Acting in Advance of Flooding: Early action in South Sudan

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Executive Summary

This brief presents findings and takeaways from a research study focused on the process and perceptions of implementing early action in South Sudan, including in the Bentiu Internally Displaced Persons (IDP) camp. In 2022, forecasts showed there was a significant risk of catastrophic flooding in the most flood-prone areas of South Sudan during that year's rainy season. At the same time, the forecasts were not reliable enough to develop a formal anticipatory action (AA) framework. Rather than not act at all, the United Nations (UN) Office for the Coordination of Humanitarian Affairs (OCHA) led the development and implementation of a pilot early action project together with partners in Unity State, South Sudan. The project was funded via allocations from two OCHA-managed pooled funds, Central Emergency Response Fund (CERF) and South Sudan Humanitarian Fund (SSHF), and intended to anticipate and actively mitigate the projected impacts of severe flooding. This type of early action builds on anticipatory action principles

and is an important yet still-nascent way to draw on climate data to provide assistance before rather than after climate disasters occur.

The early action constituted a new structural response to hazards in South Sudan, with several key features different than in past interventions. As part of the early action, the Humanitarian Coordinator created a high-level special task force that included a special envoy, deputy special envoy, and a senior OCHA employee based in Rubkona County (the site of the early action) to oversee operations; and OCHA developed a public project tracker and dashboard, which were specific to projects funded through the allocation.

Informants across UN agencies were overwhelmingly positive about both the special task force and the project tracker, stating that they were "really needed." They explained that having "on-theground oversight" from the task force helped keep projects on track and sped up decision-making that





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would otherwise have had to be relayed through the Juba country office. At the same time, there was a widespread feeling expressed by both OCHA and other UN informants that such "micro-managing" should not be needed to implement effective responses. Some informants felt frustrated that such regular follow-ups of project partners were perceived as necessary, while others explained that limited decision-making power of agency staff working in Bentiu led to delays. The dynamics described between and within agencies in South Sudan, and stated calls for increasing knowledge of anticipatory action and decision-making power of agency offices at the sub-national level, link to larger calls for humanitarian localization in the aid sector.

Additionally, the majority of informants discussed the need to increase linkages between anticipatory action and development. Suggestions for doing so ranged from increasing adaptive actions, such as building elevated houses for households, to further engaging development partners to pave roads to increase the capacity to act before flooding begins. While little of the literature on anticipatory action considers its role in development processes and programming, or the role of development in AA, this study illustrates that it is a key concern of humanitarian practitioners, who appear to feel stuck providing "Band-Aids" such as early action while also recognizing larger needs they have limited capacity to address. Recommendations arising from this study for humanitarian agencies engaged in early and anticipatory action include:

- Process
 - Allocate greater decision-making powers to staff based at the site of anticipatory or early actions to speed up processes.
 - Continue to utilize the project tracker developed for this type of allocation in the future.
- Knowledge
 - Increase awareness-raising of the objectives and structure of early and anticipatory action at different levels of UN humanitarian operations and within agencies, particularly at the sub-national level.
- Timing
 - Plan and implement allocations further in advance of the flood season to make better use of the limited dry season.
- Projects
 - Consider offering a revision window for project proposals once the flooding starts, in order to allow for reallocation of some funding for unforeseen projects.
 - Increase linkages between anticipatory action and development, such as helping people build elevated houses as part of early action, which could help people in both the short and long term.

Introduction

In South Sudan, humanitarian action seeks to address a variety of challenges, including unprecedented flooding, drought, high rates of malnutrition, and epidemics and other public health emergencies both alongside and as a result of ongoing conflict and instability. As of the end of 2022, the country had seen four consecutive seasons of intense annual flooding since 2019, which have been called "record-breaking" and "historic" (UNHCR 2022). Two-thirds of the country experienced flooding in 2022, and over 900,000 people were affected (UNHCR 2022) Indeed, the country has been listed as the fifth-most vulnerable country to climate change (ND-Gain Index 2020), and two-thirds of the population was estimated to need humanitarian assistance in 2022 (OCHA 2022a). The compounding and protracted crises in the country also heavily affect humanitarian operations, which are further limited by scarce data, unreliable weather forecasts (Caldwell 2022), and, at particular times of year, a lack of information on humanitarian needs in parts of the country because of inaccessibility due to flooding and conflict.

