



# AGÊNCIA NACIONAL DE DESENVOLVIMENTO GEO-ESPACIAL ADE, IP

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Partnerships facing climate change in Mozambique

## About ADE, IP

**Colaborative Action - *Support to geo-spatialize National Contingency Plan 2020-2021***

## About ADE, IP

ADE, IP is an independent public entity created through Decree nr 88/2020 of 7 October.

The Agency is responsible to enhance spatial development planning capacity across priority national government institutions & agencies and to promote the adoption of this methodology across public and private sectors.

ADE, IP has also developed and is responsible for the management of the National Geographic Information System, an online ArcGIS platform, comprised of data supplied by various government institutions and agencies, public sector companies and other entities having information of public interest, that is important for the integrated planning process.

# National Disaster Contingency Plan

## Mozambique

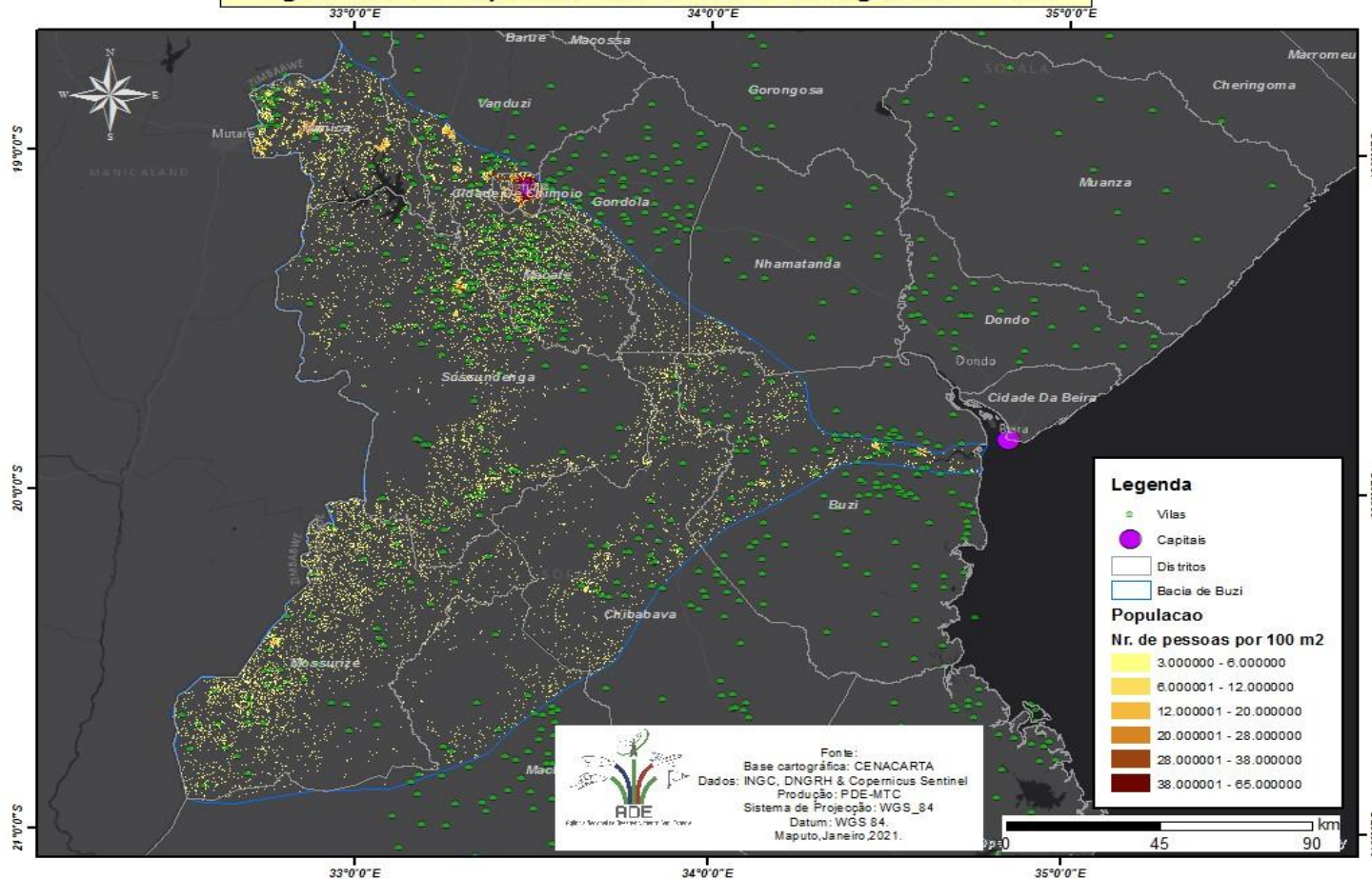
<https://analisepc.collect.pde.gov.mz/Buzi/#10/-19.9116/34.3722>

