

INDIA (ODISHA STATE)

Floods



KEY PRIORITIES

950,000

AFFECTED PEOPLE

170,000

PEOPLE RESIDING IN RELIEF CENTRES AS AT 22 AUGUST

High risk

OF SPREAD OF WATER-BORNE DISEASES

NATIONAL RESPONSE CAPACITY

- Disaster Management Division
- National Disaster Response Force
- Orissa State Volunteers and Social Workers Association
- Palli Unnayan Seva Samity
- Sabuj Sangha
- Special Relief Organisation

INTERNATIONAL RESPONSE CAPACITY

- Action Aid
- Caritas
- Christian Aid
- Humanitarian Aid International
- Indian Red Cross Society
- Inter Agency Group Odisha
- Odisha Inter Agency Group
- Oxfam
- Save the Children
- Sustainable Environment and Ecological Development Society India
- UN agencies (UNDP, UNFPA, UNICEF, WFP)

ANTICIPATED SCOPE AND SCALE

- Light to moderate rain or thundershower is forecasted for a few places over the districts of Odisha until 05 September. Some of these areas are likely to still be experiencing flooding, and additional rains could deteriorate the flood situation in the coming days (IMD 30/08/2022).
- Natural disasters often push the younger generation, including children, towards distress migration, which would raise protection concerns (HAI 26/08/2022). Potential risks include child labour and trafficking.
- The floods have destroyed a lot of houses, especially fragile kutcha houses. People residing in these houses are usually socioeconomically disadvantaged and lack the capacity to cope with shocks such as floods (NBO 2013; Square Yards 22/07/2021). A significant percentage of the displaced have become homeless and are expected to remain displaced in the longer term. They will require shelter, food, and NFIs for an extended period, even after the alleviation of the flood situation.

HUMANITARIAN CONSTRAINTS

- Flooding has destroyed roads and bridges, disrupting transportation. Rural Odisha also lacks proper road infrastructure. As per the latest reports, some inundated places are only accessible by boats, heightening humanitarian access constraints in the state (The Times of India 22/08/2022; HAI 26/08/2022; OTV YouTube 22/08/2022 and 25/08/2022).
- Aid workers are exposed to waterborne diseases and snake bites, especially with Odisha being one of the most snakebite-prone states in India (The Hindu 17/04/2022; The Telegraph 26/08/2022).
- Floods have also resulted in power cuts. Many villages have been without electricity for days, disrupting daily life, especially mobile phone communication (The New Indian Express 25/08/2022, 22/08/2022, and 23/08/2022). This constraint is likely to disrupt communications between aid workers and flood-marooned people.
- Long power cuts have been reported in Puri and Khurda districts (The New Indian Express 23/08/2022). Power cuts are also interrupting aid activities in public places, such as healthcare centres and temporary shelters.
- There are limited assessments of humanitarian needs and damages, which can be a constraint for humanitarian responders in identifying the most affected areas and the locations of vulnerable groups (The New Indian Express 25/08/2022 and 23/08/2022).

CRISIS IMPACT OVERVIEW

- Heavy monsoon rains in mid and late August 2022 in Odisha state resulting from the deep depression over the Bay of Bengal have led to overflowing rivers and landslides that have affected at least 13 districts (HAI 26/08/2022; Mint 18/08/2022 and 19/08/2022; HT 23/08/2022; SRC 22/08/2022). Its impact combined with the subsequent heavy rains in the upper catchment of the Subarnarekha River, in the neighbouring state of Jharkhand, has led the state government to open the Galudih Barrage, releasing floodwaters into Odisha and worsening the flood situation (OTV 20/08/2022; NDTV 22/08/2022; HAI 26/08/2022).
- As at 22 August, the monsoon rains had affected around 2,500 villages, with more than 900 additional villages still inundated. The floods had affected over 950,000 people in Odisha, and around 170,000 people were temporarily residing in around 440 relief centres (SRC 22/08/2022; NDTV 23/08/2022).
- The floods have severely affected Boudh, Cuttack, Jagatsinghpur, Kendrapara, Khurda, Puri, Sambalpur, and Subarnapur districts, with Puri and Jagatsinghpur being the most affected (HAI 26/08/2022).
- The floods have destroyed farmlands, crops, livestock, roads, bridges, and electricity poles — resulting in power cuts (HAI 26/08/2022; The New Indian Express 25/08/2022 and 29/08/2022; The Times of India 22/08/2022; OTV 21/08/2022 a).
- Immediate needs for the people living in flood-affected areas and displaced people include food (especially the main staple food, rice, and dry foods), potable drinking water, fuel, sanitary pads and hygiene kits, water purification kits, polythene sheets, and shelter. In the longer term, affected people need livelihood support (e.g. cash-for-work programmes and the provision of fertiliser, livestock, and fodder to affected farmers). People who lost their homes to the floods also require rebuilding support.

