



From Policy Recommendations to Practical Actions:

Towards Gender Transformative Practices for Baguio City's Flood Early Warning System

BACKGROUND

Baguio City, in the Western Philippines, is part of the ASEAN Australia Smart Cities Trust Fund (AASCTF) programme. This programme, supported by the ADB and the Australian Department of Foreign Affairs and Trade (DFAT) and implemented by Ramboll, aims to build livable, resilient, and inclusive cities across South-East Asia. Within this initiative, Baguio is aspiring to become an exemplar of an effective Flood Early Warning System (FEWS).

The *Smart Flood Early Warning, Information and Mitigation System* project (referred to also as the AASCTF pilot project) under the AASCTF is assisting the city with both the planning for flood mitigation and the delivery of the services of flood early warning and responses, using smart technologies.

As a complement to this, the *Gender Transformative Approach for Strengthened Development, Application, and Replication of the Baguio City Smart Flood Early Warning* project is being implemented specifically to ensure appropriate, applicable, and timely early warning reaches the last mile, including the most vulnerable, recognizing that effective FEWS are people-centric. The project is implemented in partnership between [Ramboll](#) and [Practical Action Consulting](#).

The *Baguio City Gender and Inclusion Study* was the first output contributing towards the development of a Gender Transformative FEWS. This was followed by the *Recommendations Brief*, which used the study's conclusions to develop a series of practical and policy recommendations for a gender transformative Early Warning System (EWS) (Figure 1), building upon the key findings of the study.

- 1 Gender and inequality-informed early warning system
- 2 Improve understanding of risk
- 3 Preparedness for safe evacuation
- 4 Development of forecasts, alerts, and warnings
- 5 Dissemination (of forecasts, alerts, and evacuation instructions)
- 6 Communication (of forecasts, alerts, and evacuation instructions)
- 7 Person-centered evacuation
- 8 Safety and dignity in temporary shelter

Figure 1: Overarching recommendations for a gender transformative flood Early Warning System ¹

¹ [From Policy Recommendations to Practical Actions: Towards Gender Transformative Practices for Baguio City's Flood Early Warning System](#), s.l.: ASEAN Australia Smart Cities Trust Fund.

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This accompanying publication takes the recommendations a step further and outlines the process by which the project developed draft actions with key FEWS stakeholders that can be taken forward to design a gender transformative FEWS in Baguio City. In a transformative approach, the FEW systems and processes are designed throughout in a way that centres and empowers those who might otherwise be an afterthought, or not considered at all. The actions highlighted in this document are specifically aligned to the recommendations developed based on the *Baguio City Gender and Inclusion Study*. Truly transformative actions need to be based on a process that is grounded firstly in an understanding of the needs of the most vulnerable and thereafter, developed in a collaborative manner with FEWS stakeholders as the system evolves (rather than be prescribed by external stakeholders or in advance of understanding the context). It is the process that leads to the development of a transformative action, whereby the whole way the system (and society and power) are structured leads to outcomes that incorporate everyone from the start. So, add-ons or later adaptations to the FEWS will not be required in order to include those who might otherwise not be considered or included. By implementing all the actions specifically aligned to each recommendation, the FEWS will take a gender transformative approach to the design and implementation of the FEWS to ensure that the FEWS is effective for everyone who needs it, leaves no one behind, and supports equitable and inclusive risk reduction and resilience.

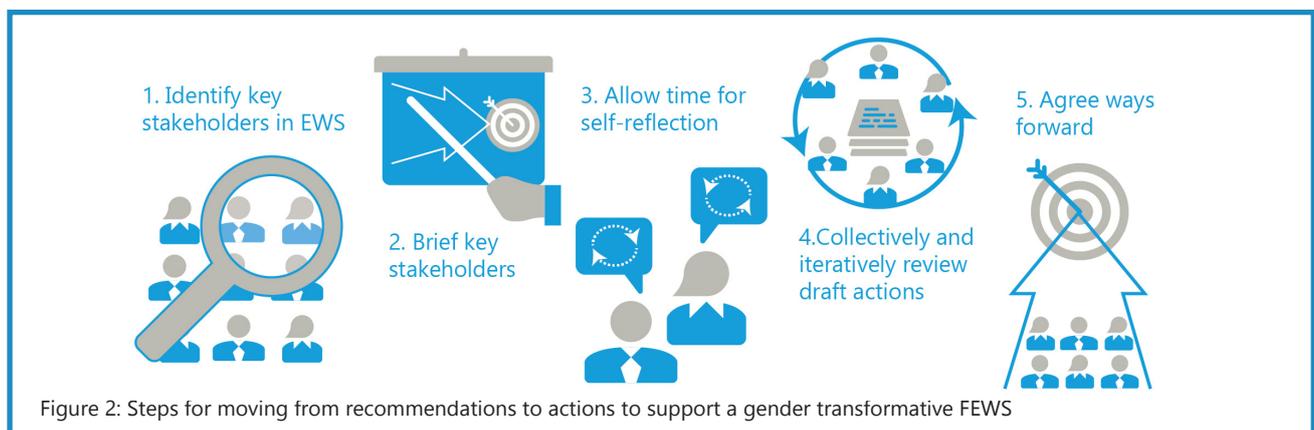
The purpose of this publication is to capture and share the process and learnings from Baguio City across the ASEAN region; many ASEAN cities are facing similar challenges and may benefit from insight into how Baguio City has sought to create a more inclusive FEWS.