Collaborative  
Action

National Disaster  
Contingency Plan  
2020-2021

## The case of Buzi river basin Population

**Aglomerados Populacionais da Bacia Hidrográfica de Búzi**

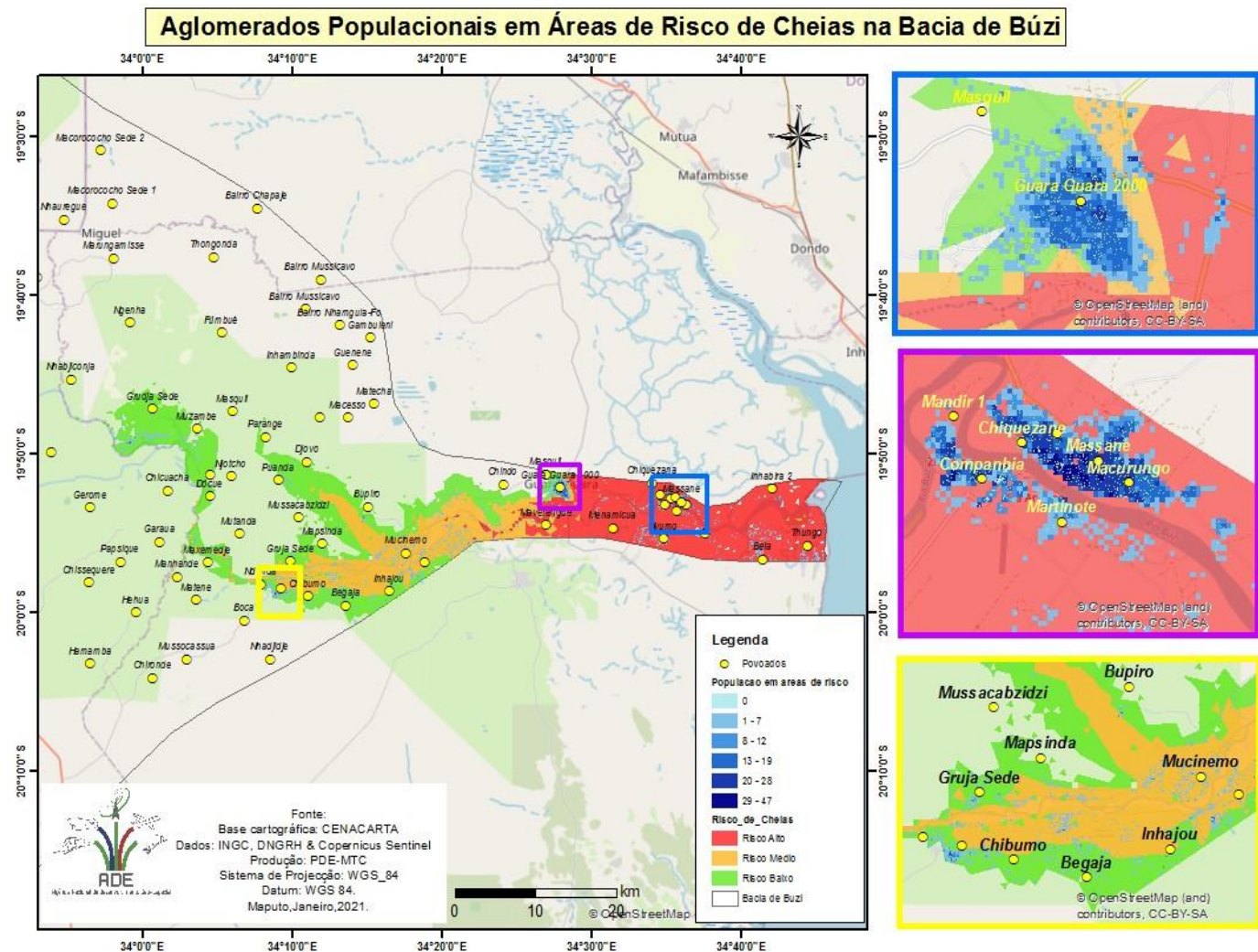


Total population 1,027,332

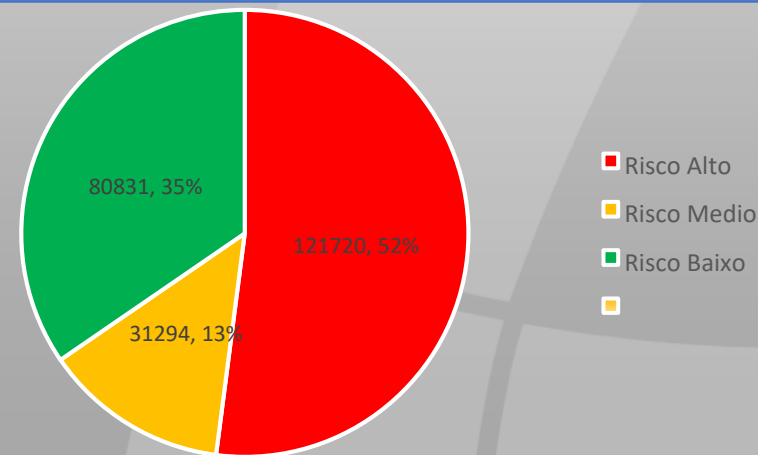
The map illustrates the Districts of major concentration of population in far northwest Districts (Manica, Vandúzi, Sussundenga, Gondola, Macate and City of Chimoio) followed by south and downstream of basin Districts (Mossurize and Búzi)



