TYPHOON EARLY ACTION PROTOCOL
POCKET VERSION FOR PRC CHAPTERS
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List of Acronyms

4Ps  Pantawid Pamilyang Pilipino Program
BAET  Barangay Animal Evacuation Committee
BarCom  Barangay Committee
CfW  Cash for Work
COA  Commission on Audit
CRA  Community Risk Assessment
DA  Department of Agriculture
DepEd  Department of Education
DENR  Department of Environment and Natural Resources
DILG  Department of the Interior and Local Government
DMS  Disaster Management Services
DPWH  Department of Public Works and Highways
DREF  Disaster Relief Emergency Fund
DRR  Disaster Risk Reduction
DRRM  Disaster Risk Reduction and Management
DSWD  Department of Social Welfare and Development
EA  Early Action
EAP  Early Action Protocol
ECMWF  European Centre for Medium-Range Weather Forecasts
ERU  Emergency Response Unit
FAO  Food and Agriculture Organization
FbA  Forecast-based Action
FbF  Forecast-based Financing
FRC  Finnish Red Cross
GRC  German Red Cross
HH  Household
HQ  Headquarters
IEC  Information, Education, and Communication
IFRC  International Federation of the Red Cross and Red Crescent Societies
INGO  International Non-Government Organization
JICA  Japan International Cooperation Agency
KII   Key Informant Interview
LGU   Local Government Units
MAAB  Membership with Accident Assistance Benefit
MoA   Memorandum of Agreement
MoU   Memorandum of Understanding
NDRRMC National Disaster Risk Reduction and Management Council
NGO   Non-Government Organization
NLRC  Netherlands Red Cross
OCD   Office of Civil Defense
ODK   Open Data Kit
OPAg  Office of the Provincial Agriculturist
OpCen Operations Center
PAGASA Philippine Atmospheric, Geophysical and Astronomical Services Administration
PAGRO Provincial Agriculture Office
PAO   Provincial Accounting Office
PAR   Philippine Area of Responsibility
PBO   Provincial Budget Office
PCIC  Philippine Crop Insurance Corporation
PDRA  Provincial Pre-Disaster Risk Assessment
PEO   Provincial Engineering Office
PhilFIDA Philippine Fiber Industry Development Authority
PPDO  Provincial Planning and Development Office
PDRRMO Provincial Disaster Risk Reduction and Management Office
PRC   Philippine Red Cross
PSWDO Provincial Social Welfare and Development Office
PVO   Provincial Veterinary Office
RCCC  Red Cross Climate Centre
SSK   Shelter Strengthening Kit
STY   Super Typhoon
TC    Tropical Cyclone
TD    Tropical Depression
ToC   Theory of Change
TWG   Technical Working Group
TY    Typhoon
UCL   University College of London
UN    United Nations
VS    Volunteer Services
WFP   World Food Programme
Introduction

This section looks at the purpose and structure of the Pocket Early Action Protocol (EAP).
This Pocket Version of the Early Action Protocol (EAP) focuses on typhoon hazard and presents the early actions that have been identified to minimize main typhoon impacts that shall be activated when the predicted impact reaches a certain threshold, a carefully defined trigger. The EAP is linked to the FbF by the DREF (Forecast based Action by Disaster Relief Emergency Fund) resulting in the automatic flow of funds to the chapters at-risk once the typhoon trigger is reached. FbA by DREF is a new financing mechanism that was launched in 2018 by the IFRC. While traditionally funding would be allocated after disaster impact, FbA by DREF guarantees funding based on a pre-agreed forecast trigger before the impact.

This Pocket EAP is a guide for Philippine Red Cross Chapters that explains who are the key actors in the implementation of the FbF project in the Philippines, why typhoon was chosen as the focus hazard, which sectors are especially vulnerable to typhoons, why certain early actions were chosen, what is the trigger, how to select beneficiaries, what are the preparatory actions for the chapters, and how to activate the early actions. This protocol provides useful information that also allows the chapters to explain and justify the early actions to stakeholders, such as Local Government Units.

In a nutshell, this EAP provides step-by-step instructions for the selected actions to be implemented in a 3-days lead time, once activated.

The typhoon Early Actions of the PRC will be triggered once the forecasted impact of the winds on housing, 72h before landfall, is more than 10% of houses predicted to be totally damaged in more than 3 municipalities. The EAP defines clearly: who takes what action when, where, and with what fund, at both the Headquarters and Chapter levels.

The EAP is not working in isolation. Coordination with PDRRM partners has been systematic. A Technical Working Group on FbF is meeting regularly and is co-chaired by Office of Civil Defense (OCD). The TWG is providing the FbF projects in the country with technical guidance and establishing national standards for FbF that will ultimately support the replication of forecast-based early actions protocols at all government levels. The TWG brings together members of national governments responsible for hazard forecasting, emergency preparedness and response, as well as the UN and INGOs. Moreover, Core Groups have been established at regional and provincial level in areas where Early Actions are implemented to guarantee that the Early Actions are selected in collaboration with key actors, and implemented in coordination with other anticipatory actions of LGUs.

Regional Core Group Members are: Office of Civil Defense, Department of Interior and Local Government, Department of Agriculture.


Municipal/City: selected Local Government Units.
Key Actors

**Philippine Red Cross (PRC)** is the main implementer of this Typhoon Early Action Protocol (EAP). This EAP has been prepared with the technical assistance of the German Red Cross (GRC), the Finnish Red Cross (FRC), the 510 initiative of the Netherlands Red Cross (NLRC), the Red Cross Red Crescent Climate Centre (RCCC). The IFRC country office will be the main counterpart of PRC in activation of this EAP.

The Disaster Management Services (DMS) is the main service of PRC in charge of this EAP - in addition to the DMS, several other support services will be being engaged, like Emergency Response Unit, Finance Department, Social Services, Volunteer Services, Logistics Department, and Communications Department. Target PRC Chapters have been actively engaged in the planning process and in the writing of the first EAP for typhoon and will be in charge of the actual activation of the EAP. Mainly, chapters do the coordination in the local level (regional, provincial, municipal, and barangay level), they conduct meetings, gather information, field visit, focus group discussion, key informant interviews, shortlisting of areas and pre-identification of possible beneficiaries, and all other related field activities.

Through its country delegation in Manila as well as its regional office in Kuala Lumpur, IFRC is informed of the FbF implementation in the Philippines and is involved in reviewing the Typhoon EAP, in coordinating its approval and in monitoring its activation in case the trigger level is reached. IFRC will facilitate the transfer of funds for the readiness, pre-positioning and activation costs. When the EAP gets activated, the IFRC will also be facilitating/supporting with the FbF EAP standard reporting.

The Forecast based Financing (FbF) project of GRC in the Philippines is supporting the Philippine Red Cross (PRC) to reinforce its capacities in Disaster Risk Reduction and Management, in particular through the development and possible activation of Early Action Protocols (EAPs). GRC is providing technical and financial support for the overall piloting of the intervention in the country, from assessment, planning, activation, monitoring, and evaluation of the EAP. GRC is also ensuring the sharing of knowledge around FbF with all interested partners, among the Red Cross movement or externally.

The FRC has partnered with PRC in successfully implementing Disaster Risk Reduction projects. The FRC delegation in the Philippines is closely involved into FbF implementation, mainly in the development of the EAPs. This cooperation aims to share knowledge on FbF and consequently to promote implementation and use of FbF in additional countries. In addition, FRC will support the piloting of EAP in the Philippines via the funding of early actions.
The data initiative of the Netherlands Red Cross became involved in the FbF project because of the Community Risk Assessment (CRA) tool they set up for the Philippines. This tool collects and integrates many risk-indicators at provincial and municipal level and visualizes all results easily through an online dashboard (dashboard.510.global). Additionally, the 510 team has substantial experience and expertise in typhoon Impact Forecasting and their typhoon statistical model is the basis for triggering the typhoon Early Actions proposed in this EAP.

