Challenges and lessons for improved land governance in Small Island Developing States

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SUMMARY

Small Island Developing States (SIDS), in particular the Pacific Islands SIDS (PI SIDS) are faced with a range of complex issues and challenges on land governance and administration.

The high frequency of natural disasters links to climate change and sea level rise pose a real challenge to the land sectors in PI SIDS. The predominant nature of tenure on customary lands with varying degree of governance and administration to manage it hinders progress on making lands system works.

Rapid urbanization, land conflicts and tension on land, as well as informal settlement, increases the challenges on land governance and administration in SIDS. Relevant resources and technology needed to support land governance and administration remains a challenge in the land sector, especially in PI SIDS.

Capacity building in different areas of the land sector through human resources development programmes needs special attention by our regional and international technical and professional partners such as PGSC, FIG, Castle, UN-GGIM, New Zealanda, Australia and institutions from other developed countries. Similarly, closer ties with potential donor partners is highly essential by way of formulating and implementing effective and efficient tailor- made, fit- for- purpose plans to tackle various challenges in the land sector.

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1. INTRODUCTION

Challenges for improved land governance in SIDS vary in scope and locations, but they shared a common nature and form in one way or another. This is the same concept to Pacific Island Countries SIDS (PI SIDS). A damaged or disturbed boundary mark caused by coastal erosion is not the same as moved or shifted boundaries by a person having a boundary issue with a neighbor.

Defining the boundaries of a land parcel that extend towards the coastline, or foreshore is determined by a number of fixed boundary markers on land which links directly to boundary marks near the coastline or foreshore. Coastal erosion on the foreshore may disrupt and move these boundary markers near the shoreline. Land conflicts, and tension on land will take place when boundary marks are not properly surveyed and cannot be re- defined using conventional means of surveying in the local grids or GNNS.(a simple example)

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".

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.

The Pacific region is one of the most disaster-prone in the world. Rapid urbanization, conflict over land, and the establishment of informal settlements on hazardous sites further exacerbate the problems. These issues present a significant challenge for government agencies, which require capacity building to respond adequately. These challenges in terms of capacity and human resources not readily available to respond effectively in a timely manner, is further weakened by the absence of relevant tools and technology to support its services.

Governance is weak in many SIDS countries, with governments struggling to formulate appropriate policy and legislative frameworks and struggling 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.

Many countries in the PI SIDS region have a very high percentage of customary lands (Table 1). In countries where the percentage of customary land is high, the customary landholders are central to many of the major decisions about land ownership and land use. Therefore, effective disaster response and land governance requires cooperation and consultation between government and customary landholders. (Mitchell et al, 2011).

Table 1Percentage of customary land in various Pacfic Island Countries (AusAID, 2008)

	Public[a]	Freehold[b]	Customary
Cook Islands	Some	Little	95%
East Timor[c]	Some	Some	Most
Fiji	4%	8%	88%
Federated States of Micronesia	35%	<1%	65%
Kiribati	50%	<5%	>45%
Marshall Islands	<1%	0%	>99%
Nauru	<10%	0%	>90%
Niue	1.5%	0%	98.5%
Palau	Most	Some	Some
Papua New Guinea	2.5%	0.5%	97%
Samoa	15%	4%	81%
Solomon Islands	8%	5%	87%
Tokelau	1%	1%	98%
Tonga	100%	0%	0%
Tuvalu	5%	<0.1%	95%
Vanuatu	2%	0%	98%

a Includes Crown land and land owned by provincial and local governments.

b Includes land that is not strictly freehold, but similar in characteristics, such as the "perpetual estates" found in Solomon Islands.

