



## Centre for Earth Science Studies, Thiruvananthapuram

### List of Publications 2006-07

#### *Published in Journals*

Ahalya Sukumar, Sukumar, B. and Devavrathan, S. 'Spatial distribution of sex-ratio and occupational structure of female population of Kerala', *The Indian Cartographer*, 25, pp 273-275, 2006.

Arunachalam, B., Sukumar, B. and Ahalya Sukumar. 'Reconstruction of the ancient Port, Korkai in Tutukkudi district of Tamil Nadu'. *Current Science* 91(3), pp 278-280, 2006.

Baba, M., Kurian, N. P., Muralikrishnan, B. T., Nirupama, N. and Murty, T. S. 'Analysis of the tsunami of 26 December on the Kerala coast of India Part II: Arrival times', *Marine Geodesy*, 29, pp 271-276, 2006.

Chattopadhyay, S. and Suresh Kumar, S. 'Fractal dimensions of selected coastal water bodies in Keala, south coast of India – A case study', *Indian Jr. Marine Sciences*, 36 (2), pp 162-166, 2007.

Chattopadhyay, S., Saji Kumar and Mahamaya Chattopadhyay. 'Landscape Evolution in Parts of Vamanapuram Drainage Basin, Kerala – A Hypsometric Approach'. *Jr. Geological Society of India*, 68, pp 841-856, 2006.

Devavrathan, S., Sukumar, B., Ahalya Sukumar and Shrivankumar., V. 'Regional variations of development in Thiruvananthapuram district', *The Indian Cartographer*, 25, pp 285-289, 2006.

Devavrathan, S., Sukumar, B. and Ahalya Sukumar. 'Urban sprawl and its impact on the environment in Thiruvananthapuram City, Kerala'. *The Indian Geographical Jr.* 79 (1), pp 51-56, 2006.

Hameed, T. S. S., Kurian, N. P., Thomas, K. V., Rajith, K. and Prakash, T. N. 'Wave and current regime of the south west coast of India', *Jr. Coastal Research*, 23 (5), pp 1167-1174, 2007.

Kurian, N. P., Baba, M., Rajith, K., Nirupama, N. and Murty, T. S. 'Analysis of tsunami of 26 December 2004 on the Kerala coast of India – Part 1; amplitudes', *Marine Geodesy*, 29, pp 265-270, 2006.

Kurian, N. P., Rajith, K., Muralikrishnan, B. T., Nirupama, N. and Murty, T. S. 'Analysis of the tsunami of December 26, 2005 on the Kerala coast of India – Part III Inundation and initial withdrawal', *Marine Geodesy*, 29 (4), pp 277-281, 2006.

Kurian, N. P., Prakash, T. N., Baba, M. and Nirupama, N. 'Observations of tsunami impact on the coast of Kerala', *Marine Geodesy*, 29, pp 135-145, 2006.

Limaye Ruta, B., Kumaran, K. P. N., Nair, K. M. and Padmalal, D. 'Non-pollen polynomorphs as potential palaeoenvironmental indicators in the late quarternary sediments of the West Coast of India;. Current Science, 92 (10), pp 1370-1381.

Mahesh Mohan and Omana P. K. 'Statistical analysis of water quality data from a Ramsar site-Vembanadu backwaters, Southwest coast of Indi' Asian Jr. Microbiol. Biotech. Env.Sc., 9 (2) 207, pp 313-320, 2007.

Maya, K., Narendrababu, K., Padmalal, D. and Seralathan. 'Hydrochemistry and dissolved nutrient flux of two small catchment rivers of the South Western India', Chemistry and Ecology, 23 (1), pp 13-27, 2007.

Murty, T. S., Kurian, N. P. and Baba, M. 'Transosceanic reflections of tsunamis: the Kerala example', Disaster and Development, 1, pp 65-76, 2006.

Nair, K. M, Padmalal, D. and Kumaran, K. P. N. 'Quarternary geology of South Kerala Sedimentary Basin - an outline'. Jr. Geological Society of India, 67, pp 165-179, 2007.

Neelakandan, V. N., Mohanan, C. N. and Sukumar, B. 'Development of Biogeographical Information System for conservations and monitoring of biodiversity'. Current Science, 90(3), pp 444-450, 2006.

Narendra Babu, K., Padmalal, D., Maya, K., Sreeja, R. and Arun, P.R. 'Quality of surface and ground water around tile and brick clay mines in the Chalakkudy river basin, South Western India', Jr. Geological Society of India, 69, pp 279-284, 2007.

Omana, P.K.and Mahesh Mohan. 'The new mercury pollution threat to aquatic ecosystems of India - An example from Kerala', Jr. Ecology, Environment and Conservation, 14 (2-3), pp 341-346, 2008.

Prakash, T. N., Black, K. P., Mathew, J., Kurian, N. P., Thomas, K. V., Shahul Hameed, T. S., Vinod, M. V. and Rajith, K. 'Nearshore and beach sedimentary dynamics in a placer-dominated coast, South West India', Jr. Coastal Research, CERC, USA. 23(6), pp 1391-1398, 2007.

