



# Roxas City Experience in Sustainable Livelihood for Women in Coastal Areas to Support Resource Rehabilitation for Fisheries and Aquaculture Security

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# Presentation Outline

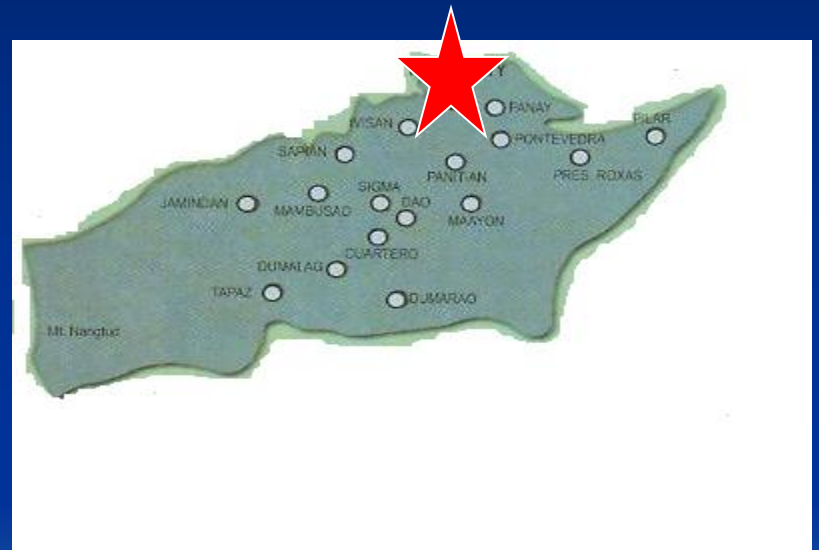
- Project Background
- Interventions to address coastal issues
- Provision of Alternative Livelihood
- Economic performance of the products and services developed
- Project benefits to women, families ,community and environment



# Location: Roxas City, Philippines



## The Seafood Capital



Capiz Province

# Proliferation of illegal structures in rivers





# Mangrove cutting for wood and to give way to fishponds and subdivisions





# Quarrying for fishpond dike construction





# Indiscriminate garbage disposal



# Enforcement of City Fishery Ordinance: Demolition of prohibited staked structures





# Challenge

- More than 500 fishermen crowding in the rivers for survival resisted the clearing operations

1. What trade-off would appease the displaced fisherfolks where women are most affected as they carry the burden of meeting family needs?

2. What alternative livelihood would be sufficient to replace former income?

# Community organization/ strategic planning/ MOA



# The Strategic Plan agreed w/ communities

- Community-based ecotourism
- Incentive for cooperation for the rehabilitation & co-management of coastal resources
- Resource-based taking advantage of the natural resources in their community
- Provide income to fisherfolks while they take care for these resources





# Building Capacity

In partnership with academe and related agencies



**Can fisherfolks operate a tourism business?**



# Trainings, Workshops & Seminars Conducted

- Mangrove Rehabilitation and Management
  - Climate Change Mitigation and Adaptation
  - Ecotourism operations
  - Strategic Planning Workshop
  - Operational Planning Workshop
  - Business Management
  - Bookkeeping
  - Personality Development and Customer Service
  - Tour Guiding
  - Resource Interpretation
  - Food preparation
  - First Aid
  - Sanitation
  - Footspa
  - Manicure/Pedicure
  - Filipino Traditional Massage
  - Facial, Bodyworks and Therapeutic Massage
  - Leadership and Teambuilding workshops
  - Shellcraft/ Pot holder /Rug making for souvenirs
  - Health and Wellness
  - Herbal Production , Utilization , Processing & Culinary
- 

# Provision of Logistics that gave rise to 5 ecotourism sites

Thru supervised financial and technical assistance.





# *Badimahan River Tour*

-In place of illegal structures

- Operated by Lawis Baybay Small Fisherfolk Association (LABSFAR since 2009)
- Male-9; female-13= 22 members with a woman elected as President
- National Awardee in Community-Based Responsible Tourism Enterprise 2015
- 2<sup>nd</sup>-Runner-up for the 4<sup>th</sup> Best Public Sector Projects Award City Category 2014
- Regional Finalist during the Search for Best Practices in Climate Change Mitigation and Adaptation in 2014



