

**LEGAL AND PROTECTION POLICY
RESEARCH SERIES**



**Climate Change and the Risk of Statelessness:
The Situation of Low-lying Island States**

Susin Park

Head, UNHCR Office for Switzerland and Liechtenstein

DIVISION OF INTERNATIONAL PROTECTION

May 2011

PPLA/2011/04

DIVISION OF INTERNATIONAL PROTECTION
UNITED NATIONS HIGH COMMISSIONER FOR REFUGEES (UNHCR)
CP2500, 1211 Geneva 2
Switzerland

E-mail: hqpr02@unhcr.org
Website: www.unhcr.org

This paper was initially prepared in 2009 as a background paper for the UNHCR submission to the Ad Hoc Working Group on Long-Term Cooperative Action under the UN Framework Convention on Climate Change (UNFCCC) 'Climate Change and Statelessness: An Overview'. It was subsequently updated for UNHCR's Expert Roundtable on Climate Change and Displacement which was convened in Bellagio, Italy, from 22 to 25 February 2011, with the generous support of the Rockefeller Foundation.

The views expressed in this paper are those of the author and do not necessarily reflect those of the United Nations or UNHCR. This paper may be freely quoted, cited and copied for academic, educational or other non-commercial purposes without prior permission from UNHCR, provided that the source and author are acknowledged. The paper is available online at <http://www.unhcr.org/protect>.

© United Nations High Commissioner for Refugees 2011.

Table of Contents

1. INTRODUCTION	1
2. STATEHOOD AND STATELESSNESS	4
3. STATEHOOD, STATELESSNESS, LOW-LYING ISLAND STATES	8
4. PREVENTION OF STATELESSNESS IN INTERNATIONAL LAW	16
5. STATELESSNESS AND LOW-LYING ISLAND STATES	17
6. EARLY ACTIONS TO BE TAKEN.....	20
7. CONCLUSION.....	23

1. Introduction

The suggestion that the entire populations of low-lying island States could be forced to move to other States due to the effects of rising sea levels is perhaps one of the most striking and well-known examples of the potential human impacts of climate change.

Elevation data on low-lying island States is indicative of their vulnerability. The highest elevation point is 2.4 meters for the Maldives, while it is 5 meters for Tuvalu and 10 meters for the Marshall Islands.¹ The average altitude is far lower, reportedly about one meter for the Maldives² and Tuvalu³ and about two meters for other low-lying atoll States.⁴ The Intergovernmental Panel on Climate Change (IPCC) thus concluded that '[s]ea-level rise impacts on the low-lying Pacific Island atoll States of Kiribati, Tuvalu, Tokelau and the Marshall Islands may, at some threshold, pose risks to their sovereignty or existence'.⁵ According to some estimates, Tuvalu could disappear in the next 50 years,⁶ and its government has raised the potential for its full submersion as a key concern.⁷ Likewise, Kiribati has sought assurances for its population in the event that its entire territory is submerged.⁸

¹ See the United States Central Intelligence Agency, *2008 World factbook*, available online at: <https://www.cia.gov/library/publications/the-world-factbook/index.html> (last accessed 29 May 2011).

² It is reportedly just over 91.4 cm. P. Barta, 'Apathy sinks Maldives island', *The Australian*, 12 January 2008, available online at: <http://www.theaustralian.news.com.au/story/0,25197,23038807-23850,00.html> (last accessed 25 January 2011). According to the same article, even the artificial island and engineered city of Hulhumale, which is 1.8m high, could be submerged by 2050.

³ M. Windisch, 'Climate refugees – the hidden cost of climate change', *Green Left Online*, 3 December 2008, available online at: <http://www.greenleft.org.au/2008/777/40054> (last accessed 25 January 2011).

⁴ J. Barnett and N. Adger, 'Climate dangers and atoll countries', Working Paper, Tyndall Centre for Climate Change Research, October 2001; Permanent Mission of the Republic of the Marshall Islands to the United Nations, New York, 'National communication regarding the relationship between human rights and the impact of climate change', submitted to the United Nations Office of the High Commissioner for Human Rights, 31 December 2008, available online at: http://www2.ohchr.org/english/issues/climatechange/docs/Republic_of_the_Marshall_Islands.doc (last accessed 25 January 2011).

⁵ See Intergovernmental Panel on Climate Change (IPCC), *Climate change 2007*, Fourth assessment report, 'Report of the international working group II: "Impacts, adaptation and vulnerability"', 736, available online at: <http://www.ipcc.ch/pdf/assessment-report/ar4/wg2/ar4-wg2-chapter17.pdf> (last accessed 29 May 2011). The IPCC is a scientific intergovernmental body set up by the World Meteorological Organization (WMO) and by the United Nations Environment Programme (UNEP). It was established to provide decision-makers and other stakeholders with an objective source of information about climate change.

⁶ See, for example, Norwegian Refugee Council, *Future floods of refugees: A comment on climate change, conflict, and forced migration*, April 2008; A. Robers, 'Islanders without an island: What will become of Tuvalu's climate refugees?', *Der Spiegel*, No 37, 14 September 2007, available online at: <http://www.spiegel.de/international/world/0,1518,505819,00.html> (last accessed 25 January 2011); Windisch, note 3 above.

⁷ Tuvalu National Assessment Report 2003, Small Island Developing States (SIDS) network, available online at: http://www.sidsnet.org/docshare/other/20031230154906_Tuvalu_NAR_2003.pdf (last accessed 25 January 2011).

⁸ See, for example, K. Marks, 'Rising tide of global warming threatens Pacific island States', *The Independent* (UK), 25 October 2006, available online at: <http://www.independent.co.uk/environment/climate-change/rising-tide-of-global-warming-threatens-pacific-island-states-421493.html> (last accessed 25 January 2011); 'Kiribati likely doomed by climate change: President', 6 June 2008, ABC News, available online at: <http://www.abc.net.au/news/stories/2008/06/06/2266607.htm> (last accessed 29 May 2011).

Still, there is no definitive listing of States at risk of ‘sinking’. A recent report speaks of up to 40 countries which may be at risk,⁹ although it would appear that further research is needed on the vulnerability of other island States. Even if these States do not ‘sink’, they could become increasingly inhospitable because of climate change related factors such as sea-water incursion into arable land and freshwater supplies, frequent and extreme weather events and increases in diseases borne by insects, food and water such as malaria, dengue and diarrhoea.¹⁰ In most cases, such a risk is likely to arise due to a confluence of economic, social, geological and environmental factors, where climate change may constitute the tipping point. Such factors would be likely to cause extensive displacement regardless.

It should be noted that migration and displacement within and from low-lying island States is not a new phenomenon. Such movements have occurred for a variety of reasons and are likely to continue due to a similarly complex mix of factors which may include, but are not limited to, the consequences of climate change.¹¹ In Papua New Guinea, the relocation of inhabitants of the Carteret Islands to mainland Bougainville, was touted as an example of the impact of climate change, although this has been disputed on the grounds that geological and other factors were predominant.¹² Already in 2000, residents of the Duke of York Islands (Papua New Guinea) had to be evacuated to higher ground, as did residents of neighbouring atolls.¹³ In the Maldives, residents of the island of Kandholhudoo had to be relocated to another island following the 2004 tsunami.¹⁴ Kiribati has an on-going relocation programme to counter overpopulation.¹⁵ Tuvalu reportedly also has experienced internal migration,

⁹ Care, CIESIN, UNHCR, UNU-EHS, World Bank, *In search of shelter: Mapping the effects of climate change on human migration*, 2008, available online at: <http://www.ehs.unu.edu/file.php?id=621> (last accessed 25 January 2011), 19.

¹⁰ N. Mimura et al, ‘Small Islands’ in M.L. Parry et al (eds.) *Climate Change 2007: Impacts, Adaptation and Vulnerability: Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change 2007*, 692 – 699.

¹¹ See inter alia, Care, CIESIN, UNHCR, UNU-EHS, World Bank, *In search of shelter: Mapping the effects of climate change on human migration*, note 9 above, 18-19; F. Gemenne and S. Shen, ‘Tuvalu and New Zealand: Case study report’, *EACH-FOR Environmental change and forced migration scenarios: Specific targeted project: Scientific support to policies - SSP*, 15 February 2009, available online at: http://each-for.eu/documents/CSR_Tuvalu_090215.pdf (last accessed 25 January 2011); C. Mortreux and J. Barnett, ‘Climate change, migration and adaptation in Funafuti, Tuvalu’ (2009) 19 *Global environmental change* 105-112.

¹² See for example, ‘Other factors affecting sea level’, *The National* (Papua New Guinea), available online at: <http://www.thenational.com.pg/?q=node/761> (last accessed on 26 May 2011). This has, however, been contested, see, for example, M. Field, ‘Sinking atolls trigger Papuan evacuation plans’, *Agence France Presse*, available online at: <http://www.abc.net.au/science/news/stories/s866600.htm> (last accessed 25 January 2011); ‘Kiwi to help islanders abandon sinking island’, *Fairfax Media*, 1 January 2009, available online at: <http://www.stuff.co.nz/environment/141044> (last accessed 25 January 2011); See also the case of Lohachara Island in the Bay of Bengal, available online at: <http://www.independent.co.uk/environment/climate-change/disappearing-world-global-warming-claims-tropical-island-429764.html> (last accessed 25 January 2011); J. Campbell, ‘Climate-Induced Community Relocation in the Pacific: The Meaning and Importance of Land’, in J. McAdam (ed.), *Climate Change and Displacement* (Oxford: Hart Publishing, 2010) 57, 70.

¹³ ‘Evacuation from rising seas planned for Pacific islanders: 1,000 flee as sea begins to swallow up Pacific islands’, *The Independent* (UK), 29 November 2000, available online at: <http://www.heatisonline.org/contentserver/objecthandlers/index.cfm?id=3585&method=full> (last accessed 25 January 2011).

¹⁴ C. Toomey, ‘The Maldives: Trouble in Paradise’, *The Sunday Times*, 1 February 2009, available online at: <http://www.timesonline.co.uk/tol/news/environment/article5604464.ece> (last accessed 25 January 2011).

¹⁵ World Bank/Global Environment Facility, ‘Kiribati - Adaptation program - Pilot implementation phase (Kap-II), project executive summary’, available online at: <http://www-wds.worldbank.org> (see Project documents – Kiribati) (last accessed 25 January 2011) and the related ‘Project Appraisal Document’, 70-73; see also ‘Republic of Kiribati: Integrated land and population development program on Kiritimati Island (financed by

which has been linked with climate change, although other factors may be more dominant.¹⁶ On the other hand, in Vanuatu, the relocation of an entire settlement on one of the islands was labelled a climate change adaptation project.¹⁷

To the extent that entire populations of States would be displaced, however, specific additional questions could arise linked to potential statelessness. The number of States at risk would evidently affect the number of persons who could potentially be displaced; the population of the above-mentioned States of Kiribati, Tuvalu, Tokelau, the Maldives and the Marshall Islands is, however, less than 600,000.¹⁸ This number could be considered small in relation to the total number of persons that could be permanently or temporarily displaced due to flooding, which was estimated by the United Nations Development Programme (UNDP) at 330 million if global temperatures were to rise by three to four degrees.¹⁹ In absolute terms, the challenge would be a considerable one nonetheless and could potentially lead to statelessness for some of the populations affected.

