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# Exploring Female Involvements in Malaysian Micro and Small Scale Aquaculture Operation (MiSAO)



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MSc. (Gender and Development)

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# INTRODUCTION

- The Fisheries and Aquaculture Economic Sector (**FAES**) is crucial especially for developing country due to its contribution to **national protein food security** and gross domestic product (**GDP**) for a country.
- Due to the masculinity of **FAES**, this study underlined by **SDG5 (Gender Equality)** to equally focus to male and female in FAES.
- Since female are always marginalized in FAES, this study aims to explore **female involvements**
- Focusing to Malaysian Micro and Small Aquaculture Operation (**MiSAO**)
- Associated with low-asset ownership and low productivity; very small size farms and largely owned, operated by household members and with **female involvement**

# ROLES OF AQUACULTURE FARMING



- ✓ SDG-1 (**no poverty**)
- ✓ SDG-2 (**zero hunger**)
- ✓ SDG-3 (**good health and wellbeing**)
- ✓ SDG-5 (**gender equality**)

# METHODOLOGY

<b>Method</b>	<b>Qualitative by using Nominal Group Technique (NGT)</b>
<b>Informants</b>	Four wives of male operators and four MiSAO female operators by the advice of DOF office to identify the informants
<b>Date</b>	19th March 2018
<b>Location</b>	Kg Baharu Pulau Keladi, Pekan, Pahang
<b>Duration</b>	90 minutes

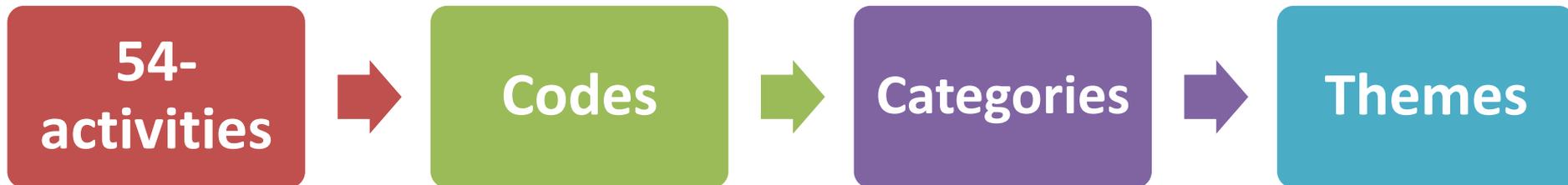


# NGT PROCEDURE

1. Briefing
2. Form two small groups (SG)
3. Appointed group leaders for SG
4. Moderator explains the question
5. Participants in SG write 3-answer on each production level
6. Paste the answers on the board
7. SG group leaders present and the answers compared
8. Answers discussed, finalized and concluded

# FINDINGS AND DISCUSSION

Data were analyzed through **thematic analysis** by using **CodCaT (Coding, Categorizing and Themes)**



# FINDINGS AND DISCUSSION

Activities	Codes	Category	Code	Themes
Searching / provide capital	[1a]	Capital management	[1]	[A] Financial Management
Managing the capital	[1b] [7a] [13a]			
Budgeting	[2a] [7b]	Budgeting	[2]	
Cash flow	[7c]	Cash flow management	[7]	
Calculating the income of the fish that has been sold (the amount of money from the sale)	[10] [13b] [7d]	Accounting	[13]	

Notes:	Input	Throughput	Output	All Levels
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# FINDINGS AND DISCUSSION

Activities	Codes	Category	Themes
Cage planning	[1c] [2b] [3a] [13c]	Cage planning	[B] Food Production
Giving suggestion to breed the fish	[3b] [4a]		
Site selection	[1d] [2c] [3c]		
Building the cage	[3d] [13d]		
Calculating the amount of seed	[4b]	Fish seed management	
Transfer fish seed to cage	[4c]		
Fish seed grading	[4d]		

Notes:	Input	Throughput	Output	All Levels
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# FINDINGS AND DISCUSSION

Activities	Codes	Category	Code	Themes
Buying fish pallet	[5a]	Fish feeding	[5]	[B] Food Production
Helping husband feed the fish	[5b]			
Ensuring that fish are fed enough for fish growth	[5c]			
Buying the seeds and pallet	[5d] [2d]			
Monitoring the water conditions	[6a] [12a]	Evaluation and monitoring the cage safety	[6]	
Repairing the leaky or damage cage	[6b]			
Monitoring the cages area (theft, pest)	[6c] [15a]			
Monitoring the cage area during midnight	[6d] [10] [15b]			

Notes:	Input	Throughput	Output	All Levels
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# FINDINGS AND DISCUSSION

Activities	Codes	Category	Code	Themes
Catching the fish	[7a]	Fish harvest	[7]	[C] Marketing
After harvest fish grading	[7b]			
Washing and cleaning caught fish	[7c]			
Calculate the amount of caught fish	[7d]			
Finding fish buyers	[8a] [14a]	Selling	[8]	
Managing order from wholesaler	[8b]			
Distribute fish to buyers	[8c]			
Selling the fish at the cage stall	[8d]			
	[14b]			

Notes:	Input	Throughput	Output	All Levels
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# FINDINGS AND DISCUSSION

