GUIDANCE NOTE 8

Anticipatory Action in the WASH Sector

Guidance for Humanitarian Practitioners

Guidance for practitioners to strengthen anticipatory action programming in the WASH sector to reduce the impacts of predictable hazards on lives and livelihoods.

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Abbreviations

AA	Anticipatory Action
AHP	Australian Humanitarian Partnership
CEMS	Copernicus Emergency Management
CERF	Central Emergency Response Fund
CPC	Climate Prediction Center
DRR	Disaster Risk Reduction
ECMWF	European Centre for Medium-Range Weather Forecasts
FEWS NET	Famine Early Warning Systems Network
GloFAS	Global Flood Awareness System
NOAA	National Oceanic and Atmospheric Administration
WASH	Water, Sanitation, and Hygiene
WMO	World Meteorological Organization

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Editing: Peta Sandison

Design: Ibex Ideas

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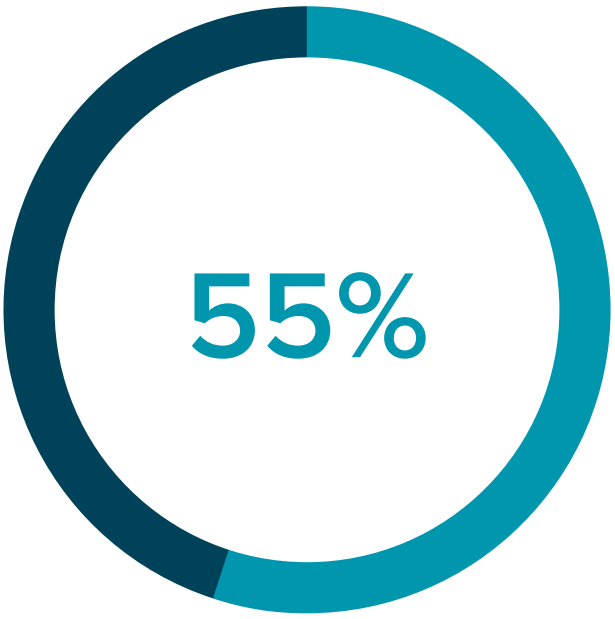
1 Introduction

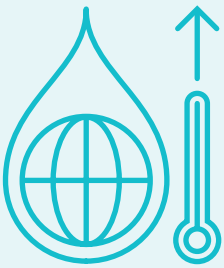
Humanitarian needs are steadily increasing due to the compounding factors of conflict, climate shocks, and economic hardship. Simultaneously, crises are becoming more intense, cyclical, and protracted.

Anticipatory action (AA) is being promoted as a way to optimise efforts to save lives and livelihoods and address the ever-increasing humanitarian needs worldwide.



Analysis of previous UN Appeals suggests that at least 55% of crises are 'somewhat predictable'[1], indicating that potential impacts can be more effectively anticipated and the necessary action taken.

Preliminary evidence shows that anticipatory action can save lives, better protect people's dignity during responses, and be more cost-effective[2]. By acting pre-emptively, predictable shocks can be prevented from turning into crises and the human and financial burden reduced.



As climate-induced shocks continue to increase in intensity and frequency, and many climate-induced shocks (such as river flooding, tropical storms or droughts) can be predicted, anticipatory action is of particular relevance in climate-risk management.

1.1 What is anticipatory action?

Anticipatory action is defined as 'acting ahead of a predicted hazardous event to prevent or reduce impacts on lives, livelihoods, and humanitarian needs before they fully unfold'[3]. It is being promoted because it shifts humanitarian response from reacting after a crisis to acting before its worst impacts unfold. It uses forecasts, early warning and risk analysis to trigger measures that reduce harm before the onset of a predicted emergency or crisis (see Figure 1 on the next page).

By preparing and responding in advance, it helps save more lives, protect livelihoods, and reduce the costs and inefficiencies of later emergency interventions. An anticipatory approach is vital as climate change, conflict, and economic shocks drive a rise in humanitarian needs worldwide, making traditional reactive models increasingly unsustainable. Anticipatory actions are based on anticipated needs, adopting a no-regrets approach[4].

Some examples of AA in Water, Sanitation and Hygiene (WASH) are:

Pre-positioning of Safe Water Supplies Before a Cyclone
(Start Ready, Bangladesh)

When cyclone forecasts predict landfall, humanitarian actors pre-position water purification tablets, jerrycans, and portable water tanks in vulnerable coastal districts. This ensures that households can access safe drinking water immediately after the storm, reducing the risk of waterborne diseases such as cholera.

Protecting Wells Before Flooding
(Red Cross, Anticipation Hub, Mozambique)

Forecast-based financing triggers the covering and sealing of community wells in flood-prone areas when river levels rise above a certain threshold. This prevents contamination from floodwaters and ensures communities can quickly access safe water once the waters recede.

Drought Anticipation Through Water Tankering
(Kenya)

Seasonal forecasts predicting drought trigger pre-arranged agreements with water truck providers. Before the wells and boreholes dry up, trucks deliver water to villages and schools, reducing the need for families to migrate or sell livestock.

