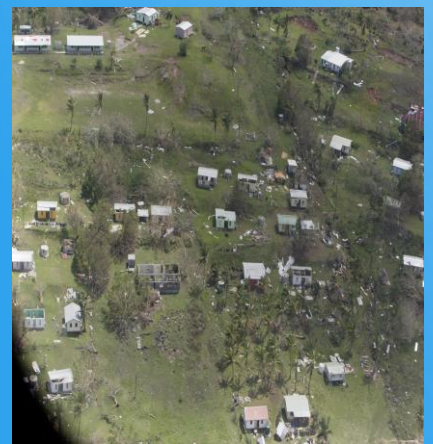

DISASTER RISK MANAGEMENT LOSS AND DAMAGES A FIJI CASE SCENARIO.

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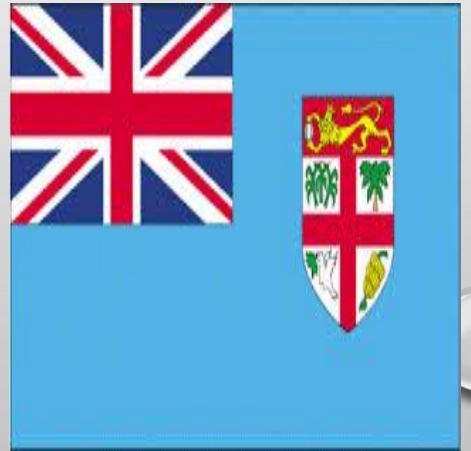
FIJI ISLANDS.

INTRODUCTION

- THE REPUBLIC OF FIJI IS AN ISLAND NATION WITH POPULATION OF 837,271 PEOPLE (2007 CENSUS)
- ANNUAL POPULATION GROWTH OF 0.8%
- THERE ESTIMATED 330 ISLANDS, OF WHICH ONE THIRD ARE UNINHABITED
- TOTAL LAND MASS OF 18, 333 SQ KM
- FIJI HAS AN EXCLUSIVE ECONOMIC ZONE OF 1.26 MILLION SQ KM



CLIMATE VARIABILITY

- THE CLIMATE OF FIJI VARIES OVER DIFFERENT TIMESCALE, MAJOR FEATURES THAT DRIVE OUR CLIMATE ARE

1. THE EL-NINO SOUTHERN OSCILLATION (ENSO) PHENOMENON (OCCURS EVERY TWO TO SEVEN YEARS, FOUR YEARS ON THE AVERAGE)
2. THE SOUTH PACIFIC CONVERGENCE ZONE
3. THE TRADE WINDS

WET SEASON FROM NOVEMBER TO APRIL AND DRY SEASON FROM MAY TO NOVEMBER.

SECTOR SPECIFIC CLIMATE CHANGE IMPACTS, AND KEY AREA OF MITIGATION AND ADAPTATION

Sector	Potential Climate Change Impact	Key Mitigation opportunities	Key properties contributing to Climate Change resilience
Agriculture	• Extreme high events such as high rainfall, floods and droughts can affect crop and livestock production and management • Land arability could be reduced due to salt water intrusion, coastal and river-bank erosion, exposure to salt water spray, and heat stress on soils; • Floods, droughts and cyclones may physically damage crops, farm equipment and infrastructure; • Reduced food security in terms of food production, food quality, nutritional availability, affordability and access • Impact on the national economy as Fiji is an agro-economy country • Increase in pest in disease	Agriculture contributes 13.5% of global green gas house emissions. Soil represents 6%, livestock manure (5.1%) Increased sequestration and reduced emissions can be achieved through; • The use of fuel-efficient farming equipment • Farming practices that maintain or increase forest cover (agro-forestry) • Ensuring minimal soil tillage and soil cover to prevent the release of carbon in soil • Intensification of small scale commercial and subsistence agricultural activities to optimize production can minimize forest clearance	• Diverse traditional crop species that are resilient to flood, drought and salt water • Diverse traditional crop species that are resistant to disease spread • Traditional agro-forestry and integrated farming practices • River Dredging • Construction of Seawalls