SECTORAL NEEDS

Health

Around 900 cases of waterborne diseases were reported in the flood-affected districts, with some reported as diarrhoea cases. Some people have resorted to drinking contaminated water amid the shortage of potable water in inundated villages. This practice risks the spread of waterborne diseases, such as hepatitis and cholera. Affected villages require a supply of potable water, as well as water point restoration and chlorination. Stagnant water could become breeding grounds for the Aedes mosquito and spread the dengue disease. The Government also reported receiving around 90 reports of snake bites from the flood-affected districts. No deaths have been reported, citing that every block (district subdivision) has antivenom drugs (The Telegraph 26/08/2022; The Logical Indian 26/08/2022; The New Indian Express 26/08/2022 and 03/09/2014).

Children can experience distress in natural disaster settings given the lack of open areas to play in and for being confined to their houses or relief centres. Children and their families also suffer from diseases and injuries; concerns of snake bites; and a lack of access to fundamental services, such as clean water, healthcare, and education. They need targeted psychosocial support (HAI 26/08/2022; UNICEF accessed 29/08/2022). Children are also in danger of falling into the floodwaters as people gather on high ground given the limited space, increasing the risk of ingestion of contaminated water and drowning.

WASH

WASH facilities, such as toilets, are submerged in flood-affected areas, likely resulting in unsafe sanitation practices, such as open defecation. The lack of adequate sanitation facilities makes women and children particularly vulnerable to protection concerns given the lack of privacy. Female hygiene would be of heightened concern, with affected women and girls needing access to sanitary pads and hygiene kits, as well as to sexual and reproductive health services (News18 23/08/2022; OTV 21/08/2022 b; OHCHR accessed 29/08/2022).

Protection of vulnerable communities

There are 93 recognised Scheduled Caste communities in Odisha. They comprise around 17% of the state's total population (Nayak 01/07/2018; SCSTRTI accessed 28/08/2022). These communities are estimated to earn much less (35% lower) than the national average (IndiaSpend 15/03/2021). They have been experiencing discrimination and persecution for years, facing a host of human rights violations and abuse as well as social and economic boycotts

(Gunratna and Anjali 26/10/2020). They also face discrimination in terms of relief distribution, which may be a risk during this flood crisis (The Kathmandu Post 17/10/2020).

Shelter

Around 170,000 displaced people are residing in 440 relief centres in Odisha (SRC 22/08/2022). These shelters are usually temporary and hosted in public places, such as schools. They are usually overcrowded and lack adequate living space, leading to unhygienic living conditions. The lack of space also means a lack of privacy for women and children, raising protection concerns. It is very likely that there are people who have lost their homes and are stranded, as has happened during previous floods. Affected people need shelter.

Education

There have been reports of floodwaters damaging books and other learning materials of students and sweeping away their clothes. The flooding has also damaged schools (OTV 21/08/2022 b; The New Indian Express 23/08/2022). Given the situation, schools are being used as relief centres, and they often require rehabilitation or repair before being usable for classes again (Sambad 17/08/2022). These constraints further limit children's access to education.

Food security and livelihood

Floodwater has inundated paddy fields, incurring damage to already planted paddy crops. The Kharif season usually starts in June and ends in December. Paddy is a major Kharif crop (PxD 15/07/2021). Floodwater has also been reported to destroy many vegetable farmlands and fodder, sweep some livestock away, and affect others, resulting in the animals' death, injury, or affliction with diseases (HAI 26/08/2022; The New Indian Express 25/08/2022; SRC 22/08/2022). In Puri district, the floods have affected around 50,000 large livestock, 18,000 small livestock, 60,000 poultry livestock, and around 9,000 hectares of crops (HAI 26/08/2022; CYSO 24/08/2022). As at 29 August, many farmlands in multiple districts, including Balasore, Cuttack, Kendrapara, and Puri, were still inundated (OTV 29/08/2022).

Around 80% of Odisha's population lives in rural areas, with the majority of the rural labour force engaged in agricultural activities. The agriculture sector is the main source of livelihood for a significant portion of the population (P&C Dept. 03/2022). Many farmers also take loans from cooperative societies and banks to grow seasonal vegetables and paddy. The floods have led them to incur significant losses, leaving them uncertain of regaining their lost livelihoods. With people's livelihoods severely affected, there is a need for livelihood programmes, such as cash-for-work programmes (HAI 26/08/2022; CYSO 24/08/2022).

Rice is the staple food of the people of Odisha. The floods damaging paddy fields is likely to affect the food security of the state. Affected people have requested rice, fuel for cooking, dry ration, potable drinking water, and cooked food (The New Indian Express 26/08/2022).

AGGRAVATING FACTORS

Poverty

Around 30% of people in Odisha live in multidimensional poverty (given the measured indices of health, knowledge, income, employment, and household environment). An estimated 90% of the poor are from rural areas. The floods from the heavy rains damaging farmlands and livestock has severely affected these people (P&C Dept. 03/2022; Sahoo 10/11/2015).

