

SOPROEN'S INNOVATIONS TO MAKE EMERGENCY SHOCK RESPONSES EFFECTIVE AND EFFICIENT



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Introduction

SOPROEN¹ is a USA-based social consultancy firm which has been developing and implementing social protection projects around the world for several years, focusing on the poorest and most vulnerable populations in more than 40 countries. Thanks to our experience, we have developed methodologies and proposals to face climate change-related challenges that typically affect the poorest families. The objective of this paper is to present solutions to different types of shocks and the role that SOPROEN plays in the different stages of an emergency, corresponding to one of the firm's three fundamental pillars which is the capacity to adapt social protection systems to emergency scenarios.

I. JUSTIFICATION AND TYPES OF DISASTERS

Both climate and extreme weather-related emergencies, as well as natural related disasters like earthquakes, volcano eruptions and others are on the rise around the world. While disasters can affect all countries, low- to lower-middle-income countries are the least able to cope and the most likely to suffer significant human losses. However, middle-income countries are particularly at risk for significant economic losses, due to rapidly growing asset-values in at-risk areas (The World Bank and GFDRR, 2013). In fact, the frequency of economic upheavals, the duration of natural disasters and crises are on the rise and the majority outside of the control of governments.

A. EXTREME DISASTERS

Extreme disasters (such as, for example, flash floods or earthquakes) are events that are difficult to anticipate and therefore occur unexpectedly. In the past, specific stages in Emergency Management have been established by scholars and practitioners in the field. For extreme disasters including hurricanes, volcano eruptions, earthquakes, and others, there are five clear stages are defined (Ayala, 2014):

- The first stage is **preparation**, which is a permanent, on-going process encompassing all measures taken by national governments and international organizations to prevent and mitigate the effects of disasters by reducing the loss of lives as many as possible. Although it is rare (or more specifically, it is rarely done) and perhaps it is not done as detailed as needed for planning the recovery and reconstruction stages; at this stage by governments and emergency management units should also plan the future stages.
- The second stage is the <u>disaster event</u> and depending on its nature could last only minutes or up to several hours. While the event lasts, alarms go off, people follow evacuation instructions, they go to shelters and other actions are taken place to limit loss of lives.
- The disaster event is followed by the <u>response</u> stage, or the period in which first responders carry out rescue operations, temporary shelters are provided for displaced individuals, and the most urgent needs are met such as food, fresh water, and

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¹ SOPROEN is the commercial and marketing name for Ayala Consulting Corporation.



emergency medical treatment. This phase lasts up to 60 days after the disaster event.

- Management then transitions into the next stage; recovery. In this stage, affected individuals are still not able to return to normal life, however the situation has stabilized somewhat, and some regularity can be reestablished. Therefore, it is necessary to ensure that they have a minimum income which enables them to gain stability and frees up resources for children to return to school, and for repairs or construction to be made on affected dwellings. Depending on the severity of the disaster and the effectiveness of the response, this phase can last up to one year after the disaster event.
- Finally, the <u>reconstruction</u> period, lasting two to five years after the disaster event, comprises a return to normalcy. Public infrastructure and productive related interventions facilitate the return of households to their houses, return to work, and daily life is reestablished. These stages are depicted in the figure below.

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B. CLIMATE CHANGE EMERGENCIES /DISASTERS (GRADUAL / ADAPTIVE DISASTERS)

In recent decades and mainly due to climate change, the weather is being disrupted and is becoming more and more uncertain. As a result, recurrent disasters like flooding and drought are happening mainly affecting food security levels of poor and vulnerable households. It became necessary to initiate adaptation processes and implement appropriate disaster risk management interventions to tackle the consequences of climate change.

For this type of emergencies which are more gradual and seasonal, four clear stages have been defined (The World Bank and GFDRR, 2013):

• The first stage is <u>mitigation</u> and the objective is to build plans and activities to avoid households suffering when the event happens. Meteorologists usually forecast long duration droughts giving authorities enough time to design and implement mitigation actions.