PROCESS

The process outlined below (see Figure 2) is aimed to guide FEWS stakeholders through a series of steps, providing a **framework and support for them to take the time to consider potential actions** they can take addressing each recommendation. The intention is that all FEWS stakeholders participate in the process and by the end, it is clear what actions each stakeholder can take now, which actions they could take in the future, who they need to work with, and the resources or support needed to implement the action.

Whilst the draft actions as outputs are extremely useful for developing a gender transformative approach to the FEWS, the key focus of the activities and steps outlined below is the process itself. It is important for each stakeholder to take the time to absorb the information from the study findings, consider each recommendation, and think about what they can do to address them. The act of thinking and developing their own recommendations is vitally important to this process, as it ensures **stakeholders are educated and empowered in the process and feel ownership of the actions**.

As a result of **COVID-19**, the project adapted the steps to take place virtually. Ideally the process would take place in-person over a series of workshop days. The in-person nature would allow for easier collaboration and more focused attention to the deliverables. Whether taking place in-person or virtually, the steps of the process remain the same (see Figure 2 for steps).



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Step 1: Identify key stakeholders in EWS

Social inequality and gendered differences affect all areas of an EWS (see Figure 3). For an EWS to be truly inclusive, gender and social inequality need to be considered across all EWS elements, including: risk knowledge, monitoring and warning, dissemination and communication, response capability, involvement of local community, and governance. Therefore, stakeholders that have roles and responsibilities related to all EWS elements need to be included in the process of developing actions that address gender and social inclusion issues.

The first step therefore begins with identifying stakeholders that have a role or responsibility across all areas of the FEWS (see Figure 3). For example, those who are responsible for:

- Providing the public with risk information and guidance (e.g., the Public Information Office);
- Forecasting hazards (e.g., City Disaster Risk Reduction and Management Office - CDRRMO);
- Issuing warning messages (e.g., CDRRMO

- Operation Center);
- Disseminating warnings (e.g. Barangay Disaster Risk Reduction and Management Office, civil society organisations); and
- Organizing and supporting evacuation procedures (e.g., City Social Welfare and Development Office, civil society organisations).

Step 2: Brief key stakeholders

For each stakeholder, present or review the **findings from the gender and social inclusion study**, providing them with an understanding of the need for considering gender and marginalization in FEWS and an overview of the FEWS.

Provide each stakeholder with **written instructions** (see example in Appendix A) on what to do next and a specifically tailored template to fill out (see example in Appendix B).

