INTER-AGENCY STANDARD OPERATING PROCEDURES (SOPS) FOR EARLY ACTION TO EL NIÑO/LA NIÑA EPISODES

VERSION 1 – FOR FIELD TESTING

March 2018

IASC Reference Group on Risk, Early Warning and Preparedness

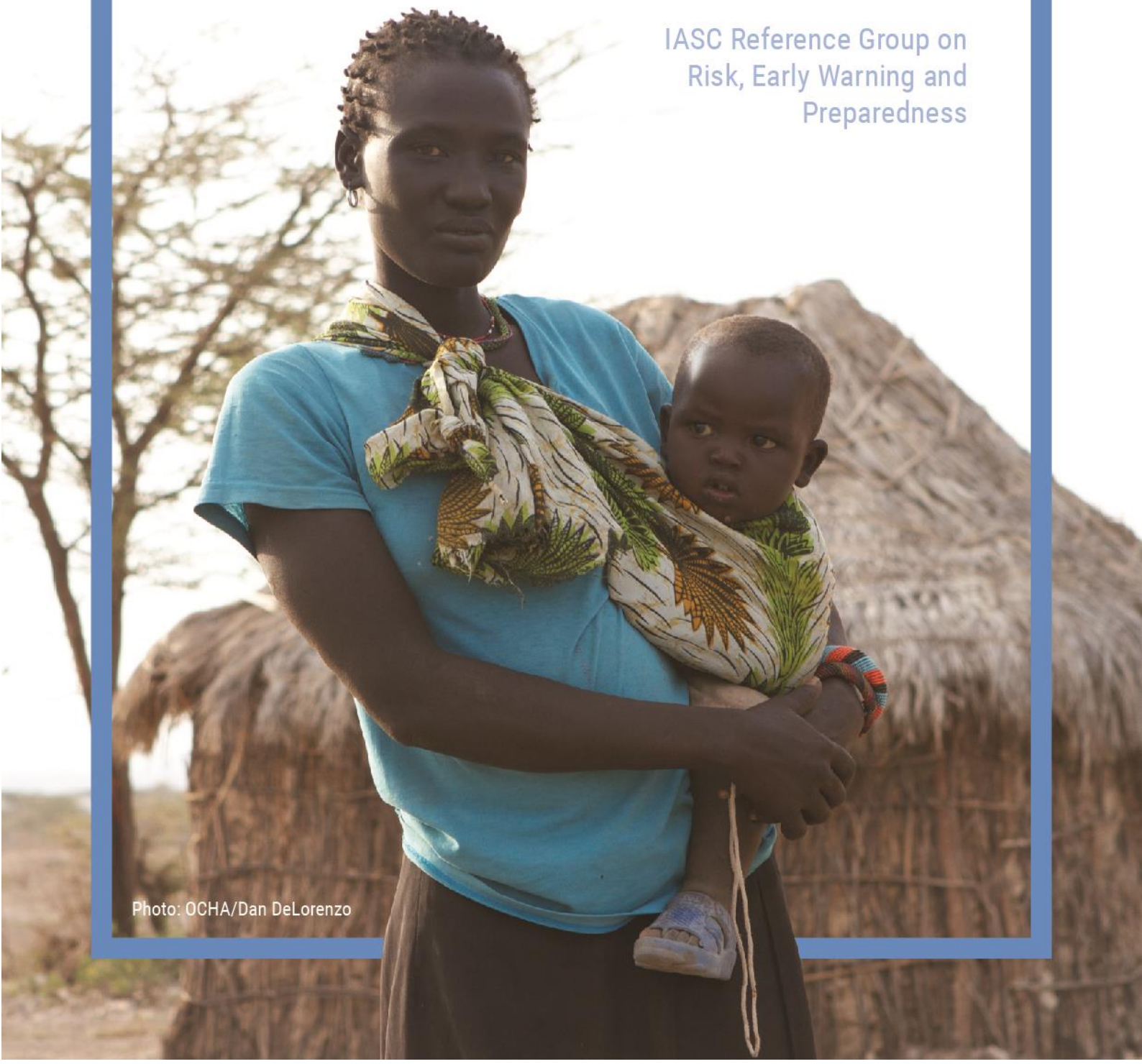


Photo: OCHA/Dan DeLorenzo

Table of Contents

Glossary of abbreviations

APA	Advanced Preparedness Actions
CADRI	Capacity for Disaster Reduction Initiative
CBPF	Country Based Pool Funds
CERF	United Nations Central Emergency Response Fund
CP	Contingency Plan
DRR	Disaster Risk Reduction
EDG	Emergency Directors Group
ENSO	El Niño-Southern Oscillation
ERP	Emergency Response Preparedness
EWS	Early Warning System
FAO	Food and Agriculture Organization of the United Nations
GCC	Global Cluster Coordinators
GPCLRF	Global Producing Centres for Long Range Forecasts
HC	Humanitarian Coordinator
HCT	Humanitarian Country Team
HQ	Headquarters
HRP	Humanitarian Response Plan
IASC	Inter-Agency Standing Committee
IFAD	International Fund for Agricultural Development
IFI	International Financial Institution
IFRC	International Federation of Red Cross and Red Crescent Societies
INFORM	Index for Risk Management
IRI	International Research Institute for Climate and Society, Columbia University
MPA	Minimum Preparedness Actions
NDMA	National Disaster Management Authority/Agency
NGO	Non-Governmental Organization
NMHS	National Meteorological and Hydrological Services
OCHA	United Nations Office for the Coordination of Humanitarian Affairs
RC	United Nations Resident Coordinator
RCC	WMO Regional Climate Centre
RCO	Resident Coordinators Office
RCOF	Regional Climate Outlook Forum
RG REWP	IASC Reference Group on Risk, Early Warning and Preparedness
SD/SP RG	UNDG Sustainable Development/Sustaining Peace Results Group
SG	United Nations Secretary-General
SOP	Standard Operating Procedures
UNCT	United Nations Country Team
UNDAF	United Nations Development Assistance Framework
UNDG	United Nations Development Group
UNDP	United Nations Development Programme
UNISDR	United Nations Office for Disaster Risk Reduction
WASH	Water, Sanitation and Hygiene
WFP	World Food Programme
WHO	World Health Organization
WMO	World Meteorological Organization

INTRODUCTION

Context: why develop SOPs for ENSO episodes?

The strong 2015/16 El Niño episode triggered extreme weather events, such as droughts, floods, extreme heat and cold spells, that severely affected over 60 million people worldwide, causing 23 countries to appeal for international humanitarian assistance totalling US$5 billion. Early warning systems flagged the impending El Niño episode in late 2014 and, in many cases, governments, local communities and international partners took action to prepare and respond earlier and more effectively than for past episodes. Despite these improvements and many examples of good practice, in many cases action geared up months after El Niño was confirmed in April/May 2015 and impacts were already being felt, highlighting that the collective response is still often 'too little too late'.

Generating an early response at the scale necessary to prevent predictable slow-onset weather and climate patterns from becoming major humanitarian emergencies remains a significant challenge. Early warning systems have steadily improved and continue to do so, but turning an early warning into early action has continued to be hampered by three key factors: **a lack of agreed triggers for action, a lack of clarity of roles and responsibilities to act upon the triggers, and insufficient funding provided on the basis of forecasts**. Part of the challenge is that there is currently no agreed inter-agency guide for responding to slow-onset crises. The following document aims to ensure that, in the future, the international system responds in a timely manner to early warning signs related to ENSO, escalating action as probability about approaching hazards increases.

El Niño-Southern Oscillation (ENSO) events – i.e. El Niño and La Niña – are natural phenomena that occur on average every two to seven years. They affect seasonal climate and associated weather patterns (notably rainfall and temperature) around the world in different ways. **They are known to bring about more *predictability* of expected weather patterns several months in advance, which can help inform appropriate early action.** Although the impacts on rainfall and temperature patterns throughout the world vary somewhat from one ENSO event to the next, the strongest shifts remain fairly consistent. Therefore, a lot can be done well in advance of an episode being confirmed based on information of average impacts and predictions.

ENSO-related extreme weather impacts <u>can</u> be mitigated to prevent them from becoming disasters. We know that, if early warning translates into early action, their consequences can be significantly reduced. By the time an El Niño or La Niña episode is confirmed, it can already be too late as the window of opportunity for effective action is often short. There is growing evidence that **early action and resilience-building interventions, however varied, prevent loss of life and suffering, protect livelihood and development gains and reduce forced population movements. They are also usually significantly more cost-effective than emergency response interventions.** Even in contexts where development efforts are stretched, with sufficient early warning there is an opportunity for these efforts to be prioritized, strengthened and refocused on people at most risk. Safety nets can be broadened and deepened; community capacities can be enhanced; investments can be made to protect household and community assets. **Many early actions can be described as 'no regrets': they have a net positive effect regardless of whether the threat materializes.**

A more collective approach that cuts across the humanitarian-development nexus is critical to support a more efficient response. In the case of slow-onset crises, effective collective early action across the humanitarian-development nexus and across all sectors (as per the diagram below) is required. Civil society and the private sector should also be part of these efforts.

Finally, early action requires earlier and more flexible support from donors based upon forecasts. There is a widespread agreement on the need to invest more in early action and resilience-building. Although there are various mechanisms that can be used to finance early action, these are still underutilized, including redirecting development funds towards mitigating risks and protecting development gains. In addition, there is no global mechanism to finance early action and many incremental changes still need to be put in place.

Objectives

The following Standard Operating Procedures (SOPs) are intended to help catalyse and guide earlier humanitarian and development action to future ENSO-related extreme weather events (including drought, flooding, cyclones and extreme heat/cold and related events such as disease outbreaks). The SOPs outline what actions need to be taken, by whom and by when, once there are warning signs of a possible or impending ENSO event, to mitigate or prevent its impacts. They outline development and humanitarian actions for the international system. While aimed in the first instance at responding to El Niño/La Niña forecasts, these SOPs may in future be reviewed/adapted as needed to apply to non-ENSO-related slow-onset extreme weather events for which early warning is available.

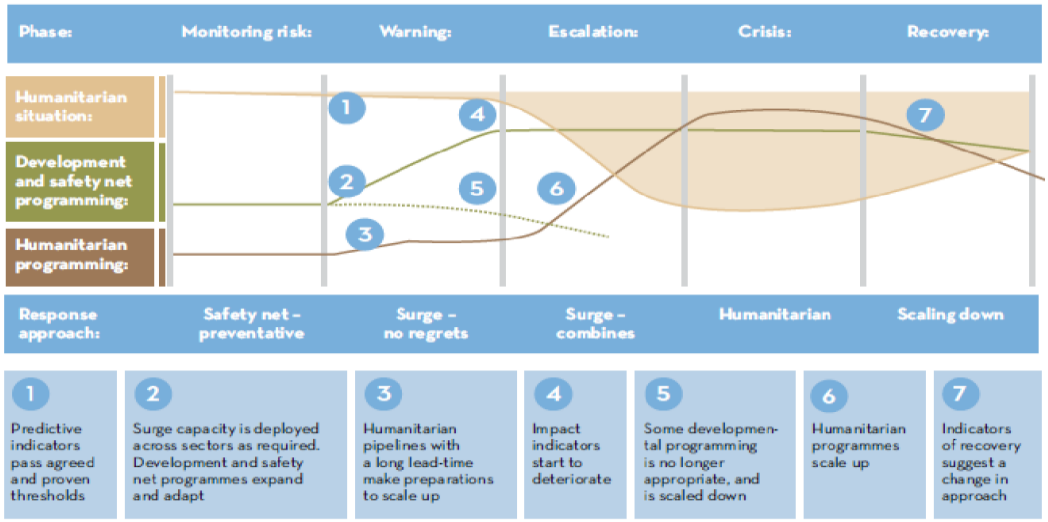
The SOPs aim to provide a structured framework for the initiation of early actions to mitigate the impacts of extreme weather caused by ENSO episodes through a focus on four key areas:

- Strengthened, on-time information and analysis on the foreseen impacts of ENSO episodes;
- Strengthened coordination that enables partners to implement early action in a timely way;
- Improved early action and preparedness planning at country level;
- More systematic and earlier leveraging of financing mechanisms.

The target audience for the ENSO SOPs is Inter-Agency Standing Committee (IASC) partners and relevant development actors at global, regional and national levels. Other key actors including affected countries, donors and private sector partners are not the primary target group of this document but are being consulted and invited to comment as relevant.

These SOPs focus on two main areas of action: early action and emergency response preparedness. *Early action* consists of activities that can be implemented *before the anticipated hazard* to mitigate or even prevent its impacts. This is relevant primarily for development partners but also humanitarian partners who can implement activities based on their comparative advantage. *Emergency response preparedness* refers to action undertaken to ensure a faster and more efficient response to emergencies and disasters. This is mainly relevant for humanitarian agencies, but is also relevant to development partners to ensure a more timely and effective early recovery response.

The SOPs build on lessons learned on how to ensure timely action and respond to slow-onset crises, and apply the global policy commitments initiated in Sendai and confirmed at the World Humanitarian Summit on anticipating crises, reducing disaster risks and building resilience. They draw from documents including the Situation and Response Analysis Framework (SRAF) developed by an NGO consortium following the 2011 Horn of Africa drought to improve responses to slow-onset food crises; as well as the Livestock Emergency Guidelines and Standards that were developed to improve the quality and timeliness of livelihoods-based interventions. The SOPs emphasize the importance of working jointly across agencies, sectors and the humanitarian-development nexus, and ensuring a coherent response. This document also incorporates lessons learned from the 2015/16 El Niño response and from its application to warning signs of a possible 2017 El Niño (which in the end did not materialize).



