EDITOR'S FORUM

THE NEW MICRONESIA: PITFALLS AND PROBLEMS OF DEPENDENT DEVELOPMENT

John Connell
University of Sydney

> One of the least developed nations on earth has been encouraged to see itself in terms of the richest, most highly developed nation on earth. . . . This unreality . . . is at the heart of the Micronesian dilemma. (Nevin 1977:25-26)

Nowhere in the Pacific is the gulf between image and reality as great as it is in the three new island states of Micronesia. For Robert Louis Stevenson the Marshall Islands were the "jewels of the Pacific." For the three semi-independent states that (with the Commonwealth of the Northern Marianas) composed the Trust Territory of the Pacific Islands (TTPI)--the Marshall Islands, the Federated States of Micronesia (FSM), and Palau--this image became tarnished by a unique form of trustee military colonialism, an unusually "dependent" form of development, and limited prospects of achieving any degree of economic and political independence, despite the signing of the Compact of Free Association. In a century this enormous and strategically important region has gone from subsistence to subsidy.

The FSM is a mix of high islands and coral atolls with high islands dominating each of the four component states (Yap, Chuuk [Truk], Pohnpei [Ponape], and Kosrae). Palau's main islands are high, though there are also thinly populated outlying atolls. The Marshall Islands is composed entirely of atolls and reef islands. The high islands are characterized by high rainfall and a more diverse agricultural system

Pacific Studies, Vol. 14, No. 2--March 1991

than on the atolls, where land is often scarce (especially in the FSM) and potential is limited for other than the traditional atoll crops of coconuts, taro, breadfruit, and pandanus, if even these. Climatic hazards including droughts, cyclones, and tidal waves are not unusual. The ecology of atolls, discussed in detail elsewhere (Wiens 1962; OTA 1987), provides significant constraints to conventional development strategies.

The early history of the Caroline Islands (Palau and the FSM) has been described in detail, especially for Pohnpei (Hezel 1983; Hanlon 1988; Hempenstall 1978). Although initial European contact was earlier than in much of the South Pacific, colonization was only effective in the late nineteenth century. Subsequently there were phases of Spanish, German, and Japanese colonization, especially in Palau (Peattie 1988), until the three states became part of the United States-administered TTPI after World War II. In many respects the forty-year US administration of the TTPI was a period of "benign neglect," though in the Marshall Islands-notably in Bikini, Enewetak, Rongelap, and Utirik -it was far from benign. Economic development was extremely limited and, in outer islands, the physical impact of colonialism was minimal. At the center urbanization was substantial and "tin roofs and palm trees" still characterize the unimpressive urban centers and dusty roads that became the bureaucratic centers of each state. The American era was a period in which the subsistence economy was effectively destroyed, especially in the principal populated islands (notably Koror, Ebeye, and Majuro), and aid-dependent welfare states emerged.

After long negotiation and various constitutional changes (Kiste 1986), the Marshall Islands and the FSM signed the Compact of Free Association (CFA) with the US in October and November 1986; Palau, after a series of seven referenda and much violence, has not yet agreed to the CFA. Because of disagreements over the constitutional implications and over the nuclear-free demands of a large minority of Palauans, the compact cannot be signed and the TTPI consequently remains in existence. The CFA grants the three new island states self-government (assuming that Palau eventually signs the CFA) with the US retaining responsibility for defense and foreign affairs, a broadly similar relationship to that between the Cook Islands and New Zealand. How much influence the US will exert remains uncertain; for example, there is doubt whether the new states could conclude fishing agreements with the Soviet Union. The enormously complex CFA gives the US considerable latitude in its future relations with the Micronesian states, which receive substantial financial gains. The considerable financial package totals of the order of $6 billion[1] for the first fifteen years of the agreement, about half of which goes to the FSM and two-thirds of the rest

goes to the Marshall Islands (Schwalbenberg 1984:91), a distribution that roughly correlates with population proportions. Additional services and grants were also available in several areas, including health and education, to be contracted from the appropriate US federal agencies. However, these scaled down in the early years of the CFA and end in 1990. In addition the Marshall Islands has received a sum of $150 million to establish a nuclear-compensation trust fund.

Expenditure is audited by the US. No less than 40 percent of the annual grants must be committed to capital improvements and "shall be in accordance with official economic plans provided by those governments and concurred in by the Government of the United States" (CFA, quoted in Kiste 1986: 134). Five years from implementation, reduction in US funding will begin to take place and payments will continue to decline steadily over the remainder of the fifteen-year period. The most radical decline will be in the FSM, where the 1988 funding of $60 million will decline to $51 million in 1992 and later to $40 million. Given the strong relationship between the island economies and US aid, this will constitute a drastic decline in per capita incomes of around 20 to 25 percent over the fifteen-year period (Schwalbenberg 1984). Palau has chosen not to "front-load" its aid package, hence the decline there will be more gradual; the structure of decline, from the sixth year onwards, will probably be negotiated in a similar manner to that conducted between Australia and Papua New Guinea.

It is most unlikely, because of the structure of the Micronesian economies, that these new states will be able to generate economic growth of such an order to compensate for the declining levels of funding outlined in the compact. Indeed it is very doubtful if there will be any significant economic growth, and certainly not the necessary 10 percent per year over a lengthy period. For the first time there are limitations to what the new states might expect from the US. Few countries are forced to contemplate such a targeted decline of national incomes. A crisis of some kind during the compact period is therefore likely, which may lead to either increased US aid, more diversified aid, more extensive outmigration, or all of these. None of these results is likely to lead to a greater degree of economic self-reliance.

Economy

Traditional economies throughout Micronesia were based on a combination of agriculture and fishing with the dominance of agriculture being most marked on the high islands. On most islands, both activities remain important.

The preferred staple crop varies on the principal high islands in the FSM. In Truk breadfruit is the preferred staple and yam and pandanus are relatively important; in Pohnpei both breadfruit and yams are consumed in almost equal amounts; in Yap taro is the most important root crop and breadfruit rarely eaten. Everywhere coconuts are a major component of the diet and the agricultural economy is supplemented by fishing. In some places, such as Pohnpei, traditional food-crop production is an integral part of competitive ceremonial feasting to achieve prestige and rank.

The traditional agricultural economies of the outlying atolls of the FSM, Palau, and the Marshall Islands are typical of atolls elsewhere in the Pacific. Although the soil is invariably poor and coralline, rainfall is generally adequate and under normal circumstances the atolls were self-sufficient, though regional trade between "coral clusters" was crucial at times. The principal food crop is usually taro, grown in quite large, swampy fields, supplemented by breadfruit, sweet potato, and inevitably coconuts. Breadfruit, though seasonal, can be preserved. On very small islands, where both taro and breadfruit are more scarce, coconuts are a staple food; on the smallest atolls, such as Eauripik (FSM), they are rarely turned into copra since food supplies would otherwise be inadequate. Most gardening activities are undertaken by women. Fishing is of much greater relative importance for atoll dwellers and is principally a male activity. With some variations, which appear to be a function of both population density and rainfall, the agricultural economies of the atolls are not fundamentally different. Especially in the eastern part of Yap State these are some of the most traditional atoll societies and economies in the South Pacific region.

Throughout Micronesia the traditional self-sufficient agricultural systems have been modified by modern trends towards cash-crop production (essentially of copra) and wage-labor employment, both resulting in the purchase rather than production of food. This is especially true on the central islands where the possibilities of nonagricultural employment are greater. The movement away from subsistence agricultural production has been least in the outer islands of FSM and greatest in Palau and the Marshall Islands, where there are larger urban populations. In general, trends in food production and consumption are typical of other parts of the Pacific. In some places the movement away from dependence on locally produced food has been accentuated by rapid population growth; for example, by 1975 it was argued that some of the outer islands of Chuuk State were fast approaching a situation where self-sufficiency was no longer possible due to very high popula-

tion pressure on limited land resources, necessitating either out-migration or family planning (Migvar 1975:10). In other atolls this trend has been accelerated by federal surplus-food distribution programs (Severance 1980; Marksbury 1980) and in many places by a situation that discourages local agricultural development, notably swamp and pit taro production, and results in high prices for local produce (Peoples 1978). Hazards are persistent threats to atoll agriculture, and storm waves destroyed numerous taro gardens in the outer islands of Yap State in early 1989. Generally, population pressure is increasing and self-sufficiency on atolls is an aim that could not now be easily realized, especially in the FSM. On many atolls in the Marshall Islands, many young people have never seen or experienced the traditional agricultural economy. Food imports are massive, around 40 percent of the value of all imports since the 1970s, substantially greater than almost everywhere else in the Pacific region, and are composed mainly of rice, sugar, flour, and also beer, thus contributing to worsening nutrition and health levels, especially in urban areas.