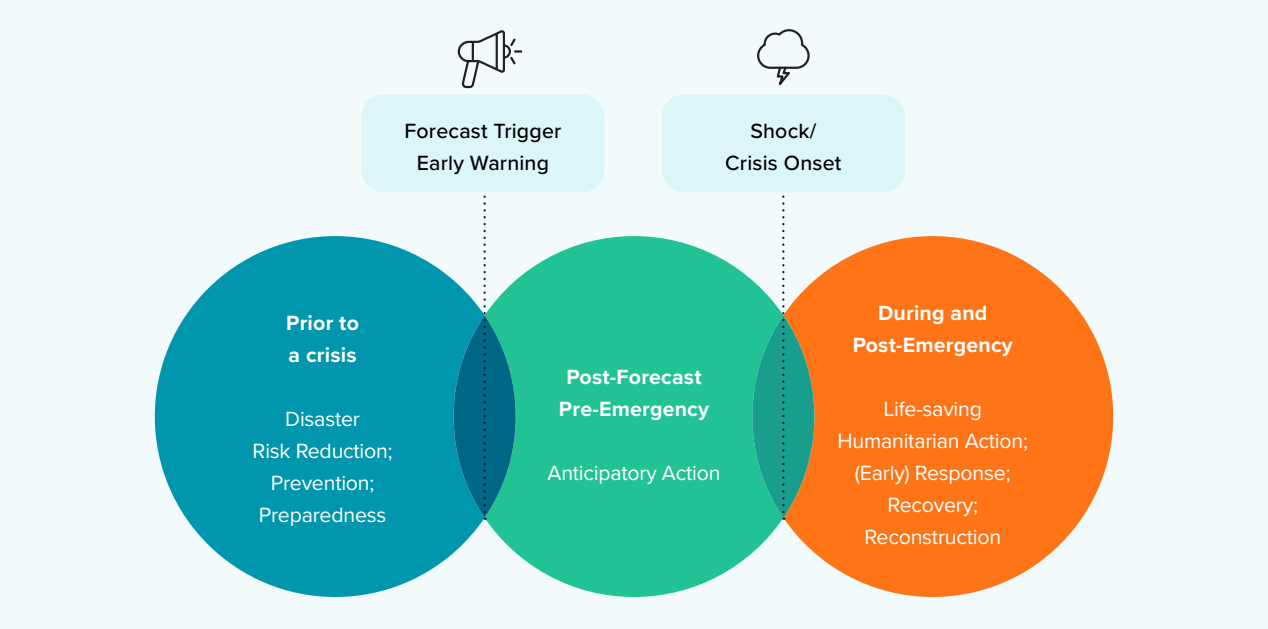
Pre-Flood Latrine Reinforcement and Hygiene Kits
(Nepal)

Ahead of the predicted monsoon floods, local NGOs strengthen latrines in flood-prone areas and distribute hygiene kits (soap, water containers, menstrual hygiene supplies). This helps households maintain sanitation and reduces the likelihood of disease outbreaks.

Rainwater Harvesting Preparation Before Seasonal Drought
(Ethiopia)

When forecasts predict poor rainfall, communities are supported to repair household and communal rainwater harvesting systems (gutters, tanks). This ensures the maximum storage of any available rainfall, reducing reliance on subsequent emergency water trucking.

Figure 1: Anticipatory action in the crisis timeline[5]



Anticipatory action is part of the disaster management cycle; it is linked to preparedness, disaster risk reduction and (early) response (see Annexe 1 for more information), but focuses specifically on hazards that can be predicted. Anticipatory action programmes normally have three elements:

- An early warning system that tells humanitarians and communities when a disaster is likely to happen
- A set of activities that have been decided on and budgeted in advance, and
- Funding that has been set aside to pay for these activities, based on the budget

Box 1: Definitions

- **Disaster Risk Reduction (DRR)**: aims to prevent new disasters, reduce existing disaster risk, and manage residual risk. These all contribute to strengthening resilience. For example, strengthening or building new embankments to prevent flooding. Anticipatory action is the bridge between longer-term DRR efforts and humanitarian responses. Adaptations to climate-induced disasters are a part of DRR
- **Preparedness**: refers to establishing systems, capacity and knowledge well before a specific hazard forecast, enabling people to anticipate and respond effectively to events or emergency conditions. For example, community training and prepositioning of spare parts for handpump repair
- **Early Warning**: an integrated system of hazard monitoring, forecasting, prediction, analysis, and communication that enables individuals, communities, governments, businesses and others to take timely action to reduce disaster risks in advance of hazardous events
- **Anticipatory Action**: acting ahead of a predicted hazardous event to prevent or reduce impacts on lives, livelihoods, and humanitarian needs before they fully unfold. This includes forecast-based action. Anticipatory action is sometimes used interchangeably with the term ‘early action’
- **Early Response**: refers to response actions taken early in a crisis based on a (rapid) assessment of needs immediately after a shock has happened. Actions are taken later than AA and usually refer to actions as part of a humanitarian response. An example is agencies deploying water trucks, chlorine tablets, and jerry cans within a few days of a flood event

1.2 Timing of anticipatory action

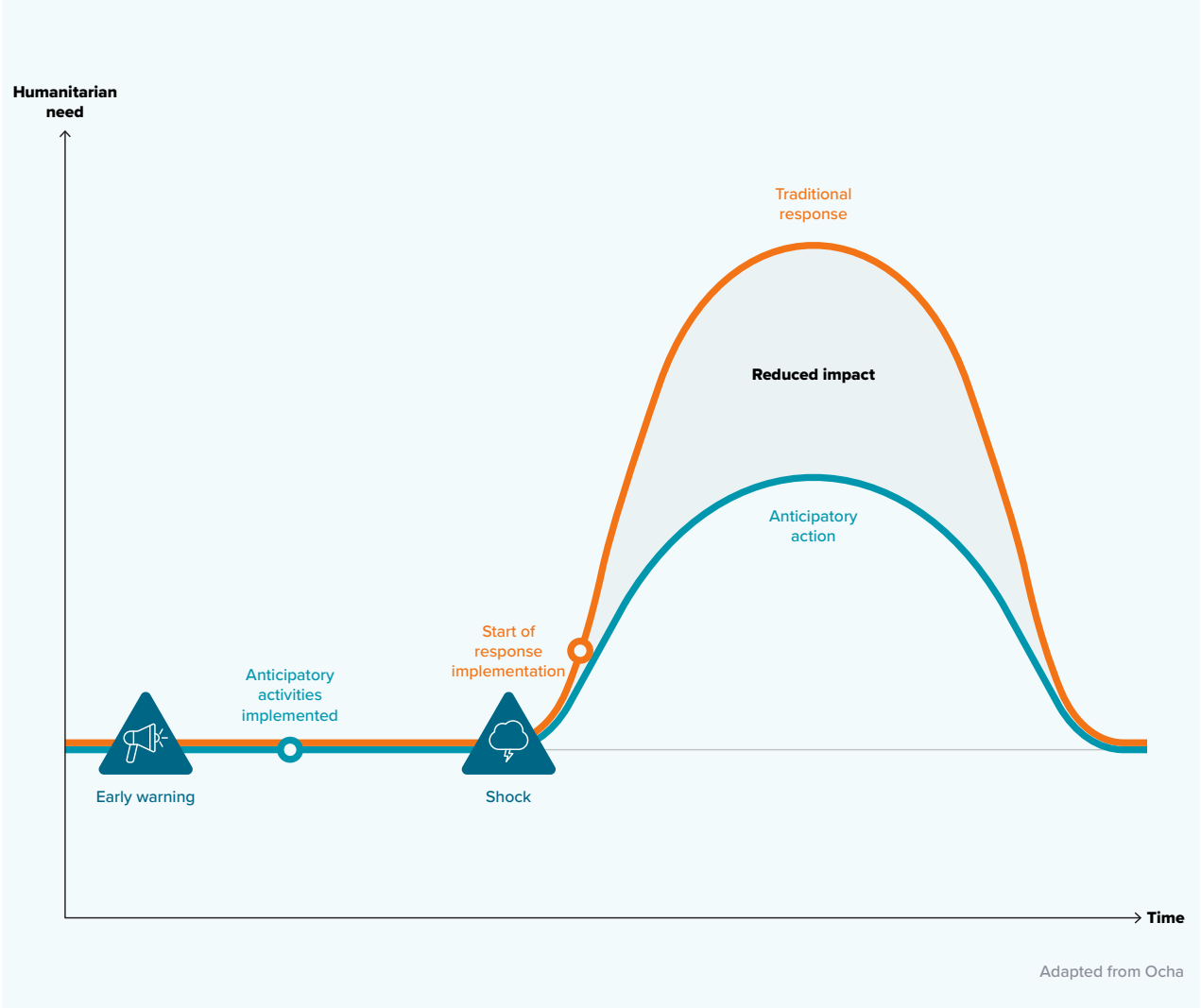
Anticipatory action occurs **before** a shock or hazard or a peak in a crisis and before the crisis response, but **after** a forecast trigger or early warning has become available. For example, the trigger for Anticipatory WASH support before the 2024 major flooding in Bangladesh was a forecast, using hydrological models and satellite data, predicting that the Jamuna River would exceed danger levels within four to five days, leading to severe flooding. The anticipatory actions were cash transfers, and the pre-distribution of WASH kits before the river peaked and households were displaced.