This paper will assess the relevance of the principle that statelessness should be prevented in addressing the situation of low-lying island States.²⁰ The paper begins by examining the elements of statehood under public international law. While there is a strong presumption of continuity for established states, the possibility of a total loss of territory for natural reasons, or the total displacement of a population and/or government, is entirely novel, and would

the Japan Special Fund', November 2006, available online at: <http://www.adb.org/Documents/TARs/KIR/39641-KIR-TAR.pdf> (last accessed 25 January 2011).

¹⁶ See Islands First, *Issues – Rising sea levels*, available online at http://www.islandsfirst.org/issues/rising_sea_level.html (last accessed 25 January 2011). As noted above, six families consisting of more than 100 persons were reportedly evacuated temporarily by the Tuvalu Red Cross Society in 2007; see Tuvalu Red Cross Society, 'Joining Forces to Tackle Climate Change', June 2008, available online at <http://www.climatecentre.org/downloads/File/programs/TuvaluCaseStudy%20Joining%20forces%202008%202p%20web.pdf> (last accessed 25 January 2011).

However, as noted by Gemenne and Shen, internal migration from the outer islands to Funafuti, the capital, has been a major pattern in Tuvalu, (Gemenne and Shen, note 11 above, 10).

¹⁷ 'Republic of Vanuatu national adaptation programme for action (NAPA)', prepared under the auspices of the UNFCCC, available online at http://unfccc.int/national_reports/napa/items/2719.php (last accessed on 25 January 2011), 20.

¹⁸ Based on projected population estimates for July 2011 provided by the United States Central Intelligence Agency, *2011 World Factbook*, available online at: <https://www.cia.gov/library/publications/the-world-factbook/geos/cg.html> (last accessed 29 May 2011), the total is 574,852 persons.

¹⁹ *Human development report 2007/2008: Fighting climate change: Human solidarity in a divided world*, published for the United Nations Development Programme (UNDP), Summary, 18, available online at: http://hdr.undp.org/en/media/HDR_20072008_Summary_English.pdf (last accessed 25 January 2011). This is a worst case scenario inasmuch as current discussions around the United Nations Framework Convention on Climate Change (UNFCCC) focus on limiting temperature rise to less than two degrees centigrade above pre-industrial levels; see, for example, 'Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - Towards a comprehensive climate change agreement in Copenhagen', {SEC(2009) 101} {SEC(2009) 102}, COM/2009/0039 final, 28 January 2009, available online at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52009DC0039:EN:NOT> (last accessed 25 January 2011). Moreover, it should be noted that the estimates vary considerably between sources and are subject to controversy.

²⁰ 'Climate change' has been defined in Art. 1 of the United Nations Framework Convention on Climate Change (UNFCCC) as 'a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods', (UNFCCC, 1771 U.N.T.S. 107, opened for signature 9 May 1992, entered into force 24 March 1994, available online at: <http://unfccc.int/resource/docs/convkp/conveng.pdf> (last accessed 25 January 2011). Not all meteorological or environmental change can be attributed to 'climate change' as such.

present a heightened risk of statelessness. The paper goes on to specifically examine the situation of low-lying island States, and the risk of statelessness that might result from their submersion. The paper concludes by exploring possible actions to prevent statelessness.

It is clear, that in the absence of adequate protection or migration regimes,²¹ the prevention of statelessness does not *per se* entail the granting of a secure status in other States. As elaborated below, however, limited regimes of protection in cases of natural disasters as well as labour migration schemes could be part of comprehensive multilateral arrangements to prevent statelessness and ensure durable solutions. The conclusion of such arrangements could additionally have an effect on current migration flows and offer greater predictability for the future.²²

2. Statehood and statelessness

According to the definition in Article 1 of the 1954 Convention relating to the Status of Stateless Persons (hereafter, ‘the 1954 Convention’), a stateless person is ‘a person who is not considered as a national by any State under the operation of its law’.²³ Should a State cease to exist, citizenship²⁴ of that State would then cease, as there would no longer be a State of which a person could be a citizen.²⁵ In the case of low-lying island States, the question would thus be whether a State would continue to exist if its entire territory were submerged and/or if the entire population and the government were in exile.²⁶

There is, on the other hand, no internationally agreed upon definition of a State.²⁷ Article 1 of the 1933 Montevideo Convention on Rights and Duties of States lists a defined territory, along with a permanent population, a government and the capacity to enter into relations

²¹ See, for example, ‘Climate change, migration and displacement: Who will be affected?’, Working paper submitted to a meeting of the Ad Hoc Working Group on Long-Term Cooperative Action (AWG-LCA 6) under the UN Framework Convention on Climate Change by the informal group on Migration/ Displacement and Climate Change of the Inter-Agency Standing Committee, 31 October 2008, available online at: <http://www.unhcr.org/4a1e4fb42.html> (last accessed 25 January 2011).

²² See Gemenne and Shen, note 11 above.

²³ Convention relating to the Status of Stateless Persons. New York, 360 UNTS 117, 28 September 1954, entered into force 6 June 1960. According to the International Law Commission, the definition of a stateless person in the 1954 Convention ‘can no doubt be considered as having acquired a customary nature’. See *Draft Articles on Diplomatic Protection (With Commentaries)*, in ‘Report of the International Law Commission: Fifty-eighth session (1 May – 9 June and 3 July – 11 August 2006)’, UN Doc. A/61/10, 49.

²⁴ The terms ‘citizenship’ and ‘nationality’ are used interchangeably here in the sense of a legal bond with a particular State.

²⁵ This was also confirmed by the International Law Commission: ‘[w]hen a state disappears by dissolution, its nationality also disappears’, International Law Commission, *Draft Articles on Nationality of Natural Persons in Relation to the Succession of States (With Commentaries)*, 3 April 1999. Supplement No. 10, UN Doc. A/54/10, 43, Commentary (1) to Art. 23, available online at: <http://www.unhcr.org/refworld/docid/4512b6dd4.html> (last accessed 25 January 2011).

²⁶ The term ‘in exile’ is the term generally used to refer to governments outside their territory. According to the Webster-Merriam Dictionary, this may comprise both voluntary and forced absence from a home country; see Merriam-Webster on-line dictionary, available online at: <http://www.merriam-webster.com/dictionary/exile> (last accessed 25 May 2011). Since persons from affected island States have already or are likely to continue to migrate to other States, where they may acquire permanent residence and citizenship rights, the term ‘exile’ should be understood with reference to a cultural, social and spiritual home country.

²⁷ Crawford notes a number of attempts to define statehood which failed on the issue of recognition, see J. Crawford, *The Creation of States in International Law* (2nd edn., Oxford: OUP, 2006) 31, 37-45.

with other States, as evidence of statehood.²⁸ These criteria are generally accepted as representing customary international law.²⁹ Additional criteria have been considered at times, although they are not examined further here.³⁰

There is general agreement that one of the key requirements for statehood is the existence of a territory. A territory should consist of a natural surface of the earth, although man-made formations consisting of artificially reclaimed parts of the seashore which had been submerged could be considered part of a State's territory.³¹ Shaw notes that 'the relevant framework revolves essentially around territorial effectiveness'.³² Crawford agrees that 'the State must consist of a certain coherent territory effectively governed', although he emphasizes that there are no requirements as to size or contiguity and borders.³³

The requirements for statehood are interlinked. Thus, the criterion of 'permanent population' should be understood as linked to that of territory which it should inhabit and where it should form a stable community.³⁴ The population must be residing on the territory of the State,³⁵ and Shaw considers that 'a nomadic population might thus not count for the purposes of territorial sovereignty'.³⁶ A large number of nomads moving in and out of the territory do not affect statehood, however, as long as there are a significant number of permanent inhabitants.³⁷

As for the government, in principle it should be effectively in control of its territory and population. The requirement of an 'effective government might be regarded as central to its claim to statehood',³⁸ although in certain circumstances this criterion is less strictly applied.³⁹ While noting that 'a foundation of effective control is required for statehood',⁴⁰

²⁸ Montevideo Convention on Rights and Duties of States, 165 LNTS 19, signed at Montevideo, 26 December 1933, entered into force, 26 December 1934.

²⁹ See, for example, Arbitration Commission of the European Conference on Yugoslavia (Badinter Commission), Opinion No. 1, (1992) 3 *EJIL* 182-183.

³⁰ See I. Brownlie, *Principles of Public International Law* (6th edn., Oxford: OUP, 2003) 70-76; Crawford, note 27 above, 45-62. Georg Jellinek's 'Drei-Elementen-Lehre' relies on the first three elements only, that is territory, population and government; see P. Malanczuk, *Akehurst's Modern Introduction to International Law* (7th edn., London/New York: Routledge, 1998) 75.

³¹ *In re Duchy of Sealand Administrative Court of Cologne*, 3 May 1978, *International Law Reports*, Vol. 80, 1989, 684-685.

³² M. N. Shaw, *International Law*, (6th edn., Cambridge: CUP, 2008) 199, 960.

³³ See Crawford, note 27 above, 43-52. He suggests that the lack of absoluteness makes 'the requirement of territory (...) a constituent of government and independence rather than a distinct criterion of its own'; *ibid.*, 52.

³⁴ Brownlie, note 30 above, 70. Malanczuk, note 30 above, agrees and notes that this 'constitutes the physical basis for the existence of a state'.

³⁵ Crawford, note 27 above, 53.

³⁶ Shaw, note 32 above, 199.

³⁷ Malanczuk, note 30 above, 76.

³⁸ Crawford, note 27 above, 55.

³⁹ One such example is Congo, which could not be considered to have an effective government but had full rights to exercise all authority. A stricter test was applied for Finland, which was still engaged in a civil war with foreign involvement. See Crawford, note 27 above, 55-61. Brownlie also underlines that States have been recognized when the government was still not really effective, Brownlie, note 30 above, 71, such as for Poland, Rwanda and Burundi and concludes that, in certain cases, it is 'either unnecessary or insufficient to support statehood.'

⁴⁰ Shaw, note 32 above, 201.

Shaw suggests that the criterion may have undergone modification and that effective control over the entire territory and population is less critical than it used to be.⁴¹

The fourth element in the Montevideo Convention, the ‘capacity to enter into relations with other States’, finds differentiated treatment. Although it is accepted that all States must have the capacity to enter into such relations, it ‘is no longer, if it ever was, an exclusive State prerogative’.⁴² Instead, many authors emphasize ‘independence’,⁴³ as ‘the decisive criterion of statehood’.⁴⁴ A distinction is also drawn between ‘formal independence’, whereby all powers, both internal and external, over a certain territory should rest with the government, and the ‘real or actual independence’ of that government. In principle, both are necessary, but in fact, ‘actual independence’ is often challenged without statehood being called into question. Even ‘formal independence’ may be compromised to a degree: Shaw, for example, cites the case of Bosnia and Herzegovina, where independence was recognized despite a considerable degree of international supervision.⁴⁵

There have been few cases of extinction of States and, of those that have occurred, extinction has occurred in the context of succession, whereby another State replaced the extinct one. The situation of low-lying island States would be unique in this sense, inasmuch as there would, in principle, be no successor States in such cases.⁴⁶ Normally, a presumption of continuity applies to existing States even if the criteria of statehood appear to be met in a limited fashion only.⁴⁷ There is, however, no precedent for loss of the entire territory of a State or the exile of the entire population of a State.

