

UNESCO-LINKS

Village-level Documentation and Transmission of Local Environmental Knowledge: A Pilot Project for Solomon Islands

Report to UNESCO

on Pilot Project carried out in Solomon Islands,
6-23 September 2005.

By Professor **Edvard Hviding**, Project Leader

In January 2005, UNESCO's LINKS (Local and Indigenous Knowledge Systems) project published the book *Reef and Rainforest: An Environmental Encyclopedia of Marovo Lagoon* (by Edvard Hviding; Knowledges of Nature Series No. 1; 248pp; 1211 entries in Marovo and English languages – many with scientific identifications; 10 chapters; indexes of scientific, Marovo, Hoava and Vangunu names; colour illustrations; maps – henceforth referred to as the *Encyclopedia*). Further [details](#) about the book are available at the LINKS website.

The Marovo Lagoon is one of the world's largest coral reef lagoons, covering about 700 square kilometres, formed by a double chain of raised barrier reef islands, and backed by a chain of high, rainforested volcanic islands (see Figure 1). The Marovo area has a population of about 11,000 people living in dispersed villages. Located in the Western Province of the South Pacific nation of Solomon Islands, it is internationally recognized as an area of extraordinary biological and cultural diversity currently facing a range of environmental threats, which have been addressed by a range of conservationist NGOs through largely unsuccessful projects. The *Encyclopedia* is an outcome of Professor [Edvard Hviding](#)'s anthropological and ethnobiological work in the Marovo Lagoon over the past two decades. It builds on a more limited environmental dictionary published by Hviding at the University of Bergen in 1995 and distributed widely by him at the time to villages and schools of the Marovo area.

The *Encyclopedia* was [launched](#) in Paris by UNESCO-LINKS on 27 January 2005 immediately after the workshop [Biological and cultural diversity: The challenge of local knowledge, practice and worldviews](#), organized by UNESCO-LINKS and CNRS in the framework of the International Conference [Biodiversity: Science and Governance](#) (24-28 January 2005).

Following this, plans were developed by LINKS staff and the *Encyclopedia*'s author to carry out explorative field trials of the book in relevant school and community situations in Solomon Islands. Hence during September 2005 this multilingual book was employed in an intensive pilot exercise (henceforth referred to as the Pilot Project) in a selected range of educational institutions in Solomon Islands, with its author as project leader. The Pilot Project, entitled as above, was jointly funded by UNESCO-LINKS (through the UNESCO office in Apia from where Terms of Reference were given [see TOR excerpts in Appendix 4]), the University of Bergen, the Government of Norway (Ministry of Foreign Affairs and National Commission for UNESCO), and the Government of Solomon Islands (National

Commission for UNESCO, Ministry of Education and Human Resources Development, and Western Province Government).

The main focus of the Pilot Project, given the language focus of the *Encyclopedia*, was the Marovo Lagoon area. The Marovo Lagoon, whose internationally renowned marine and terrestrial biodiversity and whose rich and dynamic indigenous environmental knowledge and linguistic complexity are the subject matter of the *Encyclopedia*, is one of two proposed Project Sites for the MSP “Safeguarding the Biological and Cultural Diversity of Tropical Island Systems: Palau, Solomon Islands and Vanuatu”, under submission by UNESCO-LINKS to GEF. The Marovo Lagoon is also a site long under consideration for UNESCO World Heritage nomination, although industrial logging of the area’s rainforest as well as local political fragmentation have made this scenario seem increasingly unlikely.

While directly addressing issues of biodiversity conservation, the *Encyclopedia* is, however, seen by its author (who has worked closely with the Marovo Lagoon and its people over the last twenty years), by LINKS and by the Solomon Islands Government (SIG) as having a wider relevance. For example, recent SIG policy initiatives towards promoting vernacular education (in a nation of about 500,000 people and 70 to 80 distinct languages) require the development of curricular materials in local languages and relevant to both local and global concerns (see below). The *Encyclopedia* meets such needs for one area of Solomon Islands, while being of wider relevance as example and inspiration for the rest of the nation. The implementation of the Pilot Project therefore gave considerable attention also to relevant national and provincial levels. An underlying assumption, moreover, was that the Pilot Project would have general demonstrational relevance for UNESCO-LINKS activities in the Pacific and beyond.

The Project Leader hereby provides a report on activities and results, and a discussion of the Pilot Project as an example of an integrated approach to documenting biological and cultural diversity and as an effort at bridging indigenous knowledge and Western science. A brief separate report will be submitted by the Project Leader concerning steps towards a study guide for the use of the *Encyclopedia* in primary, secondary, tertiary and community education in Solomon Islands, with bearings for the integration of indigenous knowledge and science in environmental education in the Pacific in general. While the *Encyclopedia* is anchored in the Marovo language (as well as two other lesser vernaculars of the wider Marovo Lagoon area, Hoava and Vangunu), the book and the experiences of the Pilot Project hold considerable promise for expansion of the general model into educational systems and rural communities also beyond this immediate linguistic context.

The forthcoming MSP under submission to GEF by UNESCO-LINKS notes how the ambition “is not seeking to implement classical ‘environmental awareness programs in schools’ (as many projects include) but seeks to redesign science content to incorporate (and thereby safeguard the maintenance and evolution of) knowledge systems which are seriously endangered today and have been repeatedly recognised as having crucial ramifications for biodiversity conservation in these sites of global significance”. Hence, the Pilot Project was intended as a practical demonstration and testing of the role of educational material in vernacular language for fostering the transmission and development of indigenous environmental knowledge through dialogue across generations, from a primary anchorage in the school system that highlights the connections between local knowledge and science.

