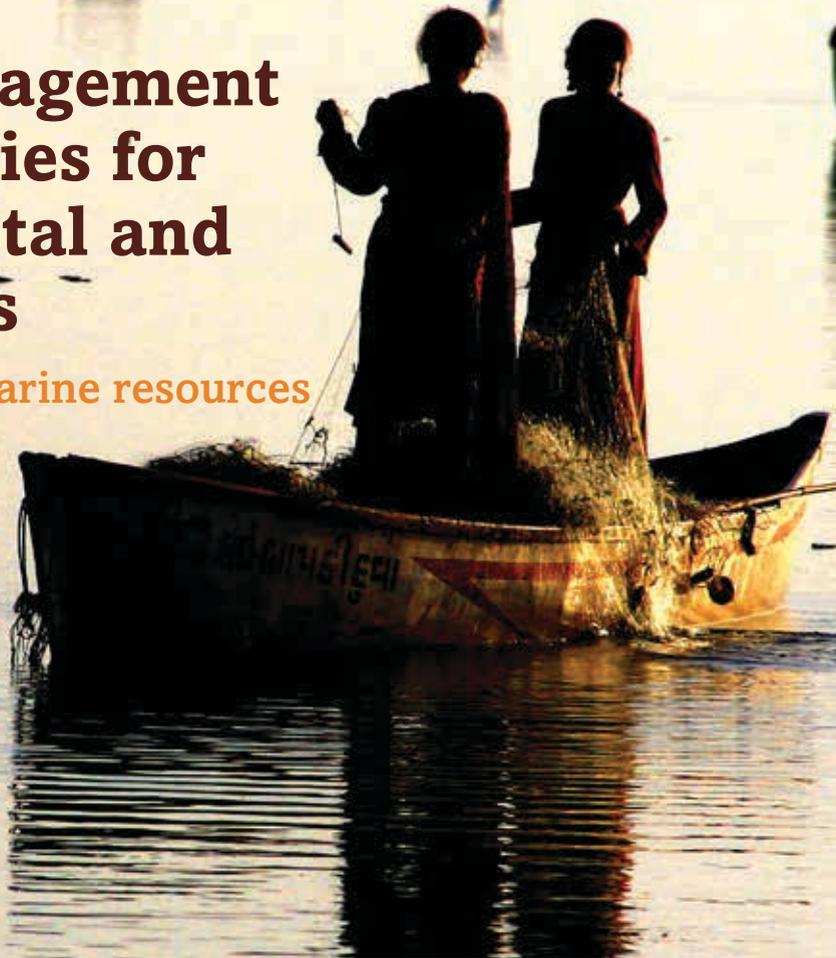


Trainer's Kit

Sustainable Management of Marine Fisheries for Conserving Coastal and Marine resources

For managers of coastal marine resources

Facilitating a process of cross-sector
dialogue for coastal and marine
biodiversity conservation



On behalf of:



Federal Ministry
for the Environment, Nature Conservation,
Building and Nuclear Safety

of the Federal Republic of Germany



Capacity Development for Sustainable and Effective Management of Coastal and Marine Protected Areas (MPAs)

In the coastal areas, a major determinant of the well-being and livelihood security is the availability of marine and coastal biodiversity resources and access to these resources. Consequences of the biodiversity loss and resulting loss of ecosystem services, therefore, have far reaching impacts on livelihoods and the overall well-being of coastal communities.

One of the most effective means of protecting marine and coastal biodiversity is through the establishment and management of marine and coastal protected areas (MPAs) and community-involvement in managing the coastal and marine ecosystems.

A holistic capacity development system for key stakeholders, addressing their knowledge, skills and values, is key to developing approaches for sustainable and effective management of coastal and marine biodiversity.

It is also equally crucial to facilitate a process of cross-sector dialogue among the decisions-makers, senior officials as well as field-level managers of the coastal and marine resources from forest, fisheries, agriculture, maritime board, pollution control board, and other key relevant sectors.

