

4.2 Select Early Actions

Summary

Early actions are at the heart of Forecast-based Financing and each Early Action Protocol. The ideal early action is one, which has the best chance of helping the population at risk to reduce the negative impacts of an extreme event.

The process of identifying impacts, prioritizing those that can and should be addressed by FbF, and identifying early actions that can prevent or mitigate these priority impacts, is therefore central to the development of a strong EAP.

Early actions play a dual role to fill critical gaps in contingency planning and funding, while building upon existing preparedness plans. Careful identification, prioritization and selection of EAs guarantees actions 1) contribute to, prevent, or reduce priority risks and prepare for effective response, 2) are adapted to the local context and feasible to implement in the lead time before the extreme event with the capacities and resources at hand and 3) align with the priorities of communities and local actors as well as with relevant preparedness plans.

This chapter outlines a recursive process for identifying and selecting forecast-based actions that will be triggered and automatically funded based on forecast information.

The different steps below help to answer the following four key questions:

- What are the main impacts of that are caused by the hazard in question?
- Which harmful impacts can FbF reduce?
- What early actions will best reduce these impacts?
- Which of these early actions are currently feasible given the existing context and capacities?

Although the questions and steps below are presented sequentially, in practice, time and resources will be saved by gathering information on all four simultaneously, or iteratively (see Figure 1). Throughout the chapter, different methods are presented that can help understand impacts and how stakeholders experience and perceive the severity of these impacts, to elicit potential early actions. Depending upon the stage of your EAP, you may use each of these methods to zoom into one of these steps, or tackle several steps at once.

The steps, methods and criteria in this chapter were elaborated particularly to support the selection of early actions for EAPs to be submitted to the FbA by the DREF and thus correspond to the requirements of this mechanism. Of course, this guidance can also be used by NS that aim to develop more localized EAPs with own funding, in that case some of the below-described steps and methods could be adapted or weighed differently and some criteria mentioned might be less relevant.

Who is involved?

The selection of EAs should be done by a group of people with interdisciplinary backgrounds, from different sectors and with varied expertise. In some FbF projects, inter-institutional working groups (comprising RCRC, government authorities and other humanitarian organizations) have been set up to develop the EAP jointly and hence select the early actions, in others these tasks are in the hands of the Red Cross FbF team.

Regardless of the team composition, the steps below require the engagement of actors at all levels, from residents, community committees, civil society organizations, local and national governments and agencies, Red Cross and Red Crescent National Societies, other humanitarian and development organizations, research institutions (including climate science community), and the private sector or other relevant actors, as appropriate. Red Cross and Red Crescent National Societies and other humanitarian and development organizations engaged in Forecast-based Financing are encouraged to use these steps in an iterative, flexible way to identify the impacts and actions to be included in their EAP.

Although FbF systems are aimed at covering extensive geographical areas, to ensure an EAP can be activated in those regions most likely to be impacted by hazards, it is important to conduct research for the selection of actions at the local level. As FbF, at least in the context of EAPs funded by FbA by the DREF, does not pre-define communities, and rather decides which communities will receive assistance upon activation, consultations with communities on past impacts, needs and risk factors would need to be carried out with sample communities. Despite this national level, flexible approach it is important to gather community-level data, as it can provide a sense of the type of impacts, risk factors and support needed that might apply to other communities in the larger exposed area. The following steps methods used in the selection of early action could be applied in urban and rural settings at various scales.

Step 1: Identify impacts and risk

As the goal of early actions in FbF is to prevent or reduce the humanitarian impact of extreme weather events, it is of crucial importance to understand the impact that the hazard in question causes, how and to whom.

Quantitative approaches can answer questions such as, how many people are impacted? How much damage is caused? What type of damage has occurred in the past and to whom? Qualitative questions reveal why and how people are affected and which impacts are most difficult for households to overcome. We've included a range of tools and methods to support you in identifying the priority impacts of the hazard that your EAP seeks to address below.

Method A: Review of historical (and current) data

When available, historical and current data from the government and national ministries are a valuable

source of information regarding the impacts of past events and current exposure and vulnerability of populations at risk.

The following ministries may have relevant information regarding general or sector-specific disaster impacts and risk factors:

- National Disaster Management Agency (Disaster Risk Management Agency)
- Ministry of Health
- Ministry of Transportation
- Ministry of Climate/Energy
- Ministry of Education
- Ministry of Agriculture
- Ministry responsible for infrastructure/land use and/or housing
- Ministry for water and sanitation
- Agency responsible for national statistics
- Department of welfare
- National Research Institutions

In addition to government entities listed above, the following international databases and offer comprehensive country-specific impact data:

- [DesInventar](#)
- [EM-DAT](#)

For data on risk factors, these information management sources may also be useful:

- [INFORM index](#)
- [ThinkHazard – GFDRR](#)
- [HDX](#)
- [OpenStreetMap](#)
- [ALNAP](#)

Method B: Literature review

A literature review allows you to gather relevant information from existing work (such as reports, studies, policies and other documents) to identify impacts and potential early actions. Systematic reviews of international disaster response and risk reduction literature can also identify relevant actions that have been tested in other humanitarian settings and to gather evidence about whether, when, why, and how such interventions are effective in preventing or addressing disaster impacts relevant to your context. When reading through contingency plans, policy documents, studies, or reports on past disasters, consider the following:

- How have people prepared and responded to this hazard in the past?
- Could any of these responses be implemented before the event occurred in order to reduce later

impacts?

- Could these preparedness actions be reinforced or improved with FbF?
- What evidence is there that this action will work?

In the case of literature reviews of existing FbF examples:

- Are the early actions and lessons learned identified in the literature review transferable to the context of the EAP that is in the process of being developed?

Method C: Semi-structured, key informant interviews

Semi-structured interviews are conversations using a guide or a list of questions that need answering but that allow for the conversation to unfold more naturally. They differ from structured interviews or surveys (in which questions are asked in specific way and answers are often pre-determined) in their open-ended nature.

