



Anticipatory action for livelihood protection

A collective endeavour

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Key messages

- Humanitarian agencies have been making the case for taking action before crises hit, but it is long-term actors (such as governments and service providers) who have responsibility for most anticipatory actions.
- ‘Anticipatory action’ is usually used to refer to an assistance project with dedicated funding, but other actions are needed to protect livelihoods ahead of a crisis. These include providing information so people can take informed decisions about their own anticipatory actions; investing in preparedness; and redirecting resources away from previously planned interventions towards actions in the same sector that can mitigate a predicted crisis.
- To achieve the potential benefits, a system-wide change is needed in how anticipatory action is thought about and used, moving from a focus on delivering relief earlier to a nexus approach with shared responsibility between government departments, development partners and humanitarian agencies.
- Each action needs to be more than just relevant and effective – it needs to be timely. Understanding windows of opportunity is as critical to the success of anticipatory action as determining the kinds of activities that can help reduce human suffering.
- More attention needs to be paid to understanding the accuracy of weather and crisis forecasts, as the ability to invest resources in advance of a crisis ultimately rests on confidence in these forecasts.



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Acronyms

AA	anticipatory action
ACF	Action Contre La Faim / Action Against Hunger
ARC	Africa Risk Capacity
CBA	cost–benefit analysis
CERF	Central Emergency Response Fund
CILSS	Comité Permanent Inter-Etats de Lutte contre la Sécheresse dans le Sahel
CRW	Crisis Response Window
DERF	Disaster Emergency Relief Fund
DRM	disaster risk management
DRR	disaster risk reduction
ECT	emergency cash transfer
EWEA	Early Warning Early Action
EWS	early warning system
FAM	Famine Action Mechanism
FAO	Food and Agriculture Organization of the United Nations
FbA	forecast-based early action
FbF	forecast-based financing
FEWS NET	Famine Early Warning Systems Network
FSNAU	Food Security and Nutrition Analysis Unit
HEA	Household Economy Analysis
IDA	International Development Association
IFRC	International Federation of Red Cross and Red Crescent Societies
LEGS	Livestock Emergency Guidelines and Standards
ROI	return on investment
SOPs	standards and operating procedures
UN OCHA	United Nations Office for the Coordination of Humanitarian Affairs
VfM	value for money
WASH	water, sanitation and hygiene
WFP	United Nations World Food Programme

Executive summary

The term ‘anticipatory action’ (AA) refers to actions triggered before a crisis in order to mitigate the worst effects of the crisis, or even avoid crisis altogether. While substantial progress has been made in reducing the devastating impacts of drought, most anticipatory actions taken to protect livelihoods have been on a small or pilot scale, and on an ad hoc project basis. In many crises, humanitarian responses still arrive late. Decisions on how to protect livelihoods continue to be taken when a crisis is already happening and delays in mobilising funds to respond are commonplace.

To scale up AA, the justification for allocating humanitarian resources before a crisis needs to be clear; this ultimately rests on getting the timing right. This paper demonstrates how a crisis calendar can be used to identify when decisions around livelihood protection for drought need to be taken in order to be effective. Understanding the window(s) of opportunity is critical to the success of AA.

The paper identifies six AA modalities to help protect livelihoods ahead of a forecasted crisis. These are: (1) implementing an assistance project with dedicated funding (the approach currently

being taken in pilot AA projects); (2) heightened surveillance; (3) investment in preparedness; (4) increased attention to ensuring that work that ought to be done seasonally is actually accomplished; (5) redirecting resources away from previously planned interventions in favour of actions that will help mitigate the predicted crisis; and (6) ensuring that potentially affected people are given all possible information, so that they can make informed choices about their own anticipatory actions.

The analysis presented in this paper suggests that the potential benefits of AA can only be achieved if the central focus moves from identifying and supporting vulnerable individuals with particular project packages to effecting a system-wide change in how AA is thought about and used. For example, anticipatory livestock protection activities at scale for droughts will require agencies and governments to consider how much fodder is available in a country, and the capacity to transport it.¹ Only then will AA be able to play a much wider and more significant role in protecting livelihoods from the damaging effects of drought and other shocks.

1 Levine et al. (2019) estimate that 350 lorry-loads of fodder would need to arrive every day in just one zone in Ethiopia (pop. 55,000 households) to keep breeding female livestock alive through a drought, even on the optimistic assumption that herders could meet half of their fodder requirements themselves.

1 Introduction

It is rare for a crisis to result in mass mortality, and when mass mortality occurs this is usually because people have been prevented from accessing the aid they need. Even so, humanitarian agencies accept that a great deal of preventable suffering still occurs (De Waal, 2018): people still die; children are still malnourished; asset losses can be huge; and some may have taken desperate measures to look after themselves and their families. For at least 20 years, humanitarians have been arguing for the need to respond sooner, and in ways that can limit the devastating long-term impacts of crises.

The trajectory of many crises is well understood, particularly those that are slow to develop, such as droughts. It is often clear long before the situation has deteriorated that a crisis will occur (see Box 1). AA, taken before the situation reaches crisis point, should in principle be able either to reduce the impacts of a crisis, or help people through them without undue suffering.

Despite these arguments, and despite significant investment in early warning systems and in developing more rapid financing

mechanisms, progress on accelerating the delivery of aid has been very limited. While there have been some notable efforts, the late responses to the double crises in the Horn of Africa in 2015/2016 and 2016/2017 illustrated yet again a familiar pattern of delay (e.g. Grunewald et al., 2019) and the difficulties the aid sector faces in acting in anticipation of a crisis.²

Similarly, for governments, despite what has been said about anticipation being a normal part of planning, action to prevent crises is often not the norm. Governments tend to give responsibility for crisis management to dedicated departments, and to humanitarian agencies. This happens across sectors: for example, the responsibility for delivering essential health, education and water services to people displaced by a crisis is not always considered by ministries of health, education and water respectively as being a core function, but instead one delegated to a national emergency management agency.

This problem is mirrored in the international aid sector, where development agencies often

Box 1 Shocks and crises

In everyday language, ‘shock’ and ‘crisis’ may be used interchangeably, but in analysing and anticipating the trajectory of a crisis, it is often useful to distinguish the problem that people are suffering (the human crisis) from the event that triggered it (e.g. a flood, earthquake, drought or conflict). Shocks may be short-lived (earthquakes and their aftershocks typically last only one or two days) or protracted (a failed rainy season extending over several months). This is distinct from how long it takes the human crisis to develop, which may also be short (e.g. earthquakes cause immediate injury and damage) or delayed (e.g. a food security crisis may result from a drought over several months). The speed with which crises follow shocks depends on the nature of the shock, the nature of the crisis and how the shock affects different people. For example, in a drought, agricultural labourers will often experience a crisis quite quickly if there is no paid labour for them to do; farmers may start to feel the crisis some time after the expected harvest; and pastoralists may not experience crisis for several months.

2 There were some attempts at anticipatory action for the 2016/2017 crisis, but not enough or at scale: (FAO 2018a).

leave responsibility for crisis management and even disaster risk reduction (DRR) to their humanitarian counterparts. Development aid is often targeted in accordance with the national priorities of recipient governments, in accordance with the Paris Declaration (OECD, 2005). This may or may not coincide with those areas and populations most vulnerable to crises.

Notwithstanding these limitations, there are some grounds for cautious optimism. Donors, states and aid agencies are beginning to take AA more seriously, especially for drought. There are several reasons for this, including:

- fears that reactive responses will not be able to keep pace with more frequent and more severe crises due to the climate emergency;
- renewed attention after the World Humanitarian Summit (2016) on creating a nexus of development and humanitarian assistance, offering new possibilities to tackle livelihood protection in crises;
- a belief that, the longer action is delayed, the greater the cost in humanitarian terms and to the donor; and
- some evidence that acting earlier might be more cost-effective than a later humanitarian response.³

AA has been facilitated by major improvements in weather forecasting, risk data and information on outcomes from past shocks, as well as projected outcomes.⁴ Improvements in meteorological forecasting have also made it possible to move beyond using the projection of a crisis after a shock to trigger AA, and even using forecasts of the shock to trigger AA.

Actions referred to as ‘livelihood protection’ have been implemented by the humanitarian sector for many years, particularly in response to droughts in arid areas. There is now a growing body of livelihood protection actions, some triggered by a weather or seasonal forecast,

others based on analysis of observational data showing that a crisis is likely to develop, or a combination of the two. So far, however, most have been on a small or pilot scale and on an ad hoc project basis. For example, anticipatory actions by the Food and Agriculture Organization of the United Nations (FAO) in several countries have been among the largest in the humanitarian sector but have still had budgets under \$500,000 and beneficiary households numbering just a few thousand. Initiatives from the International Federation of Red Cross and Red Crescent Societies (IFRC) and the START Network have been smaller.

