Malnutrition Model

Currently, the malnutrition model takes the following input variables CHIRPS, Consumer Price Index(CPI), population, cereal production per capita, consumption expenditure,Normalized Difference Vegetation Index (NDVI),and month to predict the malnutrition rates for Global Acute Malnutrition (GAM) and Severe Acute Malnutrition (SAM). According to World Health Organization (WHO) guideline, GAM and SAM are defined as weight-for-height z-score below -2, and weight-for-height z-score below -3, respectively. By this definition, GAM includes all categories of malnutrition.

* Model ID: malnutrition\_model
* Model Maintainer: Jenny Yu, jenny.yu@kimetrica.com
* Model Category: Demographic, Economic

# Outputs

**malnutrition cases:**

* Description: pixel value corresponds to predicted number of malnutrition cases.
* Units: malnutrition cases

# Parameters

**rainfall\_scenario:**

* Description: The rainfall scenario based on historical monthly average of the precipitation values. High value is estimated by 2x mean, and low value is estimated by 0.25x mean.
* Type: ChoiceParameter
* Choices: high, mean, normal, low
* Default: normal

**country:**

* Description: Select the country of interest.
* Type: ChoiceParameter
* Choices: Ethiopia, South Sudan
* Default: Ethiopia

**year:**

* Description: Select the year of interest. June, 2011 - April, 2019 is available for South Sudan. Jan, 2007 - April 2019 is available for Ethiopia.
* Type: NumberParameter
* Min/Max: 2007, 2018
* Default: 2018

**month:**

* Description: Select the month of interest. June, 2011 - April, 2019 is available for South Sudan. Jan, 2007 - April 2019 is available for Ethiopia.
* Type: NumberParameter
* Min/Max: 1, 12
* Default: 1