

A Study of Sustainable Social Progress in the Kingdom of Tonga

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Abstract

This paper describes a preliminary study of sustainable social progress in the Kingdom of Tonga conducted following the 2009 report and recommendations of the Commission on the Measurement of Economic Performance and Social Progress (CMEPSP).

Tonga appears to be making reasonable social progress according to GDP, the Human Development Index and Millennium Development Goals metrics. However, closer examination shows that hardship, inequality and other social problems are actually increasing in Tonga.

Tonga's progress to date has also been socially and ecologically unsustainable in many ways. Future challenges to sustainable social progress will require social change to address these socio-ecological sustainability challenges.

Examining different perspectives on eight key dimensions of wellbeing indicates that social progress has been uneven across different dimensions of Tongan's wellbeing. From these different perspectives an estimation is made of a plausible 'shared view' of Tongan priorities for social progress.

The findings of this study indicate the importance of broadening a society's concept of 'development' into one of sustainable social progress. Such a transition needs to be far more comprehensively integrated into Tongan national development priorities and initiatives. However, this pilot study would need to be repeated on a much larger scale to produce sufficiently robust findings to guide policy making for sustainable social progress in Tonga.

The general approach taken in this study is transferable to other social contexts to build a wider understanding of how sustainable social progress can be approached and ideally achieved around the world.

Key Words: Sustainability, social progress, progress indicators, Tonga, development objectives.

1. Introduction

In this paper I present a preliminary examination of the extent to which the Kingdom of Tonga is achieving sustainable social progress. The study was based on the recent reports of the Commission on the Measurement of Economic Performance and Social Progress (CMEPSP), and their recommendation that societies need to shift how they conceptualise and measure social progress.¹ It is also informed by the work of the Commission's advisor Amartya Sen.²

The Kingdom of Tonga is a Polynesian island nation with a land area of 650 km² and an Exclusive Economic Zone that covers 700,000 km² of the Pacific Ocean. There is a resident population of approximately 100,000 people but it is estimated that at least the same number of Tongans live overseas.³ Tonga has a relatively homogenous society, in which tradition and culture remain central to people's identity.⁴ It is also on island nations like Tonga that global sustainability challenges are often most apparent.⁵

In the first section of this paper, Tonga's social progress to date is discussed using the established metrics of the Human Development Index and Millennium Development Goals, but supplemented with reports on trends in inequality, social problems and hardship. Secondly, ten significant socio-ecological challenges are examined, allowing for an assessment of the sustainability of Tonga's social progress to date and the difficulty of sustainably achieving future social progress. In the third part of this study different perspectives on eight key dimensions of wellbeing were examined in order to identify a plausible shared Tongan view of wellbeing and priorities for social progress.

The research was designed as a pilot study that could inform further research and debate on sustainable social progress priorities and measures in Tonga. It is also a contribution to the global discussion on measuring social progress that is being informed by the CMEPSP report.

2. Sustainable Social Progress

The CMEPSP was established to identify the limitations of Gross Domestic Product (GDP) as an indicator of economic performance and social progress, and to investigate alternative ways to measure social progress. The CMEPSP has recommended a shift in progress measures to focus on people's wellbeing, starting with eight wellbeing dimensions of universal importance.⁶ This approach follows Sen's arguments for the universal importance of instrumental freedoms as both the primary ends and means of development, and the inescapable need for public valuations judgements on what a society cares about and strives for.⁷ The CMEPSP suggests that countries need to identify a socially 'shared view' of wellbeing, and priorities for social progress that emphasise the importance of instrumental freedoms.⁸

The CMEPSP also distinguishes between assessing current levels of wellbeing and evaluating whether current levels of wellbeing can be sustained into the future, recommending use of a ‘dashboard’ of ecological sustainability indicators. However, consistency demands that such universal concerns for a fair distribution of wellbeing into the future must equally be applied to the poverty and inequality of wellbeing that exists today.⁹ Sustainable social progress can thus be achieved by reducing inequality and improving people’s wellbeing in the present, as well as sustaining and improving wellbeing into the future within the world’s ecological limits.