Certain circumstances characteristic of Solomon Islands today, but representing wider trends in the Pacific Islands and other parts of the developing world, are worthy of attention in terms of the key ambition quoted from the MSP, and provide a major channel for the Pilot Project: In consultations held by UNESCO-LINKS in Solomon Islands in 2003 and 2004, national and provincial education officials and rural community leaders emphasized in clear terms how local, “custom” knowledge and vernacular language are immediately meaningful in modern times by constituting the conditions for self sufficient ways of life, given that the majority of students get no further than secondary school, and are likely to return to live their lives in the village. An urgent task facing the educational system is to develop reconceptualized plans for environmentally-oriented studies so that knowledge which is locally relevant and economically important (as a foundation for a diverse rural subsistence economy) is communicated across the hitherto widening gaps between village realities and school curricula. This progressive position is incorporated by the Solomon Islands Government in its *Education Strategic Plan 2004-2006*, which states that “[it] is especially important that basic education be re-anchored in the community, and while facilitating development of knowledge and skills needed for economic wellbeing and advancement, basic education should promote and develop positive aspects of village society” (p. 6) and concludes that “[the] preservation of indigenous knowledge and skills is important for the sustainable development of the Solomon Islands” (p. 31).

The *Encyclopedia* was consequently envisaged by UNESCO-LINKS and the Project Leader as a starting point for a process whereby students in village primary and secondary schools, rural vocational training centres and provincial secondary schools, throughout the area in the Western Solomons where the Marovo language is spoken as the primary language, could be actively involved in the bridging of generations, knowledges, languages and places by carrying out assignments of environmental knowledge documentation as part of their ongoing school work. The Project Leader, whose research involvement with the Marovo Lagoon spans several decades, has access to a particularly solid network of leaders and educationalists throughout the Marovo-speaking area of the Western Solomons, and a particularly well-qualified Team was duly recruited from this network.

500 copies of the *Encyclopedia* were air-freighted from Paris to Solomon Islands well in advance and placed in safe storage at the Solomon Islands National Museum, a key partner in the Pilot Project. The Project Leader arrived in Honiara, the Solomon Islands capital, on 6 September, and immediately started working with the Pilot Project Team (henceforth referred to as the Team), represented by its Honiara-resident members Mr. Aseri Yalangono of the Ministry of Education (Marovo speaker, Director of the Secondary Division of the Ministry for Education, and Deputy Secretary-General of the Solomon Islands National Commission for UNESCO, henceforth referred to as SINCU) and Mr. Robertson Szetu, Marovo speaker, Assistant Marketing Manager of Solomon Telekom (the national telecommunications company) and enlisted as Team member responsible for logistics and IT services. Team member Yalangono was generously seconded to UNESCO-LINKS from the Ministry of Education and Human Resources Development (MEHRD) for the duration of the Pilot Project, while Team member Szetu was remunerated from Pilot Project funds for his assistance.

In the following days meetings were held with the Minister of Education, the Permanent Secretary of the MEHRD, the Secretary General of the SINCU, the Chairman of the National Education Board and other relevant parties. Contact was made with several units of the Ministry of Natural Resources (the GEF Focal Point, the Department of Conservation, and the

Department of Fisheries and Marine Resources) and other parties in the capital with a view to follow-up meetings upon the Team's return from Pilot Project activities in the Western Province. Significantly, the Pilot Project was quickly and efficiently integrated into the MEHRD's new strategy for vernacular education, as formulated in the *Education Strategic Plan 2004-2006*. Arrangements were made for the final shipment of copies of the *Encyclopedia* to central Marovo Lagoon (copies for northern Marovo had already been shipped to their destination by Team member Yalangono), and short-wave radio messages were sent over the national broadcasting system to confirm the participation of the seven rural schools selected for the Pilot Project.

Team members Hviding and Yalangono flew to Gizo, capital of Western Province, on 8 September. Team member Szetu, whose home town is Gizo, flew from Honiara and joined Team activities during 9-11 September. From 8 September, Team member Mr. Wilson Liligeto (Marovo speaker, field coordinator and a retired senior top-level public servant) joined. On 9 September the Team held a series of meetings with provincial leadership (Premier, Provincial Secretary and a number of Provincial Assembly Members) and educational authorities, in order to explain the Pilot Project and to promote integration with current and emerging provincial policies on education, conservation and research, and with an additional specific view towards implementation of the aforementioned MSP. The Provincial Premier generously agreed to provide as in-kind support for the Pilot Project the full participation of provincial primary and secondary schools and their staff. A similar commitment had already been made by the leadership of the Christian Fellowship Church, a powerful rural organization operating its own school system in parts of the Pilot Project area.

Later in the day Team Member Szetu addressed IT-related aspects of the Pilot Project, and tentative conclusions were reached with the provincial political and educational leadership on scenarios for internet-based distance education (using the *Encyclopedia* as a model) involving selected localities including the provincial capital and several boarding school colleges.

On 10 September, talks were held with a visiting EU/STABEX team engaged in capacity-building efforts in Western, Choiseul and Makira provinces, and possible interfaces between UNESCO-LINKS initiatives and EU activities in Solomon Islands were identified. Brief meetings were improvised with representatives of civil society and of several international conservation organizations, and a marine protected area close to Gizo township was visited by boat. Logistical preparations took up much of the day. To prepare for the Pilot Project's main objective of testing out the *Encyclopedia* in practical educational situations, Team members prepared, printed and photocopied a standard *assignment sheet* (see Appendix 1) for use in the following week by teachers in participating schools of the Marovo Lagoon.

On Sunday 11 September, Team members Hviding, Yalangono and Liligeto flew from Gizo to Seghe, the central airstrip of Marovo Lagoon. Team member Szetu returned to Honiara to follow up and prepare for the Team's return there on 21 September, and to further discuss the plans for relevant IT-based distance learning activities. At Seghe the Team was met, as pre-arranged by Team member Szetu, by a hired driver with a 19-ft fibreglass boat and 40HP outboard motor, chartered for the duration of the week from Mr. Dick Hotton, a retired Marovo politician and former SCUBA dive master, now resident near Vakabo in the geographical middle of the Project area. The Team then travelled to Chea village in central Marovo Lagoon. Chea is the home of Team member Liligeto, the long-term host village of the Team Leader, a major participating community and school partner (Hinakole PS) in the Pilot Project, and a location of proposed future activities under the MSP (through Chea's new

community NGO, MINBALT). The last shipment of books via inter-island vessel was received by the Team off Chea at 3am the following morning in a heavy rainstorm. A quantity of books were left on the ship for its onward journey to the provincial capital Gizo, for distribution to interested persons there under the supervision of Team Member Liligeto upon his return.

