P. Monodon and L.Vannamei Farming System (SPF)

Proposed for the Existing Shrimp Farms in Sri Lanka

Type of Ponds		Earthern		Earthern		HDPE Lined		HDPE Lined	
Capital Invetment Requirements		*Monodon 25*		*Vannamei 50*		*Vannamei 100*		*Vannamei 200*	
			4000		4000		4000		4000
Items	**Unit Price (Rs)**	**No of Units**		**No of Units**		**No of Units**		**No of Units**	
HDPE lining (Sq M)	1,000.00	0	-	0	-	7000	7,000,000.00	8000	8,000,000.00
Bio Security Measures	300,000.00	1	300,000.00	1	300,000.00	2	600,000.00	3	900,000.00
Water Pump 6"	225,000.00	1	225,000.00	1	225,000.00	2	450,000.00	2	450,000.00
Water Pump 3" (Tube Well)	80,000.00	1	80,000.00	2	160,000.00	3	240,000.00	4	320,000.00
Root Blowers 5 Hp	300,000.00	0	-	2	600,000.00	3	900,000.00	6	1,800,000.00
Paddle Wheel Areator (2 HP)	140,000.00	4	560,000.00	6	840,000.00	10	1,400,000.00	16	2,240,000.00
Power Generator 60 Kva	800,000.00	1	800,000.00	-	-		-		-
Power Generator 100 Kva	1,000,000.00		-	1	1,000,000.00	2	2,000,000.00	-	-
Power Generator 150 Kva	1,500,000.00		0		0		0	1	1,500,000.00
Electricity Supply 100 Kva	3,000,000.00	0.6	1,800,000.00	1	3,000,000.00	1.5	4,500,000.00	2	6,000,000.00
Misc. Expenses	100,000.00	3	300,000.00	5	500,000.00	10	1,000,000.00	15	1,500,000.00
Total Capital Investments (Rs)			**4,065,000.00**		**6,625,000.00**		**18,090,000.00**		**22,710,000.00**

P. Monodon and L.Vannamei Farming System (SPF)

Proposed for the Existing Shrimp Farms in Sri Lanka

Cost Benefit Analysis

Type of Ponds			Earthern	Earthern	HDPE Lined	HDPE Lined
Species			*Monodon 25*	*Vannamei 50*	*Vannamei 100*	*Vannamei 200*
Pond Capacity		Sq M	4000	4000	4000	4000
Revenue			2,400,000	6,160,000	9,120,000	13,600,000
	Monodon	Vannamei				
Cost of goods	Unit Price	Unit Price-Rs				
PL cost	1.25	1.25	125,000	250,000	500,000	1,000,000
Feed	280	260	1,008,000	2,038,400	3,744,000	6,240,000
Aqua Health Care Products (Cost/Kg	70	90	168,000	504,000	864,000	1,440,000
			1,301,000	**2,792,400**	**5,108,000**	**8,680,000**
Gross Profit			**1,099,000**	**3,367,600**	**4,012,000**	**4,920,000**
Gross profit Margin			46%	55%	44%	36%
Other direct costs	Monodon	Vannamei				
	Cost/Kg (Rs)	Cost/Kg (Rs)				
Electricity and Fuel	70.00	90.00	168,000.00	504,000.00	864,000.00	1,440,000.00
Machinery & equipent Maintenance	15.00	10.00	36,000.00	56,000.00	96,000.00	160,000.00
Building/Ponds/Tanks Maintenance	10.00	5.00	24,000.00	28,000.00	48,000.00	80,000.00
Salary & Wages	100.00	50.00	240,000.00	280,000.00	480,000.00	800,000.00
Others	75.00	40.00	180,000.00	224,000.00	384,000.00	640,000.00
Total Over Head cost (Rs)	195.00	195.00	648,000	1,092,000	1,872,000	3,120,000
Total Production Cost (Rs)			1,949,000	3,884,400	6,980,000	11,800,000
Production Cost per Kg of Shrimp (Rs)			812	694	727	738
Profit per Kg of Shrimp (Rs)			188	406	223	113
Net profit befor tax (Rs)			451,000	2,275,600	2,140,000	1,800,000
Net Profit Margins for One Crop			19%	37%	23%	13%

P. Monodon and L.Vannamei Farming System (SPF)

Proposed for the Existing Shrimp Farms in Sri Lanka

Type of Ponds	Earthern	Earthern	HDPE Lined	HDPE Lined
Investment Analysis	*Monodon 25*	*Vannamei 50*	*Vannamei 100*	*Vannamei 200*
	4000	4000	4000	4000
Total Capital Investments (Rs)	4,065,000.00	6,625,000.00	18,090,000.00	22,710,000.00
Total Working Capital Requrement for one Crop (Rs)	1,949,000.00	3,884,400.00	6,980,000.00	11,800,000.00
Total Invetments (Rs)	**6,014,000.00**	**10,509,400.00**	**25,070,000.00**	**34,510,000.00**
No of Crops Per Year	2.00	2.00	2.50	2.50
Total Profit for One Year (Rs)	**902,000.00**	**4,551,200.00**	**5,350,000.00**	**4,500,000.00**
Return On Investment %	15.00	43.31	21.34	13.04
Pay Back Period (Years)	6.67	2.31	4.69	7.67

