

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)
High	963,000
Medium	701,000
Low	73,300
Total Exposed	1,737,000

Roads	Length (m)
Affected	1,664,000
Not Affected	73,300
Not Exposed	7,597,000

- **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
	High	Medium	Total affected	Low	Total not affected		
Motorway	3,900	1,900	5,800	1,600	1,600	481,000	488,000
Primary	42,300	33,000	75,200	0	0	294,000	369,000
Secondary	71,100	71,300	143,000	15,700	15,700	386,000	544,000
Local	545,000	361,000	906,000	43,200	43,200	4,317,000	5,265,000
Path	162,000	148,000	309,000	1,300	1,300	421,000	731,000
Other	140,000	86,800	227,000	11,800	11,800	1,700,000	1,938,000
Total	963,000	701,000	1,664,000	73,300	73,300	7,597,000	9,333,000

Aggregation result

Estimated length of roads (m) affected by aggregation area

Aggregation area	Motorway	Primary	Secondary	Local	Path	Other	Total
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Sofala	5,800	75,200	143,000	906,000	309,000	227,000	1,664,000
Total	5,800	75,200	143,000	906,000	309,000	227,000	1,664,000

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: High, Medium

Analysis details

Hazard source Flood Map - DNGRH -

Exposure source Osm Roads (Daily extract) - OpenStreetmap -

Aggregation source Mozambique Provincial - DIVA GIS -

Impact Function Flood Polygon On Roads Line