

Briefing Note – 3 May 2016

# CAMBODIA

## Drought



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

### Crisis overview

Cambodia is facing its worst drought in 50 years, and 18 out of the country's 25 provinces are currently experiencing water shortages. The most affected provinces are listed in the table below, as is the total population, but no number of affected is available:

Drought-affected province	Total population (2008)
Kompong Cham	928,700
Kandal	1,265,300
Kompong Thom	631,400
Prey Veng	947,400
Kompong Speu	716,900
Svay Rieng	482,800
Preah Sihanouk	221,400
Kampot	585,800
Battambang	1,058,100
Banteay Meanchey	677,900
Oddar Meanchey	185,800
Pursat	397,100
Siem Reap	896,400
Preah Vihear	171,100
Mondolkiri	61,100
Ratanakkiri	150,400
Koh Kong	117,500
Pailin	70,500
<b>Total:</b>	<b>9,565,600</b>

### Key findings

#### Anticipated scope and scale

The drought has been ongoing since June last year and is affecting the majority of Cambodia's provinces. Both water and food shortages have been reported. Rain is not expected until June.

While no number of affected people is currently available, the government estimates that tens of thousands of families are in need of water deliveries. Almost one million people are already considered food insecure in Cambodia, and the drought is likely to further exacerbate food insecurity.

#### Priorities for humanitarian intervention

- **WASH:** Water delivery
- **Food security:** Food and livelihood assistance
- **Health:** Awareness campaigns, water provision to hospitals

#### Limitations

Information on the total number of people affected by the drought is currently not available.

## Crisis impact

18 out of Cambodia's 25 provinces are currently facing water shortages as a result of the worst drought in decades (Bangkok Post 26/04/2016). The drought began in June last year and is linked to the severe El Niño weather phenomenon, which has caused below-average rainfall across Cambodia (Phnom Penh Post 22/04/2016).

According to forecasts, rainfall is not expected until June (Bangkok Post 26/04/2016). Temperatures have reached up to 41°C, and an increase in forest fires has been reported. Forest fires have been difficult to combat due to lack of water (Phnom Penh Post 02/05/2016; Reuters 26/04/2016).

No number of affected people is currently available, but the government estimates that tens of thousands of families are in need of water deliveries (Cambodia Daily 25/04/2016). The government has not declared a state of emergency (Bangkok Post 26/04/2016).

**WASH:** Water shortages are reported in 18 provinces, and the government has called on the population to restrict water usage (Bangkok Post 26/04/2016). As a result of water shortages, affected families have resorted to buying water from private vendors, exacerbating economic difficulties among the poor population (Phnom Penh Post 29/04/2016; Cambodia Daily 25/04/2016). Use of unsafe water is already highly prevalent in Cambodia's rural areas, and the drought is likely to have caused a further increase. In some affected areas, people have reportedly stopped bathing and cleaning, which could pose health threats (Phnom Penh Post 24/03/2016).

**Food security and livelihoods:** Food shortages are reported in some provinces as a result of the prolonged drought (Phnom Penh Post 29/04/2016). Farmers in the affected provinces are reported to have insufficient water to irrigate their crops (Bangkok Post 26/04/2016). The dry conditions that affected Cambodia in June and August 2015 reduced rice production by an estimated 2% compared to the previous year's harvest, however the 2015 production is still estimated to be above the five year-average. Cambodia generally produces twice the amount of rice needed to feed its population – however 70% of the population depend primarily on agriculture and livestock as main source of income, and the drought is likely to impact their livelihoods (WFP 31/03/2016; ACF 31/12/2015). Some farmers in the northwest were reportedly left without any rice harvest in 2015 (Phnom Penh Post 22/04/2016). An unknown number of livestock has died, and declining water levels in lakes are reducing the number of fish (Phnom Penh Post 02/05/2016).

**Health:** While no outbreaks of water- or vectorborne diseases are yet to be reported, authorities are concerned about the increased risk of diarrhoea, dengue, and cholera outbreaks (Cambodia Daily 25/04/2016). High fevers and skin irritation caused by the heat have been reported (Phnom Penh Post 29/04/2016). Hospitals have reported that lack of water impacts their ability to provide adequate health services (Phnom Penh Post 29/04/2016).



