

AQUA PARK

ECONOMIC IMPACT OF MARICULTURE PARK

AquaPark – Norad funded project



OUTLINE

- I. Economic implications of MPs**
 - A. For the different types of locators**
 - B. For the Local Government Units**
 - C. For BFAR in terms technical and infrastructure support.**

- II. Impacts of MPs on the economy of the municipality**
 - A. Job generation**
 - B. Establishment of infrastructure**
 - C. Trading/Marketing**

- III. Cost comparisons**
 - A. Local and regional market analysis comparisons.**
 - B. Differences in regional input cost compari**
 - C. Cost/benefit and breakeven analysis for support infrastructure/technical services**



WHAT DO WE PLAN TO DO?

IMPLEMENTATION STRATEGY FOR THE AQUAPARK PROJECT

- A. Data collection to attain the objecti
 - Environmental survey
 - Economics survey
 - Socio-economic survey
 - Site selection/GIS
- B. Formulate guidelines in establishing MPC.
 - Marketing strategies
 - Recommendations



WHAT DO WE PLAN TO DO?

STRATEGY OF IMPLEMENTATION (TEAM APPROACH)

- ❑ Economic Group
- ❑ Socio-economic Group

Each group shall individually pursue the defined objectives assigned for each as described in the Terms of Reference (TOR).

In this regard, the Economic Group shall pursue the following objectives:

Overall Objectives

- ❑ To investigate the economics of mariculture parks for:
 - o - the different types of locators
 - o - the local Government/BFAR MP development, technical and infrastructure support.



WHAT DO WE PLAN TO DO?

KEY COMPONENTS OF THIS INVESTIGATION

ECONOMIC ASSESSMENT OF THE FOLLOWING:

1. Different aquacultural farming systems in the MPs;
2. LGU and BFAR support for setting up and providing support of the MP
3. Differences in regional input cost comparisons,
4. Cost/benefit and breakeven analysis for support infrastructure
5. Local and regional market analysis comparisons.



ECONOMIC IMPLICATIONS OF MPs

For the different types of locators

A. Marginalized group

1. Cooperatives

- Agricultural Cooperatives (Bien coop)- self-finance - 1 unit
- Agrarian Reform Beneficiaries (DARBCO)- self-finance 1 unit

2. Women organization(KABIAC)- DIDP funded project 1 unit

3. Out-of-school Youth (Caretaker's Assn)- BFAR funded unit

4. FARMC/Bantay Dagat -----(BFAR funded) unit

5. Fisherfolk Families and Organization/associations- 10 units
(BFAR/LGU financed)

5. Panabo Coastal Schools-Coastal Resource Management 2 units
(CRM)- DepEd/BFAR/LGU funded)

➤ Most of the activities of the Marginalized Group will be production of fish for sustenance and for sale to earn money



B. PRIVATE INVESTORS*

1. Small/Medium-scale businessmen (self finance) - - 90 units
2. Civic Organization – (group finance) - - - - - 8 units
3. Medical practitioners – (self-finance) - - - - - 30 units
4. ACES Polytechnic College – (self-finance) - - - - 8 units



Project Implementation (2006-2010)

Requirements and Procedures for investors to operate marine fish cages

- ❑ Letter of Intent
- ❑ Application to operate marine fish cage (form at BFAR and LGU)
- ❑ Evaluation of applications (TWG-BFAR/LGU)
- ❑ Approval of applications (Mayor and BFAR Regional Director) 1-3 days;
- ❑ Payment of Permit at LGU Panabo;
- ❑ Lease Agreement (LGU/BFAR/Investor)
- ❑ Investors meeting (project construction, feed and fingerlings supply arrangement, caretaker, etc);
- ❑ Construction (schedule, materials, labor, etc) – 3 days



LOCAL GOVERNMENT UNITS

1. Investment on infrastructure (e.g. roads, markets, etc,
2. Investment on services
3. Power supply, etc.

GOVERNMENT AGENCIES (BFAR, DAR, DENR, etc.)

1. Technical services
2. Legal services
3. Manpower development

PRIVATE SECTOR

1. Feed companies
2. Fish seed production
3. Laboratory services (fish disease lab, analytical lab, etc.)

*How can these infrastructures and services improve the life of the stakeholders? Are these investments economically viable?