3. Methodology

This research was conducted for my Master’s Thesis in sustainability science. Fieldwork was conducted over 10 weeks in Tonga from January to April 2010. Most of fieldwork was done around the capital Nuku’alofa on the main island of Tongatapu. A short visit was made to the outer island ‘Eua

The *talanoa* technique was used to gather information through semi-structured and unstructured interviews, and focus-groups. *Talanoa* means collective discussion in which ideas are debated and knowledge is created, and such an approach is essential to gain meaningful knowledge in the Tongan social context.¹⁰ These findings were then developed through comparison with supporting literature sources of information. A descriptive approach was taken to analysing the information gathered, with the goal of reaching a useful understanding of the different parts of the study.

Identification of a plausible ‘shared view’ of priorities for social progress required an imaginative analytical step to consider how tensions between the different perspectives found during the study could be resolved through reasoned social choice. In doing so, Sen’s reasoning was followed by assuming that instrumentally important capability and freedom dimensions of wellbeing must triumph through a reasoned social choice process. Subjective aspects of wellbeing are thus integrated in a way that should not conflict with instrumentally important aspects. This of course remains a somewhat broad estimation but it is sufficient for this preliminary investigation.¹¹

More research is certainly needed to expand this pilot study to establish detailed sustainable social progress indicators and policy objectives for Tonga. The ranking of wellbeing priorities was beyond the scope of this study, but this would be an important next step.

4. Measuring Tonga’s Social Progress

The first part of this study examined Tonga’s progress to date using the metrics of GDP, the Human Development Index and the Millennium Development Goals. The first impression given by these measures is that Tonga has been making reasonable social progress. Despite these indications,

other studies show that that hardship and inequality are actually increasing and that wellbeing may overall be on the decline.

Tonga's real GDP growth rate over the last decade has averaged 2.5%. This economic progress is described in Tonga's *Strategic Development Plan Eight* (SDP8) as 'modest' but also characterised by rising inflation and continued dependence on aid and remittances.¹²

Tonga ranks reasonably well on the Human Development Index (HDI) at 99th of 182 countries. However, Tonga's HDI score has risen little in the last ten years meaning that Tonga has actually slipped from 54th place and from 'high' to 'medium' human development category since the 2005 HDI report.¹³

While an improvement on GDP alone, the HDI still misses many important dimensions of wellbeing. There is an acknowledged increase in social problems in Tonga such as crime, youth unemployment, income inequality, environmental degradation and cultural erosion. These trends are hard to reconcile with the 'substantial' social progress that is reported in SDP8 based on the 2005 HDI report, though they are difficult to quantify given the lack of relevant data. This reinforces the CMEPSP's recommendation that countries need to significantly broaden their statistical information as the basis for more representative assessments of progress.¹⁴

Tonga reports 'good and steady' progress towards poverty reduction and achieving the Millennium Development Goals. But when poverty is more appropriately conceptualised for Tonga as 'hardship' or difficulty in meeting one's social obligations, hardship is actually increasing for many Tongans as the shift to a cash economy continues.¹⁵

5. Sustainability Challenges in Tonga

The second part of the study was to examine a set of ten significant socio-ecological challenges to the sustainability of Tonga's social progress: land, freshwater, oceans and fisheries, waste and pollution, geography and climate change, energy, a Migration, Remittances and Bureaucracy (MIRAB) economy, culture and tradition, governance and democracy, and social learning. Though this is by no means a complete set, it provided a useful overview of the sustainability of Tonga's progress in two ways.

Firstly, even the partial information available on trends in Tonga's ecological systems indicates that a heavy price has been paid for progress achieved to date. Resource degradation and pollution of land and coastal marine systems are already starting to impact on the health and wellbeing of Tongan people.¹⁶ This suggests that the ecological sustainability indicators proposed by the CMEPSP would already be showing yellow and red warning lights.

Secondly, these challenges illustrate the difficulty of sustainably making social progress in the future. Tonga has limited land and marine

resources to utilise fairly and it is clear that existing degradation needs to be remedied. The effects of the current economic crisis appear to be validating long-held fears about the sustainability of Tonga's MIRAB economy. Fossil fuel dependency and the expected effects of climate change are likely to exacerbate these existing economic and ecological challenges.¹⁷ On top of these risks, the greatest challenges are likely to be the social changes needed to achieve future sustainable social progress.