Source: IFRC "Early Warning Early Action: Mechanisms for rapid decision making". The diagram illustrates how humanitarian and development actors can respond to early warning information for sudden-onset events.

Links with broader efforts to build climate resilience

Although it has been agreed that the SOPs should focus on action to be taken once an ENSO warning is issued, many actions will need to be undertaken now - in an ongoing manner - to build resilience and mitigate the risks of future climate-related risks. A greater focus on risk-informed development programmes that build resilience of "those furthest behind" is critical. Governments have a key responsibility in this regard and should be supported by a diverse set of partnerships.

In December 2016, the Secretary-General's Special Envoys on El Niño and Climate, Mrs. Mary Robinson and Ambassador Macharia Kamau, submitted a 'Blueprint for Action'[1] to help countries most vulnerable to ENSO events climate-proof their national development efforts. The SOPs are referred to in the Blueprint under the section on 'turning early warning to early action'. The Blueprint has been recognized as a central element of the UN's approach to preparedness and resilience programming for ENSO and its roll-out is being managed under the UN System Strategic Approach on Climate Change Action's impact area on "Climate Resilience and Disaster Risk Reduction". Work is ongoing to support interested countries to implement the approach.

Origins and drafting process

At a global meeting on El Niño involving Member States, the UN and partners in March 2016, FAO, OCHA, WFP and IFAD committed to lead the development of "*a document outlining steps that we agree to take, within agreed timelines, to ensure collective action whenever there is an elevated risk of an event*. *The document will be developed in consultation with relevant actors including NGOs and donors*". This commitment was echoed by the Emergency Relief Coordinator at the high-level event on El Niño in Geneva in April 2016, and endorsed by the IASC Principals in December 2016. In response to this call, a wide range of humanitarian and development partners started to develop the SOPs under the auspices of the IASC Reference Group on Risk, Early Warning and Preparedness (RG REWP).

In parallel, the organizations involved in developing the SOPs have worked to ensure that gaps identified during the SOP process, including with regards to risk analysis and guidance on early action planning, are addressed as part of the IASC RG REWP's ongoing work. Organizations are also working with donors to ensure that financing for early action is strengthened.

[1] https://reliefweb.int/sites/reliefweb.int/files/resources/301215-Blueprint_Final.pdf

ABOUT ENSO AND ITS HISTORICAL PATTERNS

The El Niño-Southern Oscillation (ENSO) is generally separated into three states – El Niño, La Niña and Neutral - although there is no formal international agreement on the classification or thresholds related to ENSO states. El Niño episodes are associated with large-scale warming of surface water in the central and eastern equatorial Pacific Ocean and changes in the tropical atmospheric circulation (i.e. winds, rainfall). The opposite of El Niño in the ENSO cycle is La Niña, which refers to the large-scale cooling of the ocean surface temperatures in the same region in the equatorial Pacific, coupled with a reversal of the atmospheric conditions. In many locations, especially in the tropics, La Niña produces the opposite climate variations to El Niño. During the absence of El Niño/La Niña conditions (i.e. neutral state), atmospheric patterns are controlled more by other climate drivers. However, it is important to recognize that ENSO-neutral states do not mean that climate and weather extremes will not occur and no action is needed.

El Niño and La Niña events tend to develop between April and June and reach a peak between December to February. While some impacts are simultaneous, there can also be a delay of several months before impacts are felt on the weather in different parts of the world, and there is a considerable degree of uncertainty as to the exact magnitude and spatio-temporal patterns of effects that El Niño/La Niña events will have on weather in specific countries. While some impacts may depend in part on the strength and focus location of the ENSO event, they are not always directly proportional. In some regions, El Niño/La Niña impacts can also be amplified or dampened by other locally dominant oscillations (e.g. the Indian Ocean Dipole), which means it is critical to focus not only on the global ENSO signal but also on national and regional forecasts which take into account these other factors.

No two ENSO events and their impacts are alike. Although the shifts in rainfall and temperature patterns vary somewhat from one ENSO event to the next, the strongest shifts remain fairly consistent in the regions and seasons shown below and in the maps in Annex 3. However, each El Niño/La Niña is different, so not all impacts occur in all events, and impacts may not be confined to the regions indicated.

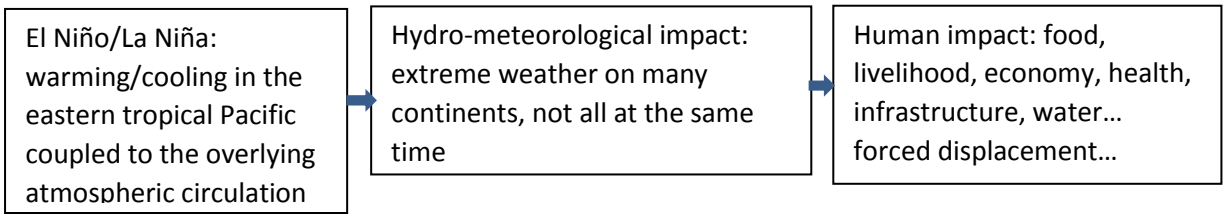
La Niña conditions often, but not always, follow El Niño conditions. Three quarters of El Niño events were followed by La Niña conditions between 1950 and 2015. The strongest El Niño events do not lead necessarily to the strongest La Niña.

Table 1: Historical impacts of El Niño and La Niña episodes (average time ranges)

	El Niño		La Niña	
	Jun-Aug	**Dec-Feb**	**Jun-Aug**	**Dec-Feb**
Wetter	Central Pacific, central Chile, western US	South America (Ecuador, northwestern Peru, southern Brazil, central Argentina, Uruguay), equatorial East Africa, northern Mexico/southern US	India, Malaysia, Indonesia, Central America, Sahel, southern Australia	Indonesia, Malaysia, Australia, northern South America, southern Africa
Drier	India, Indonesia, Malaysia, eastern Australia, Sahel, southern Africa, northern South America, Central America	Australia, Indonesia, the Philippines, northern South America, southern Africa	Central Pacific, Uruguay, eastern Argentina, central Chile	Central Pacific, Ecuador, East Africa, southern India
Warmer	West coast of South America, southern Brazil, Central America	South East Asia, southern Africa, Japan, southern Alaska and western/central	Papua New Guinea, eastern Indonesia	Southern US

		Canada, southeastern Brazil and southeastern Australia		
Colder	Southern Pacific, New Zealand	Gulf coast of US	West Africa, southeast Asia, western South America	West Africa, Japan, eastern Brazil, southern Alaska and western/central Canada

Source: DFID Historical Impact Analysis, commissioned through Evidence on Demand, Mar 2016



USING THE SOPs

The purpose of the SOPs is primarily to prompt and guide early action as opposed to providing a detailed series of mandatory and inflexible steps. The SOPs are intended to be generic enough to be relevant and easily adapted to ENSO events at different scales. They are not intended to be prescriptive but aim to give enough detail to be operationally relevant. Users are encouraged to tailor the suggested actions as needed to be appropriate for the country or regional context.

Structure

The SOPs have been divided into three tables to depict actions recommended at the global, regional and country level. Within each table, the SOPs are divided into three phases given that the type of action that is appropriate will differ depending on how likely an ENSO event is, with increasing investments possible as the likelihood of ENSO becomes stronger and its likely impacts become clearer. The phases, and the thresholds for moving from one phase to the next, are described in detail in the section below.

If the threshold for phase 2 is surpassed immediately, actions listed under phase 1 should be reviewed and implemented as relevant. If the threshold for a phase rapidly and/or before all the actions listed have been implemented, partners should review what actions from the previous phase may still be relevant and need to be implemented.

The actions in the SOPs generally relate to four main areas:

- analysis and planning;
- coordination;
- advocacy and communications; and
- information management.

Examples of sample early action interventions that country teams could consider implementing during the different phases are outlined by sector in Annex 1.

Scope of the SOPs and links with existing processes

The SOPs serve as a prompt for early action, referring to existing tools and processes where appropriate, and do not replace existing inter-agency processes and tools. For example, activation of IASC Emergency Response Preparedness (ERP) guidelines and related preparedness actions is linked to ENSO-specific indicators and triggers in the SOPs. Details on prioritization of ERP Minimum and Advanced Preparedness Actions are not provided here but can be sought directly from the guidelines. The Humanitarian Response Plan (HRP) and UN Development Assistance Framework (UNDAF) planning cycles are similarly referenced and reflected where relevant. The SOPs do not supersede or replace existing agreements and mechanisms for humanitarian response

The SOPs do not cover emergency response, which is already covered by other existing tools and processes – solely early action. Even in 'phase 3', once an El Niño/La Niña episode has been confirmed, the focus is on activities to be taken before the anticipated hazards and/or before humanitarian impacts start to be felt. Even once an El Niño/La Niña has been declared and is underway, there can be a delay of several months before impacts are felt on the weather in different parts of the world.

TRIGGERS FOR EARLY ACTION

Forecasting tools to be used for early warning

There are many ENSO and climate forecasts being produced by international, regional and national institutions including National Meteorological Services, Regional Climate Centres, private institutions and universities. It has been agreed that the following would be used for the purposes of the SOPs based on their consistency and reliability (subject to further review).

Global level

Many institutions use ENSO indicators that highlight conditions in only a certain area of the world. This document refers to two products that can be considered **global** indicators of ENSO development:

1) The widely used El Niño / La Niña Forecast that is produced by the International Research Institute for Climate and Society (IRI) of Columbia University on a monthly basis (in partnership with NOAA). The 'official probabilistic' forecast (not model-based probabilistic forecast) produced by IRI indicating the percentage probability of an El Niño event for a given year will be used as the primary source for initiating the global actions outlined in these SOPs.

2) The El Niño / La Niña Update that is produced by the World Meteorological Organization (WMO) in collaboration with IRI on a quasi-regular basis (approximately every three months) whenever an El Niño / La Niña event is developing or happening. The Update is a consensus product involving all the major global prediction centres around the world and renowned ENSO experts, including IRI.

N.B. The aforementioned forecast products only provide information on El Niño/La Niña status and possible evolution during the coming months/season. They are not forecasts of possible impacts.

Regional and national level

National Meteorological and Hydrological Services[2] (NMHSs) own and operate most of the infrastructure that is needed for providing the weather, climate, water and related environmental services for the protection of life and property, economic planning and development, and for the sustainable exploitation and management of natural resources. These can vary greatly in terms of forecasting capacity and quality, which should be considered.

Regional Climate Outlook Forums (RCOFs) routinely produce consensus-based real-time climate outlook products based on input from NMHSs, regional institutions, WMO Regional Climate Centres (RCCs), Global Producing Centres for Long Range Forecasts (GPCLRFs) and other climate prediction centres. In regions typically impacted by ENSO, the concerned RCOFs explicitly take into consideration the prevailing ENSO situation, outlooks as well as other pertinent climate drivers to produce the regional climate outlooks in probabilistic terms. WMO provides access to their recent products, sorted by region[3]. Although the sharpness and space-time detail of these outlooks are insufficient on their own for decision-making, they provide a useful source of information that can be complemented with information from national meteorological services. In addition, defining whether to activate early action and preparedness in a particular region will require the forecast information mentioned above to be combined with information on exposure and vulnerability, as explained below. RCOFs are

[2] https://www.wmo.int/pages/about/documents/WMOStatement_for_Directors_of_NMHSs_en.pdf
[3] https://public.wmo.int/en/our-mandate/climate/regional-climate-outlook-products

typically held once or twice a year ahead of the key season(s) for the region, but concerned RCCs[4] provide regular updates on an operational basis.

Thresholds that will trigger global and regional action

The table below outlines the thresholds that will prompt action at the global and regional levels, based on the global forecast products mentioned above and the likelihood or risk of an El Niño or La Niña occurring. There are three 'phases', based on the different thresholds being surpassed, with the idea being that the type of action that is appropriate will differ per phase depending on how likely an ENSO event is, with increasing investments possible as the likelihood of ENSO becomes stronger and its likely impacts become clearer. This staged approach is designed to reflect the level of confidence that climatologists and oceanographers have that an ENSO event may occur in the season ahead. For a phase to be reached, climatologists assess whether a set of atmospheric and oceanic criteria have been met, and that the current state of the climate system has reached that status level. Once an ENSO Outlook status level is reached, it remains valid until it is either increased to the next level or cancelled, or if an ENSO event has been declared, the event officially declared over.

Table 2: Thresholds for triggering ENSO-related action at the global and regional levels

Phase	Thresholds	Source
1	**El Niño/La Niña WATCH** - Greater than 55%[5] chance of an El Niño/La Niña developing, irrespective of the strength of the event	IRI official forecast and/or WMO ENSO Update
2	**El Niño/La Niña ALERT** - 75% or greater chance of an El Niño/La Niña developing	IRI official forecast and/or WMO ENSO Update
3	**EL NINO / LA NINA declared** - An El Niño / La Niña episode has been declared and is underway. While some impacts are simultaneous, there can be a delay of several months before impacts are felt on the weather in different parts of the world.	IRI official forecast and/or WMO ENSO Update

Once Phase 1 (> 55% chance of ENSO event) is reached at the global level, this will trigger a process to determine which countries are most at risk in order to trigger early action at the country level.