The Red Cross Red Crescent Climate Centre supports the International Federation of Red Cross and Red Crescent Societies (IFRC) in forecasting climate related risks. As a partner in GRC’s FbF pilot projects, the RCCC is mainly providing technical support aimed to improve use of meteorological data for triggering of the early actions, as well as in their evaluation.

The TWG on FbF meets on a regular basis and is expected to provide the FbF projects with technical guidance, and establishing national standards for FbF that will ultimately support the replication of forecast-based early actions protocols at all government levels. The TWG brings together members of national governments as well as the UN and INGOs involved in FbF. The members of the TWG are Office of Civil Defense, Department of the Interior and Local Government, PAGASA, Department of Social Welfare and Development, Department of Agriculture, Commission on Audit, Department of Finance, World Food Programme, Food and Agriculture Organization, Start Network, CARE International, Oxfam, and other relevant national government agencies.

Moreover, Core Groups have been established at regional and provincial level with members from various governmental agencies.
Risk Analysis

This section looks closer at past typhoon impact in the Philippines, sectoral exposure to typhoon hazards, and typhoon vulnerabilities in agriculture, housing sector, livestock sector and municipal fishing.

3.1 Hazard Selection

For the Philippines context, Tropical Cyclone (TC) has been selected as the main hazard for Early Actions. Tropical Cyclone is the most frequent hazard in the Philippines with an average of 19 to 20 TCs entering in the Philippines Area of Responsibility (PAR) every year with over 9 to 10 making a landfall and, half of them being categorized as typhoon. Tropical cyclone also has the highest human and economic impact, followed by floods. Moreover, while a tropical cyclone can have direct impact through its powerful winds or rains, indirect impacts may occur due to secondary hazards (storm surge, landslide, and flood), which would compound the overall effects of TCs in the country.

TC formation over the country is most common from July to October (wet season) while least common from January to April (dry season). Moreover, the highest TC categories are more prominent statistically during the last quarter of the year, and more likely to make a landfall. The usual pattern is that, as the cyclone season progresses, and as the country transitions from the Southwest monsoon (habagat) to the Northeast monsoon (amihan), the incidence of TCs appears to move from the north to the central area and then to the south of the country.

(Sources: JICA, Belgium Centre for Research on the Epidemiology of Disasters -CRED)
3.2 Analysis of Past Impact

The impacts of typhoons in the Philippines are numerous and may be due either to the extreme winds or to the heavy rains, as well as to the associated hazards (storm surge, floods and landslides). While typhoons occurring during the Southwest monsoon will tend to induce more rains and floods, the typhoons occurring during the Northeast monsoon are often dryer and have a higher probability of extreme wind speed.

Generally, the extreme winds and rains brought by typhoons have a significant impact on the national economy and more particularly on the agriculture sector which accounted for 63% of the total reported disaster losses between 1990 and 2006. These losses are encompassing not only the loss of production (e.g. crops), but also the loss of livestock or material (such as irrigation systems, or tools). Moreover, fisherfolks and the whole aquaculture sector can also be severely affected by typhoons.

The impact of typhoons on the livelihoods of farmers and fisherfolk can lead to a significant loss of income and consequently, for the most vulnerable, to the adoption of negative coping mechanisms such as (i) taking on additional or temporary jobs outside their province; (ii) reducing food consumption, (iii) taking on multiple loans, including for basic expenditures, or in extreme situations, (iv) taking their children out of school because they can no longer afford the tuition fees, or so the children can work to support their family.

During the northeast monsoon season, the impact on housing is becoming much more predominant. Moreover, shelter damage can have direct consequences on the education sector. School buildings are often used as evacuation centers and prolonged evacuations due to people’s inability to return home can negatively impact children’s access to education.

The typhoons can also impact other sectors. Disease outbreaks are possible, especially in overcrowded evacuation centers. Typhoons also disrupt access to services, such as potable water, transport, electricity, waste management, banks and telecoms, which can further exacerbate other impacts as well, as in many cases, the access to the affected areas will be made difficult due to possible landslides or floods, and the restoration of the services will take time. Typhoons also deteriorate major ecosystems (mangroves, corals, forests, shallow aquifers) either directly or indirectly having long-term impact on economy and quality of life. In urban areas, debris can become a major post-disaster issue, and needs to be managed adequately to minimize the impact on natural environment.

Moreover, the most extreme typhoons’ impact is arguably the loss of lives but it must be noted that during the last five years, a lower number of casualties has been recorded, a positive trend which can be explained by the application of the pre-emptive evacuations recommended by the LISTO protocol of the DILG, 24h ahead of a typhoon landfall.
3.3 Sectoral Exposure

Housing

The most exposed population would be those living on the coastal areas, where over 60% of the population in the Philippines lives. Coastal areas are more exposed to high winds, storm surges and floods.

Densely inhabited provinces on coastal areas are more exposed to typhoon risks. Destruction of number of houses due to a typhoon can be considerably high and the impact of super tyoons may vary between tens of thousands to hundreds of thousands of totally damaged houses. For example, in December 2012, super typhoon Pablo (Bopha) made landfall in Mindanao, leading to the total destruction of 89,666 houses.

Livestock

With regard to livestock, the main livestock production is the swine followed by the cattle. Then the smaller livestock productions are carabao (water buffalo) and goat.

Backyard farming is an important source of extra income, savings and food (meat, milk, eggs) for vulnerable groups, and would be more severely impacted by typhoons. For example, 65% of the swine production is covered by backyard farming, mainly in Western and Central Visayas, as well as in Bicol and Davao regions. The cattle production has a higher share (93%) in backyard systems (1 to 5 heads of cattle), principally in Ilocos region, in Calabarzon, then in West and Central Visayas. For both goat and carabaos, the production is at 99% in backyard farming.

Fishing

Fishing activities in the Philippines – either at sea or inland – are regularly impacted by typhoons, with a significant loss of income caused by the suspension of fishing activities several days prior and after any TC occurrence, by the reduction of catches, or in most extreme events, by the damage and loss of fishing equipment.

Agriculture

The crop subsector is the one which recorded the highest economic losses with the farmers cultivating rice and corn being the most affected by typhoons.

The exposure of those standing crops to typhoons vary locally and depending on the season. It is assumed that not all farmers plant their crops at the same time and that certain farmers will be more exposed than others, depending on the time they do the planting, or depending on the location of their fields.

The country produces 23% of its total rice production in the first quarter of the year, 21% in the second, 16% in the third, and 40% in the fourth. Moreover, the critical period for those crops is at the planting and at the flowering times.

From 2007-2011, the highest losses on rice production due to typhoons were recorded in Luzon, Bicol and Visayas regions. The higher losses in the North of the Philippines are because those regions are (i) the most exposed to tropical cyclones and (ii) are also among the main producers in terms of rice and corn. Moreover, besides rice and corn, abaca, coconut and banana are the main crops impacted by typhoons.
3.4 Vulnerabilities

These specific vulnerabilities are included in the 510 dashboard:

- In more than 70% of poor households, the head is employed as a farmer, forestry worker, fisher, laborer, or unskilled worker. Hence, the poverty indicator can be used to identify areas where impact of a typhoon may be more significant.

- Pantawid Pamilyang Pilipino Program (better known as the 4Ps) is a social support program of the Department for Social Welfare and Development. The program provides conditional cash transfers to the poorest families. The number of recipients of 4P assistance is often used as a shorthand for poverty levels at a municipal or barangay level; however, since it targets families with children under 14, there are many vulnerable households which do not qualify.

Moreover, there are other indicators for vulnerability that are included in the 510 dashboard, such as irrigation systems, type of shelter material and the percentage of households occupying lot rent-free.

For shelter vulnerability, combining the three indicators (type of roof, type of wall, occupying lot rent-free) are pointing at the Visayas and Mindanao to be the areas where house vulnerabilities are the highest. While typhoon exposure is higher in the Northern provinces, vulnerabilities are higher in the South.

