



The earlier, the better?

Impact of shock-responsive monetary transfers for drought in Niger

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Climate change is intensifying extreme weather events. For low-income rural households that rely on rain-fed agriculture, droughts are felt particularly severely. Several countries in the Sahel are building Adaptive Social Protection systems to help households respond to shocks and become more resilient to future shocks. Emergency monetary transfers targeting poor and vulnerable households are a common policy instrument used by government and humanitarian organizations to provide rapid response to shocks. However, the support often arrives after households have already started resorting to negative coping mechanisms, such as reduced food intake. Advancements in technology, such as satellite-based remote sensing, now enable earlier policy responses.

The brief highlights the impact of providing early transfers to respond to drought shocks faster than the traditional response, which typically takes place during the lean season before the next harvest. A shock-response transfer pilot using satellite-based triggers was implemented by the Government of Niger through the Safety Net Unit (Cellule Filets Sociaux or CFS) in four communes (Dantchandou, Imanan, Tagazar, and Tchaké) that experienced severe drought that affected harvest in October 2021.

The impact evaluation results show that relatively large transfers provided between March and June (45,000 FCFA per month for 4 months) have substantial impacts on improving food consumption, food security and mental well-being before the lean season. A traditional lean season response with similar-sized transfers (4 transfers of 45,000 FCFA) between July and October improves food consumption, food security and mental well-being, but its overall impacts are lower than those observed for early transfers. This indicates that some of the impacts of the early transfers persist throughout the lean season and shows value in responding early to shocks.



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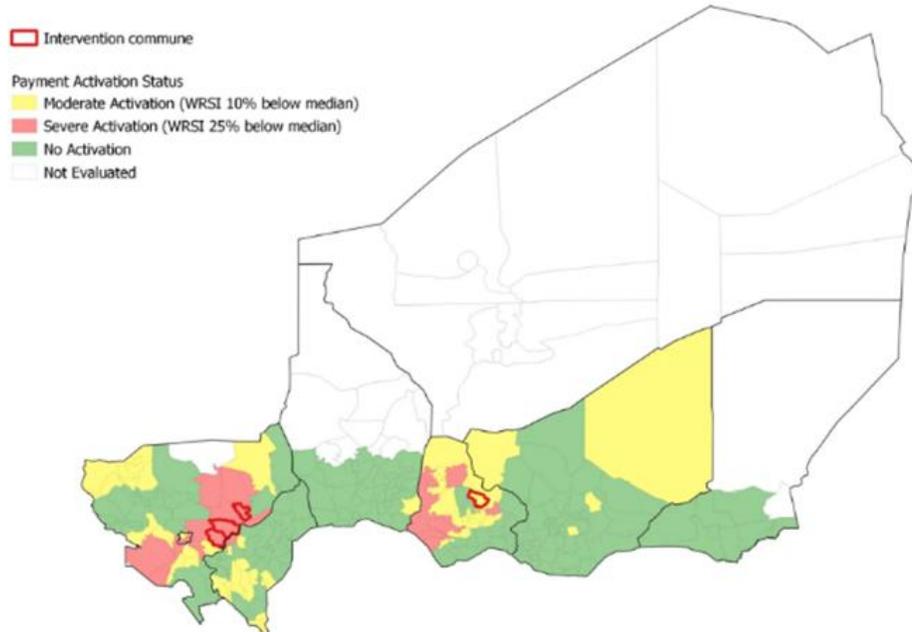
1. Triggers and shock-response modalities

Following repeated droughts and marking a pivotal shift in Niger's approach to climate-induced crises, in 2020 the Government of Niger developed an innovative early response pilot program. The program aimed to respond to droughts earlier than usual by activating emergency drought transfers in areas where a satellite index indicated high probability of the occurrence of a drought. For the satellite index, the program relied on the Water Requirement Satisfaction Index (WRSI), a crop water balance model developed by the FAO to monitor drought-related crop conditions. Index values are published on the FEWSNET website every 10 days.

The activation of monetary transfers was tied to pre-agreed rules: If the index value were to fall 10 percent below the long-term median in a given commune at the end of the agricultural season, the provision of these transfers would be triggered to 22 percent of the commune's households. A 25 percent drop would trigger transfers to 44 percent of households in the commune. The 22 percent or 44 percent recipient households would be identified using a Proxy Means Test prioritizing the poorest households in each village.

At the end of the 2021 growing season (in October), the WRSI dropped 10 percent below the long-term median in the pilot commune of Tchaké and 25 percent below the long-term median in the pilot communes of Dantchandou, Imanan, and Tagazar. Monetary transfers were thus triggered to 15,400 households in these four communes (see Figure 1).

Figure 1: Communes targeted by the rapid drought-response pilot intervention in 2021



The pilot monitored the WRSI in eight communes; trigger thresholds were reached in the four communes circled in red.