Agriculture is the major income-producing sector in the Micronesian economy but little domestic production is locally marketed; only in Chuuk and Pohnpei and intermittently in Koror and Yap are there significant urban food markets. Under the American administration no concerted attempt was made to emphasize or encourage agricultural production. Nevertheless the principal export from both the FSM and the Marshall Islands is copra, and copra production is also the principal income-earning activity on many of the outer islands. The copra, however, is not turned into oil (which would raise its value), copra prices are notoriously unstable (hence little was exported between 1985 and 1987 when world prices were low), and coconut plantations are in urgent need of upgrading and replanting. In Palau copra production is negligible but in the Marshall Islands it is much more important and copra exports were valued, in the early 1980s, at around $3.5 million per annum. On those atolls closest to Majuro, where producers may be able to take advantage of high prices, production per capita is significantly greater, whereas on the most remote atolls production is significantly lower. The relative dependence of the outer islands, especially in the drier north, on sources of income other than copra sales is apparent. On the outer islands the revenue from copra is rapidly depleted; without copra production most outer atolls would be subsistence economies almost entirely dependent on remittances and government employment for cash incomes, yet copra production alone is an inadequate base for a contemporary agricultural economy.

There is minimal agricultural diversification in Micronesia. A high-quality pepper is produced on Pohnpei but raising it is a highly labor-intensive activity and in 1987 there were no more than thirty acres. It is scarcely marketed commercially beyond the tourist trade and, even within Pohnpei, is more expensive than imported pepper. In Palau there is little commercial agricultural development; though there are prospects for cattle husbandry, the extent to which other cash crops such as coffee, cocoa, and pepper may be viable appears to have never been investigated. Marijuana, especially from Palau, is the most significant, if illegal, cash crop anywhere in Micronesia. In the Marshall Islands national development policy has increasingly favored a movement towards self-sufficiency in agriculture (although it is recognized that total self-sufficiency is impossible given the demand for foods like beef that cannot be produced locally). The attainment of self-sufficiency in basic foods, for both economic and health reasons, was the first priority of the Marshall Islands National Development Program (1981-1995). Two strands of this were the rehabilitation and replanting of copra plantations (since copra production is less than half of its potential and the mill is alternately glutted and empty) and the development of vegetable production, A Taiwan Agricultural Technical Mission established a farm in 1981 on Laura and in 1982 a second farm on Wotje, both of which were supplying vegetables to urban Majuro by mid-1982. By 1983, though, there was little marketing of agricultural produce and a realization not only that the experimental farms were heavily dependent on fertilizer inputs (and hence that production was both expensive and likely to decline over time) but that the whole structure would be extremely difficult to maintain after the Chinese agriculturalists departed.

Such schemes characterize the proliferation of expensive failures that have dominated the productive sector in Micronesia. Expansion of air services, and lower freight rates, may enable and encourage the marketing of domestic agricultural produce that, until recently, has been either unavailable or extremely expensive in places such as Majuro, Ebeye, and Kwajalein. There are considerable constraints to increased agricultural production: land shortage (and land-tenure constraints) in many places, high labor costs, an educational system oriented to white-collar occupations rather than agricultural development, consumer tastes oriented to imported goods (which may be of lesser nutritional value), no taxation on imported goods (even those that are also produced locally), limited marketing infrastructure, inadequate and expensive transport, and none or few skilled agriculturalists. Given these constraints few effective developments in the agricultural economy are possible.

The development of fisheries throughout Micronesia has been limited. Almost all domestic commercial fish production is based in Palau, where fishing has been of some economic significance. In 1964 a commercial skipjack tuna fishery and freezer storage capacity was set up there; fish production in Micronesia had slowly increased in value to $3.8 million and Palau was the main producer with 91 percent of the total catch, which was processed by the Van Camp Seafood Company. The processing plant, however, closed in 1982 following falling world tuna prices and deep-sea fisheries have continued to prove disappointing. By contrast, in Palau as elsewhere in Micronesia, small-scale commercial fisheries are almost nonexistent, constrained by traditional fishing rights, the lack of infrastructure (especially refrigeration), and excessive imports of tinned fish. The establishment of a fisheries complex at Dublon (Chuuk) may enable some movement towards self-sufficiency in the FSM, although large-scale fishing projects are fraught with technical, management, and macroeconomic problems. Moreover, the complex has been on the drawing board for more than a decade and other states (notably Pohnpei) have competing objectives.

All three states receive income from Japan for the leasing of rights to territorial fishing waters, and this income was around $4.5 million in 1984. Early in 1983 there were 608 tuna-fishing vessels in FSM waters, especially from the United States, Japan, Korea, and Taiwan. This is therefore an extremely important source of national revenue, earning around $3 million in 1982. For the FSM in 1985 alone the landed value of the Japanese catch was about $60 million, of which the FSM received about $2.3 million, some 4 percent of the total value. The situation in the Marshall Islands is similar, with foreign vessels catching fish valued at $92 million in local waters in 1982.

The Marshalls has negotiated an agreement for a Japanese fishing base in Majuro. An indication of the potential of fishing is that there were 436 applications for fishing rights from Japanese vessels alone in 1982 and for 1982-1983 about $2 million was obtained from fishing leases. Moreover the Marshall Islands imports over 50 percent of its total consumption of fish. This indicates the limited development of local fisheries, in part a consequence of rural-urban migration, public salaried employment, and a policy of duty-free imports of substitute products. The fact that in 1982 imports totaled less than 1 percent of the catch taken in local waters by foreign vessels indicates the potential for local fisheries development. This potential is less, however, than in other parts of Micronesia because of limited baitfish resources and the situation of the Marshall Islands at the end of a "gauntlet" of fishing from as far west as Palau and even the Philippines. This has, in part,

resulted in the Marshall Islands banning Japanese fishing boats from within twelve miles of any island shoreline and the complete banning of purse-seiners to protect small fish. A Marshall Islands Fishing Development Corporation has begun with a pole-and-line fishing fleet of two vessels. The problems of establishing large-scale fisheries, in competition with Pacific fringe nations and with a total lack of relevant skills, have hitherto limited development, but tuna transshipment and canning is considered at least possible if such problems as water supply and high labor costs can be overcome. This seems currently doubtful.

The failure to develop productive activities in agriculture and fisheries has resulted in economies that are highly dependent on imports of some basic commodities. Despite a number of projects aimed towards food self-sufficiency, food imports have continued to increase, the trade balance has worsened, and "we must remain pessimistic in regards to reducing Micronesia's trade imbalance, unless a massive effort is immediately directed to export development" (Celis 197523). As a result, "the Micronesian family is becoming increasingly dominated by foreign influences. The Micronesian is trading his self-sufficiency and healthy life-style for one which is costly, physically and financially" (Rody 1976: 21). Imports of alcohol have been both expensive and a cause of social disorganization (cf. Marshall 1979b) to the extent that Moen (Chuuk) and some outer islands have been declared "dry" and alcohol has not been legally on sale there. Kosrae is also "dry." All this is symptomatic of a massive trade imbalance; overall exports from the three states were valued at around $8 to $9 million in 1984, triple the value of exports at the start of the period of US administration forty years ago, but in real terms rather less valuable than in 1948.

Palau and possibly Fais (FSM) have some potential for the exploitation of mineral resources although the economics of production have not been investigated. Mining for phosphate operated only before World War II on Fais but the old Angaur phosphate mine in Palau continued after the war; in 1950 there were 405 Japanese workers there and in 1952 there were three hundred Japanese and thirty-nine Micronesian workers. The mine closed at the end of 1955 but quantities of phosphate remain that may be workable. There would be problems in obtaining labor within Palau. There is no evidence of submarine mineral resources anywhere in the extensive EEZs of the Micronesian states. Because of the absence of minerals all energy requirements must be imported and energy is extremely expensive because of minimal economies of scale and high transport costs. In Palau the construction of a new power station led to substantial foreign debt default on its loan

repayments (virtually necessitating ratification of the compact). In Chuuk the power station is extremely inefficient (because of the small market) and it costs three times as much money to generate electricity as Chuuk earns from its major export, copra (Schwalbenberg 1984). A similar situation in Pohnpei has been described in detail elsewhere (Rizer 1985). Throughout Micronesia there is a substantial subsidy to energy consumers, favoring government offices and emphasizing the urban bias in service provision.

Tourism is considered a potential future development possibility, because of the strategic location between Hawaii and east Asia, the recent enormous expansion of Japanese tourism in Guam and Saipan, and the attractions of the "rock islands" of Palau, the diving facilities of Chuuk, Nan Madol in Pohnpei, the stone money of Yap, and various wartime features. Principally because of distance to markets and high costs, the potential for tourism remains unrealized though there has been new hotel building in Palau and the Marshall Islands. The existing hotels are mainly Japanese-owned; hence, through foreign ownership and import dependence there is considerable financial leakage from the tourist sector, estimated at around 90 percent by various observers. Expansion of the tourist industry would generate employment but would probably have minimal impact on local productive activities.

