

Training Resource Material

Coastal and Marine Biodiversity and Protected Area Management

Module 10

Change management and connectedness to nature

For MPA Managers



भारतीय वन्यजीव संस्थान
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Photo by: Dr. Deepak Apte

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Summary

This module takes up the prioritized global competencies identified for marine protected area (MPA) managers for effective communication with key stakeholders 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.

Imprint

Training Resource Material:
Coastal and Marine Biodiversity and Protected Area Management
for MPA Managers

Module 1: An Introduction to Coastal and Marine Biodiversity
Module 2: Coastal and marine Ecosystem Services and their Value
Module 3: From Landscape to seascape
Module 4: Assessment and monitoring of coastal and marine biodiversity and relevant issues
Module 5: Sustainable Fisheries Management
Module 6: Marine and Coastal Protected Areas
Module 7: Governance, law and policies for managing coastal and marine ecosystems, biodiversity and protected areas
Module 8: Coasts, climate change, natural disasters and coastal livelihoods
Module 9: Tools for mainstreaming: impact assessment and spatial planning
Module 10: Change Management and connectedness to nature
Module 11: Communicating Coastal and Marine Biodiversity Conservation issues
Module 12: Effective management Planning of coastal and marine protected areas

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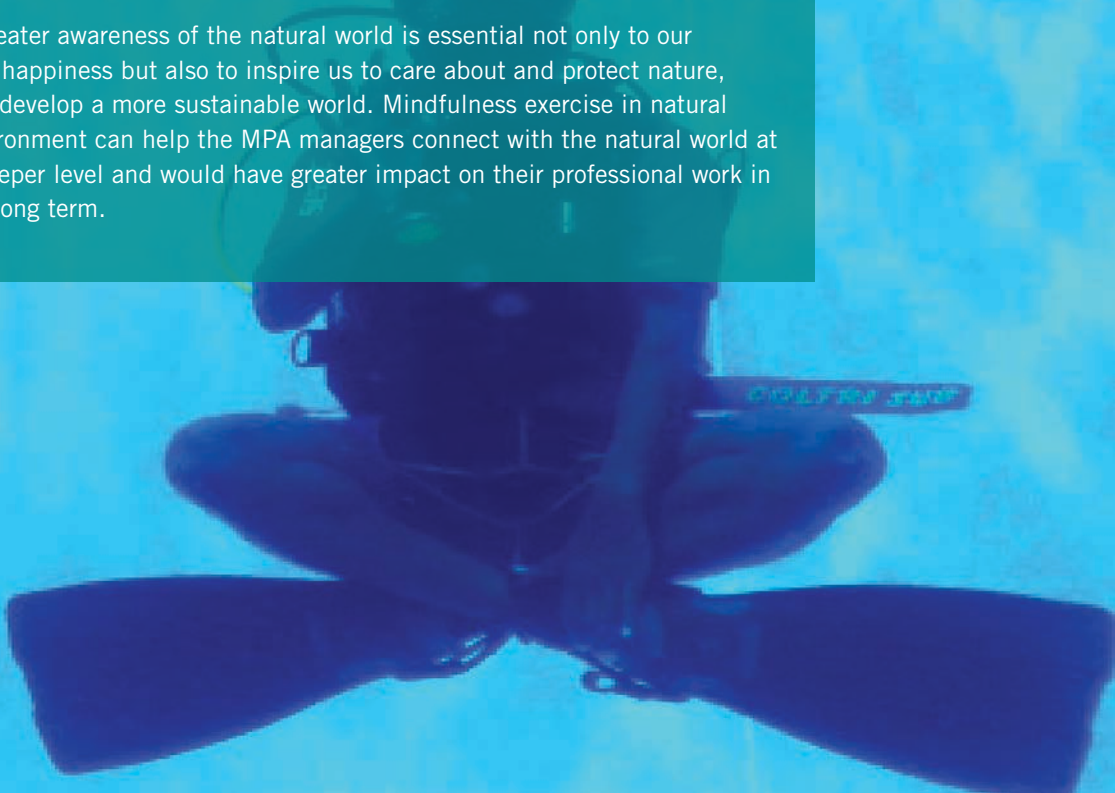
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Key messages

- Planning, implementing and managing MPAs require that attention be paid not only to the biological and physical issues that influence the performance of MPAs, but equally to the human dimensions: social, economic and institutional considerations that can dramatically affect the outcome of MPA implementation.
- In the new paradigm, in which the MPAs are to be managed, it is essential that the forest sector, responsible for coastal and marine protection, be equipped with the best knowledge on the coastal and marine issues, the skills required to manage a marine area, and the willingness to change.
- A greater awareness of the natural world is essential not only to our own happiness but also to inspire us to care about and protect nature, and develop a more sustainable world. Mindfulness exercise in natural environment can help the MPA managers connect with the natural world at a deeper level and would have greater impact on their professional work in the long term.





