

APN SCIENCE AGENDA

Scientific Research Agenda

APN fosters the understanding of global environmental change by conducting regional research through collaboration and capacity development. APN's activities promote research that improves understanding of the physical, biological and human dimensions of change in the Earth system and science that informs adaptation and mitigation decision-making in the following specific areas:

Climate Change and Climate Variability;

1. Ecosystems, Biodiversity, and Land Use;
2. Changes in the Atmospheric, Terrestrial and Marine Domains; and
3. Resources Utilisation and Pathways for Sustainable Development.

The above themes are interrelated and involve the interface of natural, social and political sciences. Thus, APN will also support research on crosscutting issues, science-policy linkages and the human dimensions of global change.

APN supports a range of research topics and other scientific activities as shown in the examples listed, although not exhaustive, in Section 7 'Endnotes.'

APN serves the scientific and decision-making communities and other users in the Asia-Pacific region. APN will invest in the identification of existing methodologies and the development of new methodologies and tools to improve the effectiveness of necessary scientific knowledge transfer to decision-makers in Asia-Pacific communities.

Examples of activities that APN might support are:

- a. Promoting and strengthening global change research, including addressing and identifying gaps via syntheses and assessment work, particularly under the four thematic areas identified in the Scientific Research Agenda. This will be across all communities of natural, socio-economic and political sciences, and non-science stakeholders including decision-makers, managers and the public.
- b. Identifying and developing existing methodologies and developing new methodologies and tools for improving the effectiveness of scientific knowledge transfer to user communities;
- c. Strengthening the interface of policy- and decision-making processes and society in general for mainstreaming environmental concern, in order to develop pathways and effective mechanisms to approach economic and industrial planning processes, adaptation strategies, and enhancing practical research activities, in keeping pace with progress in international policy processes;
- d. Encouraging initiatives from developing countries, especially for place-based (site-specific) integrative research that includes interdisciplinary analyses of the effects and consequences of development pathways, and potential coping strategies pertinent to the region; and
- e. Aligning with global change scientific programmes (refer to Section 4 under 'Alignment with Programmes of the Global Change Community').

Scientific Capacity Development Agenda

The Scientific Capacity Building/Enhancement for Sustainable Development in Developing Countries programme (CAPaBLE), which was launched in April 2003, is an initiative to realise parts 107 to 114 of the Johannesburg Plan of Implementation (JPOI) for the World

Summit on Sustainable Development (WSSD) and is registered as a WSSD Type II Partnership Initiative.¹

The CAPaBLE programme is enhancing scientific capacity in developing countries to improve decision-making relating to issues that are directly linked to their sustainable development. This effort is being achieved through a two-track process of *capacity enhancement* for experienced leading scientists and *capacity development* for early-career scientists. An evaluation of Phase One of CAPaBLE (2003-2006) was conducted in 2008, the results of which reaffirmed the urgency and need for a programme like CAPaBLE as an integrated pillar of APN activities focussing on scientific capacity development, particularly for developing countries.

The APN's strategies are to:

1. Strengthen the profile of the CAPaBLE programme to ensure that it continues to be a strong pillar of APN activities that stands alone from the first pillar (the ARCP programme);
2. Recognise that scientific capacity development is needed for both the science and non-science communities;
3. Establish specific criteria and a set of metrics for evaluating successful capacity development for short- and long-term outcomes;
4. Widen its scientific capacity development activities in the broader context of global change and the scientific themes identified in the present Strategic Plan;
5. Continue its scientific capacity development efforts in science and education at all levels from the local and community levels (grass roots), to the national, regional and global levels, particularly in developing countries. This is distinct from the APN's ARCP programme, where activities must involve the participation of at least three APN-approved countries in the Asia-Pacific region; and
6. Commit the necessary time and funds to attract investment into the CAPaBLE programme. The "partnership" approach of the CAPaBLE programme will be used as the major key for seeking and securing investment from other stakeholders. In so doing, the APN will endeavour to show current investors that there is a good reason to continue investing in the CAPaBLE programme.

Science-Policy Agenda

The APN is committed to achieving its second goal of strengthening appropriate interactions among scientists and policy-makers, and providing scientific input to policy decision-making and scientific knowledge to the public and other non-science communities. One important role of science is to provide the underpinning information for policy- and decision-making, so it must respond to the needs of policy-makers and decision-makers. Conversely, it is important that those stakeholders indicate what their needs are. The APN will continue to develop effective methodologies and procedures in its science thematic areas identified under its Scientific Research Agenda, and transfer this knowledge and information to the science, non-science (public, civil society, etc.) and decision-making communities. The APN will strive to achieve an excellent track record of strengthening appropriate science-policy interactions by the end of the period covered by the present Strategic Plan.

¹ Of particular relevance to the CAPaBLE programme is part 111 of JPOI: *Establish regular channels between policy-makers and the scientific community for requesting and receiving science and technology advice for the implementation of Agenda 21, and create and strengthen networks for science and education for sustainable development, at all levels, with the aim of sharing knowledge, experiences and best practices, and developing scientific capacities, particularly in developing countries.*

The APN's strategies are to:

1. Strengthen science-policy interactions/linkages for ARCP and CAPaBLE projects funded under the annual Calls for Proposals. In so doing, develop a set of metrics for science-policy interactions/linkages and define specific criteria for successful science-policy linkages.
2. Encourage projects to adopt interdisciplinary approaches that include natural, social, economic and political sciences.
3. Continue to empower APN members, who represent their governments, in APN activities, by seeking their guidance on best practices and opportunities to promote science and policy interactions.
4. Increase the number of policy publications, including policy-briefs, synthesis reports and assessments, etc. In so doing, APN will disseminate scientific results to non-science audiences in order for policy-makers, end-users and the public to have a better appreciation of global change issues.
5. Cooperate with other institutions and bodies (e.g. the global change programmes, Association of Southeast Asian Nations [ASEAN], Intergovernmental Panel on Climate Change [IPCC], United Nations Framework Convention on Climate Change [UNFCCC] and other UN bodies such as the United Nations Environment Programme [UNEP], United Nations Commission for Sustainable Development [UNCSD], and United Nations Education, Scientific and Cultural Organisation [UNESCO], and Subsidiary Body for Scientific and Technological Advice [SBSTA], etc), who, like the APN, address or face issues relating to science-policy interactions. Provide increasing opportunities for interactions between scientists and policy-makers, and through policy-based workshops where participants include policy-making groups and a cross-section of stakeholders.