



ROLE AND CONTRIBUTION OF MEN AND WOMEN IN MANGROVE REHABILITATION IN REGION VI, PHILIPPINES

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***CMRP-Zoological Society of London**

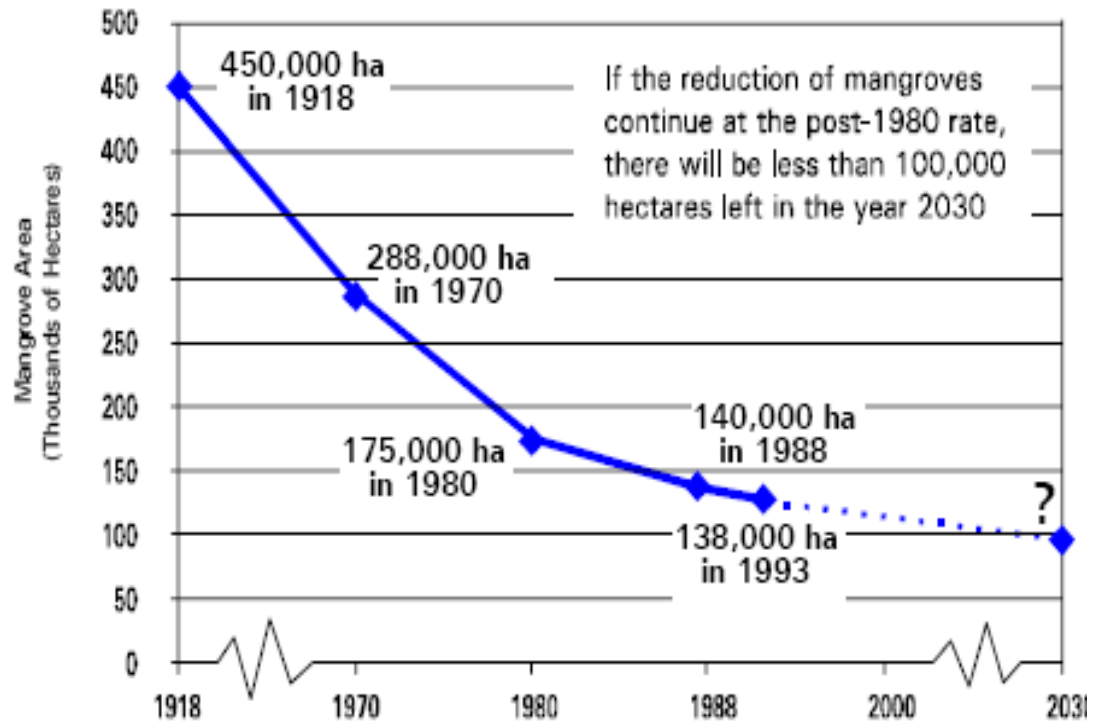
**** University of the Philippines Visayas**