Capacity development is the process of developing capacities of individuals and shaping joint learning processes such that the individuals are enabled to achieve sustainable results within their own system of reference.

Capacity development facilitates change among people, in three dimensions: knowledge, skills and values/attitudes. A combination of traditional and innovative capacity development measures is required to achieve the objective.

About the Training Expedition

This Training Expedition is suitable for officials from fisheries department, forest department, Pollution Control Board, irrigation, revenue, agriculture and other such departments as well as Coast Guard, and Marine Police that have an important stake in use, management and monitoring of coastal and marine resources.

The curriculum has been designed for a three-day Training Expedition. However, because of its modular structure and participatory training methods, it provides enough flexibility and can be customized for delivery of training expeditions varying from 2 to 5 days.

The Training expeditions, whether 2 days or one week, must have a judicious mix of field and indoor sessions. In order to get the desired impact of the training expedition, it is essential to use the participatory training methods, as recommended in the sample agenda, and also in the Trainer's Guide.¹

The Training Expedition is intended to enable participants with sound understanding of the concepts and issues related to sustainable fisheries management and its interrelationship with coastal and marine biodiversity and marine protected areas, legal-policy framework for coastal-marine PAs, livelihood issues of coastal communities, as well as necessary skills to assess and monitor coastal and marine fish resources. The training expedition facilitates participants in developing further appreciation of and connectedness to coastal and marine biodiversity.

¹ Neeraj Khara, K. Sivakumar and Pradeep Mehta. 2016. Trainer's Guide on Participatory Methods of Training for Effective Content Delivery for the trainers of forest, fisheries and media sectors. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) India. ISBN 978-81-933282-3-1. Pp 120



Learning Outcomes of the Training Expedition:

By the end of the course, the participants will be able to:

- outline concepts and issues related to managing coastal and marine biodiversity.
- demonstrate the types and relevance of different categories of MPAs in different scenarios
- identify 50 key coastal and marine species.
- understand the relevance of community involvement and cross-sector cooperation for coastal and marine resource conservation
- explain, with examples, the ecosystem approach to fisheries management.



Approach and Methodology

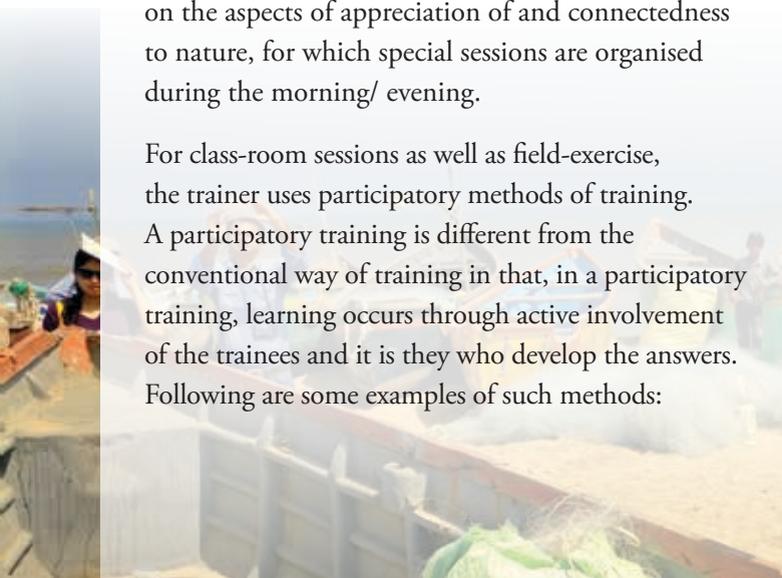
A set of eight modules on coastal and marine biodiversity, customized reading material on fisheries resource assessment, a framework schedule of training expedition, combined with well-tested participatory training methods form the core of the Training Expedition methodology. The modularised structure provides flexibility to adapt the contents, methods and duration of different topics based on the training needs of the participants.

The training expedition framework uses a mix of field-based and classroom training sessions, in almost equal proportions, to facilitate the participants in applying the information from class-room sessions into the field conditions, and to understand the field-level phenomena and actions in a broader development context.

