# Responding to Climate Change and Security of Tenure Challenges in Vanuatu: The Role of Land Professionals

#### Williams GANILEO, Vanuatu

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#### SUMMARY

The issue of climate changes has had so much impacts on the life of our people causing changes to land use planning to accommodate for the needs that is essential for livelihoods. It could be stated here as a very comprehensive issue to research and find ways to deal with it. More so, the issue of land tenure itself is a complicated one to note where 95 percent of land in Vanuatu is owned by tribes through the ownership patterns that follows the patrilineal and matrilineal lineages.

Responding to climatic issues as a land professional is a very complicate issue because one needs good data to proof the fact that there is changes happening on the coastline. Most of the islands are either high or flat which makes an interesting to note where most coastlines are being washed away and where the place are becoming more deeper proving the areas of changes.

A lot of people have moved from their islands to find home in the urban areas. This movements are either temporary or permanent which leads to other issues that is because causes more complication to livelihoods. For land professionals, it has been a major concern on when land is in the center of the decision making. One, the people create squatters on native lands that is against the laws of this country. But because the national government has the overall power over her citizens, under the redistribution of land under the Constitution of Vanuatu, the government will allocate land to the land less.

With the new policies, land laws, the international conventions and related acts of parliament, the government has measures to ensure that people are safe. Public institutions like airports, schools which the government has established and or will take, it has taken steady actions to ensure that there is comfort among the people. This is by introducing policies like the sub division, strata, land acquisition that makes is possible for the land professionals to cater for their citizens safety and livelihoods

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#### 1. INTRODUCTION

Vanuatu consists of 83 mountainous islands that spreads over an archipelago 'between New Caledonia and Fiji in the South Pacific<sup>1</sup>. The islands ranges from the largest of the islands called Espiritu Santo (875 sq mi; 2,266 sq km); and others are Efate, Malekula, Malo, Pentecost, and Tanna while the smaller islands of Hiu and Tegua in the North are very small enough for not more than 500 people living on it. To get to one island, one could travel by boat or plane. Costs for travelling is quite high. Communications to rural areas is by mobile phone services provided by TVL and Digicel.

Natural disasters include tropical cyclones and earthquakes are frequent throughiut the year. Tropical cyclones begins from January to April each year. In 2015, Tropical Pam a category 5 hit Vanuatu for the first time this hard There is also the issue of climate changes, El Nino, and Sea Level rise that has caused much of our shores being lost to the increasing sea level rise. Since the island is within the ring of fire, often there are volcanic activity which sometimes causes minor earthquakes.<sup>2</sup>

Migration exist between islands to the two urban centers of Vila and Santo. Most people have migrated during the colonial times and have made these places their homes. They have obtained land, build their homes and have been here eversince. Temporary migration have been for the search for education and employment. Those who have not made a place in the work force due to education level have found casual employment and have continued find available customary land and build their homes there.

These informal settlements have been hard for the government to settle when it comes to natural disasters. Since their homes are nothing but tin houses, they continue to put burden to the government for security to live during natural disasters. Often these are the very people who will become the people who will claim lands based on their use of the land over time. Though our laws say that the customs and use of land of an island will prove someone's ownership to the land. Such disputes have been very hard to solve when complex issues rise which may lead to formal evacuation and relocation by the government. Within the islands, people still do not understand theiwn own systems to own land according to their customs. Two systems of ownership prevail in Vanuatu, one being the patrilineal and the matrilineal lineage of ownership.

<sup>&</sup>lt;sup>1</sup> http://www.infoplease.com/country/vanuatu.html

<sup>&</sup>lt;sup>2</sup> https://en.wikipedia.org/wiki/Geography\_of\_Vanuatu

We have faced so much economic challenges. This is becasue we are far from many producing countries. Our location shows that the cost of travelling goods will be high. The cost of living has been very high compared to many countries. Production cost has been very high due the fact that our economy is based much on imports with very little to export. The challenges in production is high while we have tried to supplement with service products suc as tourism becasue Vanuatu offers the best destinations in the pacific with its happiest faces.

Education has been a major challenge for us. Each year, we have more students being dropped from the formal education system leaving only a few making it to higher education levels. Since we depend on soft loans from our developing partners, most of people recieve their education through funded scholarships. But the highest that people could get to is a bachelors degree which is really not bringing much capacity to the levels we require in assessments, and serious works that Vanuatu wants to reach. We continue to seek assistanc and build capacities through short traings but this is still not enough after all.