There is a need to expand these pilots in two ways: to roll out appropriate and effective anticipatory interventions at much larger scale; and to move away from ad hoc projects and produce a coordinated AA strategy capable of combining different kinds of interventions in a coherent way. A larger pooled fund – the UN Central Emergency Response Fund (CERF) – has developed anticipatory actions that are coordinated across agencies, piloted through its Rapid Response Window (UN CERF, 2019). The World Bank’s International Development Association (IDA) has also increased its focus on preparedness and early response for slow-onset crises (disease outbreaks and food insecurity) through the most recent IDA replenishment in December 2019. Financing is made available through the IDA Crisis Response Window (CRW) to IDA-eligible countries that have (or are developing) adequate preparedness plans. A costed response plan is produced once the event is in train. CRW early response financing is capped at \$500 million (World Bank, 2019). The World Bank is also setting up the Famine Action Mechanism (FAM) using artificial intelligence and machine learning, to improve early warnings and link these to pre-arranged financing that can be released before a crisis emerges.

3 Papers such as *The Economics of Early Response and Resilience* series (see for example Cabot Venton, 2016; 2018) are regularly cited as providing evidence that earlier action would be much cheaper.

4 Examples of these improvements include the Famine Early Warning Systems Network (FEWS NET), FAO’s Food Security and Nutrition Analysis Unit (FSNAU) in Somalia and the Comité Permanent Inter-Etats de Lutte contre la Sécheresse dans le Sahel (CILSS).

The Global Network Against Food Crises is seeking to enhance the ability of international and national agencies to develop coherent strategies around AA for livelihood protection, and to take such action to scale. Within the framework of the Global Network, FAO commissioned ODI to support this process by:

- Providing an overview of the key actors in and status of AA for food security in the context of drought.
- Providing an overview of existing evidence on the effectiveness of this approach, including measures of ‘successful’ early action for agriculture and food security.
- Encouraging critical thinking around the progress achieved so far and what is needed to obtain a comprehensive understanding of the benefits and challenges of early action in agriculture and food security.
- Promoting scaling up, as well as understanding of the constraints to institutionalising early action.

2 What is anticipatory action?

The language of anticipatory action, early action, forecast-based early action and livelihood protection can be confusing. Some AA is forecast-based – i.e. based on the forecast of a weather event – but not all. Some AA happens before the crisis, but after the weather event. Some forecast-based action is for livelihood protection, but not all; and AA, as well as early action, is sometimes used to refer to livelihood protection, but not always. Preparedness can mean delivering change on the ground for people, or just getting ready to deliver change, depending on who is using the term. Below we set out the terms as straightforwardly as possible, noting how they are used in practice, rather than just as definitions.

Early warning. Early warning systems (EWSs) can serve two purposes: to collect information from or about a (potentially) affected area and communicate to those responsible for responding (e.g. government, aid agencies) or who may need to act (e.g. businesses); and to collect information from outside the affected area (e.g. from meteorological agencies, government) and communicate this to a potentially affected area, so that the affected population can take action. (These are not always well-distinguished.) An EWS may be designed to look at weather forecasts in order to warn of an impending shock, or to analyse the predicted consequences of weather events that have already happened in order to warn of an impending crisis. Some EWSs are designed to do both (FEWS NET, for example, provides forecasts and information on both rainfall and food security implications). The parameters that are measured (e.g. rainfall proxies, crop performance, malnutrition rates) will determine how ‘early’ the warning is.

Anticipatory action. Anticipatory actions ‘are aimed at reducing or mitigating the impact of

disasters and enhancing post-disaster response, using forecasts or early warnings of imminent shock or stress’ (Weingärtner and Wilkinson, 2019). For slow-onset crises such as droughts, this has often been attempted by reacting as soon as the rains fail. For droughts, but more notably for sudden-onset crises such as floods, where there is no time for AA after the shock event, AA has also been used in response to forecasts of the shock. The term AA thus covers actions triggered both by forecasts of a shock (see ‘Forecast-based early action’ below), and actions triggered by predictions of a humanitarian crisis.

Although the term ‘anticipatory action’ has mainly been used within the humanitarian sector, the term has equal relevance for normal state services, development assistance and the private sector (for business continuity). It can also refer to actions taken by the people or communities likely to be affected by a crisis. However, some (almost entirely humanitarian) organisations use the term more narrowly to refer to a discrete aid modality in response to forecasts and predictions. These organisations seek to establish a standard approach (i.e. ‘minimum common acceptable standards for evidence/triggering’ and agreement on ‘key parameters’) to how AA is used by aid agencies.

In this paper, we use the term in its wider sense, covering all actions taken to mitigate potential crisis on the basis of anticipatory thinking. We do not limit it to the actions of aid agencies or to actions taken according to the standards of any particular set of actors. However, because of the focus of this paper the term is used only to refer to actions taken in anticipation of a specific shock or crisis, so excluding longer-term interventions to reduce vulnerability.

Drought. Different terms are used to refer to drought. A meteorological drought is when

precipitation is less than the long-term norm; an agricultural drought is when there is insufficient soil moisture to meet the needs of a particular crop at a particular time; and hydrological drought refers to deficiencies in surface and subsurface water supplies; and socio-economic consequences of a drought occur when human activities are affected by reduced precipitation and related water availability (FAO, 2013).

Early action. The term ‘early action’ is used to refer to anticipatory actions and to the rapid delivery of relief as soon as critical needs are felt, although the former is more common. FAO uses the term ‘Early Warning Early Action’ (EWEA) to denote the assistance provided to affected people before the height of a crisis is reached, in order to mitigate impacts. Given the mandate of FAO, EWEAs have been used for livelihood protection. EWEA covers actions taken before crises develop, but it can also include both those actions triggered by forecasts of potential shocks, and those triggered by predictions that a crisis will develop after a shock has occurred. EWEA is thus defined by its purpose (crisis prevention/mitigation) rather than by the trigger.⁵ The term early action is used by the humanitarian community to mean action in relation to a crisis, as the crisis is the focus of attention for humanitarian action, while actions taken just before a crisis would not necessarily be considered ‘early’ for non-humanitarian actors.

Forecast-based early action (FbA). FbA is used to describe actions that are triggered by the forecast of the shock (Wilkinson et al., 2018). FbA has so far only been used in relation to forecasts of extreme weather events (drought, flood, storm, heatwave and cold shock). FbA can be used to take action that is completed in its entirety before a shock occurs; in other cases, where implementation will take longer, it can be necessary to act on the shock forecast in order to complete implementation shortly after the shock. FbA may deliver livelihood protection, assistance to help reduce risks to avoid or mitigate expected impacts once a shock or crisis is imminent, and preparedness to respond. Unlike EWEA, it is defined by its trigger and not by its purpose.

Forecast-based financing (FbF). FbF refers to specific funding modalities set up in response to the difficulties humanitarian actors have frequently faced in obtaining resources to act before a shock or crisis has occurred. These enable quicker release of funds based on a forecast. However, FbA (and AA more broadly) does not have to be restricted to actions funded by special FbF mechanisms. For example, AA can be funded from within state service budgets or from development programmes, if flexible management is allowed. Normal humanitarian funding mechanisms can also be used for AA.

Livelihood protection. Livelihood protection refers to support given to people to maintain their livelihoods in the face of a shock or crisis. These measures are designed to have very immediate benefits, within the timescale of the expected crisis, enabling people to get themselves through the crisis or to prevent the erosion of their livelihoods, for instance through asset depletion. Livelihood protection measures may be taken before or after the shock. They are defined by their purpose and not by their trigger or timing.

No regrets (and low regrets). Following Hillier and Dempsey (2012), the term ‘no regrets’ (or ‘low regrets’) has been used to describe anticipatory actions that are worth investing in even if a serious crisis does not materialise, and which would not therefore be regretted with hindsight. Although the term is intuitively appealing, little has been published to help assess the kinds of resource use that would (or should) be regretted in which circumstances. The term is sometimes used in a way that suggests that any action providing benefits to (poor or vulnerable) people is justified in the face of a possible crisis, whether or not the crisis occurs. This does not take into account the fact that humanitarian resources are limited, and that lifesaving aid sometimes has to be rationed. In these cases, most people would regret having spent scarce resources on non-urgent interventions even if these were beneficial. Implementing these interventions, but using resources from the development sector, would result in fewer regrets.

⁵ Care is needed to distinguish between different kinds of information used to trigger EWEA, and whether this information (which may include scientific forecasts and/or observational data) can help anticipate a shock or a crisis. Hence, throughout this paper we refer to *forecasts* of shocks and *predictions* of a crisis.