A unique feature of the training expedition is to focus on the aspects of appreciation of and connectedness to nature, for which special sessions are organised during the morning/ evening.

For class-room sessions as well as field-exercise, the trainer uses participatory methods of training. A participatory training is different from the conventional way of training in that, in a participatory training, learning occurs through active involvement of the trainees and it is they who develop the answers. Following are some examples of such methods:

- 1 Group work and presentations
- 2 Dialogue and brainstorming
- 3 Knowledge Café
- 4 Role play
- 5 Simulation (case study simulation/ video simulation)
- 6 Online games and Mind Maps
- 7 Case Studies
- 8 Fish Bowl
- 9 Icebreakers, energisers, and team-building exercises
- 10 Nature walks and contemplation
- 11 Under-water and coastal surveys
- 12 Field excursions





Competencies-based curriculum for the field-level managers

The curriculum uses a competencies development approach with a strong emphasis on field-based exercises using participatory methods of training and learning. The training material is developed by a competent team of experts drawn from forest, fisheries and media sectors, bringing in a truly cross-sector perspective to the whole process of capacity development.

In order to assess the competencies required for specific job profiles, a capacity needs assessment (CNA) study was undertaken by the CMPA project. The results of this study formed the basis for developing a competencies-based curriculum for capacity development measures on coastal and marine biodiversity and MPA management for forest, fisheries and media sector professionals.

Competencies-based curriculum is a way of approaching professional training that places primary emphasis on facilitating the participants in further developing their competencies, which are required to enable them in performing their jobs more efficiently and effectively. It aims at preparing people more effectively for real workplaces.



Why use participatory training methods?

Traditional training methods are widely used to transfer information, facts and knowledge from trainer to the learner, but they are not always able to maximize the outcome for the participant's learning. The participatory methods of training help the trainer in:

- Increasing the relevance of the content for the participants, because the methods enable adaptation of the content based on the feedback of participants. Especially when the audiences are experienced field practitioners, they bring a variety of knowledge into the classroom.
- Increasing the inclusiveness of participants, by integrating the learning needs of different audiences. Different people learn differently – some need more visual stimuli, some are focused on listening and others have a more action-oriented learning style. In turn everybody can benefit from a more holistic learning experience, when different senses are stimulated.
- Increasing the sustainability of the training. The participants are encouraged to use examples that are relevant to their own work. This enables the participants to use the training methods efficiently and effectively into their sphere of work. In a participatory training, learning occurs through active involvement of the trainees and it is learners who develop the answers themselves.

In a participatory training, learning occurs through active involvement of the trainees and it is learners who develop the answers themselves.

An Outline of the Training Expedition

Training Expedition on

Sustainable Management of Marine Fisheries for Conserving Coastal and Marine resources

Date: xx-xx to xx-xx

Venue: xx (a coastal area with easy access to marine sites)

Date	Activity	Key Themes
Day 1		
11.00 – 11.30 AM	Registration & Tea/Coffee	
11.30 – 12.30 PM	Welcome and Introductions Benchmarking experiences Expected Outcomes, An overview of the schedule Resource material and Approach of the training expedition Thematic Champions	
12.30 AM – 01.00 PM	Inputs and Discussion on the key basic concepts	Introduction to coastal and marine biodiversity in India: Conservation Perspectives An introduction to fish diversity <ul style="list-style-type: none">• Fish taxonomy• Fish identification
01.00 PM – 02.00 PM	Lunch & Self-study and time to reflect and work on the field learning journal and get familiarized with the training resource material	
02.00- 02.30 PM	A Game on coastal and marine biodiversity and fisheries management	
02.30- 4.30PM	Inputs and Discussion on the key basic concepts	Of fishery and fish-folk: Overview of marine resources (what, where and who?) Economic importance of fish
04.30 – 05.30 PM	Visit to small scale fishery setting	
05.30 – 06.00 PM	Back to hotel, Debriefing and Discussion (Fish bowl)	
08.00 PM onwards	Dinner & Self-study and time to reflect and work on the learning journal	

