

# The FIG Christchurch Declaration

Responding to Climate Change and Tenure Insecurity in Small Island Developing States



## The Role of Land Professionals

SIDS Workshop, FIG Working Week, Christchurch, New Zealand 30 April – 1 May 2016



# The FIG Christchurch Declaration

Responding to Climate Change and Tenure Insecurity  
in Small Island Developing States

David Mitchell

Stig Enemark

Tony Burns

Bill Robertson

## The Role of Land Professionals

SIDS Workshop, FIG Working Week,  
Christchurch, New Zealand 30 April – 1 May 2016

Copyright © The International Federation of Surveyors (FIG), 2016.

All rights reserved.

International Federation of Surveyors (FIG)  
Kalvebod Brygge 31–33  
DK-1780 Copenhagen V  
DENMARK

Tel. + 45 38 86 10 81

E-mail: [fig@fig.net](mailto:fig@fig.net)

[www.fig.net](http://www.fig.net)

Published in English

ISSN 1018-6530 (printed)

ISSN 2311-8423 (pdf)

ISBN 978-87-92853-55-4 (printed)

ISBN 978-87-92853-56-1 (pdf)

Published by

International Federation of Surveyors (FIG)

Front cover: Photo from UN Sustainable Development Knowledge Platform

<https://sustainabledevelopment.un.org/sdinaction/sids>

Back cover: © John Meadows, Land Equity International

Editor: Stig Enemark

Layout: Lagarto

Printer: 2016 LaserTryk.dk A/S, Copenhagen, Denmark

# CONTENTS

<b>1 FOREWORD</b> .....	4
<b>2 EXECUTIVE SUMMARY</b> .....	5
<b>4 WORKSHOP OBJECTIVES</b> .....	11
<b>5 CHALLENGES AND OPPORTUNITIES</b> .....	13
Climate Change Challenges and Risk of Natural Disasters .....	14
Rapid Urbanisation.....	16
Improved Land Governance .....	17
<b>6 TAKING THE AGENDA FORWARD</b> .....	20
<b>APPENDICES</b> .....	21
Workshop Programme .....	21
Participants List.....	23
<b>REFERENCES</b> .....	24

# 1 FOREWORD

This publication is the result of the workshop on “Responding to Climate Change and Tenure Insecurity in Small Island Developing States – The Role of Land Professionals” held in Christchurch, New Zealand 30 April – 1 May 2016 in connection with the FIG Working Week 2016. It includes a report of the seminar and a FIG Christchurch Declaration as the main outcome of the workshop.

The workshop was organised to address the many distinct challenges that Small Island Developing States (SIDS) are facing in their pursuit of social and economic development and these challenges are compounded by the adverse impacts of climate change.

The International Federation of Surveyors (FIG) has organised several regional forums on the role of land professionals in supporting SIDS. In 2010 a 2-day SIDS Seminar was held over five sessions at the FIG Congress in Sydney. The major outcome of this seminar was FIG Publication 53 (FIG, 2010). In September 2013 a follow-up symposium was held in Suva, Fiji that aimed to build upon the discussions in Sydney in 2010. The outcome of this symposium was the FIG “Suva Statement on Spatially Responsible Governance” (FIG, 2013).

A key outcome of the Third international Conference on Small Island Developing States in Apia, Samoa (UN, 2014) was the Small Island Developing States Accelerated Modalities of Action (the ‘SAMOA Pathway’). International cooperation and genuine and durable partnerships were seen as critical to the implementation of sustainable development in SIDS.

Building on these initiatives, FIG arranged this SIDS workshop in Christchurch, New Zealand. The workshop was organised by Dr. David Mitchell, Assoc. Professor at Royal Melbourne Institute of Technology, Australia with a lead team consisting of Prof. Stig Enemark, FIG Honorary President, Denmark, Mr. Tony Burns, Managing Director of Land Equity International, Wollongong, Australia, and Mr. Bill Robertson, Director of Bill Robertson Associates, New Zealand. FIG would like to thank the team for their great efforts in organising this workshop and also drafting the FIG Christchurch Declaration for consideration and adoption by the workshop. Finally, we want to convey our sincere thanks to all the delegates who travelled from various parts of the world to attend this workshop and whose active participation ensured the success.

The FIG Christchurch Declaration will hopefully serve as a guiding document for the land professional in SIDS in facing the challenges of the future. FIG is committed to support this process.

**Chryssy Potsiou**

FIG President

**David Mitchell**

Workshop Organiser

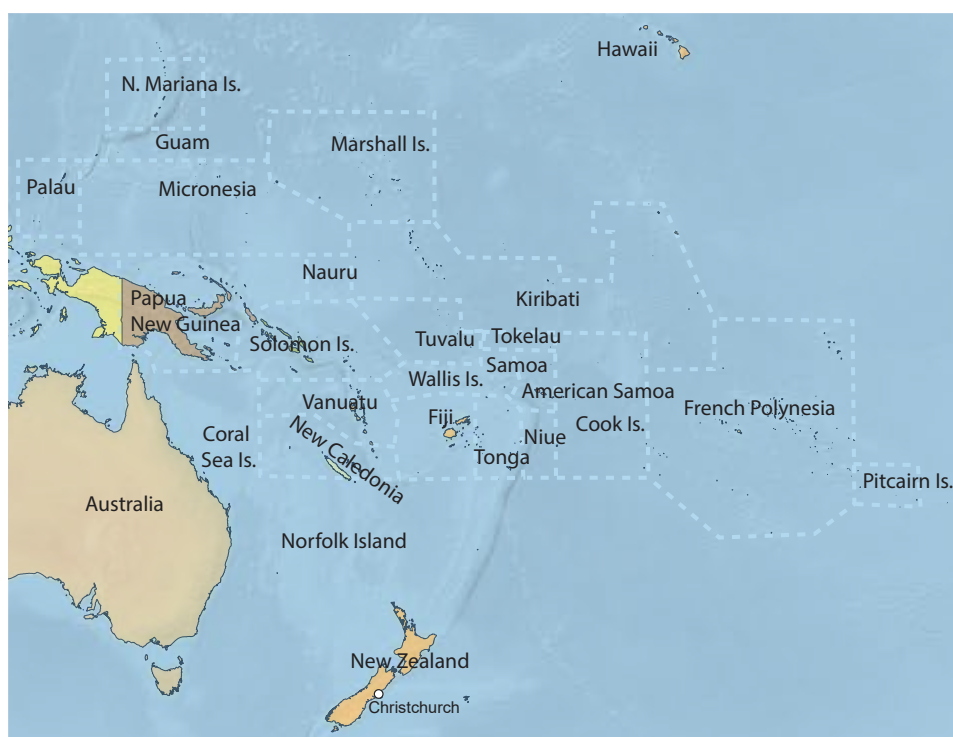
## 2 EXECUTIVE SUMMARY

### *Facing the Global Agenda*

The theme of this workshop is in the heart of the new 2030 Agenda for Sustainable development. The agenda includes 17 goals, with 169 targets and about 240 indicators. The overall goal is to “End poverty in all its forms everywhere” (UN, 2016). The targets to achieve this relate to ensuring that all men and women have equal rights to ownership and control over land and other forms of property (Target 1.4), and building the resilience of the poor and vulnerable and reducing their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters (Target 1.5).