Industrial development is almost nonexistent because of the small sizes of the domestic economies, high wage levels and energy costs, the lack of natural resources, and proximity to major Asian exporters. Many basic import-substitution industries are conspicuous by their absence, a function of the small domestic markets. A garment factory, employing more than four hundred workers, almost all of whom are from Sri Lanka, opened in Yap in mid-1989, but the state government derives no more than 3 percent of export profits and effectively subsidizes water and power supplies. The prospects for similar industrial developments are poor. The only "manufactured" goods that are currently exported are handicrafts; this makes a trivial contribution to the national economies but generates some income for the residents of a few outer islands. The nature of extremely limited economic development and diversification is apparent from a situation where, as recently as the late 1950s, the most valuable export from Palau was scrap metal, mainly relics of World War II. The prospects for industrial development and diversification are bad, though there have been tentative efforts to develop coconut processing and soap manufacture.

The Marshall Islands has established an offshore banking sector and shipping registry but so far the impact has been limited. Palau has

attempted to follow suit. The three states now have their own postal services, a source of income (of currently unknown size) that has brought the structure of the Micronesian economies much closer to those of the "MIRAB" states, where employment is dominated by the bureaucracy and aid, and philately and migrant remittances are often at least as important as agricultural and fisheries exports (Bertram and Watters 1985; Bertram 1986). In Micronesia too it is even more obvious that the island economies may, increasingly, be seen as mirages, sustained only--and distorted--through continued injections of American finance. This particular form of dependence is not unusual in the Pacific, though it does not fit the usual assumptions of resource expropriation and capital transfers; it is a "pseudo-welfare system" that appears to be dependency with affluence, at least for the elite, and is the result of massive infusion rather than expropriation of resources.

Until the signing of the CFA in 1986 the principal source of income in the Marshall Islands was US defense expenditures though the lease of Kwajalein land, a contentious issue because of pressure for increased rental payments, the funding of capital improvements in Ebeye, and the negotiation of land rights of Kwajalein islanders. However, there is no immediate prospect of the United States abandoning the missile testing site, which is an integral part of the "Star Wars" program. There has been more recent diversity in Marshall Islands foreign aid, with assistance increasingly being sought through the United Nations Development Program (UNDP) and with Japanese aid, around $1.5 million for 1984, rising rapidly. In the similar absence of a significant domestic productive component to the economy, Palau has also become massively dependent on US expenditures.

As elsewhere in the former TTPI the basis of the contemporary FSM economy is government-sector employment, financed from outside, while the productive sector is conspicuous by its absence. In 1980 only 9 percent of the funds for the whole of the TTPI were derived from tax revenues, while the annual US grant and US federal program grants represented 87 percent of the budget. Micronesia has had a forty-year history of living off US government subsidies and is "heavily dependent on government salaries bankrolled by US annual subsidies, and the single greatest source of income remains the 'school industry' in the form of teachers salaries" (Hezel and Levin 1990). For the TTPI taxable revenue was highest in Pohnpei and lowest in Kosrae and Yap, while 1975 average GDP per capita was crudely estimated at $1,103 (Palau) and $853 (Marshall Islands) compared with $974 (Yap), $839 (Pohnpei) $630 (Kosrae), and $600 (Chuuk) within the FSM. Income levels within

the FSM were thus significantly lower than incomes elsewhere in the TTPI. This structure has been maintained, though in each state--especially the Marshall Islands--there is an extremely uneven income distribution, which is also manifest in spatial terms. Overall US assistance to Micronesia, on a per capita basis, is currently around eleven times greater than Australian aid to Papua New Guinea; it is therefore broadly similar to the level of French aid to the "consumer colony" of New Caledonia (Connell 1987) and to other overseas French territories and departments.

The principal domestic development potential of Micronesia rests in agriculture and fisheries. The failure to develop these industries stems from a combination of factors, some of which, especially for agriculture, are a function of world commodity prices, remoteness from world markets, small local markets, and unreliable and expensive transportation A major constraint to development, especially in the FSM and the Marshall Islands, is the limited infrastructure outside the main urban centers (Connell 1983b:5-6). Failure to develop local productive activities is also a function of government-sector wage levels, which account for the failure to produce for the local market, and inadequate government support, which exacerbates basic geographical constraints. Thus in Pohnpei "it seems no wonder that primary interest lies in wage labor and in the entrepreneurial opportunities it brings. . . . It is externally imposed economic and organizational factors which stand in the way. And so it may be that it is in fact political change which precedes economic independence, rather than the converse" (Petersen 1976:280). Moreover, as in Fiji, "the transition from subsistence farming to fully commercialised farming is much more difficult than the transition from subsistence farming to the structured framework of wage or salary employment" (Crocombe 1971, cited in Petersen 1979:37). This is even more true of fisheries, where the transition to commercial fishing demands new techniques and more regular periods of work. Consequently, "entrepreneurial activity clusters around service activities because there is a high demand for these services and the goods they provide, and they offer a low risk means of acquiring income compared to agriculture and other primary investment" (Peoples 1978:549). The rational decisions of entrepreneurs conflict with the needs of productive economic development.

All three states have an extremely limited resource base from which to generate economic development. The thinly scattered population and limited infrastructure are not the only constraints to development. There are few skills (for construction, technical activities, or simply

development planning) or cash resources, especially in the private sector (Connell 1983c:6), a shortage of agricultural and fisheries manpower in some outer islands (following migration), and the combination of a wage structure that discourages private-sector employment (see below) and a duty-free import policy that discourages local production. On most islands there are inadequate water supplies and sanitation and minimal community participation in planning. Without substantial changes it will be difficult to reverse the trajectory of development: "The result of these conditions has been to foster a pervasive sense of economic dependence on public employment and transfer payments. The restoration of economic self-sufficiency demands a program of improved technology, substantial capital investments and structural change in the areas of education, tariffs and taxation" (Marshall Islands 1978:4).

It is exactly the same elsewhere in Micronesia. As the three states have moved towards a degree of political independence, sentiments have been generally expressed on the need for greater economic self-reliance, yet the prospect of achieving this is improbable and increased self-sufficiency has therefore been effectively relegated as an immediate objective of development. The principal problem of achieving a more self-reliant structure of development in Micronesia is not merely that of reallocating resources towards improved infrastructure, agricultural investment, and so forth, but is that of producing a fundamental change in attitudes. Despite some rhetoric on self-reliance, the reality is one of increasingly dependent development. Indeed, as Hezel and Levin have recently noted, "despite the avid talk of development of primary industries, the unspoken consensus seems to be that the new island nations will have to depend on US aid, currently scheduled to decline over the next 15-year period, to buttress their economies for the indefinite future" (Hezel and Levin 1990:43). There is little prospect of anything other than an uneasy dependent development.

Employment

In each of the three states around two-thirds of all wage and salary employment is in the public sector, where wages are about twice those in the private sector (Connell 1983a, 1983b, 1983c). Employment conditions in the public sector are also more advantageous than in the private sector; for example, government employees (including politicians) are not prevented from earning often substantial additional incomes within the private sector, they may have access to vehicles (inside and outside working hours) and travel funds, employment is often in air-

conditioned offices, minimal supervision sometimes enables a situation of effective underemployment and low productivity, and employment is relatively secure. It is for this complex of reasons, rather than simply income levels (which in a few cases are higher in the private sector), that government employment is more prestigious and more eagerly sought after throughout Micronesia.

Public-sector wages have tended to increase annually and have raised income expectations throughout the region to unrealistic levels, since wage incomes can be contrasted with low returns from copra production and fishing. This is of particular concern in terms of future development prospects where the expansion of formal-sector employment has limited potential, and, since the start of the 1980s, has been minimal, and certainly below the rate of population increase. In Chuuk, the most densely populated FSM state, the increase in formal-sector employment was no more than 1.4 percent per year from 1985 to 1988 whereas population growth was more than double this rate. Indeed, concern was expressed as early as 1976 that Micronesia was pricing itself out of the market for nongovernment employment as wage costs would reduce the viability of any new industry. This has contributed to substantial immigration of Asian workers into the three states (see below). Government employment, in quantity and quality, has severely distorted the national economies:

> One of the main costs of government has been salaries. These salaries, via the extended family system, have permitted the enjoyment of a standard of living, particularly in Majuro and Ebeye, much beyond the real productive capacity of Marshallese society. This has been a mixed blessing. The people of these islands have become accustomed to a pleasant but artificial situation. (TTPI 1976: 19)

This has also produced a two-tiered economy where the estimated incomes of those in the subsistence sector are very low in comparison with those in the wage sector. In turn this has produced a demand for educational opportunities (and an extreme version of "diploma disease") that is not in line with job opportunities and so has resulted in a rise in the level of unemployment and nonparticipation in productive employment despite opportunities in the village economy. Thus the Micronesian states seem to experience the worst of both worlds-a private sector deprived of potentially high-quality workers and a public sector characterized by high costs and low productivity.