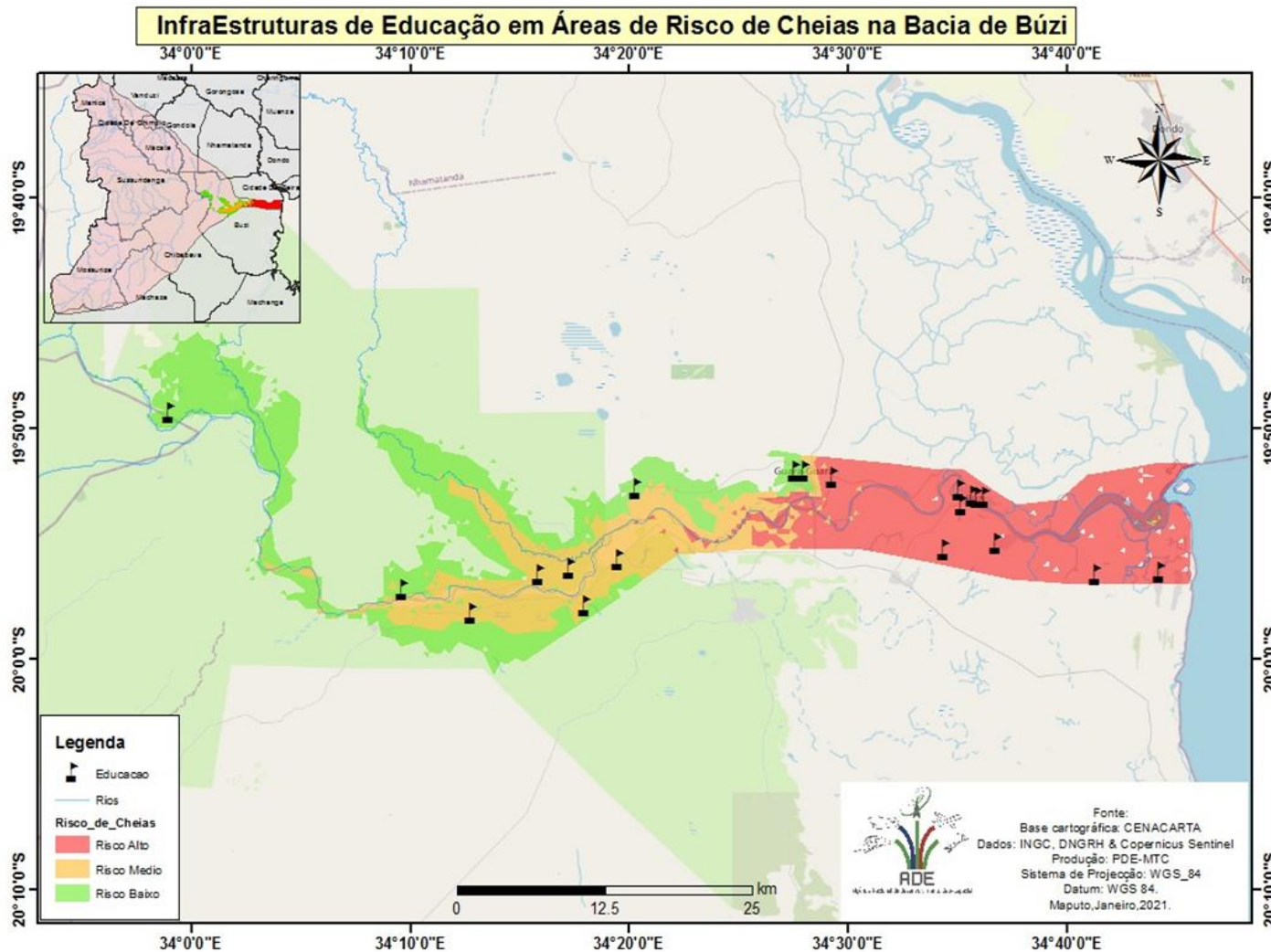
## Population in areas of high risk of floods