Anticipatory action is relevant for different types of hazards, including both slow and/or rapid-onset disasters, as long as reliable forecasts are available that predict when and where a shock is likely to occur.

The window for action (or lead time) between the early warning and the shock differs per crisis. In the case of a rapid-onset event, such as a flood or a tropical storm, the lead time can be anywhere from hours to days or weeks. In slow-onset crises, such as drought, the lead time can be several months. A longer lead time can allow a greater choice of intervention (such as the rehabilitation of water security infrastructure) or enable interventions to be implemented in phases. Options are more limited for rapid-onset shocks with a short lead time (such as evacuations or, with slightly more time and prepositioned stocks, distributions of hygiene kits).

Figure 2 shows the timing and impact of anticipatory action compared to a traditional response:

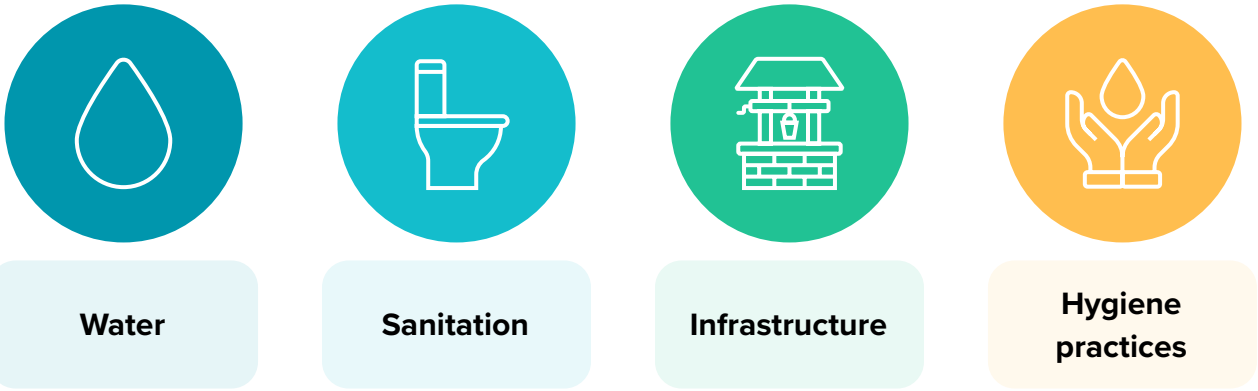
Figure 2: Timing and impact of anticipatory action



2 Anticipatory action in the WASH Sector

Anticipatory action aims to prevent or reduce the impacts of crises on lives, livelihoods and humanitarian needs.

In the WASH sector, anticipatory action aims to reduce the WASH-related impacts of crises on access to:



2.1 Types of interventions

Types of AA vary depending on the timing, context and type of disaster. Interventions carried out during the anticipatory action lead time (between the trigger warning and the crisis) can be similar to preparedness or response activities but differ in timing.

Preparedness activities (such as flood prevention around a village) or response activities (such as water trucking) may become anticipatory actions because they are now implemented earlier, following a warning for a specific event (see Table 1 for examples).

WASH adaptations that are not implemented between the warning and shock and within the available lead time (for example, protection or deepening of boreholes or raising of latrines) are considered to be DRR, not AA.

Similarly, WASH activities typically carried out before an early warning (such as WASH-related capacity building or contingency planning) would be considered as preparedness.