When the 55% threshold is passed, OCHA, FAO and WMO will convene a **Global ENSO Analysis Cell** (as a subset of the broader Global ENSO Group which is itself part of the IASC Reference Group on Risk, Early Warning and Preparedness (RG REWP)). The role of the Analysis Cell is to determine the countries at highest risk which should be prioritized for further analysis, support and early action planning – i.e. triggering Phase 1 in these countries. The cell should bring together a small number of technical experts drawn from the IASC RG REWP, bringing in additional technical experts from WMO and relevant academic bodies, as required.

To identify high-risk countries, the following is a non-exhaustive list of information that should be reviewed by the Global ENSO Analysis Cell:

[4] http://www.wmo.int/pages/prog/wcp/wcasp/rcc/rcc.php

[5] Given that ENSO has three states (El Niño, La Niña, Neutral), 55% is significantly above 'normal' (33%). A review of historical forecast data for ENSO events from 2004 to 2016 demonstrated that when a threshold of 55% was reached, an El Niño/La Niña event occurred nearly every time (which was not the case with a threshold of 50%), which is why it was decided that 55% was an appropriate threshold to ensure accuracy of the early warning.

1. **Seasonal forecasts** for relevant periods focusing mainly on countries subject to El Niño/La Niña effects and with anomalous rainfall and temperature patterns. The main source used for this is the IRI regional forecast but this can be further complemented by forecasts from other prediction centres, including GPCLRFs[6] as well as relevant RCOFs, RCCs and NMHSs.
2. **Agricultural seasonality** should be considered i.e. whether a cropping/growing season is ongoing during the analysis period (or year-round in some cases) and the potential impact of the projected weather on the agriculture seasons - to be able to exclude countries where a potential drought would not affect agricultural production significantly. Other seasonal factors should also be considered, such as seasonality of infectious diseases.
3. The Index for Risk Management[7] (INFORM) figures for **vulnerability** (including figures on displacement)**, exposure to conflict and lack of country coping capacity.**
4. **Other factors including the seasonality of outbreaks, mass gatherings and existing emergency situations** should be considered.

Table 3: Template of spreadsheet to complete as basis for identification of high-risk countries

A	B	C	D	E	F	G	H	I	J	K
Country	Historically, when ENSO shifts rainfall patterns (months)	Historical ENSO impacts on rainfall (dry/wet)	3-4 month seasonal forecast	Agriculture seasonality and potential impact	Likely peak food insecurity period	Vulnerability (0-10)	Exposure to conflict (0-10)	Lack of coping capacity (0-10)	Aggravating factors	Observations

High risk countries are those that, for the period of analysis, present a negative forecast aligning with ENSO trends that is seasonally significant, and where vulnerability is relatively high and coping capacity is relatively low.

Human judgment should be used when a country falls outside the determined parameters but is in a situation of particularly high vulnerability, e.g. countries severely impacted by a previous El Niño/La Niña and still recovering, or countries facing significant humanitarian concerns beyond El Niño/La Niña, including due to extremes caused by non-ENSO climate drivers. In situations where the cell is faced with conflicting forecasts or weak signals, these countries should generally be included out of an abundance of caution, and the factors leading to this decision noted in the analysis. The Global Analysis Cell should also take into account the degree of confidence in the global forecast, particularly with reference to the ENSO spring predictability barrier.

The analysis should be reviewed – and revised as needed – as the global ENSO signal evolves. The Global ENSO Analysis Cell should reconvene every time the global phase changes to review the analysis and make any necessary changes.

Triggering action at the country-level

While the output of the Analysis Cell will trigger Phase 1 for high-risk countries, the decision of country-level thresholds to trigger Phase 2 and 3 should be agreed in country by humanitarian and development partners, a process that should start during Phase 1 at the latest and should be led by the RC/HC. The choice of triggers should be based on key disaster indicators, which should in turn be

[6] http://www.wmo.int/pages/prog/wcp/wcasp/gpc/gpc.php
[7] http://www.inform-index.org/

based on the available information and early warning systems, and their quality/timeliness. In general, a limited number of indicators is recommended to keep the mechanism as light as possible.

Table 4: Triggering ENSO-related action at the country level

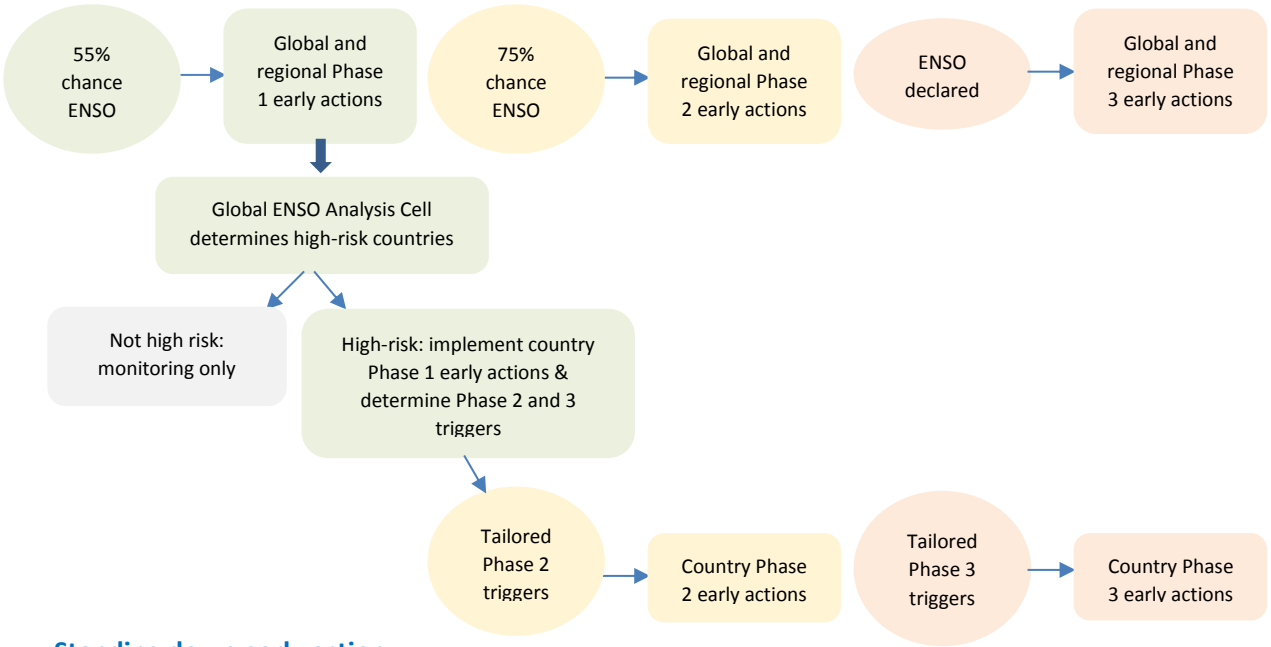
Phase	Triggers
1	Country identified as high-risk by Global ENSO Analysis Cell and notification sent to RC/HC
2	Country-specific thresholds agreed in country are reached/surpassed. These could include: regional and national 3 month forecasts (RCOF and NMHS) confirm above- or below-normal rainfall and temperature over all or part of the country
3	Country-specific thresholds agreed in country are reached/surpassed; global level proclamation of ENSO episode

Examples of common indicators that could be used are listed in Annex 4. Thresholds should be developed for Phase 2 and 3, as shown in the sample table below. Given that determining thresholds is a subjective exercise, they should be carefully monitored and adjusted as needed.

Table 5: Sample table of country-level triggers for Phases 2 and 3

Indicator	Thresholds	
	Phase 2	Phase 3

Diagram summarizing triggers for early action at global, regional and country levels



Standing down early action

If global projections for an ENSO event reduce to below 55% for two consecutive months[8], the Analysis Cell should be de-activated and stand down the global call for ENSO-related early action. It should be made clear, however, that this does not mean that there is no risk of extreme weather events as El Niño/La Niña conditions are only one driver of extreme weather, among many others.

[8] The criteria and threshold will be explored in more depth by WMO and IRI and based on their application, and revised as needed.

GLOBAL SOPs

No.	Actions/Tasks	Lead	Timeframe
Phase One (Trigger: 55% > of an El Niño/La Niña developing)			
Key objectives: **(a)** Initiate Global ENSO Analysis Cell to analyse ENSO forecasts, vulnerability/exposure and capacity to respond **(b)** Identify high-risk countries **(c)** Send communication to RC/HCs of high-risk countries to trigger country-level action			
1	Bilateral call to determine whether the degree of confidence in the forecasts indeed warrants that the Global ENSO Analysis Cell be activated. If yes, immediately inform OCHA/FAO.	WMO and IRI	Within 2 days of threshold passed
2	On basis of the above, prepare message for the co-chairs of the IASC Reference Group on Risk, Early Warning and Preparedness (IASC RG REWP) to send to their membership noting the threshold has been passed and the analysis of high-risk countries will be undertaken, inviting colleagues to inform OCHA and FAO of any change in their membership of the Global ENSO Analysis Cell.	OCHA/FAO	Within 1 day after action 1
3	Put excel spreadsheet of table 3 (pg. 12) on googledocs (or similar) to enable simultaneous editing of document. Send email with the googledocs link to relevant organizations (WMO, IRI, WFP, FAO, OCHA, WHO), asking WMO and IRI to fill out columns A-D within 2 days, and setting up a brief call (action # 5) to agree on countries that don't need to be considered (those which stand out obviously as having high capacity and low vulnerability).	OCHA/FAO	Within 1 day after action 1 / same day as action 2
4	Complete columns A-D of the global ENSO analysis spreadsheet. The countries added to the spreadsheet should be limited to those historically affected by El Niño/La Niña, as appropriate (based on Annex 3 maps).	WMO and IRI	Within 1 week of threshold passed
5	Brief call to agree on which countries do not need to be on the list based on their high capacity and low vulnerability - countries for which there is some hesitation re: high capacity and/or low vulnerability should be kept in the spreadsheet	OCHA/FAO to convene	Within 2 days of action 4
6	Complete initial analysis for remaining countries: WFP and FAO to complete columns E-I; OCHA, FAO, WFP, WHO to add relevant information to columns J-K.	WFP, FAO, OCHA, WHO	Within 2 days of action 5 (within 2 weeks of threshold)
7	Clean up draft spreadsheet, deleting countries which are a) out of season; b) for which seasonal forecasts are near-normal; or c) where no significant impacts are projected. Send email to convene a call of the Global ENSO Analysis Cell within several days (attaching to the email both versions of the spreadsheet).	OCHA/FAO	Within 1 day of action 6
8	First call of Global ENSO Analysis Cell[9] to validate the analysis, resolve outstanding issues and finalize the list of high-risk countries (agreeing on which countries to remove on the basis that they are not deemed to be high-risk).	OCHA/FAO to convene	Within 5 days of action 6 (within 3 weeks of threshold)
9	Incorporate the agreed changes in the spreadsheet and prepare a short paper summarizing the background, context and analytical approach. Combine the two into a single PDF document	OCHA/FAO	Within 5 days of action 7 (within 4 weeks of threshold)
10	If not already done, and if appropriate, include analysis in the bi-annual IASC Early Warning Early Action report, including high-risk countries If outside of the timeframe for the IASC Early Warning Early Action report, work with the IASC Early Warning Analysts Group to prepare an ad-hoc IASC Early Warning on the ENSO risk, for the IASC RG REWP co-chairs to share with the IASC RG REWP, UNDG RG SDSP co-chairs, EDG Secretariat, CERF Secretariat and donors. OCHA to send a Note to the ERC with copy to IASC/UNDG Principals and Note to the SG with the analysis	OCHA/FAO/WFP	Depending on timing of EWEAR Within 5 weeks of threshold passed
11	Prepare a message for the EDG Chair to send to the RC/HCs of the high-risk countries to inform of the risk and share the PDF of the analysis, encourage early action and offer support (including offering CADRI support). RC/HCs should be told that requests for support should be sent to ocha-ensosupport@un.org (requests received are to be shared with relevant people, depending on the nature of the request). The email should	OCHA/FAO, with comments from Global ENSO Analysis Cell	Email to be sent within 5 weeks of threshold passed

[9] The role of the Global ENSO Analysis Cell is to consider ENSO forecasts along with other relevant sources of information to determine the countries at highest risk which should be prioritized for further analysis, support and early action planning. The cell should bring together a small number of technical experts drawn from the IASC RG REWP, as well as WMO and IRI.

	be copied to Heads of RCOs and OCHA offices in high-risk countries, as well as Heads of the R-UNDG and Regional OCHA Offices in regions with high-risk countries.		
12	Forward IASC EWEAR or ad-hoc Early Warning to Heads of at-risk country and regional offices	All agencies / organizations	Within 6 weeks
13	If warranted, convene the Global ENSO Coordination Group to coordinate advocacy and resource mobilization. Work with the existing Inter-Agency Communications Groups to develop and share global inter-agency key messages. Message focus: early actions to mitigate the risks, build resilience and protect the most vulnerable are 'no regrets' (they have a positive effect regardless of whether the threat materializes). Ensure key messages are included in Talking Points, notes and briefings, wherever relevant	OCHA/FAO	Within 7 weeks
14	Work with regional offices to coordinate outreach to RCs in high-risk countries to provide advocacy as well as support/guidance to scale up DRR in high-risk regions and/or refocus on most vulnerable people	UNISDR/UNDP	Within 7 weeks
15	Coordinate with regional offices to determine regions where HQ-level support is required to conduct coordinated outreach to development/ humanitarian partners in high-risk countries and regions to provide support/guidance as needed on defining and implementing early action and Emergency Response Preparedness (ERP) Minimum Preparedness Actions (MPAs) adapted to ENSO risk analysis	IASC ERP Sub Group	Within 8 weeks
16	Share global analysis with relevant global business networks and private sector actors (Connecting Business Initiative), tailoring text as needed to cater to this audience	UNDP/OCHA	Within 8 weeks
17	Request opportunity to meet with UNDG RG SDSP to discuss importance of reprioritising or redirecting development funding (e.g. crisis/program modifiers) in high-risk countries, including identifying potential development resources for reprogramming and mapping of existing strategies to engage new actors such as IFIs, private foundations, international business and new donor governments	OCHA/FAO	Within 8 weeks
Phase Two (Trigger: 75% > of an El Niño/La Niña developing)			
Key objectives: **(a)** Update global analysis of high-risk countries as needed **(b)** If warranted, convene broader Global ENSO Group to coordinate advocacy and resource mobilization **(c)** If warranted, start producing public information products focused on forecasts and likely impacts			
18	Update analysis of high-risk countries based on new forecasts, including based on available RCC/RCOF products	Global ENSO Analysis Cell	Within 1 week of threshold passed
19	Prepare email for the co-chairs of IASC RG REWP and UNDG RG SDSP to invite organizations to inform OCHA if they are interested to be part of the Global ENSO Coordination Group[10], attaching the updated analysis.	OCHA/FAO	Within 1 week of threshold passed
20	Send email to relevant RC/HCs with updated forecasts and analysis	OCHA/FAO, on behalf of Global ENSO Analysis Cell	Within 1.5 weeks of threshold passed
21	If significant impacts are expected across more than one region (this caveat applies to steps 21 through 27), start to convene regular meeting of Global ENSO Coordination Group to coordinate advocacy and resource mobilization for early action and preparedness	OCHA/FAO	Within 2 weeks of threshold passed
22	Set up global ENSO information hub (on Relief Web)	OCHA	Within 2 weeks
23	Develop joint advocacy and resource mobilization strategy, including events and outreach to media and private sector, and ideas on how to get donors to reprioritise or redirect development funding and mobilise funds for early action and preparedness	Global ENSO Group	Within 3 weeks
24	Update and share global inter-agency key messages. Message focus: prepare!	Global ENSO Group	Within 3 weeks
25	Start producing regular public information products – including the Global ENSO Overview – focused on forecasts, likely impacts and required early action/preparedness, including based on information from the regions and countries	OCHA/Global ENSO Group	First one within 3 weeks

[10] The Global ENSO Group is responsible for global coordination of information management, advocacy and resource mobilization. The group should bring together relevant organizations from the IASC RG REWP and UNDG SD/SP RG. Consider inclusion of Global Cluster Coordinators (GCCs); International Financial Institutions (IFIs); and key donor and private sector representatives.

26	Compile (in a simple table) early action and preparedness funding requirements based on costed preparedness/early action plans (per country-level action # 27) to be used for resource mobilization efforts – subsequently updating this information as needed	OCHA	Within 3 weeks
27	Work with regional groups to agree where HQ support is required to support priority countries to define and implement ERP Advanced Preparedness Actions (APAs)	Inter-agency ERP group; GCCs	Within 4 weeks of threshold
Phase Three (Trigger: El Niño/La Niña declared)			
Key objectives: **(a)** Scale up global advocacy and resource mobilisation related to early action and preparedness			
28	Update analysis of high-risk countries based on new forecasts	Global ENSO Analysis Cell	Within 1 week of threshold passed
29	Send email to relevant RC/HCs with updated forecasts and analysis	OCHA/FAO, on behalf of Global ENSO Analysis Cell	Within 1.5 weeks of threshold passed
30	Review/revise joint advocacy and resource mobilization strategy as needed. Work with Inter-agency Communications Group to update global inter-agency key messages and ensure they are shared with international media	Global ENSO Coordination Group	Within 2 weeks of threshold passed
31	Convene regular meeting of Global ENSO Coordination Group to coordinate global advocacy, resource mobilization and response, and exchange info	OCHA	First one within 2 weeks
32	Continue producing regular ENSO Global Overview product, tailoring it as needed to be more focused on the response as impacts and needs start to be felt, and including a table of funding requirements	OCHA	First one within 3 weeks
33	Hold meeting/call of the EDG to agree on required action and support from HQ	EDG Chair	Within 3 weeks
34	Consider hosting a high-level pledging event for early action	OCHA/ERC and UNDG Chair	Within 4 weeks

Regional SOPs for regions with several high-risk countries

The below SOPs serve as a guide for regions with several high-risk countries as identified by the Global ENSO Analysis Cell. The Chair of the Regional UNDG and Head of OCHA Regional Office will be copied in emails sent to RC/HCs of high-risk countries. Regional teams are invited to tailor these for their regions based on what may already be in place – including who is responsible for what – reinforcing existing efforts and mechanisms where possible.

No	Actions/Tasks	Lead	Timeframe
Phase One (Trigger: 55% > of an El Niño/La Niña developing)			
Key objectives: **(a)** Establish Regional ENSO group if one doesn't already exist **(b)** Produce infographic showing potential impacts and existing capacity and level of preparedness **(c)** If RCOFs are issued in between global phase changes, review and update the global ENSO analysis as needed **(d)** Support and advise countries as needed on the scaling up or reprioritizing/redirecting of DRR activities to target the most vulnerable areas/people			
1	If one doesn't already exist, establish a Regional ENSO Group[11] bringing together relevant humanitarian and development partners. Clarify the role and relation to Regional Intergovernmental Organizations	Regional IASC/UNDG group(s)	Within 2 weeks of threshold passed
2	Share global ENSO analysis received from the EDG Chair	R-UNDG Chair / OCHA Regional Office	As soon as email received (within 5.5 weeks of threshold)
3	Develop snapshot/infographic summarizing the risks based on regional specific impact patterns of past ENSO events and any available forecasts, potential forward-looking impacts, existing capacity and level of preparedness. Ensure this information gets to the right people at the right time, including donors	OCHA/UNDP, with inputs from all relevant partners	Within 6 weeks

[11] The purpose of the Regional ENSO Group should be to: consolidate regional analysis; develop regional key messages; support planning for regional and country level events; and discuss how to support needs of countries

4	Convene Regional ENSO Group (per action 1) to discuss risks and support that may need to be provided to high-risk country offices on early action, based on needs identified at country level. Requests for support from at-risk countries that would benefit from HQ support should be sent to ocha-ensosupport@un.org with the email then redirected to the appropriate focal point(s)	UNDP/OCHA	Within 6 weeks
5	Identify needs/opportunities to strengthen the capacity of regional bodies	Regional ENSO group	Within 6 weeks
6	Coordinate outreach to RCs in high-risk countries to provide advocacy and support/ guidance to scale up DRR in high-risk regions and/or refocus on most vulnerable people	UNISDR/UNDP	Within 7 weeks
7	Discuss with donors the feasibility of reprioritising or redirecting development funding, including identifying potential resources for reprogramming, and engage actors such as IFIs, private foundations, international business and new donor governments	Regional ENSO Group	Within 8 weeks
8	If RCOFs are issued in between global phase changes, review and update the global ENSO analysis as needed – and share with Global ENSO Analysis Cell	Regional ENSO Group	As RCOFs are issued
Phase Two (Trigger: 75% > of an El Niño/La Niña developing)			
Key objectives: **(a)** Support high-risk countries to organize early action planning workshops **(b)** Support and advise countries as needed on the scaling up of early action and minimum preparedness			
9	Review any new RCOFs and update analysis and mapping of potential hazards / impacts. Share updated analysis with relevant countries – and with Global ENSO Analysis Cell	Regional ENSO Group	Within 2 weeks and as RCOFs issued
10	Convene Regional ENSO Group on a more regular basis	UNDP/OCHA	First meeting within 2 weeks
11	Develop regional analysis / bulletin on possible ENSO event, likely impacts and early actions/preparedness measures required/being undertaken, and ensure the information gets to the right people at the right time, including donors	OCHA with inputs from partners	Within 3 weeks of threshold passed
12	Step up support to priority countries in early action and preparedness, including supporting organization of early action planning workshops, as needed	Regional ENSO group	Within 5 weeks of threshold passed
Phase Three (Trigger: El Niño / La Niña declared)			
Key objectives: **(a)** Support and advise countries as needed on the scaling up of early action and advanced preparedness			
13	Review any new RCOFs and update analysis and mapping of potential hazards / impacts in combination with vulnerability, conflict and exposure information – and share with Global ENSO Analysis Cell	Regional ENSO group	Within 2 weeks and as RCOFS are available
14	Convene regular inter-agency ENSO meetings to coordinate regional response, communication/advocacy and resource mobilization effort and exchange information, and support planning for global and regional events on ENSO.	OCHA/UNDP	First meeting within 2 weeks
15	Step up support to priority countries in coordination, information management and advocacy	Cluster Lead Agencies and OCHA	Within 3 weeks
16	Continue and strengthen engagement with regional government bodies in terms of awareness raising, response options and resource mobilization	Regional ENSO group	Within 4 weeks
17	Link up with regional index-based insurance mechanisms (African Risk Capacity, Caribbean Catastrophe Risk Insurance Facility and Pacific Catastrophe Risk Insurance Pilot)	Regional ENSO Group	Within 5 weeks

SOPs for high-risk countries

ENSO episodes are not the only factors that drive global climate patterns and related risk of extreme weather events, whose impacts on communities depend heavily on the national and local context. Therefore, the steps to be taken at country level in countries identified as high-risk will depend not only on the global ENSO phases but also – and more importantly – on a deeper analysis of regional and national weather forecasts, existing conflict, and risks and vulnerabilities (including the existence of internal displacement or refugees) in the national context.

Once the Global ENSO Analysis Cell has determined the list of high-risk countries as outlined earlier, this should initiate a process of dialogue in those countries aimed at generating a response that fits the national context and builds on initiatives already in existence at the national or local levels. To this end, a joint communication will be sent to relevant Resident Coordinators encouraging them to:

- Contact relevant national authorities to validate the information in the global/regional analysis against national or sub-national forecasts. More precise forecast information from national meteorological sources can then be brought together (as part of existing operational procedures in countries where they are available) with information on vulnerable groups, sectors and geographic locations to produce a more detailed analysis of risks and potential impacts, and the priority areas and population groups to be targeted for risk mitigation, resilience-building and protection measures. This information should be shared with the relevant agencies, ministries and vulnerable groups to help update or initiate plans to tackle the phenomenon.

- Work with the host government to bring together relevant stakeholders, including civil society, the private sector and financing partners, including the World Bank, to agree on ENSO indicators and triggers to monitor, and to agree on what actions need to be taken immediately (e.g. actions to be scaled up or repurposed/reprioritized) to reduce the risks and mitigate their impact, reduce vulnerabilities and build the resilience of the most vulnerable. Bring together development and humanitarian actors to undertake early action and preparedness planning, building on existing disaster preparedness plans and related national and local disaster risk reduction strategies (where they are available), in consultation with national and sub-national authorities, with the objective to mitigate or even prevent the anticipated disaster impacts.

- Engage with national authorities and donors to explore financing strategies for early actions (See Annex 2).