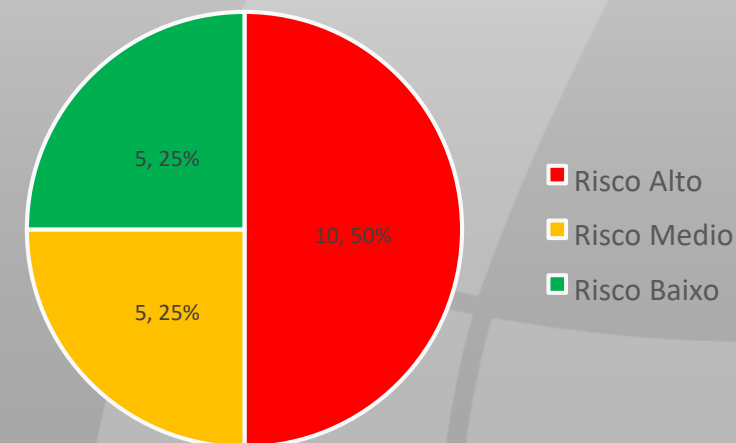
From 1,027,332 people, almost 233,845 (23%) lived in áreas of risk of flood. This areas were located at District of Buzi and limited área btw Sussundenga and Chibabava. This means that 121,720 (52%) people lived in áreas of high risk of floods, 13% lived in áreas of médium risk and 80,831 people (35%) lived in low risk areas



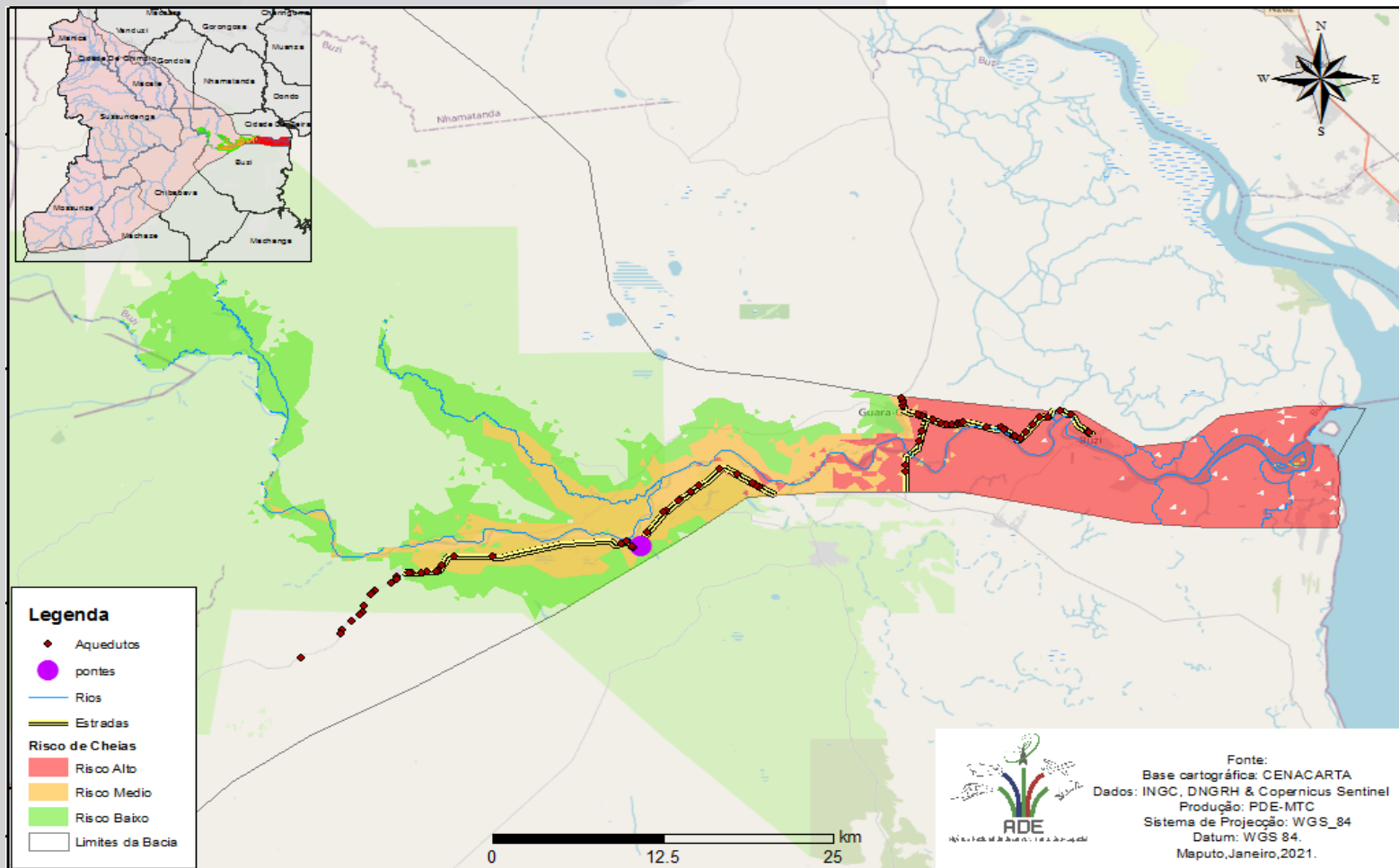
## 2. Education



This analysis identified 20 schools in risk areas of inundation - 4% of total of schools in the basin, 272 teachers and 12,955 students distributed in 122 rooms of which 96 of conventional materials and 26 of precarious materials. It was also identified 31 teacher's houses for teachers in risk areas