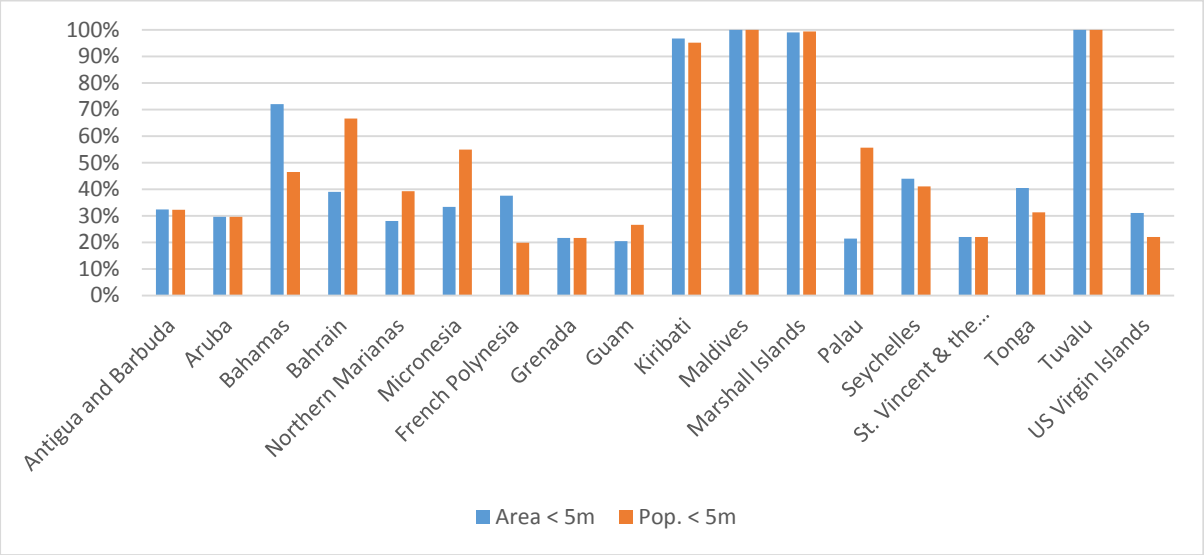
c East Timor does not as yet have a separate legal category of "customary land", even though most of its rural land remains under customary forms of authority.

2. KEY VULNERABILITIES AND CHALLENGES FOR SIDS COUNTRIES IN CONTRIBUTING TO THEIR COUNTRIES RESILIENCE TO NATURAL DISASTERS AND SEA LEVEL RISE

Small Island Developing States (SIDS) are a diverse group of 52 countries located in the Atlantic, Pacific and Indian oceans, and the Caribbean, Mediterranean and South China seas. The SIDS are a group that shares similar environmental and development issues, despite their social, cultural, economic and geographical differences. In general SIDS have unique, complex and severe vulnerabilities and characteristics, and are unique in regard to their size, isolation, impacts of climate change and sea level rise, and exposure to natural and environmental disasters. Common characteristics that SIDS share include small size, remoteness, a narrow resource base, vulnerability to external shocks and exposure to global environmental challenges, particularly climate change. The size, geography and relative isolation and remoteness of SIDS countries makes them particularly vulnerable to climate change (Dietrich et al, 2015).

Global climate change is increasing temperatures and the frequency of extreme weather events and SIDS countries have reasonable resilience to such events, but 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 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).

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



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.

Figure 2 How Land System Vulnerability can Create Human Disasters (Adapted from UN-HABITAT, 2010)

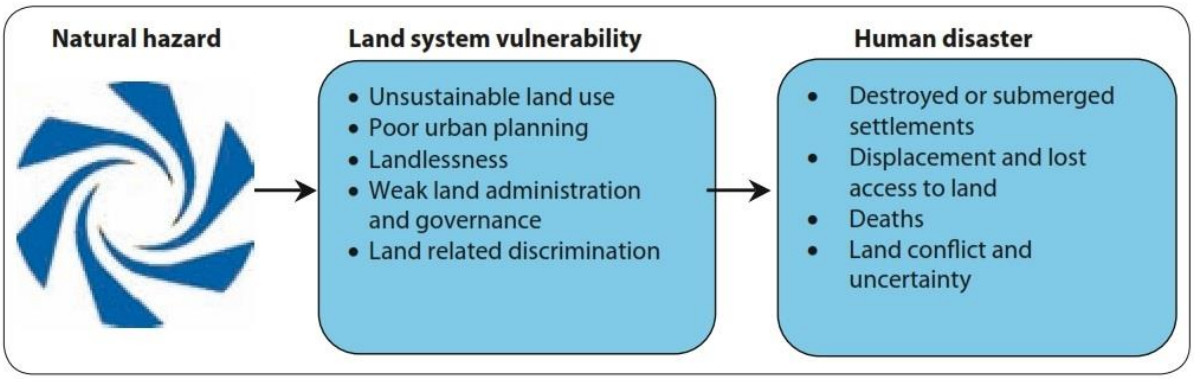


Table 2 Key Land Administration Measures after a Natural Disaster (Adapted from UN-HABITAT, 2010)