Three different response modalities were tested (Figure 2) in the three communes where the WRSI dropped 25 percent below the median in October 2021:

1. **Traditional (lean season) response:** four transfers of 45,000 CFA franc (~USD PPP \$220), from July to September 2022, i.e. during the lean season.
2. **Early short:** four transfers of 45,000 CFA franc (~USD PPP \$220), from March to June 2022, before the traditional lean season response.
3. **Early long:** 12 smaller transfers of 15,000 CFA franc each (~USD PPP \$74), from March to January 2023.

All three modalities used the same targeting criteria and had the same total transfer amounts. A comparison of the impact of the early short with the traditional (lean season) response provides information on the value of responding early.

2. Summary of impact evaluation results

The impact evaluation documents show the various shock-response modalities impact food consumption, food security and mental well-being over time. Before the lean season, the “early short” modality leads to substantial improvements in food consumption and food security (see Figure 3, pre-lean period). During the lean season, the “traditional response” modality in turn improves food consumption and food security (Figure 3, lean period).

However, and importantly, the increase in food consumption achieved by the early short modality before the lean season is larger than the increase in food consumption from the traditional response during the lean season. The impact evaluation thus finds that there is value in intervening early in the context of a drought: the early short transfers provide significantly greater net benefits for households compared to the

traditional lean season response, with effects that continue during the lean season

Figure 2: The three shock-response transfer modalities

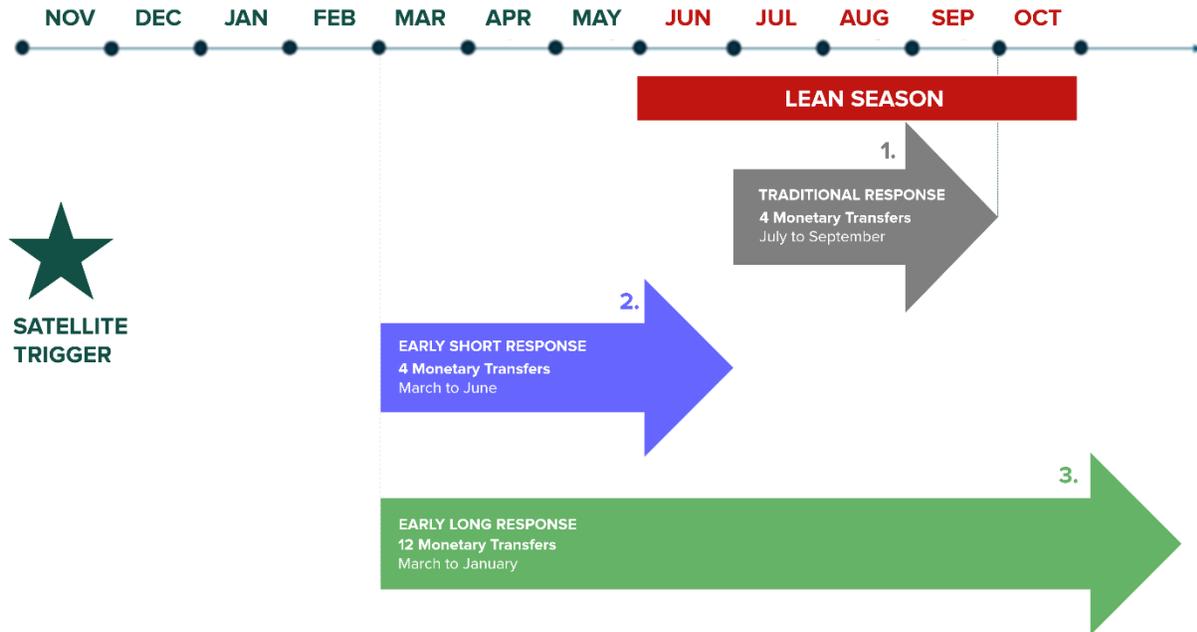
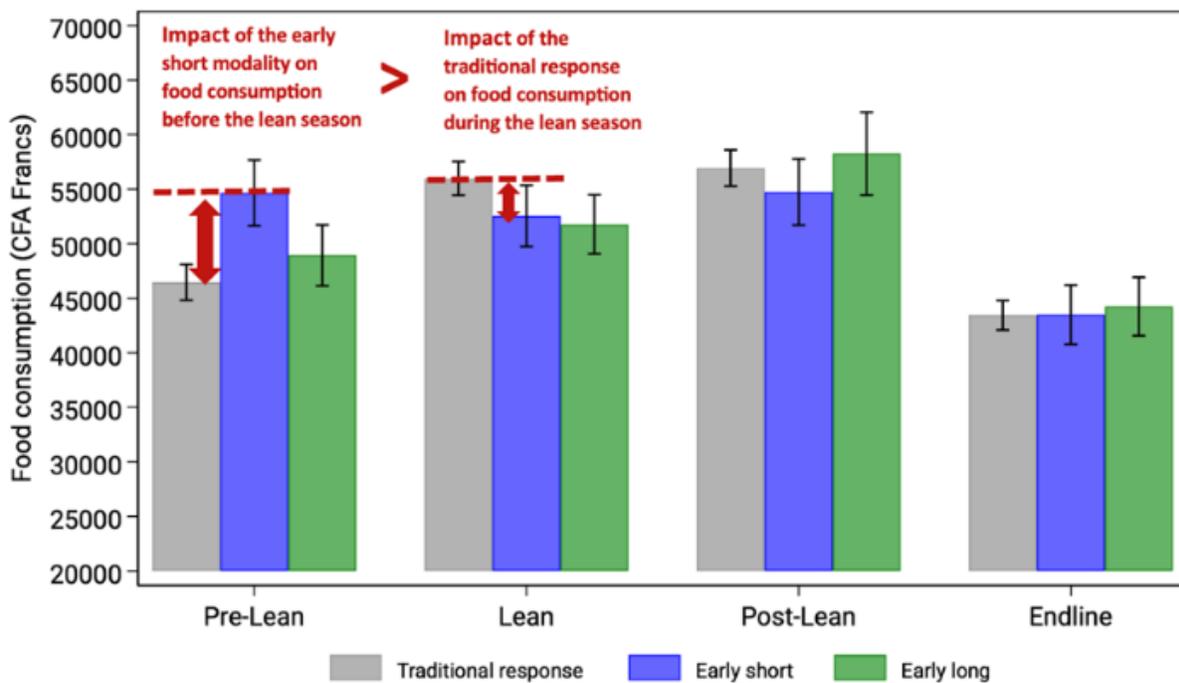


