



South Pacific Bureau
for Economic Co-operation



South Pacific Commission



Economic & Social
Commission for Asia and the Pacific



United Nations
Environment Programme

South Pacific Regional Environment Programme

SPREP/Country Report 9
Original: English

COUNTRY REPORT No.9

NIUE

SPREP Information Centre
Received
2 - SEP. 1998

South Pacific Commission
Noumea, New Caledonia
August 1980

VF
1296

SPREP / Country Report 9
August 1980

ORIGINAL : ENGLISH

SOUTH PACIFIC REGIONAL ENVIRONMENT PROGRAMME

Noumea, New Caledonia

N I U E

COUNTRY REPORT

SOUTH PACIFIC REGIONAL ENVIRONMENT PROGRAMMEN I U ECOUNTRY REPORTPART A ENVIRONMENTAL POLICY AND IMPLEMENTATION (Findings)

POLICY -

- 1 The Niue Government is in receipt of its first National Development Plan (NNDP 1980-1985) which contains chapters on social development (4 'Macroplan') and social services (Chapters 19 to 23); comprehensive physical or regional plans for land and coastal resource use are hampered mainly due to the existing tenure system.

The major resource utilisation activities are agriculture and inshore fishing. There is no physical plan co-ordinating these activities. Government priorities in the Development Plan are the improvement of economic and social standards of living coupled to a larger degree of self-sufficiency.

LEGISLATION -

- 2 The following statutes contain elements of environmental protection and resource conservation :

The Public Health Ordinance , 1965
 The Fish Protection Ordinance , 1965
 The Wildlife Ordinance , 1972
 The Niue Act , 1966 , and,
 Village Council Ordinance , 1967

Legislation pending or in draft form exist for Water Purity, Environmental Protection, Mosquito Control and Food Control.

- 3 Unwritten traditional law is used in the day-today regulation of local affairs. This regulative process is respected and provides a reasonable means of control of an environmental kind which helps sustain the productivity of land and coastal resources.
- 4 Niue is associated with a number of conventions agreed on the Government's behalf by New Zealand viz
 - International Convention on Civil Rights
 - Social Policy of Non-Metropolitan Territories
 - Recruitment of Indigenous Workers (ILO)

Government would welcome information about other conventions of relevance to Niue were it so advised by SPREP.

- 5 Legislation of an environmental kind will be needed to provide control over introduced development and processing activities at the same time encouraging development.

PLANNING -

- 6 Environmental issues are recognised in Chapter 17 of the NNDP but to the present time environmental considerations have not been formally taken into account in project planning. Some studies have been made of flora and fauna, geology, hydrology and soils; and there are useful survey maps, aerial photographic coverage and a map of extant land utilisation drawn up in the early 1960's. Outside help may be periodically required to assess the environmental implications of development proposals. The Niue Government would like to have access to guidelines, resource assessment procedures and environmental impact procedures from the SPC.

ADMINISTRATION -

- 7 At the present time there is no written environmental policy of a prescriptive kind although Chapter 17 of the NNDP recognises the importance of "a more technically developed approach to environmental questions".
- 8 There is room for comprehensive physical planning of land and coastal zone resources.

PART B ASSESSMENT (Findings)

MAJOR ENVIRONMENTAL PROBLEMS

- 9 Most environmental change arising from current development is well contained. Identifiable problems include the creation of a semi-desert conditions from unsatisfactory agricultural practices and the storage and disposal of agricultural chemicals.
- 10 Off-shore from the Alofi 'urban' area there is some coral silting caused by runoffs worsened by Cyclone Ofa in 1979. Also in Alofi, extensions to the wharf system are under construction but no further blasting for these works is envisaged. The pattern of urbanisation outside Alofi is 'bead-like' - the tendency by the people to have houses strung all around the

island being contained by the limits to which water and power are supplied.

