PROCEEDINGS



SAARC ECUBE-17

International Conference on

Eco Friendly and Socially Responsive Economy and Equity: Issues and Challenges of 21st Century for Emergent Sustainable Development Amongst SAARC Countries

Organized by



DEPARTMENT OF ZOOLOGY UNIVERSITY COLLEGE OF SCIENCE MOHANLAL SUKHADIA UNIVERSITY, UDAIPUR

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Proceedings of

The International Conference entitled "Eco Friendly And Socially Responsive Economy And Equity: Issues and Challenges of 21st Century For Emergent Sustainable Development Amongst SAARC Countries

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and

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Preface

The dictionary defines the term Sustainability as "to maintain or endure." So keeping this view in mind we are thinking of sustainability in the context of development that "meets the needs of the present without compromising the ability of future generations to meet their own needs." It is long overdue that we begin to link this vitally important concept with the goals and learning outcomes of science education with other subjects to be sustainable. The involvement of all the SAARC countries in this context is to spread these ideas and their implementations to sustainable development as our main goal.

We are very pleased to introduce the proceedings of " the International Conference entitled "Eco Friendly And Socially Responsive Economy And Equity: Issues and Challenges of 21st Century For Emergent Sustainable Development Amongst SAARC Countries" held during 9th to 11th January 2017 at MohanLal Sukhadia University, Udaipur, Rajasthan.

This volume of proceedings from the conference provides an opportunity for readers to engage with a selection of refereed papers and also provide the permanent record of what is presented in the conference. Although proceedings are published after the conference asking full length papers from the participants,generally it takes one whole year and by that time relevance of research work gets out of scene. Keeping this in mind, although it took much time effort,we collected good papers from the participants and made this valuable collection.I would like to thank the presenters for their willingness to share their latest research and ideas.Without their efforts,this conference would not be possible.

The conference will be attended by more than 300 delegates from India and abroad. About 100 invited and oral lectures presentation in conference shall be high quality. Professional and efficient selected programme chairpersons with their international standing in the subject will make sure that this programme maintains its reputation. The number of delegates, above 300, is also highly gratifying, showing the high level of international interest in the subject and many fruitful discussions and exchanges that which would contribute to the success of the conference. And many forign delegates from different countries will make the conference truly international in scope.

The conference will cover following important topics in relevance to the theme:

- 1. Environmental problems such as pollution, Deforestation, Global warming, Climate change, Biodiversity etc.
- 2. Various anticipated health problems in the context of climate change and global warming including infectious and vector borne diseases, nutrition, natural disasters etc.
- 3. Integrated pest and vector management –A need of sustainable environment and human health.
- 4. Green Economy and ecofriendly products and processes.
- 5. Ecology impact of ICT, E-waste and Electromagnetic Pollution.

- 7. Environmental Biotechnology and Bioremediation.
- 8. Socio-economic inequality and digital divide in Post- Globalization era.
- 9. Special Economic Zones (SEZ), Land Acquisitition, Rampant Urbanization.
- 10. Education for sustainable living and inculcating sustainable practices based on three 'Rs' (Reduce, Reuse and Recycle).
- 11. Eco-spirituality and Environmental Ethics.
- 12. Food security and Sustainable development.
- 13. Carbon and Ecological Footprint.
- 14. Industry, Corporate social Responsibility and Social Entrepreneurship and role NGO's in sustainable development.
- 15. Indices of Economic/ Socio-economic growth.

This international conference aims at providing a platform for academicians, researchers and policy makers from diverse disciplines to deliberate on climate change & human health as one of the important theme of this conference. We are resolved to free the human race from the tyranny of Global climatic change and want and to heal and secure our planet. We are determined to take the bold and transformative steps which are urgently needed to shift the world onto a sustainable path

We offer our sincere thanks and gratitude to our most respected Vice Chancellor Prof. J. P.Sharma also Chief patron of this conference, whose valuable suggestions and continuous support at each step has helped us organize this conference.

