

The Roles of Museums and Cultural Centres in Educating the Public about the Effects of Climate Change

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This paper aims to present what some museums and cultural centres in the Asia-Pacific region have been doing in the area of education and climate change. It features a case study of the Solomon Islands National Museum.

Introduction

The Pacific region comprises fragile ecosystems that are an important part of the lives of Pacific islanders. Tsunamis, earthquakes, floods, cyclones, droughts and other extreme events are some of the vagaries of nature that affect their lives.

Some islands have faced these natural disasters. But other devastations are caused by human activities such as deforestation (due to logging and large-scale commercial farming or plantation) and mining. For example, logging is an activity that has affected the main islands of the Solomon group. Many communities allow their land to be logged to earn money through royalties and employment and for the development of infrastructure like roads, bridges, schools and clinics. Unfortunately some of these communities often become victims of internal (tribal) conflicts, destruction of cultural and heritage sites, devastation of arable lands, loss of biodiversity, and empty promises.

The Solomon Islands National Museum (SINM) has been actively involved in educating the local communities over the past three decades about the impacts of such economic activities through the National Site Survey project (NSS), which is administered by the Museum's Archaeology Research Unit. Officers of the SINM travelled around the country undertaking surveys and impact assessment studies and conducting workshops on the revival of cultures and traditions. Other educational programs that the National Museum has been involved in include the Museum in a Box initiative and the Education Mobile Kit.

Due to the natural disasters (cyclones, flooding, earthquakes, droughts and tsunami) that have affected different parts of the Solomon Islands in recent years, the SINM is being encouraged to raise awareness through education programs, workshops and visits to affected areas and locations. The SINM has the potential and the expertise to a role in the education of the public about the impacts of climate change in the Solomon Islands. Our experiences and challenges will be shared to compare our initiatives with other programs from other Pacific Island countries, as well Asia, Australia and New Zealand.

The Solomon Islands

The Solomon Islands is an archipelago of more than 900 islands, islets and cays with a land area of about 28,000 square kilometres. It is located west of Papua New Guinea and northeast of Australia, between longitudes 155⁰E and 172⁰E and latitudes 5⁰S and 13⁰S. The Solomon group comprises six main islands with a population of about 500,000 people who speak over 80 different Austronesian and Non-Austronesian languages. The majority of Solomon Islanders are Melanesians, while there is a small proportion of Polynesians and even smaller proportion of Micronesians. More than 80% of Solomon Islanders live in rural areas and rely mostly on subsistence farming, fishing and other forms of rural livelihoods. The majority of land in the Solomon Islands is customarily owned.

The Solomon Islands has a warm tropical climate that is delineated by a wet and dry period from November to April and May to October, respectively. The former is usually linked with the cyclone season and higher rainfall while the latter is generally dry with lower than average rainfalls.



Figure 1. Map of the Pacific showing the Solomon Island. (Adopted from Nunn, 2003)

Nature of environmental change and initial human settlement in the Solomon Islands

Based on historical, geographical and geomorphological studies, the Solomon Islands is regarded as an important contact-zone and crossroad of civilisations between Southeast Asia, the Bismarck-Archipelago and Near Oceania (Moser, forthcoming). According to J. Moser, the initial human occupation of the Solomon Islands probably occurred during the Palaeolithic period.

The close proximity of the Solomon Islands to Papua New Guinea and the Bismarck Archipelago during the Pleistocene era due to sea-level regression allowed prehistoric people to move relatively easily across the narrow ocean gaps (Vitiáz-Strait) between Papua New Guinea and New Britain and the strait or passage between New Ireland and Buka (Moser) (Figure 1).