Date	Activity	Key Themes
Day 2		
6.30 AM	Reflection on connectedness to nature	At the open space in hotel
07.00 – 08.30 AM	Breakfast & Self–study and time to reflect and work on the learning journal	
08.30- 09.00AM	Recap of the previous day by the participants (Bus-stop method)	
09.00- 09.45 AM	Inputs, Discussion and exercises on the key issues and challenges in fisheries management	How to know about fish abundance? <ul style="list-style-type: none"> • Data collection • Survey methods How much fish we should extract? Analysis of catch and effort data, biology data and economic data
10.00 – 12.30 PM	Visit to commercial scale fishery setting	
12.45- 1.00PM	Back to hotel, Debriefing and Discussion (Fish bowl)	
01.00 – 02.00 PM	Lunch & Self–study and time to reflect and work on the learning journal, and prepare for the roles	
02.00- 3.30PM	Briefing on the role play, and distribution of roles Role Play	
03.30- 05.30 PM	-How much fish we should extract - Issues and threats in marine fisheries - Conflicts of interest viz., conservation and livelihood, Alternate livelihood options	
05.30 – 08.00 PM	Self–study and time to reflect and work on the learning journal	
8.00 PM onwards	Dinner	



Date	Activity	Key Themes
Day 3		
	Reflection on connectedness to nature	
06.00 – 09.00 AM	Fishing expedition (Ideally on a vessel using non-destructive fishing methods)	
10.00- 10.15AM	Recap of the previous day by the participants (Bus-stop method/ Flashlight method)	
10.15- 10.30	Briefing and Distribution of the roles for the role play on legal framework	
10.30- 11.00AM	Inputs and Discussion on the key basic concepts	Legal framework in marine fisheries of India <ul style="list-style-type: none"> • - Laws & Regulations • - Policies
11.00- 11.30 AM	Role Play on legal framework	
11.45- 12.45 PM	Inputs and Discussion on the key basic concepts	Moving with the stakeholders <ul style="list-style-type: none"> • - Participatory approach • - Co-management Ecosystem approach to fisheries management
12.45 – 1.00 PM	Time to prepare for the knowledge cafe	
01.00 – 02.00 PM	Lunch	
02.00 – 3.00PM	Knowledge Café on “Conserving coastal and marine biodiversity through sustainable fisheries management” [Participants discuss key issues on sustainable fisheries management for coastal and marine biodiversity conservation]	
03.00 – 04.00 PM	Feedback and evaluation, Certificate Distribution	
04.00 PM	Training expedition ends	

The Trainer's kit

This "Trainer's Kit" is useful for the faculty members, trainers and other experts implementing Training Expedition on "Sustainable Management of Marine Fisheries for Conserving Coastal and Marine resources" for the field-level managers.

The Trainer's Kit DVD contains the following:

- Training Resource Material for MPA managers (8 modules)
- Special Reading Material on Marine Fisheries Resources
- Trainer's Guide: Participatory Methods of Training for Effective Content Delivery for the trainers of forest, fisheries and media sectors
- Tools and Handouts: A folder containing key formats, handouts for participants, reading materials, video resources, publications etc to further support the trainers in successful delivery of the courses

The DVD also contains information on other training materials and resources on coastal and marine biodiversity developed by CMPA project.




Sustainable Management of Marine Fisheries for
Conserving Coastal and Marine Resources
for Managers of coastal marine resources
Expedition Resource Material:
Field Learning Journal




Curriculum on
Coastal and Marine Biodiversity and Protected Area Management

Module 1
An Introduction to Coastal and
Marine Biodiversity and
Ecosystem Services

