

SHORT NOTE
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PAKISTAN
DROUGHT IN SINDH

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OVERVIEW

In southeastern Sindh, below-average rainfall during the 2016 monsoon (July to October) resulted in no or substantially less crop production for the third consecutive year and in livestock losses, affecting the two main livelihood sources in the region.

According to ECHO, 27% of the population in Sindh is moderately to acutely food insecure. A lack of access to WASH facilities and medical services exacerbates food security and nutrition conditions. Landless agricultural labourers, pastoralists, and sharecroppers are most vulnerable and the worst hit. Comparable and recent data on food insecurity rates is missing, but according to the latest assessment conducted in 2015, GAM and SAM rates were well above emergency levels.

Since September 2016, response has been limited. According to a report by the UN Country Team in Pakistan published in February 2017, the 2015 findings are still valid and the region is on the verge of a humanitarian crisis.

PRIORITY SECTORS

Latest update: 12/04/2017

- **WASH:** Access to safe drinking water for human and livestock consumption is limited. Communities depend for the most part on unsafe rainwater or groundwater for drinking.
- **Health:** Due to various waterborne diseases and malnutrition, 89 children have died since January 2017 in Tharparkar district, Sindh. Medicines and health staff are lacking. Health facilities are often far away and transportation costs high.
- **Nutrition:** GAM rates in the east and southeast of Sindh province were between 29-31% and SAM rates 11-12% during the latest assessment in 2015.

CRISIS IMPACT

In Tharparkar district and surrounding areas of Sindh province, southeastern Pakistan, the third consecutive year of below-average cereal production, coupled with losses of small animals (in particular sheep and goats) and limited assistance, has caused food insecurity and acute malnutrition.^[1]

High levels of malnutrition, coupled with limited access to water, sanitation and medical services, have compromised the health and coping capacities of the most vulnerable communities. 89 children have died in Tharparkar district since January 2017 from waterborne diseases and malnutrition. ^[2] As a result of a lack of comprehensive assistance, the alarmingly high nutritional and food insecurity trends that were recorded in 2015 are likely to have persisted. According to ECHO, 27% of the population in Sindh is moderately to severely food insecure. ^[3] ^[4]

Health and water are the two immediate concerns, according to a UN survey conducted in February 2017. Water, in all aspects, including drinking purposes, for agricultural activities, and for livestock was reported to be the main problem across the communities surveyed. Moreover, support for livestock maintenance, cash grants, and food aid are needed. ^[4]

WASH

Water scarcity is a critical issue in southeastern Sindh. The main sources of drinking water include wells (protected and unprotected) and rainwater catchments, and fewer communities rely on government water supply schemes. ^[4] Water sources are difficult to access. Households have to travel 2–15km, often using camels or donkey carts, to collect drinking water. ^[4]

Very few communities use cloth filtration and boiling to improve the quality of drinking water. ^[4] No treatment is given to water consumed by livestock. ^[5] Over 70% of water samples in Sindh are unfit for human consumption. More than half of the water samples collected from reverse osmosis plants installed in Tharparkar were found unsafe due to bacterial contamination and high total dissolved solids concentration. ^[6] Manchar Lake, Sindh's largest source of fresh water, is polluted with arsenic, mercury, magnesium, and cadmium. ^[7]

Health

89 children have died in Tharparkar district since January 2017 from waterborne diseases and malnutrition. ^[2] As most deaths occur within the community rather than at medical facilities, the reported number of deaths may be far lower than the actual number of deaths. In 2016, 476 deaths were reported in official figures, although the actual number may have been over 600. ^[8]

Between September 2016 and February 2017, 20–35% of children were ill. The most common health concerns were pneumonia, fever/flu/coughing, diarrhoea, meningitis, and cholera, according to a UN survey. Most women are anaemic and newborns are underweight at birth due to malnourished mothers. There is a lack of medicines and health staff, especially female doctors. Roads are poor, few transport options are available, and costs are high. Health facilities are located 35-60km away. ^[4]

Nutrition

GAM rates in the east and southeast of Sindh province were between 29-31%, and SAM rates 11-12% in 2015. These rates are well above the emergency threshold for both GAM (15%) and SAM (5%). The numbers refer to the latest drought needs assessment conducted in the last quarter of 2015. ^[9] These rates are likely to persist to date due to a

lack of comprehensive assistance and the continued effects of drought. Maternal malnutrition, with a Mid-Upper Arm Circumference (MUAC) below the emergency threshold of 21cm, is also estimated to be very high at 20.8%. ^[4] The consumption of unsafe drinking water exacerbates malnutrition.

Livelihoods

Less rain, less cultivation, low crop yields, and deaths of livestock are the main contributing factors in the reduction in household income.

The affected areas are in arid mono-cropping zones where agricultural activities are totally dependent on the monsoon rainfall from July to September. ^[4]

Since August 2016, major livestock losses have been reported due to disease and low availability of water and fodder. Goats and sheep are the main ruminants kept, and losses of 20%–40% of goats are reported, as well as 35%-50% of sheep. Livestock prices in February were much lower than in normal times. ^[4]

Food security

According to ECHO, 27% of the population in Sindh is moderately to severely food insecure. ^[3] Most households have already consumed the cereal stock from previous harvests as a result of limited production in 2016. ^[4] Analysis of variance showed that Badin and Tharparkar districts were categorised in Crisis (IPC Phase 3). ^[10] Although children and adults consume three and two meals a day, respectively, the portions are small and nutritional content is limited. ^[4]

The nearest accessible markets to the population for purchasing food and non-food items are the ones located in the main cities, normally at a distance of 35–50km. ^[4]

Vulnerable groups

Female headed households are more likely to resort to distress sales. 68% of female-headed households surveyed at the end of 2015 were either landless or sharecroppers, which are the livelihood groups most vulnerable to the impact of drought. 41% are landless agricultural labourers or pastoralists, and 27% are sharecroppers. ^[11] These livelihood patterns and vulnerabilities are likely to persist to date (Anonymous source, UNICEF Pakistan).

Landless households, sharecroppers and smallholders have significantly lower food consumption scores than medium or largeholders or households with skilled or stable employment. ^[12] Sharecroppers, together with landless agricultural labourers, make up the poorest segment of the population. According to UNDP, 75.5% of the population in rural Sindh lives under the poverty line, with peaks of 87% and 84.7% in Tharparkar and Umerkot, respectively. ^[13]

Complementarity between cropping and livestock indicates that households that rely exclusively or heavily on livestock are more insecure in their livelihoods and nutrition. The less diverse the productive assets of a household are, the more those households must rely on seasonal casual and agricultural labour for income. Moreover, they rely on weather conditions to support sufficient natural forage for their livestock. ? [5]

AGGRAVATING FACTORS

Floods

Recurrent floods during the monsoon season from July to October exacerbate drought effects in some districts of southeastern Sindh, such as Umerkot, including a lack of safe drinking water, and the loss of livestock and produce.

Poverty and feudalistic rural economy

Agriculture is a key driver of the economy of Sindh province. Land is owned by a few large landowners who rent out land to sharecroppers. Agro-pastoralist tenant farmers live in perpetual debt to landowners, vendors, and others. ? [11]

RESPONSE CAPACITY

National and international response capacity

Affected areas received very limited assistance between September 2016 and February 2017, which is not sufficiently covering needs. The current nutritional response by the government is not fully operational. ? [4]

The Livestock Department, supported by FAO, is running out of routine vaccination for small and large animals in Tharparkar and Umerkot districts. WFP is implementing a conditional cash assistance project, which covers around 15-20% of households eligible for the Benazir Income Support Programme (BISP), a government poverty reduction scheme. Moreover, community-based management of acute malnutrition is ongoing. ? [4]

In 2016, ECHO's contributions for projects in Pakistan amounted to EUR 25.5 million. A significant part of this funding was directed to Sindh province. ? [3]

Coping mechanisms

Selling livestock is an immediate coping mechanism to meet needs. In Tharparkar district, droughts often result in the migration of families in search of pastures for their livestock, disrupting children's basic schooling. ? [4]

OPERATIONAL CONSTRAINTS

While the "No Objection Certificate", which allows INGOs to implement projects in restricted areas in Pakistan, is not needed for humanitarian projects in Sindh, ? [14] the government

has severely limited nutrition assistance in the area since September 2016 and replaced it with its own nutrition support programme (Anonymous source, UNICEF Pakistan).

INFORMATION GAPS AND NEEDS

No recent data is available on food security and nutrition. However, the Nutrition Cell of the Government of Sindh conducted a SMART and IYCF KAP assessment (Knowledge, Attitudes and Practices on Infant and Young Child Feeding) through Action against Hunger, funded by ECHO, in Tharparkar district in 2016. The report is being finalised (Anonymous source, UNICEF Pakistan).