River tour in house rafts



River tour in boats



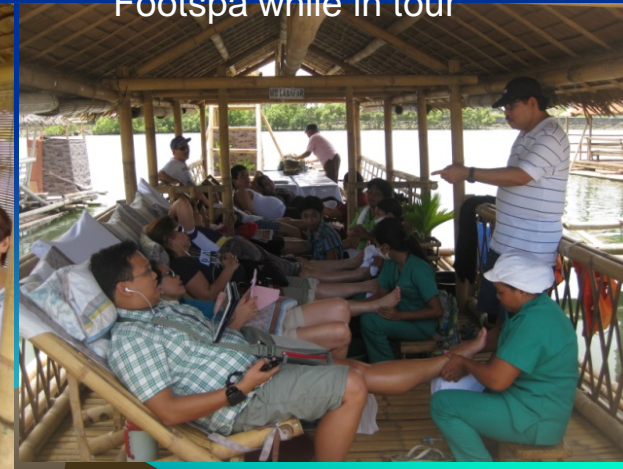
Footspa while in tour



Resource Interpretation Lectures



Food Service while on tour







# Palina Greenbelt Ecopark

Operated by Palina River Development Association, Inc. (PARIDA)  
since 2011 : 22 male, 13 female = 35 members





# Culajao Mangrove Ecopark

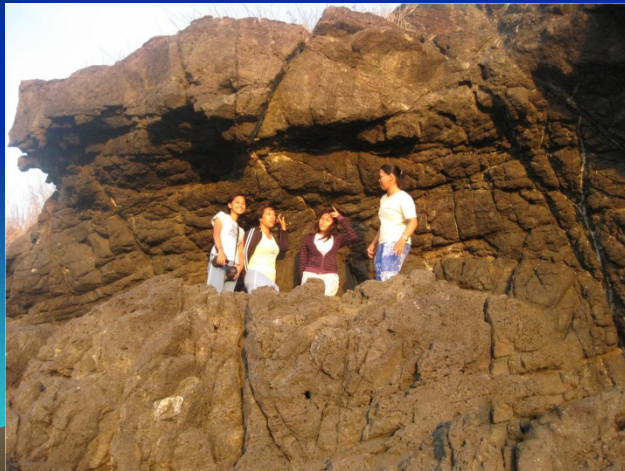
- In place of mangrove cutting & illegal structures since 2007
- Operated by **Katunggan sa Culajao Salbaron Association, Inc (KACUSA)**
- Male- 8; female-11= 19 members led by a woman President
- Adjudged Best Ecotourism Product in Western Visayas 2009





# Olotayan Island Tour

- Incentive for the fisherfolk organization whose members quit illegal fishing and participated in the protection of the marine sanctuary since 2010
- Operated by **Dagat sa Isla Olotayan Salbaron Asosasyon (DIOSA)**:
- male-5; female-15= 20 members led by a woman Vice-President





# • Vermiculture Demo site

- In place of illegal structures in the river that is nearing death because of siltation.
- It is a learning site for visitors and buyers that serve as collective marketing venue for the individual produce of members in their respective homes since 2009.
- Operated by **Samahan ng mga Vermecologists sa Roxas City (SAVER)**
- Male-14; female-11= 25 members with a woman President



**Ecotourism products and services developed are being performed by women constituting 51% of total membership of all associations (58 men and 63 women =121)**





# FOOD SERVICES on site and other venues





# Resource Interpretation lecture & tour guiding





# Show of BIODIVERSITY





# BIODIVERSITY @ the Ecosites

- 70 species of fish and, 40 species of shellfish
- 35 species of shoreline birds
- 19 species of mangroves



## Sighted Birds along Cadimahan River



SN: *Ardea purpurea*  
CN: Purple heron  
LN: Dugwak



SN: *Ardea sumatrana*  
CN: Great-billed heron  
LN: Kuro



SN: *Bubulcus ibis*  
CN: Cattle egret  
LN: Tulabong



SN: *Culicicapa helianthea*  
CN: Flycatcher  
LN: Tulamis



SN: *Todiramphus chloris*  
CN: Collared kingfisher  
LN: Takray

## MANGROVES FOUND AT CADIMAHAN RIVER

### Family Rhizophoraceae



SN: *Rhizophora apiculata*  
LN: Bakhaw lalaki

USES:  
- the leaves may be fed to pigs

### Family Avicenniaceae



SN: *Avicennia marina*  
LN: Api-api bayabason

USES:  
-the smoked of dried branches acts as mosquito repellent.  
-leaves are fed to livestock  
-newly sprouted Avicennia seedling are cooked as vegetables

OTHER Avicenniaceae sp. presents:

SN: *Avicennia rumphiana*  
LN: Api-api bungalon

SN: *Avicennia officinalis*  
LN: Api-api bungalon

SN: *Avicennia alba*  
LN: Api-api bungalon

USES:  
-Fuel wood & furniture making.