10.1 Why change?

Planning, implementing and managing MPAs require that attention be paid not only to the biological and physical issues that influence the performance of the MPAs, but equally to the human dimensions: social, economic and institutional considerations that can dramatically affect the outcome of MPA implementation.

For centuries, indigenous peoples and artisanal fishers have used various forms of closures and protected areas to manage fisheries. These locally created and managed MPAs have used spatial, gear, seasonal, species, size, access or tenure restrictions. Historically, their locations and regulations were shaped by local knowledge, beliefs and values and implemented through traditional mechanisms and governance institutions. The relative success of these sites and compliance with regulations could be attributed to their cultural or spiritual value, their perceived legitimacy, the strength of social contracts between users and the implementation of local enforcement and sanctioning mechanisms. In the absence of commercial-scale fisheries, when local management and enforcement were effective, such areas could increase fisheries and harvesting yields for local fishers and subsistence harvesters.

However, in many places around the world, top-down fisheries management regimes have resulted in the decline or loss of traditional fisheries management mechanisms, including closures. MPAs were 're-discovered' by scientists in the 20th century, promoted by conservationists, fisheries managers, and international policy makers and then implemented in a mostly top-down fashion that has often been met with opposition from local fishers and communities.

The reasons for the opposition of small-scale fishers to top-down MPAs are commonly threefold.

- First, exclusionary MPA policies can lead to unintended social and economic consequences including livelihood impacts, poverty, loss of tenure, community conflicts and even physical displacement. These negative impacts occur when there is a lack of consideration of the needs and values of local stakeholders and communities during the creation and management of MPAs. This is exemplified in the principal mandates of many MPAs citing knowledge, enjoyment and conservation – all values that may ignore the needs of local fishers and communities in developing nations who rely directly on the ocean for livelihoods and survival.
- Second, top-down MPAs have often resulted in further marginalization of vulnerable groups and populations from marine governance processes.
- Third, the conservation goals, and thus legitimacy, of top-down MPAs is often not well communicated and is therefore questioned or not understood by local fishers.

Understandably, inequity in governance processes or socio-economic outcomes and/or illegitimacy and ineffectiveness in management goals and outcomes can lead to lack of support from local fishers for MPA initiatives.

10.1.1 What is to be changed?

A study from Philippines and many such studies and experiences strongly suggest that MPAs based primarily on national law, international targets and a command-and-control policy are likely to fail.

The pressing imperative of an ocean-wide environmental decline should not be used to justify infeasible and poorly designed management interventions that ignore local dynamics and institutional constraints.

Non-compliance with MPA regulations is a problem worldwide, and this is being addressed through community programmes in many parts of the world now.

A study on park service and fisheries department employees and fishers living adjacent to three parks in Kenya reveals that the strongest factor for the perceptions of local communities towards MPAs was employment, with fishers having significantly less positive perceptions towards areas closed to fishing compared with government managers although all groups agreed that area management benefited the nation. Government employees thought that fishers and their communities benefited from area management, while most fishers did not share this view.

Fishers living adjacent to the oldest MPA held significantly more positive perceptions compared with fishers living adjacent to the newest MPA although only a slight majority agreed that they and their communities benefited.

10.1.2 How can the change take place?

The experiences so far point to:

- a need for patience in expecting change in resource users' perceptions and
- a need to adopt an approach in which there is more communication between fishers and managers so that both are more aware of the functions of MPAs, particularly closed areas and the indirect benefits.