The Agenda also addresses rapid urbanisation through Goal 11 “Make cities and human settlements inclusive, safe, resilient and sustainable”. More specifically, SIDS are mentioned in Goal 13 on “Take urgent action to combat climate change and its impacts” where Target 13.b aims to raise capacity for effective climate change-related planning and management in least developed countries and small island developing states.

The workshop involved about 35 participants with representatives from SIDS countries mainly from the Pacific Region but also from Trinidad and Tobago, Timor-Leste, and Zanzibar. It should be noted, that although the workshop discussions and the resulting declaration were biased towards the Pacific region, there was a broad consensus on the issues by participants from other SIDS regions, and declaration has direct relevance for SIDS countries throughout the globe.



The workshop venue (Christchurch, New Zealand) located near the SIDS in the Pacific Region.

The workshop and the resulting declaration emphasised the way and means for land professionals to: Address climate change, natural disaster and urbanisation challenges and vulnerabilities; address the challenges in land governance and administration; and, for this purpose, build capacity in land governance and administration and enhance professional and organisational collaboration.

The workshop addressed these global themes in a SIDS context with a focus on the role of land professionals in facing the challenges. A range of issues were identified as listed in the FIG Christchurch Declaration presented in chapter 3. Some core initiatives include:

**Advocating** for land policy and legal frameworks informed by the Voluntary Guidelines on the Responsible Governance of Tenure (FAO, 2012) that recognise, respect and safeguard all legal and legitimate tenure rights, provide access to justice to resolve land disputes, are pro-poor and gender-responsive, and provide for effective and full participation by all. This should assist land governance to address the key vulnerabilities of climate change, natural disasters and urbanisation.

**Promoting** the adoption by land professionals of the fit-for-purpose approach to land administration in building spatial, legal, and institutional frameworks to reduce capacity demands on land agencies and other institutions, and allow for protecting of all legal and legitimate tenure rights at scale. Such principles should also be applied for building land-use planning and land valuation systems.

**Encouraging** the establishment of a Regional Capacity Development Network (RCDN) of experts in each SIDS region to improve partnerships and provide technical, administrative, and professional support and advice to engage in related initiatives. Foremost to establish within FIG a RCDN of experts for the Pacific Island Countries and Territories (PICTs) and to enable the Pacific Geospatial and Surveying Council (PGSC) and, as a first stage, to lead and engage with the PICTs geospatial and surveying community on related activities.

Land professional have vital roles to play in promoting engagement and collaboration from all sectors of society. A strong land professionals' network is required to facilitate and coordinate knowledge sharing and training between countries, collecting and sharing geospatial information, and supporting capacity development at country level.





Fiji. Damage of cyclone Winston, February 2016.  
Source: EMPICS.



Low laying atoll, Tuvalu in the Pacific Ocean.  
The capital, Funafuti, is on average two metres above sea level.  
Source: wordatlas.com

### 3 DECLARATION

#### **FIG Christchurch Declaration:**

##### ***Responding to Climate Change and Tenure Insecurity in Small Island Developing States: The Role of Land Professionals***

We the participants of the FIG Small Island Developing States workshop held in Christchurch from April 30 to May 4, acknowledge the inherent diversity between SIDS countries in governance, rate of urbanisation, population density, geomorphology, exposure to natural hazards, and land tenure arrangements. We are also cognizant that SIDS share many common characteristics of small population, their dispersed nature and physical isolation from markets, high levels of exposure to the impacts of climate change and natural hazards, and severe limitations in capacity. We recall the SAMOA Pathway declared SIDS remains a special case for sustainable development in view of their unique and particular vulnerabilities.

We reaffirm the significance of the 2030 Agenda for Sustainable Development and the associated goals, targets and indicators in efforts to reduce poverty, protect human rights, promote gender equality, and protect natural resources.

We recall the 2010 FIG Sydney Agenda for Action, the 2013 FIG Suva Statement on Spatially Responsible Governance that, together with the 2015 United Nations Resolution on Global Geodetic Reference Frame, established a clear framework for developing capacity in land governance within Small Island Developing States (SIDS), and the roles and responsibilities for land professionals and practitioners.

We acknowledge the unprecedented global momentum to improve security of land and natural resources tenure and reaffirm the importance of the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests (VGGTs), the Continuum of Land Rights and the Global Land Tool Network's suite of pro-poor and gender-responsive land tools.

We, hereby issue this FIG Christchurch Declaration on Responding to Climate Change and Tenure Insecurity in Small Island Developing States: The Role of Land Professionals, and resolve to:

##### ***Address climate change, natural disaster and urbanisation challenges and vulnerabilities through:***

- Advocating for the adoption in national policy and legal frameworks relevant international instruments, including the *Sendai Framework*, the *United Nations Declaration on the Rights of Indigenous Peoples* (UNDRIP), the *Convention on the Elimination of all Forms of Discrimination Against Women* (CEDAW).
- Advocating for land policy and legal frameworks informed by the VGGTs that recognise, respect and safeguard all legal and legitimate tenure rights, provide access to justice to resolve land disputes, are pro-poor and gender-responsive, and provide for effective and full participation by all. This should assist land governance to address the key vulnerabilities of climate change, natural disasters and urbanisation.

- Emphasising the importance of robust and resilient geodetic networks, and the contribution to be made by spatial data, including earth observations and geospatial information.
- Mainstreaming disaster risk and vulnerability assessment into all aspects of land and marine administration.

***Address the challenges in land governance and administration through:***

- Promoting the adoption by land professionals of the fit-for-purpose approach to land administration in building spatial, legal, and institutional frameworks to reduce capacity demands on land agencies and other institutions, and allow for protecting of all legal and legitimate tenure rights at scale.
- Promoting the principles of participation and inclusiveness in land use planning and ensuring that all legal and legitimate tenure rights are respected in the land use planning process.
- Promoting the importance in legal and policy frameworks of the development of valuation systems that allow for fair and timely valuation of all types of tenure rights to support taxation, the operation of markets, transactions in tenure rights, and compensation for expropriation.