We are also indebted to all those who agreed to join us as Chairman, Co-Chairman, Rapporteur and in various commitiees. Without their support, the conference would not have been a success. These Proceedings provide a representative sample of the breath and quality of different contributions. So we also acknowledge the support and contribution of authors, without which their valuable input this conference could not have been possible.

Sponsorship of this conference is an important feature of its success.On behalf of the society ,I thank the many sponsers who have helped to promote the conference and supported this social event.

Thanks are also due to the publication team Mr. Jaisa Ram Chaudhary, Mr. Vikas Singh Atray and Mr. Rajesh Sharma and Apex Publishing House, Udaipur for their excellent work , prompt and time- bound commitment.

Finally, it is appropriate that we record our thanks to all faculties, students and administration of Mohan Lal Sukhadia University, Udaipur, Kiriti M. Doongursee College, University of Mumbai, Mumbai and our members of the Organizing committee for their invaluable assistance and support to bring this piece of work into this shape.

(Prof. Arti Prasad) Organizing Secretary SAARC ECUBE 17

Foreword

Dr V M Katoch

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It is my privilege to write this foreword for the Proceedings of International Conference " ECUBE" being organized by Department of Zoology, University College of Science, Mohanlal University, Udaipur in partnership with DES Kirti Doongursee College, Mumbai during 9-11 January, 2017. These proceedings have important contributions on key issues of environment, economy and equity (ECUBE), which are very important for socioeconomic development of SAARC countries in their march towards achieving the United Nations Sustainable Development Goals (SDGs). All these issues are equally important for the populations of these countries to become healthier and happier in coming years. This conference has a focus on topic of climate change which has already emerged as a major theme in health research, agriculture, social policy development and advocacy aimed at prevention and mitigation. In addition, more than a dozen other sub-themes including those dealing with development strategies - SEZs, Pollution, Environmental Biotechnology & Bioremediation, Vector control and pest management, Equality, Opportunities for quality education specially in the context of societal development, Relevant social indicators and others, have been identified for the deliberations. Several of important presentations are being published in these Proceedings. Considering the importance of these topics, I am optimistic that these Proceedings will have a reference value for a long time to come.

I am sure that this publication will be of interest to a wide spectrum of stake holders from the SAARC countries and will be useful in shaping up of ideas for research and action in order to take bold and transformative steps which are urgently needed by SAARC countries. I compliment the contributors and organizers in bringing out these Proceedings.

(Vishwa Mohan Katoch)

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CONTENTS

S. NO.	DESCRIPTION	PAGE NO
1.	Implications of Climate Change and Salinity Intrusion in Coastal Ecosystem of Bangladesh	1-6
	Rahman M. A. and Rahman M. M.	
2.	Cost Compatibility of Microbial Pesticide <i>Beauveria bassiana</i> (Balsamo) with Synthetic Insecticide Endosulfan against <i>Helicoverpa armigera</i> (Hubner) infesting Tomato crop in South Rajasthan	7-14
	Nilofer Syed, Azra Parveen and Arti Prasad	
3.	Studies on diversity of Beetle (Arthropoda: Insecta: Coleoptera) fauna in Keoladeo National Park, Bharatpur	15-17
	Trigunayat Kritika; Sharma Jaimala and Trigunayat MM	
4.	Morphological patterns of different mosquitoes	18-21
	Neetu Kachhwaha, Abhishek Rajpurohit and Geeta Devi Meena	
5.	Chemo-suppressive efficacy of <i>Moringa oleifera</i> (Lam.) and <i>Catharanthus rouses</i> (Linn.) in <i>Plasmodium yoelii</i> infected mice	22-26
-	Megha Shrivastava and Arti Prasad	27.27
6.	Repellency of Mosquito Repellent Patch and Roll ON Against Dengue Vector Mosquito , <i>Aedes aegypti</i> (L). (Diptera: Culicidae)	27-35
	Ashok Kumar, Arti Prasad and Trigunayat Kritika	
7.	Bio-pesticidesin Controlling Stored Grains Insect Pest <i>Callosobruchus spp</i> .	36-39
	Lekhu Gehlot, Dushyent Gehlot and Sangeeta Parihar	
8.	Butterfly diversity at Kharghar, Maharashtra India as ecoindicators Shaikh R N, Chavan U M	40-45
9.	A preliminary study on diversity of butterflies in M. L. Sukhadia University (MLSU) campus, Udaipur	46-50
	Saini D., Mahecha G.S., Nair N., Sadhu S. and Soni K.	
10.	Lepidopteran Fauna of Machiya Safari Biological park, Jodhpur, Rajasthan, India	51-56
	Abhishek Rajpurohit, Robin Aseri and Neetu Kachhwaha	