Most vulnerable farmers are those with lower assets or resources – being either the tenant in charge of farms of less than 1 hectare, or the agricultural daily laborers, who would be left without income in case their farms are hit by typhoons.

The 510 dashboard provides information at the municipal level (for all of the 1,600 municipalities), which can support the selection of the municipalities where to intervene in anticipation of a typhoon.

For access to 510 dashboard go to: https://dashboard.510.global

3.5 Prioritized Impacts

Based on the experience of the Philippines Red Cross in past decades, and looking at the elements the most at risk, the Early Actions of the PRC (as of 2020) for the typhoon EAP aims to address the following impacts:

(i) the loss of income of rice/ corn/ abaca farmers and municipal fisherfolk, and
(ii) the damages to houses (type 3; See Annex SSK Assessment Form).
**Trigger Model**

Now that we know what our goal is (reduction of TY impact on farmers and fisherfolks’ income and on shelters), we need to know when to intervene. This section looks at what is the trigger model and how it has been determined.

Carefully determined trigger is an important component of any Early Action Protocol. For the development of this EAP, 9 different forecast systems were analyzed for determining their respective TC forecast skills. Based on the analysis, we were able to see that:

- **The typhoon track forecasts at 3-days have an accuracy ranging from 58-72%, with a typhoon track error close to 300 km in average, which is deemed sufficient for deciding to launch Early Actions in a particular region/province.**
  
- **The accuracy increases as the typhoon gets closer; the track error decreases progressively, with a track error of 210km in average at 48h, then close to 110km at 24h. It is worth noting that the higher category of TCs, the more accurate the track forecast is.**
  
- **Windspeed is the most reliable indicator for predicting damage (on housing). The impact of rainfall does not show a clear pattern, as it is usually a combination of direct and indirect (flooding, landslide) effects.**

At the moment, we are using an impact forecast model, that was developed by the 510 team of the Netherlands Red Cross, which is processing TC forecast provided by the UCL and by the ECMWF.
When is impact deemed critical?

Now that the right variable has been chosen the question remains: when is the wind strong enough that Early Actions need to be activated?

Based on the analysis of impact curves, it is proposed to trigger typhoon Early Actions when the predicted impact (72 hours before landfall) is more than 10% of houses being totally damaged at municipal level, in at least 3 municipalities.

The 10% threshold in at least 3 municipalities corresponds to the level of impact recorded for typhoons with a return period of five years or more. Statistics from past typhoons indicates that the TCs with the highest return periods tend to be more destructive.

By using the 510 map, the FbF team can:

1) Confirm the trigger 72h in advance, e.g 3 municipalities at least reaching that impact level, then
2) Use the combined vulnerability index from the 510 dashboards to identify which of the most vulnerable municipalities will acquire highest predicted damage, and recommend to the chapters possible area of intervention (the chapter may decide eventually on a different selection of LGUs).

Once the trigger is confirmed and provinces are selected, any changes in the TC will not cancel the early actions. Only livestock evacuation can still be adjusted.

Here is an example of a map from Typhoon Ompong (Mangkhut) 2018. When a TC is approaching, the 510 model produces an impact map that is sent to the headquarters that shows a predicted percentage of houses totally damaged at municipal level.

This allows the FbF team to assess if critical level is going to be reached, and if the EAs are to be activated:

When there is an approaching TC (day -4), chapters will receive an Alert message. However, Alert does not indicate that chapters need to start the intervention, only start the preparation work. If at 72h prior to landfall (day -3), the trigger has been reached, chapters will receive a Trigger message and they can start to implement the Early Actions. If at 72h the TC has lost strength/changed its track, Early Actions can be adjusted.
Selected Early Actions

The proposed early actions were selected in an extensive consultation process with the 19 selected provinces to address the main typhoon impacts in high risk areas and were based on their feasibility and relevance. Moreover, Theory of Change (ToC, see Annex for further information) was used to identify possible Early Actions.

5.1 Selection Process

As mentioned earlier, the prioritized impacts to be reduced are (i) the loss of income of farmers and fisherfolk, and (ii) the damages to houses. Therefore, the typhoon early actions must be;

(1) targeting the most vulnerable farmers and fisherfolk to ensure that they have sufficient financial resources (or assets) to bounce back after the typhoon; and

(2) targeting the most vulnerable houses, in order for them to sustain minimal damages, thus limiting their spending in repairs.

To minimize impact on livelihoods and shelters:

- strengthening of shelters
- early harvest of crops; and
- livestock evacuation

were chosen as the early actions to be implemented when there is a typhoon forecast that is anticipated to cause significant damage.

5.2 Shelter Strengthening

Aims to make shelters more resilient towards TC hazards and minimize possible damages. In order to strengthen shelters, a customized Shelter Strengthening Kit (SSK) was designed by an international organization Build Change. They determined the most appropriate and cost-effective design that allows to minimize impact of strong winds on houses and considerably reduces the overall cost of fixing houses compared to post-disaster recovery programs.

Installation of SSKs does not intend to retrofit the house, but rather reinforces the roof and the walls, which reduces the money required for shelter repair and makes it accessible to the household immediately after the TY impact. The SSK distribution focuses on high risk areas across the Philippines. However, the SSKs can only serve its purpose when the wind remains less than 200kph.

Only certain type of houses qualify for the distribution of SSK (See SSK Assessment Form for more info). Installation of the SSKs is done with the support of a recruited team of 2 skilled and 3 unskilled workers. Houses which would not qualify for the distribution of SSK, can be prioritized to be involved in Cash for Work activities. It takes approximately an hour to install one SSK. At most, 750 SSK in provinces in East Visayas or in Bicol must activate; this would require 93 teams for 2 days. SSK are prepositioned in regional warehouses across the country (See Page 25 for more details).
5.3 Early Harvesting of Crops

As the main impact of typhoon identified is on the anticipated loss of income of farmers and fisherfolk, protection of livelihoods should be one priority for early actions. Early Harvesting is considered for saving matured crops (such as rice, or corn), especially in the target provinces of North Luzon, Bicol Region, and East Visayas with higher percentage of farmers. Specifically, for Catanduanes, saving matured abaca tree is considered as a priority since it is the main livelihood of the province: if these trees are uprooted then it will need close to two years to grow again and produce siblings.

In order to harvest 1 hectare of rice a day, about 10-20 workers are needed - and a use of manual or combined harvester. Altogether, approximately 10-15 farms can be harvested within three days lead time.

The number of farms to be targeted depends on different factors, such as the number of workers available, volunteers, geography, availability of machineries etc.

If the harvest is in a very early stage when the TC approaches, early harvesting is not possible and other early actions need to be focused on.

In an anticipatory context, with little time to harvest matured crops, process shall be simplified and will include (i) reaping the crop, (ii) hauling the cut crops to central location, and (iii) preparing bags of paddy.

As of 2020, Early Actions have only been developed for abaca, rice and corn. Other agricultural products, including vegetables, may be included later.

5.4 Livestock Evacuation

It is a flexible Early Action that can target areas not only exposed to the severe winds, but also to the risk of flooding or landslide. It is expected that this early action will also contribute to the reduction of loss of lives as numerous livestock owners are reluctant to evacuate without their animals and are remaining in areas at-risk:

Livestock evacuation will target the regions where the distribution of swine and cattle in backyard farming is higher (Bicol and Mindanao), and in LGUs where a safe evacuation/ pooling area is pre-identified. The Early Action will consist of truck rental, installation of a safe evacuation/ pooling area for the swine, goat, carabao and cattle (away from any hazards and if possible near evacuation centers for humans), with provision of feed and water to the livestock for maximum 3 days.

The overall livestock evacuation is to be managed by the Barangay Animal Evacuation Team (BAET), which members have a specific role to function. Temporary livestock corral/pen will be installed with the support of minimum 10 workers, which can be farmers of fisherfolks in the barangay. The simulation exercise demonstrated that a corral accommodating 35 livestock can be set in half a day - while the evacuation can be done (with proper instructions made to the owners) in less than an hour. (See Guidelines for Livestock Evacuation for detailed instructions.)