Pre-existing transport challenges

Rural Odisha lacks proper road connectivity and bridges, especially over small rivulets and streams. The state also has numerous road projects still under construction, and the construction of many others has been deferred (The New Indian Express 03/07/2017; OTV 17/07/2022).

Frequent natural disasters and the dependence of rural communities on agriculture

Agriculture is the primary source of livelihood for the people of rural Odisha, and the damage to farmlands, crops, and livestock will result in the loss of livelihood for many (HAI 26/08/2022; P&C Dept. 03/2022). Odisha is prone to floods, and it experiences flooding every year. The continuous loss of livelihood because of floods could push community members into deep poverty and render them assetless. They will need more robust protection for their farmlands, livestock, and livelihood. Other natural disasters, such as cyclones that occur quite frequently in Odisha, also compound the issue, especially in coastal districts such as Puri and Jagatsinghpur.

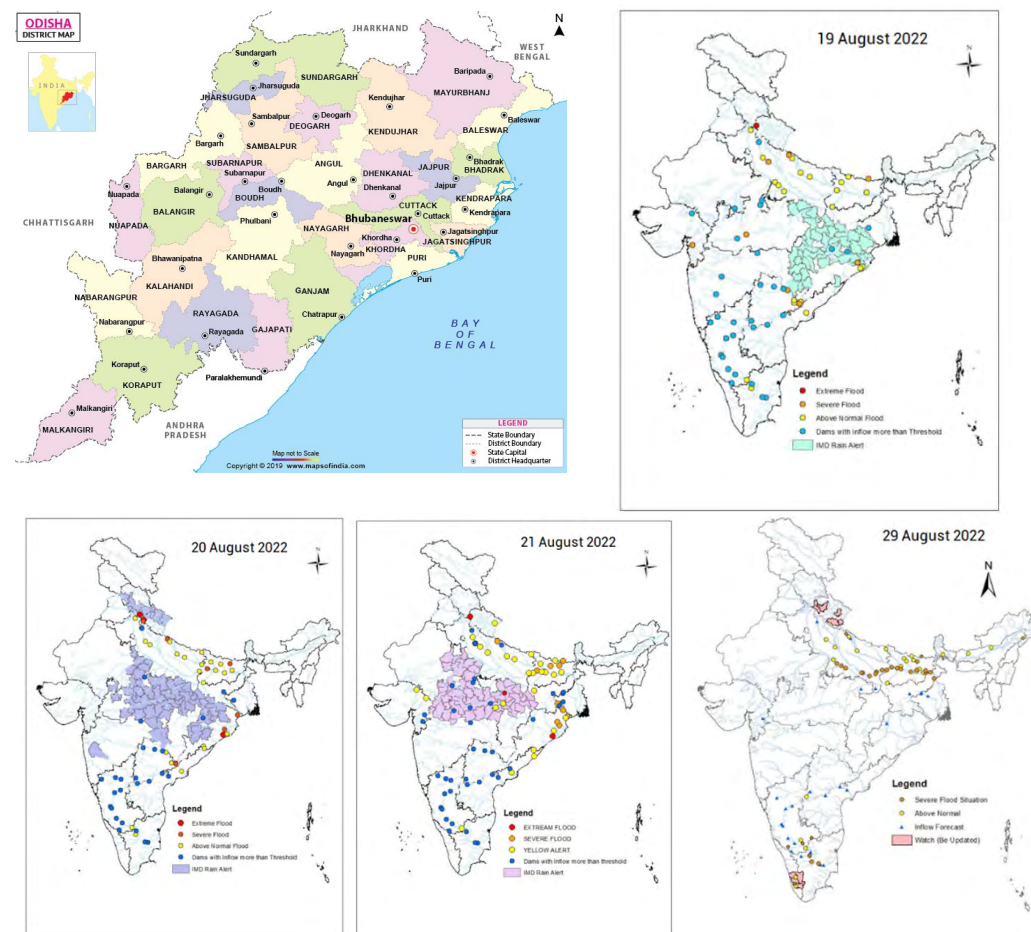
Existing housing vulnerabilities

More than 40% of families in rural areas of Odisha live in kutchha houses, which are made of weak materials such as clay, reeds, pebbles, and wood (NBO 2013; Square Yards 22/07/2021). These houses are quite vulnerable to natural disasters, such as floods and cyclones. Floods have been reported to have washed away many such houses. The population living in such houses also tend to come from the socially and economically disadvantaged sector, meaning they do not have adequate savings to cope with events such as floods by themselves.

State of health

Odisha state's maternal and infant mortality rates are higher than the average in India, indicating that the state is lagging in ensuring adequate health services to children and mothers. The impact of flooding compounds these groups' already heightened risks (P&C Dept. 03/2022).

Odisha state location and flood-affected areas



*The maps for 19–21 August 2022 indicate the areas the floods have affected. The map for 29 August 2022 shows the current flooding situation.

Sources: Maps of India (accessed 29/08/2022); CWC (19/08/2022, 20/08/2022, 21/08/2022, and 29/08/2022)