S. NO.	DESCRIPTION	PAGE NO
1.	Laboratory and field evaluation of <i>Streptomyces indiaensis</i> (Gene Bank Accession Number: AJ781344.1) against Malaria Vector: <i>Anopheles stephensi</i> (L.)	57-66
	Priyansh Mathur, Azra Parveen and Arti Prasad	
•	Comparative susceptibility of karyotype profile of vector (<i>Anopheles stephensi</i> L) and non vector (<i>Anopheles annularis</i> W) Anopheline mosquito fauna against herbal biopesticide (<i>Moringa oliefera</i> Lam.) Azra Parveen, Ashok Kumar, Megha Shrivastava and Arti Prasad	67-75
	Community Knowledge, Attitude and Practice towards Vector-borne diseases (Malaria) in Tribal belts of Rajasthan (India): A Review Devendra Kumar, Ashok Kumar &Arti Prasad	76-85
	"Gomutra" Cow Urine as a Substitute for Xenobiotics and Pharmaceutical Drugs to Mitigate Oxidative Stress and Histopathological changes in Testis	86-93
	Girima Nagda and DK Bhatt	
	Diversity of Halophilic Bacteria of Samhar Salt Lake: A Ramsar Site Archana Gaur, Girima Nagda and Arti Prasad	94-99
	Impact assessment of water quality of Bhimtal lake for sustainable aquatic biodiversity	100-107
	D. S. Malik and Shikha Panwar	
	Assessment and Bioaccumulation of Heavy Metals in Mullet Fish from Satpati, District Palghar, Maharashtra.	108-114
	Durve S and More S	
	Environment and Sustainable Development: A Comparative Analysis of South Asian Nations	115-120
	Neha Paliwal	
	Physico-Chemical Factors Influencing Exopolysachharide Production by <i>Acetobacter</i> sp. MRL 5A	121-129
	Hema Candran, Kanika Sharma	
	A Survey of Coleopteran Fauna in Some Fresh Water Ecosystems in Indian Desert Region	130-133
	Srivastava Deepti	

S. NO.	DESCRIPTION	PAGE NO
21.	Trends in Fishery and its Issues and Challenges of 21 st Century for Emergent Sustainable Development	134-141
	V.S.N. Raghava Rao	
22.	Physico-chemical Profile and Zooplankton Diversity of Ground Water of town Deeg, District- Bharatpur, Rajasthan, India Sunder Singhand Prathvi Lal Jatav	142-147
23.	Rainwater Harvesting and Electrical Power Saving can Run Parallel Dagadkhair K. V.	148-150
24.	Developing Rainfall Intensity-Duration-Frequency Curve for TNAU Coimbatore Region	151-157
~~	Patil Pravin Rajdhar, K. Nagrajan	
25.	Sustainable Tourism: The case of a Heritage city Deeksha Dave	158-167
26.	Green Marketing Ideas to Promote Eco-friendly Business Dr. Neetu Jain	168-171
27.	Desert Aquaculture- Farming for the Future Food security Saraswat Dr.Punit	172-178
28.	Diminishing Salt Lakes of Rajasthan, India and Their Sustainable Conservation Management: Sambhar Salt Lake- A Case Study Dr. Seema Kulshreshtha	179-184
29.	Tolerance potential and Anticipated Performance Index of selected roadside trees in Udaipur city.	185-189
	Nair N, Sadhu S, Saini D, Lohar H and Rekha	
30.	Indigenous Storage Techniques Practiced by Tribes of Palghar District of Maharashtra	190-193
	Chandrakant Marathe and D.D.Sangore	
31.	The Emerging Trends in Hospitality of 21 st Century are Eco friendly and Socially Responsible to Ensure Sustainable Growth.	194-196
	Jayant Y Kathe and Mahesh Singh Rajput	
32.	Opportunities and Challenges for Straw Fortification for Livestock Feed: Scope for Mechanization	197-205
	Shrinivasa D. J. and Devanand Maski	