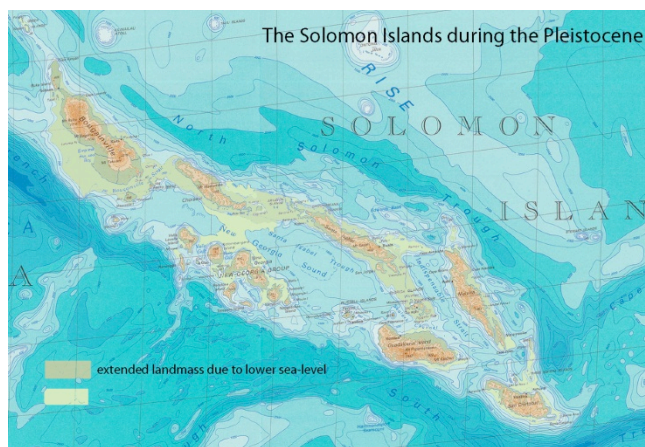


Figure 2. Reconstruction: the Solomon Islands during the Pleistocene forming a greater island (Adopted from Moser, forthcoming)

There is evidence to suggest a Pre-Lapita occupation during the mid-Holocene in the Solomon Islands. For example, Vatulumá Posovi and Vatulumá Tavuro on Guadalcanal Island date to about 6,000 years ago (Roe, 1983). The arrival of the Lapita people during the Austronesian expansion into both Near and Remote Oceania marked a second or third migration wave or occupation phase in the Solomon Islands (Heorake, 2009). The presence of Lapita (with pottery) is so far only limited to some sites in the New Georgia Group (Western Solomons) and the Reef/Santa Cruz in the East (Moser). While researchers still have different opinions about an existent “Lapita-gap” the central Solomons were probably colonised at the same time by an aceramic population (Moser).

Nature of environmental change in the Solomon Islands during and after Lapita times

During Lapita times most islands in the Pacific experienced high sea levels. In most places sea level was about 1–2 m above present level. As a result of higher sea levels, most islands experienced

expansion and growth of coral reefs and coastal marine resources such as shellfish and fin fish. Some mangrove communities also increased in size (Heorake).

According to T.A. Heorake (2009), the post-Lapita era experienced much cooler conditions, increased precipitation, lowering sea level, increased sedimentation of foreshore areas and vegetation change on some Pacific Islands. When humans colonised the central, eastern, and parts of the northern Pacific, including the Solomon Islands, fire and exotic biota were introduced, while climatogenic factors were also important in the development of certain landscapes on some islands.

Recent trends in environmental change

In recent years the influence of anthropogenic agents of climate change has caused significant changes in our environment. Several studies and reports have highlighted the impact of climate change and sea-level rise and their possible implications for Small Islands Developing States (SIDS). Temperature records for the Solomon Islands have shown an increasing trend and the frequency of severe cyclones, storm surges, flooding and droughts have steadily increased.

Over the last twenty years, SIDS has tried to attract global attention on the impact of climate change, particularly in least developed countries, but with limited success. In a recent report to the United Nations General Assembly 64th Session, the Solomon Islands noted that “climate change is a threat multiplier since it creates new threats and exacerbates existing threats that may provide the impetus for tensions and instability”. The report also stated that climate change and sea-level rise also pose imminent challenges to the food security, physical, social, political and cultural space of our populations and their existence.

Roles of SINM in educating the public about climate change – Solomon Islands case study

Perhaps in order for us to understand and appreciate the roles of the SINM in educating the public about climate change, it would be appropriate to trace the history and development of a lack of national cultural policy in the Solomon Islands prior to and after independence to the present. A brief review of the history and development of the SINM based on L. Foana’ota and G. White (forthcoming) is presented here.

In general, since the colonial period to the present, most national cultural practices and activities were characterised as being isolated and fragmented with few connections to the local or government institutions that might sustain them (Foana’ota and White). These authors note that during the colonial period European concerns with the preservation of traditions and customs assumed to be disappearing in the face of missionisation and modernisation were important factors in trying to construct a national museum for the Solomon Islands.

During the period prior to independence in 1978 and up to the 1980s, cultural activities were better organised and funded. This was generally influenced by strong expatriate support and the emergence of strong indigenous (elite) voices, especially in the interest of defining a new national identity and securing independence for the Solomon Islands. Some of these activities and projects include the National Sites Survey and the School Mobile (Learning) Kit also known as “Museum in a Box” (Foanaota and White).

As highlighted by Foanaota and White, in citing Hviding and Bayliss-Smith (2000), they state that from the 1980s to 1990 “large scale resource projects take off and efforts are made to expand tourism; national ‘culture’ becomes a resource to be marketed in the context of national development”. Some examples include the MABO project, which included the SINM, National Archives, Solomon Islands Broadcasting Corporation and Osaka University of Japan and the construction of “kastom” (traditional) houses within the Coronation gardens adjacent to the SINM.