In coastal areas, securing fishing assets (such as nets or boats) can also be considered to avoid damage on the livelihood of the fishing community.
5.5 Cash for Work

It is a cross-cutting early action for all three EAs. It will specifically benefit vulnerable farmers, or fisherfolk, by providing them with temporary employment:

In exchange for the work rendered, target beneficiaries will be provided with cash (workers will receive a service contract by the chapter). The cash should meet their requirement for basic needs.

It is proposed to provide a lump sum of **Php1,000.00 per person** (around 19.00 CHF), for 2 days of work – this corresponds approximately to the price of a bag of 25kg of rice. The payment should be processed before the TY landfall. For SSK installation, skilled workers will received Php500.00 and unskilled workers Php350.00 per day.

It is expected that at least 50% of these workers will use the cash ahead of the typhoon, in particular the fisherfolk who are left without income once the no-sailing policy is into place, up to 5 days prior to typhoon landfall.

5.6 Contextualization

Looking at the geography of the Philippines and the respective contexts of the targeted regions, a strong emphasis was put on the possible adjustment of the Early Actions to the local context; for instance, the provinces in East Visayas have selected principally the reinforcement of houses, while the focus in the Bicol provinces is more on the early-harvesting of crops through Cash for Work, and the focus in Mindanao is on livestock evacuation. The selection of EAs for different provinces is based on contextualized decisions according to specific vulnerabilities of the provinces concerned and feasibility to implement certain early actions.

However, some island provinces are not suitable for shelter strengthening considering their geographic location and difficulty of stocking SSK kits.

<table>
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<th>Early Actions</th>
<th>Scenario A (North Luzon)</th>
<th>Scenario B (Bicol Region)</th>
<th>Scenario C (East Visayas)</th>
<th>Scenario D (Mindanao)</th>
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<tbody>
<tr>
<td>Early harvesting</td>
<td>200 farms</td>
<td>150 farms</td>
<td>100 farms</td>
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<tr>
<td>CFW (early harvesting)</td>
<td>1000 workers</td>
<td>750 workers</td>
<td>500 workers</td>
<td>-</td>
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<td>Livestock/asset evacuation</td>
<td>-</td>
<td>500 heads</td>
<td>-</td>
<td>120 heads</td>
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<tr>
<td>CFW (livestock evacuation)</td>
<td>-</td>
<td>100 workers</td>
<td>-</td>
<td>250 workers</td>
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<td>Shelter Strengthening</td>
<td>500 SSK</td>
<td>500 SSK</td>
<td>1000 SSK</td>
<td>500 SKK</td>
</tr>
<tr>
<td>CFW (SSK)</td>
<td>150 workers</td>
<td>150 workers</td>
<td>300 workers</td>
<td>150 workers</td>
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<td>TOTAL direct beneficiaries</td>
<td>1850</td>
<td>2150</td>
<td>1900</td>
<td>2150</td>
</tr>
</tbody>
</table>
5.7 Consequences of Acting in Vain

All early actions were created based on a no-regret principle. This means that if the predicted event will not occur, because the track changed or intensity of the tropical cyclone decreased significantly, the proposed early actions will still benefit the most vulnerable households in the high risks areas. For the cash for work, cash provided will be used in securing daily basic needs of the targeted households, while the work will still be relevant, as there will be no disadvantage seen:

- If mature abaca trees are cut, it can still be stripped up to 1 month after, while traders have confirmed in key informant interviews (KII) that an increase of fiber production post typhoon will be easily handled as worldwide demand for abaca fiber is still higher than the offer.
- Early harvesting of rice or corn will also have no negative impact on prices, considering that both commodities are being imported in the Philippines and demand is not met by national production;
- Other work, like securing of the livelihood assets, will all be valuable to the communities.
- In strengthening of shelters, target will be those houses made of light material, thus benefiting the most vulnerable. Also, the kit is designed to be detachable so households can remove it when not necessary and apply again when situation requires.
- Evacuation of livestock (done in vain) might stress the animals for a short time but it is not expected to create any long-term negative impact. Besides, as demonstrated during the simulation exercise, the animals that are pooled in the safe evacuation place can be examined by the Office of the Provincial Veterinary, and receive some medical supplies, which benefits the livestock owners.

Simulation exercises showed that all of the Early Actions need thorough discussion and orientation with the beneficiaries in targeted areas in order to inform on the purpose of the anticipatory intervention. Assistance should not be seen as a long-term solution to the needs of the communities but only addressing the possible impact of an extreme event that is predicted to happen, on the most vulnerable population.
Selection of Beneficiaries

This section looks at the process and criteria for selecting beneficiaries

While targeted areas for typhoon Early Actions will be oriented towards certain provinces, based on the impact-based forecast map produced with the 510 statistical model, assistance should be concentrating on the LGUs which are known to be the most vulnerable and less capacitated (informed either by the 510 Community Risk Assessment index or by a thorough shortlisting process done at an early stage by the chapter).

Selection of beneficiaries is done in two stages:

1. vulnerable households within pre-selected vulnerable barangays are identified; and
2. once TC is forecasted and trigger level is reached; the beneficiary list needs to be validated and updated with the BarCom.

**Prior (of lead time)**
- Gathering of secondary data of the most ‘at risk’ areas from PDRRMO, PPDO, MDRRMO, BFAR, DA, OPAG, MPDO, DSWD, etc.
- Meta database of the most ‘at risk and most vulnerable households

**Within lead time**
- Screening of households from the meta-database
- Finalization of beneficiaries with barangay committee
- Beneficiaries’ orientation including registration

**REFERENCE CRITERIA**

**SHELTER STRENGTHENING KIT**
- Household occupying the shelter within 6 months - this is to prevent those who claim that they are a resident in the area, wherein they are residing in other areas already
- Household Type 3 as per the assessment form
- Household living in safe zones¹ - those residing in no built zone will not be targeted unless local government formally authorizes actions there

**EARLY HARVESTING**
- Preferably less than 2 hectares (or depending on the agreement with the BarCom)
- Accessible from the main roads (optional if manual/combined harvester will be used)

**LIVESTOCK EVACUATION**
- Any farm or household with any of the following conditions: (a) 1 – 20 head of adult livestock and zero young; (b) 1 – 40 heads of young animals; (c) 1 – 9 heads of adult and 1 – 21 heads of young animals.

**CASH FOR WORK** (CROSSCUTTING)

Farmers and Fisherfolks:
- Tenant – those not owning the land but cultivating it; giving either cash or percent of their product as rent for the land
- Labourer – unskilled worker hired and paid in a daily basis
- Poor household (thru 4Ps)
- Household with more than 5 children
- Household with disabled member
- Household with elderly member
- Single-headed household with dependent children
- Female-headed household with dependent children
- Minor-headed household
- Native or indigenous tribe
- Others such as: household with critically ill member, household with low daily or monthly income, and others as agreed with the BarCom

Skilled and unskilled worker – for shelter strengthening

*All criteria must be met
**At least one criterion must be met
Implementation Process

There are 3 phases for the implementation of FbF: Preparatory, Activation of Early Action, and Evaluation.

PREPARATORY

Done during peacetime and ends once trigger is confirmed.

Includes actions for both national headquarters and chapters to be prepared during activation, such as risks analysis, development of trigger models, pre-positioning of items, formation of core group, collection of impact data, shortlisting municipalities, prioritizing barangays, formation and orientation of Barangay Committee, etc.

ACTIVATION OF EARLY ACTION

Starts as soon as trigger is confirmed and before impact happens

Funds are transferred to the target chapters. Chapters need to initiate the early actions, from validation and finalization of beneficiaries, and then implementation of early actions.

Preferably, early actions should be completed in 2 days.

