

Step 11: Develop a mechanism that defines the intervention area

Once you receive information about the trigger being reached you should also know in which geographic regions the trigger is reached. You should then know how to prioritize the municipalities and where to intervene. Note that you and the national society will probably not have the capacity to act in all municipalities and support everyone, hence you will need to prioritise in a transparent mechanism. The full EAP criteria state:

There is a map or a clear methodology that will tell the national society where action should be taken based on a combination of vulnerability, exposure, and the forecast, when the EAP is activated based on the trigger model. (Section 4.4 in full EAP template)

Currently there are two main ways to define the intervention area:

Impact based forecasting

In case you have an impact-based forecasting system, it should tell you which locations might be most affected. For example, if your national society has the capacity to act in three municipalities you can select those three municipalities that are forecasted to be most affected.

Indicator-based risk assessment

If you don't have an impact-based forecast, you can use a regular weather forecast and overlay this with exposure and vulnerability information. This can serve as a proxy to predict where impacts will be highest. The simplest way to do this is to use an indicator-based risk assessment by using the vulnerability and exposure indicators that you have identified in your risk assessment (see [chapter 5: collect risk, early action and impact data](#)). This method is used in most EAPs so far.

There is a variety of methodologies to do indicator-based risk assessments. However, the most prominent one is probably the INFORM Risk Index methodology.



Example: Drought trigger development in Somalia

For the FbF project in Somalia a whole workflow was developed in QGIS for the trigger which is owned and run by the Somali Red Crescent Society.

For the development of the Somaliland-Somalia Drought Trigger mechanism various datasources were thoroughly analysed. Finally, the main parameters chosen for the trigger based on the historical impact assessment are the twelve month Standard Precipitation Index (SPI12) and the IPC acute food insecurity classification. The exact data used are the documented and forecasted SPI12 (source: ICPAC) and the forecasted IPC classification (8 month forecast, source: FEWSNET), that is used to calculate a population weighted index of food insecurity. The trigger thresholds for both components were optimised towards the most favourable proportion of hit rate and false alarm rate. The emerging thresholds were <-1 for the SPI12 and $\geq 0,7$ for the IPC based index. The triggering is done on district level and per district just one trigger initiation per year is possible.

This information of the threshold is then overlaid with an indicator-based risk assessment which identifies the most at risk districts.

QGIS Trigger Workflow for Somalia

There is no defined methodology to derive the intervention map. Hence, if you have another established methodology, please only make sure that you explain it well in the EAP document.