YEMEN: CYCLONES

Update: October - November 2019

What happened?

Neither of the two tropical cyclones in the Arabian Sea made landfall in Yemen. No significant impact was reported.

**Cyclone Kyarr** reached Category 4 cyclone levels at the end of October, but weakened to a tropical depression on 3 November and dissolved shortly after. As anticipated, on its path towards the Horn of Africa, Cyclone Kyarr passed north of Socotra, which experienced heavy rains and thunderstorms between 2 and 6 November. Cyclone Kyarr was the strongest cyclone in the Arabian Sea since 12 years (WFP 30/10/2019; GDACS 10/11/2019).

**Cyclone Maha** was classified as a Category 3 cyclone with sustained wind speeds of up to 185 km/h on 5 November. Contrary to previous estimations, Cyclone Maha moved north-east away from Yemen and weakened to a tropical depression on 6/7 November. It reached India as a low depression (GDACS 10/11/2019).

**Impact:** Socotra recorded localized small scale flooding caused by heavy rainfall and thunder on 4 to 5 November. However, no casualties or severe impact on critical infrastructure have been reported. Limited rainfall was reported across mainland Yemen between 30 October to 7 November, with Western Highlands affected the most (30-50mm accumulated rainfall). IDPs in coastal areas were not impacted (GDACS 05/11/2019).

**Lessons learned:** The humanitarian community was able to quickly implement preparedness measures to advert anticipated impact (OCHA 1/11/2019). Even though no impact was recorded, preparedness, early warning and awareness and capacity building projects are crucial as cyclones have the potential to quickly aggravate existing needs in Yemen.

**Yemen remains very vulnerable to tropical cyclones.** 2019 was among the most active cyclone season ever recorded in the Arabian Sea. As seen in previous events, cyclones can affect Yemen significantly, causing large-scale displacement, disrupting port and airports and significantly limit humanitarian access.
Two cyclones may affect Yemen between 30 October and 8 November. The first, cyclone Kyarr, will likely weaken before passing Yemen on 2 November. The second (unnamed) cyclone, forecasted to make a landfall on 5 November, could be worse than cyclones in 2018 which displaced 17,000 people. Accurate projections about the impact will be available about 72 hours before landfall (2 November 2019).

**Tropical cyclone Kyarr:** Tropical cyclone Kyarr (Category 4/3) formed on 25 October. As of 29 October, it was heading to the east-central Arabian sea (longitude 63.2E and latitude 19.3N), northeast of Socotra. It is unlikely to make landfall in Yemen. However, at least 60,000 people are likely to be exposed to tropical storm conditions (winds up to 150 km/h) on 2 November as storm travels past the south of Yemen and up the western coast, Al Hudaydah, and Hajjah in the coming week.

**Unnamed tropical cyclone forming off the coast of Sri Lanka:** As of 29 October, a new low pressure area was forming to the southeast of Sri Lanka. It is likely to develop into a cyclone and gain intensity while progressing towards Yemen. This cyclone could make landfall on the southwest coast of Yemen around 5 November and progress towards central Yemen affecting Al Mahrah and Hadramaut. Heavy rainfall and strong winds are expected in the southwest, with lesser effects on central governorates.

**Analysis:** Cyclone Kyarr is unlikely to cause extensive damage, but it may cause flooding in IDP camps in coastal areas in Yemen. Detailed predictions will not be available for the second cyclone until 72 hours before landfall, 2 November. However, worst case, it could impact over 830,000 people in southern coastal areas of Yemen, with 68,000 people in Socotra most affected. Volatile winds and thunderstorms could casualties, displacement, and significant damage to homes and critical infrastructure. Al Mukalla port, (the main gateway for food, oil, and fuel deliveries to Hadramaut, Shabwah and Al Maharah) and Saifyn airport could also be disrupted. Access and assessment are likely to be restricted by port and road closures and debris.

Early estimates suggest the 5 November cyclone could be similar in scale to cyclones in 2018 which displaced 3,000 – 17,000 people, injured more than 100, killed several people and destroyed livestock, farmland, and property (YRCS 27/05/2018, Sanaa Center 10/2018, OCHA 15/10/2018).

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