



UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

Vulnerability profile of Tuvalu

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Summary

The Ellice Islands separated from the Gilbert Islands, taking the name Tuvalu, in 1975. The territory gained independence from the United Kingdom on 1st October 1978. Tuvalu was admitted in the Least Developed Countries category in 1986.

Tuvalu met one graduation threshold (quality of life) in 1991, 1994 and 1997. It met another graduation threshold (GDP pc) in 2000, then two graduation thresholds (GNI pc; human assets) in 2003. It was not considered pre-eligible for graduation in 2003. Tuvalu again met two graduation thresholds (GNI pc; human assets) in 2006, thereby pre-qualifying for graduation. The country exceeded the same two graduation thresh

and islandness for the government and households alike (e.g. government subsidies in health and education, energy consumption, etc.). The continuous fragility of all financial balances (at macro and micro levels) owing to the unpredictability of revenue sources allows little or no progress in the people's living standards. For the government, matching uncontrollable revenue sources with irreducible recurrent expenditure is permanently a thorny issue, as the IMF noted in 2011.

Tuvalu's acute dependence on revenue sources beyond domestic control (mainly "unrequited transfers") underscores the importance, for the country, of being able to count on the greatest possible extent of concessionary financing in support of national efforts to maintain living standards. UNCTAD considers this as amply justifying continuation of LDC status.

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Vulnerability profile of Tuvalu

Section 1 of this country profile briefly describes the history of Tuvalu's technical qualification for graduation from Least Developed Country (LDC) status. Sections 2, 3 and 4 examine the situation of the country with regard to the three criteria for identifying LDCs, namely, the low-income criterion, the human capital weakness criterion, and the economic vulnerability criterion.

1. Historical context

Tuvalu was admitted in the category of Least Developed Countries in 1986. The

of "the two most economically vulnerable countries" under the Economic Vulnerability Index³.

The 2006 review of the list was the first occasion on which the CDP decided to consider Tuvalu pre-eligible for graduation, through the first valid observation of a

be regarded as "high". The report emphasized the "negligible primary income generated by productive domestic economic sectors", a statement subsequently summarized through the Committee's recognition of Tuvalu's "lack of productive activities". These factual observations brought the Committee to "question the sustainability of the present level of income", and to decide "not [to] recommend Tuvalu for graduation at the present review"⁵.

2. The situation of Tuvalu with regard to the low-income criterion

Graph 1 depicts the evolution of Tuvalu's distance to the graduation threshold relevant to the low-income criterion (which is based on a single indicator, namely, GNI

In the latest three years for which relevant data are available, GNI was greater than GDP in the following proportions, mainly as a result of remittances from seamen working abroad:

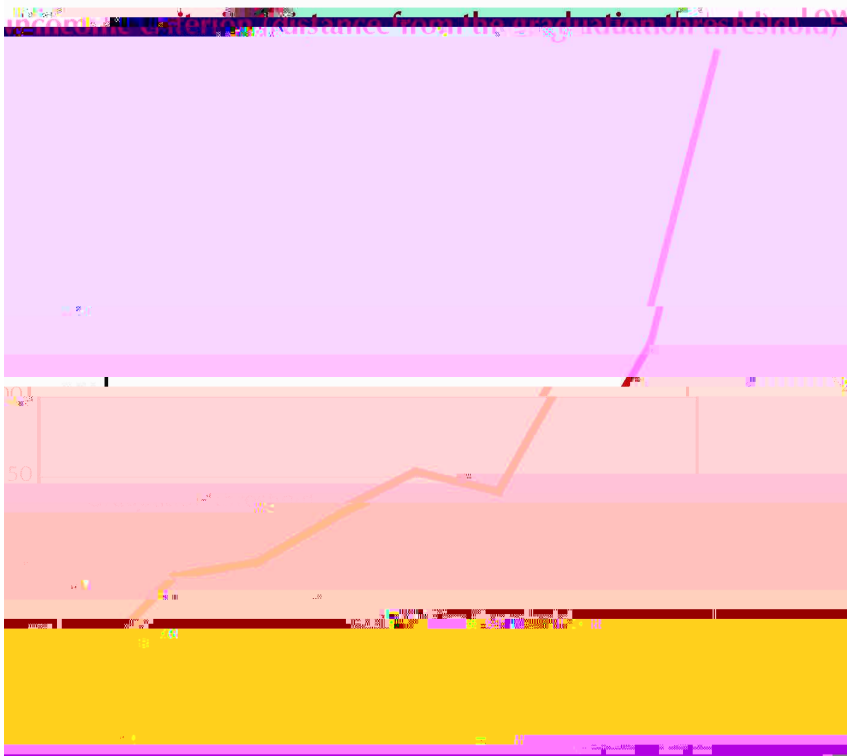
2008: by 62% according to the World Bank; by 61% according to the IMF

2009: by 99% according to the World Bank; by 57% according to the IMF

2010: by 49% according to the World Bank; by 45% according to the IMF.

Seafarers' remittance inflows in 2009 were estimated by the IMF at US \$1.7 million, or 6.4% of GDP (a sharp decline from about 10% of GDP in previous years).

Graph 1



⁶ The changes that were brought to the methodology over time (EVI replacing EDI in 2000; GNI per capita replacing GDP per capita and HAI replacing APQLI in 2003) do not affect the way the graphs should be read.

2.2 The

2006: 140.2% of the threshold
2009: 133.9% of the threshold
2012: 133.5% of the threshold.