During 12-14 September, class sets of the *Encyclopedia* were presented to the following seven schools of the Marovo area – accompanied by assignment sheets, basic writing materials and introductory talks in the Marovo language to gatherings of each school’s students and teachers by team members Hviding and Yalangono (the latter also underlining the significance of the Pilot Project in terms of national educational strategy): Hinakole Primary School, Chubikopi Primary School, Vakabo Primary School, Tamaneke Primary School, Duvaha Primary school, Ramata Primary school, and Patukai Secondary School. These schools represent the range of educational institutions in the Marovo area, also in terms of covering the three long-established church denominations of the area (Seventh-day Adventist [SDA; Hinakole and Ramata], United Church [Methodist; Chubikopi and Vakabo], Christian Fellowship Church [CFC; Tamaneke and Duvaha], Patukai SS being an inter-denominational government school). Figure 1 gives the locations of the schools and of other key locations in the New Georgia area, and Figures 2 and 3 give glimpses of Pilot Project activities.

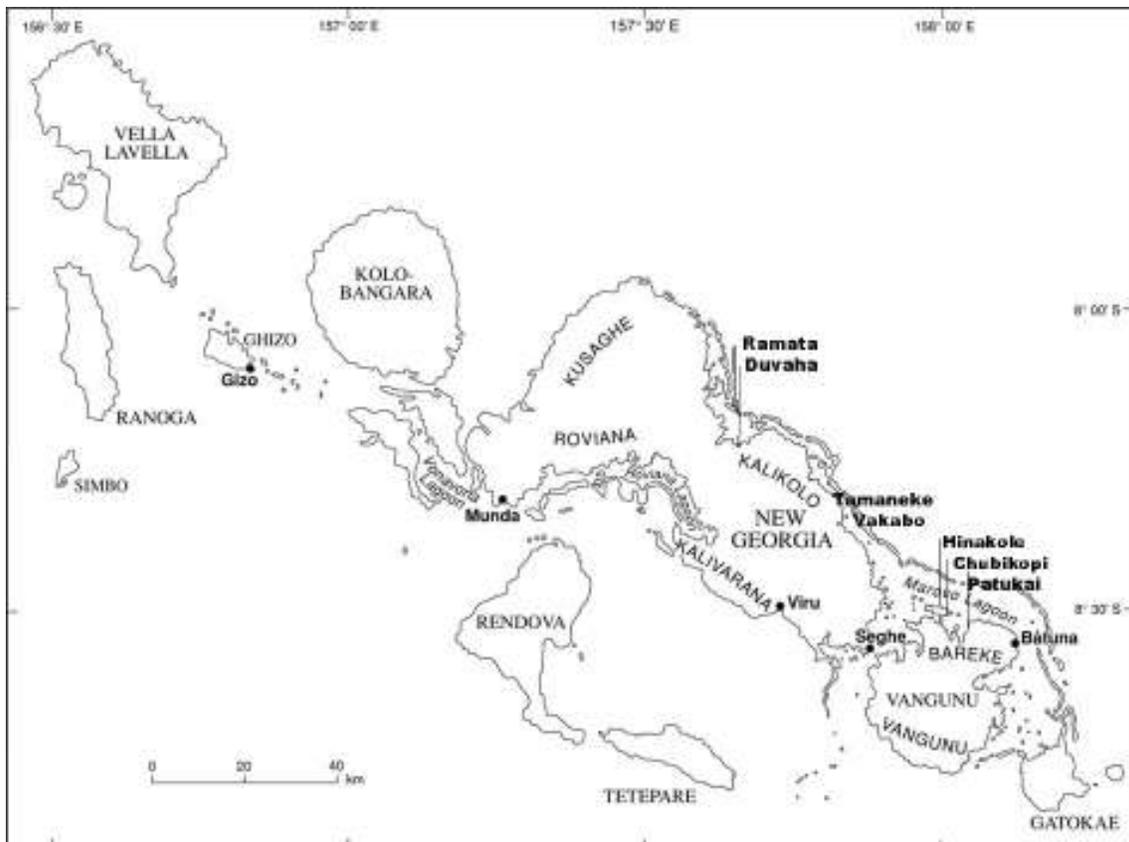


Figure 1: Locations of participating schools (in bold) and other locations mentioned in the text.

A class set was also sent to Bekabeka High School on the island of Gatokae in far southeast Marovo, in anticipation of IT-based distance learning activities to be started there on a trial basis in 2006 (logistics did not allow for a Team visit to this school). Finally, a set of books

was presented by the Team Leader to the Batuna Vocational School (BVS) in eastern Marovo, run by the Seventh-day Adventist Church and providing a range of locally relevant technical training programmes to young people who would otherwise have few educational opportunities beyond primary school. The Principal of BVS, himself from Marovo, saw a number of uses for the *Encyclopedia* in the various vocational programmes.

At each of the seven participating schools, teachers were given ultimate responsibility for the specific organization of Pilot Project work, so as to adapt activities as closely as possible to the opportunities and constraints of each school and its associate communities. Several other schools at primary and vocational levels were provided with copies of the *Encyclopedia* and assignment sheets, though not participating in Pilot Project activities owing to limitations of logistics and time. Team Member Vincent Vaguni (Marovo and Hoava speaker, retired high-level educationalist and long-term environmental activist) joined from his home at Tamaneke in north-central Marovo. As the Project Leader spent the week travelling between the two main localities of Chea (central Marovo) and Duvaha (northern Marovo) to observe on-going work, Team members Liligeto, Vaguni and Yalangono co-ordinated school efforts in their respective locations of central Marovo (Chubikopi, Hinakole, Patukai), north-central Marovo (Vakabo, Tamaneke) and northern Marovo (Duvaha, Ramata).