When considering continuity of statehood, Shaw notes that ‘one has to consider the classical criteria of statehood together with assertions as to status made by the parties directly concerned and the attitudes adopted by third States and international organizations.’⁴⁸ In fact, continuity has been accepted despite sometimes very extensive loss of actual authority.⁴⁹ It would not matter whether such loss of authority occurred due to extensive civil strife or the breakdown of order due to foreign invasion or natural disasters.⁵⁰ For instance, the governments in exile of a number of countries continued to issue national passports during World War II (WWII) and their authority to do so was not questioned.⁵¹ Governments in exile have been able to continue diplomatic relations with other States, the key issue being whether they were recognized as States or not.⁵² Statehood may in fact continue even when a

⁴¹ He compares the delay with which Finland had been recognized to the more immediate recognition of Croatia and Bosnia-Herzegovina, for example, although these governments did not control sizeable portions of the territory claimed; Shaw, note 32 above, 200-201.

⁴² Crawford, note 27 above, 61. Akehurst/Malanczuk also note that it ‘is not generally accepted as necessary’: Malanczuk, note 30 above, 79.

⁴³ Brownlie, note 30 above, 71.

⁴⁴ Brownlie, note 30 above, 71.

⁴⁵ Shaw, note 32 above, 203-204.

⁴⁶ An exception would be if union were achieved with another State prior to extinction.

⁴⁷ Crawford, note 27 above, 89.

⁴⁸ Shaw, note 32 above, 203-204, 960.

⁴⁹ Crawford, note 27 above, 89.

⁵⁰ Brownlie, note 30 above, 71.

⁵¹ A. Grahl-Madsen, *The Status of Refugees in International Law, Volume I: Refugee Character* (Leyden: A.W. Sijthoff, 1966) 259.

⁵² See S. Talmon, *Recognition of Governments in International Law with Particular Reference to Governments in Exile* (Oxford: Clarendon Press, 1998) 115-206. A number of restrictions apply, however, to governments in exile, particularly in terms of jurisdiction. These are elaborated further below.

central government is lacking altogether, as was the case in Somalia.⁵³ Statehood also does not cease where the territory has been occupied lawfully or placed under the administration of foreign powers, as the aim is to act as agents and not to dissolve the State, as was the case of Germany post-WWII.⁵⁴

If exile can be considered as a temporary problem, there is thus precedent for continuity of statehood. The presumption that such exile is temporary, however,⁵⁵ implies that extinction could occur where ineffectiveness of a government or loss of independence continues over an extended period or becomes permanent. There is no precedent, however, for loss of the entire territory or the exile of the entire population of a State, without a theoretical possibility of reversal of the situation. Presumably, similar considerations would apply. As noted above, the criteria for statehood are interlinked; in principle, the population should inhabit the territory and be under the control of the government.

That said, even if a government continues to exist and is recognized, its legal capacities would nonetheless be limited, because of its lack of territory and permanent population.⁵⁶ The government would need a host State willing to receive it as such. Its scope of action would depend on the rights that a host State would be willing to grant it.

Presumably, if a host State extended an invitation to the government of an affected island State, this would include a willingness to permit it to exercise its personal sovereignty over its nationals in the form of diplomatic and consular protection.⁵⁷ This would also include an acceptance of its legislative jurisdiction.⁵⁸ It is unlikely that permission to exercise jurisdiction to enforce its laws would be granted, however.⁵⁹ Therefore, it is unlikely that State institutions, such as the police or courts, would be able to function. Although a host State could agree to use its institutions to enforce the laws of the government in exile, this would probably be very limited in scope.⁶⁰ The government's capacities would also be limited by the lack of territorial sovereignty. Since the entire population of the State would be under the territorial jurisdiction of a foreign State, potentially different from the host State, the powers of the government would depend not only on the host country but also on the willingness of other States to accord or recognize the jurisdiction of the government, presumably without the possibility of reciprocity. The government's effectiveness would be questionable, and the criterion of 'independence' would not appear to be met. Nationals of

⁵³ Malanczuk, note 30 above, 77.

⁵⁴ Malanczuk, note 30 above, 78; see also Brownlie, note 30 above, 72, 106-107; Crawford, note 27 above, 76. The situation of Iran from 1941 to 1946 is similar, albeit for a shorter period; see *ibid.*, 86.

⁵⁵ See for example Talmon, note 52 above, 136. It should be noted that the examples cited by Talmon, *ibid.*, 218-250, involve governments in exile as a result of foreign occupation during war. Governments in exile continued to be involved in the war effort. These could thus be considered exceptional situations.

⁵⁶ See Malanczuk, note 30 above, 84, Brownlie, note 30 above, 64, 86-88, Crawford, note 27 above, 26-28, 93.

⁵⁷ Talmon, note 52 above, 202-206.

⁵⁸ Talmon, note 52 above, 215-216. Talmon engages in a more extensive examination of the jurisdiction of governments in exile, including the scope of legislative and other State powers and the likelihood that such legislation could conform with constitutional requirements; *ibid.*, 218-250.

⁵⁹ Only in very specific situations has some judicial competence been accorded; these were, however, related to war-time events; see Talmon, note 52 above, 216-218, 238-243.

⁶⁰ See Talmon, note 52 above, 215-218, 238-243. Talmon also emphasizes that the courts of host States are under no obligation to recognize the laws of another State on their territory. He examines, however, the extent to which foreign courts have enforced national legislation of governments in exile and notes that this has occurred by comity. This has been limited in general to cases where the laws could be considered valid and were not of a confiscatory or penal nature or otherwise contrary to the public policy of the host State; see Talmon, *ibid.*, 243-250.

such States, should they continue to be recognized, could thus potentially face many of the same problems as stateless persons. Should such States be considered to have become extinct, former nationals of such States would be *de jure* stateless.

It should be noted that even if cessation of statehood should arise, this would not prevent a government from continuing to have some international qualities.⁶¹ The Sovereign Military Order of Malta constitutes a particularly relevant case. It claims to be a sovereign entity with its own government and public institutions. It issues passports to its members,⁶² entertains diplomatic relations with a considerable number of States and has been admitted as a permanent observer to the United Nations.⁶³ It lacks, however, a territory⁶⁴ and is generally not considered to be a State.⁶⁵

3. Statehood, statelessness, low-lying island States

As noted above, the loss of the entire territory of a State or the exile of the entire population and government is without precedent. Given that island States are recognized as States, the presumption of continuity would apply. Insofar as there was a possibility that the elements of statehood could be restored, continuity of the State would likely not be questioned. The situation could be different, however, if the loss of territory or the exile of the population and government were to become permanent.

The International Scientific Congress on Climate Change announced in March 2009 that a rise in sea levels over one meter was possible by the end of the century.⁶⁶ Such a rise is considerably more than projected by the IPCC in its 2007 report and would be sufficient to submerge much of Tuvalu, Kiribati and the Maldives, for instance. Presumably, even the most minuscule territory could be sufficient to meet the criteria for statehood.⁶⁷ The requirement of territory could be considered to be legally met for some time still, although territorial sea and economic zones would presumably decrease and could become defunct prior to complete loss of all land territory.⁶⁸ In view of the points of highest elevation

⁶¹ See Crawford, note 27 above, 27-31; Shaw, note 32 above, 195-197.

⁶² See the official site of the Order: <http://www.orderofmalta.org/site/struttura.asp?idlingua=5> (last accessed 25 January 2011). Members retain, however, the citizenship of their countries.

⁶³ Website of the Order of Malta, note 62 above. With respect to the permanent observer status in the United Nations, see UNGA Resolution 48/265, 30 August 1994.

⁶⁴ This has not always been the case historically, see the official site of the Order, note 62 above.

⁶⁵ See Crawford, note 27 above, 30; N. Cox, 'The Acquisition of Sovereignty by Quasi-States: The Case of the Order of Malta', (2002) 6 (1&2) *Mountbatten Journal of Legal Studies* 26-47; see also the records of the meeting of the General Assembly resolution discussing the admission the Order of Malta as a permanent observer, where reference is made to the Order's long-standing dedication to provide humanitarian assistance and its special role in international humanitarian relations. However, statehood was objected by a number of speakers who referred instead to the Order as a non-governmental organization. See General Assembly, Official records, Forty-eighth Session, 103rd Meeting, 24 August 1994, UN Doc. A/48/PV.103, and General Assembly, Summary record of the 13th meeting, 22 July 1994, UN Doc. A/BUR/48/SR.13.

⁶⁶ At the International Scientific Congress on Climate Change held in March 2009 in Copenhagen, scientists highlighted that sea level could rise by up to one meter or more by 2100, and was unlikely to be less than 0.5m, see Climate Secretariat, University of Copenhagen, 'Rising sea levels set to have major impacts around the world', 10 March 2009, available online at: http://climatecongress.ku.dk/newsroom/rising_sealevels/ (last accessed 29 March 2011).

⁶⁷ Brownlie notes that '[t]he concept of territory includes islands, islets, rocks and reefs', note 30 above, 105.

⁶⁸ Art. 47 of the UN Convention on the Law of the Sea, 1833 UNTS 397, 10 December 1982, ('UNCLOS') defines how the baseline should be determined with respect to archipelagic island States. It provides for straight baselines to be drawn from the outermost islands and drying reefs subject to specific conditions set out in the Article. As islands of the archipelago are submerged, the question arises to what extent this would result in

outlined above, it appears unlikely that the entire territory of any State would be fully and finally submerged before the end of the century.

In any event, the territory would become completely uninhabitable long before its full disappearance,⁶⁹ forcing the population and the government, to the extent the latter continued to exist, into exile. The island States concerned are generally already subject to frequent cyclones and tropical storms, and the number and intensity of such extreme events are expected to increase considerably as a consequence of climate change. Tides are also worsening with global warming and rising sea levels. Increased storm surges and more severe flooding are likely.⁷⁰ In some cases, they are already sufficient to submerge entire island States, albeit temporarily, although this may not necessarily be linked solely to climate change. Thus, much of Tuvalu's land territory is reportedly regularly inundated by tidal waves,⁷¹ and the country has suffered the destruction of homes and the contamination of food supplies.⁷² The Maldives were also submerged almost fully for several minutes by the tsunami of 2004,⁷³ and tidal surges have since flooded 80 of the islands.⁷⁴

An earlier IPCC report highlighted that 'land loss from sea-level rise, especially on atolls (e.g. those in the Pacific and Indian Oceans) and low limestone islands (e.g. those in the Caribbean), is likely to be of a magnitude that would disrupt virtually all economic and social sectors in these countries'.⁷⁵ The IPCC, thus, warns that the combination of economic and climate change factors could make it difficult to ensure sustainability of habitation on

baselines being redrawn. Further, Art. 121 UNCLOS provides that '(1) [a]n island is a naturally formed area of land, surrounded by water, which is above water at high tide. (2) [e]xcept as provided for in paragraph 3, the territorial sea, the contiguous zone, the exclusive economic zone and the continental shelf of an island are determined in accordance with the provisions of this Convention applicable to other land territory. (3) [r]ocks which cannot sustain human habitation or economic life of their own shall have no exclusive economic zone or continental shelf.' No definition is given of rocks, and how they are to be differentiated from islands. Kiribati, the Maldives, the Marshall Islands and Tuvalu are parties to the Convention.

⁶⁹ IPCC, *Climate change 2007*, note 5 above, 692, 697. See also 'Vulnerability and adaptation to climate change in small island developing States', Background Paper for the Expert Meetings on Adaptation for Small Island Developing States, Jamaica, 5-7 February 2007 and Cook Islands, 26-28 February 2007) commissioned by the Secretariat of the UNFCCC with input provided by Dr. Graham Sem.