This brief presents findings from a qualitative research study on the process of an early action pilot led by the United Nations (UN) Office for the Coordination of Humanitarian Affairs (OCHA) in Unity State, South Sudan. The advent of more reliable weather and vulnerability forecasting,

communication technology, and rapid response mechanisms means that there is more opportunity than in past decades for humanitarians to pre-emptively respond to climate disasters through a type of intervention known as anticipatory action (AA). Anticipatory action is presented in humanitarian discourse as a novel and effective way to "shake up" traditional humanitarian programming, which commonly responds to disasters post-facto. Anticipatory action is currently implemented in 70 countries worldwide by a range of international actors including the UN, the International Red Cross and Red Crescent Movement, and the Start Network. However, many of these initiatives are pilots backed by limited evidence, and it is only recently that the anticipatory action community has begun implementing AA in countries also experiencing conflict, such as Ethiopia, Somalia, and South Sudan.

The following sections provide information about OCHA's early action allocation, key findings on the allocation's unique structure (including participants' perception of the process and outcomes), and the challenges posed by the overall multihazard context of South Sudan, as well as recommendations for future early action interventions sourced from informants engaged in the early action and working within the UN in South Sudan.

Overview of OCHA's 2022 early action allocation

In 2021, South Sudan was selected as one of 12 pilot countries in which to explore the development of an OCHA-facilitated anticipatory action framework (OCHA 2021). Following initial discussions between OCHA headquarters and the OCHA South Sudan country office, in February 2022, an OCHA headquarters mission team travelled to South Sudan to explore the feasibility of developing a formal framework to both anticipate and mitigate the impact of severe floods. At the time, OCHA had facilitated the development of AA frameworks in eight countries for four different types of shock (drought, dry spells, floods, tropical cyclones). In each context, frameworks were developed to mitigate humanitarian needs associated with a specific 1-in-3- or 1-in-5year severity shock as predicted by a forecast. In addition to a robust, pre-agreed trigger using forecast data, these anticipatory action pilots specify a set of actions that can mitigate the impact of the projected shock and release prearranged finance upon activation of the trigger.

While the development of a formal AA framework for Unity State was not feasible at the time due to the challenges in accurate forecasting (Caldwell 2022), the mission concluded that there was a significant risk of catastrophic flooding in the most floodprone areas during the 2022 rainy season (Caldwell 2022). As one OCHA informant involved in the decision-making at the country office level explained,

It was an interesting process of moving from an aim of anticipatory action to early action. We realized we were not hitting the markers for anticipatory action [in terms of skilled forecasts] but it was very clear to us that something needed to be done differently. The annual floods in the country are now more severe, and there is more and more standing water. We were really looking at a possible catastrophe, particularly in Unity State. We were worried about losing camps, about more displacement, and a public health catastrophe... We sat down and realized that we were nowhere near ready, that we had some prepositioning of supplies, but we really needed to act early.

Rather than waiting for flood impacts to materialize, OCHA opted to make a \$19 million early allocation (\$15 million from Central Emergency Response Fund (CERF) and \$4 million from the OCHA-managed South Sudan Humanitarian Fund (SSHF)). This allocation was intended to anticipate and actively mitigate projected flood impacts, aiming to pull the response forward. In part, this aim was created out of lessons learned from CERF allocations in 2019, 2020, and 2021 in which funding was only disbursed after flooding led to a swift and massive deterioration of the humanitarian situation.

