Planned and Existing developments at the National University of Samoa for promoting Sustainable development (SD) and education for sustainable development (ESD) in Samoa

by

Ioana Chan Mow

National University of Samoa, PO Box 1622, Apia Samoa
i.chanmow@nus.edu.ws

ABSTRACT

This paper is a discussion of existing and planned initiatives at the National University of Samoa (NUS) for promoting sustainable development and education for sustainable development (ESD). The argument put forward in this presentation is that within our current situation of mounting environmental vulnerabilities, fragile economies and the lack of capacity and resources to maintain sustainable livelihoods, the only way forward for Samoa is through institutions like NUS to forge strategic alliances and collaborations to have access to resources to develop our capacity for sustainable development. The second argument put forward is that the only way to build capacity for sustainable development is through education for sustainable development (ESD). To promote SD, NUS has been involved in the Asia Pacific Initiative for collaborative online course development and also with the Commonwealth of Learning through its Virtual University of the Small States of the Commonwealth (VUSSC). A major initiative which will contribute significantly to SD is the proposed NUS Marine and Environmental research centre to be housed in the new NUS Ocean campus. To promote ESD and SD, NUS is also involved in the NIU Edulink project which is in its first of its 3 year implementation.

Keywords
Sustainable development, Education for sustainable development, Edulink NIU Project, VUSSC, Asia Pacific Initiative, NUS Marine and Environmental Research Centre

1. INTRODUCTION

Samoa, like other small island developing states in the Pacific is faced with an increasing number of challenges due to its remoteness, small size, a fragile economy, and environmental vulnerability. With all these challenges and vulnerabilities small island nations like Samoa find they do not have the capacity to respond to such challenges. The need to build capacity for sustainable development also highlights the need for education for sustainable development. Indeed ESD is seen as the key for building capacity for SD. The rest of the paper discusses the strategic collaborative initiatives at NUS for promoting SD and ESD, namely the Asia Pacific initiative, the VUSSC initiative, collaboration with the University of French Polynesia, the Edulink project and finally the proposed Marine and Environmental Research centre.

2. ASIA PACIFIC INITIATIVE

NUS and USP are part of the Asia Pacific Initiative (API) seminar series which is a collaborative effort by 7 universities to offer via video conferencing and the Moodle platform postgraduate courses in areas such as Waste management, Climate change and infrastructure for development[1]. The initiative is an attempt to collaboratively develop courses which are of priority and relevance to countries in the Asia Pacific rim. For NUS, the strategic importance of this initiative is the provision of content for the development of our postgraduate courses in Environmental Science/Sustainable development.

3. COMMONWEALTH OF LEARNING AND THE VUSSC INITIATIVE

Another initiative to promote SD is via NUS participation in Commonwealth of Learning and VUSSC initiative. NUS and UPNG, through their country memberships, are also part of the Virtual University of Small States of the Commonwealth (VUSSC) a collaborative effort by 28 states of the Commonwealth to develop free content resources for education. To quote the goals of the virtual university are to develop capacity, develop and share learning content and courses, and work toward establishing a standards and credit transfer mechanism [1]. The resulting products are then integrated into programmes offered by these VUSSC institutions. Content developed by VUSSC members can be shared under a Creative Commons licence. To overcome issues of copyright and wherever possible, the Creative Commons licence conditions set will be Attribution and Share-Alike. The activities of the VUSSC consortium are driven by its members, with coordination support from the Commonwealth of Learning.

Since its inception, VUSSC has moved quickly in implementing its plans and strategies. Course development has already been completed in the areas of Tourism, Management, Life skills, Course design.

VUSSC activities in Samoa include: i) Online course development Disaster management (VUSSC bootcamp –Samoa); and ii) Wikieducator training for staff of NUS, Education ministry, SchoolNet and Telecentres administrators. Participation and links to the VUSSC and COL regional networks will also ensure as wide a distribution as possible of course content thus ensuring sustainability.
4. COLLABORATION WITH UNIVERSITY OF FRENCH POLYNESIA

Another important strategic alliance is the collaboration with the University of French Polynesia[1]. Through this link NUS has been able to enjoy student exchange in the area of Environmental science. As part of these student exchanges, NUS students partner with UFP doctoral students in their research projects in Environmental Science. This provides mentoring and exposure of the NUS students to research, an important aspect in trying to instill in them a love for research. Also UFP has offered valuable assistance in the planning phase of the proposed NUS research facility through scoping missions and attachments at the various research facilities in French Polynesia. Furthermore, there are planned collaborative research projects in the fields of ethnobotany and aquaculture. In ethnobotany, UFP and NUS lecturers will be collaborating in a project for extracting and identifying the active components of a variety of medicinal herbs. In aquaculture, there are plans for collaborative study in the area of shrimp farming.

5. EDULINK NIU PROJECT

The Edulink funded NIU project is a network of 3 universities USP, NUS and UPNG.