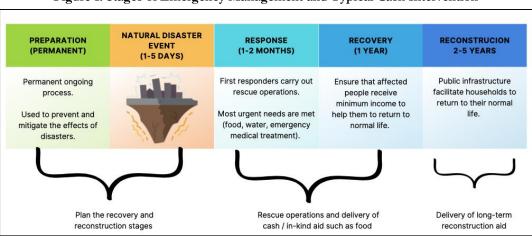


Figure 1: Stages of Emergency Management and Typical Cash Intervention

Source: Ayala, 2014, Cash Transfers and Data Collection in Emergencies: Implementation in 60 Days

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- The second stage is preparation, it is an on-going process to keep human and technical resources ready to activate the emergency shock response at any point while the disaster event lasts. The difference with extreme disasters is that the emergency unit knows in advance the disaster is coming and growing. The emergency unit organizes the social protection intervention and procures the resources.
- The third stage is the <u>disaster event</u>, which depending on its nature could last weeks or months. Floods can last weeks, and droughts go on for months. In this category of events are also included food insecurity situations in specific areas due to economic, war or political crises. The event becomes a crisis as the days go by. Affected individuals and households suffer damage in their houses, or suspensions in their livelihood activities which in turn lead to a reduction of food storage, forced temporal migration, and even may change of activity.

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The next stage is **recovery** which begins before the disaster event is over, generally when it becomes a crisis. The emergency management unit begins the implementation of the emergency shock response, typically a cash transfer and/or in-kind intervention. Enumerators start doing field data collection to identify affected households and assess damages. With this information, beneficiaries are selected, then upon the plan prepared during the preparation stage, vertical and horizontal expansions are put in place to assist all affected people needing assistance. They require a minimum income which enables them to gain stability and free up resources for children to return to school, and for repairs or construction to be made on affected houses or to increase food storage among others. These stages are depicted in the figure below.

Figure 2: Climate change emergencies / disasters



Source: SOPROEN, 2023



II. CURRENT CHALLENGES IN IMPLEMENTING EFFECTIVE RESPONSES

Despite the sense of urgency in disaster response, lack of experience and guidance has often led to significant delays in implementation of appropriate emergency shock responses. Governments and their emergency related agencies have made major efforts working in plans for mitigation and preparation stages. However, the plans and activities carried out mainly cover actions for the response stage, neither for the recovery nor for the reconstruction stages. Experts in the field recognize this important flaw in the establishment of solid and comprehensive shock responsive systems (Phillips, 2021). This is the main reason that these two stages tend to take longer and, on many occasions, tend to be frenzied.

There have been countless occasions in which response stages have become chaotic, and emergency management units mainly fail to respond to specific needs of the affected. Most of the actions are supply-side oriented, affected households get whatever assistance public and private helpers provide even if the assistance is not what the affected require at that moment. The dissatisfaction levels increase despite the efforts made by all the involved public and private agencies trying to assist in this critical stage. In short, emergency management units are failing in implementing demand side systems or providing the specific help the affected are requiring at that specific moment.

² Horizontal expansion refers to affected population not being part or benefited by the social assistance system in place, but due to the disaster require urgent assistance.

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Similar situations are relevant to gradual or adaptive disasters, emergency management units lack of required instruments, including protocols, guidelines, manuals, software applications and other peripherals to respond to this type of disasters. These agencies can better implement vertical expansions but fail with horizontal expansions² which tend to be chaotic. Some affected people get their benefits faster than others when all have similar needs.

Although it is recognized that cash and/or in-kind transfers should be one of the emergency shock response interventions to assist affected households during the recovery period, they are not properly implemented. Governments believe that their main cash transfer programs should be able to attend quickly and efficiently to the affected. However, the complications begin when affected households are not part of those programs or even have not been included in their social registries, meaning horizontal expansions tend to be a big challenge for emergency management units. This lack of preparation for the recovery stage is what often leads to the unfortunate situation of aid organizations and government actors causing more problems in their attempts to help in the disaster response phase (Canton, 2007).



III. MEASURES TO CORRECT THESE ISSUES

The social protection sector has been characterized over the years by including a set of supply side interventions to assist the poorest. It covers social assistance instruments such as cash and in-kind transfers, school feeding programs, public works programs and a food subsidy. In the last few years, development agencies are moving to the concept of having comprehensive and adaptive social protection systems composed of a social registry, supply side interventions serving a great deal of poor and vulnerable people, and demand side interventions in which specific demands and needs of beneficiaries are provided. While many countries do not yet have coherent and comprehensive social protection systems, all have elements of it.