- 11 In rural areas the most serious problem has been the degradation of areas formerly in agricultural production which arises as a consequence of agricultural practices, particularly discing, over burning and clearing with heavy machinery.
- 12 Coastal waters, with the exception of Alofi, are very clean and the quantity of biomass is probably unchanged. Opinion is varied, but there is medical evidence in support of the contention that poisoning of fish is still practised (however the incidence is very low).
- 13 There are no outside pressures on Niue to degrade the environment through destructive resource exploitation.
- 14 Waste and sewage disposal is still inadequate especially healthwise necessitating improvements. Rubbish dumps are found on the roadside and the effects of latrines on ground water quality pose real concern. Expert guidance is needed if Niue is to remain clean and healthy.

RESEARCH AND MONITORING -

- 15 Insofar as environmental surveillance is concerned only limited weather recordings and very limited measurements of the organic purity of water supplies are currently made. Measurements of water purity in localities proximate to new projects, processing points, and storage facilities need to be closely monitored and action has been taken to ensure this is done in the future. Changes in environmental conditions are not being monitored. There is no surveillance available at present for the monitoring of environmental changes.

PART C MANAGEMENT (Findings)

STATUS OF RESOURCES -

- 16 a) Soils Traditionally agricultural practice involving slash and burn techniques, after ten years fallow then allowing for one taro crop, have maintained soil fertility over wide areas. Similarly, forest areas have maintained their diversity and an equilibrium.
- b) Water Recent hydrological studies have established a substantial clear-to-brackish water lens up to 70 metres thick from which water abstraction at least ten times greater than at present could be sustained

There are 52 bore holes a minimum of 1.6 km inland. Most of the population live to the seaward side of the boundary and there have been no problems to date with ground water spoiling. Introduction of irrigation may change this. There are no permanent surface streams.

c) Crops Taro forms the main subsistence crop and is imperative to local self-sufficiency, along with fish as a supplementation. Passionfruit cultivation has been encouraged by the Niue Development Board.

d) Animal Husbandry Pigs reared in pens at a rate of about one per family constitute the most important animal husbandry component. Cattle have been grazed by the state on leased areas - results are not productive.

e) Forests Some forests are unique and remain so because of traditional tapu impositions. Areas beyond this produce considerable timber resources potentially available for local construction and as wood fuel for an electric power generating facility.

f) Reef, Lagoons and Fisheries It is generally considered that there is very little poisoning and no dynamiting of fish in the reef localities. Deep sea fishing for wahoo and skipjack and other seasonal species is improving and shows potential.

g) Conservation, Parks and Reserves There are no formally designated areas except the tapu forest areas (particularly Huvalu). Hunting restrictions and the conservation of village greens under traditional structures are still observed. (Hunting restrictions - this is a law too)

h) Endangered Species There is no listing but there is a season for the taking of pigeons and bats. Cartridges are not for sale outside this season.

i) Local Energy Sources Apart from a few windmills all power supplies from imported fossil fuels. This serious and deteriorating situation of dependence is of concern to the Government and Chapter 15 'Energy' within the NNDP addresses the problem. The main hopes for alternative sources of energy lie with electricity generation orientated programme such as the harnessing of wind energy and solar collectors and wood burning.

j) Minerals There has been a search for uranium ore. The first NNDP provides that an environmental study be made before any further exploration (if any) is undertaken.

(k) Human Resources Niueans are a healthy population with a pronounced absence of metabolic, systemic, or mental disorders. Dental Health is a problem being attacked through dental care for adults coupled to dental education and school inspections for the young.

l) Infrastructure Transport, utilities, and services are sound and adequate for present needs, but there is a lack of local transport which could be met by private enterprise taking up the challenge for entrepreneurship evident in the NNDP.