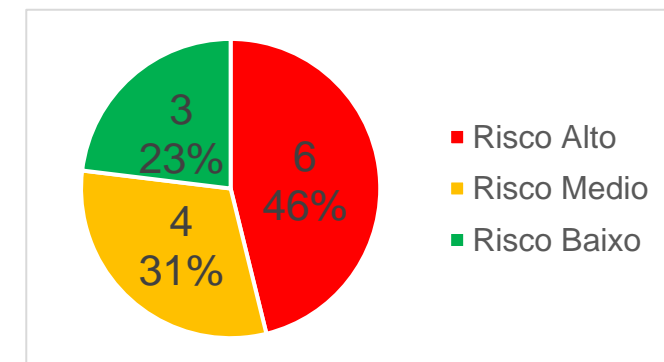


## Access Routes



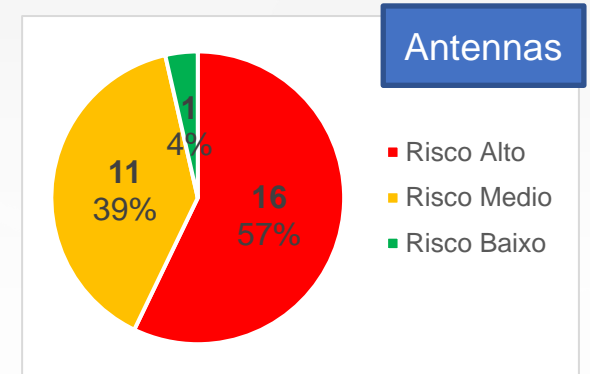
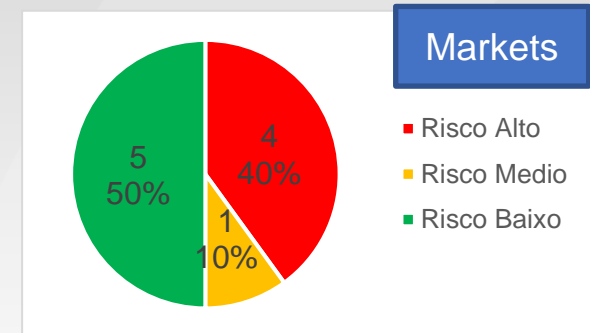
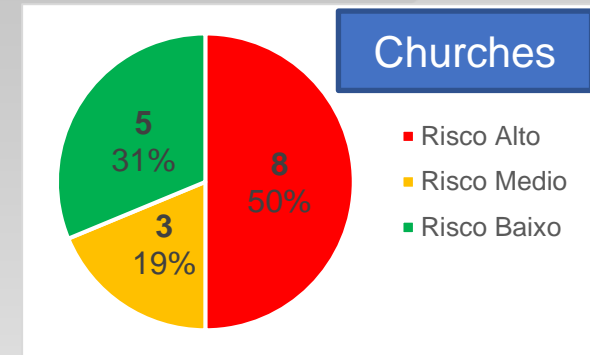
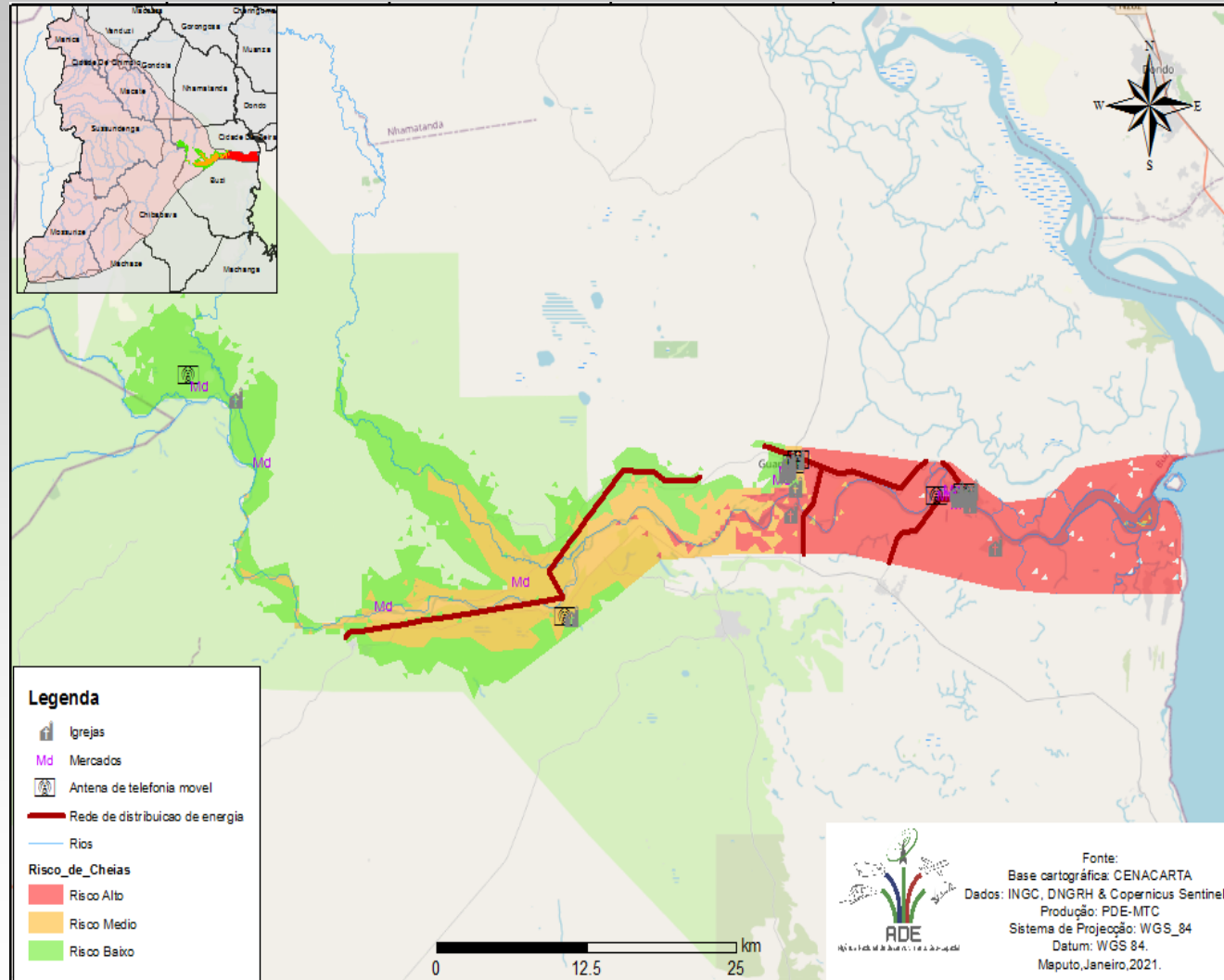
- Roads
- Aqueducts
- Bridges