Rajendran, C. P., Kusala Rajendran., Terry Machado., Sathyamurthy., T., Aravazhi, P. and Manoj Jaiswal. 'Evidence of Ancient Sea Surges at the Mamallapuram Coast of India and Implications for Previous Indian Ocean Tsunami Events', Current Science, 91. (9), pp 1242-1246, 2006.

Rajendran, C. P., Rajendran, K. and Anil Earnest. Reply to comments by R. Bilhum on 'Interpreting the style of faulting and palaeoseismicity associated with the 1897 shillong, north east India earth quake: implications for regional tectonics', Tectonics, 25, TC 2002, doi 10.102912005tc001902, 2006.

Rajendran, C. P., Rajendran, K., Terry Machado., Murthy, T. S., Aravazhi, P. and Jaiswal., M. 'Evidence of ancient sea surges and implications for previous Indian ocean tsunami events'. Current Science, 91, pp 1194-1198, 2006.

Raju, K. and Anilkumar, R. 'Landuse changes in Udumbanchola Taluk, Idukki District, Kerala: An analysis with the Application of Remote Sensing Data'. Jr. Indian society of Remote Sensing 3 (2), June 2006 pp 161-169, 2006.

Rupananda Mallia, Shiny, S. T., Rajanish Kumar R., Anitha Mathews, Paul Sebastian, Jayaprakash Madhavan. and Subhash, N., 'Oral premalignancy detection using autofluorescence spectral ratios, Oral Oncology suppl., 2 (1), pp 259-260, 2007.

Soman, K. 'Coastal Regulation Zone (CRZ) Review Committee's Report': An appraisal, Jr. Geological Society of India, 68, pp 155-157, 2006.

Singh, H. N., Shaanker, D., Neelakandan, V. N. and Singh, V. P. 'Distribution pattern of natural radioactivity and delineation of anomalous radioactive zones using insitu radiation observations in Southern Tamil Nadu, India, Jr. Hazardous materials, 141 (1), pp 264-274, 2007.

Sukumar, B., Ahalya Sukumar and Devavrathan, S. 'Delineation of drought prone areas in Palakkad district, Kerala using satellite imagery', The Indian Cartographer, 25, pp 175-178, 2006.

Sundararajan, T., Srinivas, Y., Narasimha Chary, M. and Unnikrishnan, K. R. 'Groundwater occurrence in an outlier zone – a case study from Tiruvuru, Krishna district, Andhra Pradesh', Jr. of Geological Society of India, 68 Oct 2006, pp 610-614, 2006.

Zachariah, E. J. and John, C. J. 'Reduction in methane emission from Kerala Estuaries', Asian Journal of Water, Environment and Pollution (AJWEP), 3 (1), pp 1-5, 2006.

### ***Published in Proceedings***

Ahalya Sukumar. 'The dynamics of the timber trade in the west coast of India in the medieval period'. Proc. 27<sup>th</sup> Annual seminar on Maritime trade of medieval Indian Fifth to fifteenth Century, Maritime History Society, Mumbai, pp 45-51, 2006.

Ajaykumar Varma, R. 'Solid waste management – Issues and initiatives of Kerala'. Proc. of National Seminar on Environment Management and Waste Disposal – Emerging Trends. NSS College, Pandalam, pp 24-30, 2006.

Ajaykumar Varma, R. 'Environmental impact of hard rock quarrying'. Proc. of National Seminar on Disappearing Hillocks of Kerala and their Ecological Impacts. N. S. S. College, Nenmara, pp 10-18, 2006.

Babu, A., Madhusoodhanan, P. V., Nair, A. S. K., Harikumar, P. S. and Sabu, T. 'Wetlands of Kerala, State of Environment of Kerala-2007', Kerala State Council for Science, Technology and Environment, pp 85-193, 2007.

Chattopadhyay, S., Sasidharan, C. K., Sakunthala, C. and Sachin, R. Disaster Management: 'Lessons from tsunami with a case study of Alappad-Arattupuzha segment'. Proceedings of the 'POTCOM 2006' National seminar on tsunami changes on marine system, environment and socio-economic status of coastal people, pp 51-63.

Jayaprasad, B.K., Tanish Brown, Jojo Jose, Samsuddin, M. and Biju Soman. 'Customization of health information using ESRI map objects': A case Study from Vengannur Grama Panchayat, Kerala. Paper submitted to the ninth ESRI user conference to be held at Noida during 22-23 January 2008, 1 pp 1-11, 2006.

Jayaprasad, B.K, Tanish Brown, Jojo Jose, Samsuddin M. and Biju Soman. 'A participatory health GIS – A case study in Vengannur grama panchayath, Kerala'. A paper submitted for presentation in the 20<sup>th</sup> Kerala Science Congress to be held at Thiruvananthapuram during 28-30 January 2008, pp 599-611, 2006.

