Facilitator's Kit

Coastal and Marine Biodiversity Conservation and Protected Area Management

for the Indian Forest Service (IFS) Probationers

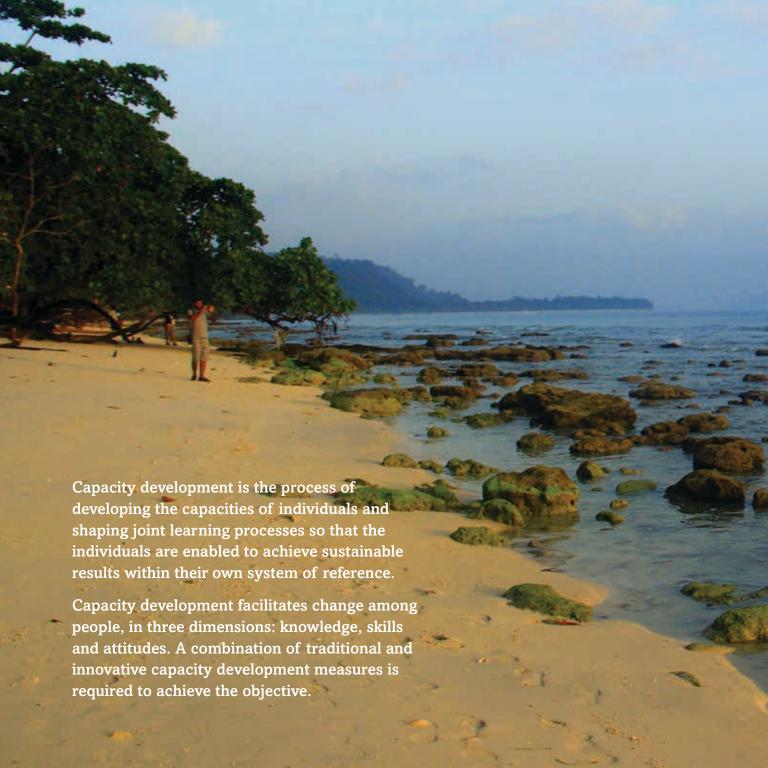








of the Federal Republic of German





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 coastal and marine protected areas (MPAs) and community-involvement in managing the coastal and marine ecosystems.

A holistic capacity development system for the MPA managers, addressing their knowledge, skills and values, is key to developing approaches for sustainable and effective management of coastal and marine biodiversity. To ensure a long term and widespread impact of the capacity development measures and to mainstream coastal and marine biodiversity into conservation planning in India, it is imperative that this issue gets integrated in the training curriculum of the probationary officers of the Indian Forest Service.

Keeping this in mind, the CMPA project of GIZ and the Indira Gandhi National Forest Academy (IGNFA) have designed specialized training measures for the IFS probationers, on coastal and marine biodiversity and MPA management.



About the Training measures for IFS Probationers

The Training measures for the IFS Probationers (future MPA managers) are designed to be delivered in a three-phased manner.

The first phase is a preLearning Phase, which begins a few months prior to the expedition. Participants are facilitated through eLearning to gain further clarity on basic concepts and issues.

The second phase is organized as a coastal and marine Training expedition to selected coastal and marine ecosystems. This facilitates participants in exploring and understanding coastal and marine ecosystems, and also getting a first hand information of various issues and challenges associated with managing these ecosystems. The field interactions and reflections enables participants in exploring their connectedness with nature.

The third phase is structured as follow-up learning and reflection phase, where participants are facilitated through a journey of setting up their personal learning and leadership goals and action plan for coastal and marine biodiversity conservation during their service.

Learning Outcomes of the Training Measures:

By the end of Phase-I (preLearning via eLearning), the participants:

- can describe various coastal and marine habitats and species
- are aware of the concepts and issues related to managing coastal and marine biodiversity
- become open to acquiring more knowledge on coastal and marine biodiversity relevant issues

By the end of Phase-II (Training Expedition), the participants are able to:

- able to outline concepts and issues related to managing coastal and marine biodiversity and demonstrate the types and relevance of different categories of MPAs
- able to differentiate clearly, between terrestrial and coastal-marine protected areas vis-a-vis the ecological and socio-political context, conservation approaches and legal-policy framework
- able to understand the relevance of community involvement and cross-sector cooperation
- open to acquiring more knowledge on coastal and marine biodiversity and contributing to its conservation in whichever capacity possible in the future.

