International Conference on 
CLIMATE CHANGE ADAPTATION AND BIODIVERSITY:
ECOLOGICAL SUSTAINABILITY AND RESOURCE MANAGEMENT FOR LIVELIHOOD SECURITY
Date: 08 to 10, December 2016

Organized by 
Andaman Science Association, Port Blair, A & N Islands

in Association with
Indian Council of Agricultural Research, New Delhi
ICAR - Central Island Agricultural Research Institute, Port Blair
Zoological Survey of India, Kolkata
Society for Plant Research, SVVPAT, Meerut
Indian Ecological Society, Ludhiana
Society for Community Mobilization for Sustainable Development, IARI, New Delhi
Bioversity International for South Asia, New Delhi
Protection of Plant Varieties & Farmers Rights Authority, New Delhi
National Biodiversity Authority, Chennai
Indian Society of Genetics & Plant Breeding, New Delhi
Department of Environment, Forest & Climate Change, A&N Administration, Port Blair

Venue:
ICAR - Central Island Agricultural Research Institute, Port Blair
ANRC - Zoological Survey of India, Port Blair
Background

Climate change, biodiversity and livelihood are inter-linked therefore any drastic changes in climate affect the biodiversity which also results in spatial distribution and extinction rates, length of growing season and reproduction timing. Human activities aggravate these changes which may lead to loss of some of the biodiversity. The impact of climate change on biodiversity and livelihood varies across the globe. It is generally believed that the islands will be more impacted by the climate change than the mainland. The magnitude of impact of such changes on islands and coastal ecosystems are very high as these regions are constantly exposed to vulnerability emanating from sea level rise, shore line changes, and coastal community disasters. Pollution from anthropogenic activities, invasive alien species, over fishing and decreasing forest cover can also reduce the resilience of island ecosystem. It is well established that oceans act as a major sink for carbon emissions but absorption of carbon dioxide by oceans may potentially cause ocean acidification which could disturb the calcifying marine organisms. Wetlands are also the world’s primary carbon sequestration mechanism and their management and conservation are extremely important for future. Another major sink for atmospheric CO2 is agricultural soils by way of alleltic and management practices which promote carbon sequestration.

The primary threat for island and coastal ecosystem emanates from sea level rise as it could potentially displace the livelihood and engross the terrestrial cover. Increase in sea surface temperature could also possibly increase with marine fauna, particularly coral reefs as corals are at constant pressure due to climate change. Since coral reefs named as ‘tropical rainforests of the ocean’ are the natural break waters of the coast and it also offers innumerable service to the community life. Similarly, liveries grasses and mangroves also provide significant valuable ecosystem services and acts as shield against natural disasters like tsunami, cyclones and floods. Therefore, it is of paramount importance that the changes and impact of climate on biodiversity are quantified and properly understood to ensure the livelihood of people particularly in the developing world.

Andaman & Nicobar Islands

Andaman and Nicobar Islands (ANI) comprises of 572 Islands, islets and rocks situated in the east of Bay of Bengal, oriented in the north-south direction like an arc. Most of these islands have originated due to volcanic eruption in the sea and few of them originated by coral reef formation. ANI situated between two major biodiversity hotspots viz., the Indian subcontinent and the Malay-Indonesia-Indonesia region. Forests cover about 87% of the islands’ geographical area with their uniqueness that lies in high degree of endemism, particularly, in avifauna. The coastline of the island is bordered with luxuriant mangroves and fringing coral reefs. A clean and pollution-free environment and lush green forests of the islands surrounded by blue sea water make Andaman & Nicobar Islands one of the most favoured destinations for eco-tourism. The presence of over 2500 indigenous and 500 non-indigenous species with an area of 8300 km2 is a significant feature of A & N Islands making them a cynosure for research and conservation.

About Andaman Science Association (ASA)

Andaman Science Association (ASA) was established in 1984 with its headquarters at ICAr-Central Island Agricultural Research Institute, Port Blair by the working institute in this island with the main objective of promoting research and development without affecting this unique island ecosystem. It also acts as a common platform for researchers and other stakeholders working in these islands representing different scientific organisations. ASA periodically organizes National and International seminars, conferences, knowledge sharing meets to promote scientific research and development apart from publishing a peer reviewed research journal.

Relevance of the Conference

Increasing trends of climate change patterns over the last decade has caused significant changes in land use pattern, rainfall, shoreline changes and imbalance in ecosystem. The 2004 Tsunami and earthquake in Indian Ocean is an eye opener for scientists and policy makers which eventually made a major reformation in ocean alarming system and earthquake predictions. Islands like Andaman and Nicobar Islands, east coast of India and South East Asian countries are worst affected which resulted in severe displacement of population, loss of livelihood and loss of valuable ecosystem and its services. Bleaching of coral reefs was observed in 2003, 2005 and 2010 which caused a major devastation to coral reefs and associated fisheries and subsequently tourism. Occurrence of cyclones like Phailin, Hud-hud, and Lehur are most frequently observed in past. Acute water shortage during pre-monsoon period with more number of non-rainy days has been a concern in the last few years. Tourist oriented and anthropogenic activities is another growing concern which diffuse the ecosystem with economy. Warming on 2016 was the warmest year with increased sea surface temperature has already alarmed the marine biologists to predict and analyze the ecosystem with ground reality. Such concerns have created the situation to predict and stream line the future course of action to sustain the fragile ecosystem which offers several livelihood services to the Islanders. ANI is one of the global hot spots of biodiversity and more prone to natural disasters and climate change events like tsunami, earthquake, cyclones etc. therefore this place offers a suitable platform to discuss the growing global concern like climate change and biodiversity management in collaboration with ICAR-CIARI being a premier institute for agricultural and allied sciences in its 37 years of existence. The conference will bring all the stakeholders together to discuss on climate change and its antagonistic effects of biodiversity and livelihood with suitable action plans for building a future in harmony with climate and biodiversity.

