

Rapid Market Appraisal for Expanding Tilapia Culture Areas in Davao del Sur (brackishwater areas)

AMC MINI PROJECT: TEAM TILAPIA

Acuna, Thaddeus R., UP Mindanao

Almazan, Cynthia V., DOST-PCAARRD

Castillo, Monica, DOST-PCAARRD

Romo, Glory Dee A., UP Mindanao

Rosetes, Mercy A., Foodlink Advocacy Co-operative (FAC)





OBJECTIVE

To conduct a market assessment of expanding areas for tilapia culture production in coastal and brackishwater areas in the province of Davao del Sur.





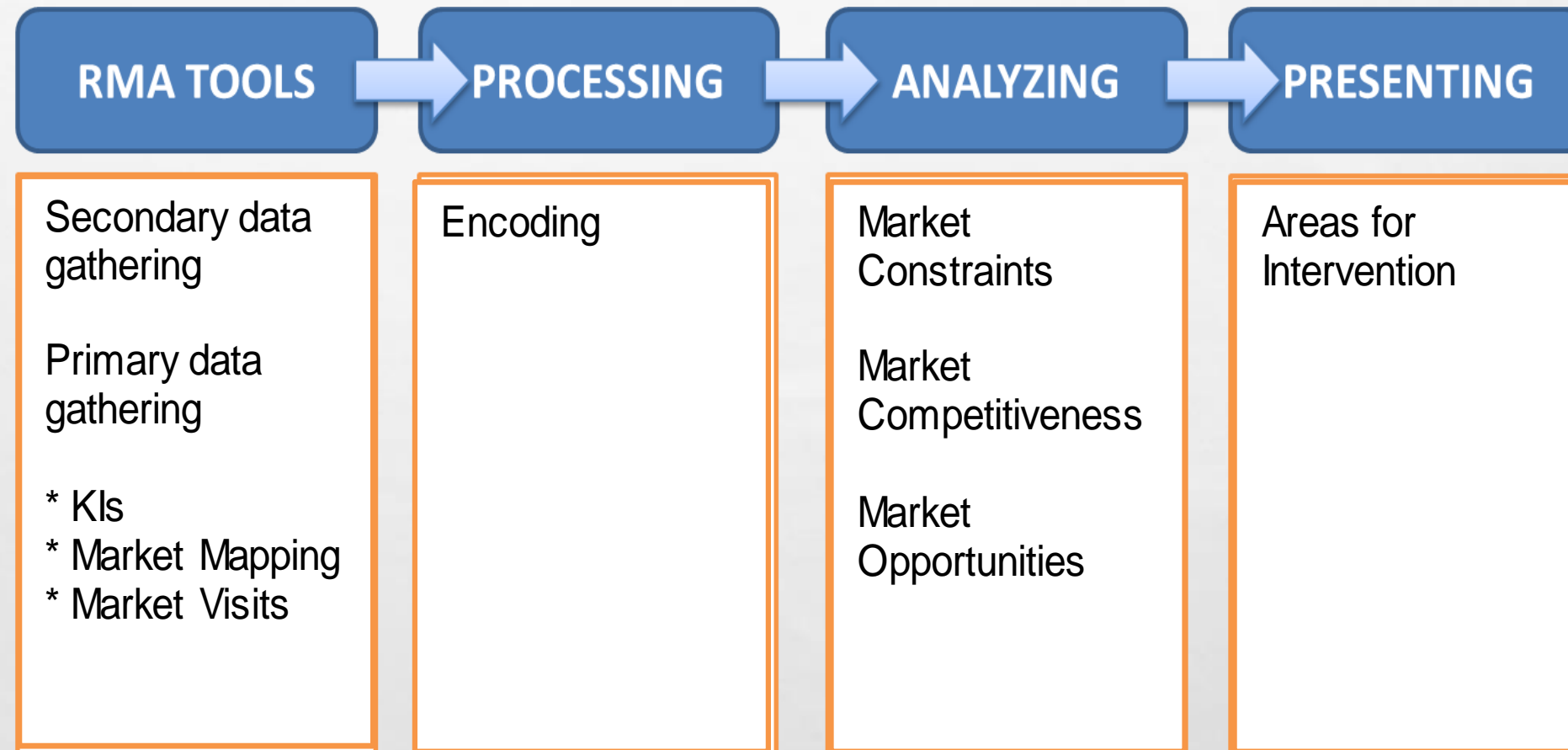
RESEARCH QUESTIONS

1. Does consumption level of Tilapia a key contributing factor for potential expansion of Tilapia production in Davao del Sur?
2. Is the market potential of competitiveness of Tilapia substantial enough to revitalize tilapia production in Davao del Sur?