Phase of Disaster Recovery	Key Land Administration Measures
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.

3. KEY VULNERABILITIES AND CHALLENGES FOR SIDS COUNTRIES IN RELATION TO RAPID URBANISATION

"Of the 65 million people living in SIDS today, 38 million (59%) already live in urban settlements. Singapore and Nauru are among the most urbanized SIDS (100 per cent), while Trinidad and Tobago (13 per cent) and Papua New Guinea (12 per cent) are among the least. The urbanization rate amongst SIDS in the immediate future (2010-2015) is expected to be 1.4 per cent, just below the global average of 1.7 per cent but with striking regional and national differences. In the fastest-urbanizing region, the Pacific, the urbanization rate is currently calculated at 4.3 per cent, increasing to 16 per cent in peri-urban areas. Rapid urban growth can also be observed in other regions, for example in Haiti (3.9 per cent), Trinidad and Tobago (2.2 per cent) and Cape Verde (2.1 per cent)" (UN-Habitat, 2015).

The rapid increase of urban population in most of the Pacific Island Countries SIDS (PI SIDS) within a short period comes with different type of challenges. 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.

Infrastructure developments and public services are slow compared to rapid growth of urban population. Urban development cannot keep up with rapid urban population growth. This will result in the spread of informal settlements and the main causes of economic, social and environmental issues that will escalates without proper measures in place. The rapid growth of land development in urban areas can undermine quality planning for recreational areas and public parks. This oversight will only take place as a result of poor urban planning and poor landuse planning.

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).

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, 2015:16).

Drawing on lessons from the Caribbean SIDS countries, the following table lists the potential positive and negative impacts of adopting and enforcing policies to promote integrated dense urban development. Table 3.

Table 3 Possible Benefits and Negative Impacts in Promoting Dense Urban Forms (Adapted from UN-HABITAT, 2015)

Positive Benefits	Possible Negative Impacts
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	

4. CONSTRAINTS IN IMPROVING LAND GOVERNANCE AND ADMINISTRATION IN PACIFIC SIDS COUNTRIES

There are many known causes of constraints in improving land governance and administration in SIDS countries. The bigger and stronger SIDS members are better resourced in terms of qualified staffing and are also well equipped with the relevant infrastructure and facilities to support its services. Smaller SIDS countries in the Pacific Islands (PI SIDS) are more vulnerable to different type of challenges on land governance and administration.

The lack of capacity or staff without relevant qualification and experience is a common issue in PI SIDS. It is common practice in the PI SIDS that trained and qualified staff who have completed their tertiary level training would migrate to New Zealand, Australia, US and other developed countries; higher salaries and better package deals and better superannuation. The migration of qualified graduates from the land sectors is different in nature from other fields such as finance, as there is a higher percentage of graduates from other fields but not on land sector such as in surveying, geospatial or other related technical fields. This is proven by the fact that we can easily recruit and filled a new vacant position of an economist overnight, but this is not so for surveying or other technical position in the land sectors. It takes time in the PI SIDS to offer new training awards for pre-service and in- service scholarships, as this is

normally planned against the needs arising from the national human resource planning of government.

Many government in PI SIDS shared a similar policy on new graduates from tertiary education. Those who have graduated under funded scholarship award would be asked to serve a minimum number of years in the relevant department of government or other public bodies, and they could leave after serving this bond or contract. Such policy has resulted in the on- going "brain- drain" issue in the Pacific and other SIDS countries. This policy on the other- hand, provide the opportunity for new potential recruits remaining in the country.

