



# UNICEF/WFP Return on Investment for Emergency Preparedness Study Final report

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The opinions expressed in this report are those of the research team and do not necessarily reflect those of UNICEF or WFP. The responsibility for the opinions expressed in this report rests solely with the authors. Publication of this document does not imply endorsement by UNICEF or WFP of the opinions expressed therein.

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### 2. EXECUTIVE SUMMARY

Although humanitarian actors have long emphasized the benefits of emergency preparedness in high-risk humanitarian contexts, little evidence has been collected to date to demonstrate the impact of early preparedness investments on eventual humanitarian response. This study is one of the first research initiatives to quantify the cost and time benefits of a large and diversified investment "portfolio" of emergency preparedness interventions undertaken by UNICEF and WFP in 2014, with support from the United Kingdom's Department for International Development (DFID). It builds the evidence-base for a return on investment (ROI) for preparedness to:

- identify opportunities to reduce costs and increase the speed of humanitarian response;
- assess planned and existing preparedness investments in terms of potential cost savings and response time; and
- compare different preparedness interventions along these two dimensions.

The ROI model has been developed and applied based on 49 emergency preparedness investments in three pilot countries: Chad, Pakistan and Madagascar. These investments span across four main operational areas (logistics, procurement, staffing and partnerships/external contracting) and cover UNICEF and WFP activities under DFID Humanitarian Programme funding for emergency preparedness from January 2014 through the end of 2014.

# **KEY FINDINGS**

ALL UNICEF and WFP emergency preparedness investments examined in Chad, Madagascar and Pakistan were found to save significant time and/or costs in the event of an emergency.

**64%** of investments saved both costs *and* time.

### COST SAVINGS

\$5.6 MILLION was invested in the 49 preparedness activities examined. These interventions saved a total of

**\$12 million** toward future humanitarian response for a net savings of \$6.4 million.

### TIME SAVINGS

**93%** of preparedness investments examined saved time toward humanitarian response – no investment examined slowed down humanitarian response.

Preparedness interventions can speed response time by **2 TO 50** 

**DAYS** or an average more than one week.

A total of \$5.6 million was invested in interventions covered by this study. In the context of projected risk on the likelihood, timing and scope of future emergencies specific to each country, future emergency response-related costs have been reduced by \$12.0 million, representing \$6.4 million in net savings and an average ROI rate of 2.1. The time savings drawn from these same investments range from 2 to 50 days, or average time savings of more than one week, when comparing the duration of necessary response activities both with and without advance preparedness measures. No preparedness interventions resulted in lost time or slower future response speed. Time-savings are particularly critical in humanitarian action since the speed of programme implementation has direct implications to lives saved during a time of crisis.



Overall findings from the study demonstrate that:

- 100% of all UNICEF and WFP investments in emergency preparedness examined were found to save significant time or costs in the event of an emergency.
- Three quarters of the preparedness investments examined demonstrated <u>cost-savings</u> beyond the amount of the initial investment (ROI>1.0).
- 93% of preparedness investments examined <u>saved time</u> toward humanitarian response. On average, preparedness interventions saved more than one week in humanitarian response time.
- 64% of preparedness investments saved <u>time</u> and cost.

## What is an ROI?

The ROI (return on investment) is a financial measure in which an ROI rate of 1 indicates that future costs will be reduced by the same initial investment amount. All rates greater than 1 indicate a higher cost saving than the original investment.

Time savings have been measured in days, indicating the number of humanitarian response days that are saved by preparedness in the event of an emergency.

The research demonstrates that humanitarian preparedness is complex and must be tailored to context. Investments with high returns in one country do not necessarily indicate similarly high returns if implemented in another country. However, trends within the data collected and analysed for this study suggest some first patterns:

- Pre-positioning of <u>internationally-sourced emergency supplies</u> yield ROIs in the magnitude of 1.6 – 2.0 and significant time savings of 14 to 21 days on average across all pilot countries. Analysis based on anticipated future needs suggests that quantities prepositioned as emergency supplies in the pilot countries could be increased without risk of spoilage or financial loss.
- Large <u>infrastructure investments</u> yield the highest absolute money savings (e.g. the Tissi airstrip investment of \$680,000 in Chad resulted into subsequent cost savings by avoiding the use of helicopters in the rainy season of \$5.2 million, with an ROI of 7.7)
- <u>Trainings</u> may yield by far the highest financial ROIs (1.3-18.7) due to their relatively limited initial investments and large potential cost savings, but this type of investment also requires the need to retain the trained staff and to ensure a high quality of training.
- The more dependent a country is on external goods and services, the higher the ROI of an investment ensuring their availability in an emergency situation (primacy of available goods over non-available ones).
- For countries with higher coping capacities, the ROIs for more basic emergency preparedness investments fade, with higher value shifting to those in human capital (e.g., training) and organizational capacity (e.g., additional resources).
- All investments have various additional qualitative benefits (e.g., higher reliability, local expertise development, spillover to the broader humanitarian community or long-term multiplier effects) that were not quantified but further increase the value of the investments.

Given the magnitude of the ROI of most investments, it appears that there is still a large gap between potential savings from preparedness investments and the actual cost of humanitarian response. By contrast, if we were to see an average ROI around 1.0 across investments, this would indicate that the humanitarian community has comprehensively addressed risk with preparedness measures. As such, the research team hypothesizes that there are still significant investments opportunities in high-risk humanitarian contexts to further reduce the emergency response costs.

The favourable returns on investment are an encouraging result for the humanitarian community and the donors already investing in these areas. At a time when global humanitarian needs, costs and complexities have never been higher, the evidence presented in this report makes a strong case for early funding toward emergency preparedness. Up-front resources to invest fully in preparedness opportunities would facilitate swifter and more efficient response, implying more lives saved in future humanitarian action. It must be noted however that donor investment in emergency preparedness does not abdicate against contributing to support to future crises. Instead, the evidence suggests that for both donors and humanitarian agencies a more balanced resource allocation approach between preparedness and response activities in high-risk settings could yield improved long term results. Investments in preparedness should also be diversified across a spread of intervention areas, since the operational preparedness gains examined in this study showed strong inter-dependence in realizing maximum cost- and time-savings. For example, optimally pre-positioned emergency supplies can do little toward a humanitarian response if staff are not sufficiently trained and partnership arrangements are not in place for emergency response activities.

Contextualized analysis is necessary for evaluating the relative merits of investments in different situations. As the model developed through this study can be used for all type of risks and type of activities, it could function more and more as a standard tool in reporting and advocating for emergency preparedness. The research team hopes that in using the model delivered with this project, humanitarian actors will be empowered to make informed long term investment choices for the greatest benefit of aid recipients and be held more accountable to deliver on the investment promises.

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