EVALUATION

Immediately after the impact

We need to do the 2 rounds of evaluation: 1st is a quick ocular survey in the communities to check their condition and as well our early actions, and 2nd round of evaluation is the impact assessment survey which is to be done 3-4 weeks after.
PHASE ONE:
Preparatory Phase

There are many preparatory actions that need to be carried out by the chapter in the 'peace time', when there is no typhoon forecast at sight. There are some preparatory actions that are relevant to all early actions, and some that are EA-specific.

These are relevant preparatory actions for all EAs:

Core Group Formation

In order to guarantee smooth implementation of early actions, it is important to coordinate with the relevant government units. The Early Actions should be selected in a collaborative manner at provincial level, and all details must be agreed by all key actors involved. Consequently, a core group must be established at regional and provincial levels. The core group in each targeted zone is expected to provide the necessary technical guidance to concerned chapters in developing and implementing the EAP, to make sure that actions are adhering to existing national policies and guidelines; and it is appropriately complementing with them and to assist, in any possible ways, during activation.

Data Analysis and Shortlisting Municipalities

While the 510 dashboard helps identify vulnerable locations, a meta database needs to be created by the chapters to understand local vulnerabilities. First, we need to understand previous disasters per provinces and identify municipalities greatly impacted. Then, prioritized municipalities need to be further shortlisted by analyzing the impact of past events on housing and crops, frequency of disasters, poverty incidence, number of 4Ps, income class, and others. Information about past disasters can be collected from NDRRMC (SitRep) or in PDRRMO. Five to six municipalities per province should be shortlisted by each chapter involved in EAP implementation. Shortlisted municipalities are made aware of the EAs, the Philippine Red Cross and its main services and principles of the Movement. Shortlisting is important as it helps to save time when EAs are activated. Moreover, data analysis complements the work of other services of the chapter, as pre-screening areas at risk contributes to the overall service delivery.

Barangay Prioritization

After municipalities are shortlisted, the most vulnerable barangays within those municipalities need to be further prioritized. Prioritization is done based on the history of past disasters, barangay classification, number of poor, and other specified factors. There should be at least 20% of the total number of barangays per municipality shortlisted. At least there should be 5 barangays shortlisted per municipality. For each barangay, a suitable
early action/s is/are identified in advance. Number and kind of early actions per barangay varies, it depends on the context and on the capacity of the chapter to simultaneously implement it during activation.

- **Early Harvesting**: Main livelihood is usually agriculture - farming, number of farmers, and % of land for the crops
- **Livestock Evacuation**: Main livelihood is usually agriculture - farming or backyard livestock raising, number of livestock, number of livestock owners and availability of safe evacuation site / pooling area
- **Shelter Strengthening**: Number of vulnerable houses (made with light materials) in the safe/built zone

### BarCom Formation and Preselection of Beneficiaries

After barangays have been prioritized, next step is to pre-identify possible beneficiaries for shelter strengthening, early harvesting, livestock evacuation and cash for work. PRC Chapters should do this in a participatory community consultative process, through the BarCom. They play an important role in ensuring transparency and accountability of PRC’s engagement at the community level. Different steps with BarCom shall be undertaken as illustrated in the diagram below:

**Step 0.** PRC Chapter setting up coordination meeting in the barangay with key leaders and sectoral representatives. **Step 1.** First formal engagement in the barangay wherein PRC is introduced and the purpose of BarCom. **Step 2.** Through defining past impacts, it will help in identifying appropriate early action/s in the barangay. **Step 3.** Will define criteria of the most vulnerable households who should be targeted (priority and less priority) by the selected early action/s. **Step 4.** Will initially identify households possessing the defined criteria. **Step 5.** Selection of BarCom members. **Step 6.** Based on the list of households generated from **Step 4**, PRC Chapter with the BarCom need to fill in the Household Database. **Step 7.** There should be 3 days to 1 week posting of the household names from the Household Database for community validation. Any concerns shall be taken up, reviewed, and validated. **Output:** Pre-final list of beneficiaries

From shortlisting municipalities, barangays, and until households, the **Meta database** should be used by the PRC Chapters. It is an excel file document which requires many relevant details on the exposure, capacity, and vulnerability which supports the identification of high-risk areas and households. It also includes some logistical details which will support the chapter in preparing for the early action.

Completing the entire document might take 3 – 6 months of work and requires consistent mobilization of at least 2 volunteers. Though, it might take longer or shorter depending on the number of shortlisted areas and also availability of resources such as manpower (volunteers), vehicles, etc.
Mapping Suppliers

Suppliers for different items and services need to be mapped in advance to guarantee availability when activation takes place. Suppliers of the SSK items, harvesters, vehicles for transportation of SSK items, livestock, harvested crops, and also for deployment of volunteers, need to be identified in peace time and chapter can enter into a MoA/MoU with the suppliers.

Readiness costs are currently being covered by the FbF project. The salary of a Chapter Project Coordinator position, in each of the target regions, as well as the trainings and simulations organized on the Early Actions and on FbF in general are covered by the project budget.

Simulation Exercises

In order to guarantee smooth implementation, EAs need to be practiced in advance with chapter, LGUs, and other stakeholders, BarCom, and target beneficiaries. Simulation exercises are a great way to bring stakeholders together, clarify roles and responsibilities and identify possible weaknesses or special needs for each early action.

Orientation of Chapter Volunteers

It is essential to guarantee that chapter volunteers are aware of the early action implementation in order to guarantee sustainability of the activation and the management of the EAP. It has been estimated that at least thirty chapter volunteers should be oriented about FbF and Early Action.
Preparatory Actions for Shelter Strengthening

Prepositioning of SSK materials: Considering the lead time of 3 days for Typhoon Early Actions, it is necessary to pre-procure and pre-position part of the Shelter Strengthening Kits, needed for strengthening the roof: the 10mm nylon ropes, nails, tie wire, as well as the iron rebar cleats. This SSK material will be kept in a PRC warehouse in each of the target region.

The tools (hammer, saw), the lumbers and plywood, and some nails, as well as protective equipment, will be purchased from local suppliers and delivered to the target areas only if the activation is confirmed.

Logistical arrangements need to be made in advance for SSK, including considerations for transportation of SKK materials, vehicle availability, service contract with a possible service provider, and mapping of available resources in the province.

<table>
<thead>
<tr>
<th><strong>ROOFING ITEMS</strong></th>
<th><strong>WALLING ITEMS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(Prepositioned items)</strong></td>
<td><strong>(Activation items)</strong></td>
</tr>
<tr>
<td>10mm nylon</td>
<td>2”x4”x10” coco lumber - 5pcs</td>
</tr>
<tr>
<td>3” CWN - 2 kilos</td>
<td>3/4” marine plywood - 0.5pcs</td>
</tr>
<tr>
<td>4” CWN - 1 kilo</td>
<td>3” CWN - 2 kilos</td>
</tr>
<tr>
<td>12mm iron rebar cleats - 10/12pcs</td>
<td>Net (optional)</td>
</tr>
<tr>
<td>GI tie wire #16 - 1 kilo</td>
<td></td>
</tr>
</tbody>
</table>

**Activation items**
- Hammer - 1pc
- Saw - 1pc
- Steel tape - 1pc
- Pliers - 1pc

**Estimated amount**
- Php2,910.00*
- Php3,350.00*
Preparatory Actions for Early Harvesting of Crops

**Safe Storage/Post-Harvest Facility:** A safe storage facility for harvested crops needs to be identified in the targeted area.

**Manual/Combined Harvester:** This should be pre-identified also, either from Department of Agriculture, cooperative, or private owner.

**Transport supplier/Trucking:** Will be used for hauling of cut crops going to central location.

Preparatory Actions for Livestock Evacuation

**Identification of possible safe livestock evacuation/pooling area:** The evacuation site should be identified in advance. It should be located in an open and elevated location, away from any hazards, with natural vegetation and water resources, that is also near human evacuation site. The area should preferably be owned by the government or a MoA should be signed with the owner to guarantee usage when needed.

