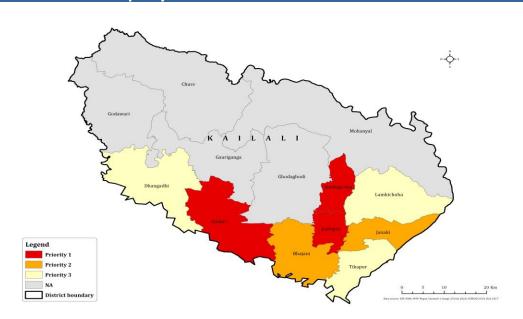
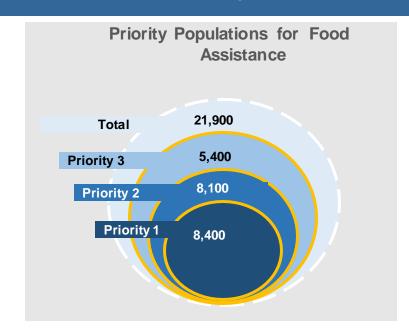
VERSION\_1
03 August 2020

Flood in Kailali | July 2020





Priority	Palika	Households	Population	Children under 5	PLW
1	3	1,400	8,400	800	200
2	2	1,400	8,100	800	200
3	3	1,100	5,400	500	100
Total	8	3,900	21,900	2,100	500

**Note**: The numbers presented in the Map and Table are estimated based on the flood inundation at the peak, received from Sentiel-1 SAR on 29 July and overlaying the pre-crisis vulnerability indicators of these Palikas. Priority 1 and 2 are in need of immediate assistance due the severity of situation.

WFP has started field assessment in the affected areas to verify and understand the impact and estimate the need as part of 72-hour approach methodology.

Heavy rainfall on 28-29 July 2020 caused flooding in Sudurpaschim Province Terai, affecting mainly Kailali district. The disaster damaged assets, including houses, water and sanitation infrastructure, food stocks and agricultural production, which negatively impacted food security in the district. An estimated 21,900 people's food security is significantly affected as a result of the flooding, of which 8,400 people, or 1,400 households, are considered to be in most need of assistance.

However, the satellite image received in 2 August 2020 from Sentiniel-1 SAR (see Inundation Area 2) showed that water level is receding in most of the flooded areas. This, together with field assessment results, can influence the final estimate.

#### Overview

#### **Shelter and Displacement**

It is estimated that 6,647 households and more than 39,000 people were affected by the floods across 4 municipalities (Bhajani, Janaki, Tikapur and Joshipur) in Kailali district.

An initial rapid assessment conducted by NRCS reported 2241 houses were completely damaged, while 2,482 houses were reported to be partially damaged by floods in 4 most affected municipalities. Approximately, 2,617 families were displaced and are taking temporary shelters at schools, community buildings and roadside.

#### **Food Security**

#### Food stock

The Initial Rapid Assessment Report from NRCS shows that a total of 3,617 households were affected by the flood in Tikapur, Bhajani and Joshipur municipalities. These households, particularly those with poor housing structure and singly-story houses, have lost their food stock.

#### Summer rice production

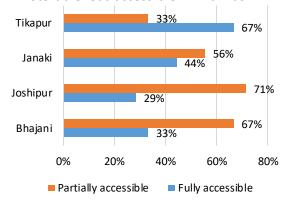
97 percent of paddy planting in Kailali district has been completed. Normally, the summer paddy is harvested in October/November. The flood water that reached the newly planted paddy can potentially result in damages and some losses. Preliminary estimates indicate that the significant area of agricultural land has been inundated and the flood water has not receded in some areas. This can negatively impact the overall rice production in the district, putting further pressure on food security of the affected households.

#### **Accessibility and Markets**

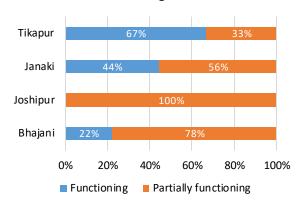
According to Initial Rapid Assessment conducted by NRCS, road access has been problematic especially 1 Ward in Tikapur Municipality, 7 Wards in Bhajani Municipality and 3 Wards in Joshipur Rural Municipalities.

