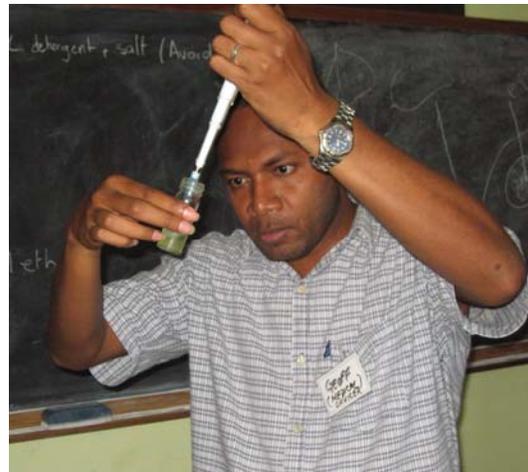
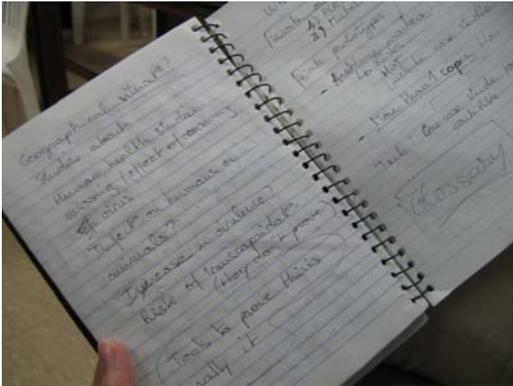


# New Zealand Institute of Gene Ecology

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## Report on the inaugural Regional Biosafety (Biosefti) Course August 15-23 Honiara, Solomon Islands



prepared by Jack A. Heinemann and Paul D. Roughan  
25 August 2005

## **The Course**

The Regional Biosafety Course (RBS) was an outcome of the partnership between the New Zealand Institute of Gene Ecology (University of Canterbury, Christchurch) and the Island Knowledge Institute (Solomon Islands) under the direction of Mr. Paul Roughan, National Biosafety Framework (NBF) Project Coordinator for the Solomon Islands. The Course was designed jointly between the host nation and NZIGE and to meet the needs of the Solomon Islands in complying with their obligations under the Cartagena Protocol on Biosafety.

The RBS had a formal enrolment of 15 people (Figure 1) representing the private sector and different areas of the Solomon Islands public sector (including health, foreign affairs, quarantine and legal), non-government organizations and educators.

Figure 1



Various RBS participants and members of the faculty.

## **Funding for the course** provided by (in order of contribution):

University of Canterbury (in kind);

NORAD, Norwegian Agency for Development Cooperation (through a subcontract to NZIGE from the Norwegian Institute of Gene Ecology - GENØK);

National Biosafety Framework Project, Solomon Islands (funded by UNEP-GEF);

Invitrogen (donation of laboratory reagents).

## **Purpose**

The Course was a milestone in the UNEP-GEF NBF Project in the Solomon Islands, contributing to the strategic objective of building stakeholder capacity to participate in National Biosafety Framework development. It provided an introduction to modern biotechnology, biosafety and the regulatory requirements of the Cartagena Protocol. It also provided a training experience in the use of a prototype risk identification and assessment tool called the GE Biosafety Forecast Service (Figure 2). A trial version of the Service was used by participants to assess a fictional application of the type that could be received under the Biosafety Protocol. The Service is under development at the NZIGE, in cooperation with GENØK, and is an output of the UNEP-GENØK Capacity Building Package funded by NORAD.

Course faculty and resource persons (alphabetical):

Marina Cretenet, MSc

Joanna Goven, PhD

Jack Heinemann, PhD

Billie Moore, BA(Honours)

Camilo Rodriguez-Beltran, MSc

Paul Roughan, BSc(Honours)

### Evaluation

The Course was evaluated by the participants both through the submission of anonymous written comments and verbally in a closed session, with a rapporteur.

The strengths of the Course were:

- + ability to holistically evaluate the impacts of LMOs for decision making by integrating social and scientific issues (Figure 3);

Figure 3



Billie Moore speaking on holistic decision making.

