

1. Institutional setting

- **Policy:** make Niterói a climate responsible, sustainable and resilient city
- **Legal regulation** – City Master Plan, Strategic Plan, GECLIMA
- **Instrument** – Law, Decree
- **Demand by people** – Citizens, community organizations, elected officials, media, attorneys, NGO's, Universities
- **Actors/Stakeholders** – Niteroi City (Secretariat of the Environment, Secretariat of Planning, Secretariat of Emergency Response), Águas de Niterói (sanitation company)



2. Starting point/Project goal

- Main Challenge: The city was originally developed in the coastal lowlands and later occupied unstable hillsides with unplanned and under structured settlements. Those communities are the most exposed to climate emergencies.
- Issue: Climate Change mitigation, disaster prevention and safer housing
- Problems addressed: solutions to provide geotechnical safety; families transferring in high risk areas

TARGETS:

Safe housing: 5000 families

Protected areas: 50% of territory

Forest recovery: 507 ha (2033)

Contention Works: R\$ 400 Million



3. Approach

- **Method:** a watershed approach including protection of forest lands and reforestation of upstream areas, drainage, slope contention works and lowland floods. Besides that, an emergency alert, prevention and rescue plan, considering storm and fire risks
- **Planning and Policy Making:** GECLIMA, a task force to develop city strategies toward emission control and mitigation of climate change effects and City Master Plan addressed to climate changing issues
- **Technology:** Use of GIS Resources, sensors and algorithms to land and weather monitoring in order to prevent disasters



4. Outputs

Which were the concrete tangible results, outcomes and/or impacts of the project?

- . Reduction of number of landslides and victims
- . Reduction of irregular occupation in risk or protected areas
- . risks minimization and impacts mitigation in vulnerable areas
- . creation of municipal council of resilience and disasters prevention

How do you ensure the sustainability of the project?

- . Through the community mobilization and risks understanding. The community itself protects, monitor and claim for improvement on their life conditions. NUDEC's members are trained by Emergency Response and Safety Dept for better evaluate and avoid community risks. Compr

5. Lessons

- . **Commitment** – city must be committed to climate change issues and adopt responsible emissions control, prevention and mitigation policies
- . **Prevention** – a strategy was adopted to avoid new settlements in risk areas
- . **Citizen participation** – community must contribute to the process and be part of the solution.
- . **Drainage** – can reduce the geological risk level, save funding and avoid the need for transferring families to other safer sites.
- . **Education** – a prevention culture must be developed since early school

6. Follow up

Are there any open questions that need to be dealt with?

1. Housing is not provided at the same pace as demanded by families.
2. City Hall provides “social rent” but affordable housing in safe places are not always available
3. It is not always possible to guarantee families a new safe site to live at a close distance to their original place
4. Assure that residents are always properly prepared for an extreme weather event
5. Technologies to monitor land movement in real time for better slide prevention