P. Monodon and L.Vannamei Farming System (SPF)

Proposed for the Existing Shrimp Farms in Sri Lanka

Type of Ponds	Earthern	Earthern	HDPE Lined	HDPE Lined
Species	*Monodon 25*	*Vannamei 50*	*Vannamei 100*	*Vannamei 200*
Pond Capacity (Sq M)	4000	4000	4000	4000
Total PL (Shrimp Fry) for One Crop	100000	200000	400000	800000
Harvest Quantity for One Crop (Kg)	2400	5600	9600	16000
Production per Hec for One Crop (Mt)	6.00	14.00	24.00	40.00
Average Size (grams)	30	35	30	25
Selling Price (Rs)	1,000.00	1,100.00	950.00	850.00
Revenue for One Crop (Rs)	2,400,000.00	6,160,000.00	9,120,000.00	13,600,000.00
Total Production Cost (Rs)	1,949,000.00	3,884,400.00	6,980,000.00	11,800,000.00
Net profit befor tax for One Crop (Rs)	451,000.00	2,275,600.00	2,140,000.00	1,800,000.00
Production Cost per Kg of Shrimp (Rs)	812.08	693.64	727.08	737.50
Profit per Kg of Shrimp (Rs)	187.92	406.36	222.92	112.50
Net Profit Margins for One Crop	**19%**	**37%**	**23%**	**13%**
Total Capital Investments	4,065,000.00	6,625,000.00	18,090,000.00	22,710,000.00
Total Working Capital Requrement for one Crop	1,949,000.00	3,884,400.00	6,980,000.00	11,800,000.00
Total Invetments	**6,014,000.00**	**10,509,400.00**	**25,070,000.00**	**34,510,000.00**
No of Crops Per Year	2.00	2.00	2.50	2.50
Total Profit for One Year (Rs)	902,000.00	4,551,200.00	5,350,000.00	4,500,000.00
Return On Investment %	15.00	43.31	21.34	13.04
Pay Back Period (Years)	6.67	2.31	4.69	7.67

Community Based Shrimp Aquaculture System

L. vannamei Shrimp farming

Capital Invetment Requirements		*Tank*		*Tank*		*Tank*		*Pond*	
			300 MT		500 MT		1000 MT		3000 Sq M
Items	**Unit Price (Rs)**	**No of Units**		**No of Units**		**No of Units**		**No of Units**	
HDPE Tank (Sq M)	1,000.00	300	300,000.00	500	500,000.00	1000	1,000,000.00	3000	3,000,000.00
Water Pump 2"	30,000.00	1	30,000.00		-		-		-
Water Pump 3"	40,000.00		-	1	40,000.00	2	80,000.00	3	120,000.00
Root Blowers 5 Hp	300,000.00	2	600,000.00	2	600,000.00	2	600,000.00	4	1,200,000.00
Paddle Wheel Areator (1 HP)	100,000.00		-	2	200,000.00	4	400,000.00	2	200,000.00
Paddle Wheel Areator (2 HP)	140,000.00		-		-		-	4	560,000.00
Power Generator 10 Kva	300,000.00	1	300,000.00	1	300,000.00		-		-
Power Generator 15 Kva	400,000.00		-		-	1	400,000.00		-
Power Generator 30 Kva	600,000.00		0		0		0	1	600,000.00
Aero Tubes (m)	1,000.00	125	125,000.00	300	300,000.00	500	500,000.00	1000	1,000,000.00
Misc. Expenses	25,000.00	3	75,000.00	5	125,000.00	10	250,000.00	40	1,000,000.00
Total Capital Investments			**1,430,000.00**		**2,065,000.00**		**3,230,000.00**		**7,680,000.00**

Community Based Shrimp Aquaculture System

Investment Analysis

	Tank	*Tank*	*Tank*	*Pond*
	300 MT	500 MT	1000 MT	3000 Sq M
Total Capital Investments	1,430,000.00	2,065,000.00	3,230,000.00	7,680,000.00
Total Working Capital Requrement for one Crop	472,440.00	787,400.00	1,574,800.00	4,723,800.00
Total Invetments	**1,902,440.00**	**2,852,400.00**	**4,804,800.00**	**12,403,800.00**
No of Crops Per Year	4.00	4.00	4.00	2.50
Total Profit for One Year	**414,240.00**	**690,400.00**	**1,380,800.00**	**6,190,500.00**
Return On Investment %	21.77	24.20	28.74	49.91
Pay Back Period	4.59	4.13	3.48	2.00