京都大学 G-COE 生存基盤持続型の発展を目指す地域研究拠点

Kyoto University Global-COE Program In Search of Sustainable Humanosphere in Asia and Africa Paradigm Formulation Group and Initiative 2 Joint Seminar

特別セミナー:アグロフォレストリーと土地利用持続性

Special Seminar: Agroforestry and Land-use Sustainability

アグロフォレストリー研究の世界的な権威、P.K. Ramachandran Nair 教授の来日に際し、アグロフォレストリーによる持続的土地利用実現の可能性について講演をしていただくことになりました。生物多様性保全、二酸化炭素排出規制、食料と生物資源をめぐる争奪など、簡単には調和点を見出せない諸問題がひしめくこの地球上で、限られた土地をいかに利用していくのか?アグロフォレストリーを題材に、この問題に関する活発な議論の場を提供できれば幸いです。年度末の多忙な時期ですが、皆様の参加をお待ちしています。

Embracing an opportunity of Prof. Nair s visit to Japan, this special seminar was planned. Prof. Nair will present a short lecture on the possibility of Agroforestry as a tool for sustainable land-use system. How can we maximize the sustainability of land-use on the earth where various issues, such as biodiversity conservation, reduction of CO2 emission, and race for food and bio-resources become simultaneously critical? The seminar is willing to provide a place for the interdisciplinary discussion on the topic. Any researchers and students who are interested in the topic are welcome.

2009年2月9日(月) February 9, 2009 14:30-17:00

京都大学東南アジア研究所 稲盛財団記念館3階大会議室

Inamori Foundation Memorial Hall, Large Meeting Room (3F), Center for Southeast Asian Studies, Kyoto University,

招待講演者 Invited Speaker

P. K. Ramachandran Nair (Florida University)

Land-Use System Sustainability: Business as Usual?

コメンテーター Commentators

竹田晋也 Shinya Takeda

(京都大学アジアアフリカ地域研究研究科 Graduate School of Asian African Area Studies, Kyoto Univ.) Oekan Soekotjo Abdoellah

(東南アジア研究所 Center for Southeast Asian Studies)

詳細についてのご質問はオーガナイザーまで For further information, please e-mail to organizers.

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講演要旨 Abstract

Land-Use System Sustainability: Business as Usual?By

P. K. Ramachandran Nair

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Modern industrialized farming and forestry systems may look good if we look only at their production benefits and ignore the costly social and environmental side effects. The emphasis on a selected few species of plants and heavy use of chemical inputs for maximizing their production has caused serious environmental problems, and the promotion of large-scale farming at the cost of smallholder systems has serious social ramifications. By adopting these systems to meet today's needs, we are seriously compromising the ability of future generations to satisfy their needs. A serious casualty in the push for such single-commodity paradigms is the age-old practices of growing crops and trees together. Although many of which have stood the test of times and are still being practiced, they are often ignored in development paradigms. During the past thirty years, however, the positive benefits of integrated land-use systems such as agroforestry to the producer and the environment have gradually been recognized.

The time has arrived for utilizing the benefits of the remarriage of crops and trees in addressing some of the major threats facing the world today, such as food- and nutritional security, eroding soils, and expanding deserts. Above- and below-ground diversity of ecosystem processes facilitated by such mixed-species stands provides more system stability and resilience at the site-level, and connectivity with forests and other landscape features at the landscape- and watershed levels. Agroforestry has also been recognized as a greenhouse-gas mitigation strategy under the Kyoto Protocol. Recent research under a variety of environments has confirmed the premise that agroforestry systems have the potential to enhance carbon (C) sequestration in soil compared with treeless (agricultural) systems because of the ability of trees to store C in their deep roots.

Too often, we treat agriculture and forestry separately, yet these sectors are interwoven on the landscape and share many common goals. In order to meet society's needs and aspirations for tree/forest-derived goods and services, we need a paradigm shift: we must find ways of embracing the principles of agroforestry and other integrated systems. "Business as usual" is no longer an option.

演者紹介 About Speaker:

Prof. Dr. P.K. Ramachandran Nair フロリダ大学 亜熱帯アグロフォレストリーセンター長インド生まれ.国際アグロフォレストリーセンター(旧称 ICRAF)に勤務後,フロリダ大学へ.国際誌 Agroforestry Systems のチーフエディターや, Advances in Agroforestry のエディターを歴任.アグロフォレストリー研究のパイオニアとして国際的に高い評価を受け,数々の賞を受賞するとともに,京都大学(2002 年授与)など4つの名誉博士号を授与されている.京都大学には,2000 年,農学研究科の招へい教授としても滞在.



Prof. Dr. PK Nair is a pioneering researcher and educator and a world leader in agroforestry. He is Distinguished Professor and Director of the Center for Subtropical Agroforestry at the University of Florida, Gainesville, Florida, USA. A native of India, he was educated in India, England, and Germany. Working as a multiple cropping agronomist at the plantation crops research institute in southern India during the 1970s, Dr. Nair developed the multistory cropping with tree crops, now acclaimed as a sustainable agroforestry system. During the late 1970s, he became one of the founders of ICRAF (World Agroforestry Centre), Nairobi, Kenya, where he worked for nine years. He has received numerous honors and awards including four honorary Doctor of Science degrees (Universities of Kyoto, Japan; Kumasi, Ghana; Guelph, Ontario, Canada; and Santiago de Compostela, Spain); Fellow of the American Association for the Advancement of Science (AAAS); IUFRO (International Union of Forest Research Organizations) Scientific Achievement Award; and the Humboldt Prize, Germany, 2006. He has authored/edited 12 books and nearly 200 research papers; and has extensive international experience. He was Editor-in-Chief of *Agroforestry Systems* journal for 11 years, and is currently the editor of the book series *Advances in Agroforestry* (Springer Science). A major area of his current research is soil carbon sequestration in agroforestry systems.

Recent Publications

- P. K. R. Nair et al. (Edited) 2004 New Vistas In Agroforestry: A Compendium For The 1st World Congress Of Agroforestry, (Advances in Agroforestry). Kluwer.
- B. M. Kumar & P. K. R. Nair (Edited) 2006. Tropical Homegardens: A Time-tested Example of Sustainable Agroforestry (Advances in Agroforestry) Springer.