10.1.3 Bringing about the soft change in ourselves

The success of conservation projects depends not only on the political will and finances, but also largely on the people managing the conservation projects and protected areas. Since management of protected areas, especially MPAs involves ‘people management’ as one of the dominant element, it is imperative that the training of the managers also includes focus on global competencies that are beyond the technical knowledge and skills on conservation issues. Leadership skills, networking and communication skills, negotiation and conflict resolutions skills, and interdisciplinary skills for multi-stakeholder participation are some of the key competence areas. IUCN also defines such group of competencies as “Universal Work competencies” that anybody working in a protected area should possess, whether the director or a local volunteer.

A recent study on the capacity building needs for effective management of protected areas in the Asian context also emphasized on the relevance and importance of such competencies (also called as “soft skills”) for park managers.





10.2 Competencies of the MPA managers

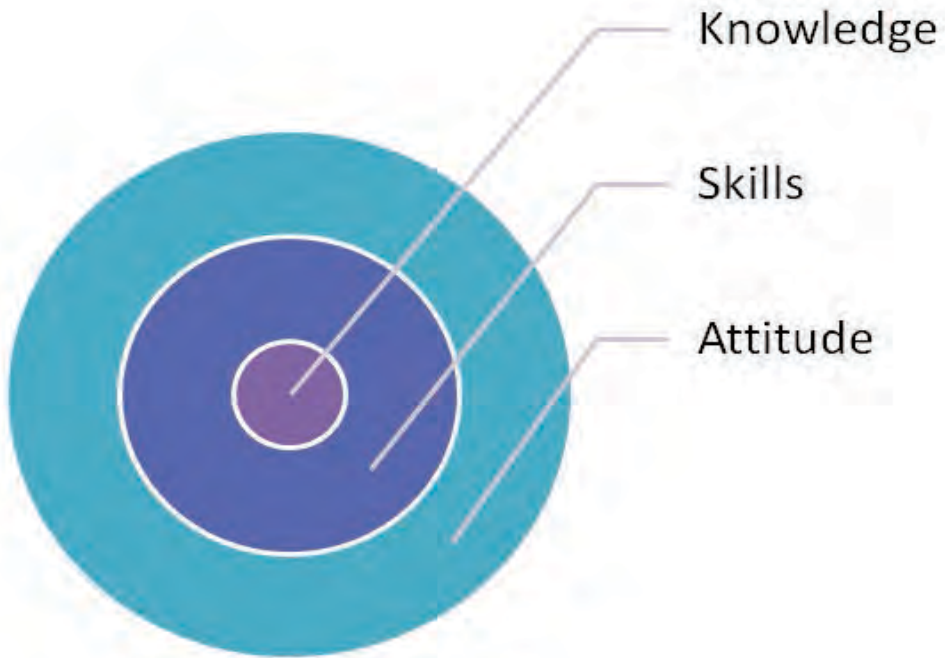
10.2.1 Overview

Competence is the proven ability to do a job, defined in terms of the combination of required knowledge, skills and attitude/Values



Knowledge provides an awareness and understanding of the conceptual and technical basis for the tasks to be performed as part of one's job.

Skills ensure the ability to perform those tasks efficiently, reliably and consistently.



Attitude and values help ensure that one remains motivated and result-oriented; and completes the tasks professionally and ethically.

In a shifting paradigm, where the protected area management now spans coastal and marine biodiversity apart from the conventionally managed terrestrial resources, it is relevant that the forest sector, responsible for coastal and marine protection, be equipped with the best information about coastal and marine issues, the required technical and leadership skills and the ability to manage the change.



The ability to appreciate coastal and marine biodiversity, ecosystem services arising out of it and the need and importance of protecting it among the key stakeholders-especially in the fisheries sector-is as critical as legal and financial resources.

10.2.2 Types of Competencies for MPA managers

The National Training Policy of India (GOI, 2012) states that competencies, for all civil servants, may be broadly divided into those that are core skills which they would need to possess with different levels of proficiency for different functions or levels. Some of these competencies pertain to leadership, financial management, people management, information technology, project management and communication. The other set of competencies relate to the professional or specialized skills, which are relevant for specialized functions.

The specific competencies of an MPA manager can be broadly classified into four categories (The categories 2, and 4 correspond to the 'core skills' identified by the National Training Policy):

1. Technical / professional competencies
2. Management and methodological competencies
3. Personal and social competencies
4. Leadership competencies

Following table provides some examples of competencies vis-à-vis MPA managers. The actual competency model, to be used for capacity development measures, would need to be specifically developed for each country/ state:

Technical / professional competencies

Protected Area Policy, Planning

Understanding of coastal and marine biodiversity basic science

Knowledge of key developments in the domain of coastal and marine biodiversity

Understanding of legal framework visa-vis coastal ecosystems and enforcement requirements

Ability to plan, manage and monitor activities for crime prevention, law enforcement and compliance.

Ability to design awareness and education programmes

Understanding of the socio-economic contexts of the coastal ecosystems

Research and monitoring skills-include planning, implementation, and valuation of assessment and monitoring of required elements of biodiversity including coastal habitats, under-water surveys, identification of suitable indicators, etc

Swimming and diving skills

Ability to use required technology such as GPS, mobile and internet-based data Applications

Management competencies

Field/Water Craft and Site Maintenance

Financial and Operational Resources Management

Administrative Documentation and Reporting

Human resource management

Handling external research projects in the MPA

Personal and social competencies

Personal Communication skills
Facilitation skills
Negotiation skills
Diplomatic Sensitivity
Empathy
Trustworthiness/Ethics
Proficiency in self-defence techniques
Appreciation for nature

Leadership competencies

Organisational Leadership and Development
Decision-making skills
Result-orientation
Problem solving skills
Teamwork and Team Leadership
Skills to engage with stakeholders from other sectors and local coastal communities
Conflict management skills
Sensitivity to local Communities and Cultures
Strategic thinking, strategic networking

10.2.3 Leadership competencies for the MPA managers:

MPA managers are engaged in a professional situation that is uniquely varied and complex. They need to not only interact and/ or work with their own departmental colleagues, but also with other departments such as fisheries and revenue, local coastal communities, as well as many types of industries and defence establishments in the coastal areas. They also engage other vested organizations ranging from their own national level Ministry, state governments, to funding agencies, to nongovernmental organizations (NGOs) and their projects that are working in the area, to the private sector.

They are addressing the goal of protecting the rich coastal and marine resources, while recognizing that these resources may also be of significant importance—both historically and today—in providing food and income to the communities that surround the protected area.

All this needs to be done, when the MPA managers themselves might not have had the time or opportunity to undergo specialized trainings on MPA management. Working in the field of such complex involvements and sometimes competing interests—as usually is the case in marine protected areas—there may be frequent misunderstandings, conflicts, and the need to make choices among conflicting values. These generate ethical dilemmas and demand practical leadership.

It is a prime responsibility of professionals working in MPAs to anticipate these and to resolve them in a way that respects both the rights of the individuals and group stakeholders as well as the mandate of the protected area (Coastal Resources Center and WIOMSA, 2012).

10.2.4 Attributes of a leader:

(Source: Londoño et al. 2015)

Leadership of protected areas, first and foremost, is based on core values of conservation and preservation. Without a deep belief by the leader that conservation of biodiversity is essential to our survival, all decisions will be seen as shallow and motivated by external factors.

Optimism is essential to effectiveness, especially when we know that protected areas will rarely have the level of funding and staffing that we believe they require.

Perseverance is also essential—pursuing each threat or opportunity with patience to succeed.

Unfortunately, no leader of a protected area is armed with the complete science, past experience with the issues or a sage-like ability to see outcomes. Instead, the leader requires a certain comfort with ambiguity.

A great leader is an excellent communicator of his or her ideas, vision, commitment and optimism.

A great protected area leader inspires others both within and outside the organisation to take action.

A great leader sees all the parts interacting and puts them into a strategic plan for effective protection.

A great leader encourages innovation and creativity.

He or she can navigate the treacherous waters of politics, knowing when to give in and when to push back.

There is no greater calling than to be a great protected area leader, as they give a voice to those who cannot speak for themselves, a voice to those of the past who handed us this responsibility, a voice to the animal and plant kingdoms with whom we share the Earth and a voice to future generations, who are counting on us to leave them a world in which they will want to live. [Londoño et al. 2015]







10.3 Connectedness to nature¹

10.3.1 Overview

True connectivity in any relationship, be it interpersonal or with elements of nature, serves to strengthen empathy and concern. Because of personal transformations brought about by the positive effects of nature, connectedness will give rise to novel types of directives to MPA managers that will result in care and attentiveness to what is happening in the coastal and marine ecosystems around them.

¹ Text contributions by Martina Hoft and Ajay Rastogi for this section are gratefully acknowledged.