However, out of 22 most affected Wards in 4 Palikas, 19 Wards are found to be some problems of road access due to water logging, debris and muds on many parts of the roads.

#### Motorable road accessible in 4 Palikas



#### Market functioning in 4 Palikas



Several markets in most affected Wards of 4 Palikas such as Bhajani, Joshipur, Janaki and Tikapur remain inundated to various degrees. Recent field indicate that markets in 19 Wards of 4 Palikas have partially accessible of roads and are partially functioning, indicating partial opening of shops with limited and insufficient commodities of daily consumed food and non-food items.

#### **Nutrition and WASH**

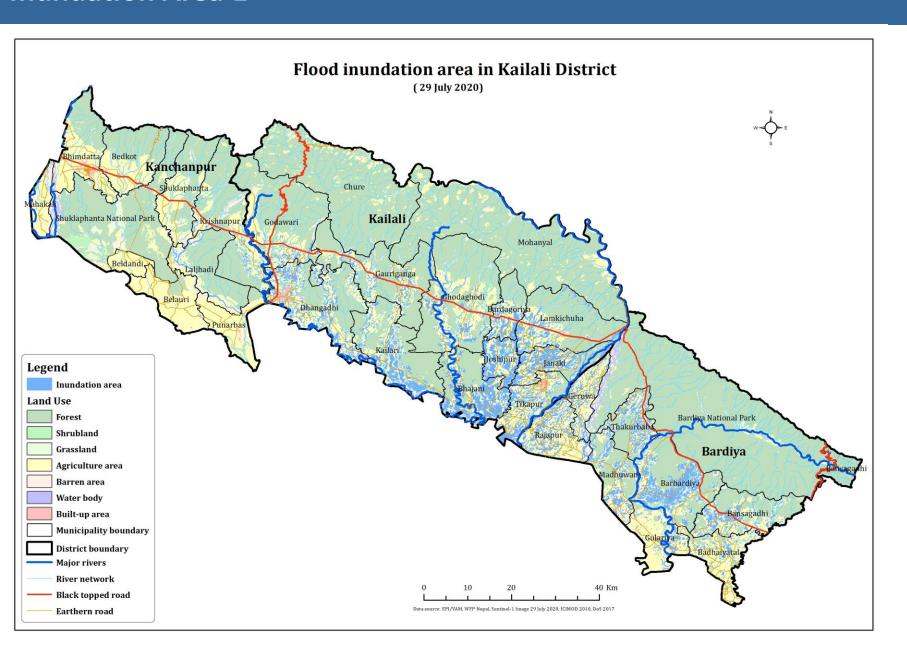
The number of children under 5 years of age and pregnant and lactating women (PLW) in Priority 1 Palikas and all affected Palikas are as follows:

	Priority 1	Total affected
Children < 5 yrs	1,001	2,129
PLW	281	565

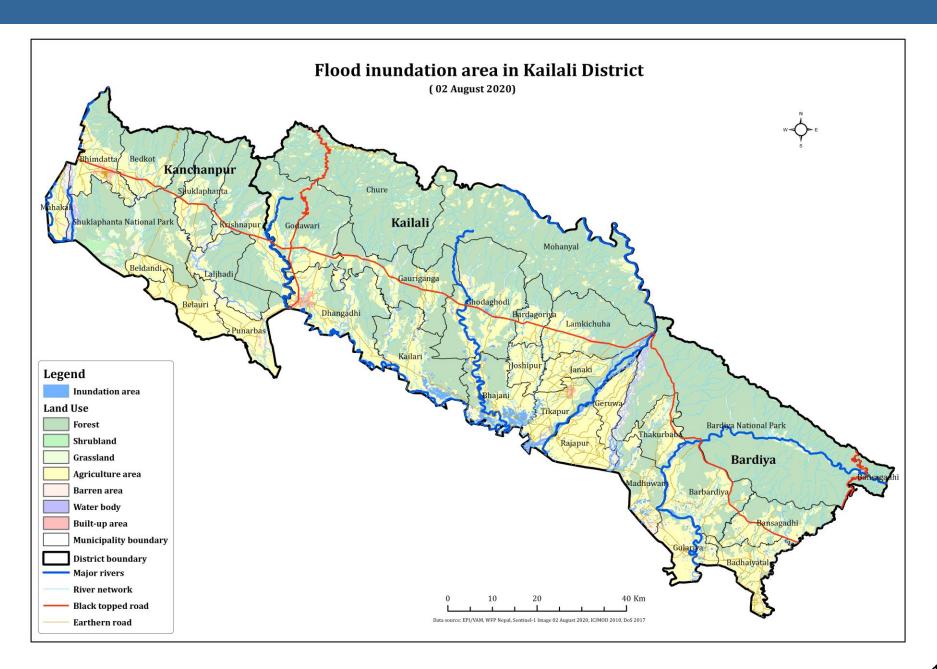
The flood has affected supply of drinking water for 4,480 households. Most of these households are from Tikapur Municipality (3,148 households), followed by Bhajani Municipality (732 households) and Joshipur Rural Municipality (600 households).