MAJOR DEVELOP- MENT TRENDS

- 17 Small industries include a garment factory, soccer-ball fabrication, soft drink and coconut cream manufacturer and two garages. Agriculture at subsistence level, including copra as a cash crop, is at equilibrium. New enterprises include passionfruit, lime, beef and honey production. Forestry potential from degraded agricultural areas could be massive, in local terms, both for the production of constructional timber and for wood fuelled electrical power production. Inshore fishing is reasonable self-sustaining and unchanged but catches from deep sea fishing offer the potential of high yields with attendant high expenditure on fossil fuels for the powered crafts necessary for this enterprise. Controlled tourism is being gradually expanded from a modest level at the present time.

MANAGEMENT APPROACHES

- 18 The coastal zone, which really includes the terrestrial island mass, is not planned or managed in an integrated way but is reasonably well safeguarded by local environmental sensitivities reflected in traditional law. (With the exception of the 'desert-like' areas created by poor agricultural practice).
- 19 Other than the usual police, ambulance and fire services there is no contingency plan to reduce the effects of disaster. However, this is expected to be corrected before November 1980. There is a hurricane warning system. The Government of Niue is interested in regional (ie. South Pacific) contingency planning for oil spill control and other disasters.
- 20 The Government has no explicit population policy although there is an understanding that more than five children to a household is socially and economically undesirable. Contraception is available to married women for a cover charge. There is a moderate and acceptable increase of births over deaths. However, because of emigration to New Zealand, there is a declining population on Niue.

- 21 Land use plans, zoning and other controls are not in use although the way is open for Village Councils to pursue the use of these processes under the Village Council Ordinance 1967. Resource use planning is needed in order to coordinate projects and to rationalise resource utilisation.
- 22 Degraded areas are not currently being rehabilitated but reforestation arises in the NNDP as a commitment and the appointment of a Forestry Officer is likely soon.

PART D REQUIREMENTS FOR NATIONAL ACTION
(Recommendations)

NEW ACTIONS -

- 23 No new actions, structures or bodies are suggested for the traditional sector. For projects concerned with modernisation there arises a need for an environmental protection statute. These imperatives derive from the economic and social importance of a sustained natural balance between resource use and population numbers on Niue. These structures would have particular application were mineral exploration enter a proving phase.

REQUIREMENTS -

- 24 Education There is a concern for environmental education within the primary and secondary school curricula, and this is met, to a limited degree, in the social science course at primary school level, and in the Form II environmental studies at secondary school level. A need has arisen for teachers to receive more in-service training on environmental matters and for the Community Education Unit to be brought into play for advancing environmental education. Particular areas for emphasis include environmental balance in food planting, fishing, house building and domestic water use with the emphasis on practical local examples. South Pacific Commission information handbooks and charts would be welcomed although local evidence suggests that these might be of limited utility in the Niuean environment.
- 25 Personnel There is the possible future need for an Environmental Protection officer. It is likely that the New Zealand Government will provide other specialist expertise on request and of course SPC facilities could be used in the spirit of regional cooperation. Local monitoring (particularly of water purity) will require more attention, but more detailed pollution analysis will have to be sought from abroad possibly the New Zealand DSIR. Overall, the proven effectiveness of traditional environmental protection - operating at Village Council level - has to be maintained.

In other words, the above requirements for personnel apply to programmes for modernisation which seek to introduce essentially alien production and processing techniques to Niue.

- 26 Facilities and Equipment. Due to the limited land area and small population of Niue, there are no facilities and laboratories for environmental monitoring. The Government would welcome assistance from outside on Niuean terms of acceptance.
- 27 Information. There is a need to collate and co-ordinate data and land capability, reef production capability, deep water fishing capacity and water potential and for this information to be drawn into a comprehensive resource use plan for the island and its coastal areas. A Niue Resource Use Plan would serve to collate, co-ordinate and rationalise the separate projects contained in the National Development Plan. This, in turn, would lead to the reformulation of planning objectives then the preparation of a second NNDP, it being recognised that changing economic circumstances, and natural disaster, render it desirable to plan flexibly, and to prepare the second NNDP well in advance of 1985.
-