



An assess of Flood Vulnerability in Ntlhaveni Block D village, Malamulele northeast, Limpopo Province



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Introduction



- Limpopo Province experienced major floods in year 2000, where the majority of households lost valuable assets (roads, houses) and farmers also lost agric production.
- These floods, for example, had a negative impact in the farming community, where farmers used to plant their crops previously have now become marginal land due to the washing away of the soil nutrients.



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Objectives of this poster



- (a) To use GIS to assess flood vulnerability at Ntlhaveni Block D village.
- (b) To identify and examine physical factors that are related with flood vulnerability,
- (c) To identify flood prone areas and flood impacts at Ntlhaveni D village.



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Map of South Africa



Description of the study site area

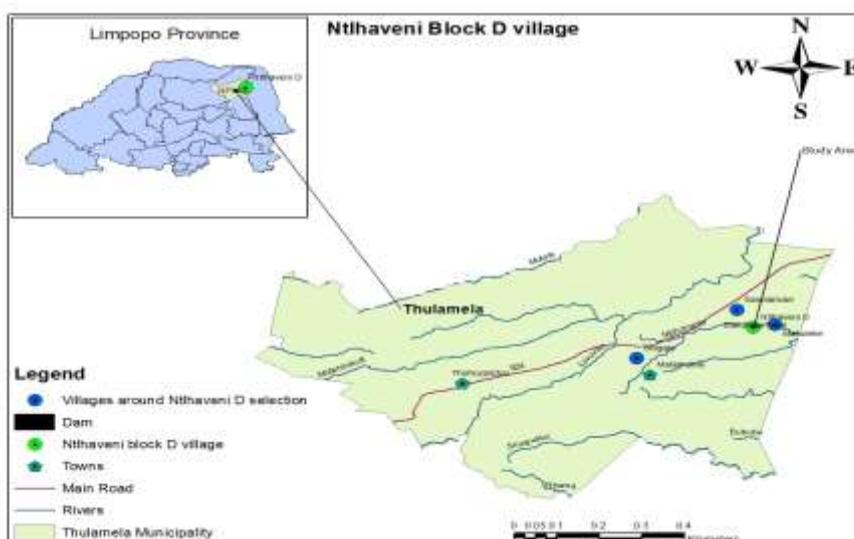


- The study area is Ntlhaveni Block D village, located approximately 30 km southeast of Malamulele Township in the Thulamela Municipality in the Vhembe District of the Limpopo Province, South Africa.
- Ntlhaveni Block D village is located very close to the dam, during floods in January 2012, water from the dam covered the majority of houses in several villages around Ntlhaveni area



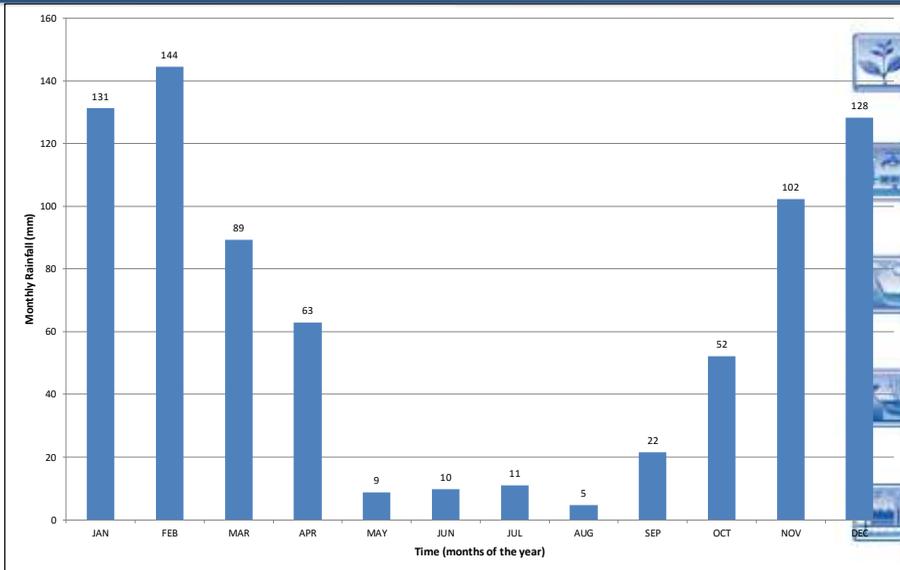
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Map of the study area