By the end of Phase-III (Follow-up and Reflection), the participants are able to:

- appreciate the need to adopt specialised conservation approach for coastal and marine biodiversity
- draw their personal learning and leadership goals and action plan to contribute to coastal marine biodiversity conservation during their service



The process of curriculum development

Capacity needs assessment

The process of capacity needs assessment (CNA) was carried out in a truly participatory and cross-sector manner, with the involvement of institutions and experts from forest, fisheries and media sectors. CNA was conducted as series of workshops, group discussions, meetings and individual consultations. At the individual level, competencies were assessed in the knowledge, skills and values dimensions. A special focus of this assessment process was identifying capacity needs for enhancing cross-sector and cross-stakeholder cooperation.





Based on the findings of the CNA process, capacity development strategy was framed. Development of specialized training material for training of the MPA managers at different levels, was clearly the central part of this strategy.

Curriculum development dialogue

To develop a competence-based curriculum and training material for existing and potential MPA managers, the project organized two curriculum development workshops during 2014 in Delhi and Chennai. The participants represented a good mix of coastal and marine experts, fisheries experts, protected area managers, media professionals, capacity development experts, governance and policy experts and senior administrators and decision-makers from the MoEFCC, premier forest training institutes such as Wildlife Institute of India, Indira Gandhi National Forest Academy, State Forest Department representatives, specialized research institutions for coastal and marine research, NGOs and International organizations.

The curriculum development group developed a curriculum framework, with 12 modules, for the MPA managers. It was suggested to conduct Training expeditions for the IFS probationers and develop necessary material for such expeditions with the support from specialised agencies.



Approach and Methodology

The training measures for the IFS probationers use an experiential learning approach, where the participants are facilitated through all the three stages of learning- Knowledge, Activity and Reflection, in an integrated manner.

As the first step, the participants are provided with the Training Resource Material, in the form of eLearning, for fulfilling their knowledge requirement and fueling their interest in understanding coastal and marine issues.



During the training expedition, participants are involved in a variety of activities in coastal and marine areas, which are carefully selected based on the expected learning outcomes. Participants get an opportunity to visit different coastal and marine habitats, and get their underwater experience with marine species through diving and snorkeling. They meet and exchange experiences and ideas with variety of stakeholders who are key in protecting and managing coastal and marine resources, as well as experts from different sectors i.e., forest, fisheries, media, marine biology, capacity development and the existing MPA managers. Participants use a specialized document- Field Learning Journal- to record their observations and reflections.

Post-expedition, the participants get many and varied opportunities to analyse their observations, and reflect on the results. A structured element on personal learning review and setting up future personal goals for coastal marine biodiversity conservation provides the perfect beginning of a new passion for the participants.

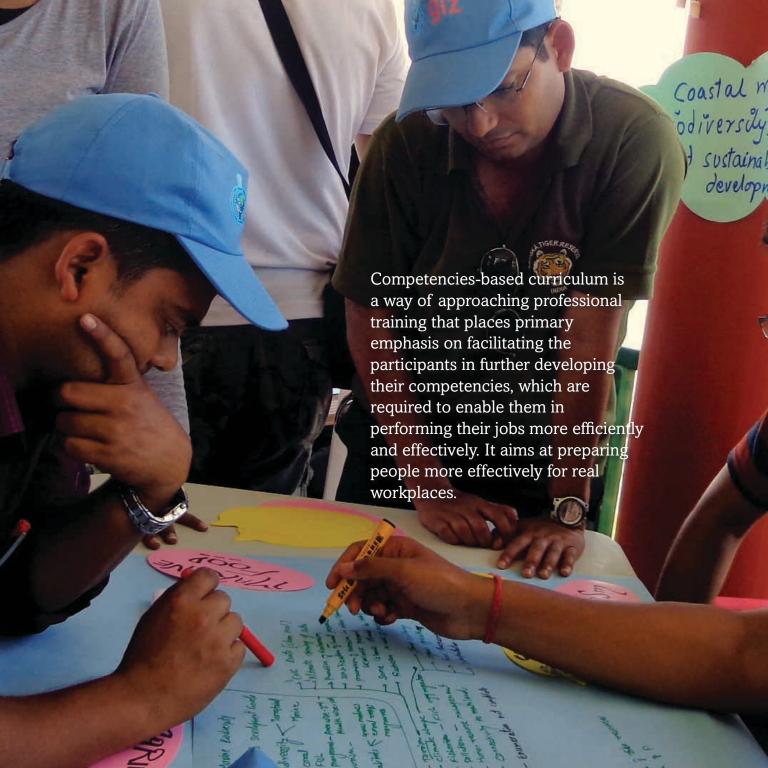
Participants are facilitated through activities focussing on their personal leadership styles and developing the skills to achieve their future goals.