S. NO.	DESCRIPTION	PAGE NO
33.	Rehabilitation of Degraded Mine Land By Medicinal Plants Poonia P and Sheoran V	206-209
34.	Some Miracle Medicinal Plants of Mount Abu of Rajasthan Satveer Singh and Dr. Manoj Kumar Yadav	210-215
35.	Plant me , maintain me ; says tree Dr.Vanita Kamat	216-220
36.	Study of Foraminiferan Diversity of Shriwardhan taluka, Dist. Raigad (MS-India)	221-224
37.	Chavan N S, Jadhav R N, Donde S Comparative study on moisture content in various tissues of <i>Harpodon nehereus</i> collected from sassoon dock, mumbai, india. Archana Oza and Leena Muralidharan	225-227
38.	Escalating Leopard Conflicts in arid region of Rajasthan, INDIA Gehlot H S Rathore S S, and Joshi Hemant	228-234
39.	Role of Vitamin C on Lead treated Neonatal kidney during Gestation and Lactation Sheetal Mogra and Ragini Sharma	235-248
40.	An Implementation of Predictive Algorithm to Analyse Human Immunodeficiency Virus (HIV) Datasets in Medical Sector Amol Joglekar, G. Prasanna Lakshmi and Maunash Jani	249-257
41.	Effect of Cadmium Chloride on Hematopoietic Organ: THYMUS. Jaishree Daverey	258-260
42.	Biodiversity of Reptiles at Belapur Forest Chavan Y B and Jadhav A S	261-270
43.	Synthesis and stability study of divalent metal ions derived from new 1,3,4-substituted pyrazol-5-one. Jadhav V D, Kawde R. B and Patil D V	271-278
44.	Popularization of bivoltine silkworm hybrids bombyx mori. L. For enhancement of cocoon productivity in non-traditional region of pune division maharashtra state	279 - 284
45.	Ramprakash & Ravindra Kshirsagar The Relationship of Spatial Fisheries Diversity with Hydrological Conditions of Ulhas River Estuary Rathod Sudesh D, Patil Nandini N	285 - 295

S. NO.	DESCRIPTION	PAGE NO
46.	Limno-biotic study of Tansa River of Thane district of Maharashtra State	296-307
	Nisar Shaikh	
47.	" Study of some plant extracts on Spodoptera litura"	308-313
	Deepali Lall, Sudha Summarwar & Jyotsana Pandey	
48.	Bio-Briquette: rural enerGy option For mitigating climate change Rijal K, Sapkota R.P.	314- 323
49.	lk;löj.k dsl aHZeaHfo"; dsifr tkvîr	324-327
	श्रीमती सुजाता सिंह	
50.	विपश्यना आत्म-निरीक्षण द्वारा आत्मशुद्धि एवं नैतिक मूल्योंका संवर्धन: शाश्वत	328-334
	विकास का मंगलमय राजमार्ग	
	दोंदे सुभाष, मगरे विष्णू एवं प्रसाद आरती	
51.	Huģ(ik viš tū/ie Z	335-337
	t"yh i kwijk	
52.	i;lðj.klģ(lk	338-342
53.	महेन्द्र पूर्वि दर्शन	343-348
55.	जैन परंपरा अनुसार जल प्रबन्धन	515 510
	प्रियंका मयुर शाह	