Preparedness. Although preparedness simply means actions taken to be ready, the different mandates and responsibilities of different kinds of actor can lead to ambiguity or misunderstanding. Humanitarian agencies think of preparedness in relation to the ability to respond to a crisis (e.g. IASC, 2015). Governments, with a responsibility to protect their populations from crises, sometimes use the term in a similar way to disaster risk reduction, referring to measures that can reduce disaster impacts in periods when those events are expected to occur (for example, at the start of the hurricane season) as well as when a disaster is imminent, in order to mitigate the impacts and to mount better responses.

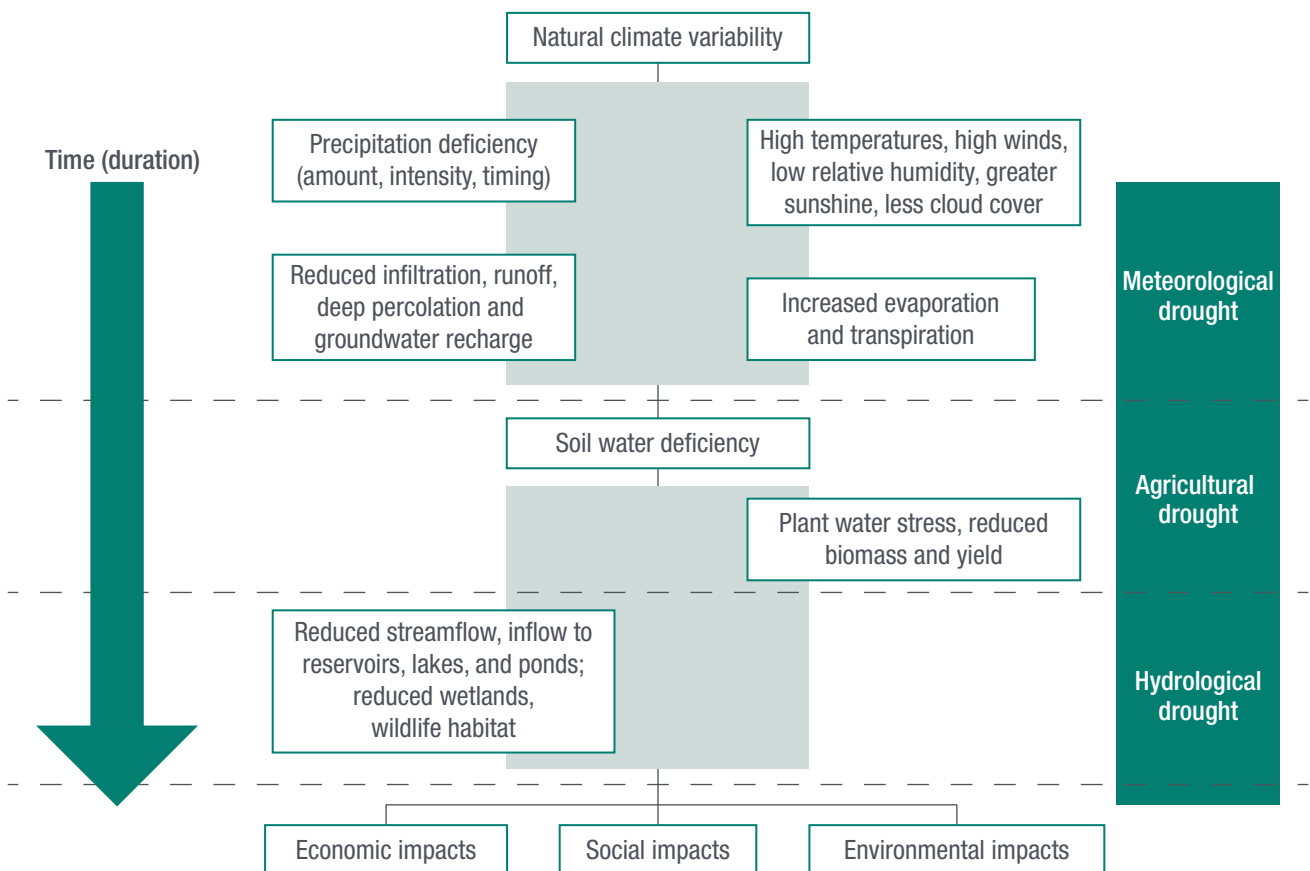
Probability and forecast skill. No prediction is ever completely certain, whether it is of the likelihood of a shock or, after the shock, the exact way and timing in which a crisis will develop. Weather and seasonal climate forecasts

usually indicate the probability that the event that they are describing will take place. This probability is calculated by the forecasting model or based on expert elicitation and consensus. It is also possible to test different forecasting models to see how well their predictions match what happened. This is the skill of the forecast, and it is a separate source of uncertainty from that calculated within the model.

2.1 Forecasting a drought

Different kinds of analysis and disciplines need to be brought together to turn a meteorological forecast into a crisis prediction to justify AA. Analysis of drought usually covers meteorological, agricultural, hydrological and socio-economic or humanitarian phenomena (Wilhite and Glantz, 1985). As Figure 1 shows, these are not simply different aspects of the same event, but occur in different timeframes.

Figure 1 Sequence of drought occurrence and impacts for commonly accepted drought types



Source: National Drought Mitigation Center, University of Nebraska–Lincoln in WMO (2006).

Forecasts and early warning systems, on which anticipatory actions rely, also exist in different timeframes depending on whether they are warning about meteorological events, agricultural outcomes, hydrological events or crises.

In the 1990s, Household Food Economy Analysis in what was then southern Sudan, designed by Save the Children, was the first system in the international humanitarian sector to give food security predictions, on which aid decisions were based.⁶ This methodology then spread to EWSs, which have given food security predictions three and six months in advance for over two decades, starting with the United Nations World Food Programme (WFP)'s Food Security and Nutrition Assessment Unit (FSNAU), a collaboration with FEWS NET, Save the Children and ACF (Action Against Hunger) for nutritional surveillance. However, in some countries response still relies on information systems that are slow and based on much later indicators, such as crop harvest assessments. Such systems do not permit AA unless they are complemented with a completely separate EWS, whose warnings governments and/or donors are prepared to act upon.

In order to predict a crisis, estimates have to be made about the timing and likelihood of a forecasted meteorological event turning into an agricultural event; and an agricultural event becoming a socio-economic or humanitarian situation. To justify AA, each step in this analytical chain has to show that the scenario leading to crisis has a high probability. Once an agricultural drought is evident (e.g. through seasonal crop assessments), the humanitarian situation can be predicted by using livelihood and vulnerability analyses. This requires knowledge of socio-economic differentiation, the possibilities and limits of coping strategies and the seasonality of income and expenditure. It also requires close attention to other factors that determine whether or not a crisis occurs, in particular conflict and markets. The most notable recent drought famine, in Ethiopia in 1984, could not have been predicted based only on information about crop yields. It was as serious

as it was because of the long-running civil war. A similar situation arose in Somalia in 2011.

Translating meteorological droughts into agricultural droughts depends on knowledge about which crops are grown (and which varieties) and detailed knowledge about soil types. Since the distribution of rainfall can be as important as the total precipitation, predictions will always be imperfect, and any geographical targeting will inevitably be imprecise. This has to be accepted if AA is to be approved.

The ability of weather and seasonal climate forecasts to correctly predict rainfall also varies. There are differences between short-range weather forecasts for the coming days, in-season forecasts and seasonal climate forecasts produced some months before the start of the rainy season. Each of these forecasts will have different skill levels. Additionally, there can also be significant differences between the forecasts for different seasons, or for different periods within a season. For example, long-range forecasts for the short October–November–December (OND) rainy season in Kenya have relatively high potential to be used for AA. The corresponding forecasts for the long March–April–May (MAM) rainy season have a much lower skill level, and are therefore much less useful for triggering action (Weingärtner et al., 2019). These skill levels are not always well understood or appreciated by those making decisions about AA. Similar considerations apply to the ability to predict floods based on forecasts of heavy rains.

'Anticipatory action' is the term favoured by this paper. It captures the essence of what is important, i.e. looking ahead, planning ahead and responding proactively as early as is justified before a crisis develops. It is a broader term than FbA because it allows for different kinds of anticipation. It also has no obvious sectoral home. It can be used equally by government services, humanitarian agencies or development actors. As this paper argues, in order for crises to be effectively prevented or mitigated, collaborative action from across many domains will be needed. A shared strategy will be more easily achieved if the language describing that collaborative action is also shared.

6 It is now known simply as Household Economy Analysis (HEA).

3 The effectiveness of existing anticipatory action initiatives to protect rural livelihoods?

A range of studies – including evaluations, research, value for money (VfM), return on investment (ROI) and cost–benefit analysis (CBA) reports – have been produced over many years making the case for AA and contributing to an overall proof of concept for acting before a shock occurs or a crisis fully develops.

