MANUAL FOR URBAN CLIMATE RISK MANAGEMENT PLANNING
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INTRODUCTION

Since 2014, the United Nations Development Program for Safer Communities through Disaster Risk Reduction (UNDP SC-DRR) has been collaborating with the local Indonesian NGO, Yayasan Kota Kita, with the City Government of Kupang and Makassