

# An economic survey of Tuvalu

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Tuvalu faces a wide array of economic development constraints, and has limited opportunities for creating new wealth-generating activities. However, Tuvalu has remarkably good socioeconomic indicators by Pacific developing economy standards: poverty is largely non-existent, life expectancy (at 70 years) is high, adult literacy is near universal, and school enrolments are among the highest in the region. Tuvalu has also had a strong democratic tradition. This apparent paradox of achieving enviable socioeconomic living standards in the face of evident economic development constraints is explored in this survey.

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Tuvalu is the world's smallest developing nation state in terms of a combined measure of resident population and contiguous land resources. Its current population is around 9,500 persons, based on the preliminary results of the 2002 Census, of whom about 52 per cent (nearly 5,000) now live on the two main islands of Funafuti Atoll. The total land area of Tuvalu is only 25.9 square kilometres, comprising nine island groups. Some of these are made up of many tiny islets, such as Funafuti Atoll, which consists of the two main, inhabited islands (Fongafale and Amatuku) and around two dozen other islets which are mostly uninhabited. The islands of Tuvalu have extremely infertile soils and are all low lying, with elevations generally less than three metres above sea level.

Consequently, Tuvalu is constantly at considerable risk from natural disasters caused by cyclones and *tsunamis*, and potentially from longer-term environmental risks such as rising sea levels.

Tuvalu is extremely isolated, even by South Pacific standards. It is recognised by the United Nations as one of the world's least developed countries, and receives considerable development assistance from the international community. Since 1970, the average annual aid flow per capita to Tuvalu has been estimated at around US\$650 (1998), the highest for all the independent nations in the South Pacific region (Hughes 2003). Tuvalu thus faces the familiar array of economic development constraints common to most South Pacific

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countries, including limited natural resources, fragmented land areas, small domestic markets with weak private sectors, isolation from major world markets (increasing the costs of trade) as well as high internal transport costs, susceptibility to natural disasters, inadequate infrastructure, an inadequately skilled workforce, and often inappropriate political, economic and administrative structures (in part, at least, 'inherited' from their colonial past).

Yet despite this formidable array of constraints to economic development, Tuvalu has surprisingly good socioeconomic indicators. Conventional poverty is largely non-existent, though arguably its citizens suffer from 'poverty of opportunity', in currently fashionable international development assistance parlance (United Nations 2002). Public health standards are generally good, and life expectancy (at 70 years) is quite high by Pacific island standards (Pacific Islands Forum Secretariat 2002). Adult literacy is near universal, and school enrolments are among the highest in the region. Conventional social problems such as violent crime, illegal substance abuse and prostitution effectively do not exist. Tuvalu has also had a strong democratic tradition as an independent nation state since achieving independence from the United Kingdom in 1978. This apparent paradox of achieving enviable socioeconomic living standards in the face of evident economic development constraints is explored in this survey.

At the outset, however, it seems appropriate to address the question of why bother to study the economy of Tuvalu, given its minute size and almost complete insignificance in global terms. There are at least two fundamental reasons. First, Tuvalu exists as an independent nation state; it has done so for 25 years, and so far as can be judged, it will continue to do so. Despite all its apparent environmental vulnerabilities,

its paucity of natural resources, and the evident array of economic development constraints, the economy of Tuvalu is surprisingly resilient. Even in the absence of continuing support from the international community, life in Tuvalu would undoubtedly be harsher, but equally undoubtedly it would continue. Second, as the world's smallest developing nation, Tuvalu provides a 'microcosm' of economic development experience in an open, democratic society, which potentially can contribute to the global debate on economic development issues.

**Basic economic data**

Readily accessible economic data on Tuvalu are extremely limited and the published data need to be treated with considerable caution. For example, one usually reliable source (Pacific Islands Forum Secretariat 2002) quotes Tuvalu's GDP in 1998 as US\$6 million in current prices, and government expenditure an unusually high 95 per cent of GDP (which is consistent however with the relatively substantial, externally sourced income of the country). On the other hand, another usually reliable source asserts that Tuvalu's 1998 GDP in current prices was more than double this estimate, at around US\$13 million (Asian Development Bank 2002). Similarly, there are considerable differences in the published statistics on GDP per capita in Tuvalu. There are various reasons for this somewhat confusing state of affairs, including inadequate statistics-gathering capacity in Tuvalu (for example, as of mid 2003, the most recently published *Quarterly Statistical Report* by the Government of Tuvalu was for the December quarter 2001); genuine difficulties in data collection and interpretation, such as rapidly changing exchange rates, in particular between the Australian dollar (the currency of Tuvalu) and the US dollar; variations in population estimates; and

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issues such as the most appropriate means of placing an accurate monetary value on the important subsistence sector.

