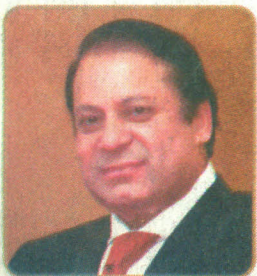




## Pakistan Navy Mangroves Plantation Campaign



### MESSAGES



**Muhammad Nawaz Sharif**  
Prime Minister of the  
Islamic Republic of Pakistan

The people of Pakistan stand together with the international community in celebrating the International Day of Forests to create greater public awareness on the significance of natural resources, in particular of forests, in our lives and to emphasize the urgent need to take concerted actions to ensure that they are utilized in a sustainable manner.

Forests are a key factor in mitigating the impact of climate change on our ecosystems and in maintaining the balances vital to the sustenance of life on our planet. Sadly, however, deforestation continues at an alarming pace all around the world, and millions of hectares of forests are destroyed every year.

Pakistan is blessed with abundant natural resources, which are critical for us both in an ecological as well as an economic sense. The Government of Pakistan attaches high priority to environmental protection and conservation, and has legislated several laws and implemented a number of policies to achieve this objective. Our Green Pakistan Programme is aimed at increasing our forest cover through a strategy of accelerated afforestation and reforestation.

It gives me great pleasure and satisfaction to note here that Pakistan Navy has taken a key initiative in this regard by launching its Mangrove Plantation Campaign - a project to plant a million mangroves all along Pakistan's coastline before the end of monsoon this year. This is, indeed, a most commendable effort, and will contribute in many salient ways in rehabilitating our threatened mangrove reserves.

I would like to avail this opportunity to commend the Chief of the Naval Staff and all naval officers for having launched a project of immense national importance.



**Muhammad Zakoullah**  
NI(M)  
Chief of the Naval Staff

International Day of Forests is a tremendous opportunity to celebrate our unique relationship to nature, forests and trees. This is the day for the whole world to celebrate nature and to appreciate the gifts that nature has bestowed on us in the form of forests and trees. I believe that forests are inextricably linked to our social and economic well-being and health of the ecosystem.

For centuries forests have been a source of food, fiber, livelihoods, resources and water for all the living beings on this planet. They are also well-paying in combating climate change and contribute in preserving natural resources for our next generations. However, these gifts of nature are eroding in the face of economic development, demand for domestic needs and urbanisation. Hence it is incumbent upon us to realize the impending perils and establish policies, laws and institutions that are required to implement sustainable forest management regimes.

Government of Pakistan has taken a lead in this drive and initiated the Green Pakistan Programme, which is considered a step in the right direction. Considering it as a national responsibility and following suit, Pakistan Navy has also launched Pakistan Navy - Mangroves Plantation Campaign (PN-MPC) in 2016 aimed at planting around 1 Million Mangroves along the entire coastline of Pakistan. These mangrove forests would be home to a large variety of fish, crab, shrimp and mollusk species and will form an essential source of food for thousands of coastal communities along the coast. Studies have shown that there are as many as 25 times more fish of some species on reefs close to mangrove areas than in areas bereft of mangroves. This makes mangrove forests vital for commercial fishing as well.

Deforestation of mangroves along our coast has continued at an alarming rate. Hence, there is a need to remedy the situation at the earliest and make up for the lost mangroves' treasure. To achieve this, people in general and policy makers in particular need to be sensitized regarding economic and ecological importance of mangrove forests. PN-MPC, as an offshoot of Prime Minister's Green Pakistan Programme, will help raise awareness amongst masses about the significance of mangroves preservation.

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**Rear Admiral Waseem Akram**  
HI(M) S Bt  
Commander Coast

As the head of the Coastal Command of Pakistan Navy, one of my tasks is to look after the welfare and well being of the coastal communities, since most of them lay at the threshold of the society. Their prime source of livelihood is the sea and the bounties that it provides to them. They live close to the banks and use the sea as a source of nourishment, income and hygiene.

Mangroves have been a vital part of the ecosystem of Pakistan's Coastal Belt as it provides safety to the people by reducing the effects of cessation of river banks. It also allows fish to breed which end up as a source of earning and sustenance for the coastal communities. But the advent of hazards, both natural and manmade, neglect and lack of monitoring and requisite nourishment has reduced the number of mangroves along the coastal belt. Per hectare covered area of mangroves has reduced to almost one fourth its size than it was at the turn of the century. This fast depleting and deteriorating condition of one of the most important aspect of ecology of the coastal belt was a source of concern for both us and the local communities. For this purpose, a solution had to be sought, and that too in an early timeframe, Pakistan Navy Mangroves Plantation Campaign was hence the need of the hour.