The immense challenge of social change is illustrated by the political reforms that are now underway in Tonga. Tongans are demanding greater accountability and reciprocity from their government, but by articulating these demands they are directly challenging the social system that is central to Tongan identity and wellbeing.¹⁸ At the same time, the hierarchy inherent to traditional Tongan society is still used by those in power to defend a political system that restricts people's freedoms and impacts on their wellbeing.¹⁹

This leads to the paradoxical situation where culture and tradition are both barriers to and fundamental to making sustainable social progress. The South Pacific Commission (SPC) identifies this need for negotiated social change by suggesting that, "the single greatest issue that must be solved for successful social development [in the Pacific] is how to reconcile the best of both traditional and modern worlds."²⁰

6. A 'Shared View' of Wellbeing

The discussion so far has indicated that a broader assessment of wellbeing in Tonga is likely to show that social progress has stagnated or is even declining in some areas. Tonga's progress to date has also been ecologically unsustainable, and the sustainability of future social progress will be dependent on making challenging social changes. This supports that CMEPSP case that current approaches to 'development' are not sufficient and their recommendation that countries should work to identify a new 'shared view' of priorities for social progress.

As the SPC notes, in Tonga this means finding a reasoned balance between what are often competing traditional and modern values and perspectives. Tradition is seen as an important foundation for a distinctly Tongan concept of progress, but the need for aspects of Tongan culture to evolve is also acknowledged.²¹

Using the eight key dimensions of wellbeing highlighted by the CMEPSP as a starting point, I examined eight important dimensions of Tongan wellbeing: material living standards, health, education, the personal activities of work and church-going, political voice, social connections and land. Sure enough, this highlighted a number of tensions between different people's perspectives, but also between wellbeing dimensions. This is predicted by the CMEPSP and they emphasise the need to examine the

complex interactions between dimensions. Priorities for social progress thus depend not only on *what* dimensions are important, but also *how* they are important.

This analysis can then be used in two ways. To further consider the extent of Tonga's social progress to date, and also plausible priorities for future progress. This will be discussed with the following three examples of social connections, land and education.

Family is fundamental to social connections within Tongan society. Over recent decades the dislocation of family ties has had a major impact on Tongan society. This has primarily been caused by migration in search of work and wages. Perhaps it could be argued that family is a relatively subjective dimension of wellbeing, but given the instrumentally important social security role of family in Tonga the weakening of family is hard to dismiss as an acceptable trade-off against other dimensions of wellbeing. It is widely regarded as a key indicator of declining wellbeing that is missed by any conventional measure of progress.²²

Land demonstrates the importance of examining how key dimensions of wellbeing interact. The shortage of land, issues of gender equality and increasing landlessness indicate that some reform of the land tenure system is required, but land is of universal importance to Tongan's identity and economic security.²³ The reconciliation of competing perspectives would most likely prioritise reforms that ensure universal land entitlement.²⁴ This raises serious questions about past reform proposals to create freehold land with the sole aim of increasing wealth and material living standards. The limited trading of land leases presently allowed appears to have increased inequality, caused many breakdowns of family relations and reduced people's security and sense of identity in the process.

Education is another dimension of wellbeing that is universally regarded as being of utmost importance, but one that is not adequately measured. Tonga's high HDI score for literacy and school enrolment misses important failures of the Tongan education system to support social progress by providing youth with practical skills, traditional knowledge and encouragement to think critically. These are priorities for education and social progress that are not currently integrated into current measures of the education system.²⁵

These examples illustrate how taking the broader view of social progress advocated by the CMEPSP raises fundamental questions about the positive social progress being reported using GDP, the HDI or the MDG metrics. Recent progress in some wellbeing dimensions such as the economy appears to have come at the expense of other dimensions.

These examples also illustrate the complexity of reconciling different perspectives to reach a 'shared view' of priorities for social progress. However, as Sen argues, complete reconciliation of different

perspectives is not necessary for making reasoned social judgements.²⁶ Bearing this in mind an estimation was made of plausible priorities for social progress in Tonga across the eight key dimensions of wellbeing. They are as follows:

- i. Raising material living standards while reemphasising the importance of collective wealth.
- ii. Improving public healthcare and reducing lifestyle diseases.
- iii. Emphasising practical skills, critical thinking and traditional knowledge in education.
- iv. Engaging youth into socially valuable work.
- v. Encouraging church-led community projects and rationalisation of church financial obligations.
- vi. Increasing accountability and moral responsibility of government.
- vii. Finding ways to restore and strengthen families.
- viii. Pursuing land reforms that ensure universal entitlement to land to meet a family's basic-needs.