No.	Actions/Tasks	Lead	Timeframe
Phase One (Trigger: Country identified as high-risk country by Global ENSO Analysis Cell)			
Key objectives: **(a)** Establish multi-stakeholder coordination platform if one doesn't already exist **(b)** Take stock of existing vulnerability and capacity information and identify gaps **(c)** Scale up or reprioritize/redirect DRR activities to target the most vulnerable areas/people			
1	Review national governance mechanisms for disaster management to make sure that they are fit for purpose in terms of analysis, early action and preparedness to ENSO. Use and strengthen existing national coordination mechanisms (e.g. NDMA) to coordinate action to ENSO, wherever possible If one doesn't already exist, encourage the creation of a high-level multi-stakeholder platform led by government, which could bring together relevant development and humanitarian partners and other relevant partners such as the private sector. If not appropriate, through the HCT/UNCT, identify the appropriate multi-stakeholder coordination mechanism and ensure appropriate linkages with government counterparts. Ensure government coordination set-up takes into consideration all relevant stakeholders (including NGOs, networks, private sector). Discuss ways to ensure community-level involvement	RC/HC, with support from RCO and OCHA[12]	ASAP
2	Contact national meteorological office to obtain national forecasts	RCO	Within 1 week
3	Work with the government, where relevant, to convene the coordination group to coordinate the implementation of phase 1 early actions (below) – determine regularity of meetings	RCO/OCHA	Within 2 weeks

[12] **All references to OCHA in this table are dependent on the presence of OCHA in the country.**

4	Analyse country specific impact patterns and lessons learned of past ENSO events as well as any available forecasts (which regions in a country have or are likely to be affected, in which way (including forced or pre-emptive displacement patterns), who are the most vulnerable populations and sectors, how were different sectors affected, etc.). Ensure inter-sectoral approach. Develop country-specific timelines (and sector-specific, where necessary) of the evolution of the anticipated risks / effects along with turning points for actions. Determine any gaps in vulnerability data (that are then to be addressed in Phase 2)	RCO and OCHA, and sector / cluster leads	Within 2 weeks
5	Work with the government to bring the above information together into a consolidated situation and risk analysis and ensure that key information is sent as an 'early warning' to relevant humanitarian and development partners, government ministries, the private sector, communities and other relevant stakeholders, with early action options	RC/HC supported by RCO/OCHA, and sector/cluster leads	Within 2 weeks
6	Based on a review of ongoing DRR, resilience-building and social protection programmes, identify which ones need to be reprioritized/repurposed or scaled up (e.g. to target areas or vulnerable people likely to be most affected) and where there would be a need for new programmes to address gaps. Determine any needs/opportunities for strengthening government capacity in DRR Regarding social protection, clarify the nature of what exists (including whether it is scalable and if so how Work with the government to engage country-level business networks such as the Connecting Business Initiative, Global Compact networks and Chamber of Commerce (where they exist) to exchange information on capacities for disaster risk reduction (DRR) and mitigation, business readiness and response capacities	RCO/OCHA, and sector/cluster leads	Within 4 weeks
7	Engage with the government to review funding available in the event the situation deteriorates, and discuss the strengthening of reserve funds and dedicated budget lines for risk management. Also discuss the appropriate moment for activation of national reserve funds for early action, if applicable, as well as reprioritization of development funds	RC/HC with support of the World Bank	Within 5 weeks
8	Discuss and advocate with donors to reprioritize or redirect development funding to mitigate the risks or build the resilience of the most vulnerable	RC/HC	Within 5 weeks
9	Work with the government to assess market and financial sector conditions including: a) potential cash-based interventions in different sectors b) transport systems and c) logistical arrangements. If not yet done, conduct a cash feasibility study and, based on this study, meet relevant development partners to ensure understanding of and coherence with existing social safety net programmes	Cash working group lead (or OCHA where there is none), with sector/cluster leads	Within 8 weeks
10	Determine the need to update the UNDAF Results Groups' joint work plans and/or development programmes to take into consideration the risks and ensure plans are best tailored to build the resilience of the most vulnerable and address the above-identified gaps	RCO	Within 8 weeks
11	Identify overall available resources and financing gaps. Engage in ex-ante financial planning measures, including identifying potential resources for reprogramming and mapping of existing and new actors such as international financial institutions, private foundations, international business and new donor governments. Also identify what financial vehicle could capture the funding. Determine if the current funding mechanisms in the country are adequate to channel potential funds or if there needs to be an additional pooled fund	HCT/UNCT in consultation with IFIs, private foundations and other actors	Within 8 weeks
12	Support ministries and national sector coordination mechanisms to: review sector-specific disaster risk management capacities; raise sector awareness of the risks to relevant systems; and develop, if necessary, national sector-specific SOPs or plan for implementation of ENSO early action and preparedness measures (including supporting mobility as a life-saving strategy (e.g. relocation), while also reducing the duration and impact of disaster-induced displacement). Ensure inter-sectoral approach	Sector/cluster leads	Within 8 weeks
13	Discuss with the government desired support (e.g. capacity building; CADRI mission) and risk financing tools, and how they are working with at-risk communities for DRR/DRM	RC/HC	Within 8 weeks

14	Consider the status of national early warning systems and opportunities to help strengthen them. Assess Early Warning System (EWS) capacities, including: (a) community engagement in EWS and (b) information/communication channels. If need be, support the development of a multi-hazard early warning early action trigger mechanism (for emergency response)	UNCT/HCT	Within 8 weeks
15	Discuss with the government the thresholds for phase 2 and 3	RC/HC supported by RCO/OCHA	Within 8 weeks
16	Coordinate the updating – or implementation – of priority ERP Minimum Preparedness Actions (MPAs). Ensure consultation with and engagement of at-risk communities. Ensure inter-sectoral approach	RCO/OCHA and sector/cluster leads	Within 8 weeks
17	Identify the organizations/bodies involved in early warning/early action messaging to ensure forecast information is sent as needed to relevant government ministries, the private sector, communities, humanitarian and development partners and other relevant stakeholders	RCO	Within 8 weeks
Phase Two (Trigger: Regional and national 3 month forecasts (RCOF and NMHS) confirm above- or below-normal rainfall and temperature over all or part of the country; Other country-specific thresholds agreed in country surpassed)			
Key objectives: **(a)** Conduct joint assessments of vulnerable areas **(b)** Initiate early action planning **(c)** Implement early action and minimum preparedness actions			
18	Convene the agreed coordination mechanism to coordinate the implementation of relevant phase 2 actions (hereafter referred to as ENSO coordination group for ease of reference)	RCO/OCHA	Within 2 weeks
19	If one doesn't already exist, determine the need for a cash coordination mechanism and appropriate lead	RCO/OCHA	Within 2 weeks
20	If these don't exist, coordinate with national authorities (wherever possible) to establish effective sectoral coordination mechanisms	Sector/cluster leads	Within 2-3 weeks
21	Support the government to conduct multi-sector and – if appropriate – sector-specific risk and vulnerability assessments taking into consideration protection issues, gender and vulnerable groups. Sectors should collaborate to ensure consistency of methodological approach to enable inter-sectoral consolidation of analysis and cost-efficiency	RCO to facilitate with UNCT and sector/cluster leads	Within 2-3 weeks
22	Based on revised vulnerability assessments, review national seasonal forecasts from highly vulnerable areas and assess potential impacts, including sector-specific impacts	ENSO coordination group	As available
23	If need be, support national forecasting and disaster risk management agencies to design impact-based forecast scenarios for the most exposed areas in the country	WMO, WFP, FAO, IRI, WHO	Within 2-3 weeks
24	Update or fine-tune assessment of market and financial sector conditions in the potentially affected areas of the country for the potential scale-up and/or use of social safety nets and other multi-sector cash and market based transfer programmes; incorporate options for scaling up in early action and preparedness plan (below)	RCO/OCHA coordinating with partners in the country	Within 2-3 weeks
25	Determine what is in place or needed, in terms of infrastructure and materials, to respond to large-scale displacement if such scenarios are likely. Determine the best approach to respond to large-scale displacement (including potential cross-border movements) requiring collective facilities or large schemes of service provision in coordination with other active sector and contingency plans.	IOM/OCHA with other sector/cluster leads	Within 2-3 weeks
26	Coordinate the implementation of ERP APAs that are agreed to be a priority. Ensure an inter-sectoral approach	RCO/OCHA and sector/cluster leads	Within 2-3 weeks
27	Convene an early action and preparedness workshop to update, or produce, an Early Action and Preparedness Plan (see below)	OCHA/RCO	Within 2-3 weeks
28	Consult with the government and relevant ministries to update (or elaborate, if one doesn't already exist) the Early Action and Preparedness Plan. The plan should be concise, costed and operational, with strategic programmatic objectives which are harmonized with and complement on-going humanitarian, DRR and resilience building initiatives. Share Plan with key stakeholders in country and at regional and global levels, including private sector. Discuss how to ensure community-level involvement and accountability to affected people. Ensure an inter-sectoral approach	OCHA/RCO and sector / cluster leads	Within 1 week after workshop
29	As part of the early action and preparedness planning process, develop a coordinated emergency supply pre-positioning strategy. Review needs and pipeline status of supplies likely to be required and status of supply chain management to deliver essential actions	Logistics Cluster or WFP with input from sector/ cluster leads	Within 1 week after workshop

30	Determine how to track funding to the early action and preparedness plan	RCO/OCHA	Within 1 week after workshop
31	Identify the organizations/bodies involved in early warning/early action messaging to ensure forecast information is sent as needed to relevant government ministries, the private sector, communities, humanitarian and development partners and other relevant stakeholders	RCO	ASAP
32	Activate forecast-based budget lines, when applicable. Request new funds for early action and preparedness	All organizations	Within 4 weeks of threshold
Phase Three (Trigger: Global level proclamation of ENSO episode; Other country-specific thresholds agreed in country surpassed)			
Key objectives: **(a)** Implement early action and advanced preparedness actions			
33	Work with national and regional forecasting and disaster risk management agencies to review impact-based forecast scenarios for the most exposed pre-identified areas in the country	WFP, FAO	Within 2-4 weeks of threshold
34	Liaise with national institutions on gaps in monthly and seasonal forecast products	RCO	Within 2-4 weeks
35	Work with the government to develop communication messages and materials to inform the public of the impact of ENSO on key sectors. Include ENSO in national disaster awareness programmes and campaigns (e.g. cyclone, flood, drought)	RCO/OCHA, sector/cluster leads	Within 2-3 weeks
36	Convene the agreed coordination forum responsible to trigger and coordinate the implementation of phase 3 actions	OCHA/RCO	Within 3 weeks
37	Track pre-emptive population movements of households or part of households	IOM/UNHCR	Within 3 weeks
38	Implement Early Action Plan and monitor impacts. Ensure an inter-sectoral approach	Relevant partners	
39	Produce information products on projected risks and humanitarian impacts (e.g. Bulletin, Snapshot), along with tailored products for private sector and at-risk communities	OCHA with relevant partners	Within 3 weeks
40	Determine at what point there might be a need for a Flash Appeal /HRP or alternative coordinated planning framework	HCT	Within 3 weeks
41	Activate country-based pooled funds (where funds already exist)	RC/HC	Within 4 weeks
42	Request additional funds for early action, as needed	HCT	Within 4 weeks

ANNEX 1: Examples of early action programmes

The below tables outline examples of programmes that may be relevant to help mitigate the risks and build resilience of the most vulnerable people; the lists are not prescriptive nor exhaustive. Each country will need to tailor action to the specific country needs based on sound in-country analysis, including government capacity. The early actions triggered by the different phases should be selected in terms of the lead times necessary for their implementation.

Food Security and Agriculture

Trigger	Examples of programmes to consider implementing
PHASE 1	Consider traditional methods (country specific) of famers responding to ENSO related events and evaluate if these methods could be up-scaled or improved with technical expertise. If **agriculture** constitutes an important livelihood in the areas potentially affected, consider implementing the following early actions: - Conduct a seed security assessment, giving due attention to the function and scope of local markets for providing farmers with diverse and adapted crops and varieties. - Assess market conditions for seeds/fertilizers - Establish community seed stores - Establish agriculture calendars to forecast crop production - Diversify outlets - Access mechanisms and partners for demand-based seed supply which promotes innovations (for example small seed packets to promote new varieties, or working through diverse outlets to market seed) - Build up links with market-oriented channels that farmers mainly use in seed acquisition - Assess strategic food reserves and required restrictions - Conduct a stock-take on seed stores and ensure seeds are procured and readily available to correspond with the anticipated ENSO influenced conditions If **livestock** constitutes an important livelihood in the areas potentially affected, consider implementing the following: - Assess livestock value chain for potential intervention options such as support to livestock markets and commercialisation - Reinforce animal health surveillance awareness campaigns and collaborate with the health sector regarding zoonotic diseases If **fisheries and aquaculture** constitutes an important livelihood in the areas potentially affected, consider implementing the following early actions: - Scope likely impacts of past ENSO events on fisheries and aquaculture along the value chain, as well as secondary impacts related to water, feed supply and safety for fishers, migration, etc. - Enhance preparedness and risk management/prevention including through stocking excess of harvest, restoring and/or maintaining coastal habitats (mangroves, seagrasses and reefs) - Produce (advisory) communication material on potential damage and adaptations in fisheries and aquaculture. If **forestry** constitutes an important livelihood in the areas potentially affected, consider implementing the following: - Develop forest management plans/strategies that address multiple benefits from forests, including livelihoods, ecosystem services and DRR - Assess suitability of species for reforestation and afforestation proposes - Assess role of forests in regulating, enhancing and maintaining water supply, and incorporate findings into DRR, forest, watershed, etc. plans - Assess the risk of forest fires and forest health diseases and propose management plans to deal with it.
PHASE 2	Advocate to increase and expand social protection mechanism in affected areas If **agriculture** constitutes an important livelihood in the areas potentially affected, and based on the initial impact assessment, consider implementing the following early actions: - Provision and distribution of drought of flood tolerant seeds or crops - Promote water harvesting or water efficiency techniques - Upgrading/maintaining irrigation systems - Promote mulching in drought like-conditions