Out of 16 health centres or health posts operating in three municipalities, 15 health centres or health posts are operating and only one is not operating due to flood.

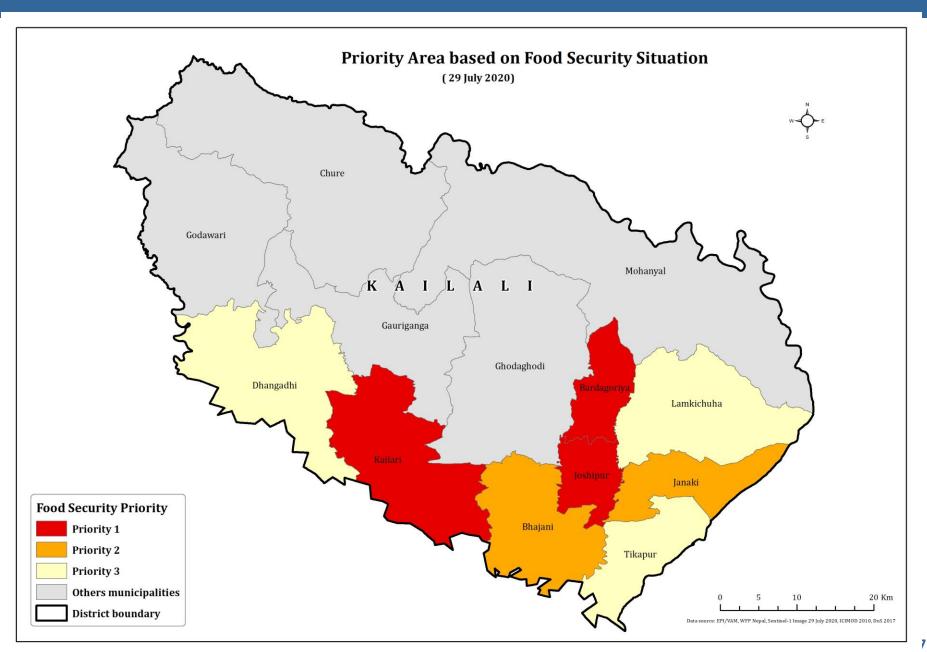
### **Inundation Area 1**



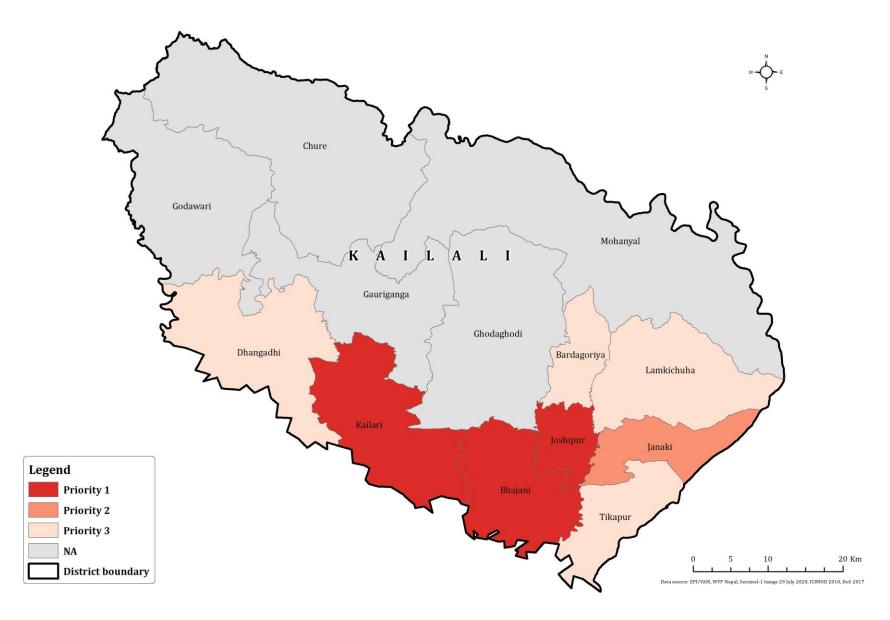
#### **Inundation Area 2**



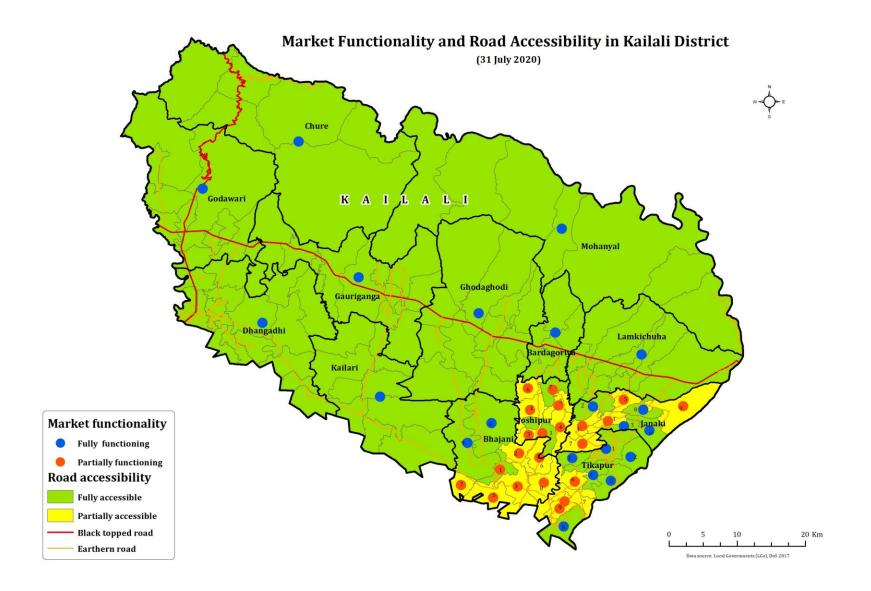
## **Priority areas (29 July)**



## **Hygiene and Nutrition**



## **Market Functionality and Road Accessibility**



### Methodology

#### WFP's 72-hour Approach

Initial areas under inundation were detected by processing Sentinel-1 satellite images of 29 July. The inundation surface layer was then overlaid with settlement data to estimate the affected and priority population. Priority population estimates were derived overlaying the affected populations with small area estimates of poverty at Municipality level (derived from the Small Area Estimation of Poverty, 2013), as well as with information from the Central Bureau of Statistics by municipality (Population Census, 2011).

The geographic targeting areas were prioritized by using the food security and hygiene and nutrition severity index to make use of it for food security and nutrition assistance, respectively.

From these initial population estimates WFP undertook ground verification and consultations with local governments, I/NGOs and the Nepal Red Cross Society within this short time, to produce revised estimates of affected and priority populations, based on which prior figures and areas of most need were updated as necessary. The information will be updating when more precise and sectoral information will be available and produced updated versions of the report.

More on WFP's 72-hour rapid assessment approach can be found at:

https://www.wfp.org/72-hours-emergency-assessment

#### Acknowledgement

Funding from the Department of Foreign Affairs and Trade, Australian Government has remained critical for supporting the capacity of the WFP Nepal for emergency preparedness and rapid assessment.

Contribution from the UK government was critical in the institutionalization process and expanding the scope of 72-hour approach.

Situation updates received from the Nepal Red Cross Society (NRCS) were used to supplement this report, namely through estimates of population displacement, casualties and asset losses/damages.

Satellite images received from Sentinel-1 SAR (European Space Agency) were used to map the inundation surface in the flood-affected Terai districts of Sudurpaschim Province.