***Build capacity in land governance and administration to address these challenges through:***

- Encourage the establishment of a Regional Capacity Development Network (RCDN) of experts in each SIDS region to improve partnerships and provide technical, administrative, and professional support and advice to engage in related initiatives. This should also include formal partnerships between SIDS and nearby countries. Foremost to establish within FIG a RCDN of experts for the Pacific Island Countries and Territories (PICTs) and to enable the Pacific Geospatial and Surveying Council (PGSC) and, as a first stage, to lead and engage with the PICTs geospatial and surveying community on related activities.
- Advocating for the international bilateral and multilateral organisations and professional bodies to provide a coordinated approach to supporting education and training in the areas of surveying, land administration, land management and land governance. Mechanisms should include funding for scholarships, providing flexibility in entry requirements for students from SIDS, training of staff, exchange opportunities, and the dissemination of international guidelines and conventions. Other support should include providing e-learning and training materials to relevant academic and training institutions. This includes the full suite of e-learning and thematic technical guides for VGGTs, and the extensive online material supporting the GLTN land tools.
- Emphasise the importance of capacity development to support improved geodetic and spatial data infrastructures, as well as current, complete and effective geospatial information to support land governance and land administration.

***Enhance professional and organisational collaboration to address these challenges through:***

- Encouraging strong, genuine and durable partnerships at the subnational, national, sub-regional, regional, and international levels to support transparent and participatory approaches, to revising legal and policy frameworks based on principles of responsible governance.
- Building on the opportunity afforded by the smaller population in SIDS, encourage the international land sector to consider coordination and harmonisation to provide multi-stakeholder, multi-actor and multi-sectorial solutions at regional or national level in SIDS.
- Encouraging and supporting the development of regional political, policy and technical coordination mechanisms in the land sector that provides a strong point of entry for engagement of multilateral and bilateral organisations and international professional bodies to facilitate and coordinate approaches to knowledge sharing and training between countries, collecting and sharing geospatial information, and in supporting capacity development at country level.

Adopted May 18<sup>th</sup>, 2016 as an outcome of  
the SIDS Workshop, Christchurch, New Zealand.



## 4 WORKSHOP OBJECTIVES

The objective of this workshop was to discuss the key issues faced by SIDS countries. A concept note was prepared to provide a list of readily available reference material on these issues to provide guidance for the workshop presentations. The concept note intended to set out a list of initial questions or issues for discussion in break-out sessions during the workshop, and also provided a framework for the workshop declaration documenting the outcome of this event.

In the plenary session invited speakers were invited to cover the key topics of:

- the specific context and vulnerabilities for SIDS
- the specific challenges faced by SIDS in the land sector:
  - climate change, vulnerability and the risk of natural disasters;
  - urbanisation; and
  - challenges for improved land governance.

Speakers from SIDS countries were also invited to present on the situation in their countries. They were requested to structure these presentations to address the list of initial questions as indicated below.

The workshop intended to some extent to take stock of the outcomes from the SIDS workshop at FIG 2010 in Sydney. The Sydney Agenda for Action sets out a rather ambitious set of actions needed to address land sector issues faced by SIDS countries. There have been some positive results. However, these results have been achieved largely through the inputs of a few key individuals and not as part of a coordinated set of activities. There are a number of factors that have contributed to this. The agenda was perhaps too ambitious without a clear structure for activities by SIDS governments and those by professional associations and professionals. Perhaps given the disparate situations and needs of the various SIDS countries, this is understandable. Other factors that have contributed to less action than anticipated include changes in donor funding. The workshop aimed redirect the focus on the challenges faced by the SIDS and the role of land professionals in this regard.

The workshop included two full days 30 April – 1 May 2016 followed by a final short session on 4 May where a draft declaration was presented. In the floor discussions that followed the broad content and message of the declaration was supported and some minor changes were agreed as a basis for drafting the final declaration.

### ***List of Initial Questions and Issues for the Workshop***

The following initial set of questions was proposed as a guide for the presenters to the workshop and for discussion at the break-out sessions during the workshop:

1. What are the key vulnerabilities and challenges for SIDS countries in contributing to their countries resilience to natural disasters and sea level rise – and what are the roles of land sector agencies and land professionals in this regard?
2. What are the key vulnerabilities and challenges for SIDS countries in relation to rapid urbanisation and how can this be addressed by the land sector agencies and land professionals?

3. What are the constraints in improving land governance and administration in SIDS countries?
4. How can these land governance and administration constraints be addressed by the land sector agencies and land professionals – including applying the Voluntary Guidelines for Responsible Governance of Tenure and a Fit-For-Purpose Approach to building sustainable Land Administration Systems?
5. What capacity building is required for the land professionals to fulfil this role and how can this capacity building be best implemented?
6. What professional and organisational collaboration is needed by associations such as FIG, the Pacific Geospatial and Surveying Council (PGSC), the Surveying and Spatial Sciences Institute (SSSI), New Zealand Institution of Surveyors (NZIS), and the Royal Institute of Chartered Surveyors (RICS) in helping land professionals in SIDS countries respond to the vulnerabilities and in fulfilling their roles?

The background material is presented in some detail in chapter 5 below. The outcome of the presentations and discussions are summarised in the declaration as presented in chapter 3 above.



© Bernardo Almeida

Rural village, Timor Leste.

## 5 CHALLENGES AND OPPORTUNITIES

There are various definitions of SIDS countries. A recent UN-HABITAT report lists and maps 52 SIDS countries (UN-HABITAT, 2015a). There are 39 SIDS member states recognised by the UN Department of Economic and Social Affairs (United Nations, 2016). There are other jurisdictions that share many of the SIDS characteristics that are not on either list, such as Zanzibar which is formerly part of the United Republic of Tanzania. Regardless of the definition, SIDS countries are a diverse group that is spread over the Atlantic, Pacific and Indian Oceans. SIDS countries face many challenges that include their small size, remoteness, narrow resource and export base, and exposure to global environmental challenges and external economic shocks, including to a large range of impacts from climate change and potentially more frequent and intense natural disasters (United Nations, 2016). As the SAMOA Pathway acknowledges – “Small Island Developing States remain a special case for sustainable development in view of their unique and particular vulnerabilities and that they remain constrained in meeting their goals in all three dimensions of sustainable development”. As well as these challenges, SIDS countries have opportunities. These common challenges and opportunities faced by SIDS countries are summarized below in Table 1.