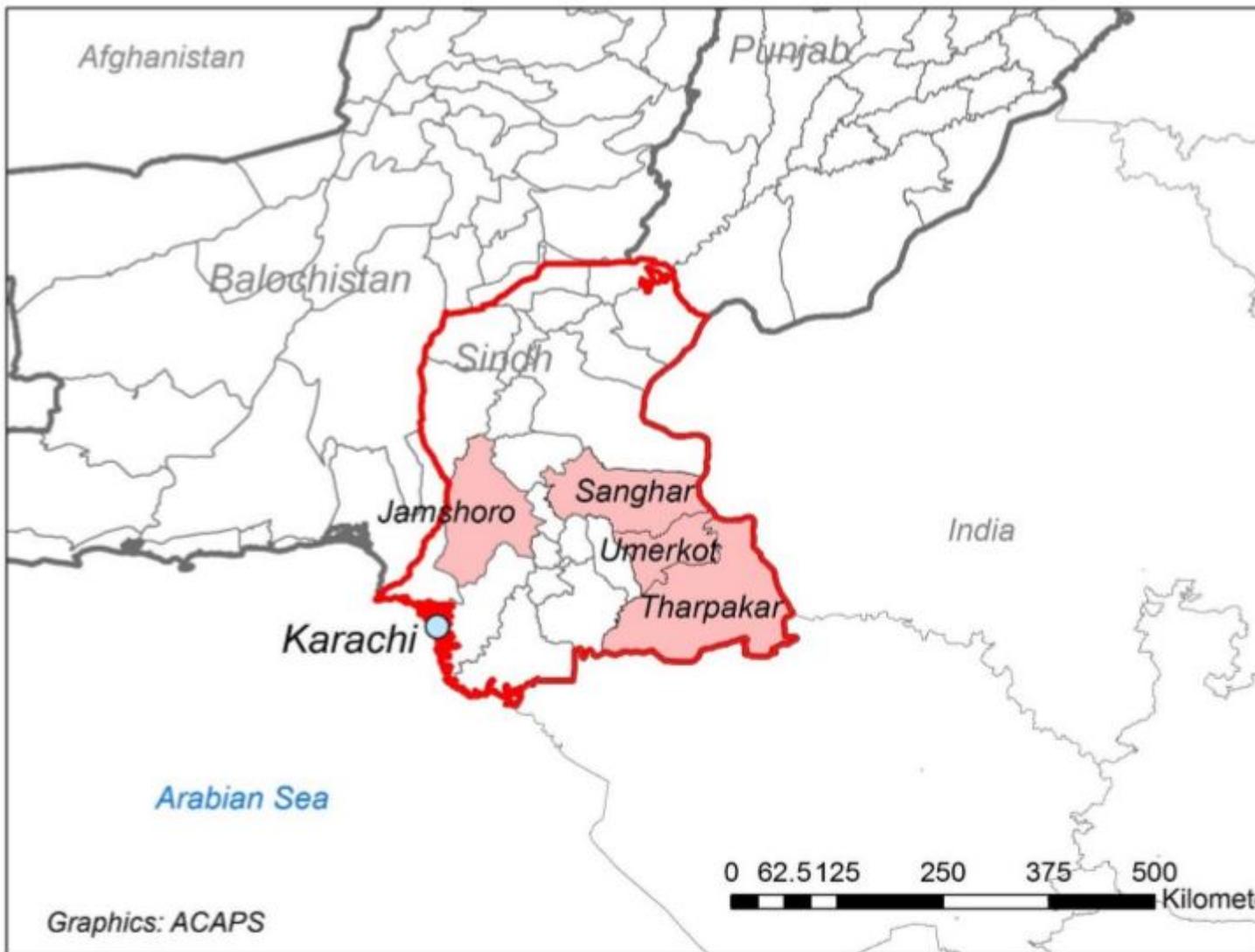
The mortality rate among children under five has been reported as a percentage of children within a community instead of number of deaths per 1,000 live births, making comparisons difficult.

There is a lack of information on how feudalism constrains humanitarian assistance.

OUTLOOK

The outlook for the next few months suggests that food insecurity may rise if there are no or limited rains in the coming monsoon (July to October) and if response remains limited. The situation could deteriorate into a humanitarian emergency. ^[4] Depleted seed stocks means sowing next year is likely to be reduced.

Worst drought-affected districts in Sindh (2015)



Source: Food Security Cluster 01/08/2016