Notwithstanding these data difficulties, the broad economic picture is relatively clear. GDP per capita in 2002 is estimated to be around US\$1,350 in current prices (Asian Development Bank 2003), though income growth per capita has been relatively modest in recent years (1998–2002), at around 1–3 per cent per annum. Tuvalu's GDP per capita is consequently significantly higher than much larger Pacific island nations such as Kiribati, Vanuatu, Solomon Islands and Papua New Guinea and broadly comparable to GDP per capita in Samoa and Tonga. A better measure of economic welfare in Tuvalu would be GNP per capita, given the substantial external income. However, published GNP data for Tuvalu are not available, and estimates that have been made, such as Hughes (2003) at US\$1,100 per capita in 2000 dollar purchasing power parity, appear unconvincing. The consumer price index (CPI) shows inflation has been restrained over the recent five-year period (1998–2002) at 1.5–3 per cent per annum on average. Other conventional economic data (such as balance of payments, exports/imports, official reserves, and external debt/debt servicing) are not available for recent years.

Concerning fiscal policy, the Government of Tuvalu broadly operates on the 'balanced budget' principle, although it appears to have produced modest budget surpluses in recent years. However, much care is warranted when interpreting the accounts of government, in part because they are usually audited well in arrears, appear to contain discrepancies and typically are subject to sometimes substantial revisions. Further, recurrent revenue estimates are not straightforward, and are split into 'underlying revenue' (taxes, duties and the like) which is reasonably predictable, and 'windfall revenue' which is far less predictable.

Examples of the latter include fishing and telecommunications licence fees, some limited donor budgetary support grants (which may be, in part at least, conditional), and Dot TV marketing agreement revenues (of which more below). A further complicating factor is the arrangements for drawdowns to recurrent revenue from Tuvalu's financial reserves, in particular, the Tuvalu Trust Fund and the Consolidated Investment Fund. Such contributions to recurrent revenue can vary widely from year to year, in part related to investment returns achieved by the Tuvalu Trust Fund. Over the recent five-year period (1998–2002), the reported average annual recurrent revenue has been around A\$34 million (Tuvalu 2003).

The reported expenditures of government are similarly not straightforward, and the published data appear to contain significant discrepancies (Asian Development Bank 2002). A substantial portion of expenditures is reasonably predictable, in particular that related to maintaining the civil service. However, other expenditures are far less predictable, including capital expenditures, and various operating grants and transfers. Over the five year period 1998–2002, the reported average annual expenditure (operating and capital expenditure) has been around A\$30 million (Tuvalu 2003), which indicates that a modest surplus has been achieved. Nevertheless, as noted earlier, caution is appropriate in interpreting the published accounts.

**The subsistence sector**

The subsistence sector (or non-monetary economic activity) refers to the production, consumption and transfer of goods and services outside the monetary system (Fisk 1995), which is also often referred to as traditional economic activity. Typical examples in Tuvalu include fishing (in many forms such as ocean, reef, lagoon, and

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collection); agricultural activities including fruit and vegetable gardening, toddy (coconut tree sap) collection, copra production and livestock (chickens, ducks, and pigs); handicrafts of many types; house building; and various 'home' processing activities such as for toddy and drying/salting fish. As recently as the late 1980s/early 1990s, the proportion of the population of Tuvalu relying largely or wholly on subsistence for their basic needs was estimated at some 75 per cent (Fisk 1995). The share of subsistence production in GDP in 1990 was estimated to be around 26 per cent (Tuvalu 1995).

As in most other Pacific island countries, subsistence production in Tuvalu is now essentially in a mixed subsistence-cash mode, and there would be few households totally reliant on subsistence production. Equally, however, there would be very few Tuvaluan households that do not engage regularly in subsistence production in one or more of its various forms. It is readily apparent that subsistence production continues to play a significant role in the economic structure of the country, and provides an element of resilience for the national economy. Due to the ease of entry to (and exit from) subsistence production, conventional unemployment is essentially non-existent in Tuvalu, as effectively all citizens can participate in subsistence production in the absence of opportunities for cash-earning activities. There seems no doubt that subsistence production will continue to play a significant role in the national economy of Tuvalu for the foreseeable future.

### **The monetary sector**

Turning now to the monetary sector, in which effectively all citizens are now engaged, there appear to be five main sources of externally derived income: maritime employment; remittances from Tuvaluans working abroad;

income from a range of special activities such as Dot TV; international aid; and income from Tuvalu's national reserves, in particular the Tuvalu Trust Fund. In addition, there is a range of other external income sources which currently are quite small, including commodity exports such as copra, philatelic products, tourism, foreign private investment, and various other minor sources such as international church and ecumenical groups. Each of the five main sources of income is briefly reviewed below.

### **Maritime employment**

The fundamental importance of maritime (merchant marine) employment for the economy of Tuvalu is not widely understood, and perhaps even underestimated. As of mid 2003, industry sources estimate that around 450 Tuvaluans were working abroad in maritime employment, up from around 275 in the early 1990s (Asian Development Bank 2002). Industry sources estimate that this employment currently generates about A\$5 million per annum in remittances. Tuvaluan seamen are typically trained at the Tuvalu Maritime Training Institute (TMTI) located on Amatuku, the second main island on Funafuti Atoll. Graduates from TMTI are in demand because of their recognised seafaring skills and aptitude; they have good English language skills; and they are generally considered to be reliable and diligent workers. While undoubtedly there are some competitive pressures arising from other lower wage sources (especially in Asia), industry sources consider that the medium to longer-term prospects for continuing maritime employment of Tuvaluan seamen are solid.

### **Other external remittances**

Remittances from Tuvaluans working abroad in addition to seamen continue to be a significant source of cash income, in addition to providing 'in kind' income through goods

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imported from overseas workers. Sources of employment include Tuvaluans engaged in phosphate production on Nauru (and formerly in Banaba), as well as those employed in New Zealand under special work visa arrangements. Other sources include Tuvaluans who have migrated abroad (such as to New Zealand and Australia), and/or have been able to settle abroad such as after completing study courses or marriage to foreigners. Recent data on external remittance flows are not readily available. The 2002 Census contained questions on remittances and should provide useful information when results become available, likely to be in 2004. Data from the late 1980s indicate that around 17 per cent of all households received cash incomes from foreign remittances (Tuvalu 1988). While comparatively little is known about remittances, the conventional wisdom is that the flow of remittances from workers abroad will decline (the 'remittance decay' hypothesis). However, recent studies of the remittance behaviour of Tuvaluan migrants in New Zealand suggest that their remittances may be sustainable (see Simati and Gibson 2001).

#### Externally derived income from special activities

Tuvalu receives an interesting array of externally derived income from various sources, such as telecommunications licences, fishing licences and the Dot TV marketing agreement (and earlier, an 'investment passport' scheme). Income received from these sources is variable and difficult to predict. Undoubtedly, the most unusual and spectacular of these sources is the Dot TV marketing agreement, which reportedly yielded around A\$25 million in 2000 and an estimated A\$27 million in 2002 (Tuvalu 2003). Income from this source in 1999 and 2001 totalled A\$2.6 million, and future revenues (for 2003 and beyond) are currently

estimated at around A\$4.4 million per annum. It remains to be seen how sustainable this revenue source will be. The origin of this largesse is an accident of history. When the former Ellice Islands became an independent nation in 1978 (being formerly part of the United Kingdom colony of Gilbert and Ellice Islands), the traditional name (Tuvalu) for the nine island groups constituting the newly founded nation was adopted as the country's official name. In an ironic twist, the word 'Tuvalu' means 'eight together', since one of the nine island groups (Niulakita) was not permanently populated (Institute of Pacific Studies 1983). When internet abbreviations were allocated by country in the early 1980s, Tuvalu acquired the title to '.tv', which almost two decades later has become a valuable national asset.

Fishing licences to distant-water fishing nations (DFWN) provide another important source of external income, based on its tuna-rich exclusive economic zone (EEZ), generally estimated at around 900,000 square kilometres; although one source suggests a smaller EEZ for Tuvalu of around 760,000 square kilometres (Pacific Islands Forum Secretariat 2002). Tuvalu currently has Fisheries Agreements with the United States, Japan and the Republic of China (Taiwan). Reported income from this source, while variable (in part due to currency fluctuations between the US dollar, in which agreements with DFWNs are generally written, and the Australian dollar) averaged A\$8 million per annum over the five-year period 1998–2002 (Tuvalu 2003). The estimated income in the 2003 national budget from this source is lower, at around A\$5 million. While quite likely a sustainable source of income in the medium to longer term, informed observers have cautioned that the government should 'conservatively assess' future income streams from such fisheries agreements (Asian Development Bank 2002).