SIDS were recognized as a ‘special case’ in the UN Earth Summit in Rio de Janeiro in 1992 that resulted in Agenda 21 (UN, 1992). The Barbados Programme of Action that was adopted in 1994 guides the development of SIDS countries. This was enhanced and updated by The Mauritius Strategy of Implementation (MSI) of 2005 and the SAMOA Pathway that was adopted in 2014. The SAMOA Pathway was adopted by the UN General Assembly on 14 November 2014 (UN, 2014) and this resolution sets out priority areas including: sustained and sustainable, inclusive and equitable economic development with

**Table 1: Common challenges and opportunities facing SIDS.**  
(Adapted from UN-HABITAT, 2015a:4.)

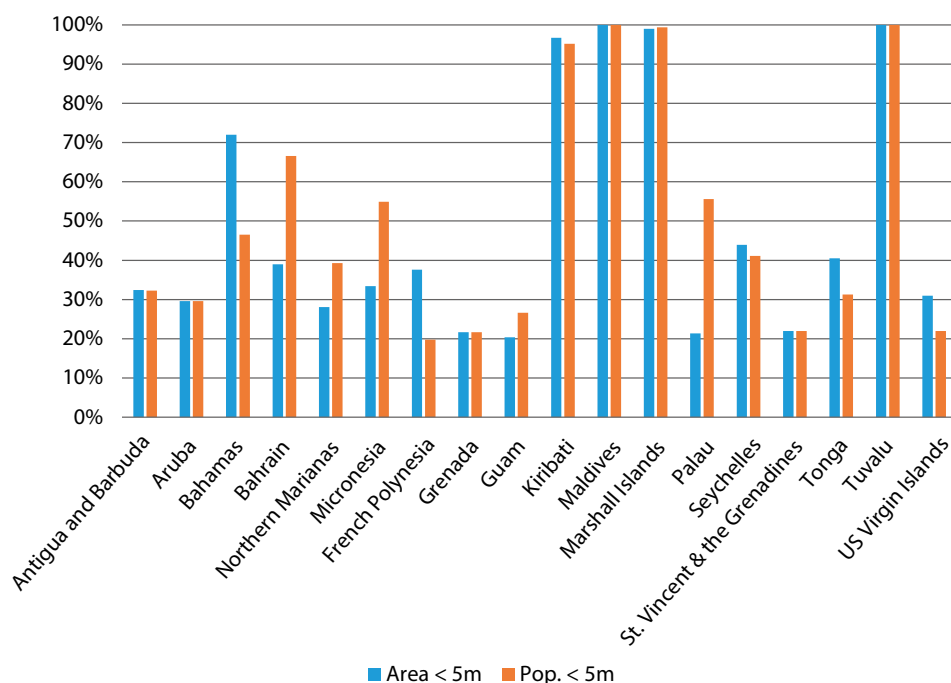
<b>Challenges</b>	<b>Opportunities</b>
Narrow resource base limiting the benefits of economies of scale	Aquaculture and Fisheries
Small domestic markets and heavy dependence on a few external and remote markets	Marine “Blue” economy
High costs for energy, infrastructure, transportation, communication and servicing	Tourism
Long distances from export markets and import resources	Renewable Energies, (esp. wind & solar)
Low and irregular international traffic volumes	Biodiversity
Little resilience and high exposures to natural disasters	Ecosystem-based adaptation
Rapidly growing populations	Improved accountability and inclusiveness
High volatility of economic growth	
Limited opportunities for private sector and a proportionately large reliance on public sector	

decent work for all; climate change; sustainable energy; disaster risk reduction; oceans and seas; food security and nutrition; water and sanitation; sustainable transportation; sustainable consumption and production; management of chemicals and waste; health and communicable diseases; and gender equity and women’s empowerment.

Although not listed as a specific priority area, land and access to land is a cross-cutting issue. SIDS countries face a number of specific challenges in the land sector, including: the land tenure impacts of climate change and the risk of natural disasters; urbanisation; and the difficulty in developing and implementing appropriate land management and administration systems. These land sector challenges are briefly discussed below.

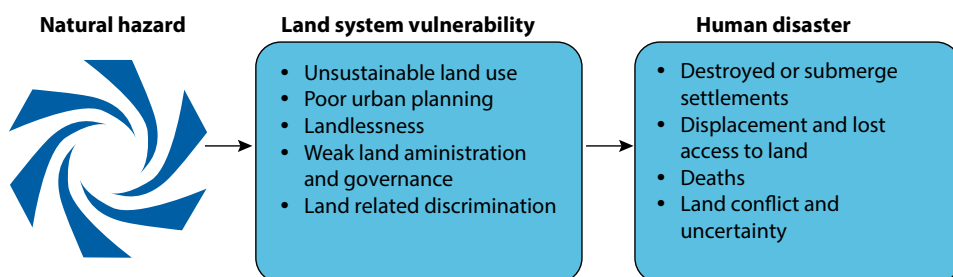
### **Climate Change Challenges and Risk of Natural Disasters**

The size, geography and relative isolation and remoteness of SIDS countries makes them particularly vulnerable to climate change. Global climate change is increasing temperatures and the frequency of extreme weather events and, while SIDS countries have reasonable resilience to such events, they lack capacity for response and recovery as is illustrated by the impact of Cyclone Pam on Port Vila in Vanuatu in 2015. The UN-HABITAT Cities and Climate Change initiative has investigated the potential impact of climate change on the urban centres of SIDS countries, including Apia in Samoa, Port Moresby in PNG, Honiara in the Solomon Islands and Lami Town in Fiji (UN-HABITAT, 2015b). Similar impacts and vulnerabilities affect other SIDS regions. Many SIDS countries are particularly vulnerable to sea-level rise, with some threatened with their very existence and others facing substantial loss of territory (see Figure 1). As noted in the SAMOA Pathway, SIDS countries have been strong advocates for ambitious global efforts to address climate change (UN, 2014:8).



**Figure 1:** Percentage of land area and population below 5 metres (UN-HABITAT, 2015a:19).





**Figure 2:** How land system vulnerability can create human disasters (UN-HABITAT, 2010:14).

After an extreme weather event, vulnerability in the land sector and the systems that support it can create human disasters as is illustrated in Figure 2. Key land administration measures that could be taken in the event of a natural disaster are set out in Table 2.