A relatively high proportion of the labor force participates in the for-

mal sector in Palau and the Marshall Islands, and income earned in that sector may well "trickle down" significantly. There is evidence, however, of growing urban unemployment throughout Micronesia, especially in Moen and Majuro, a situation of unemployment, low productivity, and a lack of skills for employment in one sector and appropriate skills but underutilized resources in the other. This is exacerbated by the extreme concentration of government employment in the urban centers and the lack of formal employment on outer islands. Employment in the formal sector has been relatively static throughout the 1980s, since it has not proved possible to significantly reduce government-sector employment and stimulate the private sector (e.g., see Connell 1983c: 12). Unemployment is likely to worsen and become more overt as population growth increases; moreover individuals prefer to remain unemployed (and continue to seek wage employment) rather than move into the more distant subsistence sector and thus reduce their availability for wage employment. Consequently, relatively few are full-time workers in that sector by choice. There are substantial gaps in knowledge of the structure of the work force, no human resources plans, no monitoring of the existing employment situation, and little more than informed guesstimates of the present employment situation.

Population and Migration

Analysis of population change and migration in Micronesia is severely constrained by the absence of adequate data. The first useful census of the Trust Territory was in 1973 and is not without flaws, while the 1980 census gave a significant undercount almost everywhere. The more recent censuses--especially in Kosrae, Yap, and Pohnpei--are the most reliable yet in Micronesia. The crude data on population growth (Table 1) indicate a very slow, or nonexistent, population growth in the first half of the century followed by accelerating growth rates in the 1960s and 1970s.

There is little reliable information on contemporary birth and death rates in Micronesia; the data that exist on natural increase suggest extremely high rates. There are no effective population policies anywhere and minimal availability and use of family planning services; the acceptance rate is generally estimated at less than 10 percent of women in the target population, and many of this minority are acceptors at a very late stage in family formation. Estimates suggest that in the FSM the annual population growth rate may have reached close to 4 percent in the past decade (a virtual demographic impossibility) and both there

TABLE 1. Population Growth

	Palau	FSM	Marshall Islands
1920	3,750	30,902	9,589
1930	. . .	. . .	9,960
1950	6,622	30,358	11,033
1958	8,845	37,368	13,928
1967	11,365	50,172	18,925
1973	12,672	62,731	25,045
1980	12,116	73,160	30,873
1988	14,200	96,000	43,380

Sources: Connell 1983a, 1983b, 1983c. The most recent FSM data are derived from the totals from the state censuses of Kosrae (1985), Pohnpei (1985), Yap (1987), and estimates for Chuuk, where the state census was conducted in 1989. The Palau population is estimated from the 1986 census, which gave a total of 13,873.

and in the Marshall Islands it is currently around 3 percent. In Palau the rate is rather lower than in the other two states. In the Marshall Islands half the population (52 percent) is aged under fifteen, the most youthful population in the South Pacific region. These high growth rates have obvious implications for development planning in situations where population densities are already high (more than 240 per square kilometer in the Marshall Islands) and natural resources limited. Yet none of the states has given serious attention to population issues.

The rapid increase in population is a result of the low average age of marriage, the absence of effective family planning programs, and an increase in the number of teenage pregnancies. This has resulted in an extremely youthful population, great pressure on the education system, and an increase in malnutrition and other health problems. One such health problem is suicide: the rate for young males is one of the highest in the world. Social disruption has resulted in epidemic levels of suicide in both the Marshall Islands and the FSM (Rubinstein 1983; Hezel 1984, 1989; Hezel, Rubinstein, and White 1985).

The overwhelming migration trend throughout Micronesia has been the increasing concentration of population in the central islands: the high islands of Palau (Koror) and the FSM (Yap, Chuuk, and Pohnpei), and the two atolls of Majuro and Ebeye (Marshall Islands). Thus, in 1980 the urban area of Koror held around 63 percent of Palau's national population and in 1988 the two atolls of Majuro and Ebeye had 64 per-

cent of the Marshallese population. No country in the Pacific has a higher urban population proportion than these two states. In the FSM the concentration is not so extreme. Less than half the population was on the central islands in each of the component states (except Kosrae). This suggests slightly more potential for rural development policies in the FSM than elsewhere. Moreover in most cases (except, perhaps, Yap State in the FSM, and Majuro and Kwajalein) population growth rates still appear to be higher at the center, both through natural increase and through migration, leading to high urban population densities, especially in the Marshall Islands. Nonetheless urban growth rates have probably slowed over the past decade.

There are other population movements within Micronesia. The Marshall Islands has experienced some quite unique internal migration movements. In 1946 the population of Bikini was resettled on Rongerik and a year later the population of Enewetak was resettled on Ujelang. These proved to be only the first moves in what was to become a long saga for the Bikini and Enewetak people, one whose misery has been documented in some detail for the Bikini population (Kiste 1968, 1974, 1977; Weisgall 1980). The tragic saga of migration from Bikini and Enewetak and its negative impact on the health and welfare of those people (and the effect of radiation on the health of other atoll dwellers) cannot be discussed in detail here. Moreover it is not yet complete; Bikinians are still seeking a permanent home other than Kili atoll and they remain "nuclear nomads." It is, fortunately, a unique chapter in the history of population movements in the Pacific.

Not only are Micronesian populations increasingly concentrated at the center of each of the states but there has also been increasing concentration of people and services on particular islands. Generally the smallest and most remote atolls have lost population, nowhere more dramatically than Palau (Connell 1983c:19), while the larger or less densely populated atolls have retained and gained population. This is particularly true of Ulithi, the location of the Outer Islands High School and the principal center for the outer islands of Yap State, where populations have not yet declined. One of the most striking characteristics of population movements in Micronesia is the unusually high level of mobility, which results in occasionally substantial fluctuations in the population of particular atolls as a result of frequent visits from outer islanders for education, health, social visits, and the purchase of goods.

Modern health facilities and medicines, increased opposition to traditional forms of fertility control, improved housing conditions, and a search for new economic status have resulted in more rapid natural

increase of population throughout Micronesia. As atoll populations grow the problems of satisfying basic needs (e.g., housing and food) on the atolls also increase; thus on Eauripik (with a population density of 950 per square kilometer in 1980) locally generated income is earned almost solely from handicrafts since coconuts are essential for eating rather than copra production. Here, and elsewhere, migration has become a safety valve for atoll overpopulation. The smallest atolls are most likely to lose population, in part because it is impossible for adequate social services or jobs to be provided there and, in part, because it is increasingly difficult for them to provide an acceptable standard of community life. The combination of higher postwar rates of population increase, the increased desire for consumer goods, the location of higher-education facilities, hospitals, and formal-sector employment either on one central atoll or on a high island, the monotony and boredom of atoll life, and the "slice of the action" (Hezel 1976: 112) available in the centers has, in many cases, resulted in considerable out-migration to the extent that many atoll populations have established a relatively permanent community on the central islands; these relatives provide a reason for migration and a means of remaining in town. In general terms,

> Life on the small coral islands is always somewhat monotonous. One day differs little from the other. There is little opportunity for individuals to find relief from the faces they see every day and tensions, stresses and animosities which develop between individuals or groups are not easily dissipated. There is a lack of entertainment and recreational activities which might break the monotony and divert attentions from everyday concerns and problems. (Kiste 1968 : 320)

Other kinds of basic amenities may also be lacking (Connell 1983a:37). By any standard life in the more remote areas is of limited attraction; nearly two decades ago, in the rural areas of Palau, "old and young eke out a subsistence living and receive cash handouts from relatives working in Koror and overseas. . . . Today the villages are virtually bankrupt" (McGrath 1972: 134, 138). The problems of small size and remoteness are both social and economic.

