

KAM NA BANE N MAURI



The effect of Sea Level Rise in Kiribati

- **Introduction**
- Kiribati background
- Land
- Water
- **3 effects of Sea Level Rise**
 - a. Coastal Erosion
 - b. Increase in Water Salinity
 - c. Impact on Land and people's livelihood

3 ways to address the effect of Sea Level Rise to build the resilience of Kiribati people

- a. climate change implementation in school curriculum.

INTRODUCTION

- **33 low lying atoll** islands lying across the equator
- **21 islands are inhabited** surrounded by sea
- Atolls have **limited food crops** (coconuts, native fig, pandanus, breadfruit)
- **Total population:** 110,000 (more than half, live on South Tarawa – Capital Island of Kiribati)
- Islands: **3 meters above the sea** (on average) & are vulnerable to sea level rise (Climate Change impacts)
- **Climate change:** national priority for Government; people's lives at risk; lots of uncertainties
 - Adversely impact the heart of I-Kiribati life; marine resources, the underground water (limited fresh water lens) and our mother land (Kiribati)

MARSHALL ISLANDS



South
Pacific
Ocean

Butaritari
Abaiang
Tarawa
Maiana
Kuria
Banaba
Tabiteuea
Abemama
Nonouti
Beru
Onotoa
Tamana
Arorae

Gilbert
Islands

Kanton
McKean
Bimie
Orona
Nikumaroro
Enderbury
Rawaki
Manra

Phoenix Islands

Teraina
Tabuaeran

Kiritimati

Line Islands

Malden

Starbuck

KIRIBATI

TUVALU

Funafuti

TOKELAU
(N.Z.)

AM.
SAMOA
(U.S.)

SAMOA

Apia

WALLIS &
FUTUNA
(Fr.)

FIJI

TONGA

NIUE
(N.Z.)

COOK
ISLANDS
(N.Z.)

Feet Meters

10000 3050

5000 1525

2000 610

1000 305

500 153

Sea Level

Caroline
Vostok
Flint

FRENCH
POLYNESIA
(France)

0 200 400 mi
0 200 400 km

180°

170°

160°

Priority Problems related to Sea Level Rise

1. Impacts of highest tides of each month
2. Increase in water salinity
3. Impact on agriculture and people's livelihood



Increase in sealevel rise

- **Inundation: Flood/overflow of sea on land caused by the king tide (2.9 meters):**
 - **destroy homes and trees**
 - **destroy local food crops**
 - **pollute well water & washes sand/beach away**



2. Increase in water salinity

- ❖ Limited underground freshwater - only source of freshwater on the atolls
- ❖ Increased in water salinity
 - ❖ Affect the lives of all living species (on land)
 - ❖ Affect land (biodiversity)
 - * tree crops
 - * subsistence economy
 - * human health & wellbeing
- ❖ Waterborne & airborne diseases increasing
- ❖ Dangerous issue (No where else to get water causing increased prolonged drought)



3. Impact on people's livelihood

- Caused by Land erosion
- Causes violence & disputes
- Lose of culture & heritage
- Affect food crops
- Affect people's health



(Building & enhancing resilience of our most vulnerable people)

3 ways to adapt and minimize the effect of Sea Level Rise

1. Implements Climate Change in national Curriculum

- ✓ e.g. Year 1 -4 New Topic introduced:
- ✓ Health Living - the wash program
- ✓ Year 12- 13 Students research on “The effect of climate Change in Kiribati”
- ✓ Training Centre (MTC) & TVET Programme – Kiribati Institute Technology



2. Seasonal Workers Programme (Australia & NZ)

VISION: TO BUILD A TVET SCHOOL FOR THE DISADVANTAGE BUT THIS NEEDS NEED TECHNICAL & FINANCIAL SUPPORTS.



2. OUTREACH -

BEHAVIORAL AWARENESS

- **Change the mentality of our people through various Government & NGOs Outreach Programmes**
 - Most people have very low self-esteem
 - Lack of local community supports towards climate change projects implemented at different levels of society (national, island and village level)
 - Food security issues, especially those living in South Tarawa & within the vicinity of South Tarawa
- **Implementation of national curriculum in schools**
- **Informal Outreach utilizing 'te mwaneaba system'**
- **Sharing of indigenous knowledge on agriculture.**

Local community/People Involvement

- **Community involvement** & participation in the implementations of national climate change & other environment programmes at island & village levels
- **Kiribati Government Small Grants Scheme** (e.g. Kiribati Adaptation Programme III – Resilient development projects & National Disaster Fund)
- **Global Environment Facility (GEF) Small Grants** to protect the global environment (biodiversity conservation; climate change & land degradation): focus on local communities projects e.g. rainwater harvesting programme; mangrove replanting

TAKE HOME MESSAGE



Kiribati like other
pacific islands, is a
**peaceful, loving,
hospitable** country
not at war BUT we
are **NOW** on the **front
line** of **deadly attacks**
by **the impacts of
climate change**, the
reason is **RISING SEA
LEVELS.**