	- Ensure seed and grain stores are raised or secured in waterproof drums - Assess market conditions for seeds and other inputs in the formal sector - Conduct an inventory of project-supported seed multiplication groups - Prioritise support to income-generation and savings - Evaluate the impact and threat of crop diseases and develop management plans if there is a risk of occurring If **livestock** constitutes an important livelihood in the areas potentially affected, and based on the initial impact assessment, consider implementing the following early actions: - For pastoral societies: assess needs and options for external support to indigenous mobility and relocation - Commercial destocking (e.g. transport subsidies to livestock markets) - Veterinary support (vaccinations and treatment) - Support to animal health system (e.g. support to public sector, training of animal health workers) - Enhance feed storage and conservation - Rehabilitation of water points through cash-for-work where appropriate - Veterinary support: monitoring for diseases and ensure adequate stock of vaccines and treatments If **fisheries and aquaculture** constitutes an important livelihood in the areas potentially affected, and based on the initial impact assessment, consider implementing the following early actions: - Assess the fishery and aquaculture value chain for potential intervention options such as early harvesting, storage, cold chain/drying/etc., cold chain and transport subsidies. - Support aquatic animal health system incl. capacity building in monitoring, surveillance and communication of options - Advise on management regimes that address water stress (extremely high or low temperature) to mitigate poor performance and water availability/quality in aquaculture. - Advise on management measures to adapt to changes in the distribution and productivity of fisheries including adjusting fishing effort, investing in vessels and gear that can pursue the resource in its new habitat, facilitating collaborative management between countries, etc. If **forestry** constitutes an important livelihood in the areas potentially affected, and based on the initial impact assessment, consider implementing the following early actions: - Reduce unsustainable forest exploitation as a distress livelihood option - Promote indigenous species and appropriate management for multiple benefits - Assess the demand and supply of wood fuel for energy proposes. - Assess if wildlife has been affected and propose options of management.
PHASE 3	If **agriculture** constitutes an important livelihood in the areas potentially affected, consider implementing the following: - Construction of bunds, distribution of tools/sandbags to protect crop fields and roads to markets - Provision of seed protection bags – e.g. triple-layer bags for hermetic seed storage - Provision of seeds from a range of crop and varieties, which are proven to be adapted and meet farmers' preferences, via: direct distribution, vouchers/seed fairs, or cash - Provision of fertilizers, tools, irrigation equipment - Training in resilience-enhancing areas, such as nutrition, natural resource management, or income generation (e.g. with vegetable seed production) - In areas with significant donor-support seed development programs, repurpose part of the development to meet short-term acute needs that would erode development gains if not addressed - If crop diseases are evident the following actions can be taken: altering planting schedules and procurement and preposition of chemical/biological control methods If **livestock** constitutes an important livelihood in the areas potentially affected, consider implementing the following: - Assessment of vulnerable beneficiaries - Destocking (slaughter destocking and distribution of dry meat), under acceptable ante- and post-mortem inspection - Veterinary support (vaccinations and treatment) - Feed supply (e.g. feed camps) - Provision of water (e.g. water tucking) - Building animal shelters with cash-for-work If **fisheries and aquaculture** constitutes an important livelihood in the areas potentially affected, and based on the initial impact assessment, consider implementing the following early actions: - Early harvest - Change in the production cycle to avoid extreme impacts - Advise not to stock (to avoid loss of crops and disease) - Improve on farm water storage - Build community reservoirs

	- Install pond liners - Cyclone proofing of fishery shore infrastructures and provision of facilities for removal of vessels and storage of gear in areas exposed to storms and hurricanes If **forestry** constitutes an important livelihood in the areas potentially affected, consider implementing the following: - Adjust pruning to ensure shoots are above predicted high water mark - Reduce shading to reduce fungal diseases - Clear canals, diches, culverts, firebreaks, undergrowth - Establish fire-watch rotas

Health

Trigger	Examples of programmes to consider implementing
PHASE 1	Identify priority areas for strengthening local and national capacities based on risk assessment and experience from past ENSO events, including secondary risks from water, agriculture, food security, migration, etc. Consider country, community and traditional methods for prevention, preparedness, response and recovery to/from the health risks associated with ENSO-related episodes and evaluate if these methods could be scaled-up Develop disease prediction models based on seasonal calendars, biological and environmental factors to support prediction of disease outbreaks Build up links with other sectors – including WASH, nutrition, food security and animal health for zoonotic diseases – to ensure that ENSO-related health risks are addressed in sector programming at all levels Based on multi-hazard epidemiological profiles, strengthen disease and nutrition surveillance systems to monitor potential increased risks and incidence of infectious diseases, malnutrition, heat stress, HIV and other potential health effects from ENSO, diseases as well as prevention measures for those health conditions Consider strengthening and scaling up primary health care services (e.g. immunization, maternal and newborn health) and facility-based services in higher risk areas Take necessary action to ensure that supplies will be readily available for any surge in demand from events influenced by ENSO conditions Enhance risk management for extreme heat events and high levels of air pollution due to forest fires and heat inversion events Strengthen health facility-based plans for emergency risk management, based on an assessment of the siting, structural and non-structural safety and functionality of health facilities for climate-related hazards Retrofit and protect health infrastructure from cyclones, floods, heat waves and other weather-related events in high-risk areas based on health facility safety assessments Review health services, staffing levels and other resources in areas at higher risk of ENSO-related events (and other risk factors including conflict) and consider strengthening and scaling up primary health care services (e.g. immunization, maternal and newborn health) and facility-based services in higher-risk areas Increase stakeholder participation in health emergency risk assessment, planning and health services, with a focus on people with higher levels of risk due to ENSO (pregnant and lactating women, neonates, infants, children, adolescents, older people, people with disabilities, people living with HIV/AIDS, and people with less access to health services). Include ENSO-related scenarios in training of health workers and health simulation exercises
PHASE 2	Where there is an increased risk of **infectious diseases** due to ENSO, implement actions to manage risks, including: - Scale up routine surveillance systems and disease early warning systems for infectious diseases (endemic, water-borne, vector-borne) in both health and animal health sectors - Ensure that supplies (including vaccines, medications and equipment for high risk diseases) are procured and readily available for anticipated ENSO influenced conditions.

	Where there is an increased risk of **malnutrition** due to ENSO (see also food security and nutrition sector SOPs), implement actions to manage the risks of malnutrition and health consequences, including: - Scale up community-based nutritional surveillance systems focusing on acute malnutrition (and linked with infectious disease and HIV surveillance), including review of coverage, capacity and quality of available services and capacity/needs for scale-up (technical, operational, logistics, etc) - Integrate nutritional surveillance into facility-based disease surveillance reporting on acute malnutrition and micronutrient deficiencies. - Stock-take of food and health supplies for the management of acute malnutrition and treatment of medical and obstetrical complications - Train health workers in managing the health aspects of acute malnutrition and support for infant and young child feeding, and develop protocols to guide community health workers on managing and referring SAM cases Where there is an increased risk of **respiratory diseases (dust, smoke, air pollution)** due to ENSO, implement actions to manage risks of risks of respiratory diseases, including: - Scale up air pollution monitoring and respiratory disease surveillance systems in countries affected by increased air particles from fire, dust - Disseminate risk communication products on respiratory diseases to help reduce health effects and fatalities Where there is an increased risk to the **water, sanitation and hygiene supply in health facilities** due to ENSO: - Implement actions to ensure WASH in health facilities and nutrition rehabilitation centres Where there is an increased risk of **heat stress and other health conditions due to heatwaves** due to ENSO, implement actions to manage health effects of heatwave, including: - Review or establish heatwave action plans in areas of high risk and among high risk populations (including older persons) Where there is an increased risk of **HIV/AIDS** due to ENSO: - Implement early actions to reduce risk of spread of HIV - Regularly distribute information on facilities/posts eligible to provide adequate prevention testing and treatment service and referral - Ensure appropriate food is provided to people living with HIV and on treatment Where there is an increased risk of **disruption to health services** due to ENSO: - Implement actions to protect facilities, staff, equipment and services from hazards and maintain health services and supplies (e.g. staffing, medical supplies for medical and obstetrical emergencies, infectious diseases and non-communicable diseases, clinical management of rape/sexual violence, health facility emergency preparedness)
PHASE 3	**Infectious diseases** - Strengthen routine surveillance systems and disease early warning systems for infectious diseases (endemic, water-borne, vector-borne) in both health and animal health sectors (by increasing facility based monitoring, updating diseases testing criteria) - Distribute and preposition vaccines, medications, equipment and devices for infectious diseases associated with ENSO - Conduct health promotion campaigns to prevent diseases outbreaks and transmission - Implement immunization through accelerated routine immunisation and emergency vaccination campaigns (e.g. where indicated, for measles and other vaccine preventable diseases) - Conduct event-based risk assessment to inform ongoing health and multi-sectoral preparedness and response for disease outbreaks **Malnutrition (see also food security and nutrition sector SOPs)** - Distribute and preposition supplies for the management of acute malnutrition and medical/obstetrical complications - Establish list of critical locations in drought-affected areas for maximum coverage to guide the deployment of mobile health and nutrition teams to provide access to life-saving health and nutrition services - Scale up programming to support infant and young child feeding - Enhance risk communication regarding management of malnutrition, early interventions and availability of services, and need to seek health interventions early **Water, sanitation and hygiene for health facilities (see also infectious diseases, disruption to health services, and the water, sanitation and hygiene sector SOPs)** - Provide emergency water and sanitation services in health facilities (including maternity and birthing homes), schools and prisons/closed settings and through water rehabilitation schemes **HIV/AIDS**

	- Scale-up food and nutrition interventions (e.g. counselling and support) for households vulnerable to and people living with HIV - Test all children with Severe Acute Malnutrition (SAM) and Moderate Acute Malnutrition (MAM) for HIV in high prevalence settings and provide effective linkage to needed HIV treatment and services - Strengthen tracing activities and outreach to re-engage ART patients lost to follow up **TB** - Scale up health, food and nutrition interventions (e.g. counselling and support) for people living with TB - Strengthen tracing activities and outreach to re-engage TB patients lost to follow-up **Disruption of health services (due to damage, loss of infrastructures, supplies, staff absences, surge in health care demand)** - Protect facilities, staff, equipment and services from hazards (e.g. elevating equipment in areas of flood risk) - Provide emergency support to health care workers and to health facilities to remain functional and able to respond to increased and changed health needs after different types of emergencies, with staff trained appropriately **Air pollution (due to smoke, dust)** - Scale up risk communication programmes to communities concerning actions to reduce risks of respiratory diseases and where health assistance is available - Provide emergency health care to people with increased risk of respiratory diseases **Heatwave** - Scale up risk communication to community at risk to stay safe in hot weather reduce exposure to heat, recognise signs of heat-related illness and seek medical care when needed - Provide emergency health care to treat heat-related illnesses (e.g. heat stroke) and other health complications (including worsening of existing chronic diseases)

Nutrition

Trigger	Examples of programmes to consider implementing
PHASE 1	Strengthen supply chain capacity and pipelines for essential nutrition actions. Undertake capacity building activities to strengthen the ability of local authorities/sector coordinators to coordinate nutrition in emergencies (NiE) interventions If protocols for assessment and NiE interventions don't exist, work with relevant authorities to develop them and disseminate to partners Scale up community-based nutritional surveillance systems Integrate nutrition surveillance into facility-based disease surveillance reporting on acute malnutrition and micronutrient deficiencies Provide training for health workers in nutrition assessment, managing acute malnutrition, promoting infant and young child feeding practices, and micronutrient supplementation
PHASE 2	Strengthen or scale up nutrition supply chain capacity and/or community-based nutritional surveillance systems Integrate nutritional surveillance into facility-based disease surveillance reporting on acute malnutrition and micronutrient deficiencies. Train health workers in nutrition assessments particularly in: managing severe acute malnutrition, promoting infant/young children feeding practices, and micronutrient supplementation.
PHASE 3	Community and facility-based nutritional and disease surveillance, including on micronutrient deficiencies Provide supplementary food rations to pregnant and lactating mothers Distribute and preposition general food rations and supplies for the management of acute malnutrition and with or without medical complications

	In drought-affected areas, establish list of critical locations for maximum coverage to guide the deployment of mobile health and nutrition teams Procure, replenish, distribute and preposition supplies for the management of acute malnutrition and medical complications

WASH

Trigger	Examples of programmes to consider implementing
PHASE 1	Ensure minimum WASH facilities/services in refugee centres. Update likely hotspots where there are regular WASH-related disease outbreak and mobilise relevant working groups Establish strategies for vector control and sustainable sanitation (e.g. sanitation marketing and community-led total sanitation) Assess and map community/health centres/schools/prisons access to water sources (to ensure minimum WASH standards), market systems, sanitation facilities and existing humanitarian/DRR/Resilience WASH programs Assess local water tanks, wells and other water sources that may require repairs or upgrading
PHASE 2	Follow up water source availability and set up information system with the communities in collaboration with state technical services (monitor groundwater table level, springs yields, river levels, ensure communications between water monitoring stations and downstream communities is in place to send warning and floods) Scale up existing WASH programs that reinforce community based water resource management, including groundwater, surface water and rainwater: - Improve rainwater storage and rainwater infiltration (aquifer recharge) - Promote rational use of water sources for domestic and livelihoods purposes Improve protection and maintenance of water infrastructures and irrigation systems by, for instance: - Repair damaged water tanks, wells, water pumps or other water sources that were classified as damaged or at-risk. - Conduct procurement and prepositioning of netting to protect water sources and providing training on water-way clearing (for example, clearing gutters, positioning of water tanks for maximum capacity during the drought and for safety reasons during floods/cyclones) - Assess facilities for people to excrete safely and hygienically Develop and conduct hygiene promotion campaigns
PHASE 3	Water trucking strategy with a clear exit or vouchers purchase of water or hygiene items Develop emergency safe excreta disposal strategy and prepare for post-flood chlorination of drinking water, flushing and cleaning of ditches and canals Activate communication channels to: Ensure information of risks reaches the most vulnerable; Coach community surveillance systems and state technical services Provide emergency water and sanitation services in health facilities (including maternities), schools and prisons/closed settings and through water rehabilitation schemes. Maintain water supplies to health facilities (including maternities) to ensure level of function Scale up on existing or implement new WASH programs to reduce vulnerabilities of WASH facilities (water points to avoid contamination of water sources, promote raised latrine in flood prone areas) Preposition hygiene kits (including soap), water bladders, netting to cover open water sources, water containers/tanks/barrels, and purification tables in at-risk communities Ensure prioritisation of continuous school-level access to water; develop water trucking strategy for schools where needed with a clear exit (boreholes drilling or deepening)

Education

Trigger	Examples of programmes to consider implementing
PHASE 1	Retrofit and protect education infrastructure against floods and other weather-related events Apply the Comprehensive School Safety Framework and EiE (if applicable to the country) with the INEE Minimum Standards for Preparedness, Response and Recovery Support national education authority and education sector partners (e.g. DRR Education Task Force, Education Cluster) to scale up existing activities Support education awareness campaigns on school retention, accessibility and safety at community and local levels Early warning dissemination at school level in coordination between the education sector and meteorological/ disaster management departments Scale-up disaster risk reduction and climate change adaptation and refresher trainings
PHASE 2	Support school based local monitoring of seasonal forecasts, local rainfall and temperature forecasts and regular communication at school of changing hazard and information Scale up and prioritisation of structural (e.g. retrofitting/raising, shelter sites), non-structural (e.g. soft fastening), infrastructure (e.g. water harvesting/ protection, evacuation), environmental (e.g. seed/grain/fodder banks) and behavioural mitigation at school level Develop education continuity plans for drought and floods Identify alternative locations for temporary schools to limit the use of schools as temporary shelters. If schools are a core evacuation area for the local community, ensure alternative arrangements are made or the situation is mitigated to allow classes to resume Assess transport routes to and from the school facilities are safe for students and teachers Regular school-wide and community-linked simulation drills and interventions to mitigate the impact of the event at the school in at risk locations Multi-stakeholder national level stakeholder workshops for development of key dissemination messages and uptake Provide students lessons to cope with ENSO events in their home environment (heat and fire conditions, landslide conditions, flood conditions, etc.) Plan for temporary school feeding/ water provision programmes and school-based response measures to encourage educational continuity, student's attendance and retention
PHASE 3	Implement education continuity plans and changes in school schedules to accommodate the heat, catch up classes, alternative school locations, instruction, clean up, limited use of schools as temporary shelters, temporary learning, child protection) In the event of flood risks, elevate and protect equipment and supplies from flood damage and full scenario drill to practice response preparedness Prepare possible social safety net scale up or supplementary/ conditional transfers to schools or families to promote education continuity Preposition education supplies, materials to rebuild classrooms, recreation kits, school-in-a-box kits and temporary learning facilities Communicate safe routes, times (if they have changed to coincide with cooler periods or avoid rains) and location of schools to students and their families

	Scale up or intensify the teaching of protection and coping mechanisms to school children and education personnel for the specific ENSO event

Shelter

Trigger	Examples of programmes to consider implementing
PHASE 1	Advocate/disseminate safe shelter and settlements messaging around likely hazards Retrofit and protect public infrastructure, buildings, housing, shelters and household items against floods and other weather-related events Map common building typologies and materials in the shelter and settlements sector to inform possible intervention options and strategies, as well as to understand potential environmental impacts of these Assess or review the impact of previous or potential ENSO events on shelter and settlements and develop a scenario for the anticipated event Engage country-level private sector networks (where they exist) to exchange information on capacities for disaster risk reduction and mitigation, business readiness and response capacities Review of existing housing, land and property issues, legislations, etc., in anticipation of possible displacement
PHASE 2	Implement DRR activities focusing on settlements – e.g. site selection, elevating houses and assets (for floods) Determine appropriateness of cash interventions and coordinate with other clusters/OCHA/ cash working group on how to achieve a joined-up response Implement participatory approach to safe shelter awareness activities Provide training and capacity building on safe shelter practices to cope with floods and other weather-related events Pre-stock emergency shelter materials and household items if relevant (e.g. if cash-based assistance does not seem feasible or appropriate)
PHASE 3	Develop and disseminate IEC materials to communities advising what can be done to protect shelter/housing – mainly technical messaging around bracing, clearing, tying roofs, etc in the case of cyclones for example

Protection

Trigger	Examples of programmes to consider implementing
PHASE 1	Establish regular monitoring outlining key actions that should be taken to ensure that protection risks are monitored regularly so that preparedness efforts are alert to emerging or developing risks Appoint protection Risk Monitoring Focal Points
PHASE 2	Undertake a Protection Mainstreaming training for Government officials and key Protection and non-protection partners, with a view to enhance Protection Sector's capacity to support the sector system, to build regional protection capacity and to further protection mainstreaming action plans with the various sectors Agree with other sectors on protection risks that will be addressed collectively, by protection and non-protection actors Recommend key protection outcomes that are prioritized in the immediate response and reflected in the work plans of each sector, so protection is not a stand-alone objective for which the Protection Sector is solely responsible Identify key protection activities that need to be undertaken ahead of time to ensure these arrangements can be implemented on phase III

PHASE 3	Establish simple, accessible, safe and confidential mechanisms to monitor and report the full range of protection risks to vulnerable groups, including incidents of violence and exploitation (PSEA) Raise awareness at the community-level about protection risks and establish community-based mechanisms to support monitoring, prevention and response Establish a system for response monitoring that measure who receives aid (disaggregated by sex and age), what aid is delivered to them, what results are achieved, and the affected population feedback Implement a protection information management strategy which systematically collects, process, verifies, and analyses sex- and age- disaggregated data and information, and disseminating relevant information to humanitarian stakeholders, affected populations, and other interested parties Identify systematically individuals and groups with specific needs at the start of an emergency Design and implement protection and assistance programmes in cooperation with groups or individuals with specific needs and their communities Develop partnerships and referral mechanisms with other protection and assistance actors (including national partners) who have the expertise and capacity to support groups and individual with specific needs Establish protocols to prevent family separation in case of evacuation or secondary population movements

Livelihoods

Trigger	Examples of programmes to consider implementing
PHASE 1	Provide technical assistance to the host government and sectoral ministries to develop relevant policies, procedures and plans on livelihoods. Seek ways to shift focus from livestock/agriculture based livelihoods to other sources, such as vocational and technical trainings, skills development, micro, small and medium enterprises Promote access to market and finance through establishment of value chains, such as cooperatives, financial institutions and banks Develop climate resilient community infrastructure and irrigation facilities, such as rural market, food storage facilities, dams, canals, animal health services centers and communication and information systems Introduce improved irrigation facilities, such as open water reservoirs and canals, drip irrigation, sloping land agricultural technology (SALT), sprinkler irrigation and tunnel shelters Introduce appropriate technologies and techniques to reduce dependency on natural resources, such as alternative energy (solar energy and bio gas)
PHASE 2	Strengthen capacity of government officials and local stakeholders in disaster-resilient livelihoods preparedness and recovery Protect water catchment areas through bioengineering/plantation of high value, climate sensitive trees and shrubs Establish community nursery and seed banks Construct rain water harvesting structures and dig wells for agriculture and livestock
PHASE 3	Support to enterprises and entrepreneurship development Increase coverage of micro-finance and promotion of savings and loan groups Provide credit and small grants to support vulnerable individuals and households with small business

Annex 2: Table of financing mechanisms (in order of applicable phase)

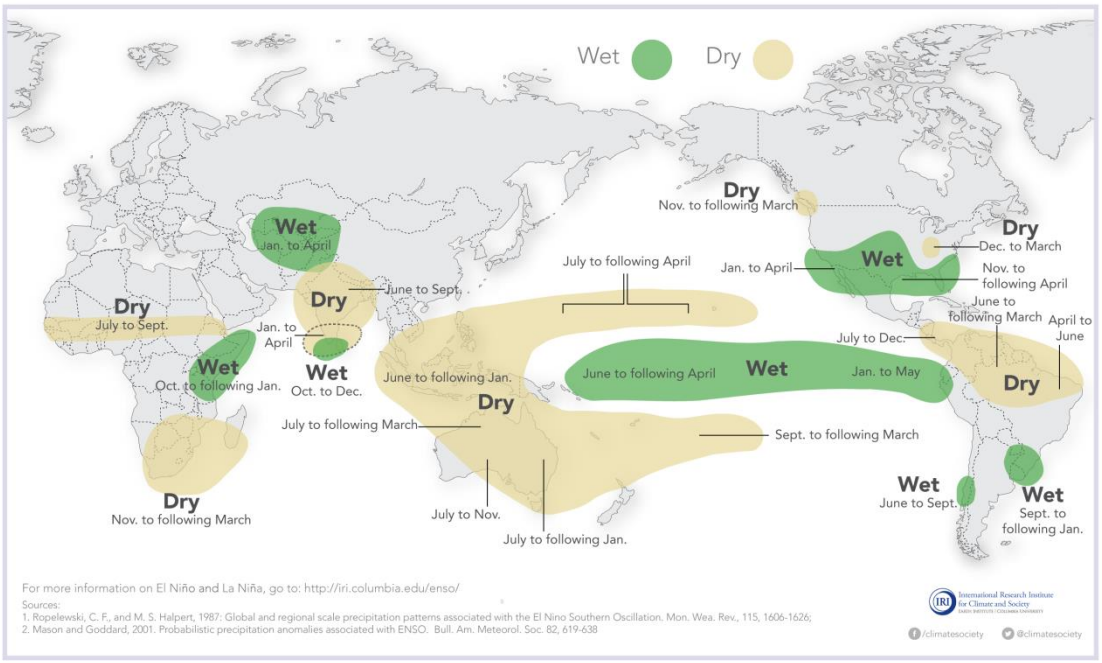
Mechanism	Category	Brief description	Geographic coverage	Phase
Least Developed Countries Fund (LDCF)	Climate adaptation fund	The LDCF was established to meet the adaptation needs of least developed countries. The LDCF finances the preparation and implementation of National Adaptation Programs of Action to identify priority adaptation actions for a country. It is administered by the Global Environment Facility.	LDCs	1
Adaptation Fund		The Adaptation Fund has been established to finance concrete adaptation projects and programmes in developing countries party to the Kyoto Protocol to reduce the adverse effects of climate change.	Developing countries party to the KP	1
Green Climate Fund (GCF)		GCF helps developing countries limit or reduce their greenhouse gas emissions and adapt to climate change. GCF's activities are aligned with the priorities of developing countries, and the Fund has a direct access modality so that national and sub-national organisations can receive funding directly, rather than only via international intermediaries.	Developing countries globally	1
Climate Risk and Early Warning Systems (CREWS)	Pooled fund	Provides investment to low income countries and small island developing States to generate and communicate effective, impact-based, multi-hazard early warnings and risk information. Resources are triggered based on countries' level of risk, demand and leveraging opportunities. CREWS emphasizes country ownership. The portfolio in 2017 was $30 million.	Global	1
Global Preparedness Partnership (GPP)	MPTF – Pooled Fund	GPP aims to bring national governments to a 'minimum standard' of preparedness for response to, and recovery from, disasters from natural hazards. Support is provided via core partners. Criteria for support include ENSO risks. The GPP opens for country applications periodically, not in response to ENSO or other events. Scale of funding is based on country context and requirements.	Global	1
Global Facility for Disaster Risk Reduction (GFDRR)	Pooled fund	Provides grant financing, technical assistance, training and knowledge-sharing activities to mainstream disaster and climate risk management in policies and strategies. Managed by the World Bank; supported by 34 countries and 9 international organizations.	Global	1 and 2
Country-Based Pooled Funds (CBPFs)	Pooled fund	CBPFs are multi-donor humanitarian financing instruments. Donor contributions to each CBPF are un-earmarked and allocated by the Humanitarian Coordinator through an in-country consultative process. CBPFs are well positioned to respond in anticipation or at the earliest stages of an emergency. They support the highest priority projects of the best-placed responders (including international and national NGOs).	As of October 2016, 18 funds were active	1, 2, 3
Delivering as One (DaO) Funds	Pooled fund	DaO Funds are multi-donor trust funds at the country level that fund UNDAFs, which should include a theme/output on Disaster Risk Reduction if relevant in the country. Donors can earmark contributions to such thematic areas. Allocations are decided by a Steering Committee usually co-chaired by the Government and RC. Since these funds include all development activities in the UNDAF, they can fund all phases.	15 One Funds as of August 2017	1, 2, 3
African Risk Capacity (ARC)	Regional risk pooling	ARC is a regional contingency funding mechanism for planned responses. Governments can access early funding based on rainfall indices. ARC uses an advanced satellite weather surveillance and software to estimate and trigger readily available funds to African countries hit by severe weather events. ARC payouts are expected to arrive in the national treasury within 2-4 weeks of harvest and currently offers a maximum coverage of $30 million per country per season for drought events that occur with a frequency of 1 in 5 years or less.	Africa	2 and 3
Forecast Based Financing (FbF) (IFRC)		A mechanism that enables Red Cross/Red Crescent National Societies to access funding for early action and preparedness for response based on credible forecast. Funding is automatically disbursed per Early Action Protocol, which outline specific forecast triggers and pre-identified actions. IFRC is currently developing the FbF Window to the Disaster Relief Emergency Fund (see below) as a global financing instrument.	Projects currently ongoing or underway in 14 countries in Africa, Americas and Asia Pacific	2 and 3