The early allocation in counties located in Unity State took place across six agencies (Food and Agriculture Organization (FAO), International Organization for Migration (IOM), United Nations Population Fund (UNFPA), United Nations High Commissioner for Refugees (UNHCR), United Nations Children's Fund (UNICEF), World Health Organization (WHO)) in a range of sectors including water, sanitation, and hygiene (WASH), camp coordination and camp management (CCCM), shelter and non-food items (SNFI), food security/agriculture, health, protection, and nutrition. Projects began as early as April and ended as late as November 2022. Early actions varied from building dykes to providing cash grants to female internally displaced people (IDPs) to buy firewood in an effort to minimize their need to walk miles in floodwater to collect it. All actions were intended to mitigate the flood encroachment and reduce potential displacement due to flooding or to minimize flood-related impacts before they compounded and caused even greater need.

While the CERF allocation covered all of Unity State, most of the funds were spent in Rubkona County where both Bentiu town and the Bentiu IDP camp are located. Bentiu camp houses over 100,000 IDPs who have fled conflict and/ or flooding. The focus of the allocation included both inhabitants of the camp as well as the more recently displaced populations, which were estimated to be 19,000 people as of February 2022, in more informal settlements around the IDP camp.

Methods Snapshot

This study employed a purposive sampling strategy to conduct semi-structured qualitative interviews with high-level key stakeholders involved in the implementation of the CERF early action allocation in Unity State, South Sudan, including the OCHA Juba office, OCHA Unity State sub-office, Humanitarian Coordinator's office, IOM Envoy, UNICEF Deputy Envoy, Agency Focal Points for CERF early allocation (seven UN agencies), government representatives, and OCHA headquarters in New York. Access to informants was facilitated through members of OCHA headquarters as well as through members of the OCHA country team in Juba. Remote, semi-structured qualitative interviews were held with 20 informants between July and November 2022. These ranged in length from 30 to 60 minutes and were held over Zoom, Teams, and by phone. Interviews were generally held on a one-to-one basis, although in one instance a small group interview was held first, and individual follow-ups occurred thereafter. In addition to qualitative interviews, the researcher remotely observed weekly and biweekly update meetings held over Teams from June to November 2022 between relevant OCHA employees at headquarters (New York), the South Sudan country office (Juba), and the sub-country office (Bentiu, Unity State).

Findings

Positive perceptions of early action outcomes

By the time research ended in November 2022, Bentiu, the capital of Unity State, was entirely surrounded by floodwaters. The Bentiu IDP camp had effectively become an island, and the camp experienced multiple dyke breaches in October 2022. The impacts of flooding were severe, increasing the country's already poor level of food security and leading to several ongoing epidemics in Bentiu, including hepatitis E in the IDP camp. Informants detail IDPs spending hours in floodwaters each day to fish or walk to collect firewood, experiencing insect and in some cases even snake bites in addition to waterborne diseases such as a 2022 cholera outbreak. There were also severe compounding impacts of consecutive years of flooding, as many people in and around Bentiu have been displaced multiple times and have lost all their livestock and assets, as well as missed multiple planting seasons.

Given the severity of the situation, multiple informants within OCHA emphasized that the fact that the Bentiu camp was not completely flooded

and that the evacuation and resettlement of over 100,000 people was avoided constituted a success in and of itself. Given several dyke breaches of the Bentiu IDP camp in October 2022, several informants working in the camp highlighted the value of the dyke building and reinforcement that had been completed in the months prior, as it was believed that this building and reinforcement prevented other dykes from being breached. As one UNHCR informant in Bentiu shared, "On the whole, the money that came in helped quite a bit with mitigation for flooding.... Other locations in the camp set up dyke committees and trained people immediately. Materials were bought, and tools, and people were able to use tools to reduce flooding in their sites."

Preliminary results of project implementation documented in a separate study (ISDC 2022) illustrate positive outcomes in terms of lower-than-anticipated malnutrition and rates of waterborne disease, alongside anecdotal evidence of increased support from cash transfers and livelihoods support. A UNFPA informant working in Bentiu said of the allocation: "It was very useful, it has helped a lot to overcome the problems that would have arisen—there has been a decrease in diseases, minimized issues of shelter . . . and there has been improvement in sanitation and health." These and other descriptions of the uses to which the early action funding was put and the outcomes informants detailed suggest that the early action allocation helped avert a full-fledged disaster.