**Creation of Barangay Animal Evacuation Team (BAET):** A team for animal evacuation should include a stockyard boss, record keepers, health technicians, people in charge of nutrition, water & sanitation, and logistics and security.

**Transport supplier/Trucking:** Pre-identification of transportation vehicle for large animals (truck, livestock carrier or sled).

**Preparation of on-site materials:** Suppliers for ropes, water containers, tagging materials, temporary fencing materials, veterinary medical kits among other materials need to be pre-mapped.
PHASE TWO:
Activation of Early Actions

This section looks at what happens when a typhoon is forecasted and trigger is reached.

Simplified Typhoon EAP Implementation Process

Day -5
- FbF Technical Adviser starts to monitor TY and 510 team to issue a first impact forecast

Day -4
- If the impact forecast at 5 days confirms a possibility that 5-10% houses will be damaged, FbF team thru DMS/OpCen send ‘PRE-ALERT’ message to chapters that are predicted to acquire highest impact

Day -3
- Chapters orient staff and volunteers on the possible TY EAP Activation;
- If impact is forecasted to pass the trigger level, the FbF team thru DMS/OpCen sends ‘TRIGGER’ message to concerned chapters
- Chapters finalize the list of beneficiaries

Day -2
- Chapters start to implement EAs

Day -1
- Chapters finalize the TY EA as early as possible and evacuate
- Chapters start collecting information on impact

Download fund for EA

Continue implementation of EAs
Four Days before Typhoon Impact (Day -4)

**ALERT MESSAGE**

As soon as typhoon is approaching the Philippine Area of Responsibility (PAR), an automatic ‘alert’ message is sent to the chapters from DMS/OpCen. Only these chapters with predicted impact according to 510 maps receive the alert message. Concerned chapters are advised to get prepared for possible activation the day after.

The alert message contains the 510-impact forecast map as well as the combined vulnerability index for all municipalities at risk. This message will be repeated every 6 hours till landfall or till the TC exits the Philippines Area of Responsibility.

**TRANSPORTATION OF SSKs**

When it seems very probable that activation will take place, SSK items stored in regional warehouses should be prepared and transported to concerned chapters on Day -4, so that they can be dispatched to the barangays on Day -3.

Suppliers should be contacted for the remaining SSK items (with procurement confirmed on Day -3 if the trigger is reached).

**COORDINATION WITH LGUs**

The concerned chapters must coordinate with their respective LGUs, either through participation in the Provincial Pre-Disaster Risk Assessment (PDRA) meeting, or calling them, and shall collect information on the most at-risk municipalities and barangays, and agree with their local partners on the Early Actions to be implemented (if the trigger is confirmed the day after). Coordination with the provincial and municipal LGUs is essential.

**VOLUNTEER ORIENTATION**

The orientation of volunteers on planned Early Action(s) is done at the chapter, in line with the chosen municipalities and barangays. Orientation and coordination with 143 volunteers from the target communities also happens on Day -4.

**PREPARATION OF NECESSARY MATERIALS**

Preparation of documents and forms, such as beneficiary card, distribution sheet, service contracts, MAABs, attendance, etc. for the possible activation of early action.

Preparation of a draft activation budget with an excel file to be sent by HQ (indicating how the activation budget must be shared between procurement, cash for work, volunteers allowance, etc.)

**REVIEW OF META DATABASE AND PRIORITIZATION OF AREAS**

The concerned chapters shall review the prepared meta database. Based on the completeness of the data, it will help the chapter to easily identify which municipalities and barangays are to be prioritized and what specific early actions are to be implemented.
Three Days before Typhoon Impact (Day -3)

**Trigger**

On Day -3, if the predicted impact reaches the trigger level, then a "trigger" message confirming the activation of the Typhoon EAP will be sent to the concerned chapters. If the predicted impact is not reaching the trigger level, then a message not confirming the activation will be sent.

**Finalization of Municipalities and Barangays**

Once trigger confirming activation of Typhoon EAP has been received by the chapters, the target areas need to be finalized. This will be based on (i) impact map showing municipalities with highest predicted damage, (ii) areas included in the meta database – shortlisted areas for FbF, and (iii) any updated information that the chapters might have from PDRA meeting, coordination with LGUs, or any other sources.

**Funding and Purchase of Remaining Items**

Once trigger confirming activation is confirmed, funding shall be downloaded to target chapters – with an Excel file adapted to the final number of chapters activating. Depending on the early actions to be implemented, chapters purchase all the needed remaining items from a pre-identified local supplier, confirm the vehicles for volunteer mobilization, and trucks for SSK transportation, livestock evacuation, or for hauling of crops. Also, other equipment, like the manual/combine harvester may need to be rented.

**BarCom Meeting & Beneficiary Validation & Finalization**

Chapters inform the concerned barangays of the confirmed intervention, and set a meeting with the BarCom, in each target barangay, to confirm the beneficiaries’ list. Quick validation shall be done to check whether the pre-identified beneficiary is still existing in the barangay, or maybe he/she left and is not residing there anymore. Once quick validation is done, then the validated list will be the final list of beneficiaries for the intervention.

Two Days before Typhoon Impact (Day -2)

**EA Implementation Continues (Day -2)**

Implementation of the distribution/installation of the SSK, or early harvesting of crops, and livestock evacuation continues.

**Cash for Work: Payment Processing**

Payment to those recruited for Shelter Strengthening, Early Harvest and Livestock Evacuation shall be processed in the end of each day so that the beneficiaries have time to consume the money for necessary assets.

**Reporting (Every Day)**

Reporting to NHQ, DMS and OpCen for the preparedness actions conducted.

Reporting is a continuous process and is carried out throughout the EA implementation.

**Finalization (Day -1)**

Chapters finalize the EAs (if weather allows)

**Evacuation (Day -1)**

Chapter staff and volunteers go to a safe place, return the remaining SSK items (if some SSKs are not yet awarded to the beneficiaries) back to the chapter and secure resources whenever the wind/rain gets too strong.

While the final number of chapters activating will be decided by the NHQ, the chapters have the sole responsibility of deciding on the number of LGUs to be targeted, based on confirmed availability of volunteers, as well as the accessibility and feasibility of the EA at the time of activation.

The FbF team will then inform its partners (OCHA, WFP, FAO, START network, PAGASA, DILG, OCD) on the possible activation and on the initial preparation work done by chapters and NHQ – at the NDRRMC meeting and at the ICCG meeting.

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PHASE THREE
Monitoring, Evaluation, and Learning

It is crucial to collect information about the implementation and the impact of the FbF, in order for the FbF project team at the NHQ to be able to assess and refine the EAP. Every time the EAs are activated, the lessons learned are compiled to refine the EAP.

Key Information to be Monitored
Key information that shall be monitored are the following:

- Trigger level,
- List of beneficiaries submitted to the barangay validation committee (and approved)
- List of beneficiaries having received the support
- Consistency of the support with the plan (amount received, material provided, timeliness of the intervention)
- Feedback from the beneficiaries on the intervention (through a meeting, tentatively a month after the activation, depending on the situation on the ground)

Chapters need to secure the following:

- Impact forecasts (510 maps)
- Copy of the alert and trigger messages sent by OpCen
- Beneficiaries lists, cards and award distribution sheets
- Cash for Work Documents: service contract, acknowledgement receipt, attendance sheet, and ID / Bio-data

Assessment of Impact
There will be 2 rounds of assessment that chapters need to do after the impact.