**Roads in flood risk areas**





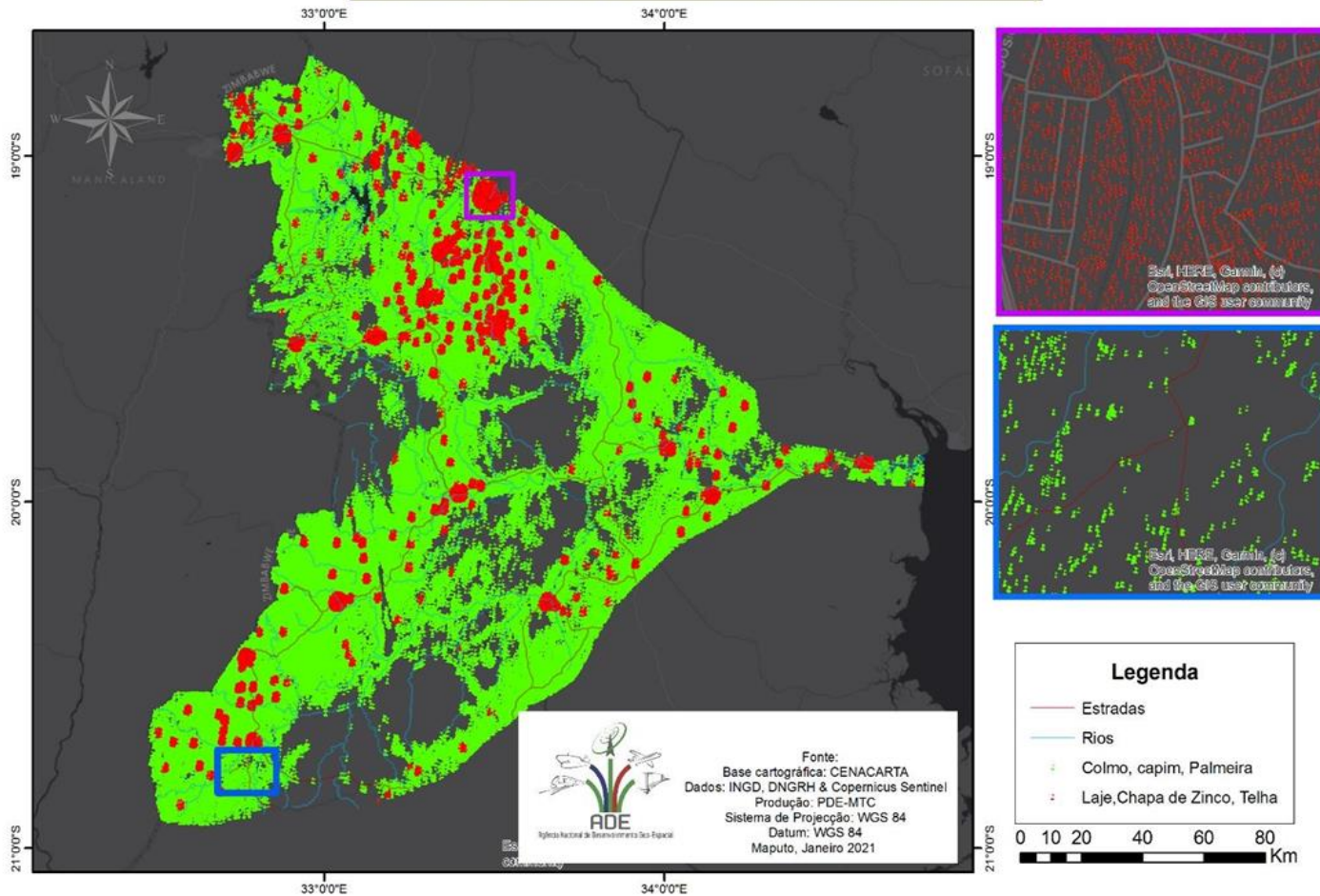
# Other Infrastructures



The exercise also included Health units, water sources and energy

## Type of Roof of Infrastructures

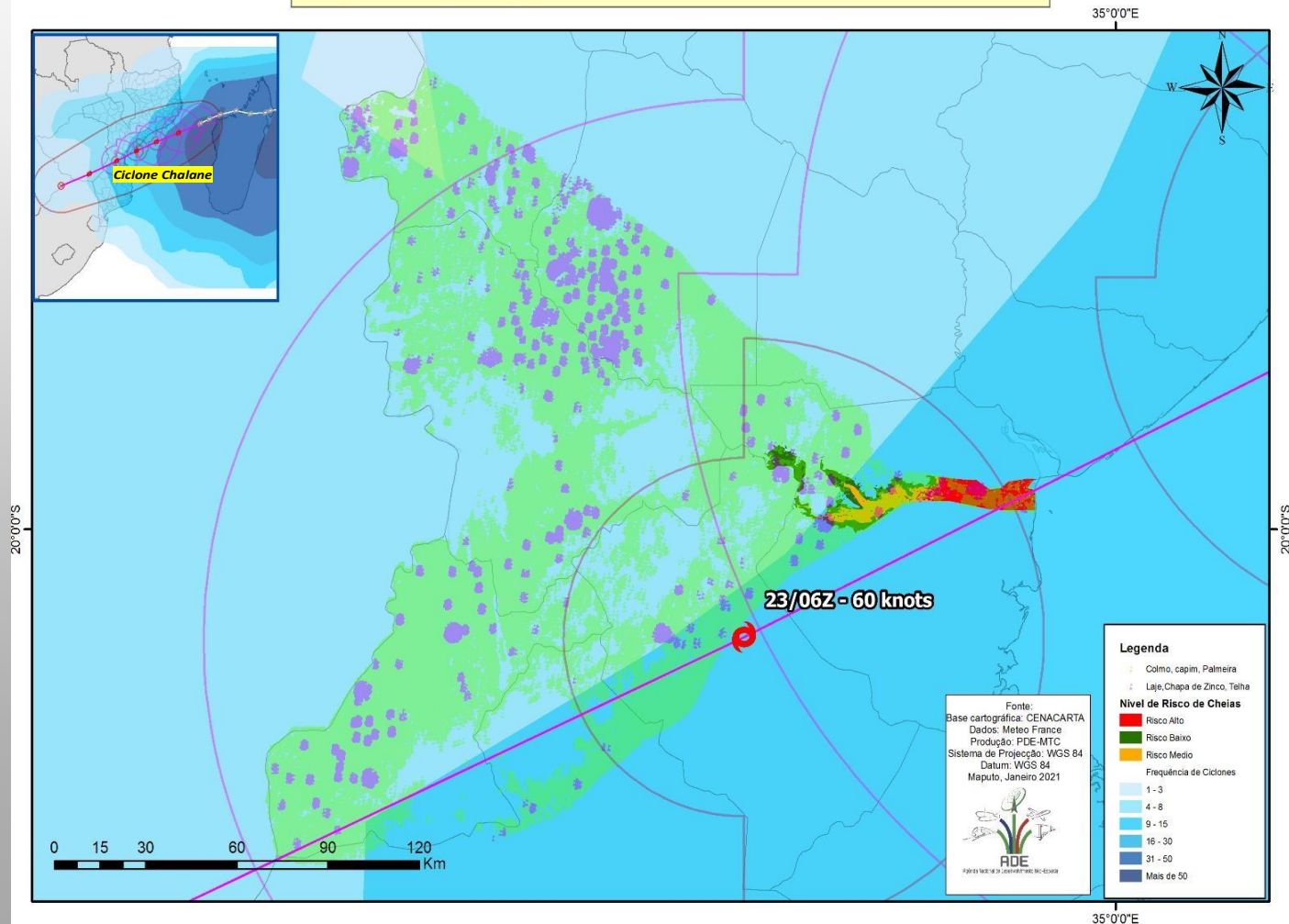
Tipo de Cobertura das Infraestruturas na Bacia de Búzi