Piloting of a unique coordination structure

The early action constituted a new structural response to hazards in South Sudan, with several key features different than in past interventions. Alongside the pre-planning and the early allocation of funding prior to the flooding season that constituted the action itself, there was the development by the Humanitarian Coordinator of a high-level special task force that included a special envoy, deputy special envoy, and a senior OCHA employee based in Bentiu to oversee operations; and the creation by OCHA of a public project tracker and dashboard, which were specific to AA projects funded through the allocation. The monitoring framework and resulting tracker were developed not just as tools to monitor progress but also to see the extent to which assistance could be provided to affected people before major flooding occurred. These tools also aimed to increase transparency and oversight of project progress across agencies.

The early action allocation appeared to generate some urgency around time-sensitive decision-making and implementation, as well as "public" scrutiny through the project tracker and oversight through the special task force in Bentiu. Notably, informants across UN agencies were overwhelmingly positive about both the special task force and the project tracker, stating that they were "necessary" and "really needed." They explained that having "on-the-ground oversight" from the task force helped keep projects on track and sped up decision-making that would otherwise have had to be relayed through the Juba country office. Alongside the special envoy, the high-level OCHA employee was able to "inject accountability into operations," as one informant put it, through daily field site visits and meetings. A UNFPA informant in Bentiu explained that the senior OCHA employee tasked with overseeing daily project progress,

[A]dded to our capacity, being able to monitor every day by going to the sites. He was a dedicated person to that.... It really helped when [a senior OCHA employee name] was here for 3-4 months. He was able to strengthen the coordination and supervision of funded partners to ensure that things were happening quickly and at the same time report directly to the HCT [Humanitarian Country Team].

At the same time, there was a widespread feeling by both OCHA and other UN informants that such "micro-managing" should in theory not be necessary to implement effective responses. Some informants felt frustrated that such regular follow-ups of project partners were perceived as needed, while others explained that limited decision-making power of agency staff working in Bentiu led to delays. A limited diffusion of power similar to what is described in critiques on the humanitarian system's lack of localization appears to have occurred on the national scale of South Sudan, with headquarters in the country's capital responsible for decisions that those in agency sub-national offices in Bentiu could not take action on without approval from country offices (Easton-Calabria in prep). Within this context, it therefore makes sense that the creation of the early allocation special task force in Bentiu itself was perceived as helping speed up various processes, as the special envoy who headed it was provided with decision-making power normally reserved for those residing in agency country offices in Juba. Alongside these dynamics, a longstanding humanitarian mindset of reactive rather than proactive crisis response was suggested by several informants as a reason why close project follow-up was particularly useful. The challenging context of South Sudan was also cited as a key reason impacting operations, as discussed in more depth below.

Challenges of a multihazard, complex context

Throughout conversations with informants, the difficulty of working in South Sudan was repeatedly discussed, with both conflict and flooding being mentioned. Exemplifying this interplay, many of the IDPs in the Bentiu IDP camp in Unity State originally moved to the camp due to conflict but have been unable to return home because of the consecutive years of flooding (UN informant 2022). While conflict levels are often reduced during the flooding season due to enforced immobility, both create competing needs for funding and assistance. During the 2022 flooding, for example, UN informants discussed time and attention being needed in and around Tonga town in the Upper Nile due to violent clashes (OCHA 2022b), even as extensive support was also needed elsewhere due to rising floodwaters. These competing needs are all the starker given that despite extremely high levels of need, with more than 8.9 million people in need of humanitarian assistance in 2022 (OCHA 2022b), response plans for the country have been consistently underfunded (Humanitarian InSight 2022).

The challenging context was also often linked to the limited practical as well as emotional resources of UN agency staff. One OCHA employee based at headquarters said: Mental scarcity and high burnout rates—you are not fighting fires as quickly in other places as you are in South Sudan. This [firefighting] is what they're experiencing every day, which makes the ability to make decisions wane. There is limited humanitarian bandwidth to make decisions, and so it is important to consider how anticipatory action and an anticipatory mindset does or can fit into this.