Especially in contexts, where little literature or data on past impacts is available, semi-structured interviews with government and disaster management officials, community leaders, staff and volunteers of response agencies and RC and civil society can help you gather information on priority impacts. After identifying the key impacts and risk factors, semi-structured interviews with sector-specific experts are extremely valuable to probe deeper into potential early actions.



Practical Guidance 1: How many interviews are enough?

Depending on the time and resources available, it is best to continue to conduct interviews until subsequent interviews no longer yield new information, and additional responses could be inferred based upon existing data and understandings (this is called saturation). In some instances, you may also exhaust the list of relevant informants.

In the Mozambican context it was not possible to reach saturation in every sector that is impacted by floods and cyclones. Due to time constraints, the FbF team focused instead on interviewees from the sectors most aligned with the Mozambique Red Cross capacities and priorities. Examples of semi-structured interview guides for government stakeholders, community leaders or members (if applicable), and sector-specific experts are available [here](#).

Arielle Tozier de la Poterie explains how to identify impacts and select early actions for an EAP, and talks about experiences made in Mozambique:

Video: <https://www.youtube.com/watch?v=8hx4jnU-4iA>

How does this translate in an urban context?

The Vietnamese Red Cross (VNRC) together with the GRC, IFRC, and the Climate Center started the FbF project focusing on heat waves in Vietnam in 2018. This was the first to bring FbF into an urban context. But, in a densely populated city with 16 million people, how do you find out who is most vulnerable and how extreme heat impacts them? The VNRC launched the Knowledge, Attitudes and Practices (KAP) survey, randomly sampling 1200+ respondents in specific areas of Hanoi. Based on resident's understanding of heat wave impacts, results from the KAP study were used to inform the selection of the early actions.

Video: <https://www.youtube.com/watch?v=wU1OkRUDnWs>

Method D: Focus group discussions

A focus group is a guided discussion, preferably conducted with a relatively homogenous group of individuals. You can conduct focus groups at various levels, including with national stakeholders, provincial or district officials, community leaders, or groups of practitioners.



Practical Guidance 2: Interviews or Focus Groups?

While interviews can help you to triangulate information from different sources, given limited resources or availability, it is not always possible to interview everyone individually. In such cases, small group interviews, or focus groups, can yield a wider range of opinions in a short period of time. However, care must be given to the selection of participants, power dynamics, gender, and age in order to ensure that everyone feels free to participate openly and honestly.

Both approaches seek to understand what disaster impacts are more common or likely, who and what is likely to be affected, as well as, existing coping capacities, responses, and potential early actions. In all cases, ask participants what kinds of actions might be taken before an event to reduce the damage and what kinds of resources or support would be needed to execute these actions.

Method E: (Post-disaster) Community visits

Walking through a community with leaders or representatives can be a valuable way to contextualize and deepen understanding gained through interviews and focus groups. Both structured transect walks (see VCA) or less formal tours of a community allow the team to observe local conditions first hand, hear stories, and ask questions that might not arise in a more formal setting. Although visits shortly after an extreme event allow for direct observation of impacts, walking through disaster-prone communities can provide valuable insights at any time.

It is always important to be respectful in the timing of your focus group or visit, and consult local leaders-representatives beforehand. For example, when visiting Nampula, Mozambique shortly after a tropical depression, local officials requested a walk through the village with local leaders rather than conduct a focus group (as planned) so as not to raise expectations of assistance.

Method F: Stakeholder workshops

Stakeholder workshops are valuable to elicit opinions and ideas while reinforcing the concept of FbF and their engagement in the EAP process. They can be used to identify which are the priority impacts that can be tackled by the FbF system and also to prioritize early actions, revise theories of change (see [M&E guideline](#)), and discuss how to operationalize early actions. Practical Guidance boxes 3 and 4 and the [resource links](#) below provide examples of workshop formats to identify, prioritize, and critically examine potential early actions.



Practical Guidance 3: Sample 1-day Provincial Workshop Agenda based on Activities Mozambique

- Presentation: Overview of the concept of FbF
- Presentation: Update on the FbF Protocol development

Break

- Review of research findings and impacts of floods
- Individual Activity: Questionnaire asking stakeholder to rank priority impacts

Lunch

- Group Activity 1: Ranking of key impacts in small groups (we divided participants according to the district from which they came)
 - Presentation of ranking to the group

- Group Activity 2: Small group brainstorming and prioritization of actions that could be taken to address the priority impacts (RC Climate Centre game “Ready”)
 - Presentation of actions to the group



Practical Guidance 4: Sample 2-day National Workshop Agenda based on Activities in Mozambique

Day 1

- Registration and official opening

Break

- Presentation of the Protocol
- Questions and answers
- Individual Activity: Questionnaire asking stakeholder to rank impacts (see Appendix F)

Lunch

- Presentation of the research findings: primary impacts and evidence for potential early actions
- Group discussion: what early actions are missing?
- Individual Activity: Post all potential early actions (including those added by small groups) on the wall and have each person vote (with stickers) for the 3 priority early actions by placing their stickers on the appropriate paper.

Day 2:

- Presentation of results of Day 1
- Individual questionnaire results: which impacts were prioritized?
- Results of early action prioritization: which early actions did the stakeholders prioritize?
Based on the above, which actions will the group recommend

Break

- Group work – Revising and Refining the Theory of Change:
 - As many 1.5 hours sessions as needed (with lunch as appropriate) to workshop key Theories of Change in small groups
 - In Mozambique, we divided participants according to their expertise, so that WASH experts were working on WASH-related theories of change, shelter experts on shelter, and so on.

- Disaster managers more generally were divided evenly among the groups.

Step 2: Prioritize impacts

Once you have developed a comprehensive list of impacts, you must decide which you can and should focus on. The choice of how to prioritize will depend upon your context and needs. It is important to acknowledge that while FbF is a system that can contribute to preventing or reducing some disaster risks (that have not been reduced or managed via long-term disaster risk reduction), FbF cannot address all potential disaster impacts. . Therefore, the prioritization of likely disaster impacts is essential to developing realistic and effective Early Action Protocols.