In the Buzi Basin there were 2M of physical infrastructures (houses, factories, warehouses, schools, hospitals, markets, churches, etc.) of which only 1.4% had slab, zinc plate and tile roof and the remaining had stem, grass and palm tree

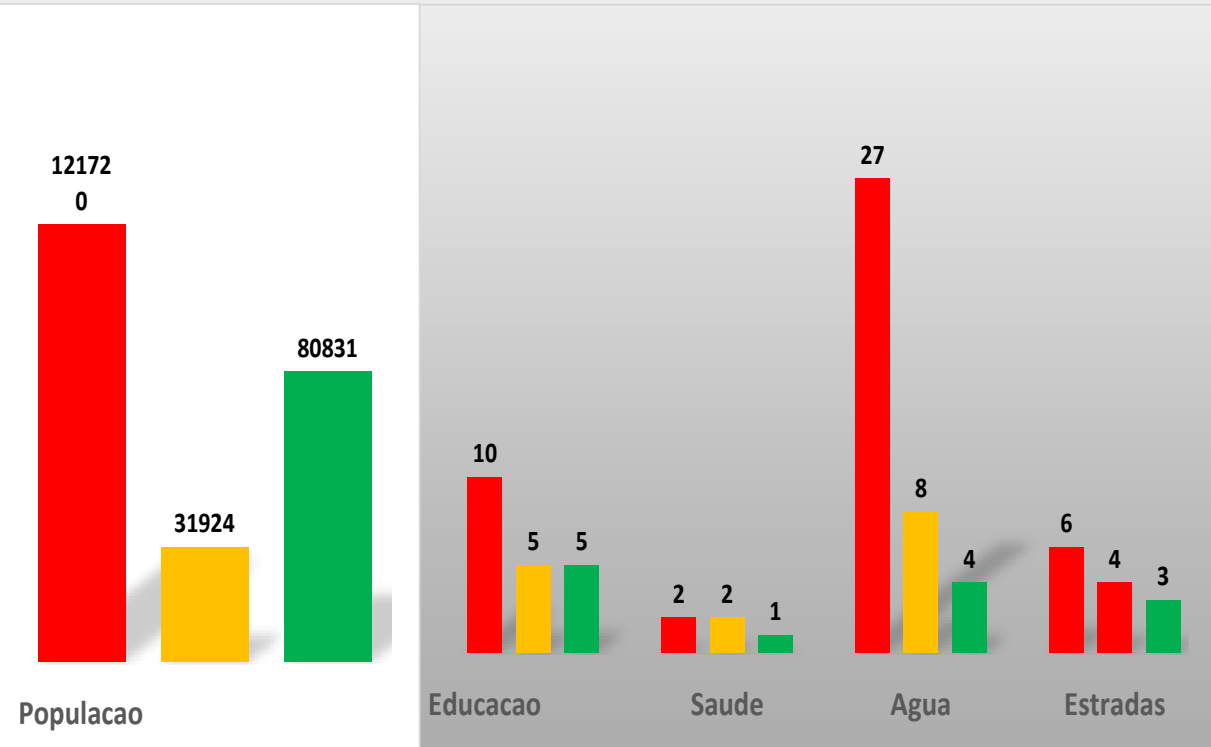
## Combination of Cyclone Trajectory Frequency and Risk Level of Floods

Frequência da Trajetória de Ciclones e Nível de Risco de Cheias



It is also possible to cross data of cyclone trajectory frequency, the areas of risk of floods and data of coverage of infrastructures to estimate the nr of infrastructure and population in risk or affected by an extreme event

## Summary of Risk Analysis of Buzi Basin



We put all this information together on population and infrastructures in risk of inundation for Buzi and other 8 basins located in high risk to moderate-high risk areas of inundation and handed over to CENOE of INGD. Also provided capacity building for their use of this application.



## Table of Summary of Risk Assessment

	High Risk	Medium Risk	Low Risk
Population	121,720	31,924	80,831
Schools	10	5	5
Health Units	2	2	1
Water Sources	27	8	4
Sections of Roads	6	4	3
Churches	8	3	5
Markets	4	1	5
Antennas of Mobile Phones	16	11	1
Energy Distribution Network	3	3	8

## Challenges/Constrains

- to create a common platform in which all stakeholders can take advantage of the spatial tools and technology already in place and have appropriation (technology resources: hard & software's, connectivity, knowledge, data sharing, resistance to change and to resettlement)
- to influence the decision-making process on approval of our NSDI
- to adapt spatial tools for community groups so they can also use this technology for assessing risk areas, people in need, evacuation routes, resettlement places...
- to reinforce the international cooperation to add transboundary data that will improve our spatial analysis and, therefore our understanding and response



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Thank you very much for your attention