Under the able guidance of Chief of the Naval Staff, Pakistan Navy has embarked upon this fascinating feat of restoring the Mangrove forests to their former glory, and I am extremely happy and elated to be a part of it. Under the directions of the Naval Headquarters, my officers and men, in collaboration with various governmental and non-governmental agencies are all set to take on this challenge and play our part in serving the nation and its people. I have made it a point to have the civil society and specially university and college students, to become a part of this campaign because it is through them that we can spread awareness and ensure sustenance of such social projects.

I pledge a whole hearted support to this cause and my men and I would be forthcoming in tackling the odds and playing our parts in Prime Minister's Green Pakistan Campaign towards economic and social development of Pakistan in general and coastal community in particular.

Pakistan Navy and Coastal Command  
Zindabad, Pakistan Patindabad.



**Dr. Asif Inam**  
Director General  
National Institute of Oceanography

NIO congratulates the Pakistan Navy on this endeavor. Plantation of Mangroves along Pakistan coast should help increase the resistance of the coastline from imminent natural threats such as climate change and associated processes of sea water intrusion and land subsidence and human intervention such as felling and clearing etc. Mangroves are natural carbon sinks; they provide coastal protection, carbon storage, nursery habitat, and wood among other services. Pakistan use to have large mangroves forests that provided rich nurseries for fish, crabs and shrimp but in years the natural cover have declined. It is important to understand that beyond a certain threshold, mangroves would no longer be able to provide the expected and significant coastal protection or fisheries benefits.

Natural causes of decline such as climate change, sea level rise are a threat to the mangroves habitat. Mangroves are the first line of defense against the sea, they become most vulnerable to sea level rise and of low-relief with the lowering rates of sediment supply, like that observed in the Indus Delta.

It would be imperative that for mangroves conservation and resource management the sediment supply is also taken into account to ensure the survival, health of the delta and the restoration of mangroves forest.

Building capacity in the use of base-maps on Digital Terrain Models is one step forward towards the efficient management of the mangroves ecosystem. These would help identifying areas where mangroves are at most risk from submergence due to sea level rise. It is important that a National Mangroves Management Plan is formulated based on scientific and traditional knowledge.

Immediate actions are required to render protection to this amazing natural resource. Establishing coastal and marine protected areas, national parks and marine reserves are management tool to protect the mangroves habitat.



**Mahmood Akhtar Cheema**  
Country Representative,  
IUCN Pakistan

It is a great honor for me to join hands with Pakistan Navy to commemorate the International Day of Forests. It also gives me immense pleasure to note that Pakistan Navy beside its duties to defend territorial integrity of Pakistan is actively involved to protect integrity coastline of Pakistan.

It is also greatly satisfying to observe that Pakistan Navy is very much aware of the significance of forests, particularly the mangroves forests that grow along the coastal areas of the country. Being aware of the valuable role of the mangroves forest, Pakistan Navy has from time to time carried out mangroves plantation along the Balochistan and Sindh coastal areas for the protection and conservation of the natural resources.

Mangroves occur at crossroad where oceans, freshwater and land realms meet. They are among the most productive and complex ecosystems on the planet, growing under environmental conditions that would kill ordinary plants very quickly.

Research over the years has proved that mangrove forests provide protection and shelter against extreme weather events such as storm winds and floods, as well as tsunamis. Mangroves absorb and disperse tidal surges associated with these events.

During the Indian Ocean Tsunami in 2004, the coasts which had dense mangrove patches and plantations were least affected compared to coasts that were denuded of such forest cover.

IUCN has been working on sustainable development and part of this mission is also to create coastal sustainability. In line with this mandate, Mangroves for the Future (MFF) programme has been underway following the 2004 Tsunami.

MFF is a unique partner-led initiative to promote investment in coastal ecosystem conservation. It provides a collaborative platform among the many different agencies, sectors and countries who are addressing challenges to coastal ecosystem and livelihood issues, to work towards a common goal



MFF addresses priorities for long-term sustainable coastal ecosystem management which include, among others: climate change adaptation and mitigation, disaster risk reduction, promotion of ecosystem health, development of sustainable livelihoods and active engagement of the private sector in developing sustainable business practices.