Introduction

Mangrove state in the country



Decline of mangrove resource in the Philippines

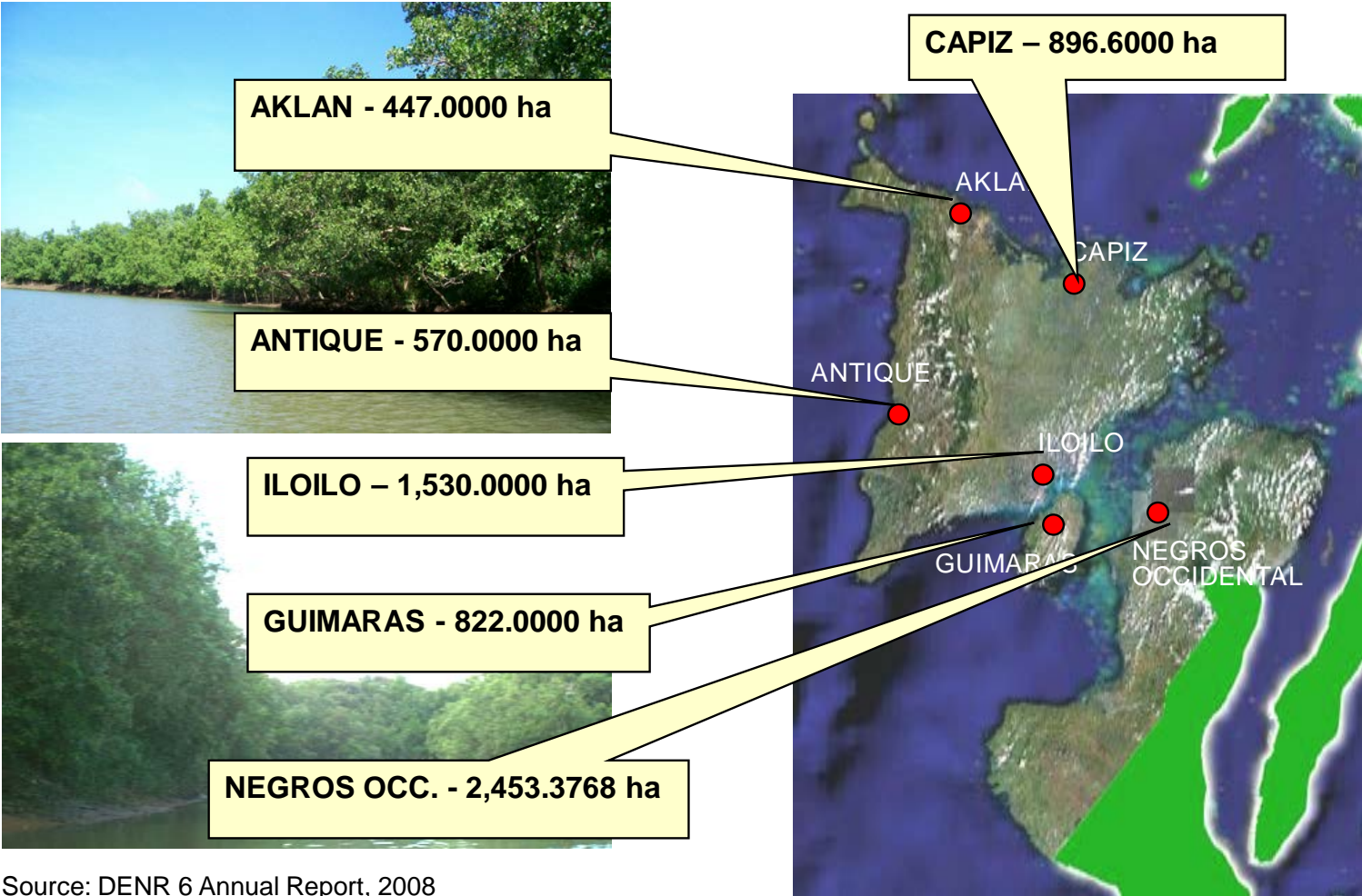


Mangrove state in **Region VI – Western Visayas**

- ✓ Western Visayas (including Panay Island), with **~61,900 hectares (ha) of brackish-water ponds (fish and shrimp)**, is one of the **most extensively converted areas** in the Philippines.
- ✓ Mangrove habitats in the region were once profuse with **49,000 ha of forest in 1951**. In December 2008, only **6,687 ha remained**.

Mangrove Areas with natural stand by Province as of December 2008

Total Mangrove Area: 6,687.3768 ha



Source: DENR 6 Annual Report, 2008

Timeline: Mangrove rehabilitation efforts in the Philippines



Why the research

- Most of the evaluation/documentation of mangrove rehabilitation efforts focused on the biological aspect
- Inadequate documentation on the role played by human resource input in the success or failure of mangrove reforestation efforts.
- Lack of understanding on the roles and contribution played by women and men in mangrove rehabilitation efforts



The research

- Focused on the role and contribution of men and women in mangrove rehabilitation using as cases the six sites in four provinces of Region VI covered by the Community-based Mangrove Rehabilitation Program of the Zoological Society of London in Region VI.