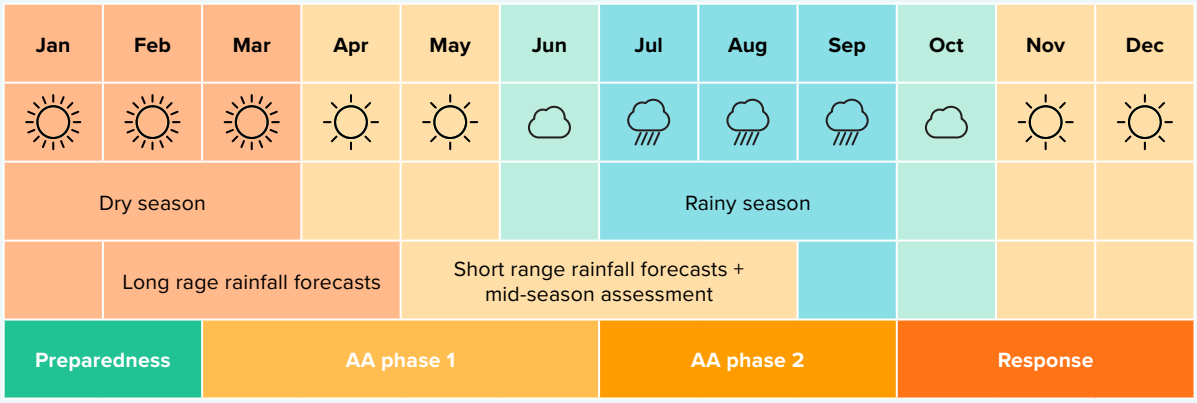
Table 1: WASH Interventions as Anticipatory Action and Response

Intervention	As a Response (after the shock)	As Anticipatory Action (after forecast, before shock)
 **Well protection & chlorination**	Response: disinfecting and cleaning wells after floods when contamination occurs.	Anticipatory: sealing wells and pre-distributing chlorine tablets before the forecasted flooding.
 **Water trucking**	Response: trucking water after boreholes run dry during drought.	Anticipatory: trucking water before the forecasted drought.
 **Distribution of WASH kits (soap, jerrycans, hygiene items)**	Response: distributed in displacement camps after people lose access to services.	Anticipatory: pre-distributed to at-risk households when river forecasts predict floods.
 **Latrine reinforcement / temporary latrines**	Response: installing emergency latrines after floods damage sanitation systems.	Anticipatory: strengthening vulnerable latrines before heavy monsoon rains.

Box 2 provides examples of possible anticipatory WASH interventions in a drought scenario.

Box 2: Scenario: AA in a slow-onset drought event

- Slow-onset events, which provide a longer lead time, can enable a wider range of AA WASH interventions, or interventions may be implemented in different phases. This example focuses on a drought, when low levels of precipitation lead to shortages in the water supply of surface and subsurface water levels[6], impacting household water supply.
- The illustration is a seasonal calendar for a drought caused by below-average rainfall during the rainy season.



- In this example, in February, the seasonal forecasts for the upcoming rainy season predict below-average rainfall. This triggers phase 1 of anticipatory action. An example of **phase 1 anticipatory action** could be the rehabilitation of water storage infrastructure such as check dams, reservoirs and rainwater collection infrastructure (before the onset of the rainy season so that, if there is less rain than normal, the rain that does fall can be captured and stored effectively).
- The short-range rainfall forecasts available from May onwards confirm the below-average rainfall, and it becomes clear that this will be a bad rainy season, with much less rain than usual. **Phase 2 of anticipatory action** could include interventions that improve consistent access to clean water for households at risk (water purification solutions at the community/household level), water storage solutions (to collect and store water during times of limited rainfall) or interventions that prevent the outbreak of water-borne diseases.
- Anticipatory actions are more effective because they happen before, rather than after, the event. People need time to prepare the AA interventions: in this example, they must be finalised before the drought's peak impact from October/November onwards.

2.2 Early warning, forecasting and triggers in anticipatory action

Anticipatory action requires some form of forecast or early warning that describes, in advance, when, where, and how bad an event (such as flooding, drought or heatwave) will be.

Early warning and forecasting are highly technical areas, and beyond the scope of this guidance. Forecasts and early warning can be based on meteorological (weather) forecasts and on other types of information (such as river levels, disease surveillance systems, or community knowledge). The type of information depends on the type of hazard. For example, weather forecasts of heat and humidity are often used for heatwave early warning, while community knowledge and observations are used to forecast flash floods.

Early warning systems may be available at community, national, regional and global levels; their availability to help design an anticipatory WASH system will differ from one place to another.

In most cases, the early warning system used for an AA programme should be the system used by the government or the humanitarian community in the country. A single early warning system prevents confusion caused by multiple organisations issuing warnings at different times.

Box 3: Impact-based forecasting

In addition to forecasting data about the hazard, anticipatory action often complements this data with an analysis of its impact. Impact-based forecasting combines the hazard forecast with its potential impacts[7]. This could include impacts on water access, water quality, and disease outbreaks.

The impact of each hazard can vary between different groups. Socio-economic and spatial data can be used to analyse the exposure and vulnerability of different groups to the hazard. Impact forecasting may also include an analysis of the historical impacts of similar hazards.

For more information on the use of data in WASH, please see *Guidance Note 7: Climate Data for WASH Programming*

3 Implementation: step-by-step guidance

This section describes good practice approaches for implementing AA and then provides a four-step guide through the building blocks of AA plans.

Anticipatory action plans are often called 'protocols'. The AA protocol sets out who will be doing what, when, and how. There are different formats for AA protocols, depending on the context and on the coordinating/lead actor. At a minimum, the protocol includes the four steps of:

1. An analysis of context, risk, vulnerability and capacity
2. The early warning system or indicators
3. Setting the triggers for action
4. Deciding on potential pre-defined actions, monitoring mechanisms and communication arrangements

Box 4 shows the key components of an anticipatory action protocol.

Box 4: Key components of an anticipatory action protocol

1. **Activation protocol:** information from the early warning system, forecasts or indicators that warn of a hazard; the triggers for activation; who will monitor and how frequently; and when and how decisions are made on the release of funds and implementation of activities.
2. **Anticipatory actions:** description of the anticipatory actions identified, linking these to the trigger statements.
3. **Standard Operating Procedures:** with details about the roles of different stakeholders; how information is shared and with whom (including with communities); any (technical) capacities required; and a timeline for the implementation from (operational) preparedness to completion.
4. **Budget:** budget required to activate the AA protocol, and whether the budget is secured (including the source of funding).

Ideally, the AA protocol is multi-sector, multi-hazard (see below) and multi-agency. Local and national civil society and governments must work together to develop and implement anticipatory action and integrate AA into existing disaster risk management structures. This can contribute to more effective responses and longer-term sustainability (see locally led anticipatory action below) and is essential for the inclusion of anticipatory action in policy frameworks, disaster management strategies, and local practices. At a minimum, the role of government is to provide an enabling policy and regulatory environment, but, where possible, government should lead the development and implementation of anticipatory action protocols.