On the other hand, the humanitarian assistance sector is designed to save lives and alleviate suffering in disasters. In the last few years, United Nations introduced a new concept, Adaptive Social Protection (ASP). United Nations defines ASP as an approach to reduce negative impacts of global challenges and change, such as poverty, food insecurity and climate change, as well as their increased interaction with natural hazards, such as floods, hurricanes or earthquakes. ASP involves combining social protection, disaster risk management and climate change adaptation. In short, this sector has the processes mentioned above, but like in the case of social protection, many countries do not have comprehensive systems. They work and make plans more in preparedness and immediate response, but not in recovery and reconstruction. Governments take a long time to put in place effective actions for these last two stages.

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As a result, international agencies and governments alike are finding out that both the social protection and the humanitarian sectors must coordinate better, work together and be comprehensive in the responses to vulnerable and affected population. The humanitarian sector overlaps with the social protection sector, the tools used for humanitarian assistance are similar and complementary to those used in social protection. Both sectors may use interventions such as the distribution of food or cash, or the provision of free school meals, or even include demand side-oriented interventions to respond to specific needs of affected people. Because of the above, there is convergence in their approaches in terms of objectives, the actors involved, and governance arrangements among others (O'Brien, 2018).

IV. ROLE OF SOPROEN IN DISASTERS

Over the years, SOPROEN has gained experience and developed instruments, protocols, and interventions to respond to disasters in an efficient manner. SOPROEN has supported major disaster-relief endeavors starting in Pakistan and Nicaragua suffering major earthquakes in the 1990s and 2000s. In recent years, SOPROEN provided technical assistance to support over 1.5 million affected households in Yemen going through the ongoing civil war. In the early 2020s, SOPROEN designed and implemented the COVID-19 response in Malawi assisting over 150 thousand households. Lately, SOPROEN has been actively working in different climate change-related disasters including floods and droughts in different rural and urban areas of Malawi.



The two main innovations developed by SOPROEN to better respond to emergency shocks include a referral system and an emergency response system for horizontal cash/in-kind expansions. The referral system was designed to attend the specific needs of affected individuals and households; it is a demand side system which complements the supply side actions typically implemented by emergency management units for the response stage. The second innovation is a comprehensive system to assist emergency management units in the implementation of cash and/or in-kind interventions to facilitate horizontal expansions during the recovery stage in record times.

A. SOPROEN SUPPORT: EXTREME DISASTERS

SOPROEN can provide technical assistance to better organize the plans and activities carried out before the disaster event and provide technical assistance during the response and recovery stages. Two objectives are pursued; first to develop a system of references to respond to the specific needs of affected people during the response stage. Second, develop a cash and/or in-kind transfer intervention for the recovery stage to facilitate horizontal expansions and make it possible for all affected people get the assistance at the same time.

1. Demand side intervention: system of reference for response stage

With the referral system developed by SOPROEN, it is possible to organize systematic procedures to attend the urgent needs of affected people. In the preparation stage, this system of reference is designed and organized.

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The main actors intervening in this system are summarized below:

- Affected organized groups are identified in advance and a leader or coordinator is selected. The leader must have access to a cell phone. The leader and members are trained not only in basic actions to save lives, but also in the process of requesting different types of help through the leader including health attention, water, food, or others. In the case of the leader, this person is trained in the use of a special digital application that uses the referral system.
- The Emergency Coordinating Unit manages the different stages of the disaster. They are trained on how to use the reference system for which a call center and trained operators are needed. They are trained on how to contact the service providers, obtain the service or assistance needed and make sure it is delivered.
- <u>Service Providers</u> include public utilities, hospitals, doctors, collection warehouses among others. Each service provider is included in the system along with the contact person which are also trained in the system of reference.
- <u>Donors and external support agencies</u> include central, provincial, and local governments, private individuals and organizations, foreign countries, and others. At the preparatory stage, the donation process is designed to make it efficient, so whatever is received is delivered to storage warehouses using state of the art inventory digital systems.
- 911 call center. Not all affected people will be in organized groups with proper training.