Figure 2. Project Leader Hviding presenting the Encyclopedia to Mr. Job Betisasa, head teacher at Duvaha Primary School

At each of these schools teachers and selected students immediately made themselves familiar with the *Encyclopedia*, which in all locations caused immediate interest and enthusiasm (given that little printed vernacular material exists at all in the Marovo area, beyond two books formerly written and distributed by the Project Leader, and a Marovo Bible dating from

the 1950s). Students subsequently carried out assignments in which (individually, or in organized groups) they spoke to village elders and produced a written narrative (maximum 1 page) in their own vernacular language, about a chosen marine or terrestrial species, or other environmental phenomenon (expanding from the *Encyclopedia* entry for the chosen species or phenomenon). Many students, of all ages, chose to illustrate their assignment with drawings, diagrams and other representations of local concepts (see Appendix 3 for samples scanned from original assignments). Assignment work took place in the period 14-17 September, with unprecedented involvement and effort by teachers, students and community. During 16-18 September, assignments and resultant written reports, in level and volume depending on the level of participating students, were discussed in class (in the local language) and collected by the Team. In selected cases, student presentations and ensuing class discussions were tape-recorded.



Figure 3. Team Member Yalangono speaking at Patukai Secondary School, introducing Pilot Project and national government initiative in vernacular education.

The Pilot Project was strongly supported in participating villages, with parents and grandparents contributing particularly well to a spontaneous intensification of study by schoolchildren of their own people's indigenous environmental knowledge as represented in the vernacular language. Moreover the collected assignments range beyond the Marovo language, a substantial proportion of them being written in Hoava, Bareke, Kusaghe and Roviana by students who are primary speakers of these other New Georgian languages. The varied and independent strategies chosen by students concerning the *Encyclopedia* are likewise remarkable, in that virtually no assignments replicate text from the book, but instead rely on the book as initial example and inspiration. Indeed, a number of assignments expand on the book by pursuing information gaps and missing entries.

It is fair to say that during the week 12-18 September, a good range of indigenous knowledge about environmental phenomena in the Marovo area was documented in written form for the first time. This applies, for example, to some truly fascinating student assignments about different species of fruit bats, certain little-known medicinal plants, the culturally central *Canarium* nut tree, the elusive but culturally significant sea mammal dugong (*Dugong dugon*), and other topics not covered in detail or indeed missing altogether from the *Encyclopedia*. At the same time, teachers and village elders pointed to the immediate effect of the *Encyclopedia* as a source of example, inspiration and cultural pride (it had been clearly pointed out by the Team Leader in introductory talks that the book had been written on the request of the Marovo people). Such local enthusiasm reflects in a positive way on the proposed further engagement in Marovo Lagoon by UNESCO/LINKS through the MSP mentioned earlier.

This beautifully produced and richly illustrated large-format book, and its highly visible presence in the formal school system, came to be seen as a demonstration of respect by the United Nations system towards – and statement of importance of – the environmental knowledge of Marovo people and its relevance in times challenged by a high incidence in the Marovo Lagoon area of non-sustainable resource exploitation. These challenges relate in particular to widespread logging of the rainforest by Asian companies, condoned by customary landowners but often with unexpected environmental devastation as a result, but also to high pressure on certain marine resources exploited for cash. A number of speeches were given by teachers, students and community leaders in which the momentum and process facilitated by the book and the Pilot Project were highlighted, and several of these speeches were tape-recorded.

On Sunday 18 September, the Team travelled to Gizo by the chartered boat (on this long journey navigated by its owner Mr. Hotton), feeling positively overwhelmed by the resounding success of the Pilot Project, as evidenced by a collection of 211 assignments written by students ranging in age from 8 to 16, an estimated 90% of whom had never before written a substantial text in their own vernacular language. The number of assignments carried out was actually even greater, given that about 20 assignments from Vakabo Primary School could not be collected in time because of torrential rain and strong winds on 17 September. These assignments were later collected by Team Member Vaguni, and were subsequently hand-carried to London and given to the Team Leader in October 2005 by the Reverend Opportunity Kuku of the Christian Fellowship Church, who visited the UK on official church business and on that occasion met and worked together with Professor Hviding.

The Team (Hviding, Vaguni and Yalangono – Liligeto staying on at Chea to fulfil important community duties – arrived at Gizo in the evening of Sunday 18 September. On Monday 19 September a full-day meeting was held with the Educational Office of the Western Province, during which lessons learnt from the Pilot Project were presented and placed in a wider context of promoting vernacular education in the school system. A plan for the expansion of the model represented by the *Encyclopedia* into several other major language areas of the Western Province was devised on the spot by the Educational Office, and a number of remaining books were given to the office for that purpose. In addition, copies were provided for all New Georgia members of the newly elected provincial assembly, in its first meeting at Gizo the same week.

On Tuesday 20 September the Team convened in Gizo for a full day of concluding meetings. Mr. Lawrence Foana'ota, Director of the Solomon Islands National Museum (and Commissioner for Culture in the SINCU) arrived from Honiara in the morning to join the day's activities, his travel funded under the Pilot Project. The leading educational officials of the province also participated. Team members presented processes, observations and results from each of the seven participating schools, assignments were examined and analyzed, and future directions for village-level documentation and transmission of local environmental knowledge were conceptualized at a general level for Solomon Islands. These discussions were tape-recorded and will form the basis for policy recommendations and further guidelines for future UNESCO-LINKS work at the interfaces between biological and cultural diversity and between indigenous knowledge and science. Later in the day an impromptu meeting eventuated between the Team and key representatives of New Zealand Aid (the major financial contributor to the development of the educational sectors of Solomon Islands), who were visiting Gizo in connection with a meeting at the World Fish Center's premises at the offshore island of Nusa Tupe.

Team members Hviding and Yalangono and Mr. Foana'ota of the National Museum flew to Honiara on Wednesday morning 21 September. A succession of meetings and telephone conversations were organized with relevant parties in Honiara, as per the Team Leader's Terms of Reference, and the Team Leader was interviewed by national broadcasting about the Pilot Project and its outcomes.