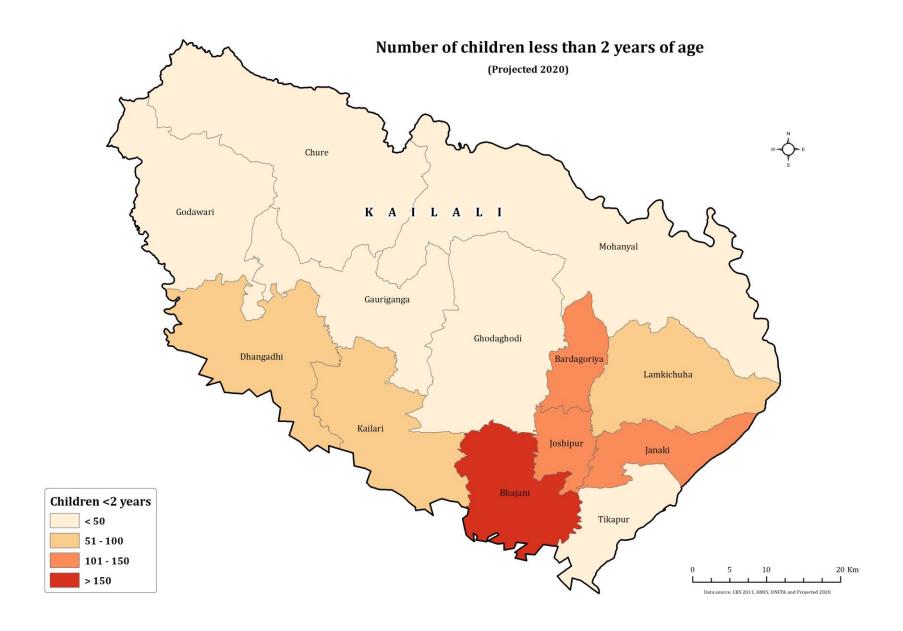




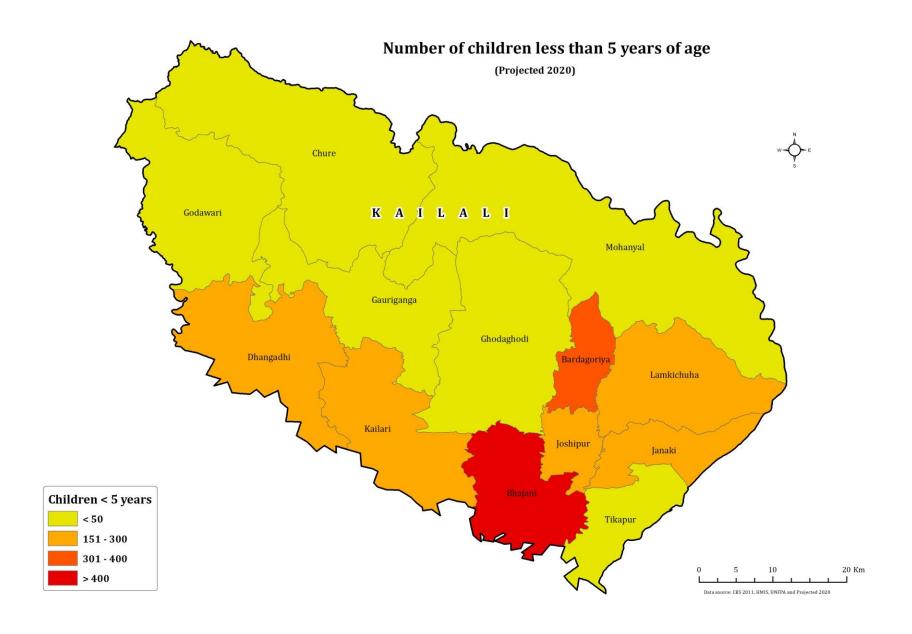
# **ANNEX 1 Priority Population**

Municipality	Affected population	Priority population	Priority households	Food Security Priority	Hygiene & Nutrition Priority	<2 yrs	<5 yrs	Pregnant & Lactating Women
Bardagoriya RM	5,077	2,886	506	1	3	129	327	74
Lamkichuha Municipality	5,456	2,077	407	3	3	94	240	53
Janaki RM	7,800	2,729	505	2	2	112	260	70
Joshipur RM	8,576	3,037	533	1	1	118	271	78
Tikapur Municipality	3,159	1,311	262	3	3	50	115	34
Bhajani Municipality	12,323	5,390	914	2	1	222	530	139
Kailari RM	5,663	2,486	401	1	1	92	200	64
	2,222	_,		·		-		
Dhangadhi Sub Metropolitan	7,364	2,057	403	3	3	79	186	53
Total	55,418	21,973	3,931			896	2,129	565