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Therefore, the referral system includes the 911 call center to receive any call asking for help and provide the respective reference to the Emergency Coordinating Unit call center.

confirms the delivery date and hour. The Emergency Coordination Unit operator informs the leader of the group the service or input to be delivered. After that happens, the leader contacts the Emergency Coordination Unit again to confirm the delivery and fills

9. Call the coordinator to indicate that the service was delivered and feedback is given ORGANIZED GROUP OF AFFECTED PEOPLE 7. Call and confirm that the request 2. has been made Person Leader/coordinator **EMERGENCY COORDINATION UNIT** requests understands the 3. Call /contact (Digital APP) help need 4. Operator identifies and searches for the service provider in the 3. Call /contact (Digital APP) inventory. 10. Unit evaluates the service AFFECTED PEOPLE THAT HAVE NOT 6. Service Provider confirms BEEN ORGANIZED INTO GROUPS 5. Call request with date and SERVICE time of delivery **PROVIDERS** Electric Water Collection Health center and 8. Service Provider delivers service / warehouse volunteer doctors company company supplies 0. Call Delivery of supplies **DONORS / SUPPORT AGENCIES** 911 CALL CENTER Informs the person Foreign Central, provincial and Private individuals and to call the unit Countries local government organizations

Figure 3: Reference for Response Stage

Source: SOPROEN, 2023

These actors need to be identified, contacted, trained, and they must understand the roles in the referral system. These activities are carried out during the preparation stage. This is so when the referral system is activated during the disaster event, all actors are ready to continue functioning throughout the response stage.

During the recovery stage, the referral system begins with the request for help by an affected person. If this person is part of an organized group, the leader of that group contacts the Emergency Coordination Unit. An operator in that unit identifies the right service provider and calls the contact person with whom he/she verifies the availability of the input or service required and

out a very short evaluation needed for feedback and improvement of the subsequent processes.

2. Emergency cash transfer for recovery stage

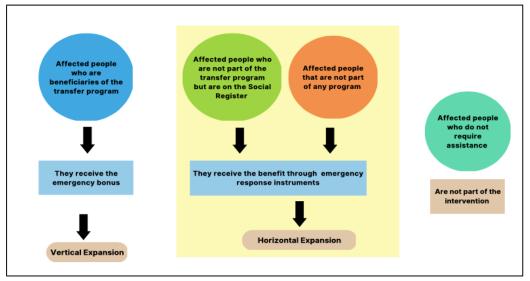
As part of the preparatory stage, SOPROEN also provides technical assistance to organize the delivery of cash or in-kind benefits to affected households who require this assistance for a few months until they move progressively back to normality or join to the main social protection program for a longer-term assistance. During the preparatory stage, SOPROEN assists the Emergency Coordination Unit to organize emergency response system and make them ready. This process



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includes proper training for Emergency Coordination Unit officials. registry, but require assistance (candidates for horizontal expansion).

Figure 3: Types of affected households



Source: SOPROEN, 2023

Basically, what this emergency response system does is to cover the horizontal expansion of beneficiaries assuming that Emergency Coordination Unit can do the vertical expansion along with the main cash transfer program of the country. To better understand what is at the stake with vertical and horizontal expansion, four types of affected households need to be defined:

- Beneficiaries of the main social protection intervention, the country's social cash transfer program and require cash and/or in-kind assistance.
- Non-beneficiaries of the main social protection intervention, but are part of the social registry, so information is available, and they require cash and/or in-kind assistance.
- People that are neither beneficiaries of the main social protection intervention, nor are in the social

 Affected households that do not require government assistance can take the measures on their own to confront the consequences of the disaster.

The affected households requiring assistance must receive cash and/or in-kind benefits for a certain period that would last 12 months, on average, via vertical expansion through bonuses or top-ups provided by the main cash transfer program. On the other hand, affected households that are not part of the main cash transfer program can receive benefits through horizontal expansion using emergency response instruments. It is here where SOPROEN helps, it has the required instruments to make possible a quick and fast horizontal expansion and provide benefits to the affected households not being part of the main social protection program. All affected households must be treated the



same, and SOPROEN makes it possible, making both vertical and horizontals expansions be implemented at the same time.

The organization and distribution of tasks, provision of equipment and instruments in general, reaching agreements with participating agencies is done during the preparation stage. Once the disaster event happens, data collection process begins immediately after making the required individual assessments as well as to identified affected households requiring cash and inkind assistance. This information can be collected using SOPROEN parametric instruments. Immediately after, information is entered into the Emergency Management Information System (EMIS) provided by SOPROEN. While households that are part of the main cash transfer program are identified to provide top ups to them, other affected population is assisted through SOPROEN's emergency response system.

If the arrangements designed during the preparation stage make that affected households that are in the social registry but not in the main social protection interventions can also be added to the main program, that process is executed as part of vertical expansion. If this is not possible, they would be part of the horizontal expansion who will join to affected population not included in any of the social protection systems but need assistance.

