Tukastan Earthquake
Results from the Shock Impact Simulation Model (SISMod)

17 November 2016

KEY FIGURES (in medium case)

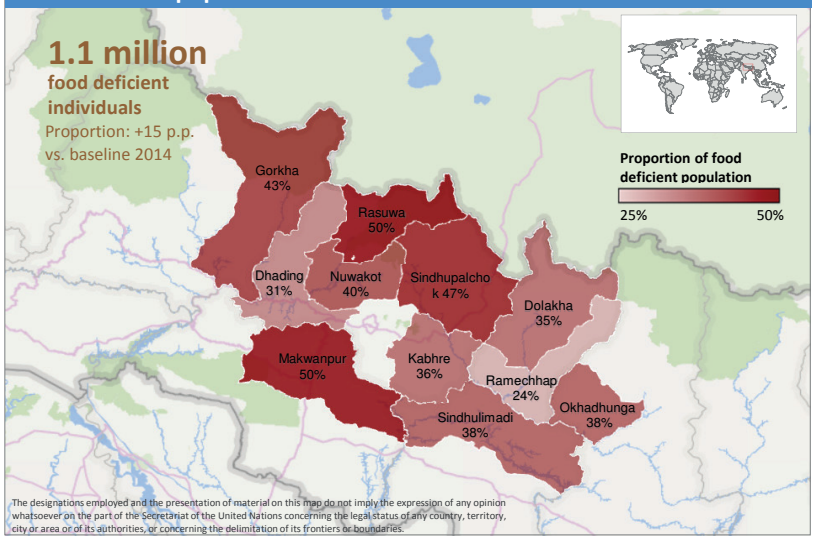
SISMod is used to focus on **indirect economic and price shocks** which will continue to affect the nation, and to quantitatively estimate the **midterm impact of the earthquake** on household food security in the **most affected districts** (especially Stichbundi Valley). This information is vital for preparedness and programming decisions.

39.3%
food deficient population
(Daily energy consumption below threshold of 2100 kcal)

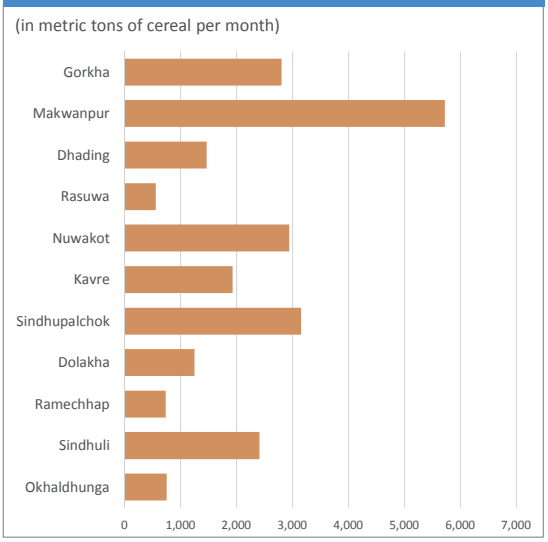
1.1 million
food deficient individuals

24,000 MT
food assistance needed
(Cereal per month)

Food deficient population



Food assistance needed



SCENARIOS

Three scenarios are developed based on findings from the Dichmundi Valley's earthquake of 1934 and initial estimates of the 2016 earthquake.

	Baseline	Low Case	Medium Case	High Case
Estimation				
No. of food deficient population	703,786	993,389	1,124,344	1,373,956
Proportion of food deficient population	25%	35%	39%	48%
Depth of hunger (in kg of cereal/person/month)	2.9	6.2	8.3	13.6
Total of food assistance needed (in metric tons of cereal/month)	8,439	17,634	23,725	38,907
Assumption				
Death (no. of people)	-	8,000	10,000	150,000
Livelihood lost (no. of people)	-	144,000	180,000	270,000
Lose of national GDP (% of total, compare to baseline)	-	15%	20%	25%
Lose of Income from crop production (% of total, compare to baseline)	-	20%	30%	50%
Increase in food price (% of total, compare to baseline)	-	20%	35%	50%
Increase in remittance (% of total, compare to baseline)	-	10%	20%	30%