⁷⁰ See 'Vulnerability and adaptation to climate change in small island developing States', note 69 above; also IPCC, *Climate change 2007*, note 5 above, 692, 697. See also an earlier report, which highlighted the increasing height of storm surges due to the rise in sea levels. IPCC, *Climate change 2001*, Third assessment report: Impacts, adaptation and vulnerability, contribution of working group II, Chapter 17, Section 17.2.2, available online at: http://www.grida.no/publications/other/ipcc%5Ftar/?src=/climate/ipcc_tar/ (last accessed 25 January 2011).

⁷¹ See Tuvalu's 'National adaptation programme of action for Tuvalu under the auspices of the UNFCCC', May 2007, available online at: <http://unfccc.int/resource/docs/napa/tuv01.pdf> (last accessed 24 May 2011). Re rising tides; see Islands First, *Issues – Rising sea levels*, note 16 above; see also D. Shukman, 'Tuvalu struggles to hold back tide', BBC News, Tuvalu, 22 January 2008, available online at: <http://news.bbc.co.uk/1/hi/sci/tech/7203313.stm> (last accessed 25 January 2011).

⁷² Make Poverty History, *Australian action on climate change: A guide for Garnaut and the government*; available online at: <http://www.foe.org.au/climate-justice/activities-and-projects/funding-adaptation/MPH%20Climate%20Change%20Report%20final%20web.pdf> (last accessed 25 January 2011), 10. The Tuvalu Red Cross reports that in 2007, it evacuated six families on Funafuti atoll, totaling over 100 persons; see Tuvalu Red Cross Society, note 16 above.

⁷³ J. Hamilton, 'Maldives builds barriers to global warming', 28 January 2008, National Public Radio, available online at: <http://www.npr.org/templates/story/story.php?storyId=18425626> (last accessed 25 January 2011).

⁷⁴ See Islands First, note 16 above.

⁷⁵ See IPCC, *Climate change 2001*, note 70 above, Section 17.2.2. The IPCC notes that 'in many autonomous small islands the cost of adopting and implementing adaptation options is likely to be prohibitive, and a significant proportion of a country's economic wealth. Financial resources that are generally not available to island governments would need to come from outside.' See IPCC, *Climate change 2007*, note 5 above, 706.

low-lying islands,⁷⁶ and that ‘rapid sea-level rise that inundates islands and coastal settlements is likely to limit adaptation possibilities, with potential options being limited to migration’.⁷⁷ Furthermore, the IPCC has indicated with a high level of confidence that rises in sea levels are unavoidable even in the longer term.⁷⁸ According to a recent study, rise in sea levels, changes in rainfall and resulting reductions in the availability of fresh water supplies due to current carbon dioxide emissions are locked in for the next 1000 years.⁷⁹

It is also projected that island States will suffer from accelerated erosion, increasing salination of arable land, contamination of fresh water sources and changes in the amount of rainfall and climate, resulting in serious shortages of fresh water both for consumption and for agricultural purposes. Extensive destruction of coral reefs, with its ensuing impact on tourism, fishing and protection against major surges is foreseen. Furthermore, ocean warming is likely to have an impact on fisheries. Rising sea levels would impact the vulnerable coastal areas, in particular, where settlements and infrastructure are generally located. Island States would probably face severe shortages of fresh water, severe risks to food security due to the impact on agricultural activities and fishing, as well as the destruction of most, if not all, of its existing infrastructure and settlements. Overall, there will therefore be a major impact on sources of income, such as fishing and tourism, particularly in the case of the Maldives,⁸⁰ as well as on any foreign investment.⁸¹ Although such an impact might not be solely attributable to climate change, the effects of climate change would likely aggravate and be aggravated by existing challenges faced by affected island States.⁸²

Measures to mitigate the intensity of climate change and to adapt to its consequences are critical and could presumably prolong the period during which the territory of the island States will remain at least partially habitable. At least one recent study suggests that the situation may not be as dire as predicted, and that while water levels are rising, there is some evidence that the islands themselves are also growing, as erosion from the coral reefs surrounding the islands is swept onto the mainland, leading to a continual growth.⁸³ While heartening, the science behind such a conclusion is still at an early stage. Failing such a natural solution, manmade efforts may be attempted: the example of the Netherlands shows that adaptation is possible even where territory falls below sea levels, albeit at a cost.⁸⁴ This

⁷⁶ IPCC, *Climate change 2007*, note 5 above, 707.

⁷⁷ IPCC, *Climate change 2007*, note 5 above, 733.

⁷⁸ IPCC, *Climate change 2007*, note 5 above, 317. A more recent study appears to confirm this, although the amount of the rise that is inevitable is not yet clear as the melting of glaciers and polar ice sheets were not considered. See U.S. Department of Commerce, National Oceanic and Atmospheric Administration, ‘New study shows climate change largely irreversible’, 26 January 2009, http://www.noaanews.noaa.gov/stories2009/20090126_climate.html (last accessed 25 January 2011).

⁷⁹ U.S. Department of Commerce, National Oceanic and Atmospheric Administration, note 78 above.

⁸⁰ Although tourism has not been a major source of income for Tuvalu and Kiribati, the possible impact of climate change appears to be generating a particular type of tourism by researchers and journalists, see for example, Mortreux and Barnett, note 11 above, 107-108.

⁸¹ See IPCC, *Climate change 2007*, note 5 above, 689-716; Islands First, note 16 above; Barnett and Adger, note 4 above.

⁸² See for example Global International Waters Assessment (GIWA), *Pacific Islands: Regional assessment No.62*, available online at: <http://www.unep.org/dewa/giwa/publications/r62.asp> (last accessed 25 January 2011); GIWA is a water programme led by the United Nations Environment Programme, UNEP.

⁸³ W. Zuckerman, ‘Shape-shifting islands defy sea-level rise’, *New Scientist*, 2 June 2010, available online at: <http://www.newscientist.com/article/mg20627633.700-shapeshifting-islands-defy-sealevel-rise.html> (last accessed 25 January 2011).

⁸⁴ See for example, C. Woodard, ‘Netherlands battens its ramparts against warming climate’, *Christian Science Monitor*, 4 September 2001, available online at:

is important as well given that studies suggest that the majority of the population wishes to remain on their islands.⁸⁵ Research here too remains in the early stages, however.⁸⁶ While some initial efforts are under way, large-scale initiatives appear to be hampered by a number of constraints including serious lack of funding.⁸⁷ Although so-called low-cost ‘no-regrets’ measures should have some benefits, even if projected climate change does not materialize,⁸⁸ major projects such as sea walls are expensive. The Maldives built a wall to protect Male, its capital, but has expressed concern at the initial cost, reportedly 70 million USD or more than 10 per cent of GDP at the time of completion,⁸⁹ as well as ongoing expenditures for its upkeep and continued seepage of sea water despite the wall.⁹⁰ It should also be noted that the small island States most vulnerable to extinction are members of the group of Small Island Developing States (SIDS), and Kiribati and Tuvalu, amongst others, belong to the group of Least Developed Countries (LDCs).⁹¹

http://news.nationalgeographic.com/news/2001/08/0829_wiredutch.html (last accessed 25 January 2011); M. Rosenberg, ‘Polders and dykes of the Netherlands: The reclamation of land in the Netherlands’, *About.com. Geography*, available online at: <http://geography.about.com/od/specificplacesofinterest/a/dykes.htm> (last accessed 25 January 2011).

⁸⁵ See for example Mortreux and Barnett, note 11 above, 109-111; Gemenne and Shen, ‘Tuvalu and New Zealand: Case study report’, *supra*, note 11 above, 13-14. See also, Permanent Mission of the Republic of the Marshall Islands to the United Nations, New York, note 4 above.

⁸⁶ See IPCC, *Climate change 2007*, note 5 above, 712. See also ‘Vulnerability and adaptation to climate change in small island developing States’, note 69 above, which speaks of a range of planned adaptation actions and projects, although a considerable number relate to increasing awareness and the carrying out of assessments. The report also highlights a number of major constraints; *ibid*, 17-24. See also relevant ‘National adaptation programmes for action (NAPA)’ developed for the Least Developed Countries under the UNFCCC, available for Kiribati, Tuvalu, and other States, at http://unfccc.int/national_reports/napa/items/2719.php (last accessed on 25 January 2011). A policy note by the World Bank further highlights the importance of engaging in preventive actions to manage risks from natural hazards rather than rebuilding once disasters have struck, particularly from a perspective of cost-effectiveness. It outlines measures which should be undertaken in this regard, and underlines the importance of an enabling environment for such ‘risk management of natural hazards’ to be implemented. World Bank, ‘Not if but when: Adapting to natural hazards in the Pacific islands region: A policy note’, 2006, available online at: <http://siteresources.worldbank.org/INTPACIFICISLANDS/Resources/Natural-Hazards-report.pdf> (last accessed 25 January 2011).

⁸⁷ There appear to be considerable obstacles to a number of possible funding mechanisms being discussed, including possible insurance schemes for small islands. See ‘Vulnerability and adaptation to climate change in small island developing States’, note 69 above, 26-27. See also World Bank, note 86 above, 34-35. Funding made available through the framework of the UNFCCC as well appears limited to date. Thus a total of 26 million USD was provided to date through the Least Developed Country Fund and the Special Climate Change Fund, comparable to a week’s spending under the United Kingdom’s flood defense programme, although 279 million USD have been pledged for disbursement over several years. Even this amount represents a fraction of requirements. *Summary of the human development report 2007/2008*, available online at: http://hdr.undp.org/en/media/HDR_20072008_Summary_English.pdf (last accessed 23 May 2011), 25.

⁸⁸ See World Bank, note 86 above, V. Kolmannskog, ‘No regrets’ (2008) 31 *Forced Migration Review: Climate Change and Displacement*, 46. More research in this area may be useful, see R. Heltberg, P. Bennett Siegel, S. Lau Jorgensen, ‘Addressing human vulnerability to climate change: Toward a ‘no-regrets’ approach’, (2009) 19 *Global environmental change*, 89-99.

⁸⁹ Submission of the Maldives to the Office of the United Nations High Commissioner for Human Rights under Human Rights Council Resolution 7/23’, 25 September 2008, available online at: http://www2.ohchr.org/english/issues/climatechange/docs/submissions/Maldives_Submission.pdf (last accessed 25 January 2011).

⁹⁰ Delegate of the Maldives during meeting on ‘Climate change, human rights and forced human displacement’, co-sponsored by UNHCR and Displacement Solutions, Canberra, Australia, 10 December 2008.

⁹¹ See the listing of Small Island Developing States prepared by the UN Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States, available online at: <http://www.un.org/special-rep/ohrls/sid/list.htm> (last accessed 25 January 2011).

The process of depopulation of small island states is already occurring and is likely to continue over time, with increased voluntary migration and forced relocation becoming increasingly more prevalent.⁹² While a number of more recent movements and relocations have been linked with climate change, there appear to be usually multiple causes including economic, social, geological and other environmental factors, with the impact of climate change acting as a culmination point.⁹³ Although some may see migration as a positive adaptation to individual circumstances, others raise questions as to the effect of such migratory flows on the future viability of small island states.⁹⁴ In any case, as long as small island States remain at least partially habitable, internal migration and relocation are likely to overshadow significantly any external movements.