Competence-based curriculum for IFS Probationers

The Training measures use a competence-based curriculum 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 capacity development and experiential learning experts with inputs from the experts from forest, fisheries and media sectors, bringing in a truly cross-sector perspective to the whole process of capacity development.

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.

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The Facilitator's kit

This "Facilitator's Kit" is useful for the faculty members, trainers and other experts delivering courses/ training expeditions on "Coastal and marine biodiversity and protected area management" for the IFS probationers.

The Facilitator's Kit DVD contains the following:

- Training Resource Material (12 modules)
- Facilitator's Guide: Coastal and Marine Biodiversity and Protected Area Management for IFS Probationers
- Trainer's Guide: Participatory Methods of Training for Effective Content Delivery for the trainers of forest, fisheriesand 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.

An overview of the Resource Material:

Training and Expedition

During Phase- I [preLearning]:

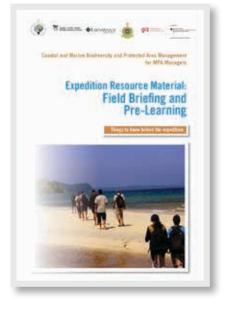
The participants are provided with Field Briefing and Pre-Learning, as well as Training Resource Material that is a set of 12-modules. All this material is available in hard copy, as well as through a dedicated eLearning platform.

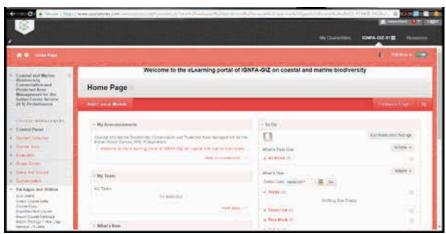
Field Briefing and Pre-Learning:

The field briefing and pre-Learning is designed to give participants the required information to prepare for the expedition – logistically, conceptually and emotionally. It includes important information on logistics, such as whereabouts of the expedition site, what to pack, how to physically prepare for the expedition, what conceptual understanding they might need to gain prior to the expedition to maximize their learning during the expedition.

Training Resource Material:

The conceptual understanding of the coastal and marine biodiversity issues is facilitated through a set of training resource material containing 12 modules (as detailed on the next page) which has been developed for the training of MPA mangers, and serves as a background resource material for the Training Expedition of the IFS probationers. An eLearning portal has been established that contains all the training resource material, discussion forum and the expedition related information for the participants.





During Phase- II [One-week Training Expedition in Andaman]:

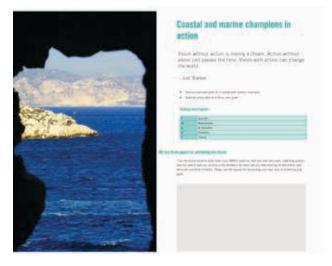
The participants are provided with a specially designed Field Learning Journal.

This journal, designed as a personal field diary for each participant, provides background information on the issues and sites to be visited during the expedition, space to capture their own observations and ideas, as well as guiding questions for analysis and reflections. The learning journal is structured in a way that helps prompting the participant to think about their connect with nature in ways they may not be used to. The learning journal helps participants to get the maximum learning out of their expedition experience.