Integrating these priorities with the sustainability challenges described in section five provides a preliminary framework for sustainable social progress planning and measurement in Tonga.

It should be noted that there are parallels between the strategic objectives contained in the current Tongan *National Strategic Planning Framework* (NSPF) and the priorities for social progress suggested above.²⁷ This is an encouraging finding, but some substantial variations also exist and the NSPF does not comprehensively address most of the sustainability challenges discussed. Much remains to be integrated into current planning if sustainable social progress is to become a serious strategic vision, achievable through initiatives that tackle necessary but challenging social change.

7. Conclusions

The three parts of this study combine to indicate that social progress in Tonga has slowed and may well be declining, while it has been generally unsustainable and also uneven between different dimensions of Tongan's wellbeing. Tonga now faces significant challenges to making future sustainable social progress.

Many important priorities for social progress remain overlooked in current national planning and policymaking. There is also no indication that the extent of social change required is understood, or being integrated into a social or political vision for change. Much needs to be done to integrate priorities and initiatives for sustainable social progress into the national planning approach. Most importantly the need for social change to achieve

sustainable social progress needs to be accepted, embraced and made the subject of reasoned social discussion and political debate.

As has been highlighted already, this study was only intended as a pilot study. More comprehensive fieldwork is required to expand on these preliminary findings and produce a robust enough report for policy making. Nevertheless, it is hoped that this study provides a useful starting point for such research as well as public discussion.

This study also highlights the importance of the CMEPSP report. By using the Commission's recommendations this study illustrates how progress metrics such as GDP, the Human Development Index and the Millennium Development Goals measure only the 'bare bones' of progress. This supports the CMEPSP case for a broader concept of progress in order to adequately measure and guide a society's sustainable social progress.

Given the theoretical weight behind the CMEPSP report and recommendations, these findings for Tonga are likely to have useful implications for other social contexts. There is likely to be value in conducting similar studies in other societies as a step towards developing a 'shared view' of priorities for sustainable social progress.

Notes

¹ CMEPSP, *Report by the Commission on the Measurement of Economic Performance and Social Progress* (CMEPSP), France, 2009.

² S. Anand & A. Sen, 'Human Development and Economic Sustainability'. *World Development*, vol. 28, no. 12, December, 2000, pp. 2029-2049; A. Sen, *Development as Freedom*, Oxford University Press, Oxford, 2001; A. Sen, *The Idea of Justice*, Harvard University Press, Cambridge MA, 2009.

³ T. Malm, *Shell Age Economics: Marine Gathering in the Kingdom of Tonga*, Dept. of Sociology, Lund University, 1999; Secretariat of the Pacific Community (SPC), *Tonga Country Profile*, Noumea, 2008.

⁴ W. Cowling, *On Being Tongan: Responses to Concepts of Tradition*, PhD Thesis, Macquarie University, Sydney, 1990; 'I. F. Helu, *Critical Essays: Cultural perspectives from the South Seas*, *Journal of Pacific History*, Canberra, 1999; E. Hau'ofa, 'Pasts to Remember', in *'Pasts to Remember', Remembrance of Pacific Pasts: An Invitation to Remake History*, R. Borofsky (ed), University of Hawai'i Press, Honolulu, 2000, pp. 453-471.

⁵ G. Baldacchino (ed), *A World of Islands: An Island Studies Reader*, Institute of Island Studies, University of Prince Edward Island, Charlottetown, 2007.

⁶ CMEPSP, p. 14.

⁷ Sen, *Development as Freedom*

⁸ Sen, *Development as Freedom*, p. 75; CMEPSP, p. 18.

⁹ CMEPSP, p. 11; Anand and Sen

¹⁰ S. Fua, 'Ko Hota Fa'ungamotu'a Ko Jota Kaha'u - A Knowledge System for Redesigning Tongan Curriculum', in *Re-thinking Education Curricula in the Pacific: Challenges and Prospects*, Sanga & Thaman (eds), Victoria University, Wellington, 2009, p. 209.

¹¹ cf. J. Moses and T. Knutsen, *Ways of Knowing*, Palgrave, London, 2007

¹² Asian Development Bank (ADB), *Transforming Tonga: A Private Sector Assessment*, Sydney, 2008, p. 1; Central Planning Department (CPD), *Looking to the Future Building on the Past: Kingdom of Tonga Strategic Development Plan 8*, 2006, p. 18.