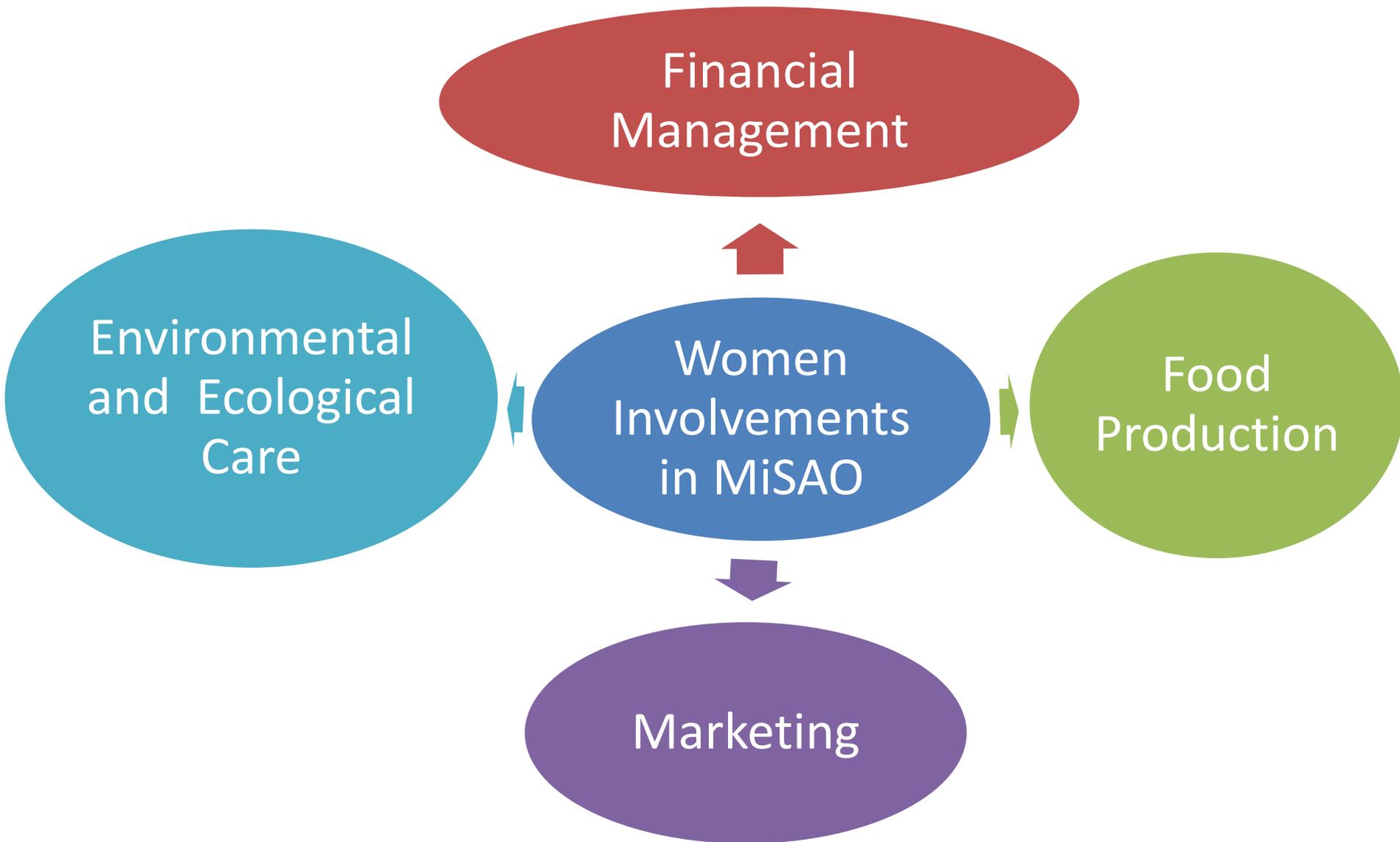
Activities	Codes	Category	Code	Themes
Fish packaging (frozen fish)	[9a]	Food processing	[9]	[C] Marketing
Process fermented fish	[9b]			
Process fish before frozen	[9c]			
Preparing <i>Patin Tempoyak</i> paste	[9d]			
Have social site to communicate with others fish operators	[14c]	Social capital / networking	[14]	
Dealing with fish buyers and selling the fish at current market price	[14d]			

Notes:	Input	Throughput	Output	All Levels
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# FINDINGS AND DISCUSSION

Activities	Codes	Category	Code	Themes
Observing the climate change	[10a]	Climate situation	[10]	[D] Environmental and Ecological Care
Discussing with husband on weather condition	[10b]			
Emergency plan for monsoon season	[10c]			
Emergency plan for drought season	[10d]			
Clean the grass around the cage	[11a]	Waste management	[11]	
Clean up the river around the cage from garbage and driftwood	[11b]			
Planted pesticide containers, pallet plastic bag	[11c]			
Identify the death seed or fish then move out from fish cage either burned or planted	[11d]			
Treat the sick fish	[12b]	Fish disease	[12]	
Acceptance of percentage of fish death	[12c]			
Move out the sick fishes and wash with salt water	[12d]			
Control pest	[15c]	Pest management	[15]	
Catch pest by using poison or traps	[15d]			
Notes:	Input	Throughput	Output	All Levels

# CONCLUSION



# RECOMMENDATION

- ❑ Women aquaculture operators have to involve in MiSAO proper **training** and **capacity building**
- ❑ Opportunities of **grant** and **loans**
- ❑ Relevant **policies** and **programs** to enhance women involvements
- ❑ The concept of **family cage farm** proposed where husband and wife together manage and operate the farm; and then policies should be aligned to develop family farm

# FEMALE INVOLVEMENTS IN MALAYSIAN MISAO





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