METHODOLOGY

RAPID APPRAISAL APPROACH



A Step-by step approach of Rapid Market Appraisal (Adapted from the RMA proposal for underutilized fruits)



INDUSTRY SITUATION

- ✓ Tilapia is a major aquaculture product in the Philippines that is considered important to the country's food security and nutrition (Perez, 2017)
- ✓ Most consumed farmed fish product at 3.7 kl consumption per capita (world is 4.6kl/capita)
- ✓ Tilapia production increase by 33% from 241k mt in 2017 to 321k mt in 2018 (BFAR, 2019)



INDUSTRY SITUATION

- ✓ Industry Strategic S&T Plan for Tilapia (PCAARRD) to develop technologies and interventions that will ensure:
 - 1) steady supply of quality fingerlings from government and private hatcheries;
 - 2) increase the production capacities of existing culture systems through innovative management scheme; and,
 - 3) help expand the market potential of tilapia [esp. in brackishwater areas]



INDUSTRY SITUATION

- ✓ Declining production in Davao del Sur

Year	Volume (in MT)^a	(Value in '000 Pesos)^b
2008	124.27	9,551.66
2009	42.71	3,083.55
2010	144.64	12,875.61
2011	112.08	10,045.34
2012	115.54	13,594.76
2013	58.53	6,809.24
2014	49.68	5,961.07
2015	45.21	5,424.98
2016	33.40	3,913.38
2017	12.03	9,54.85
2018	63.35	60,45.84
2019	46.64	4,333.38



RESULTS & DISCUSSIONS

Currently, there are 10 municipalities and cities producing Tilapia in Davao del Sur

1. Matanao (22%)*
2. Magsaysay (19%)
3. Kiblawan (16%)
4. Bansalan (14%)*
5. Hagonoy
6. Sta. Cruz*
7. Digos City (15%)*
8. Padada
9. Malalag
10. Sulop

*areas visited during fieldwork for the KII



RESULTS & DISCUSSIONS

Offices/ Entities [for KII]	Number of respondents and designation
1) BFAR Region XI	Two personnel
2) BFAR Santa Cruz	Head of the office
3) Santa Cruz local government unit	Fishery technician
4) BFAR Region XI Refional Field Office (RFO)	Two personnel
5) Wholesaler in Digos public market	One actor
6) Employee and/ or owner of stallholders in Digos public wet market	Three actors
7) Private hatchery	Mr. and Mrs. Aquino
8) Municipality of Matanao - Municipal Agricultural Office	One - staff
9) Municipal Agricultural Office in Bansalan	One - fishery technician
10) BFAR Region XI Refional Field Office (RFO) - in charge in overseeing the hatchery in Bansalan	One - staff
11) SanteH Foundation Aqua and Fisheries Council of the Philippines	Executive director and member of Aqua and Fisheries Council of the Philippines
Total number of informants	17



RMA for Expanding Tilapia Culture Areas in Davao del Sur (brackishwater areas)

RESULTS & DISCUSSIONS



With the tilapia wholesaler in Digos City Wet market



BFAR RXI RFO in Digos City



PROVINCIAL TILAPIA HATCHERY BANSALAN, DAVAO DEL SUR

Interviews with key informants conducted by Team Tilapia headed by Mr. Tanny Acuna & Ms. Glory Dee Romo @Barangay Kabasagan, Matanao

PROVINCIAL TILAPIA HATCHERY AND NURSERY (@Bansalan, Davao del Sur)