For example, you may prioritize an impact based upon suffering caused to vulnerable populations, overall economic impact, stakeholder priorities (disaster manager priorities, NS priorities, community priorities, etc.), organizational capacity and expertise, and/or after considering the selection criteria for early actions presented in Step 4. As each of these methods yield opportunities, trade-offs, and challenges (see Practical Advice 7 & 8), a combination is likely most appropriate. The following previously explained methods can support your team’s disaster impact prioritization:

- Method A: Review of historical (and current) data
- Method B: Literature review
- Method C: Semi-structured, key informant interviews
- Method D: Focus group discussions
- Method E: (Post disaster) Community visits
- Method F: Stakeholder workshops

Method G: Surveys (such as knowledge, attitudes, and practices)

Unlike qualitative interviews and focus groups, surveys can allow your team to obtain quantifiable data and reach a larger number of respondents. This can be useful when asking people to prioritize impacts and early actions to be addressed by your EAP. For example, this stakeholder survey was conducted in Mozambique to prioritize the impacts of floods and cyclones.



Practical Guidance 5: Qualitative (Interviews of Focus Groups) vs Quantitative (Surveys) Primary data

Primary data is data you collect for yourself rather than from existing sources or databases. When

deciding between data collection methods or tools, it is essential to consider what kind of information is needed and why, as well as the best source for obtaining such data. For example, while it may be tempting to quantify the impacts of past disasters using a survey, asking people to recall the consequences of past events is unlikely to yield reliable quantitative information, unless it is done immediately following an event.

Furthermore, depending on the scale of your proposed intervention, it may be extremely time and resource intensive to collect survey data from a representative sample. In such cases, qualitative data about past impacts will likely yield more detailed information regarding how and why disasters cause problems for communities. People are more likely to remember what they did and how they experienced an event than exactly how many acres of crops they lost. Government statistics (a secondary source) may then be able to provide quantitative data to support these qualitative accounts.

Depending upon the audience and sampling required, surveys can, however, be useful for ranking or for reaching a larger sample. The team in Vietnam, for example, used a Knowledge, Attitudes, and Practices survey to understand how vulnerable populations experienced heat waves. Because they were working in a limited area (certain neighborhoods in Hanoi), it was possible for them to collect a large quantity of relevant data in a short time.

Thinking about the level of detail you need (including information on causality), from whom (scale), and how reliable that information is likely to be (can people be expected to remember what you are asking?) can help you to establish which methods are most appropriate in your context.

It is well known that disaster losses and damages datasets of governments and institutions should be improved. Advocacy and technical support to government agencies and other institutions responsible for capturing detailed disaster impact information is essential to improve the capacity to identify effective early actions, as well as to develop better triggers (see [Trigger section](#) for more details).



Practical Guidance 6: Challenges in Prioritizing Impacts – Verifying and Weighing Stakeholder Perceptions

While key informants have valuable insight into their contexts, people may also have beliefs based upon misinformation, or make assumptions about cause/effect relationships and the severity of impacts that are not supported by systematic data. A lack of data does not automatically mean these observations are wrong, but it is always best to critically examine stakeholder assumptions using secondary data when possible.

For example, many humanitarian organizations and disaster managers will prioritize reducing loss of life over all other impacts. However, it may be that overall the event in question causes very few

deaths on average. Early warning messages alone may be successful in reducing mortality, and it may be difficult to predict and prevent remaining fatalities. In such cases, the decision to focus early action financing on preventing immediate loss of life may still make sense, but the decision to do so should at least be informed by critical evaluation of actual mortality rates and the likelihood of making a difference rather than emotional or political aversions to loss of life alone. Data on who dies and how will allow for a more informed decision as to whether it is possible to effectively target this impact using early action.

In another example, stakeholders may believe that flooding leads to an increase in cases in diseases (such as cholera), leading to additional hardships such as loss of income or time out from school.

National health statistics, however, may reveal that overall case loads and mortality rates remain the same or are more closely related to other factors. It could of course be the case that these data are incomplete; however, they should be presented to stakeholders and considered along with stakeholder perceptions when determining which impacts to address and early actions to take.

If stakeholder priorities are contradicted by evidence, it may be appropriate to try to influence those priorities, but when contradictory data does not exist, is not seen as reliable or is not readily available, it may be necessary to rely more heavily on qualitative data and stakeholder perceptions.

Step 3: Identify and brainstorm potential early actions

As soon as you have selected the priority impacts related to the hazard and risk factors you are addressing, you can begin to explore early actions that might reduce those disaster impacts. The following methods (described above) can also be used to identify or brainstorm potential early actions. Be sure to involve experts from relevant sectors, such as shelter, agriculture, WASH and health, or disaster management. From our experience, many stakeholders tend to bring up traditional response actions only, as that is what they are familiar with. Especially in workshops and focus group discussions, but also in interviews, try to make participants also think outside the box and consider new solutions.

Method H: Policy and practice review

While this could be considered part of an extensive literature review, consulting local policy documents can be a source of potential early actions and help you to understand how FbF will fit within existing systems.

Documents to seek out include the following:

- **Disaster risk management rules, regulations, and plans:**
 - It is important to understand how the overall system works in order to ensure that actions complement existing structures.
- **Contingency plans:**
 - These will help you to understand existing responses from the national to the community level.
- **Climate change adaptation plans:**
 - Although usually aimed at longer-term interventions, they may include plans for acute response or contain actions that could be adapted to different timeframes.
- **Evaluations of previous programs or humanitarian interventions:**
 - These will help you to understand what has been tried, what has worked, and what has not worked in your context.

Method I: Consult global early action database

In addition to context-specific exploration outline above, the DREF FbA and the Anticipation Hub are developing a real-time [early action database](#) to serve as a means of sharing between FbF projects and across contexts of potential early actions that have been used or suggested in other contexts. This database will continue to grow as FbF expands to new areas and hazards. As with the early action ideas arising from the methods above, the feasibility and relevance of any action in the Database should be carefully assessed in relation to your context before being selected as an early action.

Other organizations have also created lists of early actions that you could consult. See for example [the IASC SOP for Early Action to El Niño/La Niña Episodes](#) that includes sample early actions in Annex 1.