### International aid

As noted earlier, Tuvalu receives considerable aid from the international community (Tuvalu 2002). Currently, the major bilateral donors are Republic of China (Taiwan), Japan, Australia, New Zealand and the European Union. Other bilateral donors include Canada, France and South Korea. There is also a considerable array of multilateral donors, such as the Asian Development Bank, various United Nations agencies (such as UNDP, UNICEF, UNFPA and FAO), the World Health Organization, numerous regional agencies (such as the South Pacific Regional Environment Programme, Secretariat of the Pacific Community, Pacific Islands Forum Secretariat, Forum Fisheries Agency, and South Pacific Applied Geoscience Commission) and various others including the Commonwealth Fund for Technical Cooperation. The only notable exception to this pantheon of international actors is the World Bank group, of which Tuvalu is not a member. There is also active participation in Tuvalu by various international non-government organisations.

As generally recognised, some international aid is at best a 'mixed blessing' and some projects are effectively a waste of time and resources, both for Tuvalu and for the international donors involved. Notwithstanding these caveats, Tuvalu has benefited substantially from some effective international aid. Much of its current physical infrastructure (airport, wharves, public buildings, schools, hospitals, water supply, power generation, and so on) has been provided by international aid (the only notable exception being the excellent road network recently completed on Funafuti, which was funded entirely by Tuvalu). International aid also makes important contributions in a range of other areas, in particular in the education and health sectors, as well as providing valuable

support for agriculture, fisheries, environmental management and the like.

Putting aside the well known argument of the 'fungibility' of international aid, and contrary to the views of some observers (such as Hughes 2003), direct untied aid to Tuvalu (effectively, budget support) is quite modest, and presently confined mainly to the Republic of China (Taiwan); although even this source is currently endeavouring to attach conditionality. The European Union (EU) provides some quasi-budget support, but does so using a unique formula which requires the government to make matching contributions to the Tuvalu Trust Fund for such direct EU support to the national budget. Furthermore, these EU contributions are all for pre-agreed projects, and so are not in the nature of conventional budget support. It is difficult to estimate international aid flows to Tuvalu, either in terms of 'real value' to the country or in terms of direct expenditures on locally provided goods and services. One recent estimate of international aid flows to Tuvalu of around US\$650 (1998) per capita per annum since 1970 (Hughes 2003) appears to be too high. Another usually reliable source (United Nations 2002) reports annual average aid flows to Tuvalu over the decade 1990–2000 of just A\$70 per capita, which appears to be too low. Notwithstanding all the above qualifications and uncertainties, Tuvalu can quite reasonably assume that it will be a beneficiary of valuable support from the international community in the foreseeable future.

### The Tuvalu Trust Fund

In addition to the considerable array of international donors listed above, Tuvalu receives major financial support from the Tuvalu Trust Fund. This highly innovative fund was established in 1987, with initial support from Australia, New Zealand, South

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Korea and the United Kingdom (as well as from the Government of Tuvalu itself). The Fund has grown substantially since its opening value of A\$26,372,771, through further contributions from existing donors as well as from new donors such as Japan (and from *de facto* contributions from the European Union through the Government of Tuvalu) and from investment earnings. As of 31 March 2003, the Fund had an estimated market value of A\$71,488,682 (Tuvalu Trust Fund Advisory Committee Report 2003). Drawdowns from the Fund reportedly averaged over A\$7 million per annum in the four-year period 1998–2001 (Tuvalu 2003). Since then there have been no further drawdowns, due essentially to the recent low returns in the international equities market, which have limited growth in the Fund. Nevertheless, this fund provides a solid financial basis for the Government of Tuvalu.

### Economic development prospects

Tuvalu appears to have few options for developing new sources of wealth-generating activities. Considerable attention has been focused in the past on developing a local tuna fisheries industry, such as by large-scale, value-adding processing, and also by chilled tuna export ventures. To date, all such investigations have been stymied by inherent infrastructure constraints in Tuvalu, as well as by various other obstacles, and the short to medium term outlook for any successful developments in this field is not encouraging (Asian Development Bank 2002).

Similarly, studies have been conducted on tourism development potential in Tuvalu over the last decade. There appears to be little prospect in the short to medium term of significant progress in this economic sector (Tourism Council of the South Pacific 1997). In the very long term, opportunities could arise from the offshore mining of reportedly

substantial deposits of mineral-rich nodules; but such possible future activities remain highly speculative at best.

