

Taiwan's Engagement in Regional Global Change Activities

Jough-Tai WANG ^{1*}, Chao-Han LIU ²

1 Dept. of Atmospheric Sciences, National Central University, Chung-Li, Taiwan

2 Academia Sinica, Nankang, Taipei, Taiwan

wangjt@atm.ncu.edu.tw ^{1*}

The global change capacity building activities initiated by SARCS (Southeast Asia Regional Committee for START) Secretariat will be summarized.

SARCS Secretariat is located in Taiwan, and most of the funding is from NSC, Taiwan. It seeks to establish and foster regional networks of collaborating scientists and institutions in developing countries. These networks conduct research on regional aspects of environmental change, assess impacts and vulnerabilities to such changes, and provide information to policy-makers.

For several decades the rates of economic growth, industrialization, urbanization and globalization in Southeast Asia region had been faster than in most other parts of the world. This increase in economic activity has been exerting a tremendous pressure on the region's natural resources. Consequently, critical environmental change issues of high priority arise such as adaptation to global change, food and water security, coastal and forest degradation; problems pertaining to air quality, sustainable development, biodiversity, and climate variability. However, insufficient research funding and limited training opportunities both within and outside the region continue to challenge the region's capacity to address critical research priorities. SARCS's (www.sarcs.org) activities hope to address these needs.

SARCS member countries include most of the countries in the region. The main objectives of SARCS are to increase capacity of regional scientists and Institutes to carry out research under the agenda of global environmental research programs, and to develop long-term collaborative partnerships between scientists and Institutes in developing and developed countries within this region.

In order to use up the talents in this region, with the funding support from the National Sciences Council (NSC) of Taiwan, SARCS had conducted a research cooperation projects on a regular basis. The research topics include the study of regional sustainable development indicators, regional carbon cycle study, regional greenhouse gas measurement, regional water and carbon and water cycles study. Each

year, SARCS funded 5 to 7 regional research projects.

Capacity-building encompasses the human, scientific, technological, organizational, institutional, and resource capabilities. SARCS has organized activities such as training workshops and special lecturers; and has sponsored regional young scientists and awarded scholarship for them to attend those activities. Between years 2002-2009, SARCS conducted 6 advanced training workshops, topic ranging from the Sustainable Development Indicators, Land Use and Land Cover Change Study, Southeast Asia Regional Carbon and Water Issues, Regional Greenhouse Gas Emission Measurement and Modelling. In the past 7 years or so, more than 250 Regional Scientists had been invited to Taiwan to attend the advanced training workshop. And more than 60 international known scholars were invited to serve as workshop lectures. The workshop not only served as platform for the regional research to interact each other, also provides opportunity for the regional young researchers to foster longer term relationship with those established scientists.

Since the relocation of SARCS to Taiwan in 2000, SARCS had done a lot of work for this region. In the capacity building aspects, a lot of young regional scientists have the opportunity to interact with international known scientists and some of them continue to mature and become a capable researcher. In the research cooperation project, more than 35 scientists are funded and some of the PI also published good Journal articles. We look forward to having extra support from the Area, and SARCS can conduct more training workshops and more global change related research cooperation, which will eventually benefit for all the SEA countries.