Method J: Community ranking activities (See VCA)

Participatory community ranking exercises, whether in the context of a focus group discussion or not, may also be helpful in identifying priorities at the community-level. The [IFRC VCA Toolbox](#) offers valuable guidelines on how to conduct such activities.

Step 4: Narrow and prioritize list of early actions

Once you have used the methods outlined above to identify and prioritize the impacts that can be

addressed by FbF, and have gathered a list of potential early actions to address them, it is time to determine which actions are most promising to reduce suffering and losses.

While stakeholder priorities are an essential consideration, they are only one criteria for an effective early action. There are many other criteria that can be applied in order to best assess and rank early actions. There is no “right way” to prioritize early actions, however the following criteria below should be considered during the selection process. Also bear in mind that some of them (e.g. feasibility, evidence, scale, capacity, lifetime of relief items) are contained in the minimum criteria for EAPs of the FbA by the DREF. Click on the link for examples of how the different criteria could benefit the prioritization of early actions for your EAP.

Criteria for selection of early actions:

Policy Fit

Is the action consistent with government and/or other institutional contingency plans?

Example of Policy Fit: Cash transfers in Mozambique

When the cyclone EAP was being developed in Mozambique, the National Institute for Disaster Management – the government agency overseeing disaster response – did not allow cash transfers. This meant that although cash transfers could theoretically have been used to mitigate many cyclone impacts before a storm hits, the National Society could not include such actions in the EAP. Following cyclone Idai in March 2019, the government is making changes to these policies. This means that cash transfers may be an option for the flood EAP or for future versions of the cyclone EAP.

Evidence of Effectiveness

Is there evidence that the action would be effective in reducing the prioritized impact(s)?

Examples of Evidence of Effectiveness:

Mozambique

In Mongolia, the Mongolia Red Cross assisted 2,000 herder households with unrestricted cash grants of USD 100 in December 2017 and with animal care kits delivered to the pastoralists in January 2018. Research showed that a FbF activation in anticipation of extreme winter and drought conditions known as Dzud was effective in reducing livestock mortality by roughly 50% and increased offspring survival rates by providing tailored animal care kits and a small unconditional cash grant.

Mongolia

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Bangladesh

In Bangladesh, a test intervention in 2017 demonstrated that families who received cash transfers ahead of floods accrued significantly less high-interest debt, otherwise a common coping strategy, and experienced less psychosocial stress during and after the flood period; they also had more reliable access to sufficient and nutritious food.

Scale

Can this action be set up and implemented at the desired scale?

Example of scaling

Uganda

In Uganda the first FbF project focused on a small geographical area, after test activations and further analysis, it was acknowledged that FbF systems for National Societies are most effective if they can be implemented anywhere, that a forecast predicts severe impact (using impact-based forecasting information). For example, if a flood is forecasted for a river basin, through impact-based forecasting the NS should know for which communities the expected impact is most severe and act accordingly. Given this approach, it is essential to understand if the national society has the capacity to implement the selected early action in all the potential locations that can be impacted.

Feasibility

Is there evidence that the action is feasible?

Two key aspects of feasibility are:

Time required:

- Is it possible to execute the action effectively with the given forecast lead-time?

Access considerations:

- Are there any factors (road or travel conditions, conflict/security, social tensions) that could interfere with access to the communities and hence successful implementation?

Examples of Feasibility (Testing timing and logistical considerations through simulations) can be found [here](#).

The capacity of the NS is also closely linked to feasibility.

Social Acceptability

Is the proposed action something the community will support?

Example of Social Acceptability: Taking houses apart before a storm

Some actions, while effective, might not be something communities are willing to engage in. During conversations with shelter experts, it was suggested that deconstructing houses and storing the most valuable components, such as windows, doors, and metal roofing, might be a good way to reduce losses during cyclones or floods. An action such as this can only be effective if the community also believes the work it entails is worth the potential risk or reward. When the CVM team conducted focus groups, one high-risk community was already doing something similar, however, many others felt that such an action was too time consuming and was unlikely to be effective. If only a few communities are likely to cooperate with your early action, it is unlikely to be successful overall. Therefore, before including actions that might meet community resistance in your EAP, it is essential to consult with a large sample of potential beneficiaries to ensure the action is socially acceptable.

Capacity of Implementation

Does the NS have the institutional capacity (thematic, logistic, administrative, financial, human resource, chapter) to implement the action effectively given the lead time and scale?

Value for Money/Efficiency

How does the cost for the action compare to the expected (or proven) benefit? Are there other actions that could achieve the same impact for less?

Example of Value for Money/Efficiency: Water tanks vs. individual supplies for water purification

In some instances, there may be more than one way to attempt to mitigate the impact in question. In this case, it may make sense to compare the efficiency of different courses of action in order to determine which provides the higher value overall. When trying to ensure that communities or households have access to safe water after an extreme event in one FbF country, for example, it is possible to set up community water points or to distribute water purification kits to individual households. A review of the existing literature suggested that setting up tanks at the community level was likely to be more resource intensive, and possibly create more obstacles to consistent use, than providing individual households with kits. The NS in that case therefore decided to provide kits instead of setting up larger tanks to provide the whole community with water.

Alignment with organizational mandate and priorities

Does the National Society or other organization implementing FbF early actions have the mandate, expertise, and authority to implement the action?

Example of alignment: The Red Cross does not have expertise in protecting roads

Timing

Is the action beneficial at any time of the year, or does it depend on when the event occurs?

Example of Timing: Harvesting crops before a flood

Some actions, while potentially very beneficial and effective, may only be possible during a very short window of time. For example, harvesting crops to save them before they are damaged may only be relevant/effective if the event occurs when crops are close to harvest. Because a cyclone or flood may hit at any time during the season, the team in Mozambique decided not to include this in their EAP. Another option might also have been to make certain actions dependent upon the precise timing or season, only activating those actions when the timing would make sense. The potential benefit of such seasonal actions would then have to be weighed against the administrative and readiness costs of preparing for many different early actions.

Action lifetime

How long will the action benefit people?