Source: FAO/GIEWS 23/09/2015

## Vulnerable groups affected

- Indigenous groups (around 1.4% of the population) are particularly vulnerable to drought conditions as they often rely on natural water sources and generally live in remote areas where they cannot easily access water deliveries (Phnom Penh Post 24/03/2016).
- 80% of Cambodia's population is rural, and particularly vulnerable to drought and water shortages due to the potential impact on their livelihoods. Water shortages are further disproportionately affecting the poor, who have to spend already limited income on buying water from private vendors (Phnom Penh Post 29/04/2016; Cambodia Daily 25/04/2016).

## Humanitarian and operational constraints

No humanitarian or operational constraints have been reported by organisations working in the affected provinces.

## Aggravating factors

### Underlying food insecurity and malnutrition

An estimated 980,000 people are considered to be food insecure in Cambodia. Chronic food insecurity is perpetuated by limited access to education and health services among poor people, and low investment in public infrastructure. Micronutrient deficiencies are widespread, and 32% of children under five suffer from chronic malnutrition (Save the Children 26/04/2016; WFP 31/03/2016).

## Lack of adequate WASH infrastructure

Almost 50% of Cambodia's rural population does not have access to safe drinking water, with 20% of deaths among children under five caused by waterborne diseases (Water for Cambodia 2015). Access to latrines and hand-washing facilities is limited in rural areas, where water from polluted ponds and rivers is a main source of water (UNICEF 2010). Access to safe water in particular in rural areas has been further limited as a result of the drought conditions, and is likely to decline further in coming weeks.

## La Niña

La Niña, a weather phenomenon that is forecast to follow this year's El Niño, is expected to bring heavy rainfall in August and September, which could result in floods in drought-affected areas, where the ground cannot adequately sustain heavy rainfall (Phnom Penh Post 22/04/2016). Damage to agricultural land caused by floods could result in further food insecurity, and reduce availability of coping mechanisms.

## Key characteristics of Cambodia

**Demographic profile:** Population: 15.6 million. 80% of the population live in rural areas (World Bank 2015; WFP 31/03/2016).

**Poverty:** 19% of the population live below the national poverty line and are unable to meet basic needs (WFP 31/03/2016).

**Nutrition:** 32% of children under five suffer from chronic malnutrition. One in ten children under five is acutely malnourished (WFP 31/03/2016; UNICEF 16/09/2015).

**Health:** Maternal mortality: 170 deaths per 100,000 live births. Under-five mortality: 35 deaths/1,000 live births (WFP 31/03/2016). Life expectancy: 68 years (World Bank 2014).

**WASH:** 75% of the total population has access to improved water sources, while 42% of the population has access to improved sanitation facilities. In rural areas, 69% of the population has access to improved drinking sources, and 30% has access to improved sanitation facilities (World Bank 2015; CIA World Factbook 2015).

**Literacy:** Female: 70%; male: 84% (CIA World Factbook 2015).

## Response capacity

### Local and national response capacity

The government has called on the armed forces, civil servants, and the Cambodian Red Cross to ensure adequate water supplies reach the affected population. 18 provinces are currently receiving emergency water deliveries. Cambodia's National Centre for Disaster

Management is coordinating the response, and authorities have also ordered digging of wells to ease the water shortages (Cambodia Daily 29/04/2016; Bangkok Post 26/04/2016).

### International response capacity

Chinese authorities have discharged water from the Jinghong hydropower station in Yunnan province to provide additional water to drought-affected areas in Cambodia (Cambodia Daily 25/04/2016).

The Humanitarian Response Forum in Cambodia coordinates response between UN agencies and INGOs, and collaborates with the National Centre for Disaster Management (Humanitarian Response 2016). WFP is present in Cambodia, however funding cuts have recently reduced operations (WFP 31/03/2016).

### Population coping mechanisms

The affected population has resorted to buying water from private vendors, which poses problems for already economically vulnerable families (Cambodia Daily 25/04/2016).

In affected provinces, people have reportedly migrated to Thailand to find jobs (Phnom Penh Post 29/04/2016).