WASH practitioners typically collaborate with others to develop and implement an AA protocol, often contributing a WASH perspective to the protocol (especially in defining anticipatory actions that reduce WASH impacts).

Box 5: Locally-led anticipatory action

Locally led anticipatory action recognises local leadership in knowledge and decision-making. It means that AA work ensures that communities lead in the development of contextualised AA protocols and in decision-making about activation. It leads to early warning systems that combine climate science with traditional knowledge (such as how hazards unfold and what is usually done to protect lives and livelihoods from the impacts of forecasted hazards) and provides a community with the opportunity to learn about hazards and how these might be changing as a result of climate change. Community-led AA also increases the funding that reaches communities and local actors on the frontline of disasters as directly as possible, including through locally-led pooled funding mechanisms. It also specifically includes working with women leaders and taking a feminist local humanitarian leadership approach in anticipatory action.

Learn more: Oxfam (2024). *Better Safe than Sorry: Four fundamentals for scaling up anticipatory action* (chapter 2.II: Decolonial and Locally Led)

3.1 Four steps to create an AA action plan

Step 1: Context, risk, vulnerability and capacity analysis

Context, risk, vulnerability and capacity analyses are critical for a better understanding of the communities' exposure to hazards and risks, their vulnerability and coping capacity. The analysis should also include (or update) a gender analysis, conflict analysis and safe programming risk analysis.

The analyses should be done in a participatory way with communities. It should consider past (climate-related) events and vulnerabilities, as well as forecasts showing how the size or frequency might change as a result of climate change.

As part of the context, risk, vulnerability and capacity analysis:

- Define the programme area and affected and target populations
- Identify the risks, impacts and critical WASH challenges (for more information on risk and vulnerability, see *Guidance Note 7: Climate Data for WASH Programming*
- Decide on the key risk(s) or hazard(s)[8] that the programme or AA protocol will focus on (see Tip 1 below)
- Conduct stakeholder mapping to understand what different actors are doing, and to coordinate with other stakeholders, including the WASH cluster and relevant government authorities

For more detailed information on how to conduct an analysis, see *Guidance Note 1: Climate Change Adaptations for WASH.*

Tip 1: Single-hazard vs. multi-hazard

While the majority of anticipatory action focuses on a single risk, in many contexts a **multi-hazard approach** is recommended to reflect the potential for multiple impacts on WASH needs. Locations can experience multiple hazards in various ways:

- At different points in time: for example, a drought-prone area may flood in a different season
- Simultaneous hazards: an area may be at risk of flooding, disease and displacement - and they can all happen at the same time or successively (for example, extreme heat before or following a major tropical cyclone)

Step 2: Identifying the early warning systems or indicators to use

To act before a hazard occurs, information is needed about when a hazard is likely to take place. This might be a single indicator, but that is unusual: for most hazards, several indicators are used. For example, to forecast a flood, information about rainfall, existing river levels, and water flow in the river system is needed. Specialist support is typically required to identify, understand, analyse and monitor indicators.

Early warning systems are created by specialists using multiple indicators to provide advance warning of a hazard. For some hazards, surveillance systems generate real-time information that an event is beginning or about to occur.

A heatwave early warning system can often quite accurately predict ten days in advance that a heatwave will occur. Alternatively, a disease surveillance system will identify existing early cases of cholera, allowing anticipatory action to prevent an outbreak from becoming an epidemic.

In most cases, WASH actors use existing early warning or surveillance systems to design anticipatory action. Such systems may be government-led (e.g. by a meteorological authority) or community-led (e.g. by a community disaster management committee).

In developing early warning systems and indicators, consider:

Whether national early warning systems make information available to communities, and if not, how to help them do so, enabling communities to take their own action in response to early warning information

How to integrate existing (government and community-led) early warning systems and information into the anticipatory action protocol. This may include information from indigenous knowledge systems

If community and national systems don't exist, whether the programme can support their development

If community and national systems don't exist and are unlikely to be developed, whether there are regional or global systems that can be used whilst maintaining the engagement of national meteorological institutes or other relevant departments to ensure sustainability after a project ends

How much 'lead time' the early warning system will provide – this is important when deciding which actions are relevant and possible in the time available between receiving the early warning and the hazard occurring

Who will monitor the early warning system to ensure the information is received as soon as it is available

Box 6: Providers of weather and climate forecast data

Forecasting data may be available from several providers, but their information may vary, for example, about geographic coverage, granularity, frequency or reliability.

In anticipatory action, multiple data sources should be combined to validate findings and manage uncertainties.

National authorities and institutions should be the primary entry point to provide forecast data in countries. Where the national forecast data is limited, global data providers can complement local data.

Suitable global providers of weather and climate forecast data could include:

- The **World Meteorological Organization (WMO)** coordinates international efforts in weather and climate data. The WMO can be a good starting point to find national hydrological and meteorological agencies across the world
- The **Famine Early Warning Systems Network (FEWS NET)** is a provider of early warning and analysis on acute food insecurity around the world
- The **Global Flood Awareness System (GloFAS)** is part of the Copernicus Emergency Management Service (CEMS) and can provide 10-day flood forecasts
- The **National Oceanic and Atmospheric Administration (NOAA) Climate Prediction Center (CPC)** monitors the El Niño-Southern Oscillation, including with seasonal outlooks
- The **UK Met Office** offers global weather forecasts, climate models, and data services, including the provision of global seasonal outlooks (3 months) and seasonal outlooks for Africa and Asia. Seasonal outlooks focus particularly on rainfall and temperature

Step 3: Setting the triggers

Setting triggers - like identifying and analysing indicators - is a specialist activity. Luckily, most early warning systems include triggers describing when the conditions indicate that there will be a flood, or a heatwave, or a drought. Annexe 2 provides examples of triggers from existing AA protocols for different types of hazards.

The lead time provided by a trigger (the time lapse between the trigger and the event) depends on the type of crisis and can range from hours or days (e.g. for a cyclone) to weeks or months (e.g. for drought).

In some cases, the AA protocol may include triggers for different levels or phases of the hazard: an early trigger (e.g. waters rising) at which limited action is taken, such as risk communication, and a later trigger (e.g. flood expected in 72 hours) at which more critical actions are taken, such as evacuation (see also the drought scenario in Box 2). This is further explained in Tip 2: Readiness vs. activation triggers. See also Annexe 2: Examples of Trigger Statements.