The search for employment structures migration moves. The possibilities of employment underlie apparently more-casual motivations while movement for education is a precursor to employment. Moreover many migrants are relatives of those who have found work but are not themselves working. In the FSM, as elsewhere in Micronesia,

> As people come to the district centers, they come hoping for a government job--if not for themselves, then for their newly half-educated children. For here government is not the employer of last resort, but of first resort. . . . working in business . . . is considered demeaning, while working for government is seen as prestigious.
>
> The salary scale reinforces this attitude. Government salaries are pegged at U.S. levels. . . . (Nevin 1977:32)

It is not, however, just a movement of workers and the most fertile group of the population (who may then reproduce overseas) but also an internal brain drain of the skilled and talented (Marshall 1979a: 10). Out-migration has increased the dependency ratio of atolls and has resulted in a labor shortage for some activities, including fishing. Atolls are increasingly becoming places of "vacation homes" (Marshall 1979a: 10) so that, for example, the atoll of Namoluk (FSM) "may be described quite accurately as a combination 'old folks home' and 'day care centre' " (Marshall 1979a:3). The burdens of dependency for the remaining workers are thus substantial.

As elsewhere in the Pacific, migrants are predominantly from the youthful age groups; for example, for Namoluk atoll it has been estimated that nearly 90 percent of the estimated *de jure* population in the age group fifteen-twenty-nine have left the atoll (Marshall 1979a:10) and Marshall has titled an unpublished paper about Namoluk, "Where Have All the Young Folk Gone? Gone to Truk Everyone" (1972). The same is true throughout most of Micronesia. This is especially so on the outer islands where job opportunities are extremely limited; for example, "there are only two high school graduates on Eauripik (FSM) and both of them are teaching in the school. There is one further government position as health aide on the atoll, but when that is filled there will be no more government positions requiring education. High school graduates will have to make copra and catch fish" (Levin 1976: 180). On larger atolls there may be more jobs for teachers, health aides, or even pastors but little productive employment and no employment in the private sector. Migration for work is therefore not only scarcely surprising but almost inevitable.

Education is an important catalyst to migration. The central location of high schools (except Ulithi) encourages this movement. Equally important is the content of education, in Micronesia essentially based on an American model. It is "an unformed educational system transposed onto a poor model of a typical American system . . . emphasis is placed

on career objectives which frequently have little meaning for Micronesian youth. Even worse, Americans have fostered false education values which now are held by many Micronesians and which may well lead Micronesia into political and economic difficulties" (J. Hawkins, quoted in Nevin 1977:160). The education system has both provided training appropriate to white-collar work and inculcated a value system not conducive to farming or manual labor. This results in migration in search of white-collar work to the district centers, where there are also higher consumption levels (because of external subsidization and tax-free imports) while wages earned in the urban sector are distributed through the extended-family system to rural households, thus further stultifying local agricultural production. As Nevin observes,

> The fact seems to be that life on an island a half-mile square with a hundred-odd people, where ideas are foreign and antithetical, and the ruling forces are a combination of magic and physical facts is basically boring. When children's minds have been opened, first by the island school and then by advanced school in the district center, naturally it is difficult to get them to go home-and more difficult to keep them there. (1977:51)

In this context Micronesia exhibits not so much a particular case of the old saying, "How do you keep them down on the farm when they've seen Paris?" but a version that reads, "How do you keep them down on the farm when they've seen the farm?" Reality is, however, rather more complex and in some places a surprisingly large number of high school graduates have returned to their home islands (Hezel 1979a), although such proportions are generally declining.

Urban growth is visibly apparent in Micronesia. There are many reasons for growing urban concentrations; a centralized administration has spawned the centralization of the service sector and hence most formal-sector employment is concentrated in town. This centralization of wage employment suggests that even where urban unemployment, however recorded, is static the chances of obtaining wage employment are much greater at the center. This centralization may be compounded, as it is in Palau, by "urban bias" where financial and technical resources are overwhelmingly concentrated in the urban area.

The urban centers largely remain "crazy collections of little buildings made of concrete or sheet metal or packing cases or thatch, strung at odd and individualistic angles, along winding, muddy, pot-holed dirt roads" (Nevin 1977: 141), though the towns now have sealed roads and a

scatter of new government buildings and a modern FSM capital has been completed in Pohnpei. Nonetheless the depressing environment is apparent in Chuuk, where "the rusting automobiles, decrepit toilets and ubiquitous beer cans symbolise the contact culture life style of Micronesia's district centers" (Marshall 1979b:6), and in Colonia, Yap, where "the few stores, government buildings and residences that were its nucleus had become surrounded by clusters of small shacks, many of which were of scrap metal and discarded packing crates" (Labby 1976: 7). These may be unflattering accounts of Micronesian towns but they are indicative of the minimal urban infrastructure inherited from the American era, despite the massive urban bias in the distribution of that infrastructure! Many urban services, such as water and electricity, are generally inadequate and unreliable.

Migration to Majuro and Ebeye (Kwajalein atoll) particularly has resulted in population concentrations at extremely high densities; alongside growing unemployment this has contributed to substantial social problems in both urban centers. The population of Ebeye is estimated at over 40,000 persons per square kilometer (albeit a population of not much more than 8,300 on 0.2 square kilometers). Even by 1964 Ebeye was seriously overcrowded, with not much more than half the present population:

> The Ebeye community is similar to the shanty towns which have grown up around centers of trade and/or employment elsewhere in the Pacific. Most dwelling houses are jerry-built affairs of corrugated iron roofing and scrap lumber. Sanitary facilities are minimal. . . . Social disorder is common. Arguments and fights, usually precipitated by heavy drinking, are frequent. The Ebeye scene is reminiscent of conditions which are found in or near some Indian reservations in the United States. (Kiste 1968: 154)

Urban residence has led to many fundamental social changes (Connell 1983b:22-25) that are compounded by economic changes, including shifts in dietary patterns. In towns women can work (in clerical, domestic, or retail occupations) and others have more spare time (since there is less food preparation, washing, and so forth) to shop, play bingo, or make handicrafts. Unemployed men have little to do, since there is no cooperative labor or copra production, so they spend time fishing, boatbuilding, drinking, or gossiping.

Social change on Ebeye has been particularly dramatic. The former

Trust Territory representative at Ebeye has described the change as a "stunning social revolution. . . . It's astonishing how quickly the Marshallese have learned to want such 20th Century appliances as electric refrigerators, automatic toasters and tape recorders. And they want them right now" (quoted in Trumbull 1977:264). Although the Trust Territory representative also observed that the Marshallese had quickly learned a number of vocational skills, the extent to which these could ever be used away from Kwajalein was extremely doubtful. Gangs have emerged and alcohol use is increasing, resulting in drunkenness, fights, theft, and "mugging." Gasoline sniffing is an emerging problem while diets are often poor. Both Ebeye and Majuro have significant suicide rates. Health problems on Ebeye have often been more serious than elsewhere in the Marshalls; in 1962 a virulent polio epidemic began on Ebeye and spread to other atolls. More recently it is not uncommon to have outbreaks of shigellosis, with high attack rates, because of overcrowding and the deterioration of sanitary and housing conditions. The Ebeye sewage system has never functioned properly (as a result of defective construction work) and at the end of 1981 the drinking water of Ebeye was "100% highly contaminated' to the extent that five hundred children had recently had gastroenteritis. Ebeye has been described as "a disaster waiting to happen" and by the Marshall Islands president himself as a "biological time bomb" (Connell 1983b:24) though, in recent years, there has been significant improvement (Johnson 1990). In many respects Ebeye demonstrates in extreme form the general problems of rapidly growing, densely populated urban areas in the Third World; it is perhaps the worst urban area in the Pacific region. Thus one observer has commented, "The history of the Marshall Islands under U.S. trusteeship is a disgraceful record, including the various results of the Bikini and Enewetak nuclear tests, the irradiation of the Rongelap and Uterik [*sic*] people and last, Ebeye, which may be the focal point for the ultimate destruction of Marshallese society" (Alexander 1978: 174). This is a remarkable yet appropriate indictment of four decades of change under trusteeship.

While Ebeye's urbanization problems have been reduced through sanitation and housing programs, similar kinds of problems are also apparent on Majuro and in other urban centers, both because of migration and because of rapid population growth. Demands for government services such as schools, hospitals, water, and electricity have increased and urban services are often inadequate and fragmentary. The same kinds of social problems that exist in Ebeye also occur in Majuro and Chuuk, although in more diluted form. Pollution of land and lagoon is

also obvious; there are increasing incidences of child abuse, malnutrition, and deviant social behavior. Though services in the urban area may be severely strained they are invariably superior to those of the rural areas and, as the urban population increases, pressure on the government to improve urban services and wages also increases. This creates a familiar circularity problem for the distribution of resources in a migrant population where the pattern of resources may stimulate increased, or decreased, migration. Tentative efforts at population decentralization in the Marshall Islands (Connell 1983b:25-27) have been wholly unsuccessful.

