

Briefing Note – 19 September 2016

SORLAND Floods



	Not required	Low	Moderate	Significant	Major
Need for international assistance		X			
Expected impact	Very low	Low	Moderate	Significant	Major

Crisis overview

Unusually heavy rainfall over the first three weeks of September has caused floods and landslides across Sorland. The southern coastal areas are most affected. According to government data, an estimated 150,000 people are affected, and 35,000 people are temporarily displaced. Floods and landslides have killed at least 1,245 people. As of 19 September, 1,450 people remain missing. Farsund and Lyngdal municipalities in Vest-Agder county are the most severely affected areas.

Key findings

Anticipated scope and scale

Rainfall is expected to continue in the coming weeks, and an increase of number of affected is likely. October is generally the wettest month of the year, and continued rainfall will increase severity of needs and continue to hamper assistance. A spike in cases of water-borne diseases has been recorded, and these cases are likely to continue to increase.

Priorities for humanitarian intervention

- **WASH:** Access to clean drinking water is a priority concern.
- **Health:** A spike in water-borne diseases have been reported, and a number of health facilities have been damaged.
- **Shelter:** An estimated 35,000 are temporarily displaced, many are staying in makeshift shelters.

Humanitarian constraints

A large number of roads and bridges have been damaged or destroyed, exacerbating already poor road conditions and hampering humanitarian access. Some remote areas have been completely cut off.

Limitations

This report describes a developing situation and information may change rapidly. Limited information is available on rural areas and areas that have been cut off as a result of destroyed infrastructure.

Crisis impact

Since early September heavy rainfall has led to floods and landslides across Sorland, particularly affecting southern areas along the coast. As of 19 September, 286.2mm of rain has been recorded so far in September – the highest ever recorded rainfall in September.

1,245 people have been reported killed by floods and landslides, and as of 19 September, 1,450 people remain missing.

The population of Farsund and Lyngdal municipalities (Sorlandian: *kommune*) in Vest-Agder county (Sorlandian: *fylke*) are the most severely affected, as floods have exacerbated underlying vulnerabilities.

WASH: WASH infrastructure has been damaged across the affected areas, and access to clean drinking water is reported as a priority concern.

Health: A spike in malaria cases and water-borne diseases have been reported since the beginning of the floods. Cholera is a priority concern, as floods have led to cholera outbreaks in Sorland in the past (see Lessons learned). An unknown number of health facilities have sustained damages, and several have closed.

Shelter: An estimated 35,000 people are temporarily displaced. 12,000 people are staying in evacuation centres, while the rest are hosted by family or friends, or living in makeshift shelters, including in schools and public buildings. Thousands of buildings have been damaged or destroyed – the total number is not known.

Food: Large areas of agricultural land have been destroyed by floods. Thousands of livestock have been killed. Markets in rural areas are reported to have closed. Food prices in markets that remain open have increased substantially.

Education: The government closed all schools in the affected areas on 12 September, and they have not re-opened. A number of school buildings have been damaged in the floods, and many are used as shelters to host displaced. Educational activities are needed in evacuation centres.

Vulnerable groups affected

- People belonging to the Danlandian minority group (7.7% of the total population) are particularly vulnerable due to social and economic marginalisation.
- The rural population, and in particular people in remote areas, are generally poorer and have less access to social services than the urban population.

Humanitarian and operational constraints

A large number of roads and bridges across the southern parts of Sorland have been damaged or destroyed by the floods, hampering humanitarian access. Some remote areas have been completely cut off. Bad weather has hampered search and rescue activities. In rural areas, roads are blocked by debris from landslides. In Farsund and Lyngdal municipalities, a large number of roads are completely submerged.

A number of power lines have been damaged in the floods and landslides, leading to frequent electricity shortages.

Aggravating factors

Population density

Sorland has a population density of 213/km². Population density is particularly high in urban centres. In areas with a high population density, particularly in cities and towns, floods cause more damage and have a higher humanitarian impact than in less densely populated areas.

Location and type of housing

Houses in Farsund and Lyngdal municipalities are mainly wooden houses in poor conditions, and are particularly vulnerable to floods and heavy rainfall. A large number of houses are situated close to the coast and in flood-prone areas. Houses that sustained damages in previous floods have not been adequately rebuilt.

Malaria

Malaria is endemic in Sorland, and an increase of malaria cases have been registered since early September. On average, 8,500 cases of malaria are reported in Sorland each year. Lack of adequate access to health facilities in rural areas is a concern. Malaria cases are expected to continue to increase.

Key characteristics

Demographic profile: Population of Sorland: 5.5 million. 51% urban, 49% rural. 19% of population under 15 years old, 11% over 65 years old. Population density: 213/km². Population of Farsund municipality: 800,000. Population of Lyngdal municipality: 200,000.

Poverty: 34.6% poor, of which 11% live in extreme poverty.

Food security: 17% of Sorland's population are considered food insecure, with rates highest in rural areas in the south.

Nutrition: GAM: 6%.

Health: Infant mortality rate: 14/1,000 live births. Under-five mortality rate: 16/1,000 live births. Maternal mortality rate: 25/100,000 live births.

WASH: Access to improved sources of drinking water: 93% (urban: 98%, rural 88%). Access to improved toilet facilities: 73% (urban: 97%, rural: 48%).

Literacy: Adult literacy rate: 98.6%. Female: 97.5%, male: 99.7%.

Response capacity

Sorland Emergency Management Authority (SEMA) coordinates disaster response at a national level, and Local Emergency Management Authorities (LEMAs) are responsible for disaster response at a local level.

The government has not requested international assistance.

A National Disaster Response Force team has been deployed by the government to the affected areas and is carrying out relief and rehabilitation work. The Sorland Red Cross Society and a number of local NGOs are also responding in affected areas.

Information gaps and needs

- Very little information is available on needs in areas that have been cut off.
- Limited information is available on rural areas.
- Little information is available on needs of displaced.

Lessons learned

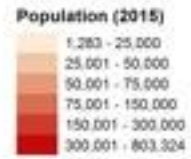
- Cholera outbreaks were reported in southern Sorland in 2007 (48 cases) and 2008 (123 cases) – both outbreaks followed heavy rainfall and floods.
- Limited coordination between the national emergency authority (SEMA) and local authorities in southern Sorland has been reported to have caused challenges in the disaster response during previous floods.
- Danlandians (7.7% of the total population) have been reported to be disproportionately affected by previous floods, as many live in inadequate housing and often in flood-prone areas. Danlandians have lower rates of education and higher rates of unemployment. Many Danlandians do not speak the majority language, Sorlandian, while most officials in southern Sorland do not understand Danlandian. The language barrier has in the past been known to create challenges in Danlandians accessing assistance.

Maps of The Archipelago and Sorland

The Archipelago



Population of Sorland (2015)



Settlements

- Capital
- ⊙ Provincial
- Town

Borders

- Coastline
- International
- Fyker
- Kommuner

Data sources:
 Sorland National Statistics Office (SNSO)
 Sorland Mapping Agency
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