

The background of the slide is a scenic photograph of a coastal area. In the foreground, there is a calm body of water, likely a bay or a large river mouth, with a sandy beach on the right side. In the middle ground, there are some small structures and a pier extending into the water. The background features a range of green, forested mountains under a blue sky with scattered white clouds.

# **LOCAL COMMUNITIES WITHIN THE NHA TRANG BAY MARINE PROTECTED AREA MUST BE RELEVANT**

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# ***INTRODUCTION***

*Nha Trang Bay is an area with the highest degree of biodiversity in Vietnam, which is reflect in meaningful figures of species namely: 350 for coral, 250 for fish, 122 for crustaceans, 112 for mollusks, 69 for seaweed, and 27 for echinoderms, not to mention large scale mangrove and seaweed system. It is among the the reasons that Nha trang Bay has been selected for the first comprehensive preservation of representative examples of marine biodiversity.*



# ***OBSTACLES AND CHALLENGES AT THE INITIAL PHASE OF NHA TRANG BAY MPA IMPLEMENTATION***

- *Nha Trang Bay MPA has been threatened by illegal use of dynamite, cyanite or poison for fishing operations and by anchoring on coral reefs.*
- *Waste volume discarded from household, industry, tourism activities has been steeply increasing.*
- *Awareness about marine protection within local communities is still modest.*
- *Many closed areas have more or less deprived fishermen of their livelihood opportunities.*



# ***WHAT MAKES THE SUCCESS NHA TRANG BAY MPA?***

- 1. Formulating the overall strategy and functional zoning.*
- 2. Drawing up & realizing the alternatives income generating program for local fisherman within Nha Trang Bay MPA.*
- 3. Implementing monitor, surveillance and control system (MCS).*



# ***WHAT MAKES THE SUCCESS NHA TRANG BAY MPA?***

- 4. Carrying out the program for management capacity building.***
- 5. Stepping up dissemination to build awareness of local communities regarding the marine resources and habitat conservation.***
- 6. Introducing sustained financial scheme by imposing conservation fees.***



## ***Formulating the overall strategy and functional zoning***

- ✓ The MPA divided into 3 zones: the core for strict protection; the buffer for limited exploitation and the common use.*
- ✓ Participation of local communities in planning & implementing process.*
- Ø Preserving valuable biodiversity while ensuring rational fishing activities and sustainable use of marine resources.*



***Drawing up & realizing the alternatives  
income generating program for local  
fisherman within Nha Trang Bay MPA***

- ✓ *Aquaculture(seaweed, sea cucumber& fish species of high commercial value)*
- ✓ *Handicraft*
- ✓ *Tourism-related services( rowing, diving guidance, small-scale trading, restaurant, hotel & others)*



## *Implementing monitor, surveillance and control system (MCS)*

- ✓ Disappearance of some illegal fishing practices owing to efforts by MPA regulation enforcement, coast guard, marine conservation department & local communities.*
- ✓ Extending the surveillance operations including the participation of environment inspectors, traffic wardens & aqueous habit observers.*
- ✓ Using the community-based co-management model.*



## *Carrying out the program for management capacity building*

- ✓ Training courses with an aim to sharpening necessary skills for management.*
- ✓ Gaining the supporting & commitment of stakeholders in the MPA project.*



***Stepping up dissemination to build awareness of local communities regarding the marine resources and habitat conservation***

- ✓ ***Implementing a comprehensive strategy on Education & Awareness of the various stakeholders: MPA regulations, anchor damage, waste management, selected aquaculture species, necessity & potential benefits of Nha Trang Bay MPA.***



## *Introducing sustained financial scheme by imposing conservation fees*

- ✓ *Managing boards, together with the financial department have drawn up a scheme of collecting conservation fees and adopted by the provincial People's Committee. This scheme has been far much crucial to kick-start the MPA operation and to lay the firm foundation for the whole project.*