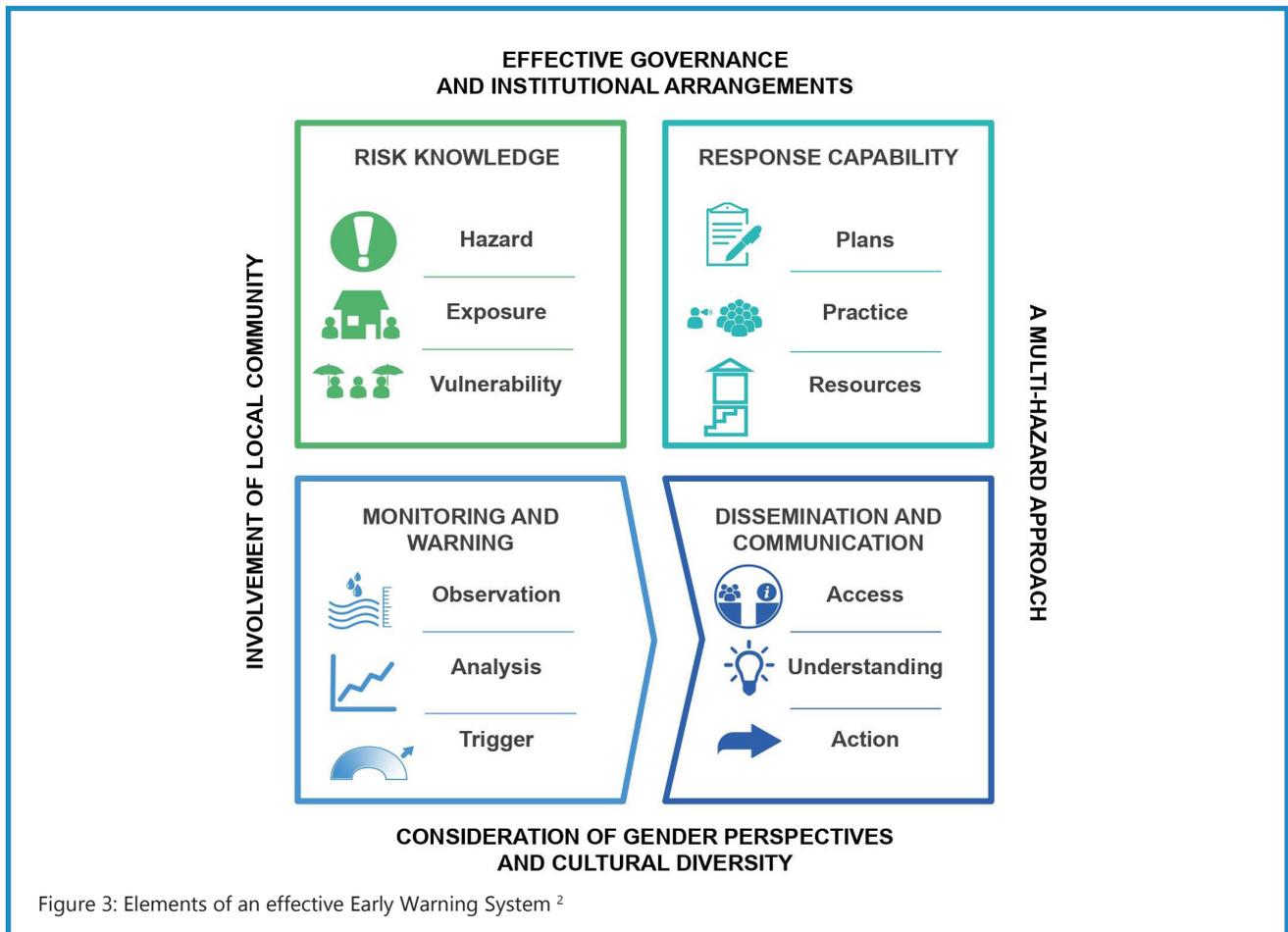


Figure 3: Elements of an effective Early Warning System ²

² Practical Action, 2020, adapted from World Meteorological Organisation, 2017.

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The information sheet should cover:

- Background information on the overall project aims, what has been done so far to generate recommendations, and how this process of developing actions fits into it.
- Information as to why they have been invited to participate in the process (as a key EWS stakeholder).
- Information on what they need to do next: familiarise themselves with existing publications, review and reflect on the recommendations in the template provided and edit the draft actions with their own thoughts on actions they can or could take.
- Links to all published resources and an accessible tailored template for them to edit directly (see Appendix B).
- Information on how these draft actions will be reviewed and collated with other stakeholders' inputs, and how these actions will be taken forward in the FEWS.

The **template** (see example in Appendix B) should be edited for each stakeholder before sharing with them by dividing the recommendations into ones that are within the scope and responsibility of the stakeholder, and those that are not within their scope. Insert some examples of potential actions the stakeholder could take for a few of the recommendations, to ensure they understand the type of content required from them. The template should include instructions for the stakeholder to follow (see example in Appendix B).

Step 3: Allow time for self-reflection

Allow sufficient time for each stakeholder to reflect on their own potential actions in response to the recommendations appropriate for their role. Encourage stakeholder contacts to share the template with their colleagues and brainstorm actions together.

The template should include **instructions for the stakeholder** to reflect and directly edit the template with suggested potential actions, responding to the following prompts:

- For those recommendations within their remit:
 - What can you/your organisation do immediately to respond to the recommendation?
 - What could you/your organisation do at a later time to respond to the recommendation?

- What resources would you/your organisation need to implement this action (now or later)? Do you already have those resources, or are these in addition to your existing resources?
- Who do you need to work with to implement this action? What do you need from them? How would you work together? What would you be providing them with?
- Are there any recommendations that are beyond your responsibilities?
- For those recommendations outside of their remit:
 - Are there any recommendations in this section that you could address or support others to implement?
 - Of the remaining recommendations outside your responsibilities, do you know who is responsible for them? Do you have any suggestions for actions they could take?

Step 4: Collectively and iteratively review draft actions

Review, compare, share, and discuss overlaps between stakeholder actions bilaterally with each stakeholder. Clarify stakeholder **roles and responsibilities and modalities of working** between different stakeholders. Be clear on which actions are **achievable in the short term** with current project scope, funding and resources, and identify which actions require **additional funding or capacity building** (see Table 1 for example actions).

This is likely to be an iterative process because actions often require bilateral organisational interaction, support or collaboration. Therefore, as the actions are developed by one stakeholder, other stakeholders need to review suggestions and confirm or clarify their organisational role and support of other stakeholder actions.

For example, in Baguio City, the CDRMO (the organisation responsible for Disaster Risk Management) suggested a central information and knowledge management system with an external-facing platform for the public to access risk information and guidance on preparedness and the FEWS. This suggestion needed to be reviewed by the Public Information Office (responsible for providing information to the public) to ensure this suggestion aligns with their strategic plans and they had the capacity and skills to support the public-facing platform.