The responses of society to the loss of biodiversity are increasing dramatically, and judging from national plans and commitments, they are expected to continue to increase. However, the overall responses appear to be insufficient relative to the pressures. This sobering outlook leads one to conclude that there is something fundamental lacking in our relationship with nature. The term 'nature connectedness' encompasses both our inner and outer nature. Contemplating natural settings calms the psyche and is a way of connecting not only to our natural surroundings, including other creatures, but also to our own consciousness. Ecological consciousness then is simply the consequence of a clear and quiet mind in contact with its origins.

Rapidly increasing scientific evidence reviewed by Selhub and Logan (2012) confirms that the brain is absolutely influenced by nature. The sciences of biology, psychology, neurology and mind–body research all inform us of different aspects of *how* nature influences the human mind and affects health and behaviour. Our perception of stress, our mental state, our immunity, our happiness and our resilience are all chemically influenced by the nervous system and its response to the natural environment.

Adult memory performance can be disturbed by just a few days of elevated levels of the stress hormone cortisol, and even low-level elevation of the levels of pro-inflammatory immune chemicals (cytokines) impairs verbal and nonverbal memory. If nature can lower stress hormone levels and keep inflammation in check, it follows that nature can be of enormous importance to cognitive health.

Lyubomirsky et al (2005) showed that time spent in contemplation, particularly what is called 'loving kindness meditation,' produces increases in positive emotions and builds personal resources.

Contemplative practice creates a naturalness orientation and inner motivation for a simpler and richer life more in line with the biological and agricultural roots of human civilization. Evidence for the positive outcomes of sustained contemplative practice on health and behavioural transformations is increasing.

Contemplative practices are gradually gaining ground in the academia. Schools as well as universities are adopting elements of contemplative education in teaching mainstream subjects (see, e.g., Association for Contemplative Mind in Higher Education (ACMHE)). Discoveries in science, artistic breakthroughs and the common classroom experience are instances of direct perception breaking into our habitual awareness with a novel cognitive insight.

A number of studies have shown that immersion in and connectedness to nature foster pro-environmental attitudes and behavioural patterns (Zaradic et al 2009; Lohr and Person-Mims 2005; Thompson et al 2005; Frantz et al 2005). The practice of nature contemplation and experiences of nature connectedness can ignite ecological consciousness and strengthen the motivation to lead truly sustainable lifestyles in line with the biological and agricultural roots of human civilization.

10.3.2 Tools for behavioural transformation

There is an urgent need to develop tools and techniques to reset the balance, to strengthen our innate bond with nature, to give emotions their rightful place at par with rational thinking and to acknowledge the wisdom inherent to ancient Eastern philosophies, native or indigenous perceptions and the principles alive in traditional communities, which emphasize equilibrium, reciprocity, solidarity and collectiveness. These are often reflected in meaningful ceremonies related to natural cycles and mindful thanksgiving, which can significantly improve our connection with both our external and internal nature.

Compassion, loving kindness, integrity and care strengthen the resolve to protect and respect nature. Several techniques are proposed for reorientation and anchoring. Ceremonies and practical exercises, including contemplation, play an essential part.

The peaceful state of mind, tranquillity and clarity of thoughts and feelings resulting from nature connectedness have the inherent power to counteract destructive consumerism, which is generally acknowledged to be one of the root causes of environmental degradation.

GOALS

- Strengthen the mind–body connection with nature, in particular with the marine and coastal environment.
- Strengthen the resolve to implement decisions that respect nature and ecosystem processes.
- Enable appreciation of key elements inherent to nature and in particular the marine and coastal environment: power, functionality, beauty and connectedness. Encourage MPA managers to actively participate and engage stakeholders in the practice of nature contemplation.
- Enable nature and human wellness to be experienced.

10.3.3 Contemplation of nature

Eastern tradition informs us that contemplation leads to powerful insights of connectedness and oneness, which make it simply impossible to disregard and not care for nature or for each other. This consciousness in conjunction with exposure to nature can be a driving force in modifying the many harmful and destructive practices that we came to rely on for modern lifestyles.

Contemplation of nature deserves a special place among the many practices that are advocated for connecting with nature, such as *shinrin-yoku* (a Japanese concept that could best be translated as ‘forest bathing’ (Park et al 2010), exercising outdoors, owning a pet, gardening or wilderness therapies. While all these have their proven benefits, the emphasis is on human well-being, and care for nature is a side effect at best.