For Field-Level MPA Managers




Curriculum on
Coastal and Marine Biodiversity and Protected Area Management

Module 4
Coastal and Marine Protected
Areas and Sustainable Fisheries
Management

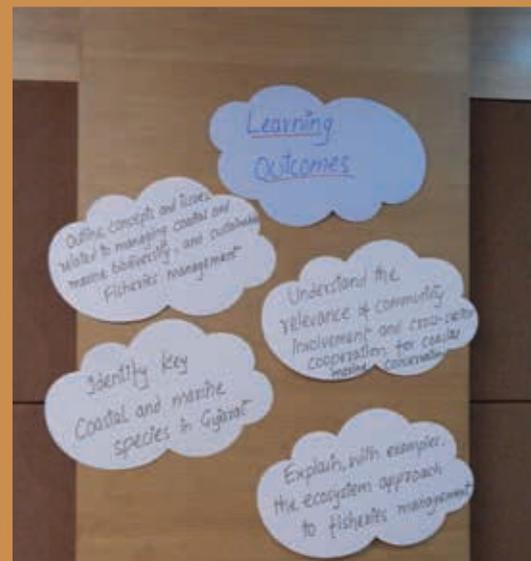
For Field-Level MPA Managers



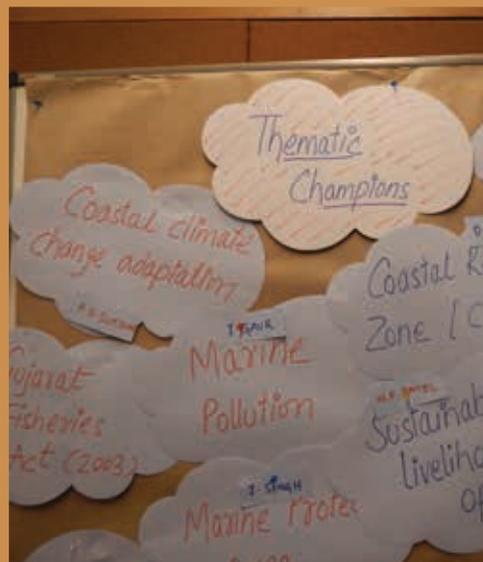

Trainer's Guide
**Participatory Methods of
Training for Effective
Content Delivery**
For the trainers of coastal, marine, and protected areas



The Training Expedition was successfully implemented twice at Verval Gujarat in the year 2017



Training Expedition was successfully conducted twice during April 2017 at Veraval, Gujarat for the senior Managers as well as the field-level staff from the Gujarat Forest and Fisheries departments, and from the Indian Coast Guard. The expedition was organized jointly by GIZ, Wildlife Institute of India, Veraval regional center of the Central Marine Fisheries Research Institute (CMFRI), and GEER Foundation, Gujarat



Partners:

The *Wildlife Institute of India (WII)* has a mandate to train Indian Forest Service officers, State Forest Service officers, as well as other key stakeholders such as the Coast Guard and Customs etc., and has recently initiated one-week refresher course exclusively addressing issues related to integrated management of coastal and marine biodiversity targeting senior forest officials.

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH is an enterprise owned by the German Government. GIZ implements sustainable development through international cooperation, on behalf of Germany and other partners. With a global footprint in over 130 countries, GIZ leverages its regional and technical expertise for local innovation.

The Central Marine Fisheries Research Institute, established by the Government of India, is a leading tropical marine fisheries research institute in the world. Along with this, fisheries management plans for each maritime state are formulated and the institute addresses climate change issues affecting coastal habitats and fishers. The Institute's multidisciplinary approach to research in marine capture and culture fisheries has won it recognition as a premier institute comparable to any well-established marine laboratory in the world.





This material has been developed under the Project –‘Conservation and Sustainable Management of Coastal and Marine Protected Areas (CMPA)’, which is a technical cooperation project jointly implemented by the Governments of India and Germany (2012-17). The Project is commissioned by the German Federal Ministry for Environment, Nature Conservation, Building and Nuclear Safety (BMUB) with funds provided under the International Climate Initiative (IKI), and jointly implemented by the Ministry of Environment, Forests and Climate Change (MoEFCC), Government of India, and the *Deutsche Gesellschaft für Internationale Zusammenarbeit* (GIZ) India on behalf of BMUB.

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Published by

***Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH***

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