

## Analysis question

In the event of a Flood, what length of Roads might be affected?

## General report

Estimated length of roads affected per hazard zone

Hazard Zone	Length (m)
Wet	371,000
Dry	0
<b>Total Exposed</b>	<b>371,000</b>

Roads	Length (m)
Affected	371,000
Not Affected	0
Not Exposed	181,337,000

- **Affected:** An exposure element (e.g. people, roads, buildings, land cover) that experiences a hazard (e.g. tsunami, flood, earthquake) and endures consequences (e.g. damage, evacuation, displacement, death) due to that hazard.

## Analysis detail

Estimated length of roads (m) affected by road type

Road type	Affected		Not affected	Total not exposed	Total
	Wet	Total affected	Total not affected		
<b>Motorway</b>	167	167	0	3,161,000	3,161,000
<b>Primary</b>	16,900	16,900	0	3,588,000	3,605,000
<b>Secondary</b>	24,400	24,400	0	9,332,000	9,357,000
<b>Local</b>	202,000	202,000	0	104,177,000	104,379,000
<b>Path</b>	104,000	104,000	0	27,153,000	27,256,000
<b>Other</b>	23,800	23,800	0	33,928,000	33,952,000
<b>Total</b>	<b>371,000</b>	<b>371,000</b>	<b>0</b>	<b>181,337,000</b>	<b>181,707,000</b>

## Aggregation result

Estimated length of roads (m) affected by aggregation area

Aggregation area	Motorway	Primary	Secondary	Local	Path	Other	Total
<b>Tica</b>	0	6,500	5,800	29,200	0	6,900	48,300

<b>Mafambisse</b>	0	5,100	0	10,600	0	5,600	21,200
<b>Estaquinha</b>	0	0	0	2,500	0	0	2,500
<b>Buzi</b>	0	5,300	18,600	130,000	74,400	11,400	240,000
<b>Inhaminga</b>	0	0	0	20	0	0	20
<b>Marromeu</b>	0	0	0	2,100	0	0	2,100
<b>Galinha</b>	0	0	0	351	0	0	351
<b>Nhamatanda</b>	0	0	57	345	0	0	402
<b>Muanza</b>	0	0	0	700	1,300	0	2,000
<b>Gorongosa</b>	0	0	0	4,200	24,200	0	28,400
<b>Subwe</b>	167	0	0	339	0	0	506
<b>Goonda</b>	0	0	0	445	0	0	445
<b>Sofala</b>	0	0	0	21,600	3,500	0	25,100
<b>Dondo</b>	0	0	0	182	0	0	182
<b>Total</b>	<b>167</b>	<b>16,900</b>	<b>24,400</b>	<b>202,000</b>	<b>104,000</b>	<b>23,800</b>	<b>371,000</b>

## Notes and assumptions

### Analysis notes

- Columns and rows containing only 0 or "No data" values are excluded from the tables.

### Road exposure general notes

- The impacts on roads, people, buildings and other exposure elements may be underestimated if the exposure data are incomplete.
- Numbers for road lengths have been rounded to the nearest 10 metres if the total is less than 1,000; nearest 100 metres if more than 1,000 and less than 100,000; and nearest 1000 metres if more than 100,000.
- Rounding is applied to all road lengths, which may cause discrepancies between subtotals and totals.
- Note that report rows containing totals are calculated from the entire analysis area totals and then rounded, whereas the subtotal rows are calculated from the aggregation areas and then rounded. Using this approach we avoid adding already rounded numbers and in so doing compounding the rounding.
- Roads marked as not affected may still be unusable due to network isolation. Roads marked as affected may still be usable if they are elevated above the local landscape.
- Roads are closed if they are affected.
- Roads are open if they are not affected.

### Flood general notes

- The extent and severity of the mapped scenario or hazard zones may not be consistent with future events.
- The impacts on roads, people, buildings and other exposure elements may differ from the analysis results due to local conditions such as terrain and infrastructure type.
- The analysis extent is limited to the extent of the aggregation layer or analysis extent. Hazard and exposure data outside the analysis extent are not included in the impact layer, impact map or impact reports.

### Affected notes

- Exposures in the following hazard classes are considered affected: Wet

## Analysis details

**Hazard source** S1 Flood Extent Sofala Province 2019-03-20 - UNITAR -

**Exposure source** Osm Roads (Daily extract) - OpenStreetmap -

**Aggregation source** Aggregation by Post - National - CENACARTA -

**Impact Function** Flood Polygon On Roads Line