Nonetheless, the potential humanitarian consequences of climate change are beginning to receive attention at the international level. Climate-induced displacement has been examined by the Special Representative of the Secretary-General on the human rights of internally displaced persons and the Task Force on climate change of the Inter-Agency Standing Committee (IASC). In 2009, UNHCR issued a paper entitled 'Climate change, natural disasters and human displacement: A UNHCR perspective'.⁹⁵ Supported by the International Organization for Migration (IOM) and the Norwegian Refugee Council (NRC), UNHCR also submitted a paper entitled 'Climate Change and Statelessness: An Overview' to the Ad Hoc Working Group on Long-Term Cooperative Action under the UN Framework Convention on Climate Change (UNFCCC).⁹⁶

The involvement of the international community is important because if the whole population and the State's government were to be compelled to move abroad, the latter's powers will be considerably restricted. Lack of funds could prove an important obstacle in practice. Although the governments concerned could potentially continue to claim some income from agreements with other States on fishing rights, the impact of the loss of land territory on the size of the territorial seas and the exclusive economic zone,⁹⁷ as well as the

⁹² Many factors may influence migration decisions, including where they relate to the environment, and the time at which particular individuals feel compelled to move is likely to differ considerably. See United Nations University - Institute for Environment and Human Security, 'Human security, climate change and environmentally induced migration', 30 June 2008, available online at: <http://www.ehs.unu.edu/file/get/4033> (last accessed 25 January 2011). See also Mortreux and Barnett, note 11 above; and Gemenne and Shen, 'Tuvalu and New Zealand: Case study report', note 11 above.

⁹³ See for example M. Loughry and J. McAdam, 'We aren't refugees', *Inside story*, 29 June 2009, available online at: <http://inside.org.au/we-arent-refugees/> (last accessed 25 January 2011).

⁹⁴ Indeed, concerns have been raised that attention and resources that could be devoted to adaptation on small island States could be diverted towards migration options and possibly increase migration outflows from small island States at a time when skills and resources are needed to ensure appropriate and sustainable adaptation measures; see for example Mortreux and Barnett, note 11 above, 105-106; Barnett and Adger, note 4 above; Gemenne and Shen, 'Tuvalu and New Zealand: Case study report', note 11 above, which highlights the danger of undermining sustainable use of current resources, 17. The same report also notes that for this reason, the Prime Minister of Tuvalu had requested that the migration quota established for Tuvalu by New Zealand under the Pacific Access Category be reduced from 300 to 75, *ibid*, 17.

⁹⁵ UNHCR, 'Climate change, natural disasters and human displacement: a UNHCR perspective', 14 August 2009, available online at <http://www.unhcr.org/4901e81a4.pdf> (last accessed 25 January 2011).

⁹⁶ UNHCR, 'Climate Change and Statelessness: An Overview', 15 May 2009, available online at: <http://www.unhcr.org/refworld/docid/4a2d189d3.html> (last accessed 25 January 2011).

⁹⁷ As noted earlier, Art. 47 UNCLOS provides for the determination of baselines which are based on the outermost islands and drying reefs. Should those islands or reefs be submerged, this would presumably affect baselines. Art. 121(3) further provides that '[r]ocks which cannot sustain human habitation or economic life of their own shall have no exclusive economic zone or continental shelf.' No definition is given of rocks or how

potential impact of climate change on fish stocks⁹⁸ would need to be considered. Unless measures such as the maintenance of current exclusive economic zones were adopted,⁹⁹ the government could become dependent on funding provided by other States.

Such a government would only be able to extend diplomatic and consular protection and would largely lack capacity to enforce its laws. It would struggle to guarantee even basic rights or services to its citizens. Individuals could face difficulties in obtaining relevant documents to prove their identity, as their issuance could depend on the verification of registries which might not have moved with the government or could have suffered damage from the events that led to the uninhabitability of the territory of the island State. Problems would occur if nationals were displaced to a country different from that of the government because exercise of protection would in such case depend on another State's acceptance of such exercise by the government in exile. In either case, a population forced into exile would be dependent on the status and rights a host State would be willing to grant it. Unless they met the definition of a refugee,¹⁰⁰ had some durable legal status,¹⁰¹ or had another nationality, the affected population could experience restrictions on their freedom of movement, including detention; the inability to seek employment; and lack of access to property or even basic health care.¹⁰² While they should enjoy protection under international

they are to be differentiated from islands. At some period, however, territorial seas and economic zones based on current baselines could potentially be lost.

⁹⁸ See J. Barnett, 'Food security and climate change in the South Pacific', (2007) 14 *Pacific Ecologist*, Winter 2007, 32-36, available online at: <http://www.pacificecologist.org/archive/14/food-security-climate-change.pdf> (last accessed 25 January 2011), which highlights the potential impact on available fish stock in the exclusive economic zones; see also Barnett and Adger, note 4 above and Barnett, 'Climate change and security in Asia: Issues and implications for Australia', *Melbourne Asia policy papers*, Number 8, March 2007, 4, available online at: <http://www.gechs.org/downloads/barnett/Barnett2007.pdf> (last accessed 25 January 2011).

⁹⁹ In view of the impact on small island States, some are arguing for the maintenance of zones once established, even if the associated land territory should disappear, see, for example, R. Rayfuse, 'W(h)ither Tuvalu? International law and disappearing states', *University of New South Wales Faculty of Law Research Series*, Paper 9, 2009, available online at: <http://www.austlii.edu.au/au/journals/UNSWLRS/2009/9.txt/cgi-bin/download.cgi/download/au/journals/UNSWLRS/2009/9.rtf> (last accessed 25 January 2011). See also D. Caron, 'Climate change, sea level rise and the coming uncertainty in oceanic boundaries: A proposal to avoid conflict', in S.-Y. Hong and J. M. Van Dyke (eds.), *Maritime boundary disputes, settlement processes, and the law of the sea (Publications on ocean development)* (Leiden: Martinus Nijhoff Publishers, 2009) available online at: http://works.bepress.com/cgi/viewcontent.cgi?article=1038&context=david_caron (last accessed 25 January 2011).

¹⁰⁰ Nationals of affected island States could claim refugee status only if they meet the definition of the Convention relating to the Status of Refugees (adopted 28 July 1951, entered into force 22 April 1954) 189 UNTS 137 (Refugee Convention), that is if they were persons that 'owing to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality and is unable, or owing to such fear, is unwilling to avail himself of the protection of that country; or who, not having a nationality and being outside the country of his former habitual residence as a result of such events, is unable or, owing to such fear, is unwilling to return to it'. While regional instruments have widened the definition, in most cases, persons forced to move externally due to the effects of climate change would still not meet such definitions. It is not excluded that nationals of affected island States may flee as refugees, however, if for example conflict would occur as a result of resource scarcity and or land rights disputes, see J. McAdam. 'Climate Change Displacement and International Law: Complementary Protection Standards', UNHCR Legal and Protection Policy Research Series, May 2011.

¹⁰¹ As an example, citizens of the Marshall Islands and other States parties to the Compact of Free Association with the United States may immigrate to the United States, although there are no guarantees with respect to permanent residence or citizenship and there are no provisions relating to climate change; see Compact of Free Association Act of 1985, available online at: <http://www.fm/jcn/compact/actindex.html> (last accessed 25 January 2011).

¹⁰² On the extent to which the international refugee regime could apply, see UNHCR, 'Climate change, natural disasters and human displacement: a UNHCR perspective', 14 August 2009, available online at:

human rights law,¹⁰³ in practice such rights could be difficult to secure. To the extent that they could not return to any country where they could secure full rights as citizens, the affected population would experience a considerable erosion of its rights.

Would States be deemed to continue to exist even with the entire population and government abroad? As noted above, continuity has been accepted, even when the criteria for statehood for not met for considerable periods of time. Statehood should in principle not be questioned if the territory's submersion is due, for example, to temporary storm surges or flooding, even if these were to occur on a regular basis, and provided it does not render the territory uninhabitable. Building dykes is a legitimate strategy to preserve territory. Existing islands may also be shored up to increase their altitude.¹⁰⁴ Although artificial islands do not have the same status as natural islands, it would presumably be possible to take action to recover territory of island States once it is fully submerged without rendering them artificial as such.¹⁰⁵

If the submersion of the entire territory through rising sea levels becomes permanent, and no other territory is ceded,¹⁰⁶ it would appear more difficult to argue that the constitutive elements of statehood continue to exist, even with the lower threshold and presumption of continuity applicable for States already in existence. Despite the fact that the air space and the territorial sea would physically remain, these are generally considered appurtenances to the land territory and, thus, would presumably pass together with the land territory.¹⁰⁷ The State's very existence could be questioned. Reactions by the affected State itself and other States would likely be the determining factor such a situation. Although State practice generally considers recognition as declaratory, its critical importance is accepted, particularly in cases where there is doubt as to the status of an entity.¹⁰⁸

There could thus be agreement that such States would continue to be recognized. However, even where continuity would be presumed, the population could find itself abroad without access to the protection of the State and be considered *de facto* stateless.¹⁰⁹ Where only

<http://www.unhcr.org/4901e81a4.pdf> (last accessed 25 January 2011); UNHCR, 'Forced displacement in the context of climate change: Challenges for States under international law', 20 May 2009, available online at: <http://www.unhcr.org/protect/PROTECTION/4a1e4d8c2.pdf> (last accessed 29 May 2011).

¹⁰³ See, UN Human Rights Committee, General Comment No.31: *Nature of the general legal obligation imposed on States parties to the Covenant*, 26/05/2004, UN Doc. CCPR/C/21/Rev.1/Add.13; General Comment No.15: *The position of aliens under the Covenant*, Twenty-seventh session, 1986; see also *Prevention of discrimination: The rights of non-citizens: Final report of the Special Rapporteur, Mr. David Weissbrodt*, submitted in accordance with Sub-Commission decision 2000/103, Commission resolution 2000/104 and Economic and Social Council decision 2000/283, Commission on Human Rights, Sub-Commission on the Promotion and Protection of Human Rights, Fifty-fifth session, UN Doc. E/CN.4/Sub.2/2003/23, 26 May 2003.

¹⁰⁴ See *Re Duchy of Sealand*, note 31 above.

¹⁰⁵ See *Re Duchy of Sealand*, note 31 above. UNCLOS provides that States shall have exclusive jurisdiction to build artificial islands as well as other structures and installations. However, Arts. 60(1) and (8) provide that '[a]rtificial islands, installations and structures do not possess the status of islands. They have no territorial sea of their own, and their presence does not affect the delimitation of the territorial sea, the exclusive economic zone or the continental shelf'. The establishment of artificial islands has reportedly been suggested in the Maldives, although this presumably refers to artificially increasing the altitude of certain islands; see Toomey, note 14 above.

¹⁰⁶ See also *infra* on option of cession of territory.

¹⁰⁷ See Brownlie, note 30 above, 105, 117-118.

¹⁰⁸ See Crawford, note 27 above, 3-36, Shaw, note 32, 207-209.