IMPACTS OF MPS ON THE ECONOMY OF THE MUNICIPALITY

1. Job generation

- a. Operations in the MP
- b. Laboratory services of private sector
- c. Marketing of materials needed in the MPs
- d. sales personnel of feed and seed companies
- e. Food and restaurants
- f. Others

2. Establishment of infrastructure

- a. Power supply (investment from private sector and the LGUs)
- b. Construction of roads, bridges, jetties, etc.
- c. Feed mills for the manufacture of feeds
- d. Others

3. Trading/Marketing

- a. Creation of trading/marketing within the municipality
- b. Others



Table 1. Results of Financial Analysis in PCMP

Criteria	Less than 10 Cages	10-20 cages	More than 20 Cages
Average Fixed Expenses (% of sales)	24%	17%	17%
Average Variable Expenses (% of sales)	50%	26%	29%
Average Other Operating Expenses (% sales)	6%	14%	5%
Recovery from Depreciation	(4%)	(3%)	(2%)
Average Net Profit (% of sales)	24%	46%	51%
Average Net Profit Per cage (Php)	185,741	230,507	287,776
Average Return on Investment	72%	117%	112% 📢

Table 2. Results of Financial Analysis of Grouper Culture in PCM

Criteria	Less than 10 Cages
Average Fixed Expenses (% of sales)	16%
Average Variable Expenses (% of sales)	35%
Average Other Operating Expenses (% sales)	17%
Recovery from Depreciation	(5%)
Average Net Profit (% of sales)	37%
Average Net Profit Per cage	(Php)286,363
Average Return on Investment	47%



Table 5. Sensitivity of Specialty Products in SMP

Rate of Increase In Variable Cost Only	Decrease in Net Profit (%)	Resulting Net Profit Margin
Base Case for	MILKFISH FRY	18 %
10%	(5%)	13%
20%	(8%)	10%
Rate of Increase in All Costs		
Base Case for	MILKFISH FRY	18 %
10%	(10%)	8%
Rate of Increase in All Costs		
Base Case for	GROUPER	47 %
10%	(7%)	40%
20%	(2%)	38%
Rate of Increase in All Costs		
Base Case for	GROUPER	47 %
10%	(9%)	38%
20%	(15%)	32%
30%	(28%)	19%
Rate of Increase in All Costs		
Base Case for	TIGER LOBSTER	41 %
10%	(7%)	34%
20%	(11%)	30%
Rate of Increase in All Costs		
Base Case for	TIGER LOBSTER	47 %
10%	(15%)	32%
20%	(21%)	26%
30%	(27%)	20%





Cost comparisons

A. Local and regional market analysis comparisons

B. Differences in regional input cost comparison

C. Cost/benefit and breakeven analysis for support infrastructure/technical services



Guide Information for the Interview

PART IV. FINANCIAL REQUIREMENTS/CAPITALIZATION

A. Cost of doing business (Permits/Licenses, other cost)

1. Registration of Business Name with DTI fees
2. SEC Registration fees (if partnership or corporation)
3. DTI Registration fees (if sole proprietorship)
4. Barangay Clearance fees
5. Fire Safety Certificate fees
6. Sanitary/Health Certificate fees
7. Business Taxes paid for past 3 years (if applicable)
8. Assessor's Clearance fees
9. Building permit/Occupancy Permit fees
10. Zoning Clearance fees
11. Certificate of Approval of Business Permt
12. SSS Registration for Employees
13. BIR Registration
14. Printing of Official Receipts

B. Cost of Operation (Refer to Technical description and cost)

1. Labor cost – expressed in man/days
2. Materials – in units or kilos
3. Collecting gears – in units
4. Stock and stocking – in units/gross units
5. Feeding in kilos per volume
6. Fuel – in liters
7. Chilling – in units per volume
8. Packing – in units



A. Other related cost (taxes, etc.)

1. If gross income is greater than 1.5 Million in a year – VAT of 12% paid quarterly
2. If gross income is less than 1.5 Million in a year – 3 % percentage tax paid monthly

B. OTHERS

1. Inspection Costs
2. Marketing costs
3. Delivery costs
4. Financial Cost
 - a. If financed by equity, how much is expected rate of return?
 - b. If financed by debt, how much is the given rate of return?
What is the term of the debt?



THANK YOU

