

CAPaBLE Short Report

Creating climate knowledge networks through strategic, global linkages (2003-CB-04-Meinke-APN/IAI)

Project Leader:

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US\$ 40,000

Participating countries

Australia, Argentina, Brazil, India, Indonesia, USA, Uruguay, Viet Nam

Brief introduction and background

One overarching aim of CAPABLE is to establish regular channels between policy makers and the scientific community for better sustainable development. It is widely acknowledged that effective policy cannot be made in isolation from the people most affected by it. Farmers actions have consequences for sustainable development. This drives policy formulation with the aim to influence the behaviour of farmers and resource managers in order to achieve better outcomes in terms of improved livelihoods of people in rural regions (ie. better economic, environmental and social outcomes). The approach and knowledge used in this project effectively links decision makers at the farm and policy level by providing scientifically sound, quantitative information that allows objective comparisons of options and a clear evaluation of choices and consequences.

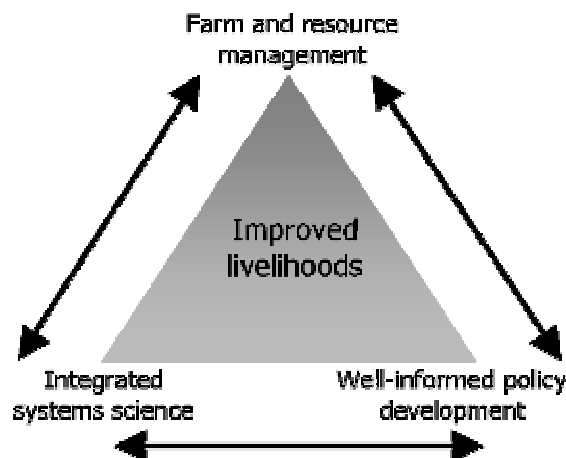


Fig. 1: Schematic diagram outlining the role of integrated systems science for farm and resource management as well as for policy development (H. Meinke, unpublished).

In spite of some positive case studies, climate applications in developing countries have been criticised for either having no value or even doing damage by making some farmers poorer risk managers than they were before. This project is partly in response to such criticism by building the networks and the capacity that is necessary to benefit from climate knowledge through integration of such knowledge into existing risk management

frameworks.

Outline of activities conducted

To achieve these objectives, we conducted two workshops, one in Fortaleza (Brazil; jointly with our IAI project partners) and one in Toowoomba, Australia, with the aim to strengthen the capacity of stakeholders in the target regions of S/SE Asia. This will allow stakeholders to deal intelligently with uncertainty and to develop new research initiatives that specifically target relevant climate risk knowledge gaps. The workshops provided a number of practical examples from the developing countries while developed country examples were targeted in regards to their potential applicability in developing countries.

Outcomes and products

1) Workshop 1 (Fortaleza, Ceará, Brazil 16 – 20 August, 2004)

At this workshop we have taken a significant step towards better integration of climate related risk reduction measures in rural regions of Asia and South America. Using the Asian experience as a case study, South American participants have identified priority areas of research and methods of delivery that will result in a major project submission to Inter-American Institute for Global Change Research (IAI). Asian and Australian participants have benefited from gaining (a) first hand understanding of the climate risk exposure in South America and (b) knowledge of the considerable amount of research that is currently being undertaken in South America on these topics. Drs Meinke (Australia) and Selvaraju (India) both gave key note presentation outlining the experience from their project work. During the second part of the workshop they then acted as resource staff to assist their Sth American colleagues in their needs analyses and proposal development. Key stakeholders such as technical advisors, farmer representatives and government officials from the agricultural sector also participated in the workshop and helped to focus the research proposals to address priority needs of this sector. This proposal will now be submitted to IAI for funding. Workshop participants also helped to define training needs for the junior staff member from Asia, who just participated in the second workshop (see below).

2) Workshop 2 (Toowoomba, Queensland, Australia, 4 - 8 October, 2004)

The objective was to develop systems analytical capacity of young scientists and to draft research proposals based on the research priorities in their regions. Most importantly the workshop acted as a catalyst to bring outcome focused scientists from around Asia together in a knowledge-based network. To create such teams and to make them effective requires knowledge of and access to the necessary risk management tools, such as climate data, climate forecasts, cropping systems simulation models and supporting software. It also requires the ability to use such tools to produce policy and farmer relevant information that facilitates the communication process and ultimately lead to better farm management decisions within a supportive policy framework. These issues provided the focus for the Toowoomba workshop. During the workshop we provided basic training in and access to the cropping systems simulation platform APSIM as well as training in the use of climate information for decision analysis in agriculture. Four junior scientists from Indonesia, Pakistan and Viet Nam as well as several senior members of the APN project team attended the workshop. Two scientist from India were unable to attend but will receive individual training over the next few months. A full report and a CD containing the draft proposals and all the resource material will be distributed to all participants by December 2004. During the workshop, three of the young scientist have applied for PhD

scholarships with various Australian Institutions:

Student	Topic	Target Institutions and supervisors	Scholarship targeted
Mr Perdinan Rakiso, Bogor Agricultural University, Indonesia	Economic Risk Analysis of Climate Information in Agriculture Management Using Simulation Models and Statistical Approaches	University of Queensland, Brisbane Prof Mal Wegener	AUSAID scholarship
Mr Akhmad Faqih, Indonesia	An Assessment of Future Rainfall Trends in Australia and Indonesia	University of Southern Queensland, Toowoomba Dr Joachim Ribbe	USQ scholarship
Mr Muhammad Asim, Pakistan	Simulating physiological traits in wheat under contrasting climatic conditions	CSIRO & UQ, Dr S. Chapman & Dr Ahmad Manschadi, DPI&F	CSIRO scholarship

Review: A Self-Evaluation

In spite of some difficult challenges, the outcomes demonstrate that we have achieved all key objectives. Specifically, we developed closer links between APN and IAI-funded project work and continued to build regional capacity in applied climate risk management through professional networks and project interactions in South America as well as throughout S/SE Asia. One of the biggest problems faced by the project team was to obtain permissions for relatively junior staff members from developing countries to attend workshops outside their home countries. A further logistical problem was to obtain visas and travel clearance in a post 9/11 world.

Future Recommendations

In our opinion staff exchanges and post-graduate work can be one of the most effective means for sustained capacity building. Such endeavours should be strongly supported by future CAPABLE projects.