The absence of a certifying body to issue license to practising surveyors or valuers and other related discipline is an impediment to the overall efficiency and performance of the land sector. This is caused by the lack of support from central government and a weak in governance in the land sector to formulate relevant investment plans and policies.

One of the constraints in improving land governance and administration in the PI SIDS countries is the lack or non- existent of surveying school in the region, beside PNG, Fiji, NZ and Australia. Higher entry requirements for first year students from PI SIDS countries in NZ and Australia school of surveying does not help to solve this on- going problem in the land sector. In some cases where high entry requirements become an issue to first year students earmarked to pursue a degree in surveying or geospatial, a switch of courses to another field is an ideal option.

There is a high demand by the surveying and land sector bodies seeking new survey graduates to recruit in their workforce with a 100% employment record. However, it is evident that only few graduates in PI SIDS would pursue courses in surveying or geospatial each year. Beside the issue of high entry requirements to enter surveying courses in particular, it is obvious to note that there is a lack of interest in pursuing a career in surveying, or in geomatics. A decision to follow a career- path in surveying is pictured as someone with a tripod looking through a telescope in the fields, bushes, mountains, country roads or highways. Transition from the optical theodolites and levelling equipment to the automated instruments in surveying has helped to promote surveying as a professional career today.

The lack of a proper strategic plan in place, or using an out-dated corporate plan is an issue that needs to be addressed amongst PI SIDS countries. The efficiency and effectiveness of the land sector to deliver quality services in a timely manner is subject to the quality of its strategic plan. However, the formulation and successful implementation of a strategic plan in the land sector need good support of the land sector's Minister and central government.

Land sectors in PI SIDS operate by following existing government policies and guidelines which are normally based on regulations and legislation enacted by national laws. There are no direct links, nor bilateral ties amongst the land sectors to share their resources in terms of capacity or knowledge exchange. Such weak links amongst PI SIDS in the land sectors hinders room for improvement in land governance and administration by learning from

others. Limited links of the land sector to regional or international organisations is evident compare to other sectors like fisheries, and agriculture with strong programme links with SPC, FAO, FFA and many others. There are potential benefits in establishing direct links and networking by other sectors like agriculture and fisheries with these regional bodies and organisations, as they provide finance and human resources as well as improving the infrastructures and facilities of these other sectors to make improved and quality changes in their governance and administration.

Similarly on another level of networking with potential donor organisations, other sectors are reaping the benefits from these bodies such as ADB, World Bank, FAO, EU and other smaller regional bodies like SPC, SPREP and FFA. The lack of donor supports from these donor bodies and organisations is a challenge to the land sectors as they would rely mainly on national funding support which can only make small changes. Re- aligning and re-programming of land sectors plans and goals to fall in line with national development goals, and also links with regional or international bodies development goals like the UN-GGIM, FIG, Pacific Island Forum, and other potential funding sources like "green climate fund".

5. ADDRESSING LAND GOVERNANCE AND ADMINISTRATION CONSTRAINTS BY THE LAND SECTOR AGENCIES AND LAND PROFESSIONALS

The constraints faced by land governance and administration in smaller SIDS countries are similar to those faced by stronger SIDS. However, stronger SIDS has the relevant resources and infrastructures to respond and tackle these constraints. Stronger SIDS has higher investment plans to provide the relevant resources and technology to provide quality services to their system. As such, smaller SIDS need to take a new approach and mind set in formulating good strategic investment plans that can achieve sustained quality changes to land governance and administration. The so called "*ways for improvement of services in the land sector* needs to be re- phrased to *the professional and strategic actions to make sustained quality changes and results.* Stronger SIDS countries, with support from our neighbours New Zealand, Australia and other developed countries has a crucial role to play in helping the smaller and weaker SIDS countries from the PI SIDS, and other SIDS members. Sharing and caring in terms of capacity building and knowledge exchange is highly relevant to tackle these issues and constraints faced by small PI SIDS.