These studies have shown that AA has the potential to enhance the effectiveness of humanitarian and development funding, and can lead to beneficial outcomes for individuals and households by helping them reduce risk or prepare for and cope with shocks and crises. For example, helping keep livestock alive during a drought can be cost-effective and help prevent the drought leading to widespread destitution. Supporting livestock-keepers to sell their animals at a higher price early on (known as ‘commercial destocking’), leaves them enough income to buy the food they needed and still have money to invest in protecting the rest of the herd (Pastoralist Livelihoods Initiative, 2007). Livestock interventions have been at the forefront of the development of livelihood protection for drought, and principles for a range of interventions, most of which can be considered as potentially appropriate AAs, were first set down in the Livestock Emergency Guidelines and Standards (or LEGS) in 2009. (A revised edition was published in 2014.)⁷

However, in other situations the same interventions have failed, for example because a drought lasted too long for a feeding initiative to be sustained and livestock eventually died anyway (Levine et al., 2019), or because the fodder distributed was infested with ticks. Ensuring that farmers have appropriate planting material before a predicted poor rainy season can help them guarantee some harvest. In other situations, seeds distributed have not proved well adapted to farmers’ actual growing practices and anticipatory interventions have not had a positive impact.

In other words, establishing proof of concept was the first critical step, but this does not mean that AA will always work. Understanding the effectiveness and the appropriateness of AA in different circumstances, and how best to manage them, will be a long task, and will require rigorous monitoring, evaluation and learning from the actual implementation of anticipatory actions.

3.1 Existing evidence on outcomes from recent anticipatory action interventions

Despite different institutional mandates and areas of focus, practitioners overall share similar expected outcomes from AA. This can be seen in the evaluations, CBAs and ROI studies of AA

⁷ A number of evaluations and reviews of interventions which were guided by LEGS can be found at www.livestock-emergency.net/legs-impact-database/. Unfortunately, the database does not go beyond March 2014.

undertaken mainly by humanitarian agencies. Among these expected outcomes, maintained or enhanced food security and nutrition, as well as protected livelihoods and avoided losses in agricultural and pastoralist production are some of the most common.⁸

To highlight the potential benefits of AA in the context of rural livelihoods, a number of modelling and simulation exercises have been conducted in recent years. These include an analysis of projected outcomes at household level from the FoodSECuRE Small Grains Project in Zimbabwe (Giuffrida et al., 2017); a series of papers assessing the possible cost-effectiveness of acting earlier, compared to a late humanitarian response (Cabot Venton, 2013; 2018; Cabot Venton and Coulter, 2013; Cabot Venton et al., 2012); and a study estimating the impact of drought-related early action on household welfare (Hill et al., 2019). While these analyses have pointed to the potential benefits of AA, such as mitigating drought-related rises in food insecurity or enhancing the cost-effectiveness of humanitarian funding, they are not based on real-life empirical testing. Models were run for specific actions in particular countries, and therefore need to be interpreted in light of their underlying context and the assumptions on which they are based.

In addition to these studies, a handful of evaluations have empirically analysed the effects of anticipatory humanitarian action initiatives on indicators related to rural livelihoods, food security and nutrition. This includes analysis by the Red Cross/Red Crescent, the START Network and FAO in relation to FbF, anticipation window funds and EWEA pilots respectively. Empirical evaluations of AA pilots have looked at a variety of outcomes, including the effects on the continuation and resumption of productive activities; reduced livestock mortality; maintained or improved animal body condition; households' ability to buy basic necessities during periods of hardship; and enhanced quality and quantity of food

consumption. The empirical evidence base on these outcomes, while still limited, is growing, especially around outcomes from anticipatory cash transfers related to livelihoods, food and nutrition security, and the outcomes of pastoralist livelihood-oriented AA on livestock condition and mortality.⁹

Studies linked to AA initiatives in Bangladesh and Mongolia have indicated that anticipatory emergency cash transfers (ECTs) (complemented by animal care kits in Mongolia) help people undertake activities to support their livelihoods and household food security in advance of flooding and a cold wave-induced crisis, respectively (FAO 2018b; Gros et al., 2019; Tanner et al., 2019; Red Cross/Red Crescent Climate Centre, forthcoming). In both cases, anticipatory ECT recipients appeared to carry out preparedness activities similar to those undertaken by non-recipients, but could do so on a larger scale. These activities included purchasing food before prices rose in Bangladesh, and purchasing animal feed before a dzud (severe winter) in Mongolia.

Different types of anticipatory action appear to be linked to a range of positive food- and nutrition-related outcomes in some instances, but not always. In Bangladesh, for example, FbF-assisted households were significantly less likely than households in the control group to skip meals or reduce meal sizes. These households were also less deprived of nutritious food (Gros et al., 2019). Households receiving seeds, tools and irrigation equipment under an EWEA intervention in Madagascar reported higher food-consumption scores than non-beneficiaries. While households across both groups ended up engaging in coping strategies that were detrimental to their food security, non-beneficiaries did so more often than beneficiaries of the AA initiative (FAO, 2019b). Positive outcomes on food consumption and nutrition were also found in a qualitative impact assessment of the Save the Children Early Action Fund in Ethiopia, which triggered activities including cash for work, distribution of livestock

8 For more details about 'success' factors, i.e. outcomes expected by practitioners and donors from AA interventions, and for a summary of findings from recent studies, see Weingärtner et al. (2020).

9 A summary of findings on a range of other outcomes, for instance related to health or psycho-social well-being, can be found in Weingärtner et al. (2020).

feed, animal health campaigns, rehabilitation of water sources and distribution of water purification tablets in advance of an expected crisis (Atkinson, 2018). In contrast, no statistically significant effect on the quantity of food consumed among recipient households was found from the anticipatory cash transfers and animal care kit distribution in Mongolia (Red Cross/Red Crescent Climate Centre, forthcoming).

Overall, AA evaluations and data collected as part of a series of ROI studies suggest that, in some cases, anticipatory actions targeted at pastoralist livelihoods seem to have substantially contributed to maintaining or improving animal body condition and reducing livestock mortality in times of crisis. However, this is not always the case, for all types of animal.

Studies capturing information on potential outcomes from AA on livestock include assessments on de-stocking for cash and livestock feed distribution in relation to severe winter conditions in Mongolia, the distribution of concentrate feed and mineral licks for livestock faced with drought conditions in Sudan, and the provision of supplementary feed triggered by drought warnings in Kenya (FAO, 2018a; 2018b; 2019a). In all these cases, beneficiary households reported reduced average mortality for small livestock, or maintained or improved animal body condition compared to households that had not received this assistance. This gives an indication that the anticipatory actions taken might have been beneficial in the evaluated interventions, but does not tell us whether the actions taken, at the time they were taken, were also favourable to later interventions or other types of AA.

How AA compares to doing the same thing at a later stage was assessed in an impact evaluation conducted by the Red Cross/Red Crescent Climate Centre. The evaluation looked at an FbA intervention which supplied vulnerable households with cash and animal care kits during extreme winter conditions in Mongolia in 2017–2018. The study found that households that reported receiving the assistance ‘early’ (i.e. before the end of the first quarter and the typically sharp rise in livestock mortality observed afterwards) experienced lower livestock

mortality than those receiving the support ‘late’ (i.e. after the end of the first quarter). Horse, sheep and goat survival increased significantly for households who reported receiving assistance earlier compared to those who reported receiving it later. However, this effect was not confirmed for cattle, suggesting that outcomes from the same type of anticipatory action differ between animal species, and that households benefit to varying degrees depending on their specific livelihood portfolio (Red Cross/Red Crescent Climate Centre, forthcoming).

3.2 Limitations in evidence on AA outcomes for protecting livelihoods and food security

There are a range of key limitations on our ability to use existing studies to draw general lessons about the likely impacts of different AA interventions for protecting livelihoods and preventing food crises. One challenge revolves around the breadth and quality of evaluations of AA interventions undertaken to date. Many early studies of AA pilot initiatives have focused on producing a proof of concept, to show that early action can work. This type of information is important, but can be problematic when there is an overemphasis on demonstrating that an approach works, rather than aiming to understand whether it works, how it works or whether it makes sense in a particular context at a certain point in time. Failures of AA initiatives are rarely documented with the same level of detail as successes. This means that learning in the field overall is driven by a partial sample of evidence. There are some exceptions to this, with some impact evaluations also reporting on non-results (see Gros et al., 2019; Red Cross/Red Crescent Climate Centre, forthcoming), and some agencies are starting to document and share what has gone wrong in implementing FbA projects (for instance IFRC, German Red Cross and Red Cross Red Crescent Climate Centre, 2019), or the barriers to acting early (for example Start Network, 2017).