It is not only in the towns of the Marshall Islands that there have been severe social problems. In July 1982 sewage disposal in Chuuk lagoon contaminated seafood and resulted in a severe cholera outbreak, with a high mortality rate. Subsequent studies revealed that only 6 percent of households in Moen had adequate sanitation (flush toilets and a central water supply), though this too has subsequently changed. In Koror there are housing shortages, overcrowding in schools, and relatively high delinquency and crime rates; most health problems appear more serious there than in rural areas and alcoholism and violence continue to grow in severity.

Although all the available evidence points to depressed and worsening conditions of urban life, good statistical data on the economic and social (including health and nutritional) status of urban populations for the whole of Micronesia are conspicuously absent. Many urban residents have migrated from very densely populated atolls where subsequent population increases may well have reduced their opportunities to return to their home islands and take up even a subsistence life-style; there is no information on this and hence the extent to which migrants in the urban areas may, in some sense, be dispossessed. If this is the case in fact, it might be expected that many migrants in urban areas would be poor and with an inadequate health and nutritional status; the extent to which basic needs are satisfied in town is essentially unknown.

Emigration and the Brain Drain

The availability of adequate data on international migration into and out of Micronesia is even more limited than that for population change as a whole. However, as the information on population growth (Table 1) suggests, it is Palau that is overwhelmingly characterized by substantial emigration, whereas migration from the FSM and the Marshall Islands remains more limited but is now growing quickly. Once again,

data on the number of Micronesians overseas are often merely crude guesstimates. Various estimates have been made of the number of Palauans overseas, ranging from two thousand to more than four thousand (Connell 1983c:22), and the higher figure now seems increasingly likely. Palauans have long had a reputation for being competitive and have migrated "with a special nomadic zeal, searching not just for work but for higher paying and more prestigious employment" (Hezel and Levin 1990:45). About half of these overseas migrants are in Guam, some at the university, and there are probably more than one thousand in the US, mainly in Hawaii. The remainder are principally in Saipan (in the Northern Marianas) or in the FSM. By contrast there are not more than about one thousand migrants from the Marshall Islands in the US or Guam, but the number of migrants from the FSM is growing very rapidly.

Few Micronesians, especially from outside Palau, have skills or language ability that would give them access to employment in anything other than the very lowest levels in overseas labor markets. The expansion of tertiary education and the signing of the CFA have not altered this situation significantly. The impact of education on out-migration has been intensified by the more recent expansion in the number of Micronesians attending college, the "education explosion" witnessed by Hezel (1979a). For example, in the case of Namoluk atoll (FSM), between 1971 and 1976 the number of migrants in the US increased from four to twenty-three as a direct result of new educational opportunities, to the extent that "going to the U.S.A. for college and junior college education has become the latest status symbol of educational achievement for Namoluk young adults" (Marshall 1979a:7). The number of young people from Chuuk in college jumped from forty-nine in 1970 to over six hundred in 1979, when the surge to college reached its peak (Hezel and Levin 1990). Micronesians, these "Island Voyagers in New Quests" (Workman et al. 1981), have expanded their horizons and consequently the potential for acculturation into modern Western urban life-styles. Most college students are undertaking general academic college educations of little potential direct value within Micronesia, despite half-hearted attempts to use scholarships to direct students into more appropriate fields.

The signing of the CFA gives Micronesian citizens unrestricted access to the US. The compact provides that citizens "may enter into, lawfully engage in occupations and establish residence as a non-immigrant in the United States and its territories and possessions." This has already encouraged a movement of some of those with skills who cannot find

government employment (Sablan et al. 1989), more permanent residence of students, and rapid migration from Chuuk, especially to Saipan and Guam. In the two years following the signing of the CFA, around two thousand Chuukese alone have migrated from the FSM to Guam and Saipan (Hezel and McGrath 1989); this may be merely the start of a more comprehensive movement. Others have now joined the US military. As the domestic economy worsens in the future, access to the US labor market will become more widespread, so it is probable that the international migration situation in Micronesia will come to resemble that of such Polynesian states as American Samoa and the Cook Islands, situations that are beginning to be seen as partial models for the future direction of Micronesia. Eventually Micronesians resident in the US may outnumber "the folks back home" (Marshall 1979a:10-11), a situation that already exists in Niue and the Cook Islands. Moreover, even to attempt to retain skilled Micronesians in Micronesia may necessitate providing salaries at close to US levels for a small number, and hence create enormous disparities between their incomes and those of other Micronesians (cf. Schwalbenberg 1982:31). The alternative is to enable returning migrants, like the Chuukese graduates, to find an environment in their home islands where a satisfactory balanced economic and social development is possible. This will not be easy, especially at prevailing population growth rates, and policies contemplated to reduce the brain and skill drain (Connell 1983a:48) appear unlikely to be successful. Moreover emigration to the US is viewed as a necessary future safety valve and was deliberately provided for in negotiations with the US government over the CFA, hence "future emigration . . . far from being seen as a menace that threatens to deplete the islands' human resources, is counted upon as an essential element in the Micronesian states' strategy for economic and political survival" (Hezel and Levin 1990:42). As this increasingly and inevitably occurs, the final remittance element of the MIRAB political economy will fall into place.

Though emigration has increased in the past two decades it has been numerically balanced by an inflow of skilled migrants. A major problem throughout Micronesia is the shortage of skilled labor. A 1980 United Nations mission drew particular attention to the lack of Micronesian doctors and skilled maintenance workers (especially in construction and engineering); there is also a lack of qualified managers and accountants, machine operators, and entrepreneurs. This is compounded by a Micronesian absentee rate of 25 percent or more in many jobs. Related to this is the situation where young Micronesian graduates are attracted to government employment but are less interested in

entering the teaching profession (United Nations 1980:75) where regular attendance is necessary. Consequently many workers are imported from overseas in areas either where skills are unavailable or where Micronesians are unwilling to work at the prevailing wage rate (especially in the construction industry). Alien workers offer substantial advantages in higher productivity and reliability and offer employers flexibility in discharging unsatisfactory workers and in obtaining overtime work. Excluding the special case of Kwajalein (where more than two thousand Americans are employed and many families are present) the largest group of migrant workers are from the Philippines, followed by the US, South Korea, and Japan. Although data on these migrant workers (and their families) are inadequate it is apparent that at the start of the 1980s there were about five hundred migrant workers employed in the FSM, about six hundred in Palau, and two hundred in the Marshall Islands, mainly in the construction industry and fisheries (Connell 1983a, 1983b, 1983c). These numbers have not subsequently fallen significantly, despite concern attached to such high numbers (representing up to a quarter of the private-sector wage and salary work force) over the possibility of their gaining permanent residence. The structure of employment is thus paradoxically similar to that of several countries in the Middle East, though there a construction boom followed a period of rapid economic growth. In the formal sector, government employment is predominantly Micronesian while other formal-sector employment is increasingly taken up by aliens, mainly at lower wage and salary rates. Micronesian preference for government employment (or emigration), inadequate skills, low wages in the private sector, and employer preference for reliable labor (Connell 1983a:61) have prevented localization of the work force.

Conclusion

Although greater economic self-reliance has always been the avowed goal of Micronesian leaders, and such sentiments have often been committed to print in the vague documents that passed for development plans in the past two decades, it is readily apparent that the three new island states are now in a situation of such extreme dependence that they have passed the point of no return. Indeed, as the late president of Palau, Haruo Remeliik, stated, "we have to educate the people to the need for sacrifice. So we . . . will have to use dependency to achieve self-sufficiency" (quoted in Connell 1983c:7). This dependency was heightened by the increase in federal funding in the 1970s, the resultant

expansion of the bureaucracy and the "education explosion," and the predominantly front-end loading of CFA funding. Consequently, for the fifteen-year period of the compact there seems little prospect of any genuine increase in self-sufficiency, despite a volume of rhetoric, and, as time goes by and emigration increases, as in the Cook Islands and Niue, the prospects will become even dimmer.

Each of the three states demonstrates broadly similar problems--massive dependence on cash flows from America and a resultant dependence on primarily American commodities alongside a very large public sector and a small private sector. Material aspirations have gone far beyond the ability of the local economy to support them. The continuation of high and rising aspirations and limited local resources in a remote region, characterized by massive distances even within states and high population growth rates, has produced tasks of development planning that are greater than anywhere else in the Pacific. Any development strategies will demand extensive external funding and expertise for many years, a situation that is written into the CFA. There are variations from state to state. In the FSM the extraordinary distances, and conflict and competition between the component states (where separate languages and traditions exist) over access to power and resources, make the task more difficult. There have been demands for separate statehood from Faichuk, in the western Chuuk lagoon, and Yap may attempt to secede from the FSM, where the more impoverished Chuuk State is regarded as hindering development in other states. In both the Marshall Islands and Palau there are similar frictions and rivalries between different regions, which have been particularly violent in Palau due to the lengthy delay over the signing of the CFA and conflicts over government employment in this highly urbanized state. In the Marshall Islands extreme inequalities of income distribution, fueled by compensation payments, have contributed to tension.

The problems of development in Micronesia illustrate in extreme form those of other small island states in the Pacific region: extremely limited resources and high population densities on small, remote, and scattered islands; great distances from markets (which increase the cost of imports and make exports expensive); a small domestic population (and hence markets) with limited skills, which minimizes any slight possibility of import substitution industries; costly imported energy dependence; a large, unproductive, and inefficient bureaucracy; diseconomies of scale and high costs of infrastructure; massive trade deficits; and vulnerability to hazard, a situation that may worsen in future years (Connell 1989). The inherent problems of economic development are

further complicated, firstly, by a population that is growing more rapidly than perhaps anywhere else in the South Pacific region (thus resulting in heavy pressure on limited services, a high rate of unemployment, and social problems in urban areas); secondly, Micronesian societies are characterized by rank and there are intense local and regional rivalries, including tensions between high islands and atolls; and, thirdly, by the overlay of an American colonial system (within the UN trusteeship). This system has resulted in an orientation of values, through the education system, to employment in the urban, bureaucratic system rather than in the private sector, especially in directly productive activities such as agriculture and fisheries. It has also established a social and political environment that attaches high priority to the liberty of the individual, which limits the possibility for regulating such issues as population movement, access to employment, and the structure of education. These conditions have contributed to an exceptionally poor growth record concurrent with rapidly and continuously rising expectations, contributing to problems of urban unemployment and reinforcing the orientation eastwards, to what is still widely referred to as the "mainland."

In every state there is now an enormous difference between the center and the outer islands; in Palau these differences occur no more than a few miles from Koror. The term "outer islands" has become a Marshallese phrase; in historic times there was no need for such a distinction. In contemporary times the distinctions are enormous and a United Nations mission to the TTPI area commented that "throughout Micronesia the outer islands have been almost totally neglected in the development process, causing serious problems for the people living there" (United Nations 1980:63). Comparison of outer-island development strategies in the Marshall Islands and French Polynesia demonstrates that government interest in outer-island development is much greater in French Polynesia but, more particularly, that the key elements in outer-island development there have been the provision of a communications infrastructure, support for copra through price subsidies (this being the main resource of the islands), and extensive research on fisheries development (Pollock 1979). In the Marshall Islands copra production has never been subsidized and prices favor production in Majuro rather than the outer islands, while sea and air freight rates are a disincentive to produce marketing from outer islands, especially for perishables.

Everywhere there are enormous challenges to decentralization through urban bias in the provision of employment, education, and infrastructure and hence also in income and social amenities. The prin-

cipal constraint to decentralization and to economic development generally is that of attitudes, requiring a fundamental change that would allow such policies as wage constraints, raised taxation (on imports and wages), and so forth--a change that is extremely difficult to achieve in small, democratic countries where the majority of the population are now urban dwellers. Nowhere is this more so than in Palau (Connell 1983c:28). This underlying constraint must be considered in association with a second, related constraint: the massive and long-term preference for government employment in the center, where most conditions are superior. Moreover, perhaps over half the urban residents were born there and, although many have strong rural ties, all these factors combine to contribute to considerable inertia and the self-sustaining nature of urban expansion.

The prospects of any significant decentralization in the three states are slight to nonexistent. Prospects for development outside the towns are likely to depend on the retention of the present rural population (and already there are few remaining skilled or educated Micronesians there), by introducing policies that emphasize all aspects of rural development and reduce the present urban bias (from pricing policies on both domestically produced and imported produce, infrastructure provision, electricity and housing subsidies, wage rates, etc.). Any of the prospective large-scale agricultural development projects, though, may nevertheless necessitate some import of labor. It is ironic that Palau--which has one of the largest land areas in Micronesia, a relatively low population density (about thirty-six persons per square kilometer) and fertile soils, and consequently has greater potential for agricultural development than elsewhere in Micronesia--has so far been the least able to legally realize this potential.

For a long period, especially during the 1960s, "what stood for economic development . . . was fundamentally a cosmetic exercise" (Petersen 1976:42). Both the important Nathan and Solomon reports were principally aimed at directing Micronesia into permanent integration with the US; the Nathan report encouraged the centralization of the population in district centers where they might fit in better with government social benefits and employment schemes. While this policy never became official practice it underlined the reality of development based on the expansion of government employment and welfare payments. Thus the prospects for reversing a structure of development planning that was in some respects established in Japanese times, emphasized under the US administration, and only rarely questioned even in the past decade (as other Pacific states gained their indepen-

dence) are extremely poor. Self-reliance has become no more than the attempt to establish a guaranteed income from any possible source: "Micronesia's meal ticket has become its rights, not its resources, and economic development has lately become a superfluity" (Hezel 1979b: 7). A service economy, fueled by government salaries, cannot become a productive economy without motivation. Thus "self-reliance . . . will mean reliance by Micronesians upon their own abilities to negotiate what sums of money they need in return for whatever marketable rights they are willing to surrender. . . . It could be that the course Micronesian leaders are plotting is the only viable one at this time" (ibid.). The future appears to be one of increased rentier status.

It is increasingly improbable that any of the new island states can achieve a significantly greater degree of political, social, and economic self-reliance. The few available options are diminished by new aspirations that have resulted in changes in attitudes toward traditional agriculture (resulting, for example, in a decline of taro cultivation) and some loss of skills and knowledge (principally as modern "school" knowledge replaces local knowledge) that enable survival and success in environments that are often threatened by hazard. Each state does have some capacity for policy formation and is capable of moving away from the present massive dependence on aid and the resulting trading imbalance. The elements of such a policy direction are clear (Connell 1986: 55-56) but are unlikely to be chosen, especially where emigration provides an unrestricted option. Given the constraints of more than lingering demands for the prestige associated with modernization, Westernization, and urban-industrial development and the difficulties attached to establishing rural projects (which are rarely prestigious), and a situation where concerted comprehensive policy formation in loosely structured, democratic states is already difficult, the problems attached to the development of new policy orientations are apparent. In a situation where the prospects for economic growth are exceptionally limited the difficulties are much greater.

A recent element of politics and development in Micronesia is the increasing orientation towards the Pacific states south of the equator where traditional values are much more evident. The possible decline of American aid and technical assistance has prompted an increasing southwards orientation to participate in regional organizations such as the South Pacific Forum Secretariat and the South Pacific Commission, and, more generally, to examine the development experiences and strategies of other small states, especially neighbors such as Kiribati. The FSM has become a full member of the South Pacific Forum and has

exchanged diplomatic recognition with Fiji, Australia, and New Zealand. A handful of students are now at regional institutions, such as the University of the South Pacific (USP) and the University of Guam, that offer courses more appropriate to regional needs and that cater more appropriately to the needs of students from small countries, whose high school training is not comparable with that of students from metropolitan countries. Nevertheless, though four years ago it was possible to suggest that states like the FSM would increasingly resemble those South Pacific states that were attempting to move towards greater self-reliance (Connell 1983a:55), it is now more likely that the Micronesian states will move, if possible, even further away from self-reliance.

The terms of the Compact of Free Association indicate that the level of US assistance will fall, so the three states must diversify their sources of aid, achieve greater self-reliance in some economic sectors, export substantially more, or reduce government expenditure; otherwise they will suffer a decline in living standards. In the Marshall Islands the income from the rent of the Kwajalein missile range will cushion the impact of reduced assistance and Palau may lease land on Babeldaob for military use. Outside funding in the Marshall Islands also includes war reparations, nuclear-testing reparations, and fees for fishing rights, none of which can be considered guaranteed sources of future income and none of which relate to productive activities. The possibility of selling or leasing one of the unpopulated northern atolls for Japanese nuclear-waste disposal was considered and rejected in 1981 as a means of generating external funds and more recent discussions have involved the possibility of garbage disposal. So far this too has been rejected. Indeed little has changed in the last two decades; in Palau as elsewhere in Micronesia, "As the territory economy is based on funds from the United States Treasury, political activities focus on ways to extract even larger amounts of American funds and do not try to increase income from exploitation of natural resources of the area. Local people have neither the expertise nor the money to do otherwise (McGrath 1972: 145).

Already, especially in impoverished Chuuk State, there are demands for renegotiation of the compact and a growing perception that the commonwealth status negotiated by the Northern Marianas, also once part of the TTPI, would have been and might later be more appropriate for the FSM. The necessity to produce a new development plan in accordance with the negotiation of the compact meant that the first real development plans, for the Marshall Islands and the FSM, only became final in 1987. These constituted programs and projects rather than gen-

uine policies, hence the direction of development policy has not yet been established and, in a sense, the states have reached an "advanced stage" in development, in terms of the structure of employment, without ever confronting and considering very basic questions relating to the structure of the national economy.