The overall objective for the NIU Project is to mainstream education for sustainable development (ESD) in a consortium of networked Pacific island universities for building academic and research capacity to address sustainable development challenges [2]. The project proposal took 2 years to complete and was approved on Dec 28th, 2008. With a proposed 3 year implementation, and in its first year of this implementation the specific objectives of NIU are to:

1. To build institutional structures and mechanisms for the infusion and mainstreaming of ESD into the teaching and research programmes
2. To develop ESD programmes, especially at the postgraduate level
3. To strengthen ESD/SD research outputs

The implementing agents in all 3 universities are the Division/School of Environmental Sciences at USP and UPNG and the Faculty of Science at NUS.

The project has three major components:
1) Management/Administrative Capacity,
2) Academic relevance and
3) Capacity building in Research and Technology.

Component 1 is building management and administrative capacity. The main objective of Component 1 is to ensure activities implemented within each member of the NIU are properly executed and co-ordinated. Proposed major activities for Component 1 are: i) Setting up of a regional ESD Board; ii) development of an ESD Policy; iii) setting up of ESD Advisory Committees in the 3 partner universities; and iv) developing relevant ESD Action Plans.

Component 2 is academic relevance and has three major elements:
1) Teacher education; 2) Sustainability education and 3) Community empowerment.

Teacher Education, includes both pre and in service training of teachers as well as sustaining their education/knowledge bases and pedagogy through capacity building initiatives and new resource materials. At NUS activities in Teacher education will include professional development for Faculty of Science staff in the form of staff exchanges and postgraduate studies at USP or UPNG.

Sustainability education involves interdisciplinary teaching and training approaches in the development and delivery of Postgraduate Diploma/Degree in Sustainable Development, Interactive multimedia, i-browser and moodle based e- and print material development. At NUS the main activities in the area of sustainability education is the development of postgraduate diploma courses in the areas of Environmental science, Mathematics and Statistics and Computing with a strong emphasis on ESD and SD. Course development will take advantage of collaboration with USP and UPNG and involve observation visits to USP to review existing courses; reorienting existing courses and developing new courses in ESD and SD.

Community empowerment links university education to improve capacity of outside communities not traditionally served by schools and universities, through non-formal and informal approaches, and weave environment and SD thinking into the whole fabric of community education.

At NUS the community empowerment component will involve workshops promoting community awareness of issues and best practices in waste management and disaster management.

Component 3 is Research & Technology which will involve collaborative research amongst the 3 universities to complement and support academic programs developed in Component 2.

The proposed areas of research are: a) waste management; b) regional application of negotiation skills and MEA capacity building to address major land use issues of the Pacific; c) ESD leadership training; d) sustainable rural development in coastal communities through Participatory Project Planning, Design and Implementation; e) climate and extreme events in the Pacific: An economic analysis to build resilience; f) the critical roles of Teacher Education in ESD.

Specifically for NUS the research activities in which we will take the lead are the establishment of the Marine and Environmental Science Research Centre (MERC), and the longitudinal study on numeracy of teacher education students.

The Edulink NIU Project is in its first year of implementation and is expected to result in integrating ESD and SD into the postgraduate programs within the Faculty of Science. A gap and an area for the next proposed project would be integrating ESD into the undergraduate curriculum at NUS. There are plans to submit such a proposal to the UNESCO ESD program.
6. NUS MARINE AND ENVIRONMENTAL SCIENCE RESEARCH CENTRE (MERC)

An important milestone in the development of Sustainable development at NUS is the proposed marine and environmental science research centre. The main goals of the proposed centre (MERC) are as follows [3]:

1. To provide a facility for the conduct of research in the areas of marine and environmental science. Environmental science is scoped here to be quite broad and encompasses Environmental chemistry, biology, physics and health in addition to other areas not mentioned here.

2. To provide a research base to inform course development in the areas of marine studies and environmental science. This will also provide the fieldwork and research experience for students in both undergraduate and postgraduate programs.

3. To provide a base for university consultancies in marine studies and environmental science. With the recent establishment of the NUS Consulting company there is a need for a base to conduct consultancies in these areas of which there is high demand.

4. To help local industry by the provision of training and also baseline data to inform best practices and to identify new areas for investment in the fields of marine studies and environmental science.

5. To establish national repositories i.e., to house national databases and species inventories in marine studies and environmental science.

With its proposed location at the Mulinuu peninsula ocean campus, this research facility is to provide crucial research to support academic programs in SD and also provide information that will lead to innovation, inform best practices in industry, thereby ensuring sustainability [3]. The Marine and Environmental Science research centre will be housed alongside the Marine training School thus ensuring optimal coordination and sharing of resources between the two facilities. To ensure sustainability, commercial activities such as consultancies, sponsored research will be actively pursued. As expected, such a venture is made possible only through strategic collaborations with donor agencies (Government of Japan), with institutions such as Otago university, UFP, and USP and UPNG through the Edulink NIU project.

7. SUMMARY AND CONCLUSION

The planned and existing initiatives described in this paper are all strategic collaborations taking advantage of alliances for sharing resources. With the fragile economies and the increasing vulnerability in their environment small island states in the Pacific like Samoa do not have the capacity for sustainable development. Through promoting ESD as a means of increasing awareness and building capacity for SD, NUS through it various strategic collaborations will be able to promote ESD and SD thus contributing to building the capacity for sustainable development in Samoa.

8. REFERENCES