When planning your action, it is essential to consider how long the action can and should benefit the people. For example, if you intend to distribute water purification kits so that people have access to clean water immediately after the event until normal response arrives, you need to consider how long such a response will usually take. If not, people may run out and have to resort to drinking dirty water anyway, rendering your action ineffective.

There are also other elements to consider regarding the action lifetime. In the case of materials to reinforce shelters, it is probably unrealistic to assume that materials distributed during one cyclone season will be available for use in the next season. Mosquito nets, on the other hand, have an average life of 3 years in many contexts. If your activity is contingent upon specific training or skills to be effective, how long can people be expected to remember what they learn? Determine how long you need your materials or actions to benefit people and adjust your actions accordingly.

Benefit of acting early

How long until the action has benefit? Is early action necessary to get the benefit, or could the action be done after the event?

Example: timing of early actions to take effect

Depending on the early action, although it may be able to be executed quickly, the time for it to take effect might take longer. For example, vaccinating alpacas in Peru to reduce cold wave mortality will begin to take effect already after a few days, so before the impact of cold and wind on their health gets too severe and before response usually reached the remote villages. Whereas, in cases where it takes weeks after a disaster for people to feel the effects you are seeking to reduce, traditional response might be more efficient and easier to target. On the other hand, if certain areas are known to be cut-off from supply routes after an event occurs, early action may still be beneficial even in these cases and reduce the need for air support or complicated logistics. If the action can be executed just as efficiently and effectively through existing early warning and response systems or immediately following an event there may be no reason to risk acting in vain.

No regret actions

Will people still benefit from the action even if the event does not occur?

It is the nature of FbF that sometimes the forecast event will not occur as expected or will deviate

to a new location. For this reason, you may end up “acting in vain.” The EAP will ask you to consider how your proposed actions might help people even if a disaster does not strike. Materials from a shelter kit, for example, might be repurposed or used for repairs. Water purification materials can be kept for a future flood event. Because people can use unrestricted cash for whatever they choose, households will find a use for it no matter how the situation unfolds.

Be aware of the linkages between acting in vain and NS credibility. For example, repeatedly performing large-scale evacuations in vain, might not be beneficial over time.

Do no harm / avoid generating new risks

Will the selected action be in line with the principle of Do No Harm? Will the selected action create new risk?

Lifetime of prepositioned relief items

An approved EAP under the FbA by the DREF remains valid until the first activation or for a maximum of five years, when it will have to be revised and resubmitted. If the early actions you are considering depend on the use of prepositioned goods, it is important that these items do not perish before the five years are over.

Example Peru:

In a first project phase it was tested to distribute hay and veterinary kits to herder families in the Andes, as one of the priority impacts that had been identified for coldwaves was that alpaca herders lost their livestock, because alpacas lacked access to food (grass) and were susceptible to diseases. However, the hay and also the alternative option of dried concentrated food would have needed to be prepositioned to ensure availability at short notice and both items' lifetimes were less than five years, so ultimately they could not be considered in the EAP; as there was a risk they would have spoiled before the EAP was activated.

Budgetary constraints regarding prepositioning

Depending on the hazard, there are only few days between activation and the extreme event occurring. If early actions depend on particular relief items that cannot be procured on short

notice, prepositioning might be necessary. However, FbA by the DREF only allows for 40% of the EAP budget to be used for prepositioning. Hence, if your early action consists in prepositioning of items for an amount that go beyond this percentage, either different early actions need to be identified, or stocks financed by other sources or other procurement arrangements (e.g. virtual warehouses) made.



Practical Guidance 7: Evidence of effectiveness

The quantity and quality of evidence for potential early actions varies greatly. Some interventions, such as water purification and mosquito nets, have been tested in a variety of humanitarian and non-humanitarian contexts. Many, however, have not been tested as forecast-based early actions (implemented in the short window of time before an extreme event).

In such cases, evidence from effectiveness in other contexts can be used to extrapolate potential effectiveness as an early action. For example, if an action is difficult to execute properly over a longer timeframe, it is unlikely to be viable for short-term implementation.

Although still limited, there is a growing volume of evidence and studies about the effectiveness of certain early actions. The M&E working group on FbF/Anticipatory Action is consolidating all this evidence, which can soon be accessed by any national society, via the Anticipation Hub platform.

A complete list of search terms and the systematic review protocol used by the research team in Mozambique is available [here](#). Any evidence found for the various early actions considered in Mozambique can also be found in the “evidence” column of the Global Potential Early Action Database. Approved EAP summaries with an overview of different early actions can be also found on the [IFRC FbA by the DREF website](#).



Practical Guidance 8: Applying the criteria – The process in Mozambique

One of the key lessons from the experience in Mozambique is that it is unrealistic to assume there could be a fixed, context-independent order in which criteria can or should be applied. The team in Mozambique found it impossible to apply these criteria in a linear fashion. Instead, they considered potential early actions using an iterative process of narrowing actions, focusing on promising interventions, collecting additional data, and then reconsidering actions in light of new

knowledge. The discussion below provides examples of how the above criteria were applied in Mozambique to gradually narrow in on the most realistic and beneficial early actions.

In Mozambique, certain criteria were particularly useful in immediately reducing the field of potential early actions and focusing future research, these included *policy fit*, *alignment with organizational mandate and priorities*, *capacity to implement*, and *feasibility*.

Policy fit was an essential consideration in Mozambique because, cash transfers – an area of action of particular interest to the FbF community – were explicitly prohibited under Mozambican laws at the time. While cash-transfer actions might have been effective in reducing the impacts of floods and cyclones in Mozambique, the team elected not to spend time investigating early actions that would not be possible within the project timeline. Cash-based actions are nevertheless included in the Potential Early Action Database, and if cash-based interventions become an option in the future, further work will be needed to explore feasibility and to develop theories of change.

In Mozambique, two criteria—*alignment with organizational mandate and priorities* and whether CVM had the *capacity to implement* the action—were interrelated. Because the Red Cross was pre-determined to be the forecast-based actor in Mozambique, these two conditions must be met for the action to be successful. For this reason, actions related to reinforcing roads, bridges, and electrical lines, for example, were eliminated from consideration early on. As the Red Cross volunteers in Mozambique do not have the experience nor the mandate to attempt to reinforce public infrastructure or power lines, any early actions in these sectors would be better planned by the government transportation authority and funded by other means.