Graph 2



3.1 *Percentage of population undernourished*

Ministry of Health sources indicate (and the MDG Progress Report 2010-2011 confirms) a child mortality rate of 15.2 deaths per 1,000 live births in 2007, and 24.6 per 1,000 in 2009 (from 58.1 per 1,000 in 1995). In 2009, the infant mortality rate was significantly lower than the child mortality rate (14.8 per 1,000 instead of 24.6 per 1,000), a difference that reflects the positive impact of Tuvalu's immunization policy (measles and other vaccine-preventable diseases).

3.3 *Secondary school enrolment rate (component of the HAI)*

The CDP, in 2009, estimated this indicator at 84.4% (2004-2007). The counterpart estimate in 2012 (2006-2011 data) is unchanged (84.4%).

There are only two secondary schools in Tuvalu: the government school (Motufoua Secondary School), and the church-affiliated school, both located on Funafuti. The Ministry of Education, in 2008, had indicated a gross secondary school enrolment rate of 69% for the year 2006, an unprecedentedly high performance that was explained by two factors: (i) the re-opening in 2003 of the church-affiliated secondary school, which allowed more enrolment; and (ii) the

Ministry of Education officials, in 2011, indicated an adult (age 15-49) literacy rate of 94.9% in 2007, the latest year for which relevant data are known. The rate quoted by the 2010-2011 MDG Progress Report for a narrower cohort (adults of age 15-24) in the same year 2007 brings the country nearer to the 100% MDG target for 2015: 98.6%. Relevant officials yet expressed doubts about such high scores, which are based on answers to simple r ir2o2aa

"...when the sea, a fundamental source of security and comfort, is transformed by climate change into a source of threat and fear, the feeling of vulnerability is indescribable" (Richard Marles, The Punch, 12 October 2011).

Tuvalu endured 19 destructive **cyclones** in 30 years (see Table 2). The country is also considerably affected by the consequences of climate change, given the low level of the atoll islands.

An unprecedentedly severe **drought** episode brought the Government of Tuvalu to declare a state of emergency on 28th September 2011, after the nation had suffered a lack of adequate or sustained rainfall in more than 6 months. The rainfall shortage situation was exacerbated by the fact that the ground contamination resulting from sea level rise deprived Tuvaluans of drinkable groundwater. According to the Secretariat of the Pacific Community/Applied GeoScience Division, the Oct. 2010 to Sep. 2011 period was the second driest period in the 78 years during which Tuvalu has been keeping rainfall records. Scientists point to the *La Niña* weather pattern, a phenomenon which also caused deluges in Australia in late 2010 and early 2011. A *La Niña* event generally involves cooler than normal ocean temperature across much of the equatorial and central Pacific. It often, though not always follows an *El Niño* event, of which *La Niña* is more or less the reverse (*El Niño* refers to the phenomenon of unusually warm water forming across much of the tropical eastern and central Pacific). Tonga and Tuvalu are particularly exposed to the risk of drought during *La Niña*, and to the risk of cyclones during *El Niño*.

One estimates that the 2011 drought episode severely impacted half of the population of Tuvalu, essentially on the islands of Funafuti and Nukulaelae, where water rationing was imposed on the population at the peak of the crisis (40 litres a day for each family, a ration below international standards). One reported consequence of the drought on the outer islands was that taro crops were dying as a result of the lack of fresh water. The two operating desalination plants on Funafuti produce an estimated 48% of the minimum requirement for the 5,300 residents of the island, which largely rely on rain water catchments for drinking water. Development pa

were in need of repair at the time of the severe drought 2011. This prompted the state of emergency late September 2011.

Table 2
The most destructive cyclones in Tuvalu since 1972

Events	Dates	Comments
Bebe		

Events	Dates	Comments
Ami	11-15 Jan. 2003	

4.2 *Instability of agricultural production (component of the EVI)*

4.4 *Instability of exports of goods and services (component of the EVI)*

The CDP observed, in 2009, a level of export instability 70% higher in Tuvalu than in other Pacific SIDS. Grounds for considering Tuvalu's export economy as unstable could only be found in the extreme smallness of the export base, while the evolution would appear remarkably stable if compared with the export receipts of any larger country. Between 2006 and 2010, total exports of goods and services fluctuated between 2.9 and 4.1 million Australian dollars (with service exports weighing 4.8 times more than merchandise exports on average during that period). These economically small values involve a margin of fluctuation of more than 40%, which can be considered an indication of economic instability.

4.5 *Primary activities as a percentage of GDP (component of the EVI)*

The CDP, in 2009, estimated at 15.2% the share of agriculture and fisheries in GDP (based on 2007 data). In the absence of updated national accounts, IMF, in 2011, estimated the share of agriculture in the domestic value added (GDP) to have fluctuated between 21.2% and 22.4%. It is unclear whether "agriculture", in these IMF estimates, is synonymous with primary activities as a whole, encompassing fisheries inter alia. One is tempted to make this assumption, given the smallness of Tuvalu's agricultural sector.

With its extreme smallness and geographical remoteness, and given the environment-related constraints it faces, Tuvalu's economy cannot significantly specialize outside the sphere of rental income (mainly fishing licenses and "dot tv" revenue). The idea of atoll tourism development (Maldives type) is in theory applicable to Tuvalu, but has been too costly to attract foreign investors.

4.6 *Merchandise export concentration (component of the EVI)*

The CDP, in 2009, observed a merchandise export concentration 17% greater in Tuvalu than in other Pacific SIDS. In the absence of any physical export from Tuvalu other than small quantities of bêche-de-mer (reported in 2008, not confirmed in 2011), one may disregard this component of the EVI.

