PROGYSAT, 2nd Seminar – Paramaribo (September 2022)

# Challenges and Opportunities to Combat Climate Change

28 SEPTEMBER 2022

USHA MAC ANDREW-SATNARAIN MSC.

RESEARCH COORDINATOR DEPARTMENT SUSTAINABLE MANAGEMENT OF NATURAL RESOURCES (SMNR)



C ( mentimeter.com/app/presentation/1112e56369ce16aa3ee8193ca3810566/2f00b7183cb4

Go to www.menti.com and use the code 1746 4691

#### What is your definition for Climate Change?

材 Mentimeter

🖞 🛧 🔲 🔳 😩 🕻 Update







#### SECTORS WHICH CAN BE SEVERELY IMPACTED BY CLIMATE CHANGE

• Education

• Health

- Infrastructure
- Agriculture
- Tourism



## VULNERABILITY OF SURINAME TO CLIMATE CHANGE

- Low lying coast
- Rising sea level
- Majority of population resides in coastal area due to increased urbanization



### EXPERIENCES IN SURINAME WITH CLIMATE CHANGE

- Heavy rainfall and floods:
- April 2021, increased levels of rainfall across Suriname → countrywide flooding.
- Heavy rains and flooding continued throughout May 2021
- Exceptionally heavy rainfall since the beginning of 2022 across seven of the ten districts in Suriname has caused more devastation than ever before
- Warning for deforestation in South America's Guiana Shield rainforest

   covering almost all of Suriname's landmass with a potential
   increased rainfall across the region.









#### EXPERIENCES IN SURINAME WITH CLIMATE CHANGE



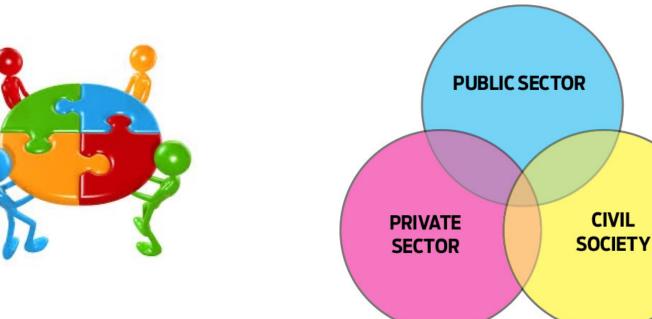






## GOVERNANCE TO ADDRESS CLIMATE CHANGE

• Participation of EACH AND EVERY SINGLE INDIVIDUAL



• HOW????



#### SUSTAINABLE DEVELOPMENT GOALS







liberté • Égalité • Fraternité

RÉPUBLIQUE FRANÇAISE

UNION EUROPÉENNE

#### **Climate action and development** policies can be mutually enhancing.

Determined action to combat climate change and minimise its impacts is integral to the successful implementation of the 17 Sustainable Development Goals (SDGs).

For example: land restoration, ecosystem protection and climate-smart agriculture reduce emissions and simultaneously secure livelihoods, especially for small-scale producers (SDG2). In arid Niger, smallholder farmers restored more than 5 million hectares of semi-desert into productive open woodlands. As a result of increased tree density, crop yields increased by more than 100 kg per hectare, enough to feed an additional 2.5 million people a year.

Natural hazards and gradual environmental degradation lead to reversals in poverty reduction and destroy livelihoods. Inaction, as well as inadequate climate policies, undermines sustainable development.

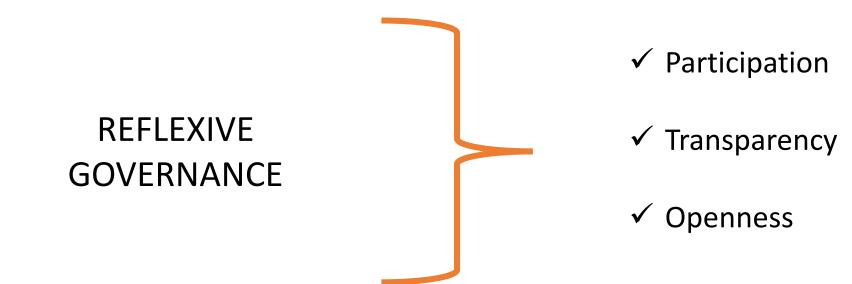
For example: climate change is likely to disrupt food security (SDG2) and water availability (SDG6). As women bear a disproportionate burden in regard to the provision of food and water, climate change can undermine gender equality (SDG5). Climate change may also exacerbate grievances and conflicts over scarce resources (SDG16).

implementation) mutually-supportive-nature-of-climate-action-and-sdg-(Source: https://sdg.iisd.org/news/infographic-illustrates





#### SUSTAINABLE DEVELOPMENT GOALS









### GUIANAS REGIONAL OBSERVATION COOPERATION PROJECT BY SATellite (PROGYSAT)

Aim:

"to appropriate the tools, methods and products that can be shared and adapt them to the contexts of Guyana and the sub-region in order to respond to local issues"

(source: https://en.ird.fr/node/10241)



## GUIANAS REGIONAL OBSERVATION COOPERATION PROJECT BY SATellite (PROGYSAT)

Aim:

"promote the development of applications, using spatial data, resulting from thematic research useful to public policies in the region in connection with demography around 3 major themes":

- Spatial planning
- Environmental health
- Urbanization and pollution
- Knowledge and preservation of biodiversity

(Sources:

https://en.ird.fr/node/10241

https://veillecarto2-0.fr/2021/09/22/le-lancement-de-progysat-un-projet-cooperatif-dimagerie-satellitaire-visant-a-developper-le-traitement-de-linformation-spatiale-dans-le-contexte-amazonien/