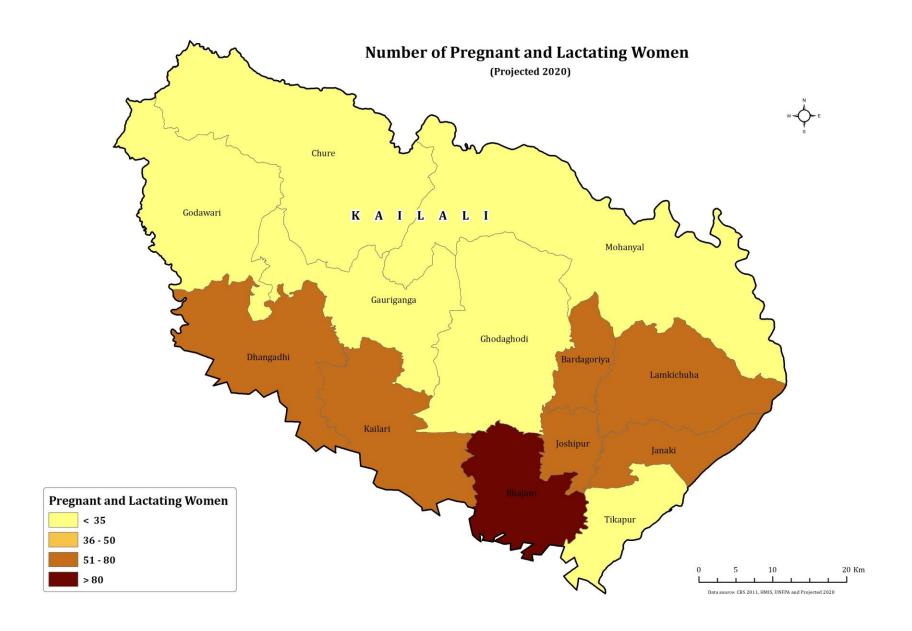
## **ANNEX 2 Children less than 2 years**



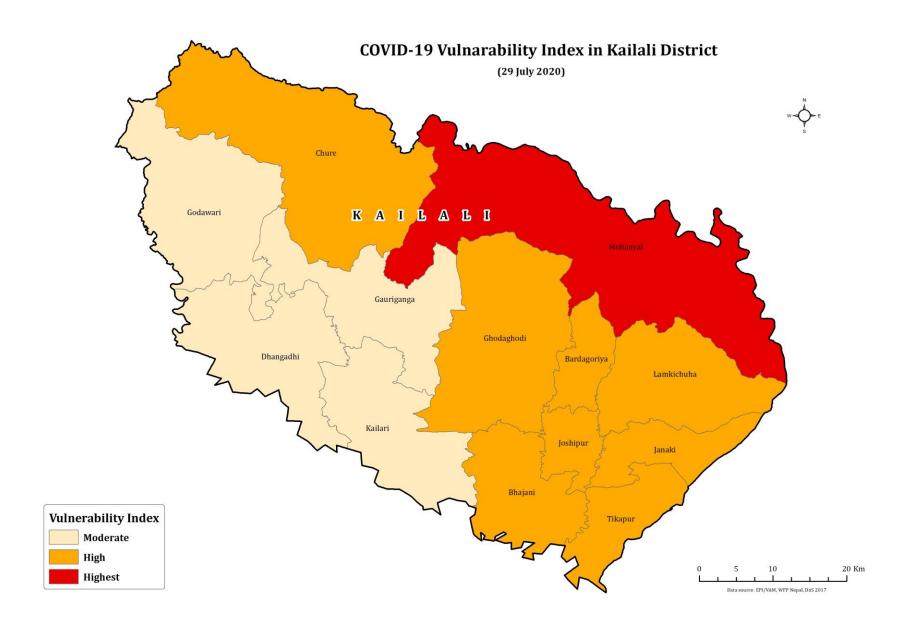
## **ANNEX 3 Children less than 5 years**