If government early warning systems are unavailable, practitioners can develop a community-based early warning system based on local knowledge, using triggers drawn from community experience. In these cases, ensure that communities consider how climate change may increase risks and change the triggers in the future.

Tip 2: Readiness vs. activation triggers

The accuracy of forecasts depends on the lead time. Often, forecast data is more accurate closer to the hazard impact, but this also reduces the available time to intervene. A 'readiness' phase can be used to, for example, stockpile essential items, set up evacuation centres or complete procurement processes.

This enables interventions to start as soon as the 'activation trigger' is reached - much closer to the hazard onset. Even with short lead times, actions can be completed before the hazard impact.

Example: National Early Action Protocol for Cyclone in Bangladesh[9]

Trigger statements have been set for wind speed, storm surge, and rainfall; the lead time depends on the magnitude of the hazard (e.g. if the wind speed is very high, the lead time is reduced). Triggers will be activated if any one of these components reaches its trigger threshold.

Readiness triggers:

- Wind speed above 118 km/hr between 72 to 120 hr before impact (or between 118-221 km/hr at 48-72 hr before impact)
- Storm surge above 3.6 m between 72 to 120 hr before impact (or between 3.6 and 5 m at 48-72 hr before impact)

At the readiness stage, communities can stockpile emergency supplies (such as water purifiers, soap, disinfectants, and hygiene kits) and secure latrines. For institutions, readiness activities could include the elevation and strengthening of riverbanks with soil and mud or sandbags, or proactive measures to the pipe network system.

Activation triggers:

- Wind speed above 222 km/hr (48-72 hr before impact) or above 118 km/hr (36-48 hr before impact)
- Storm surge above 5 m (48-72 hr before impact) or above 3.6 m (36-48 hr before impact)

At the anticipatory action stage (e.g. between 36 and 72 hours before landfall, depending on the wind speed), communities can protect tube wells by preserving the heads and covering pipes, tying down latrines with guy ropes and securing toilet pans (see *Guidance Note 11: Climate-Resilient Faecal Sludge Management)*. For institutions, actions may include the distribution of emergency supplies, including hygiene kits.

Tip 3: Trigger Evaluation

Trigger evaluation is a regular review of the accuracy of the triggers. Triggers can be adjusted as necessary based on experiences (activation/non-activation), changing climate patterns and feedback from the community or stakeholders. A trigger evaluation can take place after a hazard event (when the triggers were activated or not) to analyse the performance of trigger mechanisms and assess whether anticipatory actions were timely and effective.

Step 4: Defining anticipatory actions

An anticipatory action protocol includes pre-defined actions that are implemented at the trigger level(s) and aim to reduce (WASH) impacts before the hazard. Actions need to be contextually relevant, realistic within the lead time and the resources available, and be defined in collaboration with the community and other stakeholders.

Key questions to consider are:

- What and who are we trying to protect? Consider the specific needs of vulnerable or marginalised groups
- What specific anticipatory actions make sense, and can they be realistically activated in different timeframes and in different trigger phases?
- How can anticipatory actions reinforce what communities already do?

An AA protocol includes preparations for implementation, such as the prepositioning or procurement of stocks, selection and registration of households, and signing of agreements with service providers, etc. If cash and voucher assistance is considered an appropriate modality, this also needs to be prepared.

Table 2: Examples of anticipatory WASH interventions

Table 2 provides examples of anticipatory actions taken to reduce WASH impacts before flooding or drought. Note that not all actions can be implemented within the lead time in every context.

AA to reduce WASH impacts before flooding (lead time up to two weeks)
✓ Improve/protect selected water sources and make the community aware of where they should collect safe water after a flood
✓ Temporarily protect vulnerable infrastructure (such as pumps or other elements on or above the ground) from floodwater using sandbags or other temporary defences to reduce the risk of damage during flooding. Stockpile materials to temporarily protect infrastructure as part of preparedness to ensure their availability when needed
✓ Protect and seal wells and latrines
✓ Clean drainage infrastructure after a flood warning (and before a flood) to clear blockages and speed up the movement of floodwater out of settled areas
✓ Provide WASH items to households (or through cash or vouchers) to enable people to meet their needs for personal, domestic and food hygiene during a flood
✓ Raise public health risk awareness of best practices during floods
✓ Pre-position WASH supplies: stockpile water purification tablets, hygiene kits, jerry cans, and mobile latrines in flood-prone areas
✓ Prepare alternative water and sanitation facilities in locations identified as evacuation shelters

AA to reduce WASH impacts before drought (lead time up to six months)
✔ Strengthen borehole infrastructure by rehabilitating and deepening boreholes in advance
✔ Scale-up community hygiene promotion before a drought with drought-specific messaging, for example, maintaining hygiene with minimal water, reducing disease transmission when handwashing and managing sanitation practices challenged by water shortages
✔ Provide household water storage containers before the onset of a predicted drought
✔ Identify and develop alternative, backup water sources (e.g. rainwater harvesting systems, protected wells)
✔ Pre-position water trucking routes and agreements
✔ Promote drought-resistant sanitation solutions, such as the use of dry or composting toilets where water scarcity is severe
✔ Establish or reinforce water quality monitoring, such as early warning systems for groundwater depletion or contamination
✔ Build capacity of local WASH committees: train local actors in drought-response protocols, safe water storage, and resource rationing

3.2 Funding for anticipatory action

Anticipatory action can be funded through standalone projects or integrated into longer-term programmes focusing on disaster risk reduction or humanitarian preparedness, or in programmes incorporating ‘crisis modifiers’ (pre-arranged humanitarian funding integrated into development programmes).

Linking AA to ongoing priorities and programmes across humanitarian, development and climate work contributes to the mainstreaming and sustainability of anticipatory action.