### 2. KEY VULNERABILITIES WITH RESPECT TO RESILIENCE AND DRR

#### 2.1 Vulnerabilities

The key vulnerabilities for Vanuatu are low lying islands with very high concentration of population density along the coastal areas. On some islands where water is an issue, there are settlements along main river courses. Vanuatu lacks no historical data on stream flow channels for future assessments which this may contribute to good planning in terms of disaster risk reduction. On the same note, there are no available historical data held by our survey section. If there is, it is hard to access these old maps as we were governed by British and French and during the colonial days, most mappings were done offshore. There was no capacity by our people in terms of DRR. There is a lack of proper planning as our islands are sparsely spread and for the nation to design plans, it requires financial costs that may not be enough to complete the work. There is a lack of policies to direct specific issues that discusses resettlement plans and why this has to happen. The ways how constructions are made do not follow engineers styles but poorly done with the materials used such as corals and sand form the sea that allows steel to erode quickly. Many people do not have the knowledge of where fault lines are that could cause supductions along these lines.

SIDS country	Customary /Communa I/Family lands (%)	Urban Populati on (thousan ds)	Total Population (thousands )	Percentage urban	Average Annual Rate of Change of the Urban Population 2010-2015 (in %)	Population in the largest city (% of urban population)	Largest city (by inhabitants )	land area where elevation below 5m (% of total land area)	populati on living in areas where elevatio n below 5m (% of total populati on in 2000)
Vanuatu	98	61	246	24.9	3.64	77.8	PortVila	11.7	10.8
Average for SIDS countries		749	1251	54.6	1.44	66.2		24.9	28.8

 Table 1 Country data for Vanuatu compared to SIDS averages (UN-Habitat (2015): Urbanization and Climate Change in

 Small Island Developing States)

#### 2.2 Challenges

The challenges that Vanuatu and many other SIDS countries face are small land masses, issues of land tenure and ownership patterns, lack of funding for better homes to withstand disasters, need good policies that could assist in lessening DRR, the issues of traditional knowledge on reading weather systems are missing in educational materials which are the real signs to show what will happen. The predictions under the traditional systems are what many people in this age needs to know. These are reactions of animals, birds and Key species knowledge that tells one that a tsunami is coming or other disasters. Good predictions of la nino and El Nino have been very minimal but is coming in slowly. There are still areas of good tracking systems for wind and earth tremors for real time warnings to the people.

#### 2.3 Roles of Land sector and Professionals

- enhance awareness on the effects of climate change and sea level rise,
- develop plans for relocation for those homes are less than 10 meters near the coastlines
- Assist in providing good and sound home designs
- Reviewing of national legislations to meet standards for disaster and sea level rise
- Provide advice on best locations if sea level is faster in terms of rate of increase
- Provide crust information on sea level changes each year
- Proposing through mapping out locations of new homes that could sustain DRR and climate change
- Providing team leadership in planning
- Providing the best GIS software that could be used for mapping
- Providing simulation predictions
- Providing 3D modeling productions for better planning that is free of climate changes

## 3. KEY VULNERABILITIES WITH RESPECT TO URBANISATION

## 3.1 Vulnerabilities

Non-communicable diseases (NCD), including cardiovascular diseases, diabetes, cancer and chronic respiratory diseases are a major health problem in Vanuatu, and are the leading causes of death and disability (responsible for 70% of deaths).

It is common knowledge that the spread of NCD is high within the urban centers because of the new experiences that contributes to the changes to new life styles. That is, eating pre packaged import goods, frozen foods that one would say that is delicacy but it is really a worry to the life of a home boy exposed to these food types.

Most of the built up areas within a city does not create friendly atmosphere but will continue destroy the natural environments. Loss of natural environments has been on the rise due to a desire for development. The lack of understanding of the legislation to impose what needs to be done under the laws has created a desert and concrete slaps that makes it quite hot in the summertime.

The destruction of the natural environments results in loss of cultural significance of the area that was once used as a place of worship. As more land is cleared, it expands the area and the built areas begins to become a crowded city(ies). The changes caused to the natural environments has had some direct impacts to the oss of customs, tradition and cultures. The more increases in an urban center also has created a degree of landlessness citizens forcing people to live on the streets, something that is slowly happening but quietly recognized by the masses.

Cities within SIDS have had the worst cases of overcrowding. As mentioned early, this has resulted in the spread of disease, Social structure is being disowned and a huge increase in social issues

#### 3.2 Challenges

The challenges to urbanization results in loss of cultural values that often leaves a country and its citizens not knowing who they are. Such situations could lead to other social issues, one of which the youths not understand where they belong. Where most islands are culturally linked to their traditions, by living too long in the city could make one not knowing his roots. This is one of the worst thing that may have happen with any SIDS country.