During Phase- III [Reflection and drawing personal goals towards coastal marine biodiversity]:

The training material in this phase includes a format on "Personal Learning Review" that has been specifically designed for the IFS probationers. The probationers are also encouraged to revisit their 'Leadership Training" notes at this time, and draw up their personal learning and leadership goals and action plan to contribute to coastal marine biodiversity conservation during their service.





Training Resource Material

Following is an overview of the 12 modules: [preLearning material]

Module 1:

An introduction to coastal and marine biodiversity

This module serves as the foundation of the course by providing the basic concepts of biodiversity at the genetic, species and habitat levels, focussing on the examples and peculiarities of the coastal and marine ecosystems

Module 2:

Coastal and marine Ecosystem Services and their Value

This module facilitates participants looking into the concept of ecosystem services, overall development agenda via Global Sustainable Development Goals, the concept of sustainability, the concept of sustainable livelihoods and its interlinkages with the ecosystem services. The module then takes a deeper look into the economic values, and threats to coastal and marine biodiversity and focuses on some case studies.

Module 3:

From Landscape to seascape

This brief but very important module provides an overview of the ecological, socio-economic and political context that make the coastal and marine ecosystem management different from the management of terrestrial ecosystems. The module also summarizes they key ecosystem characteristics of the coastal and marine ecosystems.

Module 4:

Assessment and monitoring of coastal and marine biodiversity and relevant issues

This module provides an overview of different coastal and marine ecosystems, critical marine habitats, their importance and assessment, selected assessment and monitoring methodologies of different critical habitats and different species found in coastal and marine ecosystems. The module ends with an overview of the stakeholder mapping and analysis for an effective MPA management.

Module 5:

Sustainable Fisheries Management

This module provides much needed information on the basics of fisheries management, and principles and practices of sustainable fisheries management in and around marine protected areas. Apart from providing useful case studies on the subject, this module is also covering challenges and trade-offs with the protection oriented coastal management, synergies with the MPAs and livelihood security.

Module 6:

Coastal and Marine Protected Areas

This module provides much needed information on the basics of marine protected areas (MPAs). The modules provides insights into the differences between them and terrestrial protected areas, special conditions that affect the management of MPAs, and the categories and types of MPAs. This module covers the key issues of community participation and the role of indigenous communities in managing the MPAs and coastal and marine biodiversity management. Module also contains information on different types of MPAs in India and their locations, and the benefits and challenges that MPAs management involves.

Module 7:

Governance, law and policies for managing coastal and marine ecosystems, biodiversity and protected areas

This module gives an outline and a brief history of the diverse governance, legal and policy frameworks for managing coastal and marine ecosystems. The governance, policies and laws have been presented in two sections. The first section deals with global conventions and guidelines that provide a framework to the maritime countries to draft national policies and legislation for conservation and management of coastal and marine habitats and species. The second section provides an overview of the major policies, law, rules and guidelines in India.

Module 8:

Interlinkages between coastal and marine biodiversity, climate change, natural disasters and coastal livelihoods

The module provides an overview of the concepts of climate change and natural disasters and the related risks that they pose to the coastal and marine biodiversity and ecosystems. The module further explores in detail the impacts of climate change and natural disasters on coastal livelihoods and their management options using examples and cases. The module then focuses on a very important issues of possible synergies and trade-offs between the measures taken towards climate change management, coastal and marine biodiversity conservation, coastal livelihoods, and coastal disaster management.

Module 9:

Tools for Mainstreaming: Impact assessment and spatial planning

This module provides the conceptual background and introduction of mainstreaming biodiversity. To ensure that biodiversity-related issues and concerns become a part of the larger development planning process in the country, there is a need to incorporate it into policies, strategies and action plan. There is also a need to use science-based tools to understand the impact that projects can have on the environment and ensure that spatial planning incorporates measures for conservation of coastal and marine biodiversity. This module provides the basic concepts and examples of such tools knowledge of which is useful for the conservation managers and decision-makers.

Module 10:

Change Management and connectedness to nature

This module takes up the prioritized global competencies as identified for the MPA managers to effectively communicate with key stakeholder and for an effective cross-sector dialogue. The module elaborates a selected set of such competencies such as connectedness to nature and ecological consciousness, communication skills, leadership qualities and stakeholder engagement approach.

