CI-Early Warning System in Sao Tome and Principe

Strengthening climate information and early warning systems in Sao Tome and Principe for climate resilient development and adaptation to climate change – EWS - STP

November 2017
Cosme Dias

EWS STP

Project Objectives

Strengthening climate information and early warning systems in Sao Tome and Principe for climate resilient development and adaptation to climate change

Improving hydro-meteorological monitoring network

Training human resourses for mid term appropriation and long term sustainability

Creating efficient system for the availability of climate information

STP EWS components

Component 1

Enhance the capacity of national institutions to monitor extreme weather and produce weather forecasting

Component 2

Efficient and effective use of hydro-meteorological information for generating early warnings

Base Line Situation

- 3 Classical Stations
- 2 Old Synoptic
- No AWS Network
- No Hydrological Stations Network
- No Automatic Transfer of Data
- No Sadis Station
- No Lightening Detectors

- No Data Management Centers
- No Funding For Training Students Abroad And Local Observers
- Minimum Country Coverage In Climate Information
- No Modeling

PROJECT IMPACT: IMPLEMENTED ACTIVITIES

INSTITUTIONAL CAPACITY BUILDING

Under the Early Warning System Project, institutions partners like the CONPREC, INM, DGRNE e RAP received some computer hardware such as desktops and laptops, printers, GPS, UPS and 4x4 vehicle with the aim of helping them to improve their performance.

PROCUREMENT AND INSTALLATION OF AUTOMATIC METEOROLOGICAL STATIONS

- Replacement of CS by AWS
- 2 Synoptic stations
- 14 Meteorological stations
- Rehabilitation of 4 AWS
- 2 Data management centres
- Data transferred every 15 minutes

PROCUREMENT AND INSTALLATION OF HYDROLOGICAL STATIONS

12 Hydrological stations

1 Data management centre

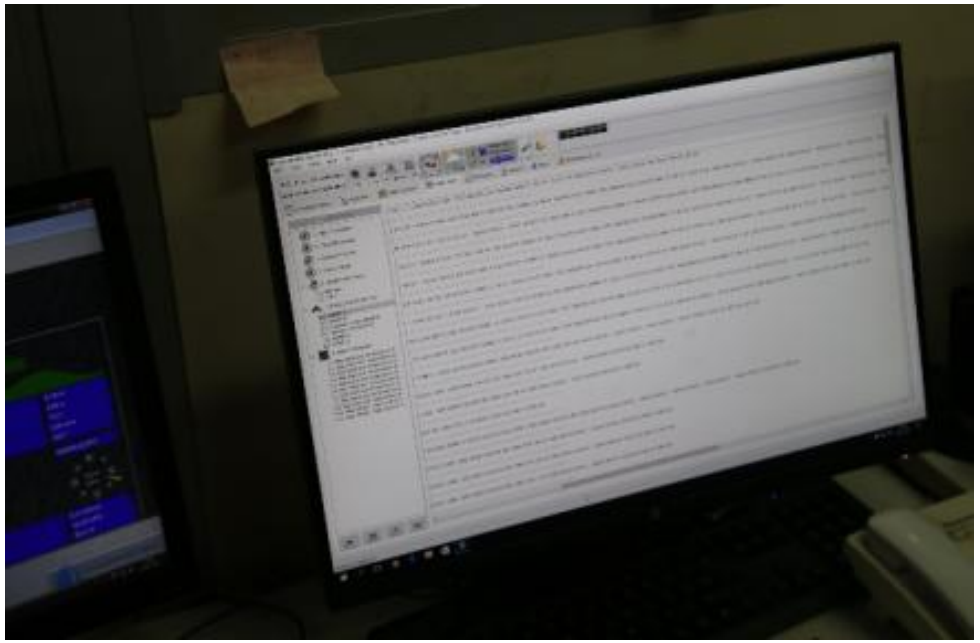
<u>First post independence hydrology network</u>

Data transferred every 15 minutes

SADIS STATION AND LIGHTNING DETECTORS

- 1 SADIS station at the airport

- 3 lightning detectors (2 ST and 1 ARP)



LOCAL COMMITTEES FOR DISASTER RISK MANAGEMENT

- 17 out of 31 committees created by EWS
- 234 members in total
- GIVEN TRAINING:
  - •Disaster Risk identification and management
  - • SOP-Emergency communication
  - •First aid

Mission: Prevent Disasters to claim lives and loss of community assets

RADIOS COMMUNICATION: THE CONPREC

CLIMATE INFORMATION DISSEMINATION: THE SMS FRONTLINE

Dissemination of hydro- meteorological information via the SMS frontline tool.