¹³ CPD, p. 1 and 33; UNDP, *Human Development Report 2009 - Country Fact Sheet for Tonga*; UNDP, *Human Development Report 2009 - HDI Rankings*, 2009.

¹⁴ CPD, p. 33; CMEPSP

¹⁵ Government of Tonga - National MDG Taskforce, *Tonga 1st National Status Report: Millennium Development Goals Today and Tomorrow*, Nuku'alofa, 2005, p. 1; Asian Development Bank (ADB), *Priorities of the People: Hardship in Tonga*, Manila, 2004, p. 4.

¹⁶ N. Pelesikoti, *Sustainable Resource and Environmental Management in Tonga: Current Situation, Community Perceptions and a Proposed new Policy Framework*, PhD Thesis, University of Wollongong, Wollongong, 2003; Pacific Islands Applied Geoscience Commission, *National Integrated Water Resource Management Diagnostic Report: Tonga*, Suva, 2007.

¹⁷ Government of Tonga, *The Kingdom of Tonga's Initial National Communication: In response to its commitments under the United Nations Framework Convention on Climate Change*, Nuku'alofa, 2009; Government of Tonga - Prime Minister's Office (PMO), *Tonga Energy Road Map 2010 – 2020*, Nuku'alofa, 2010.

¹⁸ M. Bataille and G. Benguigui, 'Identity at Stake in the Present-day Kingdom of Tonga', in *The Changing South Pacific: Identities and Transformations*, S. Tcherkezoff (ed), Pandanus Books, Canberra, 2005, pp. 230 - 244.

¹⁹ E. Hau'ofa, 'The Social Context of the Pro-Democracy Movement in Tonga', in the *Proceedings from the Convention on Constitution and Democracy in Tonga*, Nuku'alofa, Tonga, 1992; 'I.F. Helu, *Critical Essays*.

²⁰ South Pacific Commission (SPC), *Pacific Islands Social and Human Development*, Noumea, 1995). p. 17.

²¹ I. Campbell and E. Coxon, *Polynesian Paradox: Essays in Honour of Futa Helu*, Institute of Pacific Studies, University of the South Pacific, Suva, 2005; P. Finau, *He Spoke the Truth in Love: A Selection of his Writings and Speeches*, Father David Mullins (ed), Catholic Publications Centre, Auckland, 1994; K. Moala, *In Search of the Friendly Islands*, Pasifika Foundation Press, Honolulu, 2009.

²² D. Abbott and S. Pollard, *Hardship and Poverty in the Pacific*, Asian Development Bank (ADB) - Pacific Department, Manila, 2004; P. Finau.

²³ A. Maude & F. Sevele, 'Tonga: Equality overtaking privilege', in *Land Tenure in the Pacific*, R. Crocombe (ed), University of the South Pacific: Suva, 1987, pp. 114-142.

²⁴ 'I.F. Helu, *Critical Essays*.

²⁵ S. Fua, S. Manu, T. Takapautolo, and 'A. Taufe'ulungaki, *Sustainable Livelihood and Education in the Pacific: Tonga Pilot*, University of the South Pacific: Institute of Education, Tongatapu, 2007; I'F. Helu, *Critical Essays*.

²⁶ Sen, *The Idea of Justice*.

²⁷ Government of Tonga - Prime Minister's Office (PMO), *National Strategic Planning Framework – Draft*, Nuku'alofa, 2009, p. 3.

Bibliography

Abbott, D. & Pollard, S., *Hardship and Poverty in the Pacific*. Asian Development Bank (ADB) - Pacific Department, Manila, 2004.

Anand, S. & Sen, A., 'Human Development and Economic Sustainability.' *World Development*, vol. 28, no. 12, December, 2000, pp. 2029-2049.

Asian Development Bank (ADB), *Priorities of the People: Hardship in Tonga*. Manila, 2004, p. 4.

ADB, *Transforming Tonga: A Private Sector Assessment*. Sydney, 2008, p. 1.

Baldacchino, G. (ed.), *A World of Islands: An Island Studies Reader*. Institute of Island Studies, University of Prince Edward Island, Charlottetown, 2007.