Feasibility is likely to be an essential criteria in any context. If the action cannot be performed given the forecast lead time it should not be considered. However, if no one has tried your intervention before, it may not be immediately clear whether an action could be successfully implemented within the given timeframe. This was the case for shelter reinforcements in Mozambique. Because damage to houses is a major impact of cyclones according to historical data and stakeholders at all levels, CVM elected to conduct simulations to see whether or not the Red Cross volunteers could distribute materials, conduct trainings, and execute the actions within the time afforded by the forecasts.

The *scale* at which the action could be successfully set up and executed was also an essential consideration. For example, while providing families with evacuation assistance for themselves, their animals, and their belongings might have significantly reduced the number of people who choose to stay in harm's way as well as their loss of life and livelihoods, CVM did not have the capacity to create the necessary agreements for all communities across the country, where a cyclone might hit. Such an action would be more feasible to set up within specific communities rather than at a national scale.

Criteria, such as the *timing* of the action or *social acceptability*, were only applied once other criteria were met. It was determined that helping people to harvest their crops before a storm

would be too difficult because it would require setting up cash-for-work systems in a short period of time and would only be a viable action if the flood or hurricane hit late in the growing season. The possibility of deconstructing houses in order to store and save expensive components only arose in later conversations with experts, therefore the social acceptability at the community level was not explored until later in the process of defining actions.

While some criteria, such as *evidence of effectiveness*, were highly desirable, because FbF is a relatively new concept there is little existing evidence for many actions. In light of this, CVM tried to build an evidence base for FbF shelter reinforcements by testing the intervention in its protocol.

Finally, some criteria, were briefly considered but were not particularly useful in the Mozambican context. *Value for money/efficiency*, for example, could only be considered when there was reliable, comparable data regarding the relative costs and effectiveness of different interventions (seeking to address the same impact). This data was generally unavailable, but it was factored into decision-making when available. For example, the team considered evidence that installing large water tanks requires higher logistical costs than household distribution water purification kits.

After completing the process of identifying priority impacts, considering each action in relation to the criteria above, eliminating the actions that do not meet key criteria, identifying gaps in knowledge, collecting additional information, and reassessing the options (as many times as necessary) your team will eventually be left with the actions that make the most sense in your context.

Step 5: Develop Theories of Change

Once you have identified a number of promising early actions, it is time to operationalize and test the logic behind those ideas using Theories of Change. A Theory of Change (ToC) is a comprehensive illustration of how and why a desired change is expected to happen in a particular context. In the context of FbF, creating a theory of change means describing step-by-step how and why the desired outcome (in our case reduced humanitarian impact) will be attained by taking the selected forecast-based actions. It will help you to visualize, and eventually test whether your early actions are really likely to reduce the prioritized impact. A ToC is often created as a series of “if... then...” statements and then put into a visual representation, like a flowchart (see example below). It helps to think of a ToC as a map on which you mark the spot where you want to go (the desired result or problem solution). Then you draw a route on the map that you think is best to take to get from A to B (the description of the expected chain of results, from action to solution). You will realize that you make assumptions, for example, that a particular bridge is passable or that you can cover a certain distance per day. You also note down landmarks you expect to see on your way (intermediate results or milestones). It is very important to use all available evidence when building a theory of change, so that every “if... then...” relationship is built on information and evidence rather than conjecture.

A ToC can also be used as a basis for a logframe and monitoring and evaluation frameworks. Your team should therefore develop a detailed ToC for each considered early action for inclusion in the protocol. The choice of how many ToCs to develop at this stage will depend upon your team's needs and your process for narrowing and testing your early actions. At the end of this process, your team should have a sound understanding of how and why each action will contribute to your desired results. ToC for the final selected early actions will need to be included in the EAP submitted to the FbA by the DREF.

The ToC process is a crucial step in your identification of actions, make sure to follow this guidance on steps to take.

At least four steps are involved in developing a theory of change:

Step 1:

Start from a specific goal, meaning the positive change the programme or project seeks to induce in order to address a problem that has been identified.

Example: “Reduce the incidence of diarrheal diseases in vulnerable communities when there is flooding in Exemplandia”.

Step 2:

Map out the process of change, working backwards from the specific goal. Ask: “What is required to bring about this change?” It is useful to do this as a team and consulting relevant and knowledgeable stakeholders. Tip: Note down process steps on post-it notes and put them on a flip chart (see example below). Visualizing a ToC helps team members to understand it more easily and question its logic.

Example: Visual representation of a ToC for Exemplandia (Fi. 4)

Step 3:

Write a narrative summary expressed as a sequence of logically linked events (“if... then...” statements) and support them with available evidence.

Example: “If all households in flood-affected communities have 30 days worth of water purification tablets and received information how to use them, then they will purify their drinking water. If they purify all their drinking water, the incidence of diarrheal diseases will decrease.”

Step 4:

Make implicit assumptions about how changes happen explicit and reference supporting evidence.