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Table 1: Examples of some of the draft actions developed by key FEWS stakeholders in Baguio City in response to specific recommendations.

| Finding | Recommendation | Example of an immediate action | Example of a later action | Resources needed for later actions | Other stakeholders |
|---|---|--|--|---|---|
| A number of key informants felt either that authorities already understood the needs of everyone or that there was no need to consider gender and marginalization in the EWS. This was not supported by the evidence and there is a clear need to include more diverse perspectives in the design of the EWS and in decision making. | Raise awareness about the importance of specific and targeted action to reach an ambition of “no-one left behind”, especially with those in key positions in the design and management of the EWS. | CRRMO will search for organized support and community groups at the Barangay and District level that can serve as intermediary representative groups with marginalised people. | Integrate gender-specific awareness and actions for EWS into the Risk Communication Plan of the LGU Public Information Office | IEC materials, infographics, apps accompanied with skills training. | Media partners, DRRM council members, Barangay officials, organised support and community groups |
| There are groups within Baguio who have lower connections with community leaders, who are less known and understood by community leaders, or who have distrust of these authorities. Especially for minority groups who are hidden, who are disenfranchised or at risk of discrimination, communication channels based on in-person delivery are likely to be less appropriate. | Recognize that there will be individuals who do not want in-person, authority-led or police-led dissemination, particularly stigmatized groups, or those with low trust in authorities. Trust in sources of information is a barrier to accessing and acting on information, particularly stigmatized groups. Further outreach via trusted intermediaries can help understand the suitability of community leader-led dissemination for stigmatized minorities. | The AASCTF Pilot Project: Data Dissemination and Outreach (D&O) workstream will conduct a survey of community leaders and BDRRMO staff who currently support dissemination of warnings during flooding events, recording their experiences and challenges. | Develop a one-stop, publicly accessible online platform which centralizes / collates all relevant and easily digestible information about flooding events (such as web-based map of evacuation centres and “real-time” status of each site, road closures, flooding/landslide incident reports) so individuals can decide for themselves. | Additional resources needed to develop or expand existing app or public website (e.g., IT, infrastructure for servers, communication skills etc). | CRRMO staff BDRRMO staff Baguio PIO staff (including social media team) Telco companies Organised marginalised support groups |
| The one-size fits all approach to evacuation timing left some with insufficient time to evacuate, and left others, who wanted to evacuate later, to dismiss evacuation warnings entirely until flooding commenced. The EWS would do well to enable multiple rounds of early warning | Provide forecast information that suits people's needs, including information on where floods will occur, how severe they will be, what is the safe window for pre-flood evacuation. The system needs to decide how to meet these information needs. | The AASCTF Pilot Project will develop a pilot system with the emission of warnings based on pre-defined thresholds, providing multiple lead times from 1-3 hours to 2-3 days. | Develop a “library” or database of several flood maps covering a range of different rainfall scenarios valid for Baguio, including different boundary conditions in the rivers and streams. The purpose would be to have a sufficiently representative dataset of flood maps for the city to use whenever a given forecast is given, which triggers a warning in the FEWS setup, effectively addressing where the floods will occur. | More people need to be trained within the LGU to operate the GIS database at a very detailed level. | Working closely with LGU. All stakeholders forming part of the communication and dissemination warning channels must be engaged, to raise awareness, increase cohesiveness at local level and ensure no pitfalls are introduced along the way. |

Step 5: Agree ways forward

After the actions have been individually reviewed and confirmed by stakeholders, the **actions should be collated together** into one document so that the overlaps and collaboration between organisations can be clearly seen (see examples in Table 2). There should be an opportunity for all key

stakeholders involved in the FEWS to come together to **collectively review and agree the combined actions**. This also provides the opportunity for stakeholders to discuss and confirm their **next steps forward** on their actions and to better understand how their organisation-specific actions fit into the bigger picture of an operational EWS.

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Table 2: Examples of some of the combined actions developed by FEWS stakeholders in Baguio City.