Module 11:

Communicating Coastal and Marine Biodiversity Conservation issues

This module will help field-level MPA managers understand how media looks at coastal and marine conservation issues. Since conservation is not in the media priority and MPAs come into news only when an event happens, the module will help managers to gain knowledge and skills for effectively engaging media on conservation issues. The module will introduce the different tools for media relations, their strengths and limitations. It will also discuss how to use these tools during a crisis communication situation.

Module 12:

Effective management Planning and marine protected areas

This module provides an overview of the management experiences in terrestrial as well as marine environments. A description of the elements of effective management plan and guidelines for management effectiveness evaluation along with the key indicators and framework on Management Effectiveness Evaluation (MEE) of coastal and marine protected areas form the major part of the learning from this module. Case studies help participants in applying concepts and guidelines to the real life cases.

Facilitator's Guide:

Training Expedition on Coastal and Marine Biodiversity and Protected Area Management

for IFS Probationers

This facilitator's guide supports the faculty members and facilitators from institutions implementing training measures on coastal and marine biodiversity for IFS probationers. This guide serves as a simple narrative on the step-wise approach to be taken while implementing the training measures for the IFS probationers in an effective way. This guide makes available appropriate tools and handouts to be used by the facilitators. The training methods suggested in this guide are time-tested and peer reviewed, however, if required, these can be customized to suit the learning objectives, audience, time availability, resource availability and other factors. It is also possible to include new resource material and activities, as and when required.

The guide consists of four sections:

Section 1: The curriculum and the resource material

This section provides a brief history of the training material development, overall structure of training measures for the probationers, including the Training Expedition in Andamans, training approach and methodology, and an overview of the resource material.

Section 2: Training delivery

This section provides key concepts related to training delivery, a useful refresher, for the faculty member/ facilitator. This is followed by a detailed and systematic guidance on the delivery of various sessions during the one-week Training Expedition. The sessions have described as they were conducted for the four batches in 2016-17.



Section 3: Tools and Handouts

This section provides formats, tools and handouts that would serve as a ready reference for the facilitator for taking large prints/ quoting text for writing on flipcharts etc. These tools have been cross-referenced in the description of training methods (Section 2)

Section 4: References and Further Readings

Trainer's Guide

Participatory Methods of Training for Effective Content Delivery

for the trainers of forest, fisheries and media sectors

This trainer's guide has been designed to facilitate trainers and experts of forest, fisheries and media sectors in delivering their courses and sessions effectively through the use of participatory methods. This guide serves as a compendium of selected participatory training methods, which are innovative, have been tested for their effectiveness, and are easy to be applied.

The guide consists of four sections:

Section 1: Capacity Development and Participatory Training Methods

This section provides an overview of the concept of capacity development and the philosophy behind developing a guide for facilitating trainers in delivery the contents of their training using participatory training methods.

Section 2: Fundamental concepts of training and learning and the role of the trainer

This section provides interesting reading for various training and learning concepts that will serve as a quick refresher for the trainers. The purpose of this section is to draw close linkages between concepts and the practical implications of such concepts used by the trainers. This section provides an overview of the concepts of learning, characteristics of adult learners, framing learning outcomes and an insight into the need to use more participatory methods while delivering the contents of this curriculum.

Section 3: A journey through a selection of training methods

This section provides a comprehensive list and an overview of various training methods that can be used by the trainers— either in the original form or after adaptation as necessary to suit the specific group of participants. There is an attempt to elaborate a few selected training methods and approaches in this section.

Section 4: Planning, organizing and implementing coastal expeditions

Field expeditions are an important tool of experiential learning for all kinds of participants. But organizing a successful field expedition needs some planning, and some rules to be followed so that the success is maximized. This section, which has been developed in partnership with the Earthwatch Institute India, serves as a guide to planning and organizing coastal and marine expeditions.

Partners

Indira Gandhi National Forest Academy (IGNFA)



The primary mandate of the Academy is to impart knowledge and skills to the professional foresters and help them to develop competence for managing the country forest and wildlife resources on a sustainable basis. In the Academy training is provided at different levels of seniority in the Indian Forest Service besides training the new entrants to the service.

www.ignfa.gov.in/

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