Mangrove Reforestation in Region VI and the Zoological Society of London

- a NGO based in the United Kingdom

MISSION

To achieve and promote the worldwide conservation of animals and their habitats

- Established in 1826
- Runs two animal visitor attractions – London Zoo and Whipsnade Wild Animal Park
- Opened the first Aquarium in the world in 1831
- Conducts field conservation work all over the world
- Institute of Zoology is a centre for conservation research

Community-based Mangrove Rehabilitation Program

- 4-years project, 2008 – 2012
- **Project goals:**
 - To **secure tenure** on coastal land through Community-based Forest Management Agreements;
 - To **rehabilitate abandoned, unutilized and underutilized** government-leased **fishponds** back to healthy mangrove habitat
 - to **provide communities with ecosystem goods and services** including increased food resources;
 - To support coastal communities to **supplement** their **livelihoods** utilising rehabilitated mangrove habitats;
 - To **re-establish the legally mandated mangrove ‘greenbelt’** along the coast, to decrease vulnerability of the communities to coastal erosion and storm surges



• Project strategies

- Equal opportunities for men and women
- Active community participation
- Influencing opinion
- Capacity building
- Building alliances, collaboration and networking

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• Project partners

- Department of Agriculture-Bureau of Fisheries and Aquatic Resources (DA-BFAR)
- Department of Environment and Natural Resources (DENR)
- Local Government Units (LGUs)
- **Peoples Organisations (POs)**
- Fishpond Operators
- Academe