Evaluations mostly compare anticipatory action with no response, rather than comparing the use of humanitarian resources earlier in

a crisis against waiting until needs are clearly established.¹⁰

Comparing anticipatory action with later response is made more difficult by the fact that the people who benefitted from anticipatory action are not necessarily the same people who would have needed a later humanitarian response, in the absence of AA. In other words, since it is impossible to know in advance exactly who will need emergency relief and where they will be, from a humanitarian perspective there will always be ‘inclusion error’ in any early action, even if, from a livelihood perspective, the targeting is perfectly justified. Care must be taken in equating assessment of the benefits of AAs with claims about savings in humanitarian resources. Such claims would have to assume, implausibly, that the same beneficiaries of early action would all have been the beneficiaries of a later emergency relief operation, because:

- however good the vulnerability mapping behind a livelihood protection programme, it is never possible to predict exactly who will most need humanitarian assistance later; and
- it is far harder to ensure accurate targeting based on identifying vulnerability than it is to accurately target humanitarian relief at visible needs.

This consideration is particularly important in assessing the merits of using humanitarian resources to make anticipatory emergency cash transfers (ECTs). It is obvious that most people who receive an ECT will be better off than if they had not received the cash transfer. Intuitively, it may also seem likely that people who receive an

anticipatory ECT are better off than those who receive the same total level of assistance, but later in the crisis. However, this is far from certain, if the earlier transfer meant that people had fewer resources left later on, when they might have most needed them.¹¹ Similarly, it is unclear whether and when ECTs delivered through an AA mechanism are preferable over a regular and predictable transfer to people in need of social assistance, or those particularly vulnerable to droughts, floods or other prevalent hazards in the given context.¹²

An anticipatory ECT *is* clearly justified where there is good reason to believe that recipients could use resources earlier in the crisis in beneficial ways that cease to be available later in the crisis (i.e. the window of opportunity to act then closes). There are situations where pastoralists have used cash transfers to help protect their livestock through the drought, by purchasing feed, veterinary care or financing migration, such as the support provided to herders before a dzud in Mongolia (FAO, 2018b; Red Cross/Red Crescent Climate Centre, forthcoming). Recipients of an ECT before floods in Bangladesh were able to purchase food before prices rose (Tanner et al., 2019). However, there is insufficient evidence for us to know whether these last two examples are rare exceptions or the norm. Until we do, it is difficult to know when and for whom we can best use humanitarian resources for ECT.

A further limitation on drawing lessons from current experience with anticipatory action concerns scale. As most livelihood protection interventions rolled out through anticipatory

10 Exceptions to this include the impact evaluation conducted by the Red Cross/Red Crescent Climate Centre (forthcoming) in Mongolia, which makes an empirical comparison; and a few studies that have used primary data collected through interviews and focus group discussions, or secondary information from past emergency responses, to construct alternative scenarios of a late response, to which they then compared the AA intervention (see for instance Atkinson, 2018; FAO, 2018a; Start Network, 2018; Tanner et al., 2019).

11 See the early observation that FbA projects have tended to use ‘no project’ as the counterfactual. This makes it easy to find positive impact from an early action ECT, but also makes it harder to claim that being early also had any positive impact – even if that claim is sometimes made on that basis.

12 The existing literature on cash transfers confirms the importance of reliability and predictability of payments ‘in enhancing beneficiaries’ risk management capacity and planning ... with some suggestions that tying timing of payments to the agricultural cycle could increase effects’ (Bastagli et al., 2016: 152).

action initiatives have been relatively small, it is difficult to draw any direct conclusions about their potential impact on a large scale. This is because implementing activities at scale might change the underlying conditions that led to their initial success in the pilot, or because it is not operationally feasible to implement the actions undertaken in a pilot at scale. In the Bangladesh example, anticipatory ECTs allowed recipients to purchase food before prices rose, but in cases where

these transfers are scaled out to a larger number of people, they may collectively drive prices up at an earlier stage, thus reducing some of the benefits initially observed during piloting. In other cases, it may simply not be feasible to implement projects at the scale required. There are, for example, serious limitations to the ability to run livestock feeding programmes in long droughts over wide areas, when both the supply of feed and available transport are inadequate (Levine et al., 2019).

4 The importance of timing in anticipatory action for drought

The timing of livelihood protection actions for an impending drought is critical. In their analysis of potential livelihood protection measures in pastoral areas of the Horn of Africa, Levine et al. (2009) found that there was typically a time lag of three to six months from the decision to implement a livelihood protection project to assistance actually reaching people. This time was taken up with developing proposals, negotiations with donors, procurement, transport and logistics. If a decision to distribute fodder to livestock is only taken when it is visibly needed (i.e. when there is no pasture and animals are getting dangerously thin), by the time the fodder arrives the rains will already have returned. In this example, assistance triggered by visible needs would inevitably be three to six months late.

4.1 The windows of opportunity for action

Decision dates for livelihood protection do not work if they are based on the observed seriousness of the crisis, and if funding and action cannot be mobilised quickly. Rather, the timing should be determined by the livelihood calendar or timeline. The time for sowing seeds is (usually) at the beginning of the rains, and irrigation is needed during the growing season. These support measures, and others such as parasite control for livestock or repairing earth dams, each have their own window of opportunity, and their calendars are set independently from the speed at which the humanitarian crisis develops. If these interventions are to have any chance of

success, these windows of opportunity need to be understood so that measures are timely.

Figure 2 illustrates how decision dates for livelihood protection actions should be set. The example is an oversimplification of a drought in an area with crop farming and livestock-keeping, and is for illustrative purposes only. Six examples of livelihood protection interventions are considered in this scenario (see Table 1).

Each of these potential interventions has a window of opportunity. When that window closes it is too late for that specific type of assistance. Conversely, there is no point in delivering the assistance before the window opens (for example, there is no need to support livestock feeding when pasture is in good condition, although feed reserves could be built up to be released later). For other interventions, such as maintaining water infrastructure, there is no clear time when the window opens – but a very clear time when it closes.

There is also a cut-off point for taking decisions to act so that interventions can be implemented before the window of opportunity closes. For simplicity, Figure 2 assumes that each of the interventions has the same time-lag of four months between a decision being taken and it being implemented on the ground (although that time can be reduced when funding, preparedness measures taken and standard operating procedures are in place). In fact, different activities have very different time-lags in implementation. The time-lag also depends on the state of preparedness: four months has proved fairly typical when there has been little investment in

Figure 2 Crisis calendar showing windows of opportunity and decision dates relative to drought forecasts

		Rainy season																
Month		-6	-5	-4	-3	-2	-1	1	2	3	4	5	6	7	8	9	10	11
Information on meteorological drought		Earliest forecast of likely poor rains	Reasonable forecast of El Niño event		Near seasonal forecast	Alert on late rains	Alarm on late/poor rains	Met confirmation of drought				Crop assessment						Official confirmation of drought
Latest decision dates for livelihood protection interventions ⁱ					A, B	C	D		E				F					
Windows of opportunity for possible interventions						(B) Seeds for re-sowing	(C) Support for irrigation	(E) Livestock feeding										(F) Preventing cold shock
						(A) Info for drought tolerant seed planting	(D) Water source repair											

Note: ⁱ Suggested interventions (detailed separately in Table 1) are for illustrative purposes only. Decision dates are also illustrative since they depend on the length of time it will take from decision-making to completion of the intervention in each location.

Table 1 Examples of livelihood protection interventions in a drought

Stage of drought and impacts	Potential interventions
(A) At the onset of drought/late onset of rains	Providing information on drought-tolerant seed planting
(B) At the start of a drought, erratic rains cause the germinating crops to die	It might be possible to support farmers with seeds for re-sowing their fields with shorter-cycle and/or drought-tolerant varieties, or with crop species more helpful to their livelihoods in a drought year
(C) As the water table and river levels drop, more fuel is required for irrigation pumps, which farmers cannot afford	Some form of support to irrigation could be offered to maintain some production (for example in rice-growing areas)
(D) Human and animal populations face shortages of water exacerbated because many water pumps do not function well and earth dams for above-ground water storage are in poor repair	Repair and rehabilitation of the water infrastructure could prevent displacement, help people remain productive and keep animals alive
(E) When pasture dries up, there is a shortage of crop residues for livestock feed and animals become thin, affecting milk production and fertility	Support for feeding livestock could maintain production and/or reduce asset loss from mortality
(F) Finally, after a long drought, weak animals are highly susceptible to a cold shock when the rains return next year	This mortality could be reduced if livestock-keepers were given support in the form of shelter, based on the next seasonal forecast for when rains will arrive

preparedness. With optimal preparedness, this could be brought down to a few weeks (Levine, 2009). Figure 2 both illustrates the use of a crisis calendar and highlights the importance of investing in preparedness, which puts back the last possible decision dates for interventions and thus opens up more possibilities for AA.