Sector	Potential climate change and Impacts	Key Mitigation Opportunities	Key properties contributing to Climate Change resilience
Tourism	• Damage to buildings and infrastructure from seal level rise, storm surge, cyclones, floods, salt spray, costal erosion, and landslides; • Disruption of land, sea, and air transport to facilities • Decrease in tourist arrivals due to changing weather conditions and patterns, degradation of pristine natural attractions and damage to infrastructure • Increasing costs to implement adaptation measure that would be subsequently absorbed by tourists and related service providers • Growth in the tourism sector may be hindered by the need to increased capital investment and increased climate related challenges	• Increase in energy efficiencies • Fossil fuel substitution with renewable energy in tourist facilities (green tourism) • Utilization of fuel efficient equipment	Diversity of tourism destinations and services to minimize disruption caused by extreme weather events.

RAPID CLIMATE CHANGE ONSETS LOSS AND DAMAGES

Sector	Hazard	Loss and Damage
Agriculture	Cyclone Floods Droughts	• Damage to agricultural infrastructure (eg The sugar mill tramline) • Loss of soil fertility due to soil erosion • Crop loss (crop rot due to excessive water) • Siltation of irrigation trenches • Destruction of Gene banks and research plots • Pollution due to washing in of pesticides • High water saturation in very short time leading to flooding and land slides • Siltation of soil into river beds which leads to flooding
Tourism	Cyclones Floods Droughts	• Damage to building, land, sea and air transport facilities • Salt spray which destroys sceneries • Destruction of corals and aquarium biodiversity

ADAPTATION AND GAPS

Sector	Adaptation	Gaps
Agriculture	• Agriculture diversification (Farming system approach) • Saline and Drought tolerant crops • Use of legumes for soil enrichment • Existent rapid propagation technologies • Good drainage and irrigation system in place • Traditional food preservation • Vetiver grass as soil conservation measures and incorporated in Agro-forestry farming systems.	• Do not have broad base Genetic diversity • Proper water management • Lack of Water storage facility in the outer Islands because of poor transport facility • Ground water table at risk because of increase establishment of boreholes
Tourism	• Establishment of climate friendly technologies (Establishment of Solar wind, Hydro	

BEST HARVESTING INDEX

NAKELO TRIAL PLANTING SITE - 1

Preparing materials

Planting of trial

Removing excess water

Installation of Pi zeo maters

July 30, 2013 - Harvesting taro in Ollei, PALAU

SLOW ON-SETTS

Sector	Hazard	Loss and Damage	Adaptation
Housing Sector	Rise in Sea Level	• Damages Houses	• Relocation of Village sites • Planting of Mangroves to protect marine biodiversity and shoreline • Construction of seawalls

CONSTRAINTS AND LIMITATION

1. INSTITUTIONAL FRAMEWORK (WEAK COLLABORATION AMONGST GOVERNMENT BODIES, NGO, AND PRIVATE SECTORS)
2. SUPPORTING LEGISLATION (EXISTING LEGISLATION AND SECT ORAL POLICIES DO NOT SUPPORT CLIMATE CHANGE)
3. NATIONAL PLANNING (INADEQUATE CONSIDERATION OF CLIMATE CHANGE ISSUES
4. HUMAN RESOURCE (RELEVANT EXPERTISE, INABILITY OF SECTORS TO RETAIN, SUPPORT DEVELOPED SKILLED PERSONNEL
5. AWARENESS AND TRAINING (LACK OF AWARENESS AND UNDERSTANDING OF CLIMATE CHANGE AND ITS IMPACTS, WHICH HINDERS THE DEVELOPMENT AND EFFECTIVE IMPLEMENTATION OF APPROPRIATE RESPONSES
6. EDUCATION (INADEQUATE REVIEWING AND UPDATING OF CLIMATE CHANGE RELATED CONTENT IN SCHOOL CURRICULA AND TECHNICAL, VOCATIONAL AND TEACHER TRAINING)

BULA VINAKA

THANK YOU SO MUCH FOR YOUR ATTENTION