**Table 2:** Key land administration measures after a natural disaster (UN-HABITAT, 2010:96).

<b>Phase of Disaster Recovery</b>	<b>Key Land Administration Measures</b>
Emergency Relief: the first 5 days	Undertake rapid land assessment Fund land expert position(s) through Flash Appeal (or equivalent)
Early Recovery: the first 6 weeks	Find, secure and recover land records Obtain satellite imagery and aerial photos Support rapid tenure security measures through initial capacity building Advocate flexible hierarchies of land rights evidence Develop simple gender-sensitive databases of post-disaster tenure and planning documentation
Early Recovery: the first 6 months	Develop strategic plan and work plans Establish land administration priorities and pilot projects Advocate measures to integrate all recognised post-disaster tenure and planning documentation (including women's documentation)
Towards Sustainable Land Administration Systems: the first 2 years.	Reassign or create land functions to bring coherence to post-disaster tenure and planning documentation Scale up from effective pilot projects Support move from international to local capacity Build capacity to enforce land transaction and legal determinations Advocate or support tenure upgrading for informal landholders Advocate or support gender-sensitive land data and information systems.

## **Rapid Urbanisation**

Since 2008 more than half the global population has been living in urban areas and current estimates are that 60 per cent of the global population in 2030 will live in urban areas. Of the 65 million people living in the 52 SIDS countries 38 million or 59% live in urban settlements (UN-Habitat, 2015a:13, 14). This is higher than the global average of 54 per cent. However, the percentage of urban population varies considerably across SIDS countries as illustrated in Table 3, with Trinidad and Tobago (8%) and Papua New Guinea (12%) among the least urbanised. In the Pacific region the “percentage urban” varies from 19 per cent in Melanesia to 67 per cent in Micronesia.

The average annual increase in urban population is also varied across the SIDS countries, Rapid urbanisation is occurring in some SIDS countries such as Haiti, Maldives, Papua New Guinea, Solomon Island, Vanuatu and the Melanesia region with an increase higher than the global average of 2.05 per cent. Globally, increased urbanisation is linked to an increase in gross domestic product, however in the case of many SIDS countries this is not the case as many SIDS economies are driven by the informal sector (UN-HABITAT, 2015a:14).

In many SIDS countries the urban population is concentrated in the largest urban centre, typically the capital city, for example Male in the Maldives, and this primary concentration makes decentralisation and the provision of services in smaller towns more difficult. The urban/rural divide in many SIDS countries is blurred with low density urban sprawl that is largely unplanned. The low-density sprawl greatly increases the difficult and cost of providing services. Informal settlement is an issue in SIDS countries, although not as high as in many countries in Africa. The proportion of the urban population in Oceania living in informal settlements in 2013 was estimated at about 24% (UN-HABITAT 2013:151, Pacific Islands Forum Secretariat 2015).

**Table 3: Urbanization level and rate of change in selected SIDS**  
(UN-DESA, 2015).

<b>Region</b>	<b>% urban (2015)</b>	<b>Average annual increase in the urban population 2010–2015 (%)</b>
World	54	2.05
High income countries	80	0.76
Least developed countries	31	3.97
Caribbean	70	1.52
Melanesia	19	2.14
Micronesia	67	1.09
Polynesia	43	0.55
Fiji	54	1.45
Haiti	59	3.78
Maldives	46	4.49
Papa New Guinea	13	2.12
Solomon Islands	22	4.25
Trinidad and Tobago	8	-1.20
Vanuatu	26	3.42

**Table 4:** Possible benefits and negative impacts in promoting dense urban forms (UN-HABITAT, 2015a:16).

<b>Positive benefits</b>	<b>Possible negative impacts</b>
Modal shift to public transport yielding reduced pollution, noise, traffic	Reduced access to housing and reduced dwelling size
Lower cost of providing public services (water and sanitation, electricity, education and health)	Reduction in available land for construction, increase in construction costs, increase in housing prices in the city and possible reduction in competitiveness
Gain in competitiveness through reduced energy expenditures and lower taxes	Potentially larger urban heat island and larger vulnerability to heat waves
Higher density facilitated by zoning to avoid development in at-risk areas	Possible increase in natural hazard risk if containment land-use plans do not have controls for additional density in flood-prone or landslide areas
Reduction in mobility needs and energy consumption	
Reduced urban sprawl and protection of natural areas from increased competition with agriculture	
Improved social equity through reduction in segregation	

Planning regulations and standards are key tools in ensuring sustainable urban development, but many SIDS countries have difficulty in formulating and enforcing planning regulations and standards. One strategy to combat urban sprawl is to promote compact urban forms by adopting planning regulations that promote infill development and limit new or green-field developments (UN-HABITAT, 2015a:16). Drawing on experience in Caribbean SIDS countries, Table 4 lists the potential positive and negative impacts of adopting and enforcing policies to promote integrated dense urban development.

### **Improved Land Governance**

As in much of the developing world, many SIDS countries have dual land tenure systems, with a formal system to recognize rights under some form of western model of land tenure that was introduced under colonial administration and a customary system with varying degrees of formal recognition that recognizes land held under traditional or customary systems of land tenure. These traditional or customary systems take many forms. In Melanesia much of the land is held under custom. This ranges from about 90% in Vanuatu (noting all land is inalienable) to about 97% in PNG. Governments in SIDS countries have taken varying approaches to the formal recognition of customary tenure and the way that such land is made available for development and economic use. In Fiji an iTaukei Land Trust Board has been established to make customary land available for market use under arrangements that protect and provide benefits to traditional

landowners. In Vanuatu a leasehold system has been established to make land available for market use. There are also various forms of informal tenure such as the family land that is typical in many Caribbean countries.

While the need for improved land governance in SIDS is high, customary land tenure systems in many SIDS countries are under increasing pressures from urbanisation. Customary land has been acquired for public purposes both under colonial administration and post-independence and was not always acquired with appropriate consultation and compensation. Customary institutions are under pressure, both internally and externally from factors such as internal and regional migration, urbanisation, economic development and a range of government policies with objectives such as protecting the environment, safeguarding the vulnerable, ensuring social and gender equity and promoting economic development through investments in agriculture, mining, tourism, etc. In many SIDS countries land and access to land has been a source of conflict.

Capacity and governance is weak in many SIDS countries, with governments struggling to formulate appropriate policy and legislative frameworks and to develop and maintain effective systems to put policy into effect and enforce legislation. This weak governance results in increased land disputes and conflict over land and is a serious impediment to investment and economic development. Every year the World Bank publishes a global ranking of the ease of doing business. This ranking covers a range of different aspects including the ease of registering property. Although there are issues with the way the ranking are prepared, they are compiled after extensive consultation with experts in the countries being assessed. Based on the assessment in 2016 it is very difficult to register property in all but a few SIDS countries.



© Stig Eneemark

Coastal settlement, St. Lucia, Caribbean.