| Findings | Recommendation | Example of an immediate action | Example of a later action |
|---|---|--|--|
| At an individual level, knowledge gaps in understanding of weather forecasts and flood risk led to poor decision-making and risky late evacuation. | Build understanding of the early warning system, sources of information, meaning of messages, potential actions, and preparedness activities through public communication and education. | CDRRMO will work with AASCTF Pilot Project to develop guides and resources that clearly explain the FEWS capacities, operation, where to get information/data from, clearly link warning messages with evidence-based/robust physical science (i.e. clear levels and thresholds associated with messaging). | Design information/ social media information campaign focusing on flood-related concerns: (1) Monitoring and Warning (how to read weather/ emergency advisories, what to look out for before/during/ after a flood event; (2) Official dissemination channels to monitor/ follow during flooding events; (3) Preparedness activities (what should you do in case of a typhoon? How to create an individual/ family go bag/ important hotline/ contact numbers to remember in case of emergencies, etc.); and (4) Response capability (what to do/ potential actions for each warning level (linking response capability pre-plans with monitoring and warning)). |
| | | PIO will work with CDRRMO to develop and share risk and early warning information via social media. | |
| | | AASCTF Pilot Project will develop clear dissemination and communication strategy within Data Dissemination and Outreach Plan (DD&O Plan) that outlines e.g., what the EWS can/ can't do, where people can access information (risk information, evacuation shelter, early warning messages), identifies who has information on actions to take, and where to find resources of preparedness activities. This can be used by CDRRMO/PIO to develop public information later. | |
| The current one-size-fits-all early warning lead time was not effective for all, with differing needs and preferences for early warning. | Decide whether the system can immediately (or in the medium term) provide multiple lead times, providing earlier warnings to those who need additional time to respond safely. | AASCTF Pilot Project will in the current FEWS being setup, it is estimated that forecast for the next 48 to 72 hours will be generated with varying levels of accuracy (less accuracy for larger lead times). This means that the lead time will range from 1-3 hours to 2-3 days. This will be tested over the course of one monsoon in a closed prototype system (2022). | CDRRMO to integrate short term FEW (1-3 hours to 2-3 days) with existing or emerging longer term weather forecasting system lead times e.g. PAGASA forecasts |
| Current warnings are not reaching everyone, with many individuals first being aware of flooding when the water entered their home. In terms of information needs, priorities included knowledge on how severe a flood might be, where a flood would occur and when a flood would occur. | Ensure there is a robust dissemination strategy detailing who will share forecasts, alerts, and evacuation instructions and how they will be shared (in person, radio, SMS etc.). | CDRRMO will update existing OPCEN SOPs to integrate dissemination of warning information (including forecasts, alerts, and evacuation instructions) via multiple channels. These will be based on existing dissemination structures with OPCEN at centre and will include: a) public-facing dissemination: audio siren, text blasting, social media (Facebook, Twitter, Instagram), media platforms (paper, radio and television); b) direct messaging via email or SMS to Barangay DRRM Committees. | CDRRMO and PIO to work together to extend dissemination strategy to include additional streams of dissemination such as, for example: mobile app (BIMP), daily bulletin, WhatsApp messaging to private groups, interactive voice response, visual display boards etc. |
| | | PIO will work with CDRRMO to integrate outputs related to risk information and early warning into existing social media platforms. | |
| | | AASCTF Pilot Project will develop the DD&O Plan in coordination with Local Government Units (LGU). The plan will outline: dissemination and outreach strategies/activities, required information/training materials, and Standard Operating Procedures (SOPs)/responsibilities of key stakeholders during the four phases of the disaster management cycle | |
| There were governance gaps in terms of feedback loops, accountability processes and opportunities for community engagement within the system. | Develop multiple options for safe and appropriate feedback loops to listen to and be held accountable to those with minority experiences or poor trust in authorities. | CDRRMO will search for organised support and community groups at the Barangay and District level that can serve as intermediary representative groups with marginalised people. | Enhance dedicated feedback mechanisms such as hotlines, email address, and social media channels to enable multiple options for people to give direct feedback. |
| | | AASCTF Pilot Project will work with CDRRMO and BDRRMO to understand existing strategies and future plans for feedback mechanisms, including in-person, remote, regular, and ad-hoc methods of feedback (e.g., online form/email/hotline, pre-monsoon preparedness training, post-monsoon debrief sessions). | |
| People's preferences for when to evacuate and their capacity to evacuate without support varied. Some people evacuated too late, leading to dangerous evacuations, some people (especially single mothers) were evacuating twice, with the second evacuation occurring under unsafe circumstances, some wanted to evacuate earlier than the majority and were prevented from accessing evacuation centres by officials. | When discussing thresholds to trigger alerts or evacuations, consider the evacuation timelines that suit the majority, as well as evacuation timelines that suit those outside of the majority. | CSWDO will work with CDRRMO, BDRRMCs and trusted intermediaries to develop evacuation plans that align to specific thresholds for alerts that are tailored to group preferences via workshops, meetings and focus group discussions. Align multiple lead times and thresholds with specific group actions and ensure these align with needs and capacities to support | Conduct Focus Group Discussions (FGDs) and outreach with different groups at different times to solicit inputs and feedback from multiple levels of alerts/evacuations associated with different lead times and threshold. |
| | | AASCTF Pilot Project will develop examples and/or suggestions as part of their DD&O Plan for the establishment or enhancement of an alert level system that spells out clear actions/ evacuation instructions both for the majority and those outside the majority. | |

OUTPUT

There will be two main written outputs from this process:

1. A table of recommendations with specific actions and responsibilities for each stakeholder combined into one document showing overlaps between stakeholders and future potential actions (see Table 2)¹.
2. An action list for each stakeholder for their relevant recommendations (see Table 1).

In addition to these written outputs, the stakeholders involved in this process will gain important benefits including **improved awareness, ownership, and empowerment**. The process of having to take the time to review findings and recommendations will improve each stakeholder's knowledge and awareness of the issues, barriers, challenges, and needs of vulnerable groups in their context. In addition, by spending time developing their own actions and considering actions of their partners, the EWS stakeholders develop a greater sense of ownership in the actions they develop (compared to if someone had developed a list for them) and will empower them to take a clear strategic direction forward.