Moreover the ability, and also the will, to effect significant changes is limited. A relatively small number of individuals are powerful, receive high salaries (or business incomes), are well traveled (especially to the US), and have little interest in significantly changing the structure of dependence. There are also an increasing number of relatively young and educated Micronesians who recognize this situation but merely want to change their own position within the system. Finally, there is an extremely small group who recognize the long-term problems of increased dependence and are interested in considering the possibility of moving the trajectory of development towards self-reliance. Although development plans may articulate the aspirations of this latter group, development in Micronesia is also shaped in the context of an American free-enterprise system (without guidance or direction) and an overdeveloped legal system (which combine to remove local initiative and responsibility) within a democratic system where decisions are being made by a few in terms of short-term goals, with a largely uninformed public. Economic development in Micronesia faces gloomy prospects.

NOTE

1. All sums are given in US dollars.

REFERENCES

Alexander, W. J.
1978 "Wage Labor, Urbanization, and Culture Change in the Marshall Islands-The Ebeye Case." Ph.D. thesis, New School for Social Research, New York.

Bertram, I.
1986 " 'Sustainable Development' in Pacific Micro-economies." *World Development* 14:809-822.

Bertram, I., and R. Watters
1985 "The MIRAB Economy in South Pacific Microstates." *Pacific Viewpoint* 27:497-519.

Celis, A.
1975 "Micronesia's Food Imports and Exports." *Micronesian Reporter* 23 (4) : 20-23.

Connell, J.
1983a *Migration Employment and Development in the South Pacific. Country Report No. 3. Federated States* of *Micronesia.* Noumea: International Labour Organization and South Pacific Commission.
1983b *Migration Employment and Development in the South Pacific. County Report No. 8. Marshall Islands.* Noumea: International Labour Organization and South Pacific Commission.
1983c *Migration Employment and Development in the South Pacific. Country Report No. 13. Palau.* Noumea: International Labour Organization and South Pacific Commission.
1986 "Population, Migration, and Problems of Atoll Development in the South Pacific." *Pacific Studies* 9 (2): 41-58.
1987 *New Caledonia or Kanaky? The Political History of a French Colony.* Canberra: National Centre for Development Studies.
1989 "The Greenhouse Effect: A New Challenge to Island States." UNESCO, Sydney. Mimeo.

Crocombe, R.
1971 "Review Article: Koro." *Journal of the Polynesian Society* 80:509-520.

Hanlon, D.
1988 *Upon a Stone Altar.* Honolulu: University of Hawaii Press.

Hempenstall, P. J.
1978 *Pacific Islanders under German Rule.* Canberra: Australian National University Press.

Hezel, F.
1976 "The Micronesian Dilemma." *Journal de la Société des Océanistes* 50: 110-112.
1979a "The Education Explosion in Truk." *Pacific Studies* 2 (2): 167-185.
1979b "The New Formula for Self-Reliance." *Marianas Variety,* 5 July, p. 7.
1983 *The First Taint of Civilization.* Honolulu: University of Hawaii Press.
1984 "Cultural Patterns in Trukese Suicide." *Ethnology* 23: 193-206.
1989 "Suicide and the Micronesian Family." *The Contemporary Pacific* 1:43-74.

Hezel, F., and M. Levin
1990 "Micronesian Emigration: Beyond the Brain Drain." In *Migration and Development in the South Pacific,* ed. J. Connell, 42-60. Canberra: National Centre for Development Studies.

Hezel, F., and T. B. McGrath
1989 "The Great Flight Northward: FSM Migration to Guam and the Northern Mariana Islands." *Pacific Studies* 13 (1): 47-64.

Hezel, F. X., D. H. Rubinstein, and G. M. White, eds.
1985 *Culture, Youth, and Suicide in the Pacific: Papers from an East-West Center Conference.* Working Paper Series. Honolulu: Pacific Islands Studies Program, Center for Asian and Pacific Studies, University of Hawaii.

Johnson, G.
1990 "Ebeye: From Pacific Slum to Isle Showcase." *Pacific* 15 (1): 30-39.

Kiste, R. C.
1968 *Kili Island: A Study of the Relocation of the Ex-Bikini Marshallese.* Eugene: Department of Anthropology, University of Oregon.
1974 *The Bikinians: A Study in Forced Migration.* Menlo Park: Cummings Publishing.
1977 "The Relocation of the Bikini Marshallese." In *Exiles and Migrants in Oceania,* ed. M. D. Lieber, 81-120. Honolulu: University Press of Hawaii.
1986 "Termination of the U.S. Trusteeship in Micronesia." *Journal of Pacific History* 21:127-138.

Labby, D.
1976 *The Demystification of Yap.* Chicago and London: University of Chicago Press.

Levin, M.
1976 "Eauripik Population Structure." Ph. D. thesis, University of Michigan.

Marksbury, R.
1980 "Micronesian Dependency: A Simple Matter of Pragmatics." Paper presented at Association for the Study of Anthopology in Oceania meeting, Galveston.

Marshall, M.
1972 "Where Have All the Young Folk Gone? Gone to Truk Everyone." Unpublished paper, copy at the South Pacific Commission, Noumea.
1979a "Education and Depopulation on a Micronesian Atoll." *Micronesica* 15 (l-2): l-11.
1979b *Weekend Warriors: Alcohol in a Micronesian Culture.* Palo Alto: Mayfield.

Marshall Islands
1978 *National Development Program, 1981-1995.* Majuro.

McGrath, W.
1972 "The Effects of Urban Drift in the Palau District of Micronesia." In *Change and Development in Rural Melanesia,* ed. M. W. Ward, 130-150. Canberra: Australian National University Press.

Migvar, L.
1975 "Agricultural Production for Self-Sufficiency in Micronesia." *Micronesian Reporter* 23 (4): 9-11.

Nevin, D.
1977 *The American Touch in Micronesia.* New York: Norton.

OTA (Office of Technology Assessment). US Congress
1987 *Integrated Renewable Resource Management for U.S. Insular Areas.* OTA-F-325. Washington: US Government Printing Office.

Peattie, M.
1988 *Nan'yo: The Rise and Fall of the Japanese in Micronesia, 1885-1945.* Honolulu: University of Hawaii Press.

Peoples, J.
1978 "Dependence in a Micronesian Economy." *American Ethnologist* 5:535-552.

Petersen, G.
1976 "Ponapean Agriculture and Economy." Ph.D. thesis, Columbia University, New York.

1979 "External Politics, Internal Economics, and Ponapean Social Formation." *American Ethnologist* 6:25-40.

Pollock, N.
1979 "Economie des atolls." *Bulletin de la Société des Océaniennes* 17:463-476.

Rizer, J.
1985 *Pohnpei: Household Income, Expenditure, and the Role of Electricity*. Honolulu: Pacific Islands Development Program, East-West Center.

Rody, N.
1976 "Food Consumption in Micronesia." *Micronesian Reporter* 24 (4): 20-24.

Rubinstein, D.
1983 "Epidemic Suicide among Micronesian Adolescents." *Social Science and Medicine* 17:657-665.

Sablan, J., et al.
1989 "The Impact of the Foreign Workers on Truk State's Plan for Economic Development." Xavier High School, Truk. Mimeo.

Schwalbenberg, H.
1982 "Migration." *New Pacific* 7 (2): 31.
1984 "The Economic Implications of Free Association." In *Past Achievements and Future Possibilities,* 89-99. Majuro: Micronesian Seminar.

Severance, C.
1980 "Food for Piis: Interests, Linkages, and the Impact of Federal Feeding Programs on a Micronesian Atoll." Paper presented at Association for the Study of Anthropology in Oceania meeting, Galveston.
1984 "FSM after the Compact: New Linkages and Possible Trends in Education, Outmigration, and Elite Replacement." Paper presented at Association for the Study of Anthropology in Oceania meeting, Molokai.

Trumbull, R.
1977 *Tin Roofs and Palm Trees.* Canberra: Australian National University Press.

TTPI (Trust Territory of the Pacific Islands)
1976 *An Indicative Economic Development Plan for the Marshall Islands District.* Saipan.

United Nations
1980 *Report of the United Nations Visiting Mission to the Trust Territory of the Pacific Islands.* Washington.

Weisgall, J.
1980 "The Nuclear Nomads of Bikini Atoll." *Foreign Policy* 39:74-98.

Wiens, H. J.
1962 *Atoll Environment and Ecology.* New Haven and London: Yale University Press.

Workman, R., et al.
1981 *Island Voyagers in New Quests: An Assessment of Degree Completion among Micronesian College Students.* MARC Miscellaneous Publication, no. 4. Guam: Micronesian Area Research Center, University of Guam.