Numerous projects to improve land administration systems have been undertaken over the past half century. Typical project objectives include one or more of the following aspects: reforming and strengthening policy, legal and institutional frameworks; introducing efficient, participatory processes to formally recognise land rights; improving record and registration systems to record changes in formally recognised land rights over time; computerisation of records; upgrading surveying, mapping and record keeping technologies; improving service delivery to government, the market and to the general public; and capacity building, all in an attempt to develop more efficient and effective land administration services.

In many SIDS countries there are very limited resources in the public sector and staffs are often expected to cover a broader scope of tasks than in countries that have more staff. The lack of qualified and trained staff to be able to cover this increased scope of tasks adds to the difficulty of building capacity, particularly as land administration reform in many SIDS countries is funded with a project rather than programmatic approach.

Advances in technology such as improved satellite positioning, high resolution satellite imagery and the systems to produce large scale orthophotography from this imagery and improved ICT systems, support governments in improving land administration systems. However, the environment for land administration reform projects is changing. There is increased emphasis on pro-poor policy, better land governance and the adoption of procedures and technology that are fit-for-purpose.

The Fit-For-Purpose (FFP) approach to improving land administration services is particularly relevant to land professionals. The FFP approach includes three fundamental characteristics. 'Firstly there is a focus on the *purpose* before designing the means to be the most "fit" for achieving it; secondly, the FFP approach requires *flexibility* in designing the means to meet the current constraints; and, thirdly, it emphasises the perspective of *incremental improvement* to provide continuity' (Enemark et al., 2016:16). The FFP concept covers the spatial, legal and institutional frameworks and includes four key principles for each framework and set out in Table 5 below.

**Table 5:** The key principles of the FFP approach (Enemark et al., 2016:19).

<b>KEY PRINCIPLES</b>		
<b>Spatial framework</b>	<b>Legal framework</b>	<b>Institutional framework</b>
<ul style="list-style-type: none"> <li>• Visible (physical) boundaries rather than fixed boundaries.</li> <li>• Aerial / satellite imagery rather than field surveys.</li> <li>• Accuracy relates to the purpose rather than technical standards.</li> <li>• Demands for updating and opportunities for upgrading and ongoing improvement.</li> </ul>	<ul style="list-style-type: none"> <li>• A flexible framework designed along administrative rather than judicial lines.</li> <li>• A continuum of tenure rather than just individual ownership.</li> <li>• Flexible recordation rather than only one register.</li> <li>• Ensuring gender equity for land and property rights.</li> </ul>	<ul style="list-style-type: none"> <li>• Good land governance rather than bureaucratic barriers.</li> <li>• Integrated institutional framework rather than sectorial silos.</li> <li>• Flexible ICT approach rather than high-end technology solutions.</li> <li>• Transparent land information with easy and affordable access for all.</li> </ul>

## 6 TAKING THE AGENDA FORWARD

This workshop on understanding and developing a framework for the land professional in assisting SIDS countries respond to climate change and improve security of tenure is very opportune:

1. The technology available to the land professional is developing very quickly. This technology includes:
  - a) Global navigation satellite systems
  - b) High resolution satellite imagery and unmanned airborne vehicles and improved software systems that are able to produce cheap, accurate ortho-photo maps
  - c) Improved registry software (off-the-shelf, bespoke and open-source)
  - d) Improved ICT, including improved internet access and cloud computing.
2. Global conventions such as the Voluntary Guidelines for Responsible Governance of Tenure (UN-FAO, 2012) now provide clear guidance to governments.
3. New tools are available to assess land governance in a way that can be understood by policy makers and the general public such as the World Bank Land Governance Assessment Framework (Deininger et al., 2012).
4. There is increased interest in the oversight of land issues and the preparation of guidelines, tools and documented lessons and experience. Examples include:
  - a) The Land Portal (<https://landportal.info>)
  - b) The Land Coalition (<https://www.landcoalition.org>)
  - c) The Land Matrix (<https://www.landmatrix.org/en/>).
5. There is an increasing body of literature on experience and best practice and tools to support implementation such as the GLTN land tools, including: (GLTN, UN-HABITAT 2016):
  - a) Fit-For-Purpose Land Administration
  - b) Costing and Financing of Land Administration
  - c) Social Tenure Domain Model.
6. There is increased interest in funding and supporting land initiatives, see the Land Governance Donor Platform at <http://landgov.donorplatform.org>.
7. FIG has strong links to key UN agencies such as UN-HABITAT, UN-FAO and the World Bank and a track record in innovation and interest in support for SIDS.

The challenge for the workshop was to take advantage of this positive environment and come up with a set of actions to be presented in a declaration that have clear responsibilities and encouragements for the land sector. This outcome of the workshop – The FIG Christchurch Declaration – is presented in chapter 3 above.

# APPENDICES

## Workshop Programme

Proceedings are available online at FIG website:

[http://www.fig.net/resources/proceedings/2016/2016\\_05\\_sids.asp](http://www.fig.net/resources/proceedings/2016/2016_05_sids.asp)

### **SATURDAY 30 APRIL 2016:**

#### **Key Land Governance Challenges in the Context of Climate Change**

##### **Session 1 – Key note presentations**

*Chair: David Mitchell, Australia*

- **Diane Dumashi**, FIG, Welcome address
- **John Hohol**, FIG Foundation
- **Mark Allen**, New Zealand Institute of Surveyors
- **David Mitchell**, Australia: Introduction and workshop program – The context and specific vulnerabilities of SIDS: The importance of land governance
- **Faatasi Maloga**, PSGC: Challenges and lessons for land governance in SIDS
- **Luke Kiddle**, New Zealand: Pacific Urban Forum – challenges and lessons for land governance
- **Paul Munro-Faure**, UN-FAO: The Voluntary Guidelines on the responsible governance of tenure and SIDS

Discussion and summary.

##### **Morning Tea**

##### **Technical Session 1 – Regional and country perspectives**

*Chair: David Mitchell, Australia*

- **Paserio Samisoni**, Fiji: SIDS workshop – Land Governance and Climate change in Fiji
- **Martin Sokomanu**, Vanuatu: The Effects of Climate Change, Vulnerability and Natural Disasters on the National Geodetic Network
- **Williams Ganileo**, Vanuatu: Responding to Climate Change and Security of Tenure Challenges in Vanuatu: The Role of Land Professionals
- **Viliami Folau**, Tonga: Climate Change in Tonga

Discussion and summary.