TAKING ACTIONS FORWARD

The draft actions can form the basis for implementation plans, Standard Operating Procedures for the FEWS, and guidance for future iterations and evolutions of the FEWS. The draft actions should be **refined and revised** later as the system evolves and the needs of the context evolve. The actions should also be **integrated into plans, procedures, and policies** for DRM and FEWS stakeholders, rather than standing alone in isolation. In this way gender and social inclusion will be considered and addressed across all areas of the FEWS, rather than as a separate list of gender-specific "add-ons". It is recommended that these actions are highlighted within the integrated implementation

plans for the FEWS to increase their visibility and act as prompts for stakeholders.

LEARNING AND REFLECTIONS

This section reflects on some of the learning from the challenges and opportunities experienced during the Baguio City project, which can help others in replicating the process.

It is important to recognize that the focus and emphasis of the activities outlined in this document is to **support and facilitate the process of stakeholders engaging and developing their own actions** based on the recommendations. This method supports the ownership of those actions and will ultimately result in a greater chance of those actions being implemented effectively. Taking the time to reflect and think on the recommendations is important – actions should not be copied and pasted into different contexts. Bearing this in mind, when experiencing challenges, it can help to frame appropriate responses that will keep the process on track, without appropriating ownership of the process and prescribing responses which are not rooted in the capacities, remits, and expertise of the stakeholders.

There were some instances where stakeholders lacked a **fundamental understanding or awareness of gender and marginalization** among those that would need to be taking actions in the future. For these stakeholders, additional time is needed to focus on reviewing the study findings to ensure their understanding and awareness of the different barriers, issues, and needs related to gender and marginalization, before moving onto developing potential actions. Without this underlying understanding and buy-in, any actions developed will be ineffective and/or unlikely to be implemented by disengaged stakeholders.

Initial reactions from some stakeholders included a perception that they would not be able to think of actions within their remit relating to developing a

"We realize that there is a need for an active engagement of stakeholders in proactive efforts to incorporate the needs, priorities and capabilities of marginalized gender groups, magnifying their voices at every stage towards inclusive early warning system." – CDRMO

1 ASEAN Australia Smart Cities Trust Fund, 2021, "Implementation Plan: Actions and Responsibilities for a Gender Transformative FEWS in Baguio City", Working Document, Version 1, November 2021, report produced by Ramboll and Practical Action Consulting, funded by the Australian Government (DFAT), and ADB. Note this is not an externally published document.

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gender transformative FEWS, as they were not gender experts. It is important to place **trust in the process** – in Baguio City, the stakeholders felt much more aware and empowered by the end of the co-development process having developed actions to meaningfully address gender and marginalization issues as part of the FEWS design and implementation in the immediate and longer term. It is important to note that the process does not require gender expertise within the stakeholder group to carry out, but rather that it is important for stakeholders to be **open and receptive to the gender issues** explored and demonstrated in the preceding analysis, but the value that they bring to the process is in their expertise in the specific component of the FEWS and their knowledge of their roles and responsibilities related to the recommendations, and their ability to link the findings of the analysis to those components. Facilitators need to have patience and support the stakeholders to try to develop their own actions – the process of doing so will show them that they do have ideas and can suggest appropriate actions. This can be supported by facilitators providing some examples or suggestions of actions they could take (possibly taken from other contexts), and by prompting questions of the initial actions they brainstorm. The facilitator therefore needs to understand how the FEWS works in the context and of gender and marginalization issues related to the FEWS.

A key challenge during the process of developing the actions for Baguio City was securing **time commitment** from personnel to engage with the recommendations and actions in a meaningful way and competing demands of the city level stakeholders (e.g., COVID-19, monsoon season and hazard events). Due to COVID-19, the activities were conducted remotely (rather than securing time for all stakeholders in an in-person workshop, for example), and therefore the timeline for developing the actions needed to be **flexible** to facilitate input

from stakeholders. **Empathy and patience** were essential for keeping gentle pressure on progressing the actions at a pace possible for stakeholders to still feel able to engage. In the future (post-COVID-19), this could be minimized by arranging in-person workshops (to secure focus and engagement of key stakeholder personnel) during less busy work periods (e.g. not during monsoon season).

A key benefit in Baguio City was the **individuals who championed gender and marginalization**. These included high-level stakeholders (e.g., the Mayor) and operational stakeholders (e.g., those in CDRRMO). Both levels are needed to ensure gender is considered and actioned in a FEWS. High-level champions were instrumental in **securing resources and advocating for a focus on gender and inclusion** from the start of the FEWS development; their buy-in is needed for **institutional mandates** to require operational stakeholders to consider and act on gender and inclusion issues. Operational champions are needed to ensure enthusiastic engagement in the process, build awareness and advocate for gender transformative approaches with key relationships, and increase **the likelihood of actions being implemented** in a conscious and conscientious manner beyond project funding.