- First is a quick ocular survey in the communities where early actions were implemented. This can be part of the Rapid Disaster Assessment and Needs Analysis (RDANA) of PRC, which is being done in the first 24–72 hours after onset of disaster. For FbF, the purpose of which is to see how the early actions were implemented, how many were targeted, are those targeted still impacted, and the overall immediate impact of the early actions in the communities.
- Second is the community impact assessment. Its purpose is to measure the impact of the typhoon early actions. It is important to estimate how the intervention has changed the status of the beneficiaries of the early intervention in affected areas, compared to affected people who didn’t receive the support. The FbF team will do this assessment with staff and volunteers from the concerned chapters few weeks after the intervention.
  - Damage and impact assessments (with ODK), random for 20% beneficiaries, in addition to similar number in non-intervention communities;
  - Narrative summary report

After Activation Review
Debriefing after the activation will be organized as soon as possible with the chapter. The debriefing involves the FbF team and DMS, as well as the core group members in the targeted provinces. Also, an ‘After Action Review’ will be organized to present the results of the damage and impact assessment as well as the evaluation of the intervention.

Both Impact Assessment and After Action Review will support the updating and the improvement of the typhoon EAP, looking critically to what went well and what challenges are faced in the preparation phase (from the prepositioning to the alert, on day -4), the triggering process, and the implementation of the Early Actions.
Budget

This section looks at the budget that is available for PRC Chapters before typhoon forecast and after activation.

The budget available for chapters is split in two: **prepositioning** and **activation**.

The budget for prepositioning is fixed and is spent during the peace time by the chapters that are part of the EAP. The amount reserved for prepositioning will cover expenses related to visibility, IEC (3,000 copies) and some items of the shelter strengthening kit (nylon, rope 3” CWN3” and 4”, iron rebar cleats – 10/12 pcs and GI tie wire).

The activation budget is more flexible and will be split between the targeted chapters when trigger is reached and confirmed. The final amount will depend on the number of chapters where early actions are activated, and the capacity of those chapters to implement the early actions (the number of volunteers available, the number of workers available, weather conditions etc.). Consequently, it is not possible to know in advance the exact activation budget the chapter will receive as it is contextual and depends on a number of factors.

With the activation budget, chapters are supposed to purchase the remaining SSK items, protective equipment, rent a harvester, cover transportation expenses, volunteer allowances, pay the workers and secure their insurance.

For example if 3 chapters are activating in Bicol region:

<table>
<thead>
<tr>
<th></th>
<th>PREPOSITIONING</th>
<th>ACTIVATION (Flexible)</th>
</tr>
</thead>
<tbody>
<tr>
<td>visibility (shirts, raincoats) - for 3 chapters</td>
<td>97,500.00</td>
<td></td>
</tr>
<tr>
<td>IEC (livestock, SSK) - 750 copies each)</td>
<td>180,000.00</td>
<td></td>
</tr>
<tr>
<td>750 SSK in total for Bicol</td>
<td>2,182,500.00</td>
<td>2,512,500.00</td>
</tr>
<tr>
<td>Protective equipment for SSK workers</td>
<td></td>
<td>210,937.50</td>
</tr>
<tr>
<td>Material for temporary fencing</td>
<td></td>
<td>600,000.00</td>
</tr>
<tr>
<td>Cash for Work (SSK) - daily fee for each team</td>
<td>192,187.50</td>
<td></td>
</tr>
<tr>
<td>Cash for Work (livestock evac.) - 15 pens, 12 workers/pen</td>
<td>180,000.00</td>
<td></td>
</tr>
<tr>
<td>Cash for Work (15 teams of workers)</td>
<td>90,000.00</td>
<td></td>
</tr>
<tr>
<td>PRC transport (9 vans for 4 days)</td>
<td>216,000.00</td>
<td></td>
</tr>
<tr>
<td>Transport (rental of 12 trucks for 3 days)</td>
<td>720,000.00</td>
<td></td>
</tr>
<tr>
<td>Other transport expenses (fuel, etc.)</td>
<td>72,000.00</td>
<td></td>
</tr>
<tr>
<td>Harvester rental (15 farms)</td>
<td>150,000.00</td>
<td></td>
</tr>
<tr>
<td>Insurance for workers (/day/worker)</td>
<td>331,500.00</td>
<td></td>
</tr>
<tr>
<td>Volunteers allowance (4 days) - 15 volunteers/ chapter</td>
<td>54,000.00</td>
<td></td>
</tr>
<tr>
<td>IEC printing - early harvesting</td>
<td>360.00</td>
<td></td>
</tr>
<tr>
<td>Banner, meals, communication, office su</td>
<td>52,500.00</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,460,000.00</strong></td>
<td><strong>5,381,985.00</strong></td>
</tr>
</tbody>
</table>
## Activation Checklists

### SHELTER STRENGTHENING ACTIVATION CHECKLIST

<table>
<thead>
<tr>
<th>WHAT</th>
<th>HOW</th>
<th>WHO IS IN CHARGE</th>
<th>RELEVANT DOCUMENTS</th>
<th>COMPLETED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orient the beneficiaries, workers and volunteers how the installation is done and the flow of work (see IEC material). HOW: 5 steps: (1st) make strong anchors (2nd) hold down roof (3rd) tie down the roof frame (4th) close down doors and windows, and (5th) brace the walls.</td>
<td>Staff and volunteers</td>
<td>Guide to Shelter Strengthening (SSK IEC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fill in forms</td>
<td>For beneficiary HH</td>
<td>Staff, volunteers, BarCom, and workers</td>
<td>Beneficiary card Award distribution sheet GRN</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Beneficiary card (c/o chapter) • Award distribution sheet • Goods received note (GRN)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>For beneficiary workers</td>
<td></td>
<td>MAAB Service Contract (per team)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Insurance form (MAAB) • Take a photo of their one (1) valid ID • If they don’t have a valid ID’s: - First, workers should fill-out the bio-data. - Then, take a photo of the worker. Lastly, Bio-data should have signed and verified by Brgy. Captain. • Fill-out one (1) service contract per Team. Composed of five members (2 skilled and 3 unskilled). Each team should have one skilled team leader. • The Team Leader (skilled) signs the contract</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Start installing the SSKs</td>
<td>Carpenters (with guidance from Staff, Volunteers and BarCom)</td>
<td>Guide to Shelter Strengthening (SSK IEC)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>It takes approximately one hour to install one SSK. This means that one team can install around 8 SSKs/day.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Payment to the workers</td>
<td>Staff and volunteers</td>
<td>Attendance Sheet Acknowledgement receipt</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Workers should sign in the following documents: • Attendance sheet • Acknowledgment receipt Conduct cash-distribution (recommendation is Php 500.00/day/pp. However, unskilled workers are paid less) Payment for Skilled and Unskilled Workers (Skilled Workers = Php 500.00/day) (Unskilled Workers = Php 350.00/day)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Finalization of work</td>
<td>Staff, volunteers and workers</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>On day -1 (or until the weather allows) finish the work and relocate the staff &amp; resources to a safe location.</td>
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### EARLY HARVESTING ACTIVATION CHECKLIST