Training and capacity building is highly essential to all individual staff in the land sector. Land managers, surveyors, valuers, technicians, IT and every individual in the workforce requires some form of an approved official training relevant to the need and structure of the land sector. A tertiary qualification such as a degree or postgrad in the relevant discipline relating to lands, survey, geospatial, and other relevant areas is ideal. Government policies on scholarship graduates in PI SIDS needs to be amended, to ensure that graduates in the land sector especially in surveying are employed in the country longer than the current practice. Alternatively, the issue of low numbers of surveyors and other land professionals in some PI SIDS needs to be taken seriously by the relevant authority managing human resources

development and planning. Increasing the number of survey trainees enrolled in surveying school will ensure that there is a pool of surveyors ready when the need arise.

The issue of certification and issuance of license to land practitioners such as surveyors, valuers and other land professions need to be addressed bilaterally between governments of neighbouring countries. Such as between Fiji and Tuvalu, Fiji and Kiribati. This is the most essential arrangement to tackle this issue, which can be arranged through PGSC or direct bilateral arrangements between stronger SIDS and smaller SIDS countries. Other options like sending trainee surveyors from PI SIDS to New Zealand and Australia to get their license, with conditions attached to encourage these trainees to return home after their training atachments.

Availability of surveying or land professional schools that are easily accessible to technicians and trainees from PI SIDS is an issue for future land professionals. High entry requirements for survey students from PI SIDS in New Zealand and Australia university, and low intakes in PNG & Fiji- FNU surveying school with unknown reasons, as well as the phasing-out and closure of a Geomatics Diploma course at USP, Fiji are some of the constraints in building-up a sustainable supply of qualified and trained surveyors and land professionals in the region. The restoration of the USP Geomatics diploma course, with emphasis to upgrade it to degree level in future is a challenge that FIG, UN-GGIM, PGSC and managers from PI SIDS to consider. There are known cases where graduates from the USP diploma course in Geomatics not being eligible to enter degree course in surveying in New Zealand. Better collaborations between school of surveying in PI SIDS and other surveying school in New Zealand and Australia needs to be improved, for a smooth transition of survey trainees and technicians to acquire better and quality training.

The constraints mentioned earlier concerning the low number of surveying school in PI SIDS contributes to the low number of qualified, and trained surveyors and land professionals in the region. Proper planning and collaborations amongst PI SIDS and technical and donor partners is crucial in solving this issue efficiently in a cost effective and timely manner.

Development of a good strategic plan requires a significant amount of financial investments from central government. A strong political will by the Minister responsible to lands & survey requires good administration and policy support. These are the two main actors in the land sectors that can make positive changes; a strong and motivated land manager supported by a strong political leader who can convince Cabinet to support proposals from the land sector. Re- alignment of land sector's programme to the national, regional and international strategic goals is of paramount importance to access potential funding support.

Strengthening and improving collaborations between PI SIDS land sectors through PGSC with support from our technical and donor partners is highly essential in order to make good and positive changes. Lessons learnt from other sectors like agriculture and fisheries, in terms of partnership and networking with regional and international bodies like SPC, FFA, FAO as well as donor agencies like the EU, ADB, World Bank is crucial in developing a sustainable

partnership for technical and financial support to make efficient, effective and quality changes to land governance and administration.

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 (2015:9). The FFP concept covers the spatial, legal and institutional frameworks and includes four key principles for each framework and set out in the table below.

Table 4 The Key Principles of the FFP Approach (Enemark et al, 2015:10)

KEY PRINCIPLES		
Spatial framework	**Legal framework**	**Institutional Framework**
1. Visible (physical) boundaries rather than fixed boundaries. 2. Aerial / satellite imagery rather than field surveys. 3. Accuracy relates to the purpose rather than technical standards. 1. Demands for updating and opportunities for	1. A flexible framework designed along administrative rather than judicial lines. 2. A continuum of tenure rather than just individual ownership. 3. Flexible recordation rather than only one register. 4 Ensuring gender	5. Good land governance rather than bureaucratic barriers. 6. Integrated institutional framework rather than sectorial silos. 7. Flexible ICT approach rather than high-end technology solutions. 8. Transparent land information with easy and

6. CAPACITY BUILDING

One of the most common challenges in developing countries is capacity building. This is caused by the inability to secure appropriate funding to invest on capacity building by national budget, as most developing countries relies on donor support. This is the same experience faced by PI SIDS and other smaller SIDS countries.