¹⁰⁹ The term 'de facto' generally refers to persons who lack an effective nationality. Thus, the Final Act of the Convention on the Reduction of Statelessness and the Draft Articles on Nationality of Natural Persons in relation to the Succession of States, 989 UNTS 175, entered into force on 13 December 1975 indicates that

certain States would cease recognition, given that nationality would be dependent on the recognition by a particular State, individuals would be left in a situation whereby they could be considered stateless in relation to some States but not others.¹¹⁰

As noted, it would also be possible to envisage the ending of statehood as such but continued existence as an entity with international personality, such as that enjoyed by the Sovereign Order of Malta. If the extinction of the State concerned were accepted, whether implicitly or explicitly, the entire population of the affected State would be rendered stateless,¹¹¹ and they would remain stateless unless they acquired the nationality of another State.¹¹²

It should be noted that the risk of statelessness, *de facto* or *de jure*, that might arise would be without prejudice to the common identity of the inhabitants of a low-lying island State, as a people with a specific cultural and social identity. The case of low-lying island States, thus, raises additional important considerations in terms of the protection of the rights of a people with a specific social and cultural identity, history and traditions.¹¹³

'persons who are stateless *de facto* should as far as possible be treated as stateless *de jure* to enable them to acquire an effective nationality'. See also Council of Europe Convention on the Avoidance of Statelessness in relation to State Succession, E.T.S. No. 200, signed in Strasbourg, 19 May 2006, entered into force 1 May 2009, Art. 3 ('Prevention of Statelessness'), para. 16: 'State succession may well create situations of *de facto* statelessness where persons do have the nationality of one of the States concerned but are unable to benefit from the protection of that State.' See also H. Massey, 'UNHCR and *de facto* statelessness', UNHCR Legal and Protection Policy Research Series, LPPR/2010/01, April 2010, in particular 61-65, available online at: <http://www.unhcr.org/4bc2ddeb9.html> (last accessed 29 May 2011).

¹¹⁰ Moreover, there is precedent for considering a population stateless even where the demise of the State is not accepted. For instance, the Baltic States, were occupied by Germany during WWII, and subsequently annexed by the former Soviet Union until 1991, when independence was restored. Continuity of the same State was largely accepted although all signs of statehood had ceased for an extended period, see for example *Penart v. Estonia*. European Court of Human Rights, Decision on admissibility, Appl. No. 14685/04, available online at: <http://cmiskp.echr.coe.int/tkp197/view.asp?item=1&portal=hbkm&action=html&highlight=penart&sessionid=65720691&skin=hudoc-en> (last accessed 25 January 2011). Crawford notes in this regard, however, that continuity in the case of the Baltic States could be questioned, since all authority was suppressed completely for a period of fifty years and their annexation was widely accepted even if only tacitly so. He acknowledges, however, that other States largely accepted the argument of continuity made by the Baltic States; see Crawford, note 27 above, 689-699, 703. Grahl-Madsen notes that persons from the Baltic States who found themselves in third States were considered by many States to be stateless in the interim period, inasmuch as they had not acquired another nationality, although others treated them as Soviet citizens; see Grahl-Madsen, note 51 above, 260.

¹¹¹ This would exclude third-country nationals present on the affected island States.

¹¹² This would be the case if individuals with links to another State acquired citizenship there. Another possibility would be where the State would become part of another State or a new State. In such cases, Art. 10 of the Convention on the Reduction of Statelessness, note 109 above, would be applicable. The International Law Commission's *Draft Articles on Nationality of Natural Persons in Relation to the Succession of States (With Commentaries)*, would also be relevant, see note 25 above. This option is explored below.

¹¹³ There appears to have been some discussion with respect to indigenous peoples in this regard. See, for example, F. Hampson, 'Prevention of discrimination: Prevention of discrimination and protection of indigenous peoples on the human rights situation of indigenous peoples in States and other territories threatened with extinction for environmental reasons', prepared for the Sub-Commission on the Promotion and Protection of Human Rights of the Commission on Human Rights, Fifty-seventh session, UN Doc. E/CN.4/Sub.2/2005/28, 16 June 2005. A questionnaire was issued as Annex 1 in a Hampson's paper, 'The human rights situation of indigenous peoples in States and other territories threatened with extinction for environmental reasons: Update', for the Sub-Commission on the Promotion and Protection of Human Rights of the Commission on Human Rights, Working group on indigenous populations, Twenty-fourth session, 31 July – 4 August 2006, UN Doc. E/CN.4/Sub.2/AC.4/CRP.2, 30 June 2006. Unfortunately, however, with the dissolution of the Human Rights Commission and the Sub-Commission, work appears to have been discontinued on this issue (conversation with OHCHR representative at IASC meeting of 15 September 2008). The issue is being raised, however, by others. See, for example, R. Baird, *Briefing: The impact of climate change on minorities and*

4. Prevention of statelessness in international law

International law's approach to statelessness is twofold. It focuses on the protection of stateless persons but also emphasizes the prevention and reduction of statelessness.

The international regime for the protection of non-refugee stateless persons consists of the 1954 Convention¹¹⁴, which provides for formal status and rights for stateless persons who are not refugees. The number of States Parties to the 1954 Convention is still relatively low,¹¹⁵ and not all States Parties have implemented the Convention. In addition, stateless persons should enjoy rights outlined under international human rights law,¹¹⁶ although such rights may be difficult to realize in practice. In a situation where statelessness has not yet arisen, however, another principle prevails.

Statelessness is recognized as an anomaly under international law which should be prevented. The international regime recognizes the principle of prevention of statelessness as a corollary to the right to a nationality.¹¹⁷ Both have been outlined in a number of universal and regional instruments.¹¹⁸ The prevention of statelessness has also been addressed in

indigenous peoples', Minority Rights Group International, April 2008. Questions of the right to self-determination could arise in this context. See also 'Report of the Office of the United Nations High Commissioner for Human Rights on the relationship between climate change and human rights: Summary', submitted to the Human Rights Council pursuant to its resolution 7/23 of 28 March 2009, UN Doc. A/HRC/10/61, 15 January 2009, available online at:

<http://daccess-dds-ny.un.org/doc/UNDOC/GEN/G09/103/44/PDF/G0910344.pdf?OpenElement> (last accessed 29 May 2011).

¹¹⁴ Note that stateless persons who are refugees are to be treated as such under international refugee law and that the Convention Relating to the Status of Refugees (note 100 above) includes stateless refugees in its scope. However, populations of low-lying island States would normally not fall under the international refugee regime.

¹¹⁵ At the time of writing, there were 65 States Parties to the 1954 Convention.

¹¹⁶ See also note 103 above.

¹¹⁷ See commentary to Art. 4 of the *Draft Articles on Nationality of Natural Persons in Relation to the Succession of States*, note 25 above; P. Weis, 'The United Nations Convention on the Reduction of Statelessness, 1961', (1962) 11 *ICLQ* 1078.

¹¹⁸ Art. 15 of the Universal Declaration of Human Rights (adopted 10 December 1948) UNGA Res 217A (III) ('UDHR') provides that '[e]veryone has a right to a nationality. No one shall be arbitrarily deprived of his nationality nor denied the right to change his nationality'. The right to a nationality is reiterated in the International Covenant on Civil and Political Rights (adopted 16 Dec 1966, entered into force 23 March 1976) 999 UNTS 171 ('ICCPR'), and the Convention on the Rights of the Child (adopted 20 November 1989, entered into force 2 September 1990) 1577 UNTS 3 ('CRC'), as well as in the International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families, UNGA Res 45/158 of 18 December 1990 ('Migrant Workers Convention'), although formulations vary. The Convention on the Elimination of All Forms of Discrimination against Women (adopted 18 December 1979, entered into force 3 September 1981) UNGA Res 34/180, 34 UN GAOR Supp. (No 46) 193, UN Doc A/34/46 ('CEDAW') the International Convention on the Elimination of All Forms of Racial Discrimination (adopted 21 December 1965, entered into force 4 January 1969) 660 UNTS 195 ('CERD'), the Convention on the Nationality of Married Women, UNGA Res 1040 (XI) of 29 January 1957, entered into force 11 August 1958, and the Convention on the Rights of Persons with Disabilities (adopted 13 December 2006) UNGA Res. 61/106 ('CRPD') also contain provisions on the right to nationality. At the regional level, the African Charter on the Rights and Welfare of the Child, OAU Doc. CAB/LEG/24.9/49 (adopted 11 July 1990, entered into force 29 November 1999), the Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women in Africa, as adopted by the Meeting of Ministers, Addis Ababa, Ethiopia on 28 March 2003, and the Assembly of the African Union at the second summit of the African Union in Maputo, Mozambique, 21 July 2003, the Organization of the Islamic Conference, Covenant on the Rights of the Child in Islam, June 2005, OIC/9-IGGE/HRI/2004/Rep.Final, the American Declaration of the Rights and Duties of Man, O.A.S. Res. XXX, adopted by the Ninth International Conference of American States, 1948, the Organization of American States, American Convention on Human Rights, "Pact of San Jose", Costa Rica, 22 November 1969, the Arab Charter

greater detail in instruments such as the 1961 Convention on the Reduction of Statelessness (hereafter, ‘the 1961 Convention’), although this Convention has an even more limited number of States Parties than the 1954 Convention.¹¹⁹ As noted earlier, its Final Act recommends explicitly that ‘persons who are stateless *de facto* should as far as possible be treated as stateless persons *de jure* to enable them to acquire an effective nationality’. The 1961 Convention has been supplemented by the Draft Articles on the Nationality of Natural Persons in Relation to Succession of States¹²⁰ and by numerous resolutions of the General Assembly¹²¹ and of the Human Rights Council.¹²²

The General Assembly has emphasized the role of States in protecting stateless persons and preventing statelessness. States have been called upon to accede to the 1954 Convention as well as the 1961 Convention and to undertake other actions to reduce and prevent statelessness.¹²³

In 1996, the General Assembly entrusted UNHCR with a global mandate on statelessness. UNHCR was requested to engage both in the protection of stateless persons and in actions to prevent and reduce statelessness.¹²⁴ This represented a considerable expansion on its earlier mandate to undertake the functions foreseen under Article 11 of the 1961 Convention, first given in 1974 and then confirmed in subsequent resolutions.¹²⁵ This global mandate has been reiterated and further developed in a number of General Assembly resolutions¹²⁶ as well as in Conclusions of the UNHCR Executive Committee.¹²⁷

5. Statelessness and low-lying island States

With respect to low-lying island States, inasmuch as statelessness could arise but is not an immediate concern,¹²⁸ the key objective should be the prevention of statelessness.

on Human Rights, 22 May 2004, entered into force 15 March 2008. The Commonwealth of Independent States Convention on Human Rights and Fundamental Freedoms, 26 May 1995, entered into force 11 August 1998 and the European Convention on Nationality, E.T.S. No. 166, signed in Strasbourg, 6 November 1997, entered into force 1 March 2000, reiterate the right to a nationality. Many of the same international and regional instruments listed contain provisions relating to the prevention of statelessness.

¹¹⁹ There were 37 States Parties to the 1961 Convention at the time of writing. As noted earlier, its Final Act recommends that ‘persons who are stateless *de facto* should as far as possible be treated as stateless persons *de jure* to enable them to acquire an effective nationality’.

¹²⁰ See note 25 above. See also the Council of Europe Convention on the Avoidance of Statelessness in relation to State Succession, note 109 above.

¹²¹ See UNGA Res. 49/169, 24 February 1995, UNGA Res. 50/152, 9 February 1996, UNGA Res. 59/34, 10 December 2004, UNGA Res. 61/137, 25 January 2007 and UNGA Res. 62/124, 24 January 2008.

¹²² See Human Rights Council Resolutions 7/10 of 27 March 2008 and 10/13 of 26 March 2009 on ‘Human rights and arbitrary deprivation of nationality’.