According to Foana’ota and White, during the “civil crisis period” and the 2000 coups, the Solomon Islands experienced both economic and political ruin. Some of the most unique cultural heritage of the Solomon Islands was also looted from the SINM and sold to overseas buyers and dealers. Then in 2003 the international intervention known as Regional Assistance Mission to Solomon Islands (RAMSI) was invited to the Solomon Islands. Foana’ota and White note that during the crisis period “‘custom’ became a means of gauging and regulating conflicts between local constituencies, especially land disputes between populations around the national capital Honiara”.

The SINM is now entering into a new and exciting phase of development. By the end of this year the Solomon Islands will have completed a National Cultural Policy through the support of the

Secretariat of the Pacific Community (SPC). This is an aspect of the cultural sector that has been lacking over the past three decades despite several attempts to develop such a policy. Since 2010 the SINM has been collaborating with researchers in a range of research projects including several on the impact of climate change and how people have developed strategies to mitigate its impacts on their livelihoods. These projects are being conducted in the Choiseul and Makira Ulawa provinces.

Some examples of projects that the SINM was involved in the early 70s and 80s are discussed below.

1. National Sites Survey project (1976–78 and 1978–80)

The Solomon Islands National Sites Survey project was initiated by archaeologists who were appointed to the SINM through the British Volunteer Service Overseas program. Two archaeologists who were involved in the initial phase of the project were Daniel Miller and David Roe. The National Sites Survey has six main aims. These include:

- 1) To adapt the discipline of archaeology to produce a survey suited to the resources, needs and peoples of the Solomon Islands;
- 2) To conduct archaeological surveys throughout the islands and to assess the potential of each island's archaeological resources;
- 3) To assess and respond to threats to archaeological sites from all destructive agencies;
- 4) To work within the Solomon Islands National Museum to ensure the systematic documentation and adequate storage of all archaeological materials and information gained during the course of fieldwork;
- 5) To provide information on archaeological discoveries to the people of Solomon Islands through the media, exhibitions and the development of educational curricula materials;
- 6) To combine archaeological survey with the systematic recording of oral traditions, in particular those which maybe of importance in reconstructing the recent past.

During its first four years (1976–79) of operation, over 700 sites were surveyed and recorded, 55% of which were surveyed by the SINM, while the remainder were recorded as part of the Southeast Solomon Islands Culture and History project. Funds for the project were provided by the Australian Government under the South Pacific Cultures Fund scheme (Miller and Roe). According to Miller and Roe, the NSS project was both challenging and provided opportunities for further improvements.

Some of the challenges encountered include:

- 1) Difficulty in characterising and classifying sites, owing to the degree of variety of the sites surveyed. For example, while in certain areas there is a limited degree of similarity, one cannot predict the form of sites at one end of an island from survey results at the other.
- 2) The archaeological heritage of the Solomon Islands is under severe threat not only from logging operations and road building but also from sale of traditional artefacts. In order to meet these threats several Provincial Assemblies have developed and enacted their by-laws. At the National level only an official permit by the Minister responsible for Cultural Affairs administered through the SINM will enable a person to export or sale artefacts.
- 3) While successful negotiations with the Levers Pacific Timbers Ltd has reduced the potential threat from logging, comprehensive surveys and site protection measures need to be conducted in areas concerned.
- 4) A small but significant threat to Solomon Islands sites is also posed by natural occurrences such as earthquakes and periodic cyclones that have the potential to destroy completely parts of the archaeological landscape, especially in exposed coastal areas.

While challenges were encountered by the NSS project, an increasing number of requests from rural areas for archaeological surveys to be undertaken hint at the level of public awareness and concerns for the future of Solomon's past.

Reporting on the National Sites Survey project was done via several means:

- 1) Local media
- 2) Informal talks at schools and religious institutions
- 3) Exhibition on archaeology of the Solomon Islands as part of the Independence celebrations
- 4) Materials for use in schools – a brief cultural history of the Solomon Islands

- 5) Oral traditions project sponsored by the SINM
- 6) Granting of scholarship by SIG
- 7) Establishment of the first Provincial Cultural Centre (Guadalcanal Island)

It was intention of the project that the survey would continue to be administered by volunteers and later be taken over by the SINM. But after the contracts of the volunteers lapsed the project was never sustained.