Bataille, M. & Benguigui, G., 'Identity at Stake in the Present-day Kingdom of Tonga'. in *The Changing South Pacific: Identities and Transformations*, S. Tcherkezoff (ed), Pandanus Books, Canberra, 2005, pp. 230 – 244.

Campbell, I. & Coxon E. (eds), *Polynesian Paradox: Essays in Honour of Futa Helu*. Institute of Pacific Studies, University of the South Pacific, Suva, 2005.

Central Planning Department, *Looking to the Future Building on the Past: Kingdom of Tonga Strategic Development Plan 8*. Nuku'alofa, 2006, p. 18.

Commission on the Measurement of Economic Performance and Social Progress (CMEPSP), *Report by the Commission on the Measurement of Economic Performance and Social Progress*, France, 2009.

Cowling, W., *On Being Tongan: Responses to Concepts of Tradition*. PhD Thesis, Macquarie University, Sydney, 1990.

Finau, P., *He Spoke the Truth in Love: A selection of his writings and speeches*. David Mullins (ed), Catholic Publications Centre, Auckland, 1994.

Fua, S., Manu, S., Takapautolo, T. & Taufē'ulungaki, 'A., *Sustainable Livelihood and Education in the Pacific: Tonga Pilot*. University of the South Pacific: Institute of Education, Tongatapu, 2007.

Fua, S., Fa'ungamotu'a, 'K., Kaha'u 'K., 'A Knowledge System for Redesigning Tongan Curriculum'. in *Re-thinking Education Curricula in the Pacific: Challenges and Prospects*, Sanga & Thaman. (eds) Victoria University, Wellington, 2009, p. 209.

Government of Tonga - National MDG Taskforce, *Tonga 1st National Status Report: Millennium Development Goals Today and Tomorrow*. Nuku'alofa, 2005. p. 1.

Government of Tonga, *The Kingdom of Tonga's Initial National Communication: In response to its commitments under the United Nations Framework Convention on Climate Change*, Nuku'alofa, 2009.

Government of Tonga - Prime Minister's Office (PMO), *Tonga Energy Road Map 2010 – 2020*, Nuku'alofa, 2010.

Government of Tonga - Prime Minister's Office (PMO), *National Strategic Planning Framework – Draft*. Nuku'alofa, 2009. p. 3.

Hau'ofa, E., 'The Social Context of the Pro-Democracy Movement in Tonga', in the *Proceedings from the Convention on Constitution and Democracy in Tonga*, Nuku'alofa, Tonga, 1992.

Hau'ofa, E., 'Pasts to Remember', in *'Pasts to Remember' Remembrance of Pacific Pasts: An Invitation to Remake History*. Borofsky, R. (ed), University of Hawai'i Press, Honolulu, 2000, pp. 453-471.

Helu, 'I.F., *Critical Essays: Cultural perspectives from the South Seas*. Journal of Pacific History. Canberra, 1999.

Malm, T., *Shell Age Economics: Marine Gathering in the Kingdom of Tonga*. Dept. of Sociology, Lund University, 1999.

Maude, A. & Sevele, F., 'Tonga: Equality overtaking privilege'. in *Land Tenure in the Pacific*, R. Crocombe (ed), University of the South Pacific: Suva, 1987, pp. 114-142.

Moala, K., *In Search of The Friendly Islands*. Pasifika Foundation Press, Honolulu, 2009.

Moses, J. & Knutsen T., *Ways of Knowing*. Palgrave Macmillan, London, 2007.

Pacific Islands Applied Geoscience Commission, *National Integrated Water Resource Management Diagnostic Report: Tonga*. Suva, 2007.

Pelesikoti, N., *Sustainable Resource and Environmental Management in Tonga: Current Situation, Community Perceptions & a Proposed New Policy Framework*. PhD Thesis, University of Wollongong, Wollongong, 2003.

Secretariat of the Pacific Community, *Tonga Country Profile*. Noumea, 2008.

Sen, A., *Development as Freedom*. Oxford University Press, Oxford, 2001.

Sen A., *The Idea of Justice*. Harvard University Press, Cambridge MA, 2009.

South Pacific Commission (SPC), *Pacific Islands Social and Human Development*. Noumea, 1995, p. 17.

UNDP, *Human Development Report 2009 - Country Fact Sheet for Tonga*, New York, 2009.

UNDP, *Human Development Report 2009 - HDI Rankings*, New York, 2009.

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