USES:  
-the wood was used to smoke fish & build rice mortars and pestles.

-Fruits as astringent, bark and roots as aphrodisiac and seed & roots as poultice to treat ulcers.

USES:  
-wood as fuel, leaves for Forage.

-resinous secretion for birth control, bark as astringent and an ointment from seeds to relieve smallpox ulceration.

### Family Sonneratiaceae



SN: *Sonneratia alba*  
LN: Pagatpat

USES:  
- housing construction materials

### Family Meliaceae



SN: *Xylocarpus moluccensis*  
LN: Piagaol/ Lagutlot

USES:  
- (for seeds) insect bites repellent  
- (for fruit) treat diarrhea  
- (bark) as astringent  
- wood used as poles, railroad ties, posts, beams and for interior finish, musical instruments and high grade furniture

OTHER MANGROVE SPECIE. & ASSOCIATES PRESENTS:

LOCAL NAME:  
Lapis-lapis  
Pailaypay

SCIENTIFIC NAME:  
*Carpinus decandra*  
*Nyssa fruticans*

### Family Euphorbiaceae



SN: *Excoecaria agallocha*  
LN: Lipata/ Buta-buta

USES:

- pest repellent (twigs), treat epilepsy (leaves), (sap) is used to treat toothache and ulcer, burn ashes for salt extraction, sap as fish poison



# DISPLAY OF DIFFERENT TYPES OF FISHING GEARS

40 TYPES ARE OPERATED IN ROXAS CITY



# Massage Therapy



Average Monthly Income : 3 customers/ day @ P350 =  
P1050 x 20 days = **21,000 + tips (\$447)**



# Footspa, Manicure, Pedicure



P150/ customer x 5 customers = 750  
x 20 days  
= P15,000 (\$ 319)



# Pot holder and Rug making

the art of making them is in itself a tourist attraction that became a marketing strategy



20 potholder/ day x P15 = P300 x 20= P6,000

3 rags/day x P40 = P120 x 20 days = P2,400

**Total of P8,400 or \$179**



# Vermiculture & vermicomposting



Highest Producer in  
2015  
97.5 sacks sold =  
4,875 kgs x P7 = 34,125  
43 kgs ANC sold @ 800  
= P34,400



**Total : P68,525  
(\$1,457.98)**







# Herbal Production & Processing

Source of fresh herbs for juices , tea, culinary for the ecosites.





# Interventions for Resource Rehabilitation

- Enforcement of City Fishery/CRM Ordinance
- Alternative/supplemental livelihood provided to displaced fisherfolks
- Community Organization
- MOA/ Deed of Undertaking
- Capability Building
- Provision of supervised financial assistance for ecotourism business
- Ecotourism Development of related products and services
- Coaching, Monitoring, Feed backing, Networking





# **Environmental and Socio-Economic Results of the operations**





# Venue for Community Participation: Partnership with schools, civic and religious organizations, agencies and private sector where Climate change has become the selling point translated income to fisherfolk families



## **Partner Agencies , Organizations, Private Sector**

- Capiz Agricultural Multi-purpose Cooperative (CAMPCO)
  - Filamer Christian University (FCU)
  - Philippine Institute of Certified Accountants (PICPA)
  - Provincial Tourism Office (PTO)
  - Bureau of Fisheries and Aquatic Resources (BFAR) R6
  - DPWH, DENR
  - Red Cross
  - Vice Mayor's League
  - Roxas City LGU (CAO, CEO,CTO,CHO)
  - Kapis Mansions
  - First Assembly Roxas Missions, Inc.
  - St. Michael Montessori
  - Amado Lim Enterprises
  - Radion International
  - Camp Sonshine Center Foundation
  - Colegio dela Purisima
  - Different schools
  - PLDT/ SMART/ MERALCO/ TV 5
  - Private Sector Individuals
- 



# 250,000 mangroves planted by

3 Fisherfolk Associations, Schools, NGOs,  
PO, GO private sector



**MANGROVE PLANTING**





# Mangrove planting by different groups





# 26,040 sacks of garbage collected





# RIVER CLEAN-UP





# Regular clean-up by Fisherfolk associations – mostly women participants





# Introduction of Eco-friendly practices



- Mussel and Oyster culture in raft
- ECOSAN CR
- Use of Organic Cleaning Agents



Women preparing oyster cultches in strings for floating Mussel culture





## Devastation left by Typhoon Yolanda in November 8, 2013





Immediate Rebuilding of Ecosites demonstrated resiliency which was made possible with their savings and cooperation among members as help from other sectors arrived after a year yet