On Thursday 22 September, a formal presentation of the *Encyclopedia* and the Pilot Project took place at the premises of the National Museum, with national broadcasting present (Figure 4). Among those in attendance were most members of the Solomon Islands National Commission for UNESCO, as well as Dr. Visessio Pongi, newly appointed Director of UNESCO's South Pacific Office in Apia, who was in Honiara on his first visit to Solomon Islands in that capacity. The Hon. Job D. Tausinga, Member of Parliament for North New Georgia and Chairman of the National Education Board (as well as a Marovo speaker and one of the original initiators of the research that began in 1986 and ultimately resulted in the *Encyclopedia*) formally received the book on behalf of the Solomon Islands educational system. The Hon. Tausinga responded with a speech which highlighted the roles of book and the Pilot Project as a first-ever publication and exercise of its kind in Solomon Islands, and as being the effectual launching media of the Solomon Islands Government's new programme for vernacular education.

It was announced by the Hon. Tausinga that the *Encyclopedia* was henceforth adapted by the Solomon Islands educational system as an example to follow also in other language communities of the nation (in which a population of ca. 500,000 speak about 87 different languages), and UNESCO was commended for its generosity in publishing the book and making it available for free to the people of Solomon Islands. Several additional speeches were made by other prominent national leaders, and a number of copies were signed by the author and given to interested members of the public who were present at the ceremony.

During these days the *Encyclopedia* and the Pilot Project were indeed treated as items of high national significance, as demonstrated by numerous headline spots in radio news for several consecutive days, and as exemplified by the news transcripts in Appendix 2.



Figure 4: Hon. Job Dudley Tausinga, MP, Chairman of National Education Board, formally receiving the Encyclopedia from Project Leader Hviding. National broadcasting present; Dr. V. Pongi of UNESCO Apia in left background.

Meetings at various levels of government and civil society continued until the Team Leader's departure for Brisbane, Australia on Friday evening 23 September. Hviding and Yalangono met with the GEF Focal Point (Mr. Tione Bughotu, Permanent Secretary of Fisheries and Marine Resources) at the airport before the departure of the Brisbane flight, and a copy of the Encyclopedia was presented and the MSP discussed (with particular emphasis on national endorsement of the proposal). During Friday 23 September Team members Hviding and Yalangono developed a recommendation that UNESCO-LINKS publish an edited collection of students' assignments from the Pilot Project, and all 211 assignments were scanned by team Member Szetu as high-resolution PDF files. These files, organized according to the schools at which assignments were carried out, have been submitted on a CD-ROM to UNESCO-LINKS, for further consideration in terms of publishing on paper and/or on the WWW. As IT specialist, Team Member Szetu will continue to monitor the development in Solomon Islands of relevant distance learning projects (such as the one launched in early 2006 at Bekabeka High School in southeast Marovo) into which the *Encyclopedia* and the approach to knowledge documentation and vernacular education developed in the Pilot Project can be usefully integrated and further developed.

In conclusion, the Team Leader wishes to point to the remarkably rapid and solid development of the Team and its approach. This was made possible above all by the combined experience of the Team Members (including the strong ties to educational authorities through the participation of Mr. Yalangono), and it is clear that this team and its members could well be activated by UNESCO for further work in the Marovo Lagoon and

more widely in Solomon Islands, especially with reference to the activities proposed in the forthcoming MSP, and with the support of relevant government authorities including the National Commission for UNESCO. Also, it is recommended that UNESCO-LINKS looks into the possibilities for printing and sending to Solomon Islands more copies of the *Encyclopedia*, so that the book (and an accompanying Study Guide now in preparation) can be distributed more generally to most or even all schools of Marovo Lagoon and adjacent areas, and tested out more selectively in other parts of the nation.

Bergen, Norway, 23 February 2006

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APPENDIX 1

**UNESCO-LINKS
SOLOMON ISLANDS NATIONAL COMMISSION FOR UNESCO
MINISTRY OF EDUCATION
WESTERN PROVINCE
THE PEOPLE OF THE MAROVO AREA**

Village-level Documentation and Transmission of
Local Environmental Knowledge:
A Pilot Project for Solomon Islands
12-17 September 2005

**ASSIGNMENT SHEET FOR
TEACHERS AND SCHOOLS IN THE MAROVO AREA**

In this week, some schools, teachers, pupils and villages of the Marovo area will participate in a UNESCO-LINKS exercise which relates to the documentation of local knowledge of the environment of land and sea. The foundation of this exercise is a new Encyclopedia in Marovo language and English, provided for free by UNESCO and the Government of Norway. The people of Marovo have asked for this book to be written. It is the first of its kind in Solomon Islands, and the Pacific, and maybe in the whole world!

Resources

- (1) Book (class set), provided by UNESCO Team
Kiladi oro vivineidi ria tingitonga pa idere oro pa goana pa Marovo / Reef and Rainforest: An Environmental Encyclopedia of Marovo Lagoon, Solomon Islands, written by Professor Edvard Hviding and published in 2005 by UNESCO.
- (2) Writing materials, provided by UNESCO Team
- (3) Resource person from UNESCO Team
- (4) Resource people from village
- (5) Samples (leaves, fruits, fish, shells, etc.) collected from forest and sea

Assignment reports should be written in Marovo or Hoava, but if this is not possible, English can be used. Pupils should seek help with the language from parents or other adults. The main intention is to focus on knowledge rather than language, but the fullest knowledge is grounded in the language of the place.

Assignment 1.

KATIGA TINGITONGA PA IDERE BA PA KAVO

Write a one-page story, with drawings if you wish, about one of the following topics. You can go and ask men and women who know these things well to help you.

(assignment 1 cont.)

- A. VIVINEINA KURA MAKOTO
- B. VIVINEINA MORUMORU
- C. VIVINEINA KUARAO
- D. VIVINEINA RUMU
- E. VIVINEINA DEO
- F. VIVINEINA KAMEJE
- G. VIVINEINA MEKA TINGITONGA PU OMIA HOI PA BUKA

Assignment 2.

