## REPORT ON NEW ZEALAND'S VIEWS ON THE POSSIBLE SECURITY IMPLICATIONS OF CLIMATE CHANGE

## Key Points

- The possible implications of climate change for security is a relatively new angle to international discussions on climate change. Many of the key issues remain undefined. The type of conflict that may occur, when, and to what extent, as a result of the adverse impacts of climate change is still relatively unclear and undefined.
- Without effective mitigation and adaptation action, climate change is likely to become a major driver of change to the security environment after 2030. A substantial increase in the mean global temperature is likely to result in novel climatic scenarios, which may generate a number of adverse first order physical and social effects. Second order effects of increased social tensions, disrupted livelihoods, potential displacement of populations, and political unrest may result in security challenges.
- Climate change can exacerbate a number of potential drivers of instability and conflict, such as access to energy, water, food and other scarce resources, poverty and inequality, population movements, and land and border disputes.
- Such conflict (e.g. over resources) is not new. Climate change is likely to intensify existing challenges rather than create a distinctly new set of issues – this is the case both for social impacts, and any resultant security impacts. As such, conflict exacerbated by the effects of climate change is still likely to manifest itself in traditional forms, e.g. political, socio-economic, territorial, resource-based and so on.
- If the traditional drivers of conflict are not displaced by climate change, but rather are exacerbated by it, then the traditional drivers of sustainable development - such as sound governance and rule of law, sustainable natural resource management, community resilience and aid effectiveness - should also remain effective in lessening the risk of conflict.
- Climate change should, therefore, be addressed in the context of sustainable development overall, incorporated into these traditional stabilising elements. Countries that are well-governed and with robust economies are more likely to adapt more effectively changing social and economic conditions, including to the adverse impacts of climate change.

#### Impacts in the Pacific

- The Pacific region is likely to be one of the most vulnerable to the adverse impacts of climate change. The region is of key importance to New Zealand, and we take an active interest in issues of concern to the Pacific.
- Pacific countries are amongst the most vulnerable to climate change impacts, which are likely to exacerbate issues such as access to fresh water, and vulnerability to cyclones, drought or flooding. The Mauritius Implementation Strategy speaks of the risks that climate change and sea level rise pose to small island developing states. Acidification also poses significant risks to Pacific countries dependent on fisheries for community livelihoods and national export. It will be important to continue to provide assistance to Pacific and other vulnerable states in evaluating the impacts of and adapting to climate change.
- The Niue Declaration on climate change (attached as Annex A) references the adverse impacts of climate change in the Pacific. The Niue Declaration addresses key issues for, and challenges faced by, the region.

### Physical and social effects

- Climate changes are likely to increase:
  - water scarcity (saline contamination of freshwater, decreased runoff from glaciers, and shifts in the hydrologic cycle);
  - disruptions to food supply (decreased productivity of some crops and livestock, collapse/decline of some ecosystems, including offshore ecosystems);
  - extreme weather events (floods, droughts, and tropical storms) leading to more frequent and severe natural disasters;
  - spatial spread of food, water, and vector-borne diseases (malaria and dengue fever);
- These effects will disrupt the livelihoods of some communities and exacerbate underlying social, economic, or political tensions of states or regions.
- Any link between climate change impacts and threats to security is likely to be contingent upon numerous political and social variables. As a result, it is not possible to systematically predict climate-related security challenges.

- Nonetheless, a broad range of security challenges are likely to arise through the interaction of the first order effects with other complex issues (for instance, poverty, human rights, ineffectual leadership, poor state infrastructure, weak political institutions).
- Examples of scenarios generating indirect or direct security challenges include:
  - an increase in extreme weather disasters requiring civil defence or humanitarian response efforts;
  - overwhelming demands on state capacity in the wake of a natural disaster;
  - resource scarcity exacerbating intra-state conflict or border tensions between states.
  - an increase in violations and incursions into states' exclusive economic zones and fisheries industries;
  - an increase in the incidence of state failure, political instability or civil conflict;
  - escalation of inter-communal tensions and increased recruitment opportunities for criminal or extremist groups;
  - increasing the problems of protection of people already displaced by other factors, particularly those already in refugee and IDP camps.

### Population movement

- In the absence of significant mitigation action, land degradation, competition for scarce resources, and other environmental effects are likely to induce greater numbers of climate change migrants. This has the potential to have a destabilising effect both on origin and destination communities.
- Insecurity could also create a push factor for migration. This may initially be voluntarTri-.000bbuJJ20(Id alsonomnJJ-15385 6TD-.0002 Tc.05492Tw[esc mi by)cal

Statelessness may also become an issue, with the accompanying issue of protecting the rights (economic and otherwise) of traditional fisheries and other maritime resources for the benefits of citizens who may be made stateless through loss of land or degradation of environment to the point that it is uninhabitable. This debate will take place within the paradigm of sovereignty but is predicted to extend the paradigm in order to meet this new challenge. It is likely to be manifest first in the Pacific.