In this example, four actions could be taken on the basis of a reasonably reliable seasonal forecast, for example of an El Niño event:¹³ (A) seeds for re-sowing; (B) support for irrigation; (D) information on drought-tolerant seed planting; and (E) water source repair. However, if the decision to act was only taken when a meteorological drought was confirmed (three months into the rainy season), only two actions would make sense: (C) livestock feeding and (F) protection from a cold shock during the rains following a drought. A decision on livestock feeding would however need to be taken before an agricultural drought could be confirmed, because the last possible decision date for this intervention falls in the middle of the cropping season, several months before any crop assessment would be available. Support for livestock feeding (C) is therefore only possible with AA.

Apart from (F), none of the actions would be possible if they could only be triggered

when a drought was already evident (i.e. well into the failed rains) or if action had to wait for official confirmation of drought (typically a post-harvest assessment looking at impacts on production, food access and incomes) or a declaration of emergency.

4.2 Identifying anticipatory actions to protect rural livelihoods in different windows of opportunity

Given the diversity of actions undertaken under the AA umbrella, lessons about the impact of AA on rural livelihoods and the prevention of food crises cannot simply be aggregated and generalised from existing project evaluations to identify adequate actions, at specific points in time, in different situations. The number of evaluations is still low, and actions taken are small-scale, diverse and highly context-specific. This underscores the need for:

- context-specific evidence to inform the design of adequate anticipatory actions and mechanisms, including on the relevance and effectiveness of particular actions, as well as the impacts of shocks on people's lives and livelihoods;

¹³ It is important to note, however, that there are locations where forecasts three months before a rainy season might not be reliable enough to justify AA.

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- evaluations of mechanisms and interventions to assess outcomes and impacts from AA (summarised in chapter 3).

While serving different purposes, these two types of evidence are closely interlinked: the latter needs to build on the former to enhance understanding of outcomes from AA in relation to the status quo, and other types of actions that could have been taken instead. It should also contribute to learning and adapting the mechanism that is being evaluated, though there are limitations to the applicability of this type of evidence for scaling existing AA mechanisms or designing new ones elsewhere.

Because livelihood calendars are so context-specific, the scope for generic learning on AA aimed at livelihood protection is restricted to the functioning of AA financing mechanisms and delivery channels. Evidence from one situation about the technical appropriateness of different livelihood protection measures, and the triggers for launching them, may provide useful background knowledge, but cannot simply be applied to any other situation without

independent livelihood and crisis calendar analysis in that context. There are therefore limitations in the applicability of findings from evaluations and ROI studies, in the extent they can be used to design new interventions.

This also means that AA should not be a silo for learning. Instead, there is potential for AA to incorporate learning from experiences of the impacts of livelihood interventions much more broadly. In many countries, people can be found with good knowledge about local livelihoods and how to support them. There is also a fairly good generic understanding of how droughts or floods affect people, and good knowledge and literature exists on the locally specific impacts of shocks on people's lives. Less common is the systematisation of such knowledge into a crisis calendar or timeline, which can inform anticipatory action. Because humanitarian action responds to actual needs as determined by real-time assessment, less attention has been paid to the timing of impacts, or to when and how people cope with these. This makes it more difficult to identify specific support measures that could be taken and their exact window of opportunity for action.

5 Challenges in mainstreaming anticipatory action within the humanitarian sector

For at least the last two decades, humanitarian agencies have taken on themselves the imperative to protect livelihoods, as well as lives (e.g. Buchanan-Smith and Maxwell, 1994; Ross et al., 1994; Guarnieri, 2003; Longley and Maxwell, 2003; Jaspars, 2006; Benson and Twigg, 2007; Lawrence and Maunder, 2007). Attempts have been made to introduce early response and livelihood protection, particularly in arid areas, but these efforts have been on a relatively small scale, and have suffered from implementation delays. There are, for example, instances of fodder distributions arriving after the rains had already returned and pasture was regenerating (Pantuliano and Wekesa, 2008; Levine 2009).

There are many reasons why the humanitarian sector has found it difficult to deliver livelihood protection in a timely manner and at scale. Many of the individual ingredients have been put in place in past decades, and huge progress has been made. The ability of meteorological forecasting today is significantly higher than even 20 years ago. From the end of the 1990s, important investments were made in national and local level contingency

plans. New, faster financing mechanisms were established, such as the United Nations Office for the Coordination of Humanitarian Affairs (UN OCHA) managed CERF in 2005, and crisis modifier mechanisms in 2009. And more recently, forecast-based financing mechanisms and drought insurance systems have been set up (for example, the Africa Risk Capacity (ARC) in 2012 and ARC-Replica in 2018). Yet, despite these investments, drought response has too often remained late. While many of these individual elements show promise, for a transformational change to occur in the use of AA to manage risk several challenges will need to be addressed.

Among the main challenges are:

1. **The primary humanitarian mandate** is to protect lives in the short term. If humanitarian principles are followed, aid should be targeted strictly based on need and the urgency of that need,¹⁴ and other considerations are secondary to this.¹⁵ Different opinions exist within the humanitarian sector on the responsibility to act in the *absence* of urgent needs.

14 This derives from the first humanitarian principle of *humanity* ('The purpose of humanitarian action is to protect life and health and ensure respect for human beings') and the third principle of impartiality ('Humanitarian action must be carried out on the basis of need alone, giving priority to the most urgent cases of distress') (UN OCHA, 2012).

15 For example, it is better if humanitarian assistance or emergency relief can be given in ways that build up local structures, or have more sustainable impacts; but the ability to meet the primary objective should not be reduced in order to meet these subsidiary goals.

Non-urgent needs are generally considered the responsibility of non-humanitarian actors, or only a priority when acute needs have been met. Box 2 summarises the case *against* early response – not an argument being proposed by this paper, but one that needs to be taken seriously, even when planning anticipatory action.

2. **Difficulties in being timely** are common, even for emergency relief, because if humanitarian resources need to be reserved for crises (actual or, in the case of AA, probable), it is difficult to know when it is necessary to act. Droughts cause crises in two ways: gradually, then suddenly. Although agencies can have plenty of warning of a possible drought crisis, it is difficult to predict the exact time when the slow deterioration of a situation will suddenly collapse into a full humanitarian crisis. Although there have been attempts to introduce a ‘no regrets’ approach to livelihood protection, decision-makers still want to see evidence of actual

acute needs before releasing resources. Delays are often blamed on the ‘system’ or donors but according to Hillier and Dempsey (2012) delays in drought response are due more to donors receiving proposals from agencies, not in donors responding. Using pooled funds for AA, such as the CERF and Disaster Emergency Relief Fund (DERF), can help overcome this problem.

3. **Technical disagreements** about the actual situation on the ground also cause delays. Since crises most often (and not by coincidence) affect more marginalised and remote areas, information gathering is difficult, costly and time consuming – and sometimes further constrained by insecurity. Trust in information is also an issue. Critically, decision making on aid resources depends on assessments conducted by agencies who also have a claim on those resources for undertaking response. There is no independent assessment agency for determining assistance needs. This perceived

Box 2 The case for delaying response

The first assumption in assessing whether an anticipatory action is justified should be that there will always be more urgent crisis needs than humanitarian resources available. Second, no prediction can ever be perfect. No forecaster can be 100% sure whether a shock will occur or exactly where. Even after the shock has occurred, we cannot always be 100% sure who exactly will be most affected, who will not be able to cope without assistance and what exactly their needs will be. If vulnerability analysis is good and forecasters are good, we will have a pretty good idea – but we can never be sure exactly how things will turn out.

Putting together the arguments that resources are limited and that predictions are uncertain, a case can be made that we should not use up scarce humanitarian resources until we know by whom they will be needed. And that means waiting until those needs are felt before handing out resources – provided we believe that we will still be able to avoid the worst impacts of crisis even if we delay in distributing relief.

This argument, though, is not for inaction in the face of shock forecasts or crisis predictions, only for delaying the use of humanitarian resources. Forecasts and predictions should still trigger actions designed to improve preparedness – so that a rapid and effective response can be delivered once those needs became real.

This argument only applies to the use of funds intended for use in humanitarian relief. It does not apply for the use of structural funds (e.g. normal government spending), private funds or resources for development assistance, where anticipatory action would be judged by other criteria, including its predicted economic value or rate of return on investment, equity considerations, its potential impact on social cohesion or conflict, political demands, human rights, its implications for existing legal obligations, etc.