ZSL - CMRP Sites

Capiz

1. Buntod, Panay
2. Balaring, Ivisan

Aklan

3. Bugtongbato-Naisud, Ibayay- PO

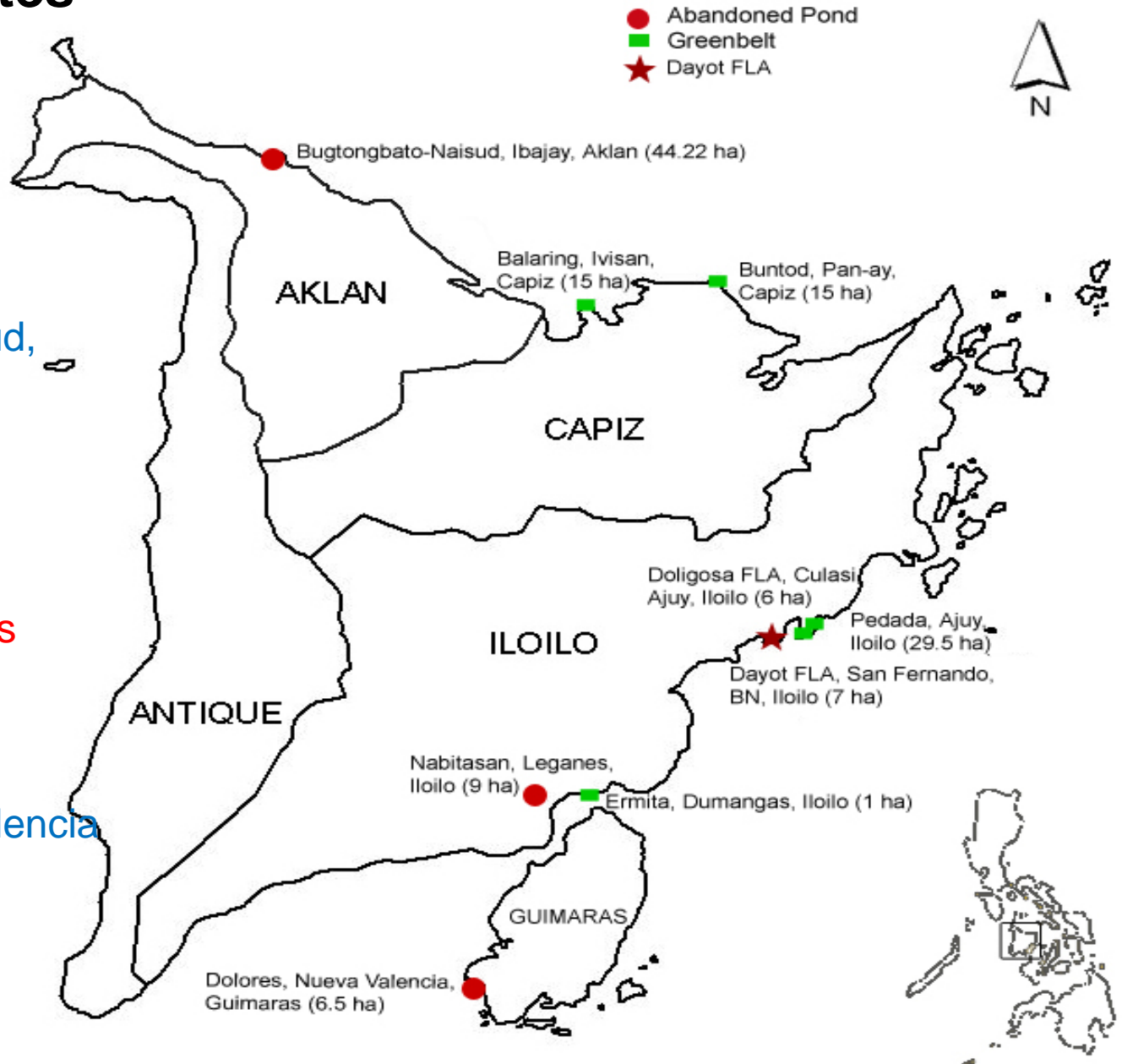
Iloilo

4. Culasi, Ajuy
5. Pedada, Ajuy
6. Nabitanan, Leganes
7. Ermita, Dumangas

Guimaras

8. Dolores, Nueva Valencia

 w/ PO



Basic information on the study areas

Basic information	Buntod	Balaring	Naisud	Bugtong bato	Pedada	Dolores
Land area (hectares)	222	500	904	181	269	421
Population	724	1,672	2,624	1,221	1,285	2,055
Project intervention of ZSL	Enhancement of MG GB	Establishment of MG GB	Mangrove protection and ecotourism		Establishment of MG GB	Rehabilitation of FLA pond
# of years of ZSL presence	1 yr, 8 mo	1 yr, 8 mo	1 yr, 11 mo		1 yr, 10 mo	1 yr, 10 mo
Target MG planting / protection area (hectares)	15	8	44.22		29.5	6.5
			Total : 103.22 ha			
With PO	Yes	Yes	Yes	Yes	Yes	Yes
Number of PO members	61	34	88	152	204	46
			Total : 585			

GB – greenbelt
MG - mangrove

PO – people’s organization

Data collection methods

- ✓ Project data (available with ZSL-CMRP)
- ✓ Key Informant Interviews
- ✓ Socio-economic data (available with ZSL-CMRP) – gathered through FGDs and HH surveys



Basic information on the participants

	Buntod		Balaring		Naisud		Bugtong bato		Pedada		Dolores	
	M	F	M	F	M	F	M	F	M	F	M	F
Sex	7	54	20	14	37	51	122	30	101	103	28	18
Age (mean)	48	59	47	50	49	52	47	45	43	46	47	52
Education	EL	EL	EL	EL	HS	HS	EL	HS	HS	HS	EL	HS
Main source of livelihood	Fish	Fish	Fish	FV, F, Handi	F	F, NS	Fish	F, L, H	Fish	F, SG, Fish	F	DM, FV, L
Mean Mo. Income (PhP, USD)	4,500 (104)	2,300 (53)	5000 (115)	2900 (67)	5,000 (115)	6,954 (161)	4,000 (92)	5,000 (115)	4,000 (92)	4,100 (95)	4,500 (104)	3,500 (81)

F- farming
SG – shell gleaning
Fish – fishing
L- laborer
NS – nipa shingles

FV – fish vending
Handi - handicraft
DM – dressmaking
H- honorarium as barangay official

