

UNU-EHS

Institute for Environment and Human Security

United Nations University Institute for Environment and Human Security (UNU-EHS)

'Research and education to reduce environmental risks'

HOW DOES CLIMATE CHANGE AFFECT MIGRATION IN THE PACIFIC?

The United Nations University (UNU)

UNU acts as a bridge between the international academic community and the United Nations system. Current research by the UNU Institute for Environment and Human Security (UNU-EHS) directly addresses goal 2A of SBSTA 44 concerning risks and impacts of slow onset events as a result of climate change affecting vulnerable countries, such as Small Island Developing States (SIDS). This poster outlines some of the latest scientific knowledge generated on the theme by UNU-EHS.

1. Introduction

MIGRATION PATTERNS AND TOP

 More than 70% of households feel that migration will be a likely response if agricultural production becomes more difficult or if sea level rise, flooding or saltwater intrusion worsens;

Pacific Climate Change and Migration (PCCM) is an EU funded project implemented by the Economic and Social Commission for Asia and the Pacific (ESCAP) in partnership with the United Nations Development Program (UNDP), the International Labour Organization (ILO) and UNU. UNU was responsible for the research design, fieldwork and data analysis for the project.

2. Methods

Fieldwork was conducted in early 2015 in Kiribati, Tuvalu and Nauru

- It included representative surveys of a total of 850 household interviews across the 3 countries on 9 different islands.
- Participatory Research Methods were used to triangulate survey findings.
- "Q" a new method in this field was used to investigate attitudes to migration (www.qmethod.org).
- Agent based models were produced for Kiribati and Tuvalu in order to produce projections of future flows of migrants.

3. Current Migration

Households are experiencing the impacts of natural hazards.

Environmental stress is a reason for migration, but economic and cultural motivations remain as drivers of migration.

EDUCATION 26%



More than 40% of households feel that migration will be a likely response if sea level rise or flooding worsens;
Nauru is small single island with extensive phosphate mining damage, so internal migration is not an option;
If agricultural production decreases, 16% of Nauruans feel that migration will be necessary.

AUSTRALIA

NEW ZEALAND

VANUATI

NAUR

• Climate stressors were the second most important (23%) motivation for migration after work (41%) Education was third with (19%).

KIRIBATI 21 % 63 % **TUVALU**

16 %

29 %

• More than 70% of households feel that migration will be a likely response if sea level rise, flooding, saltwater intrusion, or droughts become more severe;

• Climate stressors were a primary influence of previous migration for 8% of migrants.





Households in Kiribati, Tuvalu and Nauru are already experiencing climate related hazards and household respondents claim that these environmental stressors are already inducing migration.



There are significant differences in the migration experiences in the three countries in the period of 2005-2015. In Kiribati most migration is internal, to the capital. In Tuvalu, migration is both internal and international. As Nauru is a single island all migration is international. In both Kiribati and Tuvalu, the vast majority of environmentally-related migration is internal to the capital islands.

In addition to the number of people who have migrated, there are a significant number of people who wanted to move, but were constrained by household finances and visa requirements.

4. Attitudes to Migration and Climate Change

The Q sorts revealed a range of attitudes on migration and climate change:

There was a wide variety of understandings of the existence, severity and effects

5. Projections of Future Migration

Climate change will result in increased migration as islanders are affected by sea-level rise, coastal erosion, salt-water intrusion and more frequent and intense droughts. Under a moderate climate change scenario (RCP 6) and population growth, the Agent Based Model projects that by 2055 migration will dramatically increase in Kiribati and Tuvalu.

		Internal migration	International
2055 MIGRATION	KIRIBATI	+100%	+35%
PROJECTIONS	TUVALU	+70%	+100%

This also means the populations of Kiribati and Tuvalu and their capitals are projected to increase dramatically, placing great strain on resources and exacerbating environmental "hotspots".

POPULATION GROWTH



of climate change.

- Most participants were concerned with the impact of climate change and migration on island culture and sovereignty.
- A minor, but strongly held belief is that God will protect islanders, related to God's covenant with Noah meaning migration is seen as unnecessary.
- There was a range of perspectives on the extent to which islanders have the capacity to adapt to climate change, including the ability to migrate.

6. Recommendations

- There is a need to facilitate migration in a dignified, agential manner.
- Training could help islanders to better compete in international jobs markets.
- Take steps to ensure the sustainable growth of country capitals.
- Further research is needed in other Small Island Developing States.

Further research UNU-EHS academic sections have carried out on slow onset events:







SECTION	PROJECT	SLOW ONSET EVENT
Environmental Migration, Social Vulnerability and Adaptation (EMSVA) rhyner@ehs.unu.edu	 Migration, Environment and Climate Change: Evidence for Policy (MECLEP) Gibika and Resilience Academy: Livelihood Resilience in Bangladesh – Turning Research into Action Loss and Damage in Vulnerable Countries Initiative 	 Changing rainfall, drought Riverbank erosion and drought Drought, SLR, coastal; erosion, salinization and changing rainfall
Vulnerability Assessment, Risk Management & Adaptive Planning (VARMAP) garschagen@ehs.unu.edu	 Preparing for Extreme And Rare events in coastaL regions (PEARL) The Political Economy of Urbanization and Climate Risk in Vietnam (PEUR) World Risk Report 	 Sea level rise Sea level rise Drought and sea level rise
Environmental Vulnerability and Ecosystem Services (EVES) renaud@ehs.unu.edu	 Catalyzing action towards sustainability of deltaic systems with an integrated modelling framework for risk assessment (DELTAS) Enabling knowledge for disaster risk reduction in integration to climate change adaptation (DeltAdapt) Changes in Glacier and Snowmelt runoff components in Central Asia and societal Vulnerability (GLASCA) 	 Salinity intrusion and droughts Salinity intrusion Glacier melting