Funding for anticipatory action can be characterised as two streams: 'build funding' and 'fuel funding'[10]:

- **Build funding** directly supports the establishment of inclusive anticipatory action frameworks/systems
- **Fuel funding** is released when a specific trigger is reached to support the implementation of activities before a hazardous event occurs, or before the most acute impacts are felt

Box 7: Funding landscape for anticipatory action

'Anticipatory action is increasing in scale and in scope'[11], and, in 2024, Germany, EU/DG ECHO, Sweden, and UK/FCDO committed to substantially increase funding for anticipatory action[12]. Examples of the available funding for anticipatory action include:

Build funding

- **Start Ready** is a financing mechanism of the Start Network that provides funding for recurring disasters that can be modelled and predicted. Start Network members in select countries come together to develop an AA mechanism and get access to funding for predictable shocks. More information: here
- **The Welthungerhilfe Anticipatory Humanitarian Action Facility** aims to identify and analyse disaster risks, support the development of locally-led anticipatory action mechanisms, and secure funding to implement these mechanisms. Funded by the German Federal Foreign Office, it funds German NGOs and their local humanitarian partners for anticipatory action. More information: here
- **The Australian Humanitarian Partnership (AHP)** is a ten-year (2017-2027) partnership between the Australian Government and Australian NGOs. Partners aim to save lives and alleviate suffering by supporting partner countries, local organisations and communities to prevent, prepare for, respond to and recover from disasters and other humanitarian crises. With support from the Australian Government, the AHP is trialling an AHP Anticipatory Action Fund to support communities to take protective actions prior to hazards. More information: here

Fuel funding	• The **Start Fund** Anticipation fund enables members to take anticipatory action before the impacts of crises take place, preventing or reducing their humanitarian impact. Anticipation alerts follow the same process as a response alert. The difference is that anticipation alerts are based on emerging risks (and ways to mitigate their impact) rather than a crisis that is already happening. More information: here • Other donors have similar mechanisms, such as the Danish Emergency Relief Fund • The **Central Emergency Response Fund (CERF)**, led by UN OCHA, is a global funding tool for (OCHA-facilitated) inter-agency responses, including anticipatory action frameworks. The CERF is also exploring innovative financing mechanisms, such as insurance-based risk transfer solutions, to increase its anticipatory action capacity • Specifically allocated **programme and project funds** can also provide a source of fuel funding. An example is 'crisis modifiers' that could offer contingency funding available in case of crisis onset, and, depending on donor requirements, may be used for anticipatory action

4 Success factors for anticipatory action

Anticipatory action has the potential to prevent predictable shocks from turning into crises, reducing the impacts on lives and livelihoods and the costs.

Effective AA requires preparation, both within organisations and with communities in at-risk locations. It is integrated with other strategies, including (community-led) preparedness, climate change adaptation, and other disaster management practices that address vulnerabilities and strengthen community resilience.

Anticipatory action is most successful when:

- The early warning systems provide information directly to communities, not only to humanitarian organisations or early responders
- The actions planned are realistic and can be implemented in the time between reaching a trigger and the hazard occurring
- Participants are prepared and have received the correct training in activating the plan (for example, through scenarios or simulations) and in particular skills needed for implementation (for example, community WASH committees know how to do augmented water testing and treatment)
- Plans - including the early warning system and triggers - are reviewed and adapted after implementation
- Plans are informed by vulnerabilities and strengths and build systems that are inclusive and appropriate for different communities and groups. They ensure that the specific risks to marginalised or minority groups are considered, and they can participate in developing the plan
- Local leadership is recognised in knowledge and decision-making, and funding is as directly accessible to first responders at the frontline of disasters as possible. Communities lead the development of contextualised anticipatory action frameworks and in decision-making about activations
- The complexity of crises is recognised by investing in multi-hazard early warning systems and anticipatory action models that make linkages with different approaches, including risk insurance approaches and shock-responsive social protection

- Strong collaboration between local and national civil society and governments is prioritised to better coordinate efforts and integrate anticipatory action into existing disaster risk management structures, contributing to longer-term sustainability. At the same time, strong collaboration between humanitarian, climate, and development sectors optimises resources and complementarity

Anticipatory action has focused largely on climate-induced hazards. However, through non-meteorological data (such as economic or surveillance data) or foresight analysis, AA may also expand to non-climate-related events, such as economic trends, displacement patterns, or outbreaks of conflict or disease.

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Annexe 1: What is the difference between AA, DRR and Preparedness?

Anticipatory Action, Disaster Risk Reduction, and Preparedness are three interconnected but distinct elements of disaster risk management. The graphic below illustrates how preparedness and anticipatory action are part of risk management process.

- **Disaster Risk Reduction (DRR)** aims to 'prevent new and reduce disaster risk' (Sendai Framework)
- **Anticipatory Action (AA)** is defined as 'acting ahead of a predicted hazardous event to prevent or reduce impacts on lives, livelihoods, and humanitarian needs before they fully unfold'
- **Preparedness** refers to putting in place systems, capacity, and knowledge to be able to anticipate and respond effectively to hazard events or conditions defined as emergencies

All are critical in disaster risk management, and, although they may overlap, successful AA will often depend on actions taken in the DRR and preparedness phases (such as flood proofing infrastructure, training of WASH committees, support to community disaster management committees, and setting up early warning systems).

	Anticipatory Action	Disaster Risk Reduction	Preparedness
Timing:	Actions implemented before a hazard occurs, initiated based on early warnings, forecasts, or predictive analyses.	Ongoing and long-term interventions.	Ongoing, focused on readiness for possible disasters (can be scenario-based).
Objective:	To reduce the immediate impacts of predicted hazards.	To prevent new disasters and reduce disaster risk.	To improve the ability to anticipate and respond effectively to hazard events.
Type of actions:	Short-term interventions, implemented before an event and based on concrete warnings. Actions could include distributing emergency kits and providing cash transfers to vulnerable communities before a forecasted cyclone makes landfall.	Traditionally, long-term DRR programmes build structures, strengthen policies, governance, or community disaster committees, and prepare people in at-risk areas through assessments, training, awareness-raising, and mitigation measures for future extreme events.	Preparedness can support response capacity through a wide range of activities, including risk assessments, developing early warning systems, training, simulations, capacity-building, contingency planning, and stockpiling resources.
Note:	Organisational preparedness is not part of anticipatory action.	DRR often only includes limited anticipatory action or early response when a shock happens.	The development of anticipatory action plans and the establishment of AA mechanisms are part of preparedness, focusing particularly on the operational capacity to act ahead of a specific shock. Preparedness can therefore facilitate more rapid development and implementation of anticipatory action plans.