EL – elementary
HS – high school graduate

Basic information on the participants

	Buntod		Balaring		Naisud		Bugtong bato		Pedada		Dolores	
	M	F	M	F	M	F	M	F	M	F	M	F
Members hip	7	54	20	14	37	51	122	30	101	103	28	18
Age (mean)	48	59	47	50	49	52	47	45	43	46	47	52
Education	EL	EL	EL	EL	HS	HS	EL	HS	HS	HS	EL	HS
Main source of livelihood	Fish	Fish	Fish	FV, F, Handi	F	F, NS	Fish	F, L, H	Fish	F, SG, Fish	F	DM, FV, L
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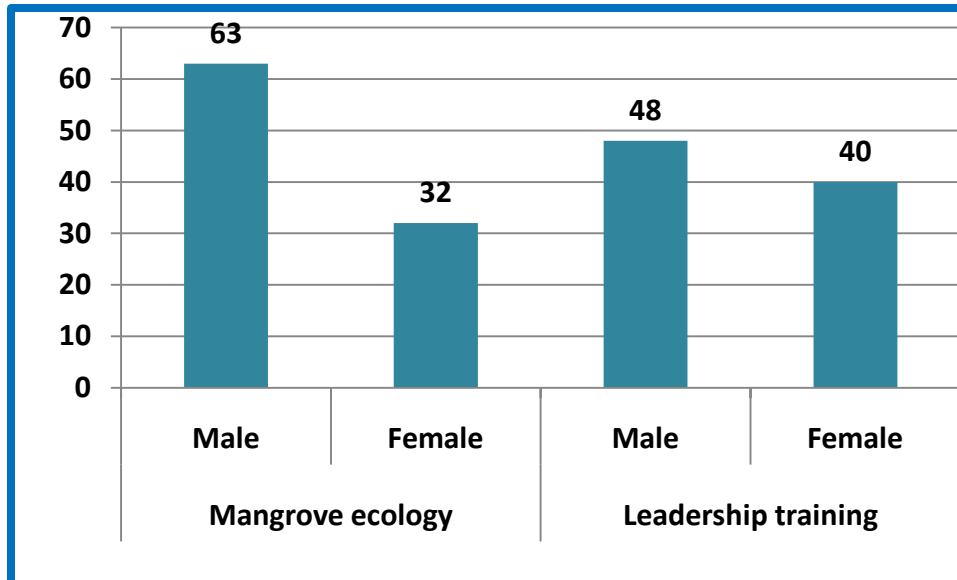
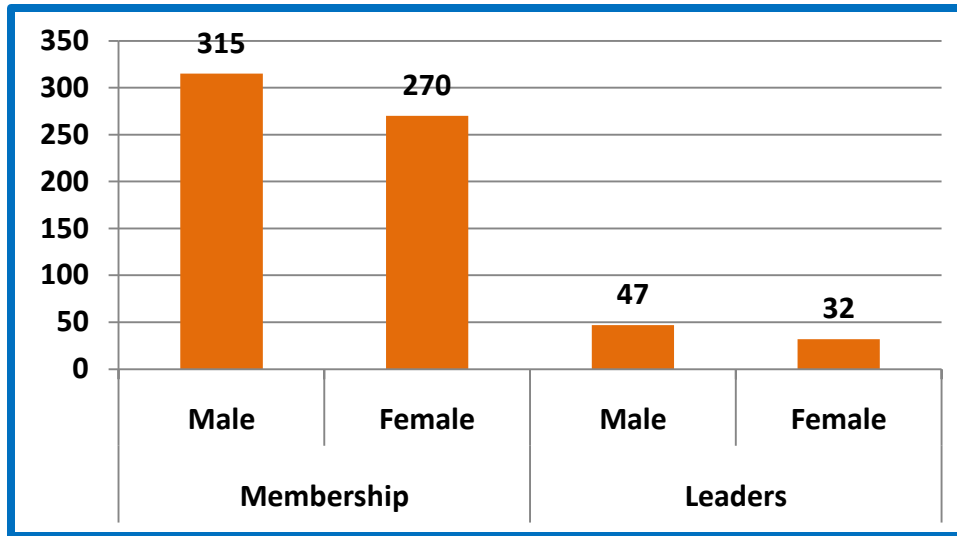
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Profile of men and women participation in major capacity building activities

	Buntod		Balaring		Naisud		Bugtong bato		Pedada		Dolores	
	M	F	M	F	M	F	M	F	M	F	M	F
Executive officers/leaders	0	12	7	3	5	2	7	2	19	7	9	6
Mangrove ecology training	5	10	20	4	5	2	5	2	16	6	12	8
Leadership training	3	7	5	5	3	3	7	3	20	12	10	10