The process of developing actions is **part of a longer-term commitment** to a gender transformative FEWS. It provides an **opportunity and space for stakeholders to think about the bigger picture** of what a FEWS might look like in the future with sufficient funding, resources, and capacities. It **provides** a roadmap not just for immediately achievable, concrete actions, but also a strategic direction and plan for the foreseeable future and identifies the resources, relationships, and actions needed to achieve them. Taking this time to think through what that might look like in advance is very valuable, rather than responding to the short term or immediate environment.

“The tools and approaches used in the study are unique and have allowed us to understand vulnerability and marginalization in Baguio City in a really meaningful way and which could be relevant for other cities as well.” – CDRRMO

“We identified this project to ensure appropriate, applicable and timely early warning reaches the last mile.” – Benjamin Magalong, Mayor, City Government of Baguio

APPENDICES

Appendix A: Example of information sheet provided to Baguio City EWS stakeholders with instructions on how to engage in the process of developing actions.

Actions for a gender inclusive FEWS in Baguio City: Information sheet

Invitation

We would like to invite you to a meeting to discuss the recommendations and develop actions for a gender inclusive flood early warning system in Baguio City. This information sheet has been developed to help you to understand the purpose and scope of the meeting. Please take time to read the information here carefully and discuss it with others if you wish.

What is the purpose of the meeting?

The purpose of the call is to discuss the published gender inclusive recommendations and develop gender-inclusive actions specific to stakeholders' roles and responsibilities within an operational flood early warning system in Baguio City. This study is being conducted as part of the Asian Development Bank's ASEAN Australia Smart Cities Trust Fund (AASCTF), which is working to assist Baguio City with both the planning for flood mitigation and the delivery of the services of flood early warning and responses, using smart technologies.

So far, the GESI study has developed and published two deliverables:

- [Baguio City Gender and Inclusion Study: Findings and Solutions to Inform the Baguio City Smart Flood Early Warning System](#)
- [From Policy Recommendations to Practical Actions: Towards Gender Transformative Practices for Baguio City's Flood Early Warning System](#)

During the meeting we would like to discuss the recommendations outlined in the policy and practice recommendations document that relate to your organisation's role and develop specific actions that can or could be taken to address these recommendations. We would also like to understand which actions could be taken up immediately, which could be implemented at a later date as the EWS evolves, and which actions would require additional support to implement.

Why have I been invited?

You have been identified as a key stakeholder with a relevant role to play in an operational flood early warning system in Baguio City. Your position or organisation holds some responsibilities, interests, or knowledge that relate to an EWS operating effectively. If you think that another person in your organisation would be more appropriate, or could provide useful insight, please forward this information onto them and/or invite them to join the call with you.

What do I need to do?

Before the call:

1. Please read and familiarize yourself with the two existing publications:
 - [Baguio City Gender and Inclusion Study: Findings and Solutions to Inform the Baguio City Smart Flood Early Warning System](#)
 - [From Policy Recommendations to Practical Actions: Towards Gender Transformative Practices for Baguio City's Flood Early Warning System](#)
2. Access and read in detail the draft actions Google document *****here*****. In this document we have gathered together the specific recommendations that we understand lie within your responsibilities. We would like you to:
 - Reflect on these recommendations: please see the prompting questions within the document (and below)

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to guide your suggested actions. We have noted down some example actions to get you started. Feel free to discuss and share with colleagues in advance of the call.

- Please edit the document directly with specific actions you can and/or could take.

During the call:

We will discuss the draft actions Google document content and talk through your pre-edited responses. The document is divided into those recommendations that are likely to fall under your responsibility, and those external to your role. We will talk through both lists, responding to the following prompt questions for each recommendation:

For those recommendations within your remit:

- What can you/your organisation do immediately to respond to the recommendation?
- What could you/your organisation do at a later time to respond to the recommendation?
- What resources would you need to implement this action? Are these in addition to your existing resources?
- Who do you need to work with to implement this action? What do you need from them?
- Are there any recommendations that are beyond your responsibilities?

For those recommendations outside your remit:

- Are there any other recommendations in the longer list you could address or support others to implement?
- Of the remaining recommendations outside your responsibilities, do you know who is responsible for them?
- Do you have any suggestions for actions they could take?

What will happen to the results of our conversations?

Your input during the call will be collated alongside other stakeholders to develop a working document outlining specific actions each stakeholder can or could take directly in response to the recommendations from the study.

You will then be invited to participate in a workshop where the collective actions will be shared and discussed amongst all relevant EWS stakeholders.

The result will be a working document of a collection of specific actions for the FEWS. Each action and responsibility can then be integrated into existing DRM strategies, protocols, and procedures, and be integrated into FEWS SOPs as they are developed.

These working actions are intended to be an initial starting point and the specific actions will evolve as the FEWS evolves. We hope this provides a useful starting point to further evolve the implementation of a gender inclusive FEWS in Baguio City, both in terms of identifying actions and gaps.

Who should I contact for further information?

For any concerns or questions, please contact **** (email@email.com).

Thank you for reading this information sheet. We look forward to talking with you soon.

Appendix B: Extracts from an example template provided to Baguio City EWS stakeholders with instructions on how to think about actions and directions to fill in the template with draft actions.