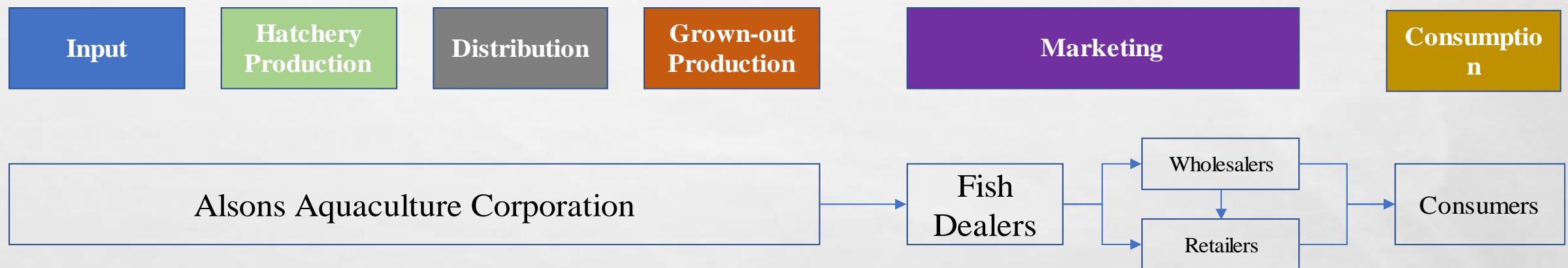
Interview with the hatchery and nursery staff

Hatchery and Nursery Information Board



TILAPIA SUPPLY CHAINS IN DAVAO DEL SUR

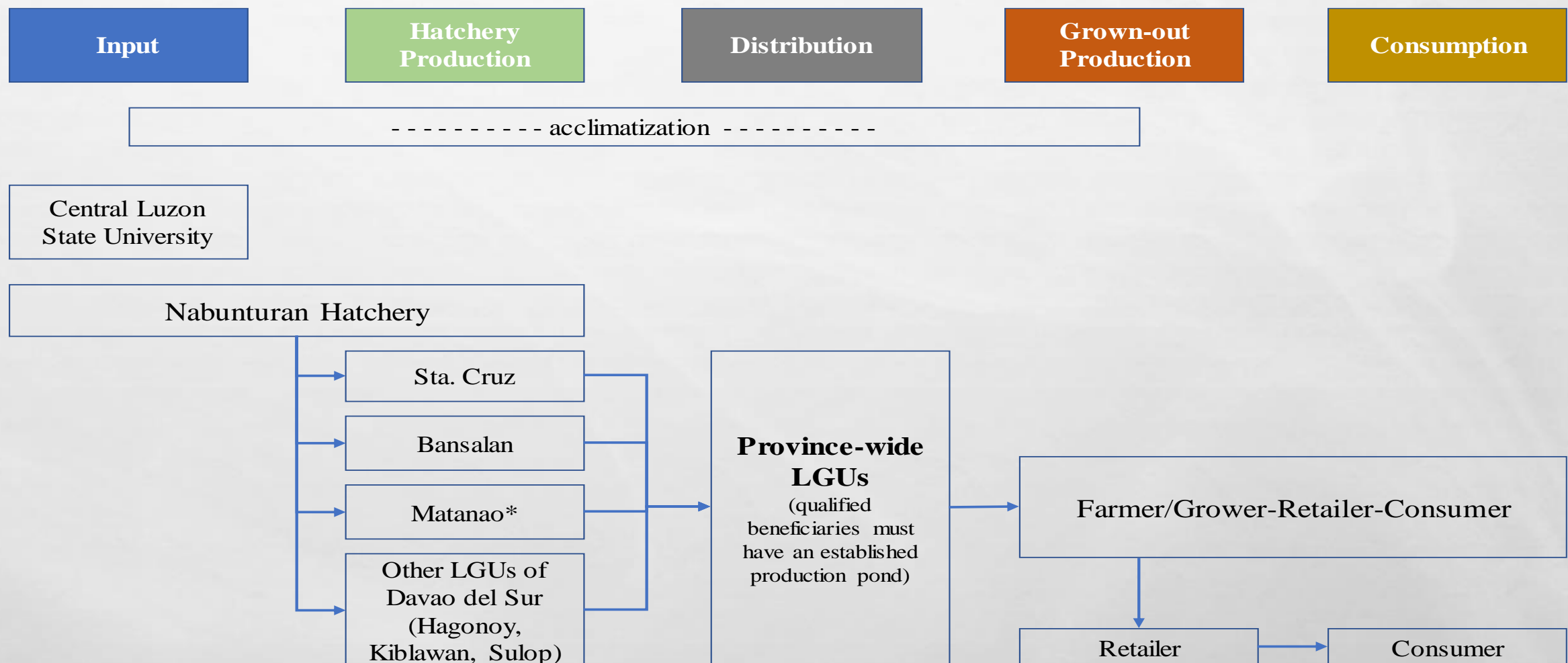
[1] Commercial-Based Tilapia Supply Chain





TILAPIA SUPPLY CHAINS IN DAVAO DEL SUR

[2] Government-Initiated Tilapia Supply Chain



*BFAR accredited and contracted farmer-based hatchery



MARKET CONSTRAINTS

1. Tilapia not a primary commodity in Davao del Sur

- Part of regular dispersal program by BFAR through LGUs
- Backyard production level only
- Limited fingerling production

2. Market acceptability

- unhealthy product due to use of chicken dung as feeds

3. Consumer perception

- Tilapia is low class aquaculture commodity
- Decent earning HHs prefer lapu-lapu, pompano, bangus, etc.



MARKET CONSTRAINTS

4. Low level of profitability

- Low price
- Low demand

5. Presence of predators and climate change

- Natural farm-based predators [bullfrog; snake turtles]
- Changing climate patterns [impact to hatchery & grow-out production]



MARKET CONSTRAINTS

6. LGU mandated restrictions in aquaculture production areas

- Bay rest [St. Cruz, Davao del Sur]

7. Limited areas for expansion in brackishwater for saline Tilapia production

- Coastal areas in the province only in Sta. Cruz and Digos City



MARKET OPPORTUNITIES

1. Increased production of saline Tilapia

- Higher demand
- Easier to produce

2. Varied consumer preferences

- No 'mud' odor/taste; low price
- Product sizes for different consumer type – HHs/institutional buyers



PROPOSED INTERVENTIONS TO SCALE-UP TILAPIA PRODUCTION

1. Harness government-private sector collaboration

- **Government** - to provide quality brood stocks; technical assistance & continuing R&D; financial incentives/subsidy for start-up commercial production
- **Private** – capital investment in setting up production areas



PROPOSED INTERVENTIONS TO SCALE-UP TILAPIA PRODUCTION

2. Development of an enabling environment to ramp-up investments in Tilapia production

- Establish a road map for Tilapia production as indicative of a priority commodity both at national/local levels
- Strengthen R&D centers to improve Tilapia farming systems and management operations of Tilapia production; enhance product development



RESULTS & DISCUSSIONS

3. Intensify promotion of Saline Tilapia

- Identify areas potential areas to increase existing production areas
- Take advantage of market demand



RMA for Expanding Tilapia Culture Areas in Davao del Sur (brackishwater areas)

FIELDWORK IN ACTION

PROVINCIAL TILAPIA HATCHERY AND NURSERY (@Bansalan, Davao del Sur)



Interview with the hatchery and nursery staff



Hatchery and Nursery Information Board



Data Gathering for the AMC Mini Project – Team Tilapia with the staff from the Municipal Agriculture Office of Matanao

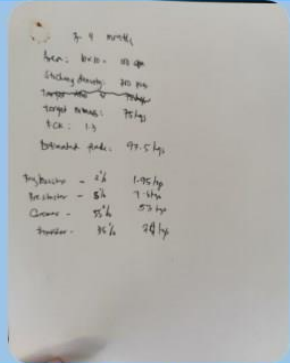


After the fieldwork, it's fun time @the farm!



Enjoying while working!

PROVINCIAL TILAPIA HATCHERY BANSALAN, DAVAO DEL SUR



Interviews with key informants conducted by Team Tilapia headed by Mr. Tanny Acuna & Ms. Glory Dee Romo @Barangay Kabasagan, Matanao



With the stallholder in Digos City Wet market

With the tilapia wholesaler in Digos City Wet market

AND AQUATIC RESOURCES PROVINCIAL FISHERIES OFFICE BFAR RXI RFO in Digos City



RMA for Expanding Tilapia Culture Areas in Davao del Sur (brackishwater areas)

END OF PRESENTATION