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- potential conflict of interest inevitably undermines trust and creates delays as assessments have to be repeated or verified.
4. **Political disagreements** occur over whether the situation on the ground constitutes an (actual or probable future) emergency that warrants a humanitarian response. This is more complicated when there is already mistrust about the facts on the ground (as described above) and it is analytically difficult to determine how close the situation is to the precipice. Different agencies may have different opinions or ‘quasi-thresholds’ for calling the situation in emergency. In addition, the discussion can be constrained by a government with a strong political incentive either to deny that there is a crisis or to exaggerate a situation (Darcy et al., 2013). Despite significant investment in EWS and forecasts, decision-making is often political rather than evidence-based (see Box 3).
 5. **Internal bureaucracies in the humanitarian system** present further constraints on anticipatory action. In fast moving situations, decisions have to be made quickly, in real time. This applies even more so to anticipatory action, where windows of opportunity for action close quickly. Humanitarian agencies struggle with the kind of instant decisions making procedures which are needed, partly because of their own internal bureaucracies and because of the need for proposals to be passed through a multitude of advisers for comment or approval. This reinforces the reliance on repeating standard project models globally. This can work to some extent for urgent emergency relief, but livelihood protection support needs a very different analytical process, one which understands the contextual factors in the livelihoods of affected people.

Box 3 The politics of anticipatory action in Ethiopia

The late response to the El Niño drought in Ethiopia in 2015–2016, where major investment has been made in early warning systems, illustrated how delays can persist despite technical improvements in weather forecasting. The El Niño event itself was forecast several months before the drought began, and although El Niño events do not always lead to floods and droughts in different parts of the Horn of Africa, the strong relationship is known to be close enough for it to at least be a warning. Aid was nevertheless very late. (Action for livelihood protection was also extremely late.) Delays were caused by a mix of international aid politics (e.g. development and social protection donors reluctant to acknowledge that drought crises could still happen on their watch), identity politics (resistance to the international humanitarian community’s perceived attempt to influence the policy of a sovereign African state), and national politics (the regular refusal by the government to acknowledge the ‘failure’ that a food security crisis was perceived to represent). The politics was so strong that it made it almost impossible even for drought forecasts to be published, let alone crises predictions. These political problems exist in addition to the political-bureaucratic problems, which included: the seasonal timetabling of crop assessments and drought warnings, which are unconnected to the response calendar; the focus of national early warning on very late ‘humanitarian indicators’, such as high rates of acute child malnutrition; and the reluctance of humanitarian donors to launch a major appeal in the absence of critical ‘humanitarian indicators’ (Grunewald et al., 2019). The late response to the following drought in Ethiopia in 2016–2017, in the southern parts of the country (associated with an Indian Ocean Dipole and sometimes referred to as the ‘IOD drought’) had additional barriers in the form of local or regional politics in some areas, which sometimes even prevented humanitarian agencies from undertaking assessments until very late in the crisis.

6. **A skill set better suited to delivering emergency relief than livelihood protection.** Top-level decision-making is in the hands of international staff who have experience in a wide range of crises globally. From this perspective, it is easier to standardise people's food, water or health requirements and modalities for delivering these, and this may be an explanation for why food security and resilience responses are so generic, even across countries with very different institutional and market conditions and targeted at people facing a whole range of different livelihood constraints. If anticipatory livelihood protection is focused on windows, then its design demands greater contextual knowledge. Human biology, farming systems, and even the choice about the variety of seeds that will grow best in a particular fields, are all incredibly heterogenous. The best ways to ensure that farmers have access to what they need depend upon a myriad of other factors, including how markets work, how markets cope with crisis, the ability of different population groups to access those markets, potential limitations of supply in these markets, longer-term efforts which are being made to improve market functioning, etc. Livelihood protection may, therefore, be better designed by people who have been in one country for a long time. Otherwise, generic options like cash transfers will predominate, leaving underlying constraints unaddressed.

7. **A 'protection' mentality** within the humanitarian sector is concerned with vulnerable individuals. Interventions are typically targeted at specific beneficiaries rather than on systems – for example, on changing how markets function. Humanitarian agencies prefer to deliver support directly to individuals, but this impacts on the scale of the humanitarian livelihood protection operations and on their potential impact: beneficiaries are usually in the hundreds, rather than in the hundreds of thousands or millions who are affected by the drought. This lack of scale has been one of the main drivers for expanding social protection and for shock-responsive social protection, because monetary transfers can be given easily at scale, and pre-registration of households with bank accounts can permit very fast action.¹⁶

Agencies seeking to move forward with AA for livelihood protection in a meaningful way will have to consider these many structural and cultural challenges within the humanitarian community, and take active measures to overcome them.

The next chapter discusses the type of evidence needed to design AA mechanisms and identify adequate actions that can help protect livelihoods and prevent food crises for different contexts.

16 Keeping household registers up-to-date and avoiding exclusion remain challenges.

6 Towards a joint humanitarian–development strategy for anticipatory action

AA should be considered part of a broader approach to managing risk in crisis-prone places. Humanitarian agencies have made important progress in developing and piloting AA assistance projects and financing, but these need to be complemented by many other actions if livelihoods are to be adequately protected from drought and other shocks. Many of these other actions are usually considered outside the humanitarian domain. But this does not mean that humanitarian actors should not have a role to play. Humanitarians can provide vital expertise on the likely future impacts of impending (or recent) shocks. They should also lobby for – and demonstrate the urgency of – taking AA. Disaster risk management (DRM) will benefit from anticipatory thinking and action if it combines the skills, analysis and operational capacity of a wide range of actors, and through joint planning.

Equally, government ministries, local authorities and businesses should be thinking about the kinds of AA they can take, using permanent structures where possible (including market systems, state services and institutions of social protection); where these cannot

meet needs, humanitarian agencies will have a responsibility to take short-term action to meet those needs. A combination of the two may be required.

An emphasis on joint planning offers a chance to take AA forward in new ways. At the same time, a renewed focus on AA offers a focal point around which humanitarian-development approaches can be advanced. This starts with the recognition that different types of AA can be elements of a single strategy, rather than existing in different silos.

6.1 A typology of anticipatory actions for drought

A recent study for the IFRC of anticipatory actions and plans for contingency responses in Kenya showed that the list of proposed actions across various sectors (livelihoods; water, sanitation and hygiene (WASH); health; shelter) could be broken down into six categories (Gray et al., 2020).¹⁷ These provide a useful starting-point for developing a typology of anticipatory actions, all of which are triggered either by a forecast of a shock or a prediction of a crisis.

¹⁷ Gray et al. (2020) include a seventh category, of proposed actions which had no possibility of being adequately implemented, even as anticipatory actions. These are activities which can only be considered within the framework of multi-year interventions, e.g. for DRR, promoting climate-smart agriculture, etc. This ‘false category’ was included in an analysis of contingency plans but is not included here.

The six anticipatory action types are:

1. **Implementing an assistance project.** Using a forecast or prediction as a trigger allows for earlier intervention in order to mitigate an expected crisis. Most projects reported by agencies as FbA or EWEA fall into this category (although some may also include project elements that would fall under other categories). Anticipatory advocacy may also be undertaken by aid agencies to persuade other agencies to meet their own responsibilities, for example to accomplish actions under (4) or (5) below.
2. **Heightened surveillance.** Once a crisis is anticipated, more resources should be dedicated to monitoring the evolving situation, focusing in particular on specific parameters that will be critical later to ensuring timely decision-making and thus timely action (either for subsequent livelihood protection or for relief). Apart from government institutions, there may also be roles in this surveillance for international and local humanitarian agencies and development actors.
3. **Investment in preparedness to respond.** The forecast or crisis prediction should trigger actions by all agencies who may have to respond later, whether with mitigating or relief interventions. By shortening the time-lag between future decision-making and implementation, agencies will in some cases be able to meet windows of opportunity for interventions that would otherwise have been impossible and, in other cases, to make decisions later (i.e. with more certainty) and still meet the same windows of opportunity. Stepping up preparedness activities for response is common among government and humanitarian agencies, but insufficient funds are allocated to these activities. Businesses may also need to take preparedness measures, both to ensure business continuity in the event of a crisis and to ensure that they are in a position to offer goods and services in an evolving crisis.
4. **Increasing attention to ensuring that work which ought to be done on a regular or seasonal basis is accomplished.** In many crisis-prone areas, risk reduction activities that should be undertaken regularly or annually are not always carried out. There is a need to ensure that actions that will have heightened importance due to the predicted shock or crisis are properly implemented.
5. **Redirecting resources away from previously planned interventions in favour of actions that will help mitigate a predicted crisis.** Government and development agencies should not maintain a business-as-usual adherence to pre-existing plans in the event of a shock forecast or crisis prediction. Spending plans should be reviewed to see how implementation could be altered to focus on mitigating a potential crisis. This might mean changing the location of planned investment. Because this would still result in meeting the long-term goals of the agency, it would be considered a ‘no-regrets’ option.
6. **Ensuring that potentially affected people are given all possible information.** Those most likely to be affected need information, not just on the shock, but also on the likely impacts and advice on mitigating measures, in order to take AA. Providing people with information enables them to make informed choices for themselves about how to reduce the impacts of any crisis, and how they can prepare to cope with likely eventualities.