The EMIS is a parametric platform that was developed to support emergencies and disasters, it can be configured in a matter of hours and provides the same services as a tailor-made MIS supporting a cash and/or in-kind intervention and can be used to support horizontal expansions. Once households are selected according to agreed eligibility criteria, their information

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is ready to be sent to payment agencies or to begin manual payments in the field. In short, even before the response period is over, the recovery period begins with the first transfer of cash or in-kind to beneficiaries who were affected by the disaster.

B. SOPROEN SUPPORT: GRADUAL OR ADAPTIVE DISASTERS

As discussed above, gradual disasters typically, although not all, last weeks or months. In fact, events like droughts become a crisis after some time the drought began. For these cases, SOPROEN has the instruments, protocols, and the emergency MIS to support this type of disaster during the recovery stage. In this case, although the preparatory stage could be permanent, it continues through the disaster event, perhaps the initial weeks of the drought before becoming a crisis for the population living in that area.

Like what was explained for extreme disasters, during the preparatory stage the system to provide benefits to affected households is organized to secure that all affected needing support receive cash and/or in-kind assistance during the recovery period via vertical and horizontal expansions. SOPROEN has the required instruments and EMIS for horizontal expansion. In this preparatory stage, the Emergency Coordination Unit officers are trained on how to prepare the protocols, manage the EMIS and datasets, and how to prepare and undertake field data collection using tablets or cell phones.

Once the Emergency Coordination Unit decides to implement the emergency response intervention, the recovery period begins before the disaster period ends.



In fact, the provision of benefits should happen during the disaster period to allow affected households to cope with the situation, go through the disaster and secure enough food reserves until the disaster period ends. If the preparatory work is done properly, the implementation of the cash and/or in-kind intervention takes less than a month including the data collection process, selection of beneficiaries and making the first transfer.

In view of the above, SOPROEN's proposal for dealing with extreme and adaptive disasters is viable and realistic in that it quickly reaches all those affected at the same time and in an organized manner. These interventions begin to operate in less than a month, which is a record response time, and information is permanently available online so that donors and the central government have first-hand knowledge of the progress of the project. On the other hand, affected people can access different types of assistance through Linkages and Referrals (L&R) mechanisms, always according to their needs and priorities in the disaster context.

We are aware of the importance of intervening quickly in the event of a disaster, and we have the tools, methodology and technical and human resources to respond efficiently and cover the needs of those most affected and safeguard their lives.

V. SOPROEN'S SERVICES AND PRODUCTS

SOPROEN can provide support to governments in the design and implementation of shock-responsive adaptation systems which try to converge or align

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interventions with one another, social protection, and humanitarian assistance. The firm easily adapts to support in design tweaks, piggybacking, vertical expansion, and horizontal expansion interventions (O'Brien, 2018).

Design tweaks: small design and operational adjustments to social protection interventions introducing features to make it possible to maintain the regular service in a shock. In terms of digital solutions and MIS, SOPROEN can provide technical assistance to develop parametric functionalities to make these instruments flexible in aspects like coverage, timeliness, targeting criteria, top-up transfers, types of grievances and monitoring indicators. As such, when a shock happens, these social protection programs can continue providing the regular service, but are also capable of doing vertical expansion which is a temporary increase of the value or duration of an intervention to meet beneficiaries' additional needs (i.e. a top-up).

<u>Pigyhacking</u> occurs when an emergency response uses an established system or program while delivering something new. SOPROEN can assist in the delivery of a new intervention using the existing instruments available for the main cash transfer program, like the case of the COVID response intervention in Malawi. The instruments were quickly adapted to respond to the agreed design of a new emergency intervention making changes in the operation and MIS functionalities of the main social cash transfer program's instrument.

Horizontal expansion approach is the temporary inclusion of a new caseload into a social protection program using emergency response instruments. SOPROEN has the tools that allows to extend geographical coverage, enroll



more eligible households in existing areas with specific criteria. The advantage of this system is that these beneficiaries can also obtain benefits at the same time as those through vertical expansion. In fact, few countries have this capability where horizontal expansion has been applied due to major challenges like conceiving what the benefit is intended to cover; selecting new recipients; resourcing, adherence to pre-set procedures and communication (as with vertical expansion).

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