¹²³ UNGA Res. 61/137, 25 January 2007, UNGA Res. 62/124, 24 January 2008, and UNGA Res. 63/148, 27 January 2009.

¹²⁴ UNGA Res. 50/152, 9 February 1996, paras.14-15.

¹²⁵ UNGA Res. 3274 (XXIX), 10 December 1974, and UNGA Res. 31/36, 30 November 1976.

¹²⁶ See UNGA Res. 59/34, 10 December 2004, UNGA Res. 61/137, 25 January 2007, UNGA Res. 62/124, 24 January 2008 and UNGA Res. 63/148 of 27 January 2009.

¹²⁷ See EXCOM Conclusion No.106 (LVII) - 2006 on Identification, Prevention and Reduction of Statelessness and Protection of Stateless Persons; as well as other Conclusions of the Executive Committee, available online at: <http://www.unhcr.org/41b4607c4.html> (last accessed 25 January 2011).

¹²⁸ There may be some cases of statelessness currently on some small island States. Amnesty International has reported potential statelessness cases in Tuvalu; see Amnesty International, ‘Tuvalu: Submission to the UN Universal Periodic Review: Third session of the UPR working group of the Human Rights Council, December 2008’, AI Index: ASA 47/001/2008, 21 July 2008, available online at:

One option to prevent statelessness would be for other States to cede territory to the affected State for its continued existence. Full cession of sovereignty over certain territory would be required in such a case. Additionally, in such a situation, other States would have to agree that it is the same State establishing itself in a new territory.¹²⁹ In such a case, the population could maintain its nationality and would not be rendered stateless. The President of the Maldives has reportedly announced plans to purchase land in Sri Lanka or India. Nations which have been approached are said to have been receptive to the idea.¹³⁰ It is, however, not clear whether such discussions addressed the possibility of full cession of State sovereignty over certain territory.¹³¹

Another option would be to establish a union with another State. Such a union could result in the creation of a new State or lead to one State being subsumed into an existing State. In either scenario the establishment of a federation or a confederation would be possible.¹³² Regardless of whether the State resulting from the union would be a new State or an existing State, and regardless of the nature of the constitutional arrangement within the State, the 1961 Convention and the Draft Articles on the Nationality of Natural Persons in Relation to Succession of States would offer relevant guidance. The 1961 Convention provides that in the absence of a treaty specifying otherwise, citizens of the predecessor State should acquire the nationality of the successor State if they would become stateless otherwise.¹³³ The Draft Articles on the Nationality of Natural Persons in Relation to Succession of States, which are broader in scope, have extended this approach to all nationals of the predecessor State, stating that in the case of unification of States, ‘the successor State shall attribute its nationality to all persons who, on the date of the succession of States, had the nationality of a predecessor State’.¹³⁴ The International Law Commission has indicated that it considers this

<http://www.amnesty.org/en/library/asset/ASA47/001/2008/en/75b4fa2c-6e1b-11dd-8e5e-43ea85d15a69/asa470012008eng.html> (last accessed 25 January 2011). To the extent that such stateless persons were present, their situation would need to be tackled separately, although in some cases they may form part of special arrangements as outlined *infra*.

¹²⁹ Crawford, note 27 above, 667-678.

¹³⁰ See Toomey, note 14 above; also R. Ramesh, ‘Paradise almost lost: Maldives seek to buy a new homeland’, *Guardian*, 10 November 2008, available online at: <http://www.guardian.co.uk/environment/2008/nov/10/maldives-climate-change> (last accessed 25 January 2011); AFP, ‘Maldives saves for new homeland amid flooding fears: report’, 10 November 2008. Indonesia’s Maritime Minister also reportedly suggested that uninhabited Indonesian islands could be rented to affected populations, although there has not been a formal proposal; see S. Holland, ‘Indonesia’s rent-an-island answer to climate change’, ABC News, 3 June 2009, available online at: <http://www.abc.net.au/news/stories/2009/06/03/2588165.htm> (last accessed 25 January 2011).

¹³¹ See also the historically analogous case of Nauru, which was offered resettlement of its entire population on Curtis Island (Australian Territory) because of the environmental decimation of its own island, but refused because the resettlement terms did not grant the Nauruans sovereign independence. Examples of Kiribati, Tuvalu and the Maldives having approached the Governments of Australia and New Zealand respectively with proposals for the latter two to take entire populations in case of total loss of territory, have consistently been met with refusal: Senate Foreign Affairs, Defence and Trade Committee, *A Pacific Engaged: Australia’s Relations with Papua New Guinea and the Island States of the South-West*, 12 August 2003, para 6.78 and B. Crouch ‘Tiny Tuvalu in “Save Us” Plea Over Rising Seas’ Sunday Mail, 5 October 2008.

¹³² See Crawford, note 27 above, 479-500. While a federation or a confederation would be possible, the former island State would presumably require the granting of new territory within the Union.

¹³³ See Art. 10 of the 1961 Statelessness Convention, note 109 above.

¹³⁴ See Art. 21 of the *Draft Articles on Nationality of Natural Persons in Relation to the Succession of States*, note 25 above, and commentary (3) to above Article. Habitual residents of the island State, including stateless persons, should also have the right to choose whether or not to acquire the nationality of the successor State. See also Commentary 5 to Art. 21 of the *Draft Articles on Nationality of Natural Persons in Relation to the*

to be a rule of customary international law.¹³⁵ Inasmuch as the union occurred prior to the complete uninhabitability of the island State, questions of displacement and relocation would still arise, although they would then be internal within the same State.¹³⁶

Unless there was a cession of territory or union with another State, continuity of statehood would depend largely on continued recognition by other States. As noted, *de facto* statelessness could be an issue nonetheless with continued recognition; should recognition cease, *de jure* statelessness would arise. The only option to prevent such statelessness from occurring would be the acquisition of the nationality of a third State. Neither the 1961 Convention nor international instruments on State succession provide for specific safeguards against statelessness in such a situation.¹³⁷ The principle that statelessness should be prevented should nonetheless be applicable. Thus, a situation-specific approach would need to be pursued, ideally through multilateral comprehensive arrangements. Based on the principle that statelessness is to be avoided, such arrangements should include provisions on where, and on what legal basis affected populations would be permitted to move and integrate.¹³⁸ Situations which would trigger the initiation of such an arrangement would also need to be agreed upon. Several receiving States could be foreseen. Solutions would have to apply to all members of the population would and possible bars to immigration would need to be waived.

Such arrangements should include measures to prevent the entire population concerned from being rendered effectively stateless. Specifically, they should offer the option to all nationals of the State threatened by submersion to acquire another nationality, ideally before the dissolution of the State to avoid temporary statelessness. They would also ideally allow dual citizenship, at least for a transitional period.¹³⁹ A waiver may be required as regards formal requirements applicable to renunciation or acquisition of citizenship, which might be difficult to fulfil for affected people. Such arrangements would also need to include a right of residence, to health care, pensions and other social security benefits in addition to other services and rights. In elaborating these arrangements, the status of people who might have been displaced to States not necessarily party to specific arrangements, as well as habitual

Succession of States, ibid. Such an approach could also include those stateless habitual residents who left the State due to climatic change.

¹³⁵ See commentary (6) to Art. 21 of the *Draft Articles on Nationality of Natural Persons in Relation to the Succession of States*, note 25 above.

¹³⁶ While questions of statelessness would not arise, internal displacement and relocation raise a host of other legal issues; see for example, UNHCR, 'Forced displacement in the context of climate change: Challenges for States under international law', note 102 above; see J. R. Campbell, M. Goldsmith, K. Koshy, 'Community relocation as an option for adaptation to the effects of climate change and climate variability in Pacific Island countries (PICs): Final report for APN project 2005-14-NSY-Campbell', Asia-Pacific Network for Global Change Research, 2005, available online at: http://www.sprep.org/att/irc/ecopies/pacific_region/643.pdf (last accessed 25 January 2011); see Field, note 12 above.

¹³⁷ The 1961 Convention would apply to the children of stateless persons born abroad.

¹³⁸ Such an approach would also be in line with UNHCR Executive Committee Conclusion No. 95 (LIV) of 2003, which in para. (v) '[e]ncourages States to cooperate with UNHCR on methods to resolve cases of statelessness and to consider the possibility of providing resettlement places where a stateless person's situation cannot be resolved in the present host country or other country of former habitual residence, and remains precarious;...', although the population could be resettled prior to actual statelessness arising.

¹³⁹ Although this is not a requirement under international law, such an approach would prevent uncertainty in situations where nationality would be acquired and the previous one would cease, particularly in the context where cessation of statehood may be contested and persons could be rendered stateless with respect to some States but not others.

residents not citizens of the affected States, would also need to be considered to determine the extent to which they could benefit from such arrangements.¹⁴⁰

These arrangements would also have to address the environmental, social and economic viability of such resettlement to ensure sustainability. An important consideration would be the protection of the islanders as peoples with a common social and cultural identity, history and traditions.¹⁴¹ The principle of family unity would be important to consider as well, ideally beyond the nuclear family. In the case of the Vanuatu settlement on Tegua Island, which was relocated some 300 meters inland, all 60 inhabitants reportedly belonged to a single extended family.¹⁴² Although it may be impossible to relocate the whole population of an affected island State to a single third State, the relocation of communities may be desirable and could be explored further. Additional issues which may need to be addressed, include the right to live as communities, the provision of land where they could live as such, the rights of persons wishing to live outside such communities, and the type of support they could expect. Any arrangements should take into account lessons learned from earlier processes of relocating entire communities even if these were internal.¹⁴³

6. Early actions to be taken

The relocation of entire populations would likely be a measure of last resort. Affected States wish to ensure their existence through adaptation for as long as possible, although island States likely to be affected are beginning to raise concerns about their future.¹⁴⁴ In view of the complexity of resettling entire populations across borders, early planning is essential. Timely work on such arrangements could enhance confidence in engaging in adaptation mechanisms locally, by easing concerns about where the population could go if the territory of the affected island States were to become uninhabitable. Early planning would also permit cultural and communal artefacts to be preserved.¹⁴⁵

¹⁴⁰ This approach would also be in line with Art. 18 of the *Draft Articles on Nationality of Natural Persons in Relation to the Succession of States*, note 25 above, and Art. 13 of the *Council of Europe Convention on the Avoidance of Statelessness in relation to State Succession*, note 109 above (see also, Explanatory Report to the Convention). This may include any refugees or stateless persons currently habitually resident on affected island States; see also note 136 above.

¹⁴¹ See also the 'Report of the Office of the United Nations High Commissioner for Human Rights on the relationship between climate change and human rights', UN Doc. A/HCR/10/61, 15 January 2009, 17-18. As noted above, questions of self-determination could also arise.

¹⁴² P. Boehm, 'Global warning: Devastation of an atoll', *The Independent* (UK), 30 August 2006, available online at: <http://www.commondreams.org/headlines06/0830-07.htm> (last accessed 25 January 2011).

¹⁴³ As noted above, such relocations generally raised a host of challenges and issues; see for example, Campbell, Goldsmith, Koshy, note 136 above; Field, note 12 above; United Nations University - Institute for Environment and Human Security, 'Human security, climate change and environmentally induced migration', note 92 above.

¹⁴⁴ See for example, 'UNHCR and displacement solutions: Climate change, human rights and forced human displacement: Meeting report', Canberra, Australia, 10 December 2008, 5, available online at: http://www.unhcr.org.au/pdfs/ClimateChangeandDisplacementmeetingreport_000.pdf (last accessed 25 January 2011). See also the Submission of the Maldives to the Office of the UN High Commissioner for Human Rights, 25 September 2008, note 89 above.

