send you a quote)		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 market rate - currently R50/kg (March 2018)			

Please note that you are dealing with live animals, human error and uncontrollable climatic conditions. Therefore these calculations may vary slightly in a real situation, and are detailed to give the client and farmer an indication of costs and timings. Of course, the labour rate is variable, as labour may be used in other areas in the farm.

275kg Holding mass of all fish in system
77.8kg Weight of the 250 fish harvested after 6 months