In the short to medium term, it would appear that the best foundation for a successful national economic development strategy for Tuvalu is to focus on those areas where it is currently successful, and to improve the overall effectiveness and efficiency of its domestic economy, in particular through various reforms in the civil service and improving the performance of the public sector generally, particularly the performance of its many state-owned enterprises including the

- National Bank of Tuvalu
- Tuvalu National Providence Fund
- Development Bank of Tuvalu
- National Fishing Corporation of Tuvalu
- Tuvalu Philatelic Bureau
- Vaiaku Lagi Hotel Corporation
- Tuvalu Electricity Corporation
- Tuvalu Media Corporation
- Tuvalu Telecommunications Corporation
- Tuvalu Maritime Training Institute.

There is also much that the government could do to better prioritise its expenditures, and reduce waste and inappropriate outlays. For example, substantial amounts of public money are wasted on the clearly excessive travel allowances paid to politicians and civil servants for overseas travel. Tuvalu also maintains a diplomatic office at the United Nations in New York at considerable expense (which seems both unnecessary and inappropriate). Government could also give more attention to better managing the aid received from the international community.

### **Economic development constraints**

In common with most other South Pacific developing nations, Tuvalu faces a wide array of economic development constraints, although these are generally accepted as being more extreme in Tuvalu than elsewhere in the region. There are still major physical infrastructure inadequacies in Tuvalu, related particularly to power and water supplies, sea transport facilities, and telecommunications networks. There are also recognised weaknesses in the supporting infrastructure, such as inadequately skilled health workers, and, to a lesser extent, weaknesses in the national education system. All these areas provide scope for improvements in the short to medium term, if not beyond, both by nationally funded efforts as well as with the support of the international community.

Concerning the country's physical environment, much has been reported on its apparent vulnerability. As a group of nine very low-lying islands, Tuvalu is generally believed to have existed in its current form for only some 2,000 to 4,000 years; which is an extremely short time in geological terms (Lane 1993). There continue to be regular reports that Tuvalu is in danger of being destroyed by rising sea levels, such as through the greenhouse gas/global warming phenomenon. Ironically, perhaps, the bulk of relevant data on this effect appears to suggest that in fact the reverse has been happening over the last decade at least; that sea levels around Tuvalu have been falling in recent years (Baliunas and Soon 2002). However, it seems undeniable that Tuvalu can rightly be considered to be more environmentally vulnerable than most developing nations, given its miniscule land resources, limited resource base, and susceptibility to natural disasters related to its geographic location and the low-lying nature of the country.

Ironically, however, perhaps the most substantial and immediate constraint to economic development is entirely man-made, and essentially self-inflicted. As noted earlier, Tuvalu has had an enviable democratic record since attaining political independence in 1978. The political structure has generally been lean; appropriate for a country of its very small size. Over the last decade, however, (and contrary to the first 15 years of independence) there has been a prolonged period of political instability, with frequent changes of government, prime ministers, and ministerial portfolios. As of mid to late 2003, this unfortunate state of public affairs continues, and undoubtedly has a deleterious impact on good economic governance in many ways, including delays in decision making by government; political expedience taking precedence in government decision making, with a resulting focus on short-term implications rather than taking decisions in the longer-term interests of the country; and a tendency towards a general malaise in the civil service as a result of these debilitating circumstances. Unfortunately, there appear to be few (if any) prospects in the short to medium term of a reversal of these regrettable circumstances, although equally there appear to be no prospects of anti-democratic forces taking hold.

### **Conclusion**

Tuvalu faces a wide array of economic development constraints, and has limited opportunities for creating new wealth-generating activities. However, in part by good fortune as well as by good management, and with considerable assistance from the international community, Tuvalu has surprisingly good socioeconomic indicators—certainly by South Pacific developing country standards. One of the explanations for this enviable state of affairs is the



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recognisably high sense of family and community obligations felt by its citizens, in addition to strong respect for moral and democratic behaviour. It is perhaps an irony that Tuvalu is generally seen as being quite conservative in international politics, and that one of the stated explanations for its long-term association with the Republic of China (Taiwan) is its traditional opposition to communism. Yet Tuvalu has quite a few characteristic features often associated with socialism, such as the well-entrenched and undoubtedly successful cooperative movement (in particular in the retail sector) as well as its commendable health and education systems, which are highly accessible. This strong tradition of guarding and promoting the social welfare of the nation (sometimes described as 'primitive' or 'island' socialism) could well provide useful lessons for other developing nations, not to mention the so-called developed nations of the world.

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