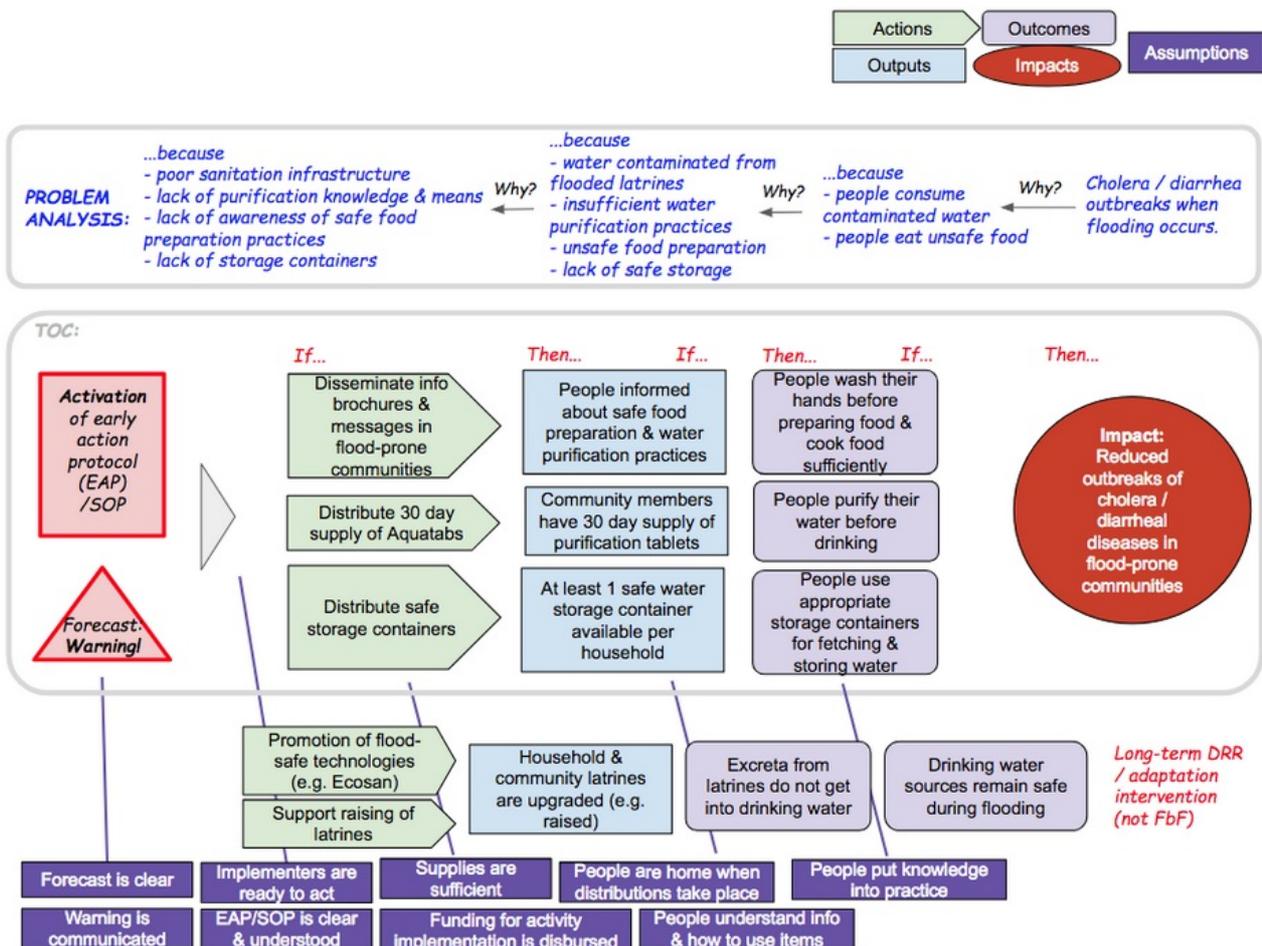
Tip: Note assumptions on post-it notes in a different colour and add them in between the process steps.

In the previous example, many assumptions are made that would need to be confirmed by evidence. For example, it is assumed that households understand and appreciate the information they have received about the importance of water purification, or they already have the knowledge and awareness to use purification tablets. But what if pre-existing knowledge about water purification is low?

What if written information materials are given to a household whose members cannot read? What if there are community members who speak a different language? What if there are reservations against using

blue pills or tablets, based on previous bad experiences or rumors? What if households purify their drinking water but they don't purify the water used for washing food items? What if safe hygiene practices are relatively unknown and household members don't wash their hands with soap and water before preparing food and before eating?

All assumptions, as trivial as they may seem, should be made explicit and checked against evidence to see whether they are "safe" or they need to be addressed as part of the early action protocol.



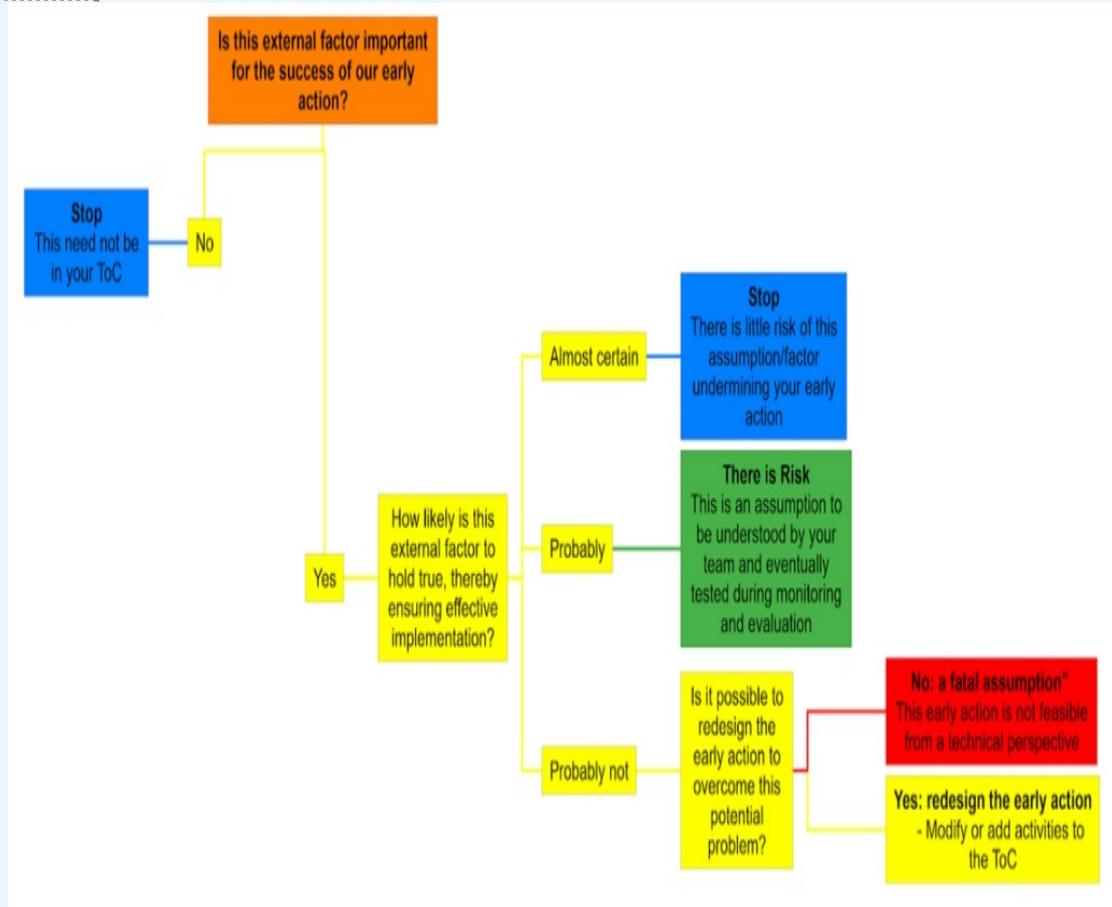
Alternative visualization of a theory of change for forecast-based actions



