THE MAB PROJECT IN THE EASTERN ISLANDS OF FIJI, 1974-76

This document is from:
http://www.islandvulnerability.org/mabfiji/mabfijibackground.pdf

Origin and formation

The Fiji project was a 'pilot project' within UNESCO's Man and the Biosphere programme (MAB). The international MAB Programme began in 1971. It was to involve applied scientific research on the interaction between people ('man' in the language of the day) and their environment. The aim was to provide scientific knowledge on how to manage natural ecosystems effectively while also conserving them. The notion of sustainability did not surface fully for another twenty years, but its embryonic form was central to MAB and to our own work within it. Among the main project areas in the MAB design was 'Ecology and Rational Use of Island Ecosystems'. Islands were considered to be appropriate sites for studying the complexities of people-environment relationships and – in some minds – for modelling interactions and their management in ways capable of upscaling, even all the way to global level.

More practical ideas for the future came from a series of pilot projects, the majority of which were set up in the developing countries of the tropics. The countries had to be fully independent, and this constraint limited choice in regard to a pilot project in island regions. In the Pacific, the obvious location for such a project, only two countries, Western Samoa and Fiji, were independent in the early 1970s. UNESCO needed reasonably isolated groups of small islands, where MAB ideas could be tested and elaborated. Fiji has such an island group in its eastern region. Here, a project might be mounted within the mid-range level of funding likely to be available. Such funds were eventually obtained from UNFPA. After an exploratory visit in July 1973 by Professor Harold Brookfield, then of the Department of Geography at McGill University, Montreal, Canada, a project was designed and proposed to UNFPA and the Government of Fiji.[1]

The research team

The UNESCO/UNFPA project was entitled 'Studies on population-environment relationships in the eastern islands of Fiji'. A multidisciplinary team of 11 researchers, spanning both the natural and social sciences, was ultimately recruited. A five-member marine resources group, headed by Bernard Salvat, was added via a subcontract with L'Association Naturalia et Biologia, Paris. After project approval, however, action was constrained by an unexpected political difficulty in Fiji. This excluded intended co-ordination through the young local University of the South Pacific. To surmount the difficulties, Harold Brookfield led the project, in the process moving to the Chair of Geography at the University of Melbourne in Australia. He took up duty in Fiji in October 1974. Field work had been initiated on the island of Koro in the Lomaiviti Group in July 1974 by Tim Bayliss-Smith, a geographer based at the University of Cambridge, UK. He provided much of the human ecology and modelling expertise; later working on Lakeba as well as on Koro and Batiki. Richard Bedford and John Campbell, geographers from New Zealand, joined the project late in 1974. They specialized in migration and coastal research respectively. Both, but on different schedules, worked on Taveuni and Lakeba, as well as on Kabara in the Lau group. Muriel Brookfield, then of Concordia University, Montreal, joined the project in May 1975 and later became a key member of the research team. She co-ordinated and conducted much of the work on the island of Lakeba. Together with Marc Latham of ORSTOM (below) these five became the core research team in the later stages.

---

[1] Brookfield was principal author of *Melanesia: A Geographical Interpretation of an Island World* (with D. Hart), London, Methuen, 1971.

ORSTOM[2], at its office in Nouméa, New Caledonia, was first contacted in late 1974 to contribute on the soil and environmental side of the project. The ORSTOM team comprised Marc Latham as head of the ORSTOM soil science department in Nouméa, and Bernard Denis as a member of his group. The fieldwork extended over two years, in close integration with the rest of the project. Latham became effective coordinator of all our natural science work on land, and reporting in this area was brought together by ORSTOM.

Other significant contributors to the field research programme included Roger McLean, a coastal geomorphologist based at that time at the Australian Defence Force Academy in Canberra; agricultural economist Brian Hardaker of the University of New England (in Armidale, New South Wales); agronomist Patrick Haynes, working in Fiji at the time, whose base was the Institut National Manioc in Zaire, and nutritionist Joan Macpherson from Fiji's Hotel and Catering School. Somewhat separate from the rest of us, with their own contractual arrangements, were Bernard Salvat and his team of marine ecologists from a number of French universities.

Support with laboratory analysis of samples collected in the field was provided by several people at different stages in the project, including especially Philip Hughes and Geoff Hope of the Department of Biogeography and Geomorphology at the Australian National University. Paul Nankivell from the Australian Training Institute in Sydney provided important statistical analysis. The accurate large scale topographic map of Lakeba, on which most of our work on that island depended, was prepared in 1975 from 1971 air photography with absolutely-minimal ground control – a considerable achievement – by Walther Wassermann of the then Canberra College of Advanced Education (now the University of Canberra). Later, most of the maps in our reports were drawn by Robert Bartlett of the University of Melbourne. Not least among those who made the project a success was Christine Prasad, who efficiently maintained our small office in Suva over two years, and supported us all while away in the field. Later, Tyna Charles typed all our reports in Melbourne with interest and involvement. Augmenting the team in many of its activities were research students from the University of the South Pacific and officers from several Ministries and Departments in the Fiji Government.

