

# RESEARCH DIRECTIONS

## Food security and climate change

**Associate Professor Samsul Huda from the Centre for Plants and the Environment is leading an international research team that will investigate likely shifts in the pattern of rain and water availability and to what extent climate change will contribute to any mismatch between crop development and water availability. The project is supported by Asia-Pacific Network for Global Change Research.**

‘Studying the environment and in particular its relationship to seasonal and climatic change is the single most important way to understand crop adaptation to shifting environments’, says Associate Professor Huda. ‘An understanding of the development of key crops under different climate conditions will enable better preparation for and adaptation to climate change. Because of greater attention being given to food security and resultant changes in policy by government, Asia-Pacific farmers, community workers and government agencies need to be more aware of different strategies for crop and disease management.’

This project will evaluate existing data on plant life cycles, water availability and yield using an agricultural modelling program that will integrate locally available models and compare them with current farm practices. This information will be used to assess practices recommended for projected future climate change scenarios. The researchers will also monitor crop performance, encouraging community participation and developing appropriate strategies to minimise risk and maximise opportunities related to the likely impact of climate change variables on current and future practices. In addition to publishing papers in scientific journals workshops will be held to present the results of the research and discuss issues arising from the work.



New knowledge gained from this research will be incorporated into crop management policies and will enable farmers, community workers and government agencies to adapt to climate change.

**Project Title:** Food Security and Climate Change in the Asia-Pacific Region: Evaluating Mismatch between Crop Development and Water Availability

**Funding has been set at:** \$120,000

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