RIA HAE NA ROKOROKO ARILAEDI

Take a group walk from the seashore up into the forest. Ask a man or woman who knows about this to come with you. Find and talk about some of the useful plants listed below. Bring back to the village leaves, flower or fruit of the plants you find. Then find the plants in the book and talk about them. If you speak Hoava or Vanunu, use the name lists in those languages. The resource person from the Team will write a brief report about your work.

BOI	TANGOVO	BUNI
BICHEBICHERE	MUDU	TALISE
IJOKO	RIHE	
KURUVETE	NGOETE	BA MEKA HAE PU TA
JILATONGO	MARIA	OMI PA TANIA INENE

Assignment 3.

VIVINEINA CHINABA IHANA

Teacher makes ten small groups, and allocates one of the following fishes to each group. First, each group reads about the fish in the book. Then, each group goes and asks a fisherman about the ways to catch the fish. Each group writes a report of at least one page.

MAROGO	GHALUSU	GHOHI
CHAMUHU	MEDARAE	
MAKOTO	LIPA	MEKA IHANA PU KO PA
TOPA	IHANA ORAVA	BUKA

Assignment 4.

RIA VAHU

Write a short story about the different types of VAHU in Marovo. Where can you find them, and what do they eat?

Assignment 5.

VIVINEI MALIVI

Write down a custom story about anything which is named in the book.

APPENDIX 2

NEWS ITEMS FROM SOLOMON ISLANDS BROADCASTING CORPORATION

ENVIRONMENTAL ENCYCLOPAEDIA TO BE LAUNCHED

18:19hrs
21/09/2005

In brief: A book entitled "Reef and Forest: An Environmental Encyclopaedia of Marovo Lagoon" will be launched in Honiara tomorrow.

A book entitled "Reef and Forest: An Environmental Encyclopaedia of Marovo Lagoon" will be launched in Honiara tomorrow.

This book is the first publication at the United Nations Educational, Scientific and Cultural Organisation, UNESCO's Knowledge of Nature series.

The Encyclopaedia, in Marovo and English, has more than one-thousand-200 local terms and it contains the local knowledge of the coral reef and rainforest environments of the lagoon.

It is a revised and expanded version of the "Dictionary of Environment and Resources of Marovo Lagoon" that was first published in limited numbers in 1995.

The book is based on work initiated by a number of key persons from Marovo, including Beraki Jino, presently Solomon Islands Ambassador in Taipei.

The author of Reef and Rainforest, Edvard Hviding, is Professor of Social Anthropology at the University of Bergen, Norway.

Former Solomon Islands Ambassador to the European Union, Robert Sisilo, in January this year attended the launching Ceremony and received the Encyclopaedia on behalf of the People of Solomon Islands, at UNESCO's headquarters in Paris, France.

STUDENTS WRITE ASSIGNMENTS IN LANGUAGE

17:38 hrs
22/09/2005

In brief: More than 200 students from primary and secondary schools in Marovo, Western Province have for the first time written assignments in their own language.

More than 200 students from primary and secondary schools in Marovo, Western Province have for the first time written assignments in their own language.

Professor and the Head of the Department of Social Anthropology, University of Bergen, Norway, Edvard Hviding, revealed this during the launch of a book about the Reef and Rainforest of Marovo.

He says soon the various assignments will be assembled in a new book to be published by UNESCO, through the LINKS Programme based in Paris.

Professor Hviding who wrote the the book "Reef and Rainforest: An Environment Encyclopedia of Marovo Lagoon" described it as "heart-warming, fantastic and almost unbelievable" to see that even standard two children wrote stories about something in their own language.

MAROVO PEOPLE AND KNOWLEDGES OF NATURE

18:10 hrs
24/09/2005

In brief: The Environmental Encyclopedia of Marovo, Western Province which was launched in Honiara this week is the first volume of a new publication series entitled Knowledges of Nature.

The Environmental Encyclopedia of Marovo, Western Province which was launched in Honiara this week is the first volume of a new publication series entitled Knowledges of Nature.

The Head of the UNESCO's project 'Local Indigenous Knowledge Systems', LINKS, Douglas Nakashima, in the foreword to the book says the author, Professor Edvard Hviding of the University of Bergen proposes a voyage of discovery.

Mr Nakashima says it is a voyage that lays out the vastness of the environmental complexity of the Marovo people as evidenced by the more than one-thousand-200 names they possess for plants and animals.

He says it also show the insights of the daily preoccupations of the Marovo people including the managing and use of their natural resources.

Mr Nakashima says he hopes the book brings indigenous language, knowledge and world view into the formal education system in both Marovo and elsewhere in Solomon Islands.

He says it is the first step to enhance the confidence and pride of youth in indigenous knowledge and ways, to reinforce ties between elders and youth, and expand the community's active involvement in local schools.

APPENDIX 3

Sample Student Assignments (scanned into PDF files from originals)

Sample I: Assignment 2 (the BUNI tree), written and illustrated (from branch sample taken from tree) by Standard 5 student (approximately 12 years old)

CLASS 5 HINAKO/E. School BRENTON. N

HSCAN 28 BUNI

Hae Buni leni ko pa Goana oro pa Rarusu idere Hae Geteno. Mani ori burong ona Hinajonga via burongona ukalae burong ia Mani vura mae urena ia. Urena ia leni Kuloburu. Mani pula Pora urena ia leni ngina bupara Mani uke pula pa Goana uke ia ueni ngina to pa Goana Pular pa idere ia ngina tafala.