Profile summary

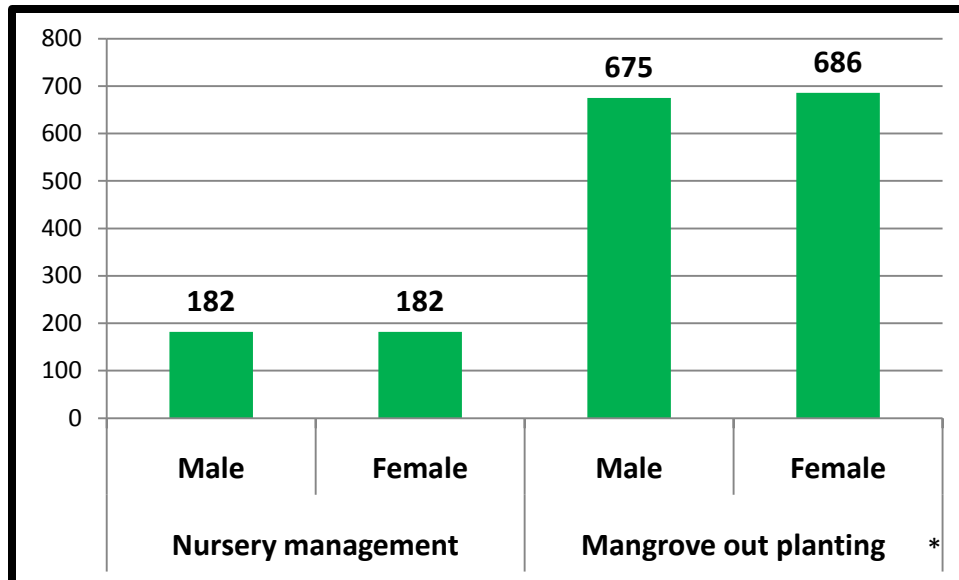
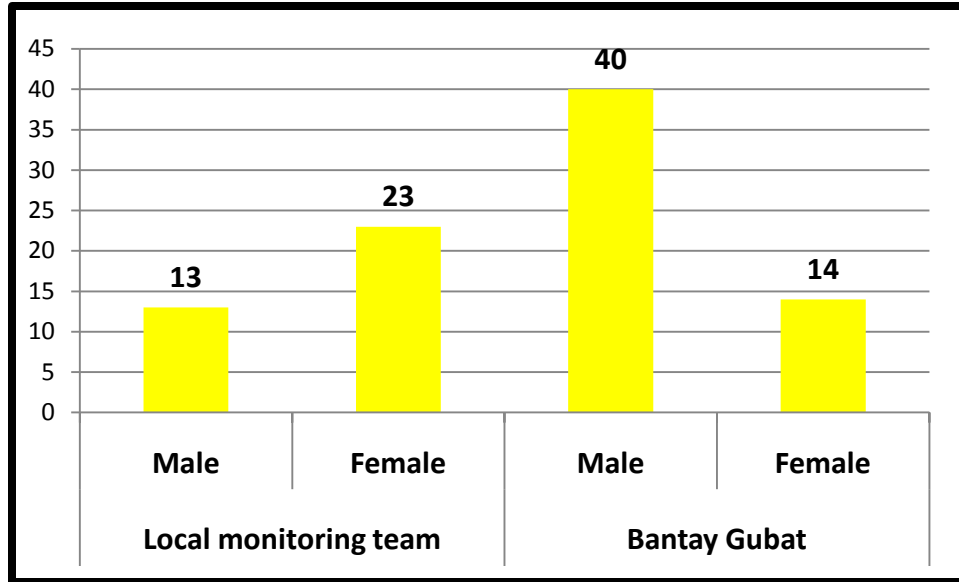


Profile of men and women participation in mangrove rehabilitation activities

	Buntod		Balaring		Naisud		Bugtong bato		Pedada		Dolores	
	M	F	M	F	M	F	M	F	M	F	M	F
Local mangrove monitoring team	0	15	2	3	Not applicable/ planting stopped		6	2	5	3		
Bantay Gubat	5	7	9	3	6	0	6	0	10	0	10	4
Nursery management	18	44	76	89	47	20	None/ natural forest		30	19	11	10
Mangrove out planting*	137	273	68	87	60	64			288	180	122	82

*Includes other stakeholders and not just the members of the PO

Profile summary



*Includes other stakeholders and not just the members of the PO

Entry to the mangrove rehabilitation efforts

- Organization of POs

- External agencies started the four organization and strengthened under CMRP-ZSL in 2009
 - Buntod Katibyugan was organized by World Vision in 2000 for child sponsorship program
 - Barangay Pedada Fisherfolk Association (BPFA) was organized in 2003 as a requirement to a livelihood project from the LGU
 - Katilingban sang mga Magagmay nga Mangingisda sa Dolores (KAMAMADO) was organized in 1997, an all men organization of fishers
 - Bugtongbato Fisherfolk Association (BFA) was organized by the Barangay LGU in 2008 however it was in 2009 that the organization was registered with DOLE through ZSL's assistance

Entry to the mangrove rehabilitation efforts

- Two POs started with an all-female members

Naisud

- Naisud Mangrove and Aquatic Organization (NAMAQO) was organized by ZSL in 2009
- **At the time of organizational formation more women were present, hence their number is more than men. It was said that the men were out in the sea fishing or outside of the home earning a living.**