Capacity building in SIDS countries, especially in PI SIDS is of paramount importance in the development of an efficient, effective and proactive land sector that can provide quality services where it is needed. Tertiary qualification in land administration, surveying & mapping, geospatial and other relevant discipline is critical and that land practitioners should attain degree or higher level of qualification.

Similarly, land practitioners are encouraged to attain professional training on their fields in order to receive professional certification and licenses from the relevant authority. This remains a challenge to smaller SIDS countries without the authority to issue license to land practitioners. Support from other stronger SIDS like Fiji, and other countries like New Zealand and Australia or UK is ideal.

Tailored training attachments and mentoring on relevant fields for land professionals is highly relevant in the PI SIDS and smaller SIDS countries. Relevant training programs for sustainable human resources development is crucial such as; short term refresher training courses or training attachments. This will provide the opportunity to learn and develop new knowledge and ways of doing business from developed countries like NZ, Australia, UK and other developed countries.

As such, it is highly relevant to design and establish new professional development program for land professionals to undertake work experience in NZ, Australia and other developed countries in areas of land administration and governance, and other areas in the land sector.

7. THE IMPORTANCE OF COLLABORATION

Stronger partnership and networking between the land sectors and the professional and technical partners and institutions is crucial. Partnership of PI SIDS and other SIDS countries is encouraged through PGSC to develop strategic links with FIG, UN-GGIM, New Zealand, Australia, UK, and other developed countries land & survey bodies, surveying institutions. Developing of a sustainable professional partnership between the land sectors and the professional partners is of paramount importance for capacity building and human resources development of land practitioners at all levels. A new innovative way of doing business by the land sectors in PI SIDS and other SIDS countries is a matter of urgency. This may only be achieve through stronger partnership and collaborations amongst SIDS countries and the professional & technical partners to make these positive changes.

There is a need to initiate and establish a pool of land professionals in PI SIDS and SIDS in general, targeting retired professionals from the region including New Zealand and Australia to provide capacity building to land sectors on target areas. The need to establish and

strengthen ties between PICs SIDs land sectors with NZ, Australia, UK and other developed nations on sharing the way of doing business, identifying the gaps and shortfalls and designing of quality strategic plans is highly important.

Similarly, other possible actions needs to be considered to make these positive changes realized such as scoping, stock- taking and fact- finding mission to PI SIDS and other SIDS members organise by PGSC, FIG, UN-GGIM, NZ, Australia, UK, with support from donor partners to visit PI SIDS. This initiative will help to mapping out realistic and common land sector issues on different areas; capacity building and human resource development, land administration and governance, land tenure, landuse and policy, surveying & mapping, cartography, valuation. These country visit will address the real issues and challenges face by land sectors in PI SIDS and other SIDS countries in which relevant plans on different areas can be address under project support.

8. DISCUSSION AND CONCLUSIONS

Governance is weak in many SIDS countries, especially in smaller PI SIDS where governments are still struggling to formulate appropriate policy and legislative frameworks and struggling 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.

The complex nature of land tenure systems used by SIDS countries, coupled with different form of regulations and policy framework attached to it as in PI SIDS, we can conclude that there are no easy solutions to address the constraints on land governance and administration. Tailored land reforms, policies and strategic planning to suit the purpose and serve the needs of each SIDS member countries, in particular the smaller and weaker SIDS countries needs to be addressed and supported at the national, regional and international level.

The efforts and drive to achieve common goals and targets by SIDS countries, with PI SIDS in particular on meeting standards of doing business in the land sector, is still at arms lengths to a few and a long shot to many. We can make a conclusion in saying that although there have been various efforts made in the past to tackle land governance and administration issues in SIDS, positive changes are seen only in the stronger SIDS countries but not in the smaller members of SIDS. The challenge now is trying to carve the same methodology and concept adopted by stronger SIDS and developed countries, in the context of the small and weaker SIDS countries in the Pacific Islands.

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