##### **Lunch**

##### **Technical Session 2 – Regional and country perspectives (cont.) Challenges and lessons for improved land governance in Small Island Developing States**

- **Hubert Kalauni**, Niue: Niue Maritime Boundaries Delimitation Project
- **Petania Tuala**, Samoa: Land Governance and Climate Change in Samoa

- **Faatasi Maloga**, Tuvalu: Challenges and lessons for improved land governance in Small Island Developing States  
Discussion and summary.

##### **Afternoon Tea**

##### **Workshop 1 – Key challenges for CCA and Land Governance in SIDS**

*Chair: John Hannah, New Zealand*

*Discussant: Chris Pearson, New Zealand*

Break out groups

- Key vulnerabilities and challenges for SIDS countries in contributing to their countries resilience to natural disasters – and what are the roles of land sector agencies and land professionals in this regard?
- What are the key vulnerabilities and challenges for SIDS countries in relation to rapid urbanisation and how can this be addressed by the land sector agencies and land professionals?
- What are the constraints in improving land governance and administration in SIDS countries?

Each group to report back.

##### **Evening – Welcome Reception**

### **SUNDAY 1 MAY 2016:**

#### **Potential Land Government Responses and Land Tools**

##### **Technical Session 3 – Regional and country perspectives**

*Chair: Don Grant, Australia*

*Discussant: Luke Kiddle, New Zealand*

- **Charisse Griffiths-Charles, Trinidad and Tobago**: Latin America and Caribbean report for Habitat III – Lessons for land governance
- **Azzan Rashid, Zanzibar**: Zanzibar case study
- **Bernado Almeida**, Timor-Leste/Netherlands: Timor-Leste case study
- **Dalila Gharbaoui**, Belgium: Land governance in climate induced relocation, and what role for land professionals

Discussion and summary.

##### **Morning Tea**

#### Technical Session 4 – VGGTs for SIDS

*Moderator:* **David Mitchell**, Australia

- **Paul Munroe-Faure**, FAO, Rome: Addressing key vulnerabilities and challenges through implementing the VGGTs

*First round of discussants:* **Stig Enemark** and **Teo**

**CheeHai:** High level comments on land governance and SIDS

Second round of discussants on the following topics:

- What are the priority land governance issues that the VGGTs can help address?
- What are the next steps in implementing the VGGTs at country level?
- What capacity building is required to implement the VGGTs at country level?
- What professional and organisational collaboration is required to implement the VGGTs at country level?
- What is the role of youth in implementing the VGGTs at country level?
- What is the role of academic and training institutions in implementing the VGGTs at country level?

Floor discussion.

#### Lunch

#### Technical Session 5 – Land tools and secure land rights for all

*Chair:* **Kate Fairlie**, Land Equity Int., Australia

*Discussant:* **John Gitau**, GLTN, Kenya

- **Cyprian Selebalo**, Nairobi: GLTN Land Tools and their application to SIDS
- **Charisse Griffith-Charles**, Trinidad and Tobago: STDM Piloting in St Lucia and St Vincent

#### Panel Discussion

*Facilitator:* **Cyprian Selebalo**, GLTN

Focus questions for discussions:

- What are the priority land tools for addressing key land governance challenges and priorities in SIDS?
- What land tools are needed to improve security of tenure in hazard-prone areas?
- What land tools are needed to improve security of tenure in rapidly urbanising areas?
- What land tools are needed to improve land use planning in rapidly urbanising areas?
- How can fit-for-purpose land administration principles be applied in SIDS?
- What land tools are needed to improve the valuation of land across all tenure types?

Questions and comments from the audience

- **Kate Fairlie**, Australia, Summary and closing remarks

#### Afternoon Tea

#### Workshop 2 – Responsible Land governance and administration

Break out groups

- How can these land governance and administration constraints be addressed by the land sector agencies and land professionals – including applying the Voluntary Guidelines for Responsible Governance of Tenure and a Fit-For-Purpose Approach to building sustainable Land Administration Systems?
- What capacity building is required for the land professionals to fulfil this role and how this this capacity building best implemented
- What professional and organisational collaboration is needed by associations such as FIG, the Pacific Geospatial and Surveying Council (PGSC), the Surveying and Spatial Sciences Institute (SSSI), New Zealand Institution of Surveyors (NZIS), and the Royal Institute of Chartered Surveyors (RICS) in helping land professionals in SIDS countries respond to the vulnerabilities and in fulfilling their roles?

Each group to report back.

- **David Mitchell**, Australia, Workshop summary and closing remarks

#### WEDNESDAY 4 MAY 2016:

##### *Towards the Declaration*

- **David Mitchell**, Australia: Draft declaration and discussions, followed by revision for final version



## **Participants List**

<b>Name</b>	<b>Organisation</b>	<b>Country</b>
Allan, Mark	NZIS	New Zealand
Almeida, Bernardo	Leiden University	Netherlands
Azzan, Rashid	Department of Lands	Tanzania
Ben, Chethna	University of South Pacific	Fiji
Burns, Anthony	Land Equity International	Australia
Chang, David	Ministry of Lands and Mineral Resources/PGSC	Fiji
Dumashi, Diane	FIG Vice-President	UK
Enemark, Stig	Aalborg University	Denmark
Fairlie, Kate	Land Equity International	Australia/UK
Folau, Viliami	Ministry of Lands, Climate Change and Nat. Resources.	Tonga
Ganileo, Williams	G 2 Consultancy Ltd / Vanuatu Government	Vanuatu
Gharbaoui, Dalila	United Nations University - CRIS	New Zealand
Gitau, John	GLTN	Kenya
Grant, Donald	RMIT University	Australia
Griffith-Charles, Charisse	University of West Indies	Trinidad and Tobago
Hannah, John	University of Otago	New Zealand
Harper, Ian	Geodata Australia	Australia
Hay, Geoff	Trimble	New Zealand
Johnston, Gordon	Venture Geomatics Limited	United Kingdom
Kalauni, Hubert	Division of Land Survey and Management	New Zealand
Kiddle, Luke	Independent Consultant	New Zealand
Lal, Andrick	Secretariat of the Pacific Community	Fiji
Malolga, Faatasi	Department of Lands & Survey / PGSC	Tuvalu
Mitchell, David	RMIT University	Australia
Munro-Faure, Paul	UN-FAO	Italy
Pearson, Chris	University of Otago	New Zealand
Robertson, Bill	Bill Robertson Associates	New Zealand
Samisoni, Paserio	Housing Authority of Fiji	Fiji
Sarib, Robert	Office of the Surveyor general North Territory	Australia
Schennach, Gerda	Chair, FIG Com 7	Austria
Selebalo, Cyprian	GLTN	Kenya
Sokomanu, Martin	Ministry of Lands and Natural Resources	Vanuatu
Sterling, Andrew	NZIS	New Zealand
Teo, CheeHai	ASEAN Federation of Land Surveying and Geomatics	Malaysia
Tuala, Petania	Ministry of Natural Resources and Environment	Samoa