In such situations, it forces land professionals to provide good planning mechanisms to cater for such situations.

- Beautiful cities become old
- Provide policies and laws to guide developments
- Providing good regulations for services

#### 3.3 How these key vulnerabilities can be addressed by the land sector and land professionals

- Better policies to design spaces for multiples homes within a locality
- New government legislations on all socio-economic and political structures
- Better zoning plans
- Better land use plans
- Subdivision plans and policy establishments
- Land Acquisition policy to acquire land for DRR
- New policies designed for improvements by land developments
- New land laws introduced for land redistributions
- Market distributions systems policies
- Creations of areas to host cultural villages

# 4. CONSTRAINTS IN IMPROVING LAND GOVERNANCE AND LAND ADMINISTRATION

Vanuatu faces many land governance challenges, including:-

- weak land laws
- Borrowed laws that are not relevant in our context
- Unable to execute laws
- Inconsistent land laws
- Technological flaws and knowledge to use technology to change old things to new systems
- Need to continue to create new policies to make land work
- Policies versus actions in reality

# 5. HOW LAND GOVERNANCE CONSTRAINTS CAN BE ADDRESSED BY THE LAND SECTOR

The Vanuatu Government has began some new development in land management after it has learnt from its mistakes the issues of corruptions that it has gone through. With the introduction of GIS systems where all cadastral surveys are now linked to the new plans once approved, it has allowed for the Ministry to use these systems to try and lessen the corrupt practices. manage land within the commune to the national government for traditional lands and state lands

The need to implement the voluntary guidelines is essential here. Though Vanuatu manages the process of lease per se but does not enter directly into lease, it is essential that we put things in order to ensure that there is less of corrupt practices within the system. We have tried to create e- systems in preparation for SOLA which we hope that after this conference we might have some dialogue with FAO for the creation of systems that will assist to lessen corrupt practices in land use and change. This is our dream and we hope to achieve this soon.

The issue of land tenure system has hindered knowledge by many. It would be really appropriate to study the different land tenure systems that exist in Vanuatu in order to create polices accordingly. The land tenure patterns can draw some directions on use which will have some direct policy decision by the government to ensure that land is working

# 6. CAPACITY BUILDING IN THE LAND SECTOR

One of the great results in capacity building will be targeting land professionals to go for further studies. There are still grey areas within the land sector professionals that needs more attention to. These are advance studies in land administrations, surveying, and geodetic trainings. It is our wish also that attachments with professionals within the regions and worldwide would be an advantage for collaborations where the officer learns first hand use of technology with the most experience people. This is something that Vanuatu wants to see develop out from this FIG meeting.

Vanuatu understands that within the CROP organizations, there are very technical people in areas that some SIDS can tab into. We would like to see a creation of exchanges programs that links our people with CROP agencies, FIG and both international and regional organizations to up skill our people before they can take further studies. By doing such attachments, it allows one to have the required skills and knowledge before going through the formal trainings.

It is a pity that there are not many land professionals sent on scholarships each year for land managers. Usually we have different areas but land seems to be the last. And if one takes a scholarship for a bachelors degree, this is still a very law generalized degree that does not put you into the world of land management but an area that will slowly take you there. Technical areas such as GIS, Survey and geodesy is fine but land management is still

One of the areas that we think needs to be addressed and raised in this SID conference is that we wish to see that where there is a need by the SIDS, donor partners will respond accordingly but the criteria they set should be something that needs to be not entertained by (SIDS) as it is their needs and not the donor partners needs. This brings me to say that country support for land managers in terms of fund allocation specifically for the area of s specialty is what we want for our purpose

# 7. THE ROLE OF COLLABORATION

Vanuatu wishes to ask for your assistance and collaborations in this workshop that if there really are issue for SIDS, we wish to see that there is further collaborations where funding could be provided for trainings in areas of spatial information management, land use planning, community awareness on land rights and development.

One of the key things that Vanuatu wants to see is that if we can organize professional trainings for land managers within country, region and internationally for a year where a group of land officers can attend this short term trainings and be given the best in what can be given to them. Vanuatu wishes to see if FIG or any other organizations can act as secretariat for sourcing of funds for SIDs.

#### 8. CONCLUSIONS

In conclusion,

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#### **BIOGRAPHICAL NOTES**

I have a Bachelors Degree in Geography from the University of Hawaii at Hilo. I graduated with a BA and a certificate in Land Use Planning. I went on to do a Masters Degree in Cultural Geography but never got to complete this because of my commitment to the land reform program in Vanuatu in 2006. I am currently the ICT Manager for the Ministry of Lands. I am a government employee but also practice as a consultant in GIS and EIA.

# CONTACTS

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