# Visitors in 7.5 years: 102,000 of which about 55% were women



Travel Time -ANC



ABS-CBN Trip na Trip



ABS-CBN Mag TV



NBN Channel 4



Balikbayan from Canada



Japanese visitors



# visitors







CBYIP visitors



Regional Environmental  
Education Network



Lakbay Maria Archdiocese  
of Manila



FCU-NSTP



# Economic performance

## CADIMAHAN RIVER TOUR GROSS INCOME 2009-2015



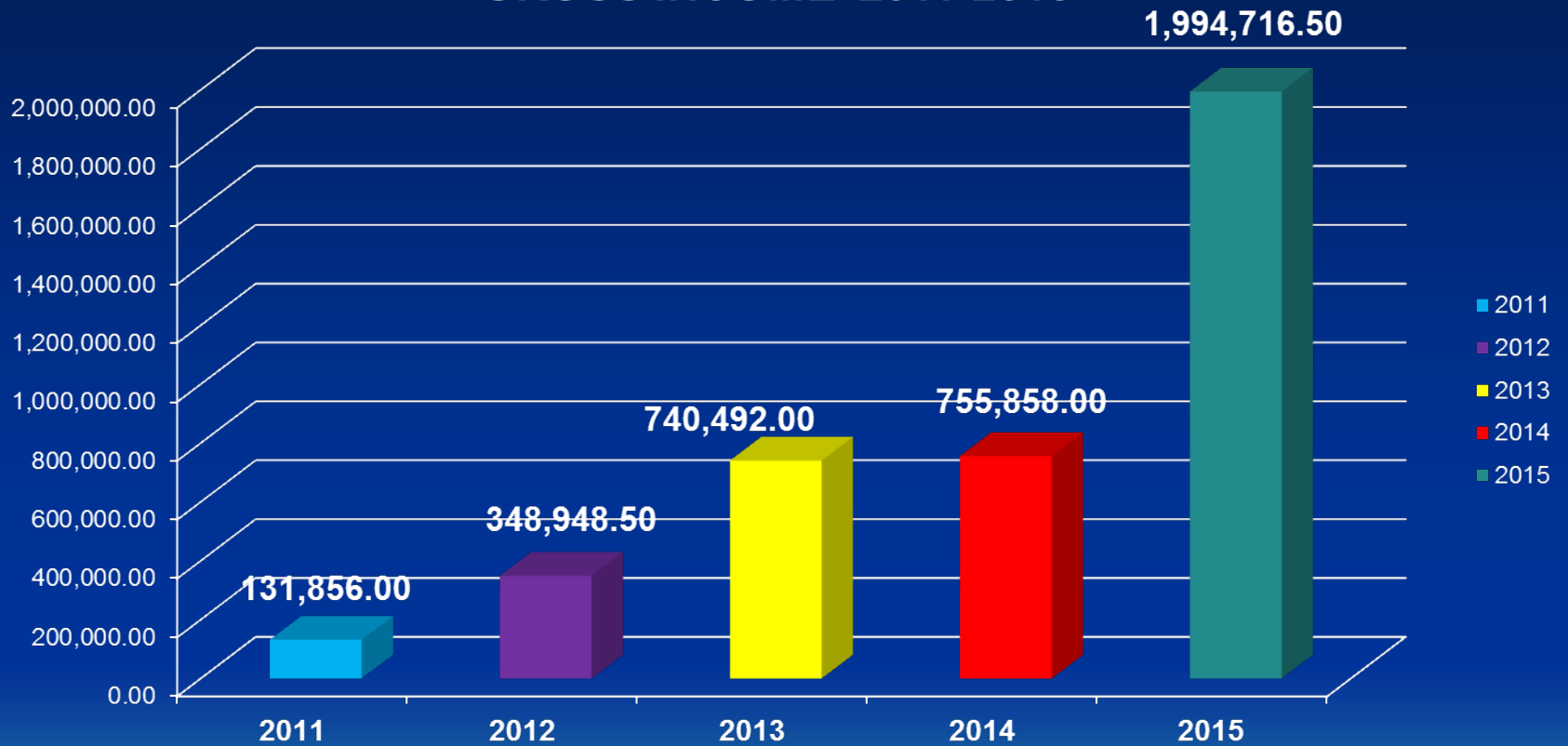


## CADIMAHAN RIVER TOUR VISITORS 2009-2015





## PALINA GREENBELT ECOPARK GROSS INCOME 2011-2015



## PALINA GREENBELT ECOPARK VISITORS FROM 2011-2015





# Income from Massage Therapy, Footspa, Manicure/Pedicure From Feb 2014- June 2016

- No. of Women involved: 17
- Passed Licensure Exam: 12
- Customers served free and w/ pay: 6,554
- Accumulated income in 2.4 years:  
P1, 434,483 (30,520.91 USD)