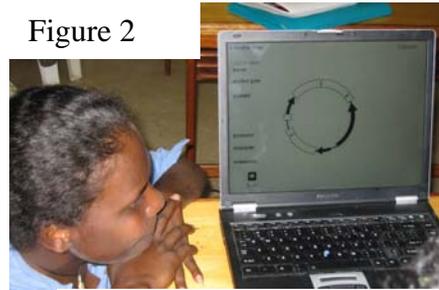
- + competent and accessible presentation of the science behind making a scientific risk assessment (Figure 4);
- + informative case studies;
- + useful practical sessions in which participants isolated DNA, built a PCR machine (Figure 5) and used it to sex pawpaw (papaya), sample pawpaw DNA for evidence of modifications, built an inexpensive gel electrophoresis rig, poured and loaded a gel with DNA from the PCR;
- + friendliness and enthusiasm of the faculty;
- + the Course was designed with representative participants who did not have to travel, or travel far, to attend the Course.

Figure 4



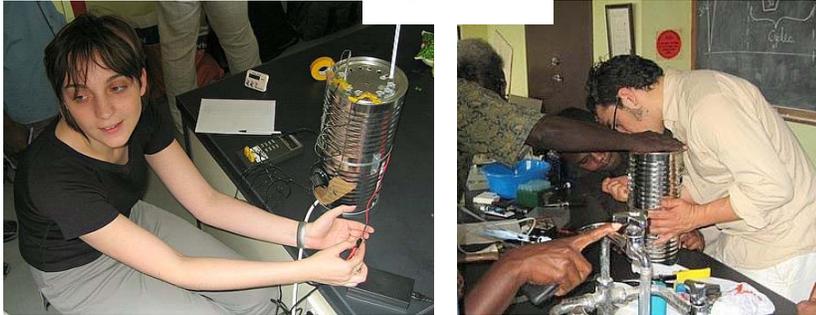
Paul Roughan speaking on regional biodiversity, particularly marine.

Figure 2



Karlyn Tekulu working with the prototype.

Figure 5



Marina Cretenet demonstrating the homemade PCR machine (left). Camilo Rodriguez-Beltran leading the construction of the PCR machine (right).

The Course could be improved by:

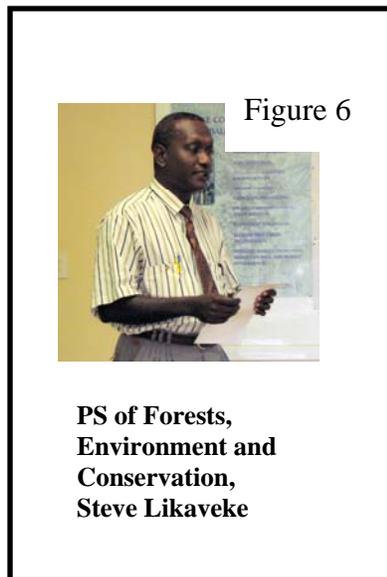
- developing more case studies around the host country/region;
- incorporating more impacts in the context of local culture;
- providing background readings in advance of the Course;
- being slightly longer and allowing more time to work with the Forecast Service.

### Ongoing Work

The Hon. David Holosivi, Minister of Forests, Environment and Conservation, represented by the Permanent Secretary, Mr. Steve-Daniel Likaveke (Figure 6), said that “This course, through the collaborative efforts of our friends from New Zealand, and the resourcing from UNEP and Norway, promises the possibility of further building and a further

and the activities, further capacity partnership into the future.”

The NZIGE and Solomon Knowledge Institute, are now planning follow-up distance training course in and risk assessment, as well workshops and a repeat countries of the region. Discussions for a similar training experience are already proceeding with course would include Vanuatu. That proposed Solomon Islands faculty from Vanuatu and the with personnel and supplemented as necessary Zealand.



PS of Forests, Environment and Conservation, Steve Likaveke

Islands partner, the Islands now planning follow-up distance training course in and risk assessment, as well workshops and a repeat countries of the region. training experience are Vanuatu. That proposed faculty from Vanuatu and the supplemented as necessary equipment from New

The high level attention given to the Course by the Solomon Islands Government hopefully will lead to broader support from the New Zealand and Australian Governments. The resounding conclusion of the Course was that biosafety is a regional goal and can best be achieved through a cooperative network.