Contemplation of nature can be practiced anywhere, anytime, and no equipment and no special instructions are needed. Anyone can take up this practice and incorporate it into his and her daily routine. Multiple benefits for the body and mind arise from a contemplative mind-set.

Contemplation of nature is akin to a meditative practice done in association with the natural environment. It involves three steps: soft gaze, disinterestedness and sympathetic attention.

Soft gaze. One chooses a view to observe. This could be a landscape, water body, agricultural field, garden or hedge. If there is no access to nature outdoors, one can choose to contemplate on a potted plant, flowers, leaves, stones, sea shells, etc. indoors. One’s attention is gently focussed on the view or the object. The eyes can blink as naturally as they do. If one is tired or feels better by closing the eyes briefly, there is no problem. Often thoughts start to rush in as soon as the eyes are closed. If that happens, the eyes should be opened as one reminds oneself about contemplating nature. Open eyes help because nature is a multi-sensuous engagement (sight, hearing, smell, etc.). This is a support even though one is not consciously engaging the senses.

Disinterestedness. This is about distance from the subject’s own needs, desires, concerns and outcomes in the process of contemplation. To put it more classically, this element in the practice is ‘transcendental.’ Though one is fully aware of one’s own presence and that of the view or the object, one is not exercising the mind to find out any details about the view or the object.

Sympathetic attention. This comes from the well-developed field of loving kindness meditation. This practice, in which one directs compassion and wishes for well-being toward real or imagined others, is designed to create changes in emotion, motivation and behaviour in order to promote positive feelings and kindness towards the self and others. What is required is to just gently remind oneself once that without the elements of nature survival would be impossible and to continue, remaining disinterested and maintaining a steady soft gaze.

The recommended duration is about 30 minutes. Scientific research into the mind–body connection has pointed out that after about 22 minutes of a restful mind, a much deeper physiological relaxation starts to take place. This finding has ushered a relaxation revolution and given rise to several techniques such as mindfulness-based stress reduction (MBSR).

Contemplative practice creates a naturalness orientation and inner motivation for a simpler and richer life more in line with the biological and agricultural roots of human civilization. Evidence for the positive outcomes of sustained contemplative practice on health and behavioural transformations is increasing.

10.3.4 THE ECOLOGICAL CONSCIOUSNESS

Life carries meaning and purpose. Purposeless growth is profligate and cancerous. The tree must give fruit, the seeds must be formed. If we have worked our way stepwise to the flame of dying and becoming, if we have felt reverence before nature and committed ourselves to service, then the death of the husk, which is to say our lower self, is nothing fearsome. We are certain to uncover the real self thereby.

At the close of the contemplation, guide yourself back by recalling the full importance that awaits you here upon the good Earth. Contemplating in this way can help us form a true spiritual relationship with the Earth in a way many traditional societies and philosophers did. Arne Naess placed the experience of profound ecological interconnectedness at the heart of his philosophy of 'deep ecology' and recognized the spiritual foundations of ecological ethics. Satish Kumar called it 'reverence ecology.' Naess, Kumar and so many others rightly acknowledged that an ethics governing the relationship of humanity with the Earth cannot be the outcome of a rational cost-benefit analysis merely but must be predicated on a lived spiritual relationship with her. The above-mentioned approach and methods help us connect deeply with nature and cultivate ecological consciousness.

10.3.5 Mindfulness

Mindfulness is paying attention to where we are, how we are, what we are feeling and what we are thinking, in the present moment. It is about being aware of our experience as it unfolds. Its practice helps us learn to explore our own life, such as our thoughts and emotions, as well as life in the world around us. The world around us also includes natural world, the creatures, the habitats. However, we are increasingly forgetting the natural world around us. Losing touch with our natural home is having serious consequences for our own health and well-being.

A greater awareness of the natural world is essential not only to our own happiness but also to inspire us to care about and protect nature, and develop a more sustainable world. Mindfulness exercise in natural environment can help the MPA managers connect with the natural world at a deeper level and would have greater impact on their professional work in the long term.

Following website links will help the MPA managers understand the mindfulness better:

TED Talk on mindfulness by Andy Puddicombe :

<https://www.youtube.com/watch?v=qzR62JJCMBQ>



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