# ***PEOPLE-CENTERED APPROACHES FOR DEVELOPMENT***

- ✓ *Providing loans to target group: poor households, the households potentially affected by the MPA zoning, fishermen using hook and line to catch squid, trammel net and diving fishers, fishermen using lift net and purse seine nets.*
- ✓ *Promoting the development of alternative income generative activities.*



# ***PEOPLE-CENTERED APPROACHES FOR DEVELOPMENT***

- ✓ Providing technical support through linkages with institutions such as the Agriculture and Forestry Extension Centre and the Veterinarian Services of DARD. The purpose is to improve the awareness of farmers on the importance of technical knowledge and practices (e.g. vaccination and proper feeding of animals, proper aquaculture practices etc.) and ensure the success of the business.***



# ***ALTERNATIVE INCOME GENERATIVE ACTIVITIES***

- ✓ *Ecotourism.*
- ✓ *Aquaculture.*
- ✓ *Basket weaving.*
- ✓ *Other supported programmes.*



## ***Ecotourism operations***

- ✓ *The organization of seminars on the effective implementation.*
- ✓ *The creation of local community-based glass bottom boat services.*
- ✓ *The opening of English courses for local people, and cooking training courses in Hon Mot and Dam Bay villages.*



## ***Aquaculture***

- ✓ *Some species of high value and/or of natural advantage being selected for broad-based trials as follows*
- § *Seaweed trial :6 households being provided with 300 kg of seaweed to begin additional trials for its culture. Seaweed is growing well in Vung Ngan, Vung Me, Dam Bay, and Bich Dam village. In the future, it is anticipated that seaweed will be hcultivated on a larger scale.*



## ***Aquaculture***

*§ Sea cucumber trial : After 6 months of culture, the average weight of an individual sea cucumber increased from 180g to 360g. These were then harvested and 134 individuals were released around Nha Trang Bay as part of the restocking program. The project is considering additional trials on integrated culture methods combining raising sea cucumber, seaweed with other aquaculture species*



## ***Aquaculture***

§ *Cobia trial: fast growing fish species becoming recognized as having great potential for aquaculture. After the 7-month trial in Vung Ngan village, the fish have reached the average length of 37 cm and average weight of 516 grams. The highest growth rate was for fish fed on small fish that produced fish with an average length of 59 cm and an average weight is 1,800 grams.*



## ***Basket weaving***

***§ Training local villagers to make baskets. Some people are able to make more than 1 basket per day, generating an income of up to 500,000 VND per month. These funds provide a valuable contribution to household incomes and assist them in entering the workforce. This activity also creates opportunity to cement family relationships.***



## ***Other support programmes***

- § Providing opportunities for women to visit other locations where women are playing a leading role in community, resource and environmental management.*
- § Providing for local people on family health care, reproductive health care and gender sensitization as well as information on the Family Law and the Mother and Children Protection Law to ensure all people understand their rights and responsibilities.*



# ***FUTURE CHALLENGES***

- 1. Management of aquaculture to ensure that there is not a significant impact on the environment, with preferences given to local people in the operation of aquaculture activities.***
- 2. Maintaining and expanding the areas included in “core zones” within the MPA to ensure that these areas can continue to contribute to fishery production in Nha Trang Bay.***



# ***FUTURE CHALLENGES***

3. *Creation of local fishing zones within Nha Trang Bay MPA for use by local people living within Nha Trang Bay.*
4. *Creation of opportunities for local people from islands within Nha Trang Bay to be involved in tourism activities.*
5. *Ensure that funds received from the various charges for the use of Nha Trang Bay MPA are able to be used to both fund activities to support the operation of management of the MPA and also are used to support local communities.*



## ***CONCLUSION***

*One valuable lesson that can be drawn from Nha Trang Bay MPA is that: the relevance and meaning of management should begin and end with its impact upon the human condition. In this case, it derives from the fact that, if management is essential for responsible fisheries, so is communities. Local communities can provide vital support for Nha Trang Bay management. Therefore, communities are a source – a variable of the fisheries management equation. This “special resource” requires both intensive and extensive investment.*





***Thank you for your  
attention!***