Illustrating the stress of the context, one informant pointed out in an interview that not only was the Bentiu IDP camp at risk of being submerged but so was the entire state's humanitarian operations site, as they were effectively one and the same. This statement reinforces both the challenge and the immensity of what is at stake in a late, or lack of, response to hazards such as flooding. It also highlights an area for further discussion within the anticipatory action practitioner community as it continues to extend operations to conflict and other multihazard contexts.

Informant Recommendations

Alongside sharing information and insights on different aspects of the early action allocation, informants also had suggestions and recommendations for similar interventions in the future. Key recommendations that arose related to the timing of planning and the allocation disbursal, the use of the funding, and the value of anticipatory or early actions focusing more overtly on "development" rather than mainly "humanitarian" needs, as presented below.

Timing: Earlier action and planning is desired

Informants were overall in agreement that providing assistance before the flooding was important and useful. Many informants across UN agencies, including within OCHA, also stressed that early planning for earlier implementation was necessary. There was overall interest in beginning conversations about implementation design in December or January in order to make as much use as possible of the dry season before the flooding begins in April or after. As a person close to the implementation of the early action stated,

If my appointment had started not in March but in January or in December of last year, then we would have had time to think through better plans for the CERF early action allocation and would have had time to bring people together. It was lucky, to be honest, that the rains came later than they normally do, but we shouldn't be reliant on whether they do! . . . When the rainy season stops in mid-October, we need to start planning for the next rainy season. . . . Ideally we have CERF anticipatory action funding kicking in on January 1st when the dry season starts so we have time to implement and be ready.

Similarly, a UNFPA informant explained,

The flooding is a continuous crisis. The allocation was implemented in May or June, with activities implemented in June-ish. Flooding had already started but was not as severe as the flooding we have right now [in October 2022]. Somehow this is in time but if assistance was given even before the previous flooding that would have been great. But this crisis is continuous, and the scenario is getting worse. We are now surrounded by water.

These recommendations on timing are all the more important given that flooding in South Sudan is annual, with a relatively stable wet season from April through November (although some research indicates these patterns are changing due to climate change). While for the purposes of anticipatory action it has proven difficult to forecast particular periods of more severe flooding in advance, the wet season in general is possible to plan for. As forecasts continue to be refined, there is still value—as this early action allocation has indicated—in robust advance preparations for the season. Advance preparation may prove most useful if it includes the flexibility to target projects in either particular sectors or geographic areas as the season unfolds, as discussed by some informants.

Increased knowledge on AA and decision-making within sub-country UN agency offices

Alongside positive responses, informants detailed a level of concern about the high level of oversight built into the allocation's coordination structure, which in some instances was linked to limited knowledge and decision-making within sub-country offices. One recommendation that emerges from this concern is the need for more awareness of the objectives and structure of early and anticipatory action at different levels of UN humanitarian operations and within agencies. While it appears that extensive discussions were held with those in higher positions of leadership, and particularly those based in Juba, it does not seem that this information always flowed to staff based in sub-national offices in and around Bentiu. In some instances this lack of information flow contributed to delays in project implementation. While some level of delay is likely normal, it becomes particularly problematic for anticipatory action, as interventions must occur on a very short timeline.

More flexibility in uses of funding

Several informants from different UN agencies in Bentiu recommended a more flexible mode of project funding that could take into account unplanned occurrences or allow for a more tailored response to particular situations as activities continued with the flooding season. An informant from a UN agency explained,

Our early planning was to do flooding mitigation in terms of building dykes—but little did we know that by increasing latrines in new settlement sites, our resources were going to be affected. In this case, the element of desludging latrines was overlooked. Most of those places during rainy seasons where IDPs were staying would not be accessible, meaning that the desludging material was not sufficient because it couldn't be distributed. If we had known this earlier, we could have put it in this proposal, but because we didn't, it was a big challenge to address.