Figure 3 presents illustrative examples of anticipatory actions under each category.

Figure 3 Examples of anticipatory actions by categorisation

(1) Implementing an assistance project pre-shock or pre-crisis	(2) Surveillance/situational monitoring	(3) Get ready for later action
<ul style="list-style-type: none"> Working with traders to ensure supply of drought-tolerant seeds Emergency cash transfers Support to local vet service for parasite control Advocacy for actions under (4) and (5) 	<ul style="list-style-type: none"> Real-time rain monitoring Disease surveillance Bring forward crop assessment Nutrition surveillance 	<ul style="list-style-type: none"> Activate coordination structures Train staff in readiness Pre-purchase preparedness (e.g. pre-qualification of suppliers) Identify sites for likely displacement
(4) Ensure regular work gets done	(5) Redirect expenditure	(6) Provide information and advice
<ul style="list-style-type: none"> Planned borehole repair and servicing Ensure adequate stocks in health centres Animal health services, including vaccination, deworming Measles vaccinations, school deworming, vitamin A distribution (where undertaken) Maintenance of irrigation structures and water storage (e.g. desilting water pans) 	<ul style="list-style-type: none"> Focus resources for water infrastructure on drought-prone areas without adequate supply Change planned water investment from drilling to repair 	<ul style="list-style-type: none"> Weather alerts Advice on sale of livestock Agricultural extension advice (related to the forecast) Public health advice Drought-specific nutrition advice

The terms AA and FbA refer mainly to assistance projects (1), although Red Cross Societies also do a lot of work with communities under category 3, which is not labelled AA. Similarly, agencies with humanitarian and development mandates, such as FAO, are experienced in providing advice to farmers in anticipation of shocks and crises (6). What is needed now is a broader vision for AA, involving different actors from across development and humanitarian sectors. Regional actors will also need to be involved, since droughts (and other crises) frequently have a cross-border dimension.

6.2 What's in it for development actors?

Governments and international development agencies do not refer to development funds as 'anticipatory', because they are not allocated to a targeted population by reference to a specific shock (although they may be allocated according to levels of risk). Nonetheless, it is important for them to have a clear logic for using development

resources in a specific timeframe when a crisis is likely to occur, in addition to using them to reduce vulnerability (whether those investments are from state resources, development aid, DRM budgets or international climate or resilience funds). Investments in infrastructure such as irrigation, for example, which are not focused on any particular shock, can be justified economically (they increase production), can reduce risk (water storage in drought years), and are probably more effective in reducing suffering than anticipatory actions.

From a national perspective, a range of interventions, over various timescales, can be used to manage risk and mitigate hazard impacts, but these are weighed against other development needs in public investment decisions (Wilkinson et al., 2020). There are many well-documented constraints on the use of public funds to reduce disaster risk, the details of which are beyond the scope of this paper, but the result is a severe underinvestment in DRM and persistently high levels of vulnerability in places prone to frequent and severe droughts. Here, AA can

help to manage ‘residual risks’ – that is, risks that individuals or governments are unwilling or unable to reduce through longer-term measures (ibid.), for example improving market access for farmers and pastoralists.

Humanitarian agencies can help manage these residual risks by providing data, analysis and heightened surveillance, as well as supporting rapid dissemination of

information in communities and providing discrete interventions and dedicated funds for heightened preparedness. These interventions and funds will need to be carefully designed so that they provide the right incentives for governments to redirect resources where they can, and to continue to invest in EWSs and longer-term risk reduction and adaptation measures.

7 Next steps for anticipatory action

The analysis presented in this paper points to some important conclusions and recommendations for scaling up AA. Our conclusions align closely with a Joint Statement on Anticipating Food Crises, produced by the Global Network Against Food Crises in January 2020.

7.1 Clear justification for anticipatory action

The justification for allocating humanitarian resources to AA needs to be clear. For development actors, AA means focusing financial and human resources on actions to manage risks that they were unable to reduce through longer-term DRM measures. Agencies should be using crisis timelines to identify when decisions around livelihood protection for drought need to be taken. Understanding these windows of opportunity is as critical to the success of AA as determining the kinds of activities that can help reduce human suffering.

7.2 More than just weather forecasts

For all natural hazards – as well as for man-made hazards – the relationship between the shock (in this case rainfall) and crisis (food insecurity) is complex and plays out differently in different contexts. Both local knowledge and expert judgement are needed to interpret forecasts and biophysical and socio-economic phenomena, which means that the impact models used to inform anticipation need to be context-specific, and ideally adhere to minimum standards. These standards need to be defined.

7.3 A context-specific, systems approach

Context-specific livelihood analysis and identification of the different windows of opportunity for different actions are critical to developing an AA strategy for livelihood protection. Global lessons on AA provide some basic principles, but will not provide templates for programme design. For example, distributing drought-tolerant seeds may be an important action in one country, but have negative consequences in another, for instance by negatively affecting private companies providing agricultural inputs. In some places, market approaches to improving seed access will be more effective and cost-effective; in others, this will not be possible. Extensive humanitarian-development collaboration is therefore needed in deciding what action to take in this development context.

7.4 A collective endeavour

Much of the current attention to improving the use of AA has been devoted to creating common standards and operating procedures (SOPs) for AA projects. While it is clearly important to improve guidance on AA planning and the quality of interventions, our analysis suggests that the potential benefits of AA can only be achieved if the central focus moves towards effecting a system-wide change in how AA is thought about and used. Only then will AA play a much wider and more significant role in protecting livelihoods from the damaging effects of drought and other shocks.

AA is much broader than the sets of pilot projects labelled FbA, FbF or EWEA. Of the six modalities of AA identified in this paper,

perhaps the most important is the *provision of information* to affected people. Weather and climate information, as well as information on how crises evolve and their impacts, can all be useful to farmers and pastoralists in deciding the actions they need to take. Advice on market access, agricultural practices and livestock health can also help. Early warning information is important for many reasons: it is a fundamental right; it supports agency; and it avoids the erroneous assumption that external agencies necessarily know what is best for individuals and families facing an impending crisis.

The best ‘no-regrets’ AA option is *heightened preparedness*. This is a relatively low-cost measure, and it makes subsequent actions possible by potentially bringing more windows of opportunity into reach by shortening the time-lag between decision-making and implementation. All agencies, from humanitarian to state services, should be undertaking preparedness. Humanitarians should have a critical role in helping development actors undertake this preparedness, by promoting and assisting with the analysis of crisis calendars, and by ensuring that it takes place as a collaborative venture.

State services, development actors and humanitarians alike all need to ensure that all six types of AA occur, including ones they themselves do not deliver. For example, humanitarians can provide analysis on vulnerability and crisis to development partners early on, to ensure that the services they provide (e.g. education, health, water, animal health) have proper contingency plans, and that these are updated and implemented, so that *support can be redirected* to help mitigate crises.

7.5 Scaling up anticipatory action

Scaling up AA requires more than increasing funds and simply repeating the same actions with more beneficiaries. Interventions will have to be planned with scale in mind. Things that work

well for direct beneficiaries might not be feasible at scale, and outcomes should be assessed in terms of systems change. Ensuring that markets can work in crises, so that people can access what they cannot produce, needs planning in advance, knowing where seeds will come from if farmers need to re-sow and ensuring that traders can make them available to farmers.

For livelihood protection, significant attention needs to be paid to the modality of assistance in project design. Agencies usually distribute to individuals and households (cash, seeds, fodder, etc.). This makes sense when help is needed urgently, but other modes and forms of collective action can be considered when planning a system-wide AA strategy.

To date, AA pilots have been facilitated by funds deliberately allocated to these initiatives. These global allocations will remain important in helping to create financial discipline (setting aside funding for AA), and the incentives for further investment in AA, but scaling up will require more than humanitarian funds. The true cost of AA should account for all finance allocated from across public, private and community resources to protect the livelihoods of people likely to be most affected by imminent drought and other shocks.

7.6 New competencies

A priority for enhancing AA for livelihood protection is to develop the right skills, resources and attitudes within humanitarian agencies, the civil service and development partners. For the humanitarian sector specifically, the skills required to support the protection of livelihoods by advancing AA more fully will include the ability to negotiate with local government, line ministries and the private sector. These skills may become more important than logistics management and relief delivery as the prominence of anticipatory action for crises grows.

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