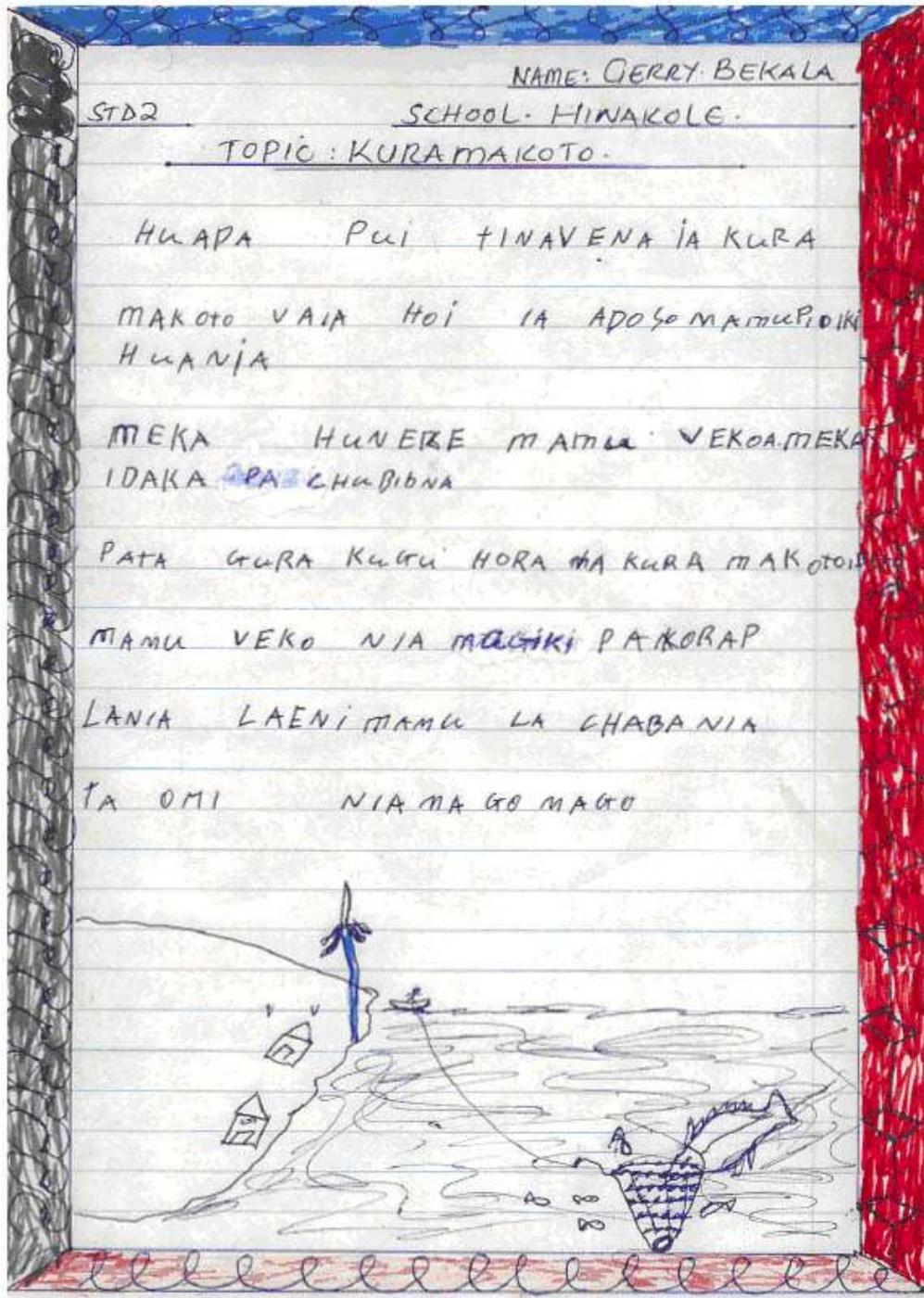
Mani to pa rarusu idere na vaxi va legu ia urena ia pula picha ia Hoi mamsu ngo ia ienu ngina legu puna kati oro otona ia mana vaxi va legu Heana ia gura to vae marti tavete Vanua. Labete na.