Buntod

- Buntod Katibyugan was organized by World Vision in 2000 for child sponsorship program
- **99% of members are women (at the start, only 1 male member)**
- Engaged with DENR in 2004 for a mangrove contract growing project (3 years for 22 hectares reforestation area)
- Identified as PO partner by ZSL CMRP in 2009
- **Started inviting men to become members after re-organization in 2009**

Entry to the mangrove rehabilitation efforts

- Two POs started with an all-male members

Balaring

- New Balaring Mangrove Association (NewBAMA) was organized in April 2009 by ZSL
- Bgy Captain initiated formation of the core group of 19 people composed of BHWs and Tanods (**more men members; the majority were men barangay officials**)
- **Membership of the men was short lived; women members stayed with the organization, was observed to have good camaraderie and enjoy planting activity**

Bugtongbato

- Bugtongbato Fisherfolk Association (BFA) was organized by the Barangay LGU in 2008. In 2009, the organization was registered with DOLE through ZSL's assistance
- **Only the men who were engaged in fishing was organized.**

Entry to the mangrove rehabilitation efforts

- Two POs started with a mix group

Pedada	Dolores
<ul style="list-style-type: none">•Barangay Pedada Fisherfolk Association (BPFA) was organized in 2003 as a requirement to a livelihood project from the LGU•Active recruitment - At the start both men and women were invited to participate, hence, the near equal distribution of membership•More men were observed occupying top leadership positions•Women act as secretary, treasurer, bookkeeper, auditor	<ul style="list-style-type: none">•Katilingban sang mga Magagmay nga Mangingisda sa Dolores (KAMAMADO) was organized in 1997, an all men organization of fishers•Later, the wives of the fishers were invited when husbands cannot attend meetings•with ZSL's influence, KAMAMADO membership was opened to women•To date women are highly visible in all activities

The men in mangrove rehabilitation

Engaged in activities that require physical strength:

- setting up of bamboo poles and binders during area demarcation
- dig holes during planting
- construction of the footwalk
- construction of the breakwater-piling and hauling of rocks from source



The women in mangrove rehabilitation

Engaged in following activities:

- Monitor mangrove growth and survival
- Organize meetings
- Keep records
- Conduct saving mobilization
- Handle funds of organization
- Wives perform activities of husbands when unable to do so while out fishing



Roles for both men and women in mangrove rehabilitation



- Participate in organizational meetings
- Actual planting and replanting activities
- Bagging, driving of the raft during hauling of planting materials,
- Maintenance work such as taking out of algae from newly planted mangroves,
- Attend meetings/ activities outside of the site
- Manage the affairs of the organization as elected official

- **Reasons for staying**
 - Passion to plant
 - Payment from the contract growing/ Incentives
 - Understands the importance of mangroves
- **What they like most about work**
 - time to bond
 - able to help the environment
 - feeling of being in a group and contributing to its goals
- **What do they do not like about the work**
 - They get lots of cuts/ wounds in the skin
 - Planting area is muddy, difficult to move
 - They are taken away from their livelihood

Possible reasons for exit

- Livelihood opportunity outside of homebase (better pay, to be able to send children to school, better quality of life for the family)
- Interests not provided/ satisfied with the project (e.g. payment for planting activities)
- Personal disappointment (not chosen by group to participate in seminars and training due to opposing political affiliation)
- Conflict among fellow members
- Delisted from the membership due to non-participation in activities/ non-attendance in meetings



Concluding remarks

- Women and men actively participate in mangrove rehabilitation efforts in all sites.
- Each play a unique role but also share similar other responsibilities
- Women complement and many times substitute the males
- Women play an important role in the operations of their organizations as officials (decision makers), record keepers and managers of funds.
- Women play a crucial role in the success of mangrove rehabilitation because of their role in monitoring the growth of the mangroves and in the overall maintenance of the reforestation project.

A large, ancient Avicennia rumphiana tree in a mangrove forest. The tree has a thick, gnarled trunk and dense green foliage. A small white sign is visible on the left side of the tree. The background shows other trees and a fence.

Centuries old *Avicennia rumphiana* found inside
the mangrove forest of Ibayay, Aklan, Philippines

Thank You!