Additional Resources

- Tool: [Editable example of FbF action theory of change.](#)
- Resource: [Hivos guidance on how to develop a ToC in 8 steps](#); "Theory of Change Thinking in Practice"
- Resource: [How to facilitate a theory of change development workshop](#), including a 2.5 days agenda (Hivos)
- Resource: Nesta UK, [6-page compact guidance how to develop a theory of change.](#) Also addresses the issue of different levels of results

- Resource: [Tools4Dev](#), overview – including visualizations – of ‘theory of change’ vs. ‘logic models’
- Resource: Learning for Sustainability, [comprehensive list and direct links to guidance notes](#), how-to documents and practical examples of working with theories of change
- Resource: [DFID review of the use of ‘theory of change’ in international development](#); comprehensive overview and further references
- Resource: [BetterEvaluation.org list of available Theory of Change Software](#), some are for free
- [Decision-tree](#) to help identify any fatal assumptions in your ToC:



Step 6: Test or workshop Theories of Change

Once your internal team has developed theories of change, it can be useful to test or validate these theories of change with external stakeholders. Perhaps the most important step of this process is making your assumptions explicit and making sure there are not any [fatal assumptions](#) to undermine your success. This can be done using the following methods described above:

- Interviews with sector-specific experts
- Stakeholder workshops

- Community consultations

Step 7: Finalize early actions

Based on the external feedback you receive from the consultations in step six, select the early actions to be included in your EAP and finalize the ToCs.

Step 8: Develop activation plan for selected actions and test

Design how, by whom and when the selected action can be implemented after a trigger has been reached. Conduct a tabletop exercise to ensure your actions are really feasible in the time frame given by the forecast. When possible conduct a real drill.

Step 9: Make rationale explicit in the EAP

Once you have made the final selection of early actions to be included in your EAP, including developing and validating, your theories of change, it is essential to document how and why you came to the selection you did. Section 5.2 of the EAP requires that you outline which methodologies and data sources you used to identify impacts and actions and justify how you came to select the actions in your EAP. This will allow the validation committee to understand why the early actions in your protocol are most likely to mitigate the impacts of the hazard in question on the beneficiary population. Being explicit about your rationale will also help those responsible for future revisions of the EAP to understand why these actions, to consider what may have changed since those actions were selected, and to decide if the rationale is still valid for future versions of the EAP.

Final lessons and recommendations

The methods and processes described above can assist you in identifying and selecting early actions. We conclude with a few key suggestions for you as you apply them to your context.

The identification and selection of early actions is an iterative process

- As indicated above, exploration of early actions is not a linear process. As you narrow in on the

most promising actions, new questions may arise. Follow the gaps in your knowledge until you are confident in the actions you are selecting.

Keep an open mind

- The people within your organization may be attached to actions they are familiar with in a response context. Be sure to talk to as many experts and external stakeholders as possible to widen the possibilities.

Do not pick something just because you have to

- It may be that after completing this process there are few, if any, actions that can be properly executed. In such cases, it may be necessary to discuss a way forward with the project sponsors/donors or look for simple actions (such as reinforcing early warning) that can have an impact.

Be critical – develop theories of change and test them where possible

- Developing a clear theory of change will help you to really assess how your action will contribute to reducing the prioritized impact and whether it can truly be successfully executed given the lead-time available to you. Stakeholders may be overly optimistic (or pessimistic) about the feasibility or effectiveness of a proposed action. Simulations or small-scale pilots are valuable ways of testing your theory of change and operational capacity and will strengthen the quality of your Early Action Protocol Proposal.

One criteria is not enough

- As you can see from the process above, there are many factors to consider when selecting early actions. An action that has proven extremely effective in one place, for example, might be impossible in another because of political, logistical, or other constraints. You must therefore gather evidence for each of these criteria rather than being guided by a single one.

Look to existing early actions for inspiration

- There are a growing number of countries and partners implementing FbF for a range of hazards. Look to other FbF countries for guidance based on existing good practices.

Build your own evidence

- FbF is a new concept. This means that you may identify an action that has not been tested in your circumstances. If your innovative action has the potential to help people and there is sufficient support from the partners involved, it may be worthwhile to test the action and develop your own evidence. This evidence can eventually be shared with the broader FbF community, contributing to the Potential Early Action Database and helping others in the process of identifying and assessing early actions.

Involve experts

- Although community involvement is crucial in the selection of the actions, it is important to include sectoral experts in the brainstorming process to identify the best measures to reduce the prioritized impacts, as some solutions might be innovative that communities at risk might not yet be aware of.

Make sure early actions apply the principle of Do No Harm.

Toolbox

-  VCA toolbox with reference sheets (by IFRC)
 -  FbF in Mosambique: Guidance and Tools for Post-activation Evaluation of the Cyclone Protocol
 -  Financiamento baseado em Previsão em Moçambique
 -  SOP for Early Action to El Niño/La Niña Episodes (By IASC)
 -  Early Action Database (Anticipation Hub)
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