Food SECuRE (WFP)		Food SECuRE is a multilateral, multi-year fund that uses seasonal climate forecasts to trigger action for community resilience-building and for preparedness to reduce the impact of climate disasters before they occur.	Started in 5 countries: Guatemala, Niger, Sudan, Philippines, Zimbabwe	2 and 3
Start Fund	Early action fund	The Start Fund is managed by a network of NGOs. The 'anticipation window' allows the 42 members of the network and their hundreds of local and national NGO partners to secure financial support for early action in anticipation of emergencies. The Fund was used multiple times to respond to both forecasted and actual impacts from the 2015/16 El Niño. The value of the Start Fund is currently circa $16 million per year.	Global	2 and 3
TRAC 1.1.3 Category 2	Emergency response funding	TRAC 113.2 resources are primarily used in response to sudden crises, but can also support responses to escalating situations in protracted crises. They are to be used by UNDP and RCO in conducting needs assessments, coordinating the response and establishing early recovery frameworks and other tools for recovery planning. The maximum allocation amount is $200,000 for L3 crises. Funds are released within 48 hours of the request made by the country. The resources must be used within maximum 6 months.	Global	3
Emergency Development Response to Crisis and Recovery (EDRCR)	Developme nt fund	Created to fund UNDP's immediate response and recovery initiatives, especially to support: rebuilding livelihoods and jump-starting socioeconomic recovery; restoring core government functions; strengthening recovery assessment, planning and coordination; and making the UN System coordination work for early recovery. Depending on the level of crisis, the amount of allocation differs from $200,000 to $1 million.	Global	3
Central Emergency Relief Fund (CERF)	Pooled fund	CERF pools contributions from donors into a single fund with a current target of $450 million, increasing to a target of $1 billion in 2018 for underfunded and rapid onset emergencies. The money is set aside for immediate use at the beginning of a humanitarian crisis – to be used for life-saving activities in the initial days or weeks following the onset. Rapid response grants can be approved in as little as 48 hours. Underfunded emergencies grants are disbursed twice a year. CERF funding is available to UN agencies, funds and programmes. NGOs receive CERF funding when they carry out work for recipient organizations. The maximum amount applied to a crisis in a given year typically does not exceed $30 million, although higher allocations can be made at the discretion of the ERC in exceptional circumstances.	Global	3
Disaster Relief Emergency Fund (DREF)		The DREF is a fund set up by IFRC for National Societies to ensure immediate financial support is available for emergency response. Allocations may be made as start-up loans in the case of large-scale disasters, grants to meet the costs of responding to small-scale emergency relief operations, or for preparedness in the case of imminent disaster. Money can be authorized and released within 24 hours. The average amount of funding disbursed in a year is CHF 20 million. The average per grant is CHF 300,000. Loans for early action are usually 10% of the total requested.	Global	3
Pacific Catastrophe Risk Insurance Facility (PCRIF)	Regional risk pooling	The PCRIF uses insurance to provide immediate cash in the aftermath of a disaster. The payouts depend on the premium paid, which itself reflects the propotion of risk covered.	Marshall Islands, Samoa, the Solomon Islands, Tonga and Vanuatu	3
Caribbean Catastrophe Risk Insurance Facility (CCRIF)	Regional risk pooling	Mutual insurance company controlled by participating governments that provides immediate liquidity in case of a major hurricane, earthquake or excessive rainfalls. Limited to cyclones and sudden onset. Since 2007, 36 payouts have been made to 13 member governments totalling $130.5 million (so an average of about 3.6 million), the largest being just over $20 million to Haiti for Hurricane Matthew in 2016. Payouts are made within 14 days of the event.	Central America and Caribbean	3

Annex 3: Maps of average ENSO impacts on rainfall

El Niño and Rainfall

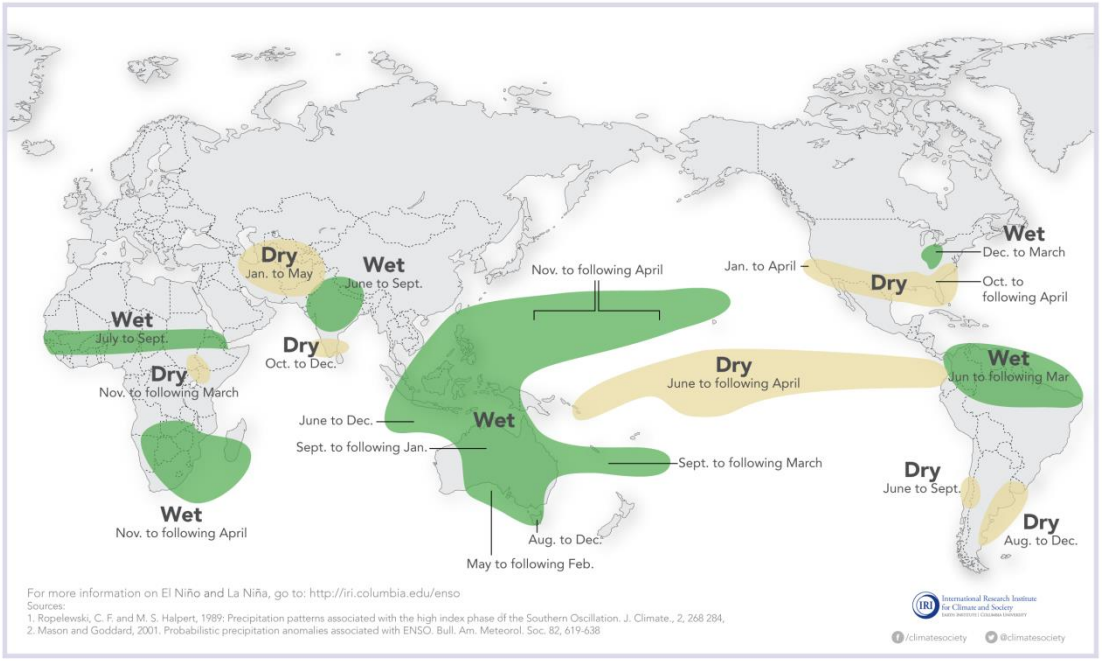
El Niño conditions in the tropical Pacific are known to shift rainfall patterns in many different parts of the world. Although they vary somewhat from one El Niño to the next, the strongest shifts remain fairly consistent in the regions and seasons shown on the map below.



http://iri.columbia.edu/wp-content/uploads/2016/05/ElNino_Rainfall.pdf

La Niña and Rainfall

La Niña conditions in the tropical Pacific are known to shift rainfall patterns in many different parts of the world. Although they vary somewhat from one La Niña to the next, the strongest shifts remain fairly consistent in the regions and seasons shown on the map below.



http://iri.columbia.edu/wp-content/uploads/2016/05/LaNina_Rainfall.pdf

Annex 4: Examples of country-level triggers for Phase 2 & 3

DROUGHT

Type of Indicators	Description	Example Values
Meteorological drought		
Percent of normal precipitation	Relates observed or forecasted precipitation to the long-term average (usually 30 years) for a given month/season by expressing it as a percentage of the long-term average	Is the map showing considerable areas of the state receiving only 80 percent or less of the normal rainfall?
Precipitation percentiles	Defines the percentile ranges within which certain observed or forecasted dekadal/monthly/seasonal precipitation values fall within the frequency distribution of a long-term precipitation record	Is the map showing considerable areas of the state receiving rainfall in the 30th percentile or less of the long-term record?
Standardization	Defines the degree of deviation of the observed or forecasted dekadal/monthly/seasonal precipitation from the long-term mean by subtracting it from the latter and dividing it by the standard deviation of the long-term record	Is the map showing a current or projected standardized rainfall value of -2 or less?
Standardized Precipitation Index	Similar to the above, but different computational procedure, in the sense that it is based not on the normal but other frequency distributions. It is recommended by WMO for meteorological drought monitoring.	Does the map show a current or projected SPI value of -1 or less?
Standardized Precipitation Evapotranspiration Index	Same as above but based not only on precipitation, but on the difference between precipitation and evapotranspiration	Does the map show a current or projected SPEI value of -0.5 or less?
Agriculture drought		
Normalized Difference Vegetation Condition Index	NDVI values range from -1 (water) over 0 (non-vegetation, stressed vegetation or barren soil) to +1 (very dense, healthy green vegetation). The NDVI is a common proxy for the amount of healthy vegetation found in an area. Declining NDVI values may indicate a reduction in healthy vegetation or plant stress. However, since "normal" NDVI values depend on the ecology of an area, it is better to interpret NDVI values in relation their normal range rather than just the values themselves.	Is the map showing considerable areas with NDVI 0.1 or less?
Vegetation Condition Index	The VCI relates current NDVI values to the recorded NDVI range of values (maximum and minimum of time series). Hence, it gives an indication of whether current values are at the lower or upper end of normally experienced NDVI values. The VCI will assume values between 0 % and 100 %, whereas low values mean that the vegetation condition is very bad (0 % would be the worst ever observed) and high values mean that it is very good (100 % would be the best ever observed). It is important to have a long time series to avoid to under or overestimate drought (>20 years is needed)	Is the map indicating areas affected by a VCI below 35 percent? This indicator alone tends to overestimate the extension of drought events, needs the correction of Temperature Condition Index.
Temperature Condition Index	The TCI is similar to the VCI in that it compares current temperatures with the observed temperature range (0% signifies the highest temperatures ever recorded and 100% the lowest temperatures).	Is the map indicating areas affected by TCI below 35 percent?
Vegetation Health Index	The VHI readily combines VCI and TCI into one index. It estimates vegetation health from the combined effect of moisture (VCI) and thermal (TCI) conditions. Using the VHI, deteriorating vegetation conditions can be identified early, when vegetation is still healthy, but the VHI values are slowly declining.	Is the map indicating areas affected by TCI below 35 percent?
Agriculture Stress Index	FAO GIEWS also provides the ASI. This index is based on the VHI as well, but as opposed to the common vegetation	Is the map showing a considerable area with ASI values below 25 percent?

	indices, it does aggregate it temporally, and spatially across districts.	
Start of the growing season	Late sowing can lead to reduced crop yield or even failure. Hence, it is important to monitor the start of the growing season as compared to the known normal start.	Is the map showing that the growing season started 2 or more dekads late?
Number and length of dry spells	Impact of dry spells on yield is especially high during sensitive stages of crop growth. Therefore it is suggested to monitor them closely. Both the length and the number of agricultural dry spells in a season are important. Forecast information may exist.	Is the map showing moderate sized areas expected to be affected by one or several dry spells longer than 8 days?
Water Requirement Satisfaction Index	Crop-specific indicator of crop water stress. In dekadal time steps, it expresses the percentage of crop water requirements that have been met until the current dekad, starting at 100 % and decreasing by the proportion of water deficit over the given time period.	Is the map showing considerable areas with WRSI values of 75% or below?
Temperature	Both too high and too low temperatures can limit crop growth. If the effect of temperature on specific crops is known, both forecasts and observed temperatures could be consulted.	Is the map showing current or forecasted temperature anomalies of at least 3 degrees above normal?
Hydrological drought		
Reservoir levels, streamflow, groundwater levels	Water levels in reservoirs, lakes, rivers, ponds or the groundwater fluctuate at longer time scales than precipitation. Therefore, they indicate long-term hydrological drought, which is important to monitor with regards to long-term water availability, e.g. for the livestock sector, but also irrigation and other purposes.	Is the water level in the well 3 m or more below normal?
Snow Water Equivalent	In high latitudes or mountainous areas, this indicator is often used to predict the amount of water that a downstream area will receive in spring.	Is the map indicating areas with a SWE of at least 10 cm below normal?
Water availability for livestock	Sometimes provided by agro-met bulletins as qualitative indicator of surface water availability.	Is the water availability for livestock reported to be low?

FLOODS

Type of Indicators	Description	Example Thresholds
Observed/forecasted water gauge levels	Thresholds values based on water levels are widely used to provide issues for early warnings. Here, the water levels are measured (either at different points of a river (particularly near the mouth) or at different levels in lakes) and monitored. It is important to test if this indicator provides a realistic overview of what occurs at the catchment scale.	Are the upstream water gauges showing water levels that are usually associated with flooding downstream?
Soil moisture and conditions (saturated and crusted)	Two types of soil conditions are of concern here: saturated (prolonged period of rain) and crusted (e.g. drought induced) soils. With saturated and crusted soils, combine farmer's perception of the soil with long-range seasonal as well as short-range rainfall forecasts. This will provide a very generic and qualitative indicator for enhanced or reduced flood risk during a season or upcoming period.	Has there been a prolonged period of rainfall already, i.e. is the soil already saturated (prior to a forecasted heavy rainfall event)? Or has there been a drought, i.e. is the soil crusted and its infiltration capacity low (prior to the onset of the rainy season or a forecasted heavy rainfall event)? (yes/no)
Percent of normal precipitation	This indicator should be observed for all flood risks. It relates observed or forecasted precipitation to the long-term average (usually 30 years) for a given month/season (percentage of the long-term average).	Is the map showing considerable areas of the state receiving 130 percent or more of the normal rainfall?
Snow Water Equivalent	In high latitudes or mountainous areas, this indicator is often used to predict the amount of water that a downstream area will receive in spring.	Is the SWE 10cm or more above normal? (yes/no)