## REFERENCES

- Deininger, K., Selod, H., and Burns, A., (2012): The Land Governance Assessment Framework: Identifying and Monitoring Good Practice in the Land Sector. The International Bank for Reconstruction and Development / The World Bank, Washington.  
<http://www.seachangecop.org/sites/default/files/documents/2011%2011%20World%20Bank%20-%20Land%20governance%20assessment%20framework.pdf>
- Enemark S., McLaren R., Lemmen C. (2016): Fit-For-Purpose Land Administration - Guiding Principles for Country Implementation. GLTN/UN-HABITAT, Nairobi. <http://www.glttn.net/index.php/publications/publications/publications-list/send/2-glttn-documents/2332-fit-for-purpose-land-administration-guiding-principles-for-country-implementation>
- FIG (2010): Sydney Agenda for Action - Small Island Developing States and the Millennium Development Goals: Building the Capacity. SIDS Seminar, Sydney, Australia, 14–15 April 2010, FIG Publication No. 53.  
<http://www.fig.net/resources/publications/figpub/pub53/figpub53.pdf>
- FIG (2013): Suva Statement on Spatially Responsible Governance. Proceedings of FIG, UN-FAO, GLTN, UN-HABITAT and UN-GGIM-AP seminar held in Suva, Fiji 18–20 September 2013.  
<https://www.fig.net/resources/proceedings/2013/fiji/index.htm>
- GLTN, UN-HABITAT (2016): Introduction to Land Tools.  
<http://www.glttn.net/index.php/land-tools/introduction-to-land-tools>
- Pacific Islands Forum Secretariat (2015): Pacific Regional MDGs Tracking Report 2015.  
<http://www.forumsec.org/resources/uploads/embeds/file/2015%20Pacific%20Regional%20MDGs%20Tracking%20Report.pdf>
- UN-DESA (2015): World Urbanization Prospects: the 2014 Revision. UN Department of Economic and Social Affairs. New York.  
<https://esa.un.org/unpd/wup/Publications/Files/WUP2014-Report.pdf>
- UN-FAO (2012): Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of Food Security.  
<http://www.fao.org/docrep/016/i2801e/i2801e.pdf>
- UN-HABITAT (2010): Land and Natural Disasters: Guidance for Practitioners.  
<http://www.glttn.net/index.php/resources/publications/publications-list/send/2-glttn-documents/78-land-and-natural-disasters-guidance-for-practitioners-eng-2010>
- UN-HABITAT (2013): State of the World's Cities 2012/2013.  
<http://unhabitat.org/books/prosperity-of-cities-state-of-the-worlds-cities-20122013/>
- UN-HABITAT (2015a): Urbanization and Climate Change in Small Island Developing State.  
[https://sustainabledevelopment.un.org/content/documents/2169\(UN-Habitat,%202015\)%20SIDS\\_Urbanization.pdf](https://sustainabledevelopment.un.org/content/documents/2169(UN-Habitat,%202015)%20SIDS_Urbanization.pdf)
- UN-HABITAT (2015b): Guiding Principles for City Climate Action Planning.  
<http://unhabitat.org/books/guiding-principles-for-climate-city-planning-action/>
- United Nations (2016): Sustainable Development Knowledge Platform.  
<https://sustainabledevelopment.un.org/topics/sids>
- United Nations (1992): Agenda 21 on Sustainable Development.  
<https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf>
- United Nations (2014): SIDS Accelerated Modalities of Action (SAMOA Pathway), [http://www.un.org/ga/search/view\\_doc.asp?symbol=A/RES/69/15&Lang=E](http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/69/15&Lang=E)

## FIG PUBLICATIONS

The FIG publications are divided into four categories. This should assist members and other users to identify the profile and purpose of the various publications.

### FIG Policy Statements

FIG Policy Statements include political declarations and recommendations endorsed by the FIG General Assembly. They are prepared to explain FIG policies on important topics to politicians, government agencies and other decision makers, as well as surveyors and other professionals.

### FIG Guides

FIG Guides are technical or managerial guidelines endorsed by the Council and recorded by the General Assembly. They are prepared to deal with topical professional issues and provide guidance for the surveying profession and relevant partners.

### FIG Reports

FIG Reports are technical reports representing the outcomes from scientific meetings and Commission working groups. The reports are approved by the Council and include valuable information on specific topics of relevance to the profession, members and individual surveyors.

### FIG Regulations

FIG Regulations include statutes, internal rules and work plans adopted by the FIG organisation.

### List of FIG publications

For an up-to-date list of publications, please visit [www.fig.net/pub/figpub](http://www.fig.net/pub/figpub)

## ABOUT FIG



International Federation of Surveyors is the premier international organization representing the interests of surveyors worldwide. It is a federation of the national member associations and covers the whole range of professional fields within the global surveying community. It provides an international forum for discussion and development aiming to promote professional practice and standards.

FIG was founded in 1878 in Paris and was first known as the *Fédération Internationale des Géomètres* (FIG). This has become anglicized to the *International Federation of Surveyors* (FIG). It is a United Nations and World Bank Group recognized non-government organization (NGO), representing a membership from 120 plus countries throughout the world, and its aim is to ensure that the disciplines of surveying and all who practise them meet the needs of the markets and communities that they serve.



Image from Vanuatu in the Pacific Ocean.

This publication is the result of a workshop on “Responding to Climate Change and Tenure Insecurity in Small Island Developing States – The Role of Land Professionals” held in Christchurch, New Zealand 30 April – 1 May 2016 in connection with the FIG Working Week 2016. It includes a report of the seminar and a FIG Christchurch declaration as the main outcome of the workshop.

The workshop builds on previous FIG events such as Sydney 2010 and Fiji 2013. It was organised to address the many distinct challenges that Small Island Developing States (SIDS) are facing in their pursuit of social and economic development and these challenges are compounded by the adverse impacts of climate change.

The workshop and the resulting declaration emphasised the way and means for land professionals to: Address climate change, natural disaster and urbanisation challenges and vulnerabilities; address the challenges in land governance and administration; and, for this purpose, building capacity in land governance and administration and enhancing professional and organisational collaboration.

The FIG Christchurch Declaration will hopefully serve as a guiding document for the land professional in SIDS in facing the challenges of the future. FIG is committed to support this process.