Conduct of the project

The Prime Minister of Fiji in the 1970s was Ratu Sir Kamisese Mara, who was also high chief of the eastern Lau group of islands where we wanted to work. Suspicious of what he regarded as arrogance and disrespect among academics, he kept us waiting several months for permission. We therefore began work in the central Lomaiviti island group and, after Brookfield's arrival, also on the larger Northern Division island of Taveuni. Only in 1975 were we allowed onto Lakeba, Kabara and other islands in Lau. The 16 project members (including the marine science group) spent 1226 days on the islands, of which an almost equal 36 per cent each was devoted to Taveuni and to Lakeba, the only two islands with air service in the 1970s. The kind efforts of the Fiji Marine Department and Fisheries Division gave us 9 per cent on Kabara, 6 per cent on Batiki, and 4 per cent on Koro. The balance consisted of short visits to other and remoter islands, mainly by Brookfield travelling on Government ships going about their own business, and a short period of reef study on an a Fisheries Division vessel collaborating with the marine science group. Despite the problems of scarce and very irregular shipping, we developed plans to station researchers for periods of weeks on two remote islands, Ono-i-Lau in the south and Qelelevu in the north. The fate

[2] ORSTOM: Office de Recherche Scientifique et Technique Outre-mer [Office for overseas scientific and technical research], a French research institute now called L'Institut de Recherche pour le Développement [IRD].

of these plans at the hands of untoward events, both financial in UNFPA and UNESCO, and ship-mechanical in Fiji, is briefly recounted in Island Report No.4.

The research tasks posed significant challenges to most members of the project, mainly because of the emphasis placed on the study of how change happens, that is on process. For example, the questions raised with Latham and Denis in ORSTOM, concerning the dynamics of the island agro-environments and especially of the fire-prone *talasiga* formation, called not only for research on the state of the agro-environment using classical mapping techniques but also studies on the dynamics of these environments using tools unconventional for soil scientists. Others found that field methods they had employed elsewhere yielded limited results, or were inappropriate, requiring changes in their approach.

The concentration of work in Taveuni and Lakeba did have one significant advantage. Greater depth was possible, especially on the latter smaller and less populous island. By the start of 1976, when the project was at last sure of full access to its budget, information collection was accelerating dramatically. A pre-determined schedule had most of us moving to the hospitable environment of the Development Studies Centre at the Australian National University in Canberra in May to write up our findings, then in September we would all disperse. The Lakeba group managed to negotiate delay and a return visit so that some of its most important work was done in late 1976.

Formal reporting began in June 1976 and was completed by 1983 when the final agro-ecological report, co-edited by Marc Latham and Harold Brookfield, was published by ORSTOM. Almost all that reporting is captured on the project website http://www.islandvulnerability.org/mabfiji.html Not included due to copyright is the review and update of our findings in the light of later research and events, published as a book by Cambridge University Press in 1988. It carries the MAB logo, but is not a MAB report, and takes advantage of its freedom from constraints to express views with a candour not permissible within the UNESCO framework. Written by five of the core members, it is the final wrap-up of the Fiji project.[3] The book was digitally reprinted as a paperback edition in 2006. It remains in print.[4]

We had gone to Fiji under no illusions, as a group, that islands were different from the rest of the world except in the one peculiarity of physical separation. This peculiarity is important, and we found it reflected in many aspects of economy and society, as well as classically in environmental processes, as it is in biogeography. Otherwise, we found insular and peripheral rural Fiji to share many of the same problems as peripheral, rural places anywhere else. At the request of the Fiji Government at the time of project approval, our main report is also a development report. Although political events in the 1980s and subsequently have completely changed the conditions under which our recommendations were made, certain aspects of our forecasts did come to pass; they were inherent in the condition of islandness.

The Fiji project was a substantial team effort. For a relatively small project it generated a considerable number of detailed research reports, the main ones being those reproduced on this on the project website http://www.islandvulnerability.org/mabfiji.html For various reasons, not the

---

[3] Bayliss-Smith, T., R. Bedford, H. Brookfield, M. Latham and M. Brookfield. 1988. *Islands, Islanders and the World: the Colonial and Post-colonial Experience of Eastern Fiji*, Cambridge, Cambridge University Press (ISBN-13 978-0-521-03008-3 and ISBN-10 0-521-03008-0), reprinted 2006.

[4] Also not included on the website due to copyright is J.R. Campbell's (1984) book *Dealing with Disaster: Hurricane Response in Fiji*, Honolulu and Suva, East-West Center and Government of Fiji.

least important of which was the low use of electronic storage of research papers at the time, much of the substantive research contained in the Island Reports and in the ORSTOM-published general report never reached a wide audience. Hopefully the reproduction of the reports on this website will make them more accessible to researchers interested in the relationships between people and environments on small islands – a highly topical subject in the Pacific in the context of contemporary debates about climate change and globalization.

What was distinctive about the Fiji project?

To its participants, the most remarkable thing about the project was the strong *esprit de corps* which developed among its members. When it came to reporting, considerable differences of opinion emerged. They were all cheerfully tolerated and, where not resolved, were presented in parallel. This was important because, as our UNESCO programme officer Gisbert Glaser remarked in writing a Foreword for the 1988 book, "the Fiji project is one of the few MAB pilot projects directed to the problems of man in relation to his environment rather than focusing on the problems of the environment in relation to man's activities." We were pioneering a separate road in MAB and needed to stand together.

The consequence was that we provided a distinctive dimension, or set of dimensions. Comparing MAB projects on ecosystem management in the tropics, almost all of them in Glaser's second and larger category, ecologist Frank Golley wrote in 1984 that "the Fiji study is especially important to MAB since it raised questions about static concepts within MAB planning … and concluded that MAB should focus on process rather than structure."[5] An emphasis on process was certainly our aim, and we hope it comes through in the reports that that have been reproduced on this website.

Harold Brookfield

Richard Bedford

Marc Latham

Tim Bayliss-Smith

Muriel Brookfield

July 2012

[5] Golley, F. 1984. Land management strategies in the humid and subhumid tropics. In F. Di Castri, F.W.G. Baker and M. Hadley eds, *Ecology in Practice, Part 1: Ecosystem Management*. Dublin and Paris, Tycooly International and UNESCO, pp. 29-56, at p.49.