Call for Papers

Climate change poses a major threat to the biotic communities and their habitats which needs to be discussed and understood. The impact of climate change has already been felt and has been a concern in ensuring livelihood security. Oceans are becoming more acidic, water temperatures are rising, and cultural yields are reducing and forests are deteriorating. The field of Agriculture, Horticulture, Plant Sciences, Ocean and Marine Biology, Social Sciences, Zoological Sciences is advancing rapidly while climate change is having harmful impacts and hampering their development. Therefore, scientists and other stakeholders are invited to discuss and deliberate on these issues by submitting their papers/research works and to prepare a road map to address the issues of biodiversity, ecology, sustainability and resource management for livelihood.

Topics of Interest for Submission include

- Agriculture, Horticulture, Plant Sciences, Animal Science
- Fisheries Science, Ocean and Marine Biology, Social Sciences
- Zoological Sciences, Plant Biotechnology, Agricultural Engineering and Environmental Sciences etc.

Conference Registration Fee

<table>
<thead>
<tr>
<th>Registration category</th>
<th>Date of registration or before</th>
<th>Indian delegates (INR)</th>
<th>Foreign delegates (USD)</th>
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<tbody>
<tr>
<td>Early bird Registration</td>
<td>10th November, 2016</td>
<td>Rs.6000.00</td>
<td>90 USD</td>
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<tr>
<td>On-spot Registration</td>
<td>08th December, 2016</td>
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<td>Industry partners</td>
<td>05 October, 2016</td>
<td>Rs.30,000.00</td>
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Mode of Payment

Registration fee can be paid through online (NEFT) transfer, multioxly cheque/ draft or in cash in favour of the Andaman Science Association, Port Blair (A & N Islands). After payment, the details of the transaction may be intimated to secretaryasa84@gmail.com

Account Details

Name of Bank and Branch: State bank of India, Gacharbacha, Port Blair, South Andaman

How to Reach

Andaman and Nicobar Islands is located 1200 km away from mainland India and located in proximity with South East Asian countries. Port Blair is the capital city which is connected through Air (daily flights to Chennai, Kolkata, Bengaluru and New Delhi) and Sea (Chennai, Kolkata and Vishakhapatnam).

Accommodation

Accommodation for the participants/ delegates will be arranged on request to Mr. K. Lohith Kumar, Joint Secretary, ASA, e-mail jointsecretaryasa@gmail.com, Mobile No. +91-9531845377 & Dr. A. Anuraj, Member Secretary Local Organizing Committee, e-mail anuraj4ciari@gmail.com, Mobile No. +91-9531956459

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Article Types for Submission

All submitted full-text articles should report original, previously unpublished research results, experimental or theoretical. Articles submitted to the conference should meet these criteria and must not be under consideration for publication elsewhere. The types of articles should be submitted to the conference are full length articles, short communications and research articles. All manuscripts are subject to peer-review and are expected to meet the scientific criteria of significance and academic excellence.

Manuscript Format and Style (Writing Guide)

While submitting manuscript for publication in the conference proceedings, please submit an original editable file following the JASA guidelines (attached).

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REGISTRATION FORM

Please complete and return this form on or before November 10, 2016 with payment to ASA: ICCB-2016. Conference Secretariat: Mr. K. Lohith Kumar, Joint Secretary, Andaman Science Association, Port Blair C/o ICAR-CIARI, Post Box No. 181, Port Blair- 744 105. Andaman & Nicobar Islands, India. e-mail: jointsecretaryasa@gmail.com & Mobile No. +91-9531845377

1. Delegate Information (Please print clearly in capital letters)
Name of the delegate : Prof./ Dr./ Mr./ Mrs./ Miss ...........................................................
Organization : ...............................................................................................................................................................................................................................
Designation/ Position : ...............................................................................................................................................................................................................................
Complete Postal Address : ...............................................................................................................................................................................................................................
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Mobile : Country code (+ )..................................
Email : ...............................................................................................................................................................................................................................
Name to be appeared on name badge: ...............................................................................................................................................................................................................................

2. Manuscript details:
Title of the paper submitted: ...............................................................................................................................................................................................................................
Authors: ...............................................................................................................................................................................................................................

Sectional Theme:
Article Types ...............................................................................................................................................................................................................................
Abstract Submitted for ........................................ Mode of Presentation Oral Presentation
Full length Research Paper Submitted for ........................................ Mode of Presentation Oral Presentation
Full length Research Paper Submitted for ........................................ Mode of Presentation Oral Presentation
Concept paper ...............................................................................................................................................................................................................................

# (Mode of presentation will be finalized by the conference secretariat on recommendation of sectional coordinators comments)

3. Delegate Registration
Registration category ...............................................................................................................................................................................................................................
Date of registration on or before : Registration Fee Please tick (✓)
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Industry partners 10th November, 2016 Rs.30,000.00 -

4. Accommodation (Please reserve the following accommodation)
Hotel type ...............................................................................................................................................................................................................................
Range (per room per day) ...............................................................................................................................................................................................................................
Date of occupancy Check-in Check-out Single Double Sharing
Luxury hotels Rs.5000 – 7500
Deluxe Hotels Rs.3000 – 5000
Semi-Deluxe Hotels Rs.2000 – 3000
Budget Hotels Rs.1000 - 2000

5. Payment Summary (Please indicate the mode of payment of registration fee)
Payment type Details of transaction (indicate the name of bank) Amount (INR/ USD) Date of transaction
NEFT transfer Check
Cheque/ Draft payment Check
On-spot payment Check

Date : Signature : ...........................................................................
Place : Name : ........................................................................... Designation : .............................................................................
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