¹⁴⁵ See also I. Kelman, 'Island evacuation', (2008) 31 *Forced Migration Review*, 20-21. This may be particularly complex, as the displaced population may consider itself an indigenous population with spiritual links to its lands; see for example, Permanent Mission of the Republic of the Marshall Islands to the United Nations, New York, 'National communication regarding the relationship between human rights and the impact of climate change', note 4 above; see also Hampson, note 113 above.

The key objective would be to help avert a humanitarian catastrophe by promoting orderly population movements. As natural disasters may require early, if only temporary, evacuation from an island State, further consideration could be given to include not only relocation and resettlement once the territory is uninhabitable but also a form of temporary protection scheme in the interim. Such an approach could help reinforce links with relevant third States while also filling a potential protection gap.¹⁴⁶ Furthermore, appropriate education and other measures to prepare for displacement could serve not only to increase the resilience and ability to adapt of displaced islanders but also to provide further resources and knowledge to the population remaining on the islands.¹⁴⁷ Labour migration quotas could help expose islanders to a different culture and lifestyle as well as ensure additional remittances to invest in adaptation measures locally. Agreements on education and vocational or technical training would also be useful. The latter could include a broad range of scholarships for candidates from the affected island States which could be co-funded by the island States and potential host States. Such measures could be foreseen as part of comprehensive arrangements with the objective to ensure that any final relocation will be a sustainable one.¹⁴⁸ Different people feel the pressure to migrate at different points in time due to multiple factors, as noted above, and such migration schemes could also address such differences.¹⁴⁹

Such measures would be supplementary to information and awareness programmes, the establishment of consultation mechanisms with the populations themselves, and measures to build the skills needed to live in a different society. Additionally, arrangements could foresee the exchange of lessons learned from past and current relocations, such as those undertaken within Kiribati and from the Carteret Islands to the main island of Papua New Guinea, to help ensure a viable relocation from a social, cultural and economic perspective. Such measures should also help ensure that relocation, albeit inevitable, becomes a positive adaptation response.¹⁵⁰

Governments of affected States should be enabled to assume control over and responsibility for adaptation measures, including those associated with external relocation. The Small Island Developing States (SIDS), the Pacific Islands Forum and the Pacific Islands Development Programme are three fora in which States likely to be affected may be engaged. However, the impact of climate change on low-lying island States raises major policy issues regarding the affected populations themselves. Clearer understanding is needed regarding the motivations and concerns of the populations likely to be affected by climate change, who should be fully involved in planning for their own adaptation. Such arrangements should thus be based on the participatory involvement of affected populations as well as the governments of affected island States. The early and participatory involvement of women and children would also be critical to ensure that their concerns are taken into consideration and thereby help increase the viability of any relocation. This would require appropriate knowledge and information as to existing risks and available options and a willingness and ability to take an active part in shaping their future.¹⁵¹ This was recently

¹⁴⁶ See, 'Climate change, migration and displacement: Who will be affected?', note 21 above.

¹⁴⁷ See for example Barnett and Adger, note 4 above.

¹⁴⁸ Kiribati and Tuvalu have reportedly expressed the aim that any relocation would permit them to be 'valued and active members of a community'; see Loughry and McAdam, note 93 above.

¹⁴⁹ See Loughry and McAdam, note 93 above.

¹⁵⁰ See A. Berzon, 'Tuvalu is drowning', *Salon.com*, 31 March 2006, for personal stories of the type of adaptation that will be required for islanders, available online at: <http://www.salon.com/news/feature/2006/03/31/tuvalu/print.html> (last accessed 25 January 2011).

¹⁵¹ See M. Loughry and J. McAdam, 'Kiribati – relocation and adaptation', (2008) 31 *Forced Migration Review*, 51-52; available online at: <http://www.fmreview.org/FMRpdfs/FMR31/FMR31.pdf> (last accessed 25

highlighted by the Committee on the Elimination of Discrimination against Women (CEDAW), the body overseeing the implementation of the Convention on the Elimination of All Forms of Discrimination against Women. In its concluding observations on Tuvalu, CEDAW noted that:

The Committee recommends that the State party develop disaster management and mitigation plans in response to the potential displacement and/or statelessness arising from environmental and climatic change and that women, including women in the outer islands, be included throughout the planning processes and adoption of such strategies. The State party is encouraged to seek assistance from the Office of the United Nations High Commissioner for Refugees for this purpose. The Committee recommends that the State party ensure that a gender perspective is integrated in all sustainable development policies and plans.¹⁵²

Additionally, other interested States, as well as relevant organizations and agencies, should be involved as partners, and due account taken of existing links with other States, such as a significant community already living in a particular country. This would apply, for example, to Tuvalu and Kiribati in relation to New Zealand, which has an existing labour migration scheme, the Pacific Access Category.¹⁵³ Communities of some island States have also been established in other States. Australia has initiated a Pacific Seasonal Worker Pilot Scheme which allows workers from a limited number of countries to obtain temporary work permits to work in the horticultural industry.¹⁵⁴ Another example mentioned earlier, is that of the citizens of the Marshall Islands and other States party to the Compact of Free Association with the United States may immigrate to the United States.¹⁵⁵ While these existing schemes are not intended to deal with the effects of climate change, it may be worth exploring whether they could be built upon to take account of climate change and the possible future loss of statehood and nationality, thereby allowing the permanent external relocation of nationals from affected island States.

Early funding for planning and implementation is also needed. To date, potential donors appear to have stopped short of providing funds for migration or relocation solutions. Pressure appears to be on ensuring that development and adaptation coincide.¹⁵⁶ However,

January 2011), 51-52; J. Cameroon-Glickenhau, 'Palau – coral reef protection', (2008) 31 *Forced Migration Review*, 52-53; M. van Aalst, 'Communicating changing risks', (2008) 31 *Forced Migration Review*, 57-58; Toomey, note 14 above.

¹⁵² Committee on the Elimination of Discrimination against Women, 'Concluding observations of the Committee on the Elimination of Discrimination against Women on Tuvalu', 7 August 2009, UN Doc. CEDAW/C/TUV/CO/2, at para. 56.

¹⁵³ The Pacific Access Category is intended for labour migration purposes and is subject to conditions including being between 18 and 45 years of age, having an existing 'acceptable offer of employment' meeting minimum income requirements, as well as requirements for English, good health and character. In 2008, only up to 75 citizens of Kiribati, 75 citizens of Tuvalu and 250 citizens of Tonga could be granted residence in New Zealand. See the New Zealand Department of Labour, Pacific Access Category, available online at: <http://www.immigration.govt.nz/migrant/stream/live/pacificaccess/> (last accessed 25 January 2011).

¹⁵⁴ See, 'Pacific Seasonal Worker Scheme', available online at: <http://www.immi.gov.au/skilled/pacific-seasonal-worker/> (last accessed 25 January 2011).

¹⁵⁵ See note 101 above.

¹⁵⁶ See for example 'UNHCR and displacement solutions: Climate change, human rights and forced human displacement: Meeting report', note 144 above, 6. Still, development actors such as the World Bank and the Asian Development Bank and other donors appear to have provided funding for internal resettlement or relocation e.g. in Kiribati, see, World Bank, Kiribati - Adaptation Program - Pilot Implementation Phase (Kap-II), Project Executive Summary, available online at: <http://www-wds.worldbank.org> (see Project documents – Kiribati) (last accessed 1 April 2009) and the related Project Appraisal Document, 70-73. See also Republic of

particularly where forced external displacement seems highly probable, as in the case of low-lying island States, early planning is critical. It is encouraging that the text of article 14(f) agreed upon at COP16 in Cancun now creates new funding and recommended that the adaptation measures foreseen in the follow-up agreement to the Kyoto Protocol to the United Nations Framework Convention on Climate Change (UNFCCC)¹⁵⁷ should explicitly allow funding and the conclusion of inter-State arrangements in cases where external relocation and measures to prevent statelessness are required. Such funding should be made available online at the earliest opportunity to allow for appropriate planning and preparation.¹⁵⁸

7. Conclusion

The situation of low-lying island States raises a serious risk of forced, permanent displacement of entire populations and their respective governments abroad, with a considerable risk of large-scale *de facto* statelessness, which could turn into *de jure* statelessness should the affected States be considered to have ceased existence. Although such statelessness is likely not to occur for some time, inasmuch as it is possible, the principle that statelessness should be prevented would appear to be applicable.

In accordance with this principle, adequate multilateral arrangements should be concluded in a timely manner for States that are at risk of being submerged and rendered uninhabitable. Such arrangements are necessary to ensure that the affected populations find a safe haven and that their rights, including the right to a nationality, will be safeguarded and respected. Such an approach does not necessarily require the granting of temporary protection or arranging for early migration options per se. Nonetheless, early planning and the adoption of preparatory measures, including temporary protection and some limited migration options as outlined above, could be advantageous as they would increase the resilience of the affected populations and ensure that displacement, where inevitable, becomes a positive adaptation response.

First steps include the recognition that forcible displacement will be inevitable should the territory of island States become uninhabitable and that the disappearance of low-lying island States gives rise to a risk at least of *de facto* statelessness. As information gaps persist in a number of areas, further efforts need to be invested to fill such gaps, including a more comprehensive analysis of the island States likely to be affected. Additionally, appropriate adaptation measures should be provided for, as outlined above, including within the UNFCCC process. Consultations with the small island States likely to be affected, their populations, and possible partners should be called for.

Kiribati: Integrated Land and Population Development Program on Kiritimati Island (Financed by the Japan Special Fund), November 2006, available online at: <http://www.adb.org/Documents/TARs/KIR/39641-KIR-TAR.pdf> (last accessed 25 January 2011).

¹⁵⁷ As called for in the Bali Action Plan UNFCCC Conference of the Parties, Decision 1/CP.13, FCCC/CP/2007/6/Add.1, 14 March 2008, 3-7, under Art. 1(c), Available online at: <http://unfccc.int/resource/docs/2007/cop13/eng/06a01.pdf#page=3> (last accessed 25 January 2011).

¹⁵⁸ It should be noted that in addition to low-lying island States, islands such as the Cocos (Keeling) Islands and Tokelau may suffer a similar fate as island States described above - the highest elevation for the Cocos Islands and Tokelau is 5 m. See United States Central Intelligence Agency, *2011 World Factbook*, available online at: <https://www.cia.gov/library/publications/the-world-factbook/geos/cg.html> (last accessed 25 May 2011). The question of statehood would, however, not arise, as these islands are territories of Australia and New Zealand respectively and its populations hold the respective citizenships.

Relocation and resettlement needs are not limited to low-lying island States. However, in the case of such States, a considerable additional challenge is that displacement will necessarily be external, with a corresponding increase in the complexity of the move as well as a multiplication of stakeholders. This complexity makes early planning more compelling. As outlined above, there are drawbacks to a premature and extensive focus on migration. However, the existence of contingency arrangements could have an impact on migration pressures by reducing uncertainty regarding the future.

In light of its mandate to engage in preventive actions related to statelessness, it is recommended that UNHCR offer interested States its expertise and advice in devising appropriate solutions and participate in consultations with affected and other interested States, other United Nations organizations and interested partners. It is hoped that the present paper will provide a useful contribution to ongoing discussions to prevent statelessness resulting from the impact of climate change on low-lying island States.