## Information gaps and needs

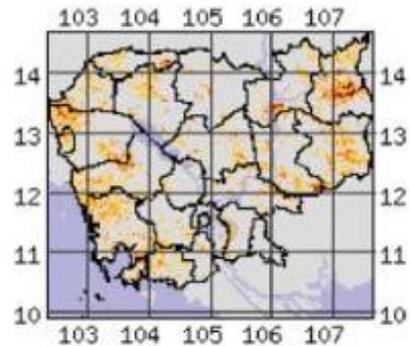
- No number of drought-affected people is currently available – the government is reportedly collecting data (Cambodia Daily 25/04/2016).
- Very little publicly available information on the current situation has been provided by humanitarian organisations in drought-affected provinces – the information in this report is mainly collected from local media sources.

## Lessons learned

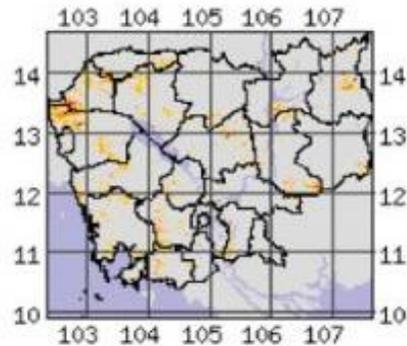
80% of Cambodia's population live in rural areas, where the majority rely on rice as their main income and staple food. In the severe drought in 2004, an estimated 82% of the potential rice harvest was lost as a result of the drought (Chhinh 2015). Farmers who are completely dependent on rainfall to water their crops are particularly vulnerable to drought, and measures to secure water supply to these farmers would reduce their vulnerability significantly (Chhinh et al 2014).

Cambodia has yet to introduce an early warning system for drought – its implementation would improve preparedness and response planning (Chhinh 2015).

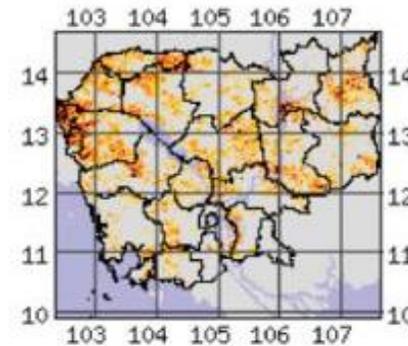
Drought-affected areas in Cambodia 2011-2016



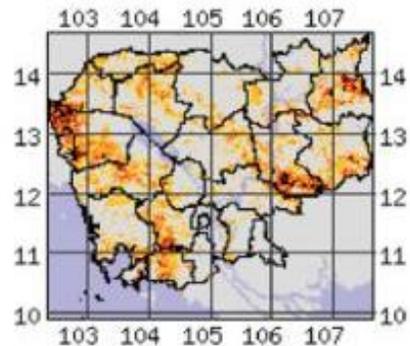
**April 15, 2011**



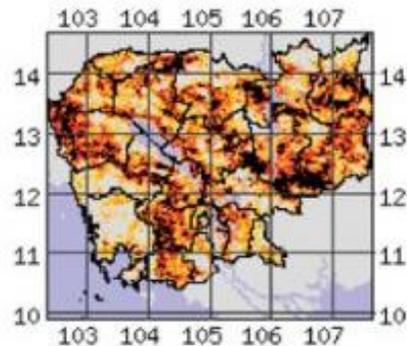
**April 14, 2012**



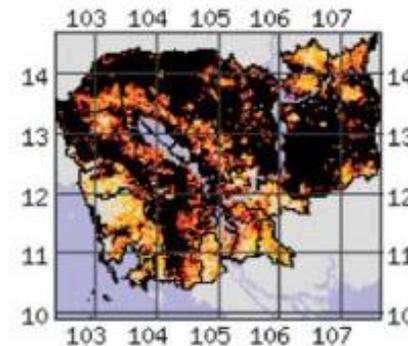
**April 15, 2013**



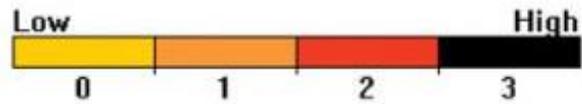
**April 15, 2014**



**April 15, 2015**



**April 14, 2016**



Source: NOAA STAR

Source: Phnom Penh Post 22/04/2016