One IOM informant suggested that OCHA offer a window of time after funding has been dispersed for agencies to revise project proposals to account for changes in the context. This window of time would offer, as one informant termed it, "the flexibility to include what we have left behind." Interestingly, CERF does in fact accept mid-project revision, suggesting some important gaps in information dissemination surrounding the allocation procedures. These recommendations also align with other research on anticipatory action in multihazard contexts, which found that implementing agencies struggled with the rigidity of AA project plans when trying to address the new hazard of COVID-19 (Tozier de la Poterie et al. 2022). Given the tight timeframes for both planning and implementing anticipatory and early action, it is important to further consider how flexibility in funding or project planning could improve, rather than delay, implementation.

Stronger linkages between humanitarian action and development within AA

While there were overall positive perceptions of the early action allocations, as described above, the majority of informants also discussed the need to increase linkages between anticipatory action and development. In the context of South Sudan, years of conflict and ongoing violence and political tension have impeded or eroded the country's development. Governance in South Sudan is tenuous, with regional leadership in some areas having little true power and government institutions having limited capacity to implement programming. In practice, infrastructure development (e.g., paved roads) has been limited in parts of the country, which in turn has impeded humanitarian operations. Humanitarian agreements with government actors also may not be adhered to at different levels of government, meaning that setbacks were described as common. Such challenges risk not only reducing the long-term impacts of humanitarian assistance but making shorter-term action such as AA harder to implement. One high-level OCHA informant described.

Anticipatory action is not enough at all. What we're doing is mitigating the worst humanitarian impact for people. But if we don't have a real climate adaptation programme, where we really look at infrastructure, roads, dykes, and longer-term areas to protect, like water systems reinforced, we will continue to have massive humanitarian consequences.... Our action is meant to be limited in time, but here [in South Sudan] it is the only action taken.

Similarly, many other informants suggested the need for a longer-term outlook for anticipatory action, such as helping communities build elevated houses as part of early action, which could help people in both the short and long term (Humanitarian Affairs Officer, OCHA, Bentiu). The need to maintain machinery used to prepare for flooding was also mentioned, with one informant suggesting a "maintenance kitty" to help the sustainability of early action operations themselves (IOM informant, Bentiu). A leader of the early action allocation explained the need for this longer-term thinking in relation to the 2022 flooding response:

[P]eople in Bentiu knew it would be 4–5 years before they could go back home because Unity State was 80–90% underwater. We knew people would still be in the camps by this year's rainy season. Given this, we should have done everything differently. Everyone acted as if this was the short-term, usual humanitarian assistance but it could have been different if people had a longer-term vision and perspective.

These and other informant responses all relate to the need to act early and quickly in the face of long-term and enduring challenges in South Sudan. This point relates to the longstanding humanitarian-development gap, wherein humanitarian action is not coordinated with longer-term development needs and responses. While little of the literature on anticipatory action considers its role in development processes and programming, or the role of development in AA, this study illustrates that it is a key concern of humanitarian practitioners, who appear to feel stuck providing "Band-Aids" such as early action while also recognizing larger needs that they have limited capacity to address.

As research and evidence on anticipatory action in complex crises grow, South Sudan presents an important case study of early action, one with clear successes in processes as well as identified gaps and needs of relevance to the wider anticipatory action community.

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Photo: Floodwaters submerge dwellings in the Bentiu IDP Camp, Unity State, South Sudan, by Christoph Baade, formerly of OCHA.

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About the Academic Alliance for Anticipatory Action

The Academic Alliance for Anticipatory Action (4As) is a consortium of researchers from seven universities working to increase the knowledge base on anticipatory action. 4As is led by Feinstein International Center, Friedman School of Nutrition Science and Policy at Tufts University in the U.S., partnering with Bangladesh University of Engineering and Technology, Eduardo Mondlane University in Mozambique, Makerere University in Uganda, University of Namibia, National University of Lesotho, and University of the Philippines.

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