### Health

- Climate change may exacerbate existing health problems or create new challenges. Activities and choices under the adaptation and mitigation agendas are likely to result in co-benefits for health and avoidance of health risks.
- Impacts of climate change that may have impacts on health include: the increase in frequency and severity of climatic events such as intense storms, heat waves, droughts and floods. These are matched by other impacts for example: rising temperatures and increased rainfall that will create new habitats for disease-bearing mosquito species, salination of the freshwater lens and resultant lack of freshwater; increased degradation of infrastructure leading to population density, and associated health concerns; changing agricultural and maritime production systems, leading to a change in diet and associated health concerns.
- One of the primary health concerns relating to climate change is that of malnutrition resulting from food and resource scarcity. This is recognised in the UNFCCC, whose Article 2 (Objective) states that the ultimate aim of the Convention is to stabilise greenhouse gas emissions at a level that would prevent dangerous interference with the climate system, and that this should be achieved whilst ensuring that food production is not threatened.

## Future Consequences

• Prior to 2030, climate change effects are unlikely to be a primary factor in security commitments and operations. However, the focus during this period should be to improve governance and capacity building so that regional governments are able to respond or adapt to events as they unfold.

over resources linked to potential climate-induced statelessness will be addressed.

- Beyond 2030 an increased demand can be anticipated for the following tasks:
- o civil defence and humanitarian responses to natural disasters;

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- maritime surveillance and protection operations in exclusive economic zones;
- regional stability and reconstruction operations in response to failed and failing states;
- new challenges to human rights obligations of States, and
- risks of increase in stateless and displaced people, and border protection responses.

ANNEX A

# THE NIUE DECLARATION ON CLIMATE CHANGE

We, the Leaders of the Pacific Islands Forum, meeting in Niue:

**DEEPLY CONCERNED** by the serious current impacts of and growing threat posed by climate change to the economic, social, cultural and environmental well-being and security of Pacific Island countries; and that current and anticipated changes in the Pacific climate, coupled with the region's vulnerability, are expected to exacerbate existing challenges and lead to significant impacts on Pacific countries' environments, their sustainable development and future survival;

**RECALLING** that despite being amongst the lowest contributors to factors causing climate change, the Pacific Islands region is one of the most vulnerable to the impacts of climate change including its exacerbation of climate variability, sea level rise and extreme weather events;

**RECOGNISING** that societies pursuing a path of sustainable development are likely to be more resilient to the impacts of climate change through enhanced adaptive capacity;

**NOTING** that despite Pacific Island countries' low greenhouse gas emissions, they are taking significant steps towards reducing their reliance on fossil fuel, with its detrimental economic and environmental consequences;

**RECOGNISING** the importance of retaining the Pacific's social and cultural identity, and the desire of Pacific peoples to continue to live in their own countries, where possible;

**RECALLING** Forum Leaders' recognition that climate change is a long-term international challenge requiring a resolute and concerted international effort, and stressing the need for urgent action by the world's major greenhouse gas emitting countries to set targets and make commitments to significantly reduce their emissions, and to support the most vulnerable countries to adapt to and address the impacts of climate change;

**WELCOMING** in this context the progress made by the international community in the "Bali Road Map" towards a comprehensive global climate change agreement under the United Nations Framework Convention on Climate Change and its Kyoto Protocol, along with the accompanying Bali Action Plan covering mitigation, adaptation, financing and technology, and a dramatic enhancement of effort under the Kyoto Protocol; **RECALLING** the Mauritius Strategy for the Further Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States, which calls for Small Island Developing States, with the necessary support of the international community, to establish or strengthen and facilitate regional c4oteste.4af2lopiand

- (a) strengthening meteorological services,
- (b) consolidating and distributing information on climate change,
- (c) strengthening adaptation and mitigation measures, and
- (d) increasing Pacific Island countries' capacity to manage their engagement in the United Nations Framework Convention on Climate Change;

and to secure new and additional financial and technical resources to do this work;

- ENCOURAGE the Pacific's Development Partners to increase their technical and financial support for climate change action on adaptation, mitigation and, if necessary, relocation, while welcoming the pledged increases in resources to address the climate change challenge; and to ensure their assistance aligns with regional and national priorities and supports existing regional and national delivery mechanisms (in accordance with the Pacific Aid Effectiveness Principles 2007, and the Paris Declaration on Aid Effectiveness 2005);
- FURTHER ENCOURAGE development partners to increase investment in and support for Pacific Island Countries' efforts to move towards alternative and renewable energy sources, which reduce the emissions of our region and improve energy efficiency, as well as help to address the growing unaffordability of fuel;
- **CALL ON** international partners to assist our development by undertaking immediate and effective measures to reduce emissions, use cleaner fuels, and increase use of renewable energy sources;
- AGREE that the high sensitivity and vulnerability of Pacific Island Countries to climate change, including its exacerbation of climate variability, sea level rise and extreme weather events, means that adaptation is a critical response for Pacific governments, and requires urgent support from regional agencies and development partners alike;
- **ENCOURAGE** all Pacific Island countries to act on the ability and information they have now, with the assistance of development partners, to continue to address the impacts of climate change through 'no regrets' or 'low regrets' actions in affected sectors that are already facing development challenges, including food and water security, health, and the capacity to deal with extreme events such as tropical cyclones, flooding and droughts, thereby simultaneously delivering on sustainable development aims;
- AGREE that the exacerbating effects of climate change in the region will require Pacific Island countries to incorporate adaptive strategies into their