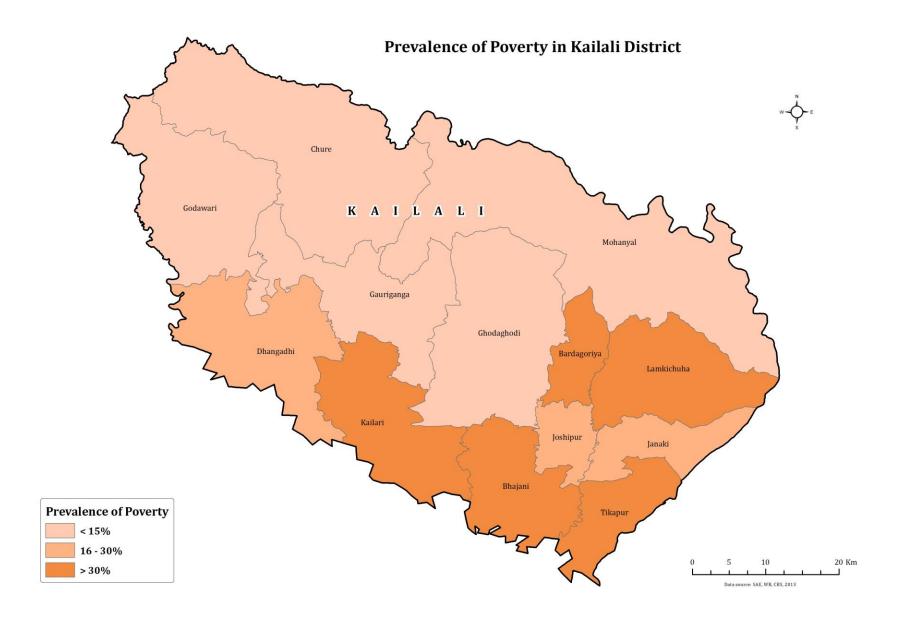
## **ANNEX 4 Pregnant and Lactating Women**



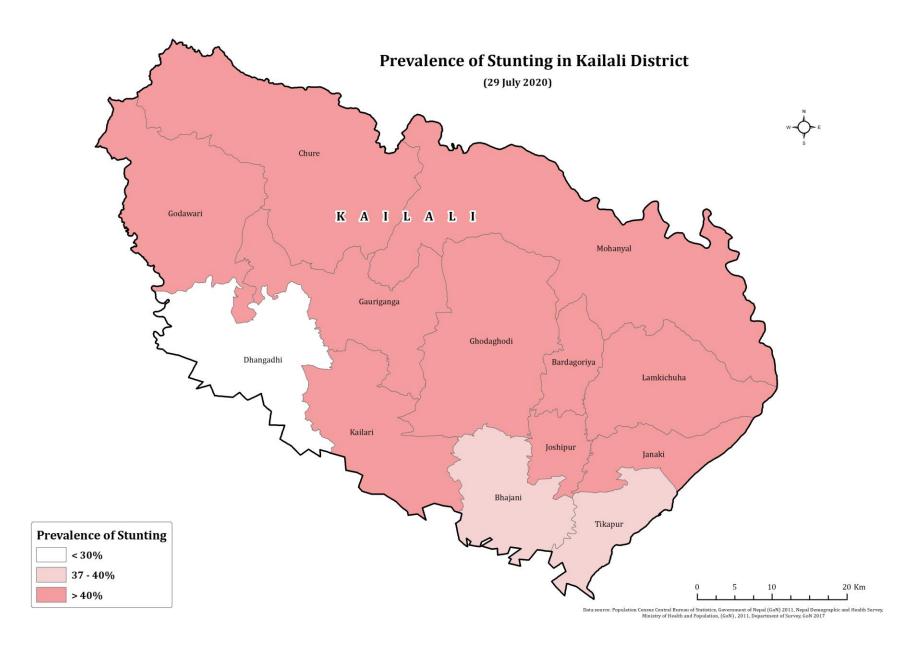
## **ANNEX 5 COVID-19 Vulnerability Index**



## **ANNEX 6 Poverty**



### **ANNEX 7 Stunting**



## **ANNEX 8 Wasting**