For more reading on this topic, please see the Briefing: A Short Overview of Anticipatory Action, published by the Anticipation Hub.

Annexe 2: Examples of trigger statements

	Drought (Nigeria)[13]	Drought (Somalia)[14]
Readiness trigger	Phase 1 will be triggered when NiMet releases the annual Seasonal Climate Prediction in February, with a forecast of below normal rainfall of 250 mm to 450 mm in Baure LGA for the rainy season.	N/A
Activation trigger	• The Baure Anticipatory Action Committee observes no precipitation in the five communities for 20 consecutive days during the rainy season (May-October) and • NiMet predicts temperatures ≥45 °C for at least 7 consecutive days during the rainy season (May-October)	• When the IGAD Climate Prediction and Applications Centre issues a Standard Precipitation Index (SPI-12) forecast of less than -1 for a district and • The FEWS NET food insecurity projection reaches at least 0.7 in its derived population-weighted index in the same district
	Flood (Nigeria)[15]	**Flood (Yemen)[16]**
Phase 1 trigger statement **(readiness)**	Phase 1 will be triggered when the annual climate outlook at the beginning of the year (usually February) indicates above-normal rainfall in Numan LGA (average rainfall from previous years is 948 mm) during June to October.	The readiness trigger will be met when the median ensemble member of the European Centre for Medium-Range Weather Forecasts (ECMWF) forecast indicates that 24-hour rainfall totals will be 20 mm or above, using a time window of seven days ahead across western Yemen (including Hajjah Governorate).
Phase 2 trigger statement **(activation)**	Phase 2 will be triggered when the Nigeria Hydrological Services Agency reports that there is an 80% probability that the Hawal river water level exceeds 4 metres (with a flow of 685 m3/s) at the Numan measuring station. This water level will also be determined by the water release from the Kiri dam once it exceeds its threshold.	The activation trigger will be met when the median ensemble member of the ECMWF forecast indicates that 24-hour rainfall totals will be 20 mm or above, using a time window of within three days (72 hours) over the northwestern part of the country (including Hajjah Governorate).

	Cyclone (Philippines)[17]	Cyclone (Mozambique)[18]
Phase 1 trigger statement (readiness)	Tropical Cyclone with potential to reach wind speed greater than 154 km/h maximum 1 -minute sustained wind speed, or 136 km/h wind speed at 10 -minute sustained wind speed.	The readiness trigger uses the same conditions defined for the action trigger (see below), but considers forecasts with lead times between 72 and 120 hours.
Activation trigger	Threshold is reached, and CERF AA is activated if 72 hours (3 days) before landfall, the predicted numbers fall within this range: 50% probability that 50,000 houses or more will be totally damaged, or 85% probability that 8,000 will be totally damaged.	Lead time between 72 and 6 hours before landfall: • The exposed area corresponding to a severe tropical storm of at least 89 km/h overlaps with at least one of these districts: Angoche, Maganja Da Costa, Machanga or Govuro OR • The exposed area corresponding to a tropical cyclone of at least 119 km/h overlaps with at least one of these districts: Mogincual, Namacurra, Dondo, Cidade Da Beira, Buzi or Vilankulo
	Cholera (DRC)[19]	**Cholera (Cameroon)[20]**
Trigger 1	Scenario 1: An anomalous number of cases or deaths over three weeks in any health zone in a province where cholera is endemic (regularly occurring). These provinces are: North Kivu, South Kivu, Tanganyika, Haut-Lomami and Haut-Katanga.	• Climatic Trigger (2-month lead time): activation occurs when floods affect ≥2,000 people or when heavy rainfall (≥50 mm/ day for four consecutive days) is recorded.
Trigger 2	Scenario 2: An anomalous number of cases or deaths over three weeks in any health zone within a province where cholera is not endemic (not regularly occurring).	• Surveillance Trigger (5-day lead time): the response is initiated when there are ≥5 community diarrhoea alerts, ≥5 suspected cases per week, or one confirmed cholera case in adjacent districts.

End notes

1. Start Network & ODI (2019). Financial Flows Mapping: The potential for a risk finance facility for civil society https://start-network.app.box.com/s/cqzxnvgjsun7covshe28z07bbymmpgke
2. Anticipation Hub (2022). How anticipatory action makes a difference. https://www.anticipation-hub.org/Documents/Briefing_Sheets_and_Fact_Sheets/How_AA_makes_a_difference_policy_brief_FINAL.pdf
3. Extract from the agreed definition in the Grand Bargain Caucus on Scaling Up Anticipatory Action.
4. Anticipatory actions are based on forecasts. At times, funds are released and/or actions taken without the forecasted disaster materialising. In these cases, the funds and/or actions will still benefit longer-term resilience to future shocks.
5. Graphic adapted from Pichon (2019) Anticipatory humanitarian action: what role for the CERF? Moving from rapid response to early action, accessible here.
6. Asia-Pacific Technical Working Group on Anticipatory Action and Asia-Pacific Regional Cash Working Group. 2024. Anticipatory action and cash transfers for slow-onset hazards: Practitioners' note for field testing, Bangkok.
7. In addition to its use in AA, impact-based forecasting is also used in wider disaster risk management, for example to decide on appropriate approaches and adaptations
8. Some risk(s) or hazard(s), such as earthquakes, might have a significant impact on at-risk populations, but they might not be forecast accurately or reliably. If forecasting of sufficient quality is not available for a particular hazard, it is unsuitable for developing an AA protocol
9. National_Early Action Protocol_Cyclone_Bangladesh.pdf
10. Definitions drawn from the agreed Grand Bargain Caucus on Scaling Up Anticipatory Action Outcome Document, available here.
11. Anticipatory Action in 2024: A Global Overview _Online_FINAL_highres.pdf
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15. Unpublished. CRUDAN and Oxfam, Anticipatory Action Framework, Nigeria.
16. IFRC. Simplified Early Action Protocol_Yemen_Floods.pdf
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18. Mozambique: Anticipatory Action and Early Response Framework - Cyclones (As of 9 January 2025) | OCHA

19. Summary: DRC 2025 Anticipatory Action Framework | OCHA

20. Early Action Protocol_Cameroon_cholera.pdf


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