# Income from Vermiculture/ Vermicomposting March 2009-May 2016

- :
- ANC Sold: 275 kgs amounted to  
P204,960 = 4361 USD
- Vermicast Sold: 66,219 kgs. amounted to  
P432,690 = 9,206 USD

Note: from individual and group production that survived the storms and el nino- the advantage of putting eggs in different baskets





## Project benefits to women, families ,community and environment

- Trainings provided empowered fisherfolks to run their own business where women usually do the accounting, business fund management and perform most services
- Their children are seeing a more productive environment where their mothers and fathers have developed an industry to earn a living instead of the usual preoccupation of gambling.
- Most fisherfolk women were haggard looking with untidy countenance before but this time they have smiles on their faces and looking healthier.
- They gained confidence as they deal with visitors from all walks of life and their exposure to tri-media. Their membership with the association of hotels and restaurants brought them to a bigger network of acquaintance and support



- Tract record in project management qualified them for financial and technical assistance with other donors esp. after Typhoon Yolanda.
- Most families have now regular meals everyday compared before, repaired their houses, sent their children to school and have savings in the bank.
- The Project provides daily income to members. The non-member fishermen is provided a market for their daily catch. Those who do foot spa ,manicure/pedicure and body massage are on call in the nearby neighborhood and hotels expanding their workplaces





- The presence of people itself at the Ecosites is deterrent to mangrove cutting and other violations done in the coastal areas
- The mass collection of garbage by students becomes a campaign for proper waste disposal increasing awareness of nearby communities and making impact on the participants themselves.
- The facility has become an educational facility for science, HRM and Tourism, business, social science, architecture, information technology classes where they see actual model of the concepts they need to learn.
- The ecosites is being featured in a number of TV programs promoting Roxas City as tourist destination. The web sites required by schools for IT students, blogs and facebook postings of visitors helped in the promotion .



- Mangrove reforestation will come along way to provide ecosystem services including nursery ground for fishes and carbon sequestration
- The project contributed to the global movement for Climate change mitigation and adaptation thru mangrove reforestation, regular garbage collection and biodiversity conservation.
- River condition has improved indicated by the high DO levels (DENR result) ,revival of valuable fish species , increase in fish catch from ½ kg to 3-5 kg/ fisherman 3) Water depth increased by 1-1.5m 4) faster growth rate of mussels and fishes in cages.
- It provided a venue for community-participation by schools and companies expressing their corporate social responsibility in the campaign for protection of the environment through planting mangroves and river clean-up, cash and in kind contributions . Visitors have become advocates themselves and stakeholders.





- Community-based Ecotourism has become a strategy to sustain resource rehabilitation efforts. Beneficiaries understood and realized that they need to rehabilitate and protect the ecosystems to sustain fishery production but their resources is the major attraction to visitors which is translated income for them.
- The river tour activities limit the time of fisherfolk members in fishing which lessens fishing pressure giving time for the resources to recover
- The project was able to demonstrate that with a small investment river ecotourism is a viable alternative livelihood for fisherfolks where their fishing gears form part of the cultural attraction and gives more job opportunities for women. It promoted *entrepreneurship and encouraged diversification of tourism products and services*
- Ecotourism has made areas of operation clean and green that supports sustainable fisheries and aquaculture production. It made Roxas City a better place for people to live and visit .
- WATCH YOUTUBE: Roxas City Ecotours 2013

# Community-based Ecotourism will go along way...

1. Community benefits
2. Legal instruments in -placed
3. Strong support system-multi-stakeholders
4. Process Documentation-accountability and transparency
5. Monitoring & Feed backing (environment & operations)
6. Continuous capacity building
7. Innovations relevant to changing times
8. Environmental Protection & Biodiversity conservation
9. God's intervention and favor





“For these efforts, the most fulfilling of all is to see changed lives economically, socially and spiritually that somehow to some degree ensured responsible stewardship of their resources and environment. This was possible because God was on it.





**Maraming Salamat Po!**