<table>
<thead>
<tr>
<th>WHAT</th>
<th>HOW</th>
<th>WHO IS IN CHARGE</th>
<th>RELEVANT DOCUMENTS</th>
<th>COMPLETED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hire a team of workers and validate the beneficiary farms (based on the vulnerability criteria and the stage of the crops)</td>
<td>Staff, volunteers and BarCom</td>
<td>MAAB Service Contract (per team) ID/Biodata</td>
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<tr>
<td>Fill in forms</td>
<td>For beneficiary HH/workers: • Insurance form (MAAB) • Take a photo of their one (1) valid ID • If they don’t have a valid ID’s: • Insurance Form (MAAB) • Take a photo of their one (1) valid ID w/ signature. • If they don’t have a valid ID’s: - First, workers should fill-out the Bio-Data - Then, take a photo of the worker. Lastly, BioData should have signed and verified by Brgy. Captain • Fill-out one (1) service contract per Team. Composed of by (1) Team Leader and (9) Members • The Team Leader (TL) is the one who signs the contract.</td>
<td>Staff, volunteers, BarCom, and workers</td>
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<td>Go through (i) reaping the crop, (ii) hauling the cut crops to central location for (iii) preparing bags of paddy</td>
<td>Workers (with guidance from staff, volunteers and BarCom)</td>
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<td>To fasten the process of harvesting, threshing and cleaning are not included in early harvesting of rice within the lead time. For abaca, the workers can either do (a) tumbling and store it in safe location, or (b) trimming of abaca leaves. Then assigned person should count the number of tumbled/trimmed abaca trees.</td>
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<td>Transport the cut crops to a storage place</td>
<td>Workers (with guidance from staff, volunteers and BarCom)</td>
<td>Attendance Sheet Acknowledgement receipt</td>
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<td>The cut crops need to be transported to a safe storage place/ marketplace.</td>
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<td></td>
<td>Payment of workers</td>
<td>Staff, volunteers and workers</td>
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<td>Conduct cash-distribution (recommendation is PHP 500.00/day/pp) Workers should sign in the following documents: • Attendance sheet • Acknowledgment receipt</td>
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<td>WHAT</td>
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<td>Barangay Animal Evacuation Team (BAET) Activation</td>
<td>Orient the beneficiaries, workers and volunteers how the installation BAET is activated through the barangay chairman. The members immediately act on their roles and responsibilities.</td>
<td>PRC Chapter through Barangay Chairman</td>
<td>Livestock Evacuation Guidelines and Livestock IEC</td>
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<tr>
<td>Recruitment of workers and filling in forms</td>
<td>Hire a team of at least minimum 10 workers to work in setting up 1 fence/corral/pen for the livestock: - Can be anyone from the barangay who knows basic carpentry skills - Can be those receiving low daily income/monthly income</td>
<td>Staff, volunteers, BarCom, and workers</td>
<td>MAABs Service Contracts ID/Bio-Data</td>
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<tr>
<td>Establishing the evacuation/pooling areas</td>
<td>There is no standardized design for the corral. Materials can be any locally available materials, but the corral needs to be sturdy enough. Take the following into consideration: - Inside a corral, livestock should be segregated per species, and/or per gender - Allocated space per livestock is at least 2 square meters - Goat should be inside an area with roofing - Installation of temporary drainage (if possible) - If no corral was set up, cattle and carabao should be tied in strong tree. - They should be freed from the corral once there is severe strong wind</td>
<td>Logistics (BAET) and workers</td>
<td>Livestock Evacuation Guidelines</td>
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<td>Confirm pick up schedules and needed manpower</td>
<td>Spearheaded by the Barangay Chairman, schedules shall be plotted out, along with the manpower needed to support in the evacuation. Once schedules are determined, it should be announced to the entire community for their information. Manpower should ideally be from the BAET and barangay officials.</td>
<td>Barangay Chairman and BAET</td>
<td>Livestock Evacuation Guidelines</td>
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<tr>
<td>Transporting the livestock to the pooling area</td>
<td>It is the responsibility of the entire barangay council to do the evacuation, from the early warning, to transporting of the livestock from the pick-up sites towards the evacuation/pooling area. Livestock should be transported in appropriate vehicles and in a manner that does not cause stress throughout the travel and does not predispose them to injury and disease. Extra precautions for sick, distressed or pregnant animals required. Note: if a livestock owner refuses to evacuate, sign a waiver.</td>
<td>Barangay Council and BAET</td>
<td>Evacuation waiver</td>
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<tr>
<td>Registration/identification of livestock in the evacuation/pooling area</td>
<td>As soon as the livestock arrives, animals should be registered in various ways (depending on the availability of resources on the ground). Recording and marking are to be done based on species, sex, age, and/or size.</td>
<td>Record Keeper (BAET)</td>
<td>Master List</td>
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<tr>
<td>Sorting and dispatching</td>
<td>Stockyard boss sorts and dispatches the animals to the holding corral based on species, sex, age, and/or size, and reproductive status.</td>
<td>Stockyard Boss (BAET)</td>
<td>Livestock Evacuation Guidelines</td>
<td></td>
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<tr>
<td>Payment of workers</td>
<td>Conduct cash-distribution (recommendation is PhP500.00/day/pp.) Workers should sign in the following documents: - Attendance sheet - Acknowledgment receipt Payment should be processed in the end of each day</td>
<td>Volunteers and staff</td>
<td>Attendance sheet Acknowledgement sheet</td>
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<tr>
<td>Regular monitoring and maintenance of the evacuation/pooling area</td>
<td>Provisions of feeds/forage/pasture/water will be primarily done by the owner with the supervision of the Nutrition and Water in-charge. Monitoring of health status and reporting to the veterinary any observation that requires intervention. Proper sanitation maintenance and security monitoring needed; at least one person monitoring the animals all the time</td>
<td>Owner Nutrition in-charge (BAET) Herd Health Technician (BAET) Water &amp; Sanitation in-charge (BAET) Security in-charge (BAET)</td>
<td>Livestock Evacuation Guidelines</td>
<td></td>
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<tr>
<td>Provision of health supplements and drugs</td>
<td>Herd Health technician provides vitamin A, D, E, electrolytes, and antibiotics (broad spectrum) before animals are released.</td>
<td>Health Technician (BAET)</td>
<td>Livestock Evacuation Guidelines</td>
<td></td>
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<tr>
<td>Release of livestock after end of emergency</td>
<td>Release begins based on the order of the barangay chairman. Owners provide a claim stub to the Record Keeper to claim the animals.</td>
<td>Record Keeper (BAET)</td>
<td>Livestock Evacuation Guidelines</td>
<td></td>
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<td>Restoration of evacuation/pooling area (clean and fix)</td>
<td>The site must be cleaned from waste to be facilitated by the Water and Sanitation team of BAET, and community people are encouraged to take part as well. Fence installed should be dismantled and stored in a safe place for future use.</td>
<td>WASH (BAET) and Logistics in-charge</td>
<td>Livestock Evacuation Guidelines</td>
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<tr>
<td>Close out meeting - evaluation and documentation</td>
<td>Gathering feedback from the owners of the animals through a close out meeting, is being encouraged to evaluate the action done and further gather information for improvement. Moreover, all forms will be gathered and collated as basis for the early action done. These forms can be references in any case there’ll be same action in the future.</td>
<td>PRC Staff, Volunteers and BarCom</td>
<td>Livestock Evacuation Guidelines</td>
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</table>
Relevant Materials & Further Learning

**Relevant Annexes and Documents**

- The TY Early Action Protocol (Full Version)
- Theory of Change (ToC)
- Annex 1: List of typhoon disasters which triggered a DREF/Appeal
- Annex 2: Agriculture Damage per Calamity
- Annex 3: Forecast Study; Final Report
- Annex 4: Households Totally Damaged
- Annex 5: Description of 510 Model
- Annex 6: SSK Assessment Form
- Annex 7: SSK IEC
- Annex 8: SSK Cost Estimate
- Annex 9: Overview of Simulation Exercises
- Annex 10: Shortlisted LGUs
- Annex 11: ToR Barangay Committee
- Annex 12: Alert and Trigger Message
- Annex 13: Detailed EAP Protocols
- Annex 14: Service Contract Cash for Work
- Annex 15: SSK Post Disaster Assessment Form
- Annex 16: TY EAP Budget
- Annex 17: Endorsement Letter
- Guidelines on Livestock Evacuation
- Frequently Asked Questions

We have created a **Google Classroom for Typhoon EAP**. It is an online classroom where people can access documents and learning materials related to Typhoon Early Actions, watch training videos and increase their knowledge about the early actions and FbF.

**To access Google Classroom:**

1. Go to google.classroom (use Chrome browser)
2. Log into your gmail account
3. Click the plus sign at the right corner of the screen and click ‘Join Class’
4. Enter the class code: 44mpquf
5. Now you should be in Forecast based Financing & Typhoon EAP Class
6. Click CLASSWORK at the top of the screen. This is where you can find materials

Now you can freely play around the Classroom, go through different learning materials or try out some of the quizzes.
Contact Details

Contact persons for further information about the Early Action Protocol.

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