Pakistan's mangrove forest cover has declined rapidly over a period of past 80 years due to various anthropogenic reasons such as upstream diversion of Indus River flows.

This year's theme is "Forests and Water" as decided by the United Nations Forum on Forests and the Collaborative Partnership on Forests. As the theme "Forests and Water" goes for this year, both of them are essential for the survival of all the species on this planet.

Forests play an extremely important role in controlling floods and soil erosion. Forests help in infiltration of rainwater and refilling of underground aquifers and cleaning of water.

Therefore, if we are conserving and protecting our forests, it simply means that we are protecting our water resources for our future generations.

The launch of the Green Pakistan Programme by the Honorable Prime Minister of Pakistan, Mr. Muhammad Nawaz Sharif, which entails plantation of 100 million trees, is a mighty step towards improving the fast depleting forests in the country

I appreciate the dedication and devotion of Pakistan Navy to the conservation and protection of the coastal natural resources. I believe, the PN campaign of planting one million mangrove trees would add significantly to the on-going forest conservation efforts and will encourage others to follow the same suit. On behalf of IUCN Pakistan and on my personal behalf I wish Pakistan Navy all the best in their endeavors in making Pakistan greener and healthier.

**Continue Message**  
**Muhammad Zakaullah NI(M)**  
**Chief of the Naval Staff**

I am confident that this endeavour will lead to mangroves plantation on a massive scale along the Baluchistan and Sindh coast in a bid to support the nature and give a fillip to improve environment and build better Pakistan.

I urge public-private sectors and all segments of society to join hands with Pakistan Navy in this noble cause and commit to reversing mangroves deforestation, preventing forest degradation, helping to reduce poverty and promoting sustainable livelihoods for all forest-dependent people.

Pakistan Navy Zindabad - Pakistan Pindabad.



WWF

**Rab Nawaz**  
 Senior Director  
 Biodiversity WWF-Pakistan

Forests are natural assets that directly and indirectly benefit almost every living thing throughout the world and especially provide home to millions of life forms, store water, protect land from degradation, home to unique species, purifying air, removing pollutants like carbon and clean the environment. It also provides food, fodder and timber and other several services to millions of people. As an international standard the recommended forest cover is 25% of its total land however, Pakistan has unfortunately only 5.36% (4.72 million hectares) forest cover. The country has a rich diversity of forests and forest ecosystems starting from the mangroves to the high altitude mountains. The country is facing several challenges regarding forests beside deforestation; there are issues such as a looming water crisis and the introduction and promotion of exotic tree species that has catastrophic consequences on the existing forest.

Many people in Pakistan are not aware of the economic but the critical ecological role of the forests. One endeavour that WWF-Pakistan is undertaking is protecting and improving the forest cover through community participation approaches in close collaboration and involvement of the government as well as other stakeholders. WWF - Pakistan has planted saplings that covered more than 8,500 hectares in the Indus Deltaic creek systems. Similarly regular plantation of tree species with different corporate sectors and raising awareness about the importance of trees and forests are regular activities of WWF-Pakistan.

I strongly believe that forest conservation is not only the responsibility of the government but also of every Pakistani living in or out of the country. They should understand the ecological role forest play and everyone should participate in the efforts to increase the forest cover through plantation wherever they can. It is time to combat the challenges facing our forests and reduce our usage of wood based commodities e.g. paper, furniture, construction etc. or at least make sure they are sourced sustainably. WWF-Pakistan hopes for better forested future in Pakistan.

WWF-Pakistan is very happy to learn that Pakistan Navy is taking a lead in celebrating World Forest Day and mark the occasion with plantation of mangroves in coastal areas of Pakistan. I wish their success in this endeavor.



# Protecting & Preserving the Maritime Frontier



Pakistan Navy is the guardian of the nation's sea frontiers. It has the added responsibility for the protection of coastal environment. On 'International Day of Forests', Pakistan Navy is upholding its commitment to safeguard and preserve the mangrove forests and coastal eco system.

## PAKISTAN NAVY

[www.paknavy.gov.pk](http://www.paknavy.gov.pk)





# Green Pakistan, Green Coast