burongno na ia

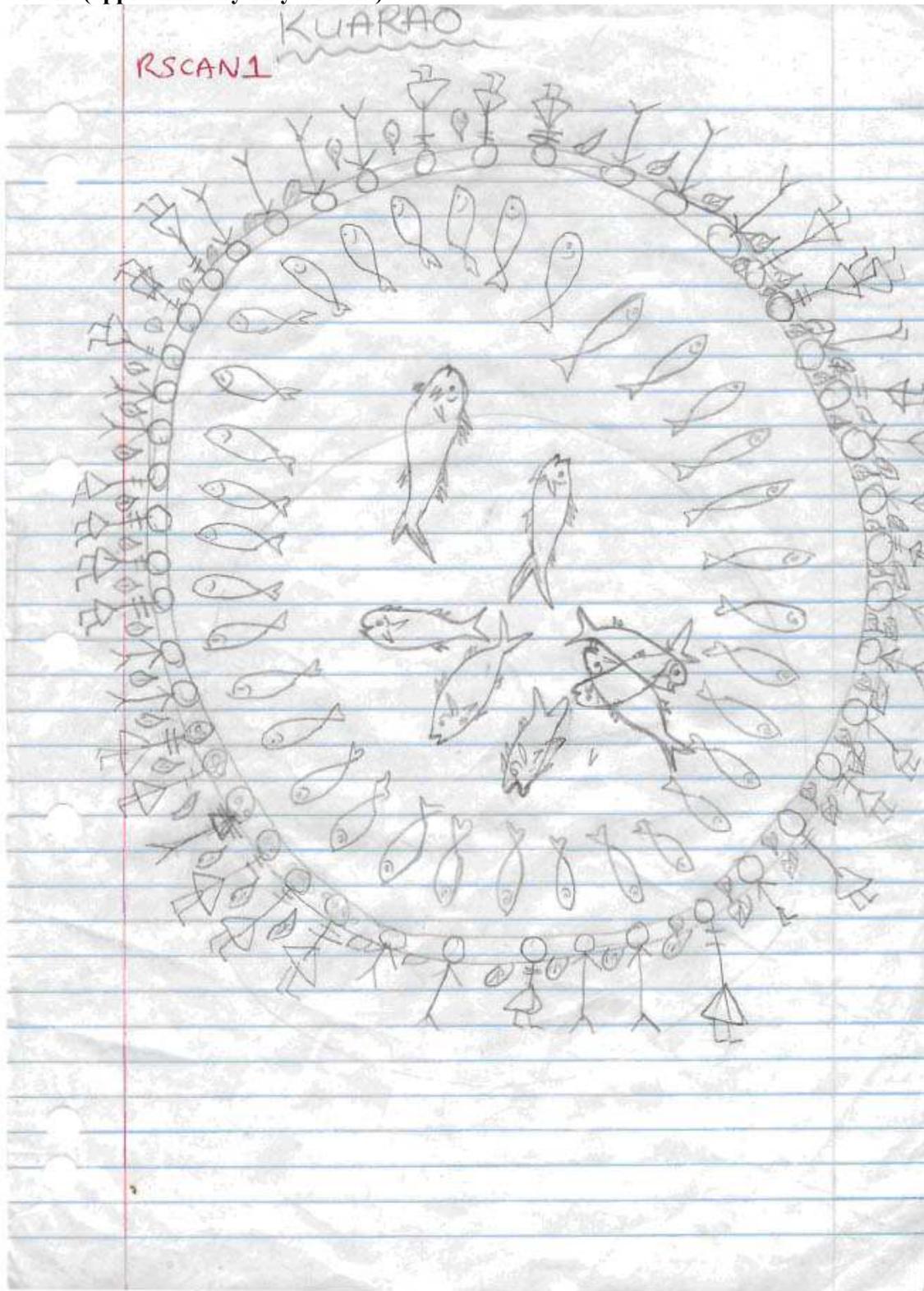
ura na ia

tokoroko na ia

Sample II: Assignment 1 (A), KURA MAKOTO (triggerfish trap), written and illustrated by Standard 2 student (approximately 8 years old)



Sample III: Assignment 1(C), VIVINEINA KUARAO (story about communal fishing by encircling large reef area with the ARA vine), written and illustrated by Standard 5 student (approximately 12 years old)



RISCANI VIVINEINA KUARAO

KUARAO IE NI MEKA CHINABA TA TUARI,
IA CHINABA PIA IE NI HOKITINA MIKA.
KANI HUA CHINABA PA HUA PIA.
KANI SANU TA TAVETE, PU NA HUA
NA TAVETE KINOLO GETE PIA TA MEKA
RANE MADI TONU, HUA NA, VINARICHABA
BA TAVETE RIA KATIGA TINAVETE CUST
PA TUARI, BORU PU NA HUA NA HUA
RIA IA CHINABA KUARAO NGIANA LAPA
GOANA RIA TINONI, MADI LA VAE ADOSO
PU TA KILAE ARARA, BETO MADI HERU
PULE LA PA PALAVANUA MADI LA PIA
IARI TUTUTI NIA RIA IA ARARA PUI, MA
NGIANA HELE IA VINARI TUTUTI ARARA.
BORU PA HUA PUI NGIANA LA RIA PA VI
PU PETA KUARAO MADI NGIANA LA CHAIKI
NIA RIA IA IDERE PUNA HORE MATI BOA
NGIANA TA TONU IA KUARAO, KUARAO PIA
KANI MEKA TINONI DENI CHABA NIA
NGIANA RAIKU TU NGIANA MANE MAKE.
NGIANA RACHACHA LA NIA RIA PA SIGAURU
IA ARARA, BETO MADI LA NADORIA, RIA PA
KOTAPA IDERE IA ARARA HENI LEO PA KO
IDERE IA ARARA, HEDI ESESE NIA RIA IHA
PA KOPI IA KINURUMU TA IDERE HEDI CH
VARI PULEI PATANIA KOPI PU RIA IHAN
MADI LA VARI HAGONOI PA BINUTURU IDAKI
PU CHIDI VANAMAIA RIA, MADI KOTA PATA
IHANA. PA HUA PIA VAE IA RIA MEKA
ADOSO KATI PU RIA KILANA MADI RIJA
BA TUPA VA ROCHEA RIA MADI HONALA

NIA RIA PA KORAPA NA KOPI PUTA.
PATA IA RIA IHANA, NGOIA RIA
IHANA IA BUNA RIRO PUI HEDI LEGU
TOU RIA IHANA PU KOPA KORAPANA
CHIDI IDAKA PUI.
HUA HOKARA NGANA IA
VIVINEI NA KUARAO PU GURA TOTONE
ATU NIA RA
LEANA
Written by SHUMINGCHAI TIRZA
grade five

APPENDIX 4

Terms of Reference (excerpt)

In the context of the UNESCO Apia Science Programme, the LINKS cross-cutting initiative, and the forthcoming project on “Safeguarding the Biological and Cultural Diversity of Tropical Island Systems”, the contractor [Professor Edvard Hviding] shall:

1. Utilize the newly published UNESCO book "Reef and Rainforest: An Environmental Encyclopedia of Marovo Lagoon" as the basis for an intensive pilot exercise in a select number of educational institutions in Solomon Islands. Important tasks to be accomplished by the contractor are as follows:
 - The contractor shall work in close cooperation with national education and other authorities in Honiara;
 - The contractor shall ensure that books are air freighted to Marovo Lagoon (and some to the provincial capital of Gizo) and from there are distributed by motorized canoe to schools and communities throughout the Marovo area;
 - The Project Team, under the leadership of the contractor, shall conduct an initial meeting in Western Province to plan the work to be undertaken;
 - The contractor and field coordinators identified by the contractor shall make arrangements with teachers at selected schools;
 - The contractor shall identify an IT specialist who will make similar arrangements at schools in the provincial capital of Gizo and at provincial secondary schools in Western New Georgia;
 - The contractor shall ensure that selected students and teachers at schools make themselves familiar with the Encyclopedia and carry out simple assignments in which each student speaks to local elders and collects a written narrative, in the local language, about a chosen species or other environmental phenomenon (expanding from the Encyclopedia entry for the chosen species or phenomenon). The written and possibly illustrated reports, in level and volume depending on the school level of participating students, are then discussed in class (in the local language) and collected;
 - The contractor shall return to Honiara via Gizo and summarize and explain the work undertaken to provincial authorities, the Ministry of Education and other key national partners of the LINKS programme, including the National Commission for UNESCO, the National Museum, and the GEF Focal Point.