Targets:

- Farmers
- Fishermen
- Breeders

NATIONAL OPERATIONNAL CENTRE FOR EMERGENCY

- Operational 24 hours a day with technicians from
- Various sectors :
  - Police and Army
  - Meteorology
  - Hydrology
  - Costal Guards
  - Fire Brigade
  - Red Cross

SENSITIZATION ON CLIMATE CHANGE AND EARLY WARNING

Awareness campaigns:

- Proj. EWS
- UNDP
- INM
- DGRNE
- CONPREC
- Theater group
- Climate change fair

CAPACITY REINFORCEMENT

- Disaster management training for all members of Local Risk and Disaster Management Committees

CAPACITY BUILDING

- Training of National Observers
- Training of Meteorologists in Dakar Senegal
- Training of Hydrology Technicians in Barcelona Spain
- Training of Hydrologist in Porto Portugal
- Field Visit For Experience Share Of Meteorologist To Mozambique
- Training on Modeling with Brazil
- Creation of Forecast Team at The Met Office
- Protocol with 3 communities and One Regional Radio

República Democrática de S. Tomé e Príncipe

MINISTÉRIO DA DEFESA E ADMINISTRAÇÃO INTERNA

(Unidade – Disciplina – Trabalho)

CONPREC

CONSELHO NACIONAL DE PREPARAÇÃO E RESPOSTA ÀS CATÁSTROFES

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Boletim Informativo Meteorológico

CE NO E

Instituto Nacional de Meteorologia

CENTRO NACIONAL DE OPERAÇÕES DE

Data 26/07/2017

SITUAÇÃO METEOROLÓGICA ACTUAL

Céu pouco nublado.
Vento fraco do quadrante Sul.
Temperatura do ar na ordem de 27°C.

CONCERNENTE AO ESTADO DA ÁGUA DO MAR

Altura de maré é de 1.04 m
Altura significativa das ondas 0,35 m.
Temperatura de água do mar é de 25,6°C.

PREVISÃO PARA AS PRÓXIMAS 24 HORAS

O céu continuará pouco nublado durante o primeiro período, apresentando-se um aumento de nebulosidade durante a segunda metade do dia e nas primeiras horas da amanhã.
Vento soprará fraco por vezes moderado do quadrante sul, com pequenas rajadas no litoral.
Possibilidade de ocorrência de chuvisco ou chuva fraca em alguns pontos do país, sobretudo nas regiões montanhosas e sul, de S. Tomé, e na região autónoma do príncipe

TEMPERATURAS DO AR NAS CIDADES DOS DISTRITOS

LOCALIDADES	TMAX	TMIN
S. Tomé	29	20
Santana	28	20
Guadalupe	28	21
Angolares	29	19
Trindade	27	18
Neves	30	22
S. António	28	22

Tec. Meteorológico
Nelson Lima

Nota: a previsão será atualizada caso houver mudanças significativa do tempo

DATA OF THE STATIONS

PHOTOS OF THE FAIR

FINANCIAL SITUATION

YEAR	PLANNED	EXECUTED	PERCENTAGE
2014	1 060 600,00	1 019 681, 00	96%
2015	1 428 500,00	1 426 472,18	100 %
2016	520 000,00	520 000,00	100%
2017	400 00,00	397 550,00	99%
GLOBAL BUSGET USE			98.75%

NEXT STEP

- Exit Strategy: To be validated
- Project closing date: April 2018
- Transition Period: April- December 2018
- Challenges: Appropriation and Sustainability
- National Budget: to take over from Jan 2019
- PPPi with Enasa: $75k / Year to Negotiate increase
- Phase 2 with funding from GEF7 Or GCF

CHALLENGES

- IMPROVE DISSEMINATION OF CI TO END USERS
- IMPROVE COORDINATION AMONG PLATFORM MEMBERS
- IMPROVE QUALITY OF FORECAST
- MODELLING SOFTWARE PROCUREMENT FOR HYDRO AND METEOROLOGY.
- RECRUIT MORE STAFF FOR INM AND HYDRO

CHALLENGES

- DEVELOPMENT OF MORE PPPI
- TRAINING OF HYDROLOGIST FOR FORECAST AND MODELLING
- PLAIDOYER WITH DECISIONS MAKERS FOR POLICY DEVELOPMENT AND IMPLEMENTATION

LESSONS LEARNT

- CI-EWS HAS CHANGED THE NIM AND THE HYDRO DEPARTMENT
- CI-EWS HAS CHANGED THE COMMUNICATION SYSTEM FOR EWS AND DRR IN THE COUNTRY
- CI-EWS HAS COVERED 60% OF THE COUNTRY IN CLIMATE INFORMATION
- NATIONAL INSTITUTIONS ARE ABLE TO WORK TOGETHER IN A COORDINATED MANNER AND HAVE GREAT RESULTS.

Obrigado