Today the SINM continues to conduct intermittent impact assessments on cultural and heritage sites and to educate local communities on the impacts of destructive activities like logging and mining. The SINM usually receive requests to survey and record significant historical and cultural sites within logging and/or mining concession areas but lack of development assistance and personnel are major challenges. Oftentimes conflict between landholding tribes and clans may hinder us to conduct proper assessments of the threatened sites.

2. Museum in A Box initiative

The other program that the SINM was involved in is the Museum in a Box initiative. It involved a box containing various artefacts and notes for teachers and students to use as teaching resources and learning materials. A box was sent to schools but unfortunately the practice was short-lived due to lack of support.

3. Museum Educational Kit (SINM and Australian Museum)

A recent introduction to the SIN is the Museum Educational Kit. It was donated to us by the Australian Museum. The kit contains a portable video player and several DVDs about certain Solomon Islands artefacts that were stored in the Australian Museum.

Due to lack of logistical support the kit has not been used outside of the Museum. It is anticipated that more outreach activities will be organised to utilise the kit, especially during school/educational visits.

Ways that the SINM can be involved in the Solomon Islands NAPA Priority Areas

While the Ministry of Environment, Meteorology and Climate Change is the lead ministry responsible for developing and administering climate change policies and programs, the SINM can play a supporting role to achieve the SIG's policy goals. Some of the priority areas identified by the NAPA project for the Solomon Islands include:

- 1) Managing the impact of and enhancing resilience to climate change and sea-level rise on agriculture and food security, water supply and sanitation, human settlement, human health and education, awareness and information;
- 2) Climate change adaptation on low-lying and artificially built-up islands on Malaita and Temotu Provinces;
- 3) Waste management;
- 4) Coastal protection;
- 5) Fisheries and marine resources;
- 6) Infrastructure development;
- 7) Tourism.

SINM partnership with The Nature Conservancy (TNC) on the Heritage Management of Arnavon Island

The Otago University and the Solomon Islands National Museum will be collaborating with The Nature Conservancy (TNC) to conduct a cultural heritage management workshop on the Arnavons on July 10–14, 2011. The Arnavons are a group of islands located between Choiseul and Santa Isabel. The Nature Conservancy has a series of conservation programs running in Choiseul and Santa Isabel, including a big turtle conservation program on the Arnavon Islands.

The cultural heritage workshop is to build the capacity of the conservation officers in the Arnavons as part of a plan to integrate heritage management into their conservation work on the island. The island is slowly being eroded by sea-level rise and the rich archaeological landscape of the islands will disappear soon. The workshop will be facilitated by Professor

Richard Walter, an archaeologist from the Otago University. He will be assisted by staff of the Solomon Islands National Museum and The Nature Conservancy.

The workshop should bring together officers from Arnavons Community Marine Conservation Area (ACMCA), TNC, SINM and the Isabel Provincial Government. The purpose of the workshop is to train community and provincial government representatives in the methods of cultural heritage mapping. The overall aim is to provide local people with the knowledge and skills to document the cultural heritage sites on the Arnavons in order to protect them from human activities like logging and rising sea levels.

The workshop will begin with an introductory session during the first day that will cover topics like tools of site mapping and getting participants to understand and use various equipment. During the next three days, participants will learn how to document and map out a large cultural heritage site located within the Arnavons Community Marine Conservation Area.

Conclusion

The Solomon Islands National Museum used to be proactive in the immediate post-Independence period, especially in its cultural education programs and in documenting and recording a range of cultural heritage activities and initiatives.

While many factors may have contributed to the demise of these programs after the 1980s and early 1990s, recently the Solomon Islands National Museum is hoping to revive these programs, and, in particular, focus on youth and heritage and also on issues relating to the impacts of climate change and rising sea levels.

The Solomon Islands National Museums aims to play a leading role in educating the public about the impacts of climate (and environmental) change on our culture and heritage, food security, water supply and sanitation, human settlement, human health, education, awareness and information, waste management, coastal protection, fisheries and marine resources, infrastructure development and tourism. The SINM is at a crossroad to embrace this opportunity to see with “new eyes” the scope and challenges that are ahead.

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