Manjula Unnikrishnan, R. K. and Ajaykumar Varma, R. 'Geoenvironmental appraisal of a heavy mineral prospect of Kerala'. Proc. of Kerala Science Congress, pp 415-417, 2006.

Nair, A. S. K. 'Characteristics of micro tidal coastal inlets of Kerala inferred from satellite remote sensing (IRS-IC/D LISS III) data in S & T input for the Perspective Development of Kerala', Kerala State Remote Sensing and Environment Centre, Government of Kerala, pp 31-40, 2006.

Nair, A. S. K. 'Planning for watershed based development: Experiences and prospects in Kerala', Proc. ICAR Winter School, Kerala Agricultural University, Trissur, pp 68-89, 2006.

Nair, A. S. K. 'Geo-ICT enabled micro-planning and governance: Learning from Kerala experience'. Proc. of National Workshop on Geo-Information Management for Micro Planning and Governance in India, IRMA, Anand, pp 84-91, 2006.

Nair, A. S. K., John Paul, Vasudevan, V. and Anil, T. Tsunami affected coasts of Kerala. In: 'Rehabilitation Measures for the Tsunami affected coasts of TN, AP, Kerala, Pondicherry & A &

N Islands'. Planning Commission of India/International Ocean Institution IIT Madras, pp 138-161, 2006.

Nair, A. S. K. 'Management of Wetlands for Sustainable Development, in Need for Better Natural Resources Management', Kerala State Land Use Board, pp 30-52, 2006.

Nair, A. S. K. 'Geo-ICT enabled micro-planning and governance: Learning from Kerala Experience', Proce. National Workshop on Geo-Information Management for Micro-Planning and Governance in India, IRMA, ANAND, Gujarat, pp 84-91, 2006.

Nair, A. S. K., 'Wetland classification: Ramsar and National Perspective', in Proce. Kerala Environment Congress-2007, pp 49-55, 2007.

Prakash, T. N., Chattopadhyay, S. and Nair, A. S. K. 'Impact of tsunami on the Kerala coast and a rehabilitation plan for the worst affected stretch at Alappad, in Tsunami' - A geoscientific perspective, Dept. of Science & Technology, Govt. of India, New Delhi, pp 139-149, 2006.

Resmi, K. R., Thankamoney, D. and Nair, A. S. K. 'Rapid EIA of Vizhinjam Deep Water International Container Transshipment Terminal', Proce. of the VII National Conference of Technological Trends, College of Engineering, Thiruvananthapuram, pp C85-C90, 2006.

Sankar, G. ' Landslides in the highlands of Kerala' in Proc. Role of Geology in solving societal issues. National workshop 23-24, pp 52-57, 2007.

Sasidharan, C. K. 'Introducing Social water management concept in Water Management of Rural Area': Example from Tirurangadi Block, Kerala, in 'Groundwater 2007', 2, pp 15-22, 2007.

Sreebha, S. and Padmalal, D. 'Sand mining and its environmental impacts on the river catchments of Vembanad lake, South West India'. Proceeding of the 18th Science Congress, pp 365-367.

Srikumar, P. R. and Nair, A. S. K. 'Biomedical waste disposal and its status in Kerala', 19th Kerala Science Congress, KSCSTE, pp 317-319, 2007.

Sukumar, B. and Ahalya Sukumar. 'Mapping disaster prone areas for mitigation: A GIS solution for Kannur District, Kerala'. Abstracts, full papers of International Conference of Natural Hazards and Disasters: Local to Global Perspectives, Dept. of Geography, Krishnadevaraya University, Anantapur, 2006.

Sukumar, B. 'Islamic and Chinese ceramic trade, Proc. 27<sup>th</sup> Annual seminar on Maritime trade of medieval India – Fifth to fifteenth century'. Maritime History Society, Mumbai, pp 52-58, 2006.

### ***Published in Books***

Biju Kumar, A. and Ajaykumar Varma, R. 'Plastics and Environment' (In Malayalam) published by DC Books, pp 108.

Prakash, T. N., Chattopadhyay, S. and Nair, A. S. K . ' Impact of Tsunami on the Kerala coast and Rehabilitation Plan for the Worst Affected Stretch at Alappad', In: 26<sup>th</sup> Dec, 2004 Tsunami – Causes, Effects, Remedial Measures Pre and Post Tsunami Disaster Management – A Geoscientific Perspective. Editor-in-Chief: Rajamanickam, G. V. Editors: Subramaniam, B. R., Baba, M., Ramesh, R., Lelango. and Prithviraj., M. Published by New Academic Publishers, New Delhi, pp 139-149, 2006.

Srikumar Chattopadhyay. 'Integrated coastal zone management – a conceptual frame work', In: Urban and regional development in India", (Eds. B. Thakur & Others) Concept Publication Co., New Delhi, pp 658-675, 2006.

Chattopadhyay, S. and Franke, R. W. 'Striving for Sustainability: Environmental stress and democratic initiatives in Kerala', Concept Publication Company, New Delhi, pp 350, 2006.