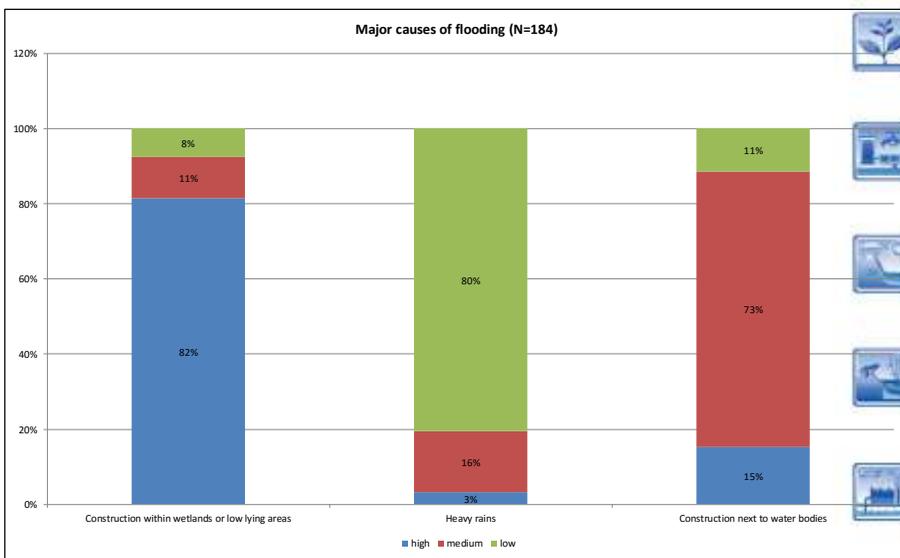
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Results and discussion cont...



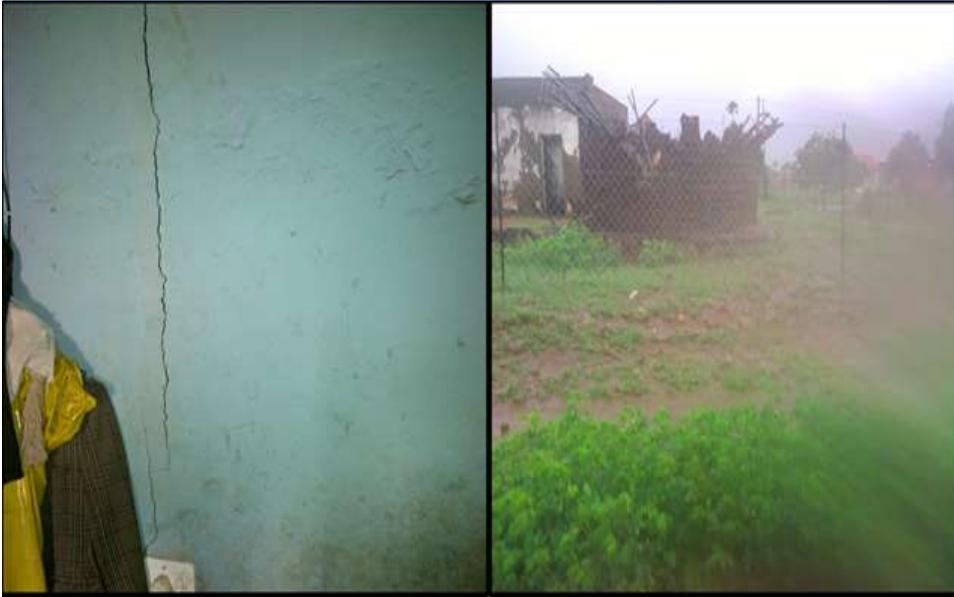
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Results and discussion cont...



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Results and discussion cont...



Results and discussion cont...



Results and discussion



Conclusions and recommendations



- It was identified that the physical factors that contribute to the vulnerability of the households include construction of houses on the wetlands, low-lying area. 
- Households located or situated closer to the dam suffer great loss compared other households that are far away from the dam. 
- Lack of drainage system in the area is influencing over flooding during rainy seasons. 
- Lack of proper planning by local authority. 

Recommendations



- The tribal authority should consider flood lines before allocating residential sites to the villagers and make sure that people should not be allocated these sites on the wetlands and on the flood plains.
- The tribal authority should be made aware of the flood vulnerability indicators so that they will not allocate the people residential sites on flood prone sites, for example on a wetland area and low lying area



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Recommendations cont...



- The government should help the vulnerable group to relocate to safer areas and allocate RDP houses.
- Though residents are not completely ignorant about flood disaster, there should be public awareness about the flood disaster and its coping strategies.



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Thank you for your attention