Figure 3: Impacts on food consumption for each in each period



After the lean season, there is no more difference in impacts between transfer modalities. Transfer modalities have similar effects on food consumption and food security both in the months after harvest (“post-lean” season in figure 3) and at endline just before the next lean season (6 months after the last transfers in May-June 2023). In addition, the “early long” modality that provides smaller transfers throughout the year does not show larger benefits over the “early short” or “traditional response” modality either.

Importantly, the study only compares shock-response transfer modalities against each other. It does not compare the effects of receiving monetary transfer to receiving no transfer, so we cannot isolate the impact of receiving transfers. Other impact evaluations in Niger have already shown that monthly transfers provided for two years have lasting impacts on multiple development outcomes.

Impacts on psychological well-being are similar to those for food consumption. The “early short” modality leads to immediate improvements in life satisfaction and mental well-being before the lean season: early monetary transfers provide households with greater peace of mind as they enter the lean season. The traditional lean season response improves life satisfaction and mental well-being during the lean season, but less so than the early short modality before the lean season. Hence, early short transfers have net benefits on mental well-being. After the lean season, the impacts are again similar between modalities.

Shock-response transfers also impact financial outcomes. Early transfers reduce the share of households borrowing before the lean season compared to households receiving the traditional response. More broadly, shifting the timing of transfers has little effects on livelihoods in the year following the severe drought.

3. Policy and operational takeaways

Overall, the results show that shock-responsive monetary transfers fulfill their primary objective of supporting poor households’ well-being when facing a severe drought. Early transfers delivered four months before the lean season have bigger impacts on consumption, food security and psychological well-being compared to a traditional response during the lean season. This shows the value for government and humanitarian agencies to provide early support to households exposed to a severe drought.

To mainstream early response interventions, early drought response triggers need to be established. With evolving technology, tools to detect droughts rapidly become ever more available. Yet many governments and humanitarian actors primarily rely on ground-collected food security data (such as the *Cadre Harmonisé* in West Africa) to plan and launch their crisis response. To facilitate early response, there is scope to mainstream the use of climate early warning data. Such data is available almost in real-time and can indicate whether and to what extent it is likely that a drought will impact the harvest even before the rainy season ends. Explicit data thresholds can be established to trigger the provision of response efforts immediately.

Ensuring rapid response capacity also remains important. With early drought detection capacity and triggers in place, responders can consider improving their rapid response preparedness. This includes three elements:

(1) Delivery systems need to be capable of providing support to affected households quickly. An effective delivery system in turn draws on three key building blocks: shock-responsive targeting capacity, for example via social registries that contain data on particularly vulnerable households; payment systems capable of delivering the support quickly, e.g. through an electronic payments portal or framework contracts with payment service providers; and the capacity of coordinating actors to administer the response.

(2) Rapid response preparedness furthermore requires that funding is readily available to pay for the response. Linking disaster risk financing (DRF) instruments such as disaster funds, insurance, or contingent credit to the response can help to ensure this.

(3) Finally, as for the trigger, clear rules should be established upfront describing the response processes in case of a drought. This can be done for example via national contingency plans.

Early drought response transfers have a significant effect in supporting food security and welfare. Yet varying the timing of these transfers has limited effects on welfare beyond the lean season. Adjusting the timing of drought response transfers does not significantly impact livelihood throughout the year. To achieve broader policy objective such as reducing poverty and promoting resilience to future shocks, longer-term regular safety net programs, such as the [multi-year safety nets incorporating human capital and economic inclusion components to promote livelihood diversification](#) that have shown strong results in Niger, remain critical.



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