Instructions:

1. Please refer to the information sheet provided.
2. Please read and familiarize yourself with the two existing publications:
 - Baguio City Gender and Inclusion Study: Findings and Solutions to Inform the Baguio City Smart Flood Early Warning System
 - Policy and Practice Recommendations for a Gender Transformative Flood Early Warning System in Baguio City
3. Reflect on the questions provided in the boxes for each recommendation and enter your answers in the tables below.
 - Note that we have divided the recommendations into those we understand to be within your remit (part 1), and those potentially outside of your remit (part 2).
 - We request that you focus your attention on Part 1 (those within your remit) but enter any relevant information you have into Part 2 (those outside your remit).
4. Please edit the tables directly in this document with specific actions you can and/or could take for each recommendation.
 - We have noted down some example actions to get you started in blue.
 - Feel free to discuss and share with colleagues in advance of the call.

PART 1: Recommendations within your remit

- What can you/your organisation do immediately to respond to the recommendation?
- What could you/your organisation do at a later time to respond to the recommendation?
- What resources would you/your organisation need to implement this action (now or later)? Do you already have those resources, or are these in addition to your existing resources?
- Who do you need to work with to implement this action? What do you need from them? How would you work together? What would you be providing them with?
- Are there any recommendations that are beyond your responsibilities?

Recommendation 1: Gender and Inequality Informed EWS

| Recommendation | Immediate actions | Later actions | Resources needed | Other stakeholders | Outside your scope |
|--|--------------------------|----------------------|-------------------------|---------------------------|---------------------------|
| Raise awareness about the importance of specific and targeted action to reach an ambition of "no-one left behind", especially with those in key positions in the design and management of the EWS. | | | | | |
| Develop multiple options for safe and appropriate feedback loops to listen to and be held accountable to those with minority experiences or poor trust in authorities. | | | | | |
| Ensure that listening to minority as well as average experiences is built into post flood After Action Reviews. | | | | | |

Etc.

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Recommendation 2: Improve Understanding of Risk

| Recommendation | Immediate actions | Later actions | Resources needed | Other stakeholders | Outside your scope |
|--|-------------------|---------------|------------------|--------------------|--------------------|
| Explore and develop ways to make experience-based knowledge accessible to broader populations, including information on lessons learnt from past floods. | | | | | |

Etc.

Etc.

PART 2: Recommendations outside your remit

- Are there any recommendations in this section that you could address or support others to implement?
- Of the remaining recommendations outside your responsibilities, do you know who is responsible for them? Do you have any suggestions for actions they could take?

Recommendation 8: Safety and Dignity in Temporary Shelter

| Recommendation | Actions we could take | Who else is responsible? | Suggested actions for other stakeholders |
|--|-----------------------|--------------------------|--|
| Consider and address the barriers to using evacuation centres, especially where individuals have had negative past experiences of evacuation centres not meeting marginalised individuals' needs in terms of access, comfort, hygiene, safety or ease of safeguarding children | | | |
| Understand the well-documented inequalities of experience in centralized shelters and the reasons why vulnerable groups may need to consider alternative arrangements. | | | |

Etc.

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Appendix C: References and Further Reading

ASEAN Australia Smart Cities Trust Fund, 2021, "Implementation Plan: Actions and Responsibilities for a Gender Transformative FEWS in Baguio City", Working Document, Version 1, November 2021, report produced by Ramboll and Practical Action Consulting, funded by the Australian Government (DFAT), and ADB.

ASEAN Australia Smart Cities Trust Fund, 2021, "From Policy Recommendations to Practical Actions: Towards Gender Transformative Practices for Baguio City's Flood Early Warning System", report produced by Ramboll and Practical Action Consulting, funded by the Australian Government (DFAT), and ADB.

Grant, C., Brown, S., Sneddon, A., Budimir, M., Nelder, I., Lama, B., Asmussen, M., Valenzuela, A., Guioguo, A., Funa, F., and Cania, H., 2021, "Baguio City gender and inclusion study: Findings and solutions to inform the Baguio City Smart Flood Early Warning System", report produced by Ramboll and Practical Action Consulting, funded by AASCTF, Australian Government, and ADB.

Practical Action, 2020, "Transforming lives through ingenuity: Practical Action and early warning systems", Rugby, UK: Practical Action Publishing.

World Meteorological Organization, 2017, "Multi-hazard Early Warning Systems: A Checklist", Outcome of the first Multi-hazard Early Warning Conference, World Meteorological Organization (WMO) 1st Multi-hazard Early Warning Conference, 22 to 23 May 2017; Cancún, Mexico.

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The ASEAN Australia Smart Cities Trust Fund (AASCTF) assists ASEAN cities in enhancing their planning systems, service delivery, and financial management by developing and testing appropriate digital solutions and systems. Digital solutions address vital cross-cutting themes such as social inclusiveness, gender equity & women's empowerment, climate change & environmental sustainability, and public-private partnerships. By working with cities, AASCTF facilitates their transformation to become more livable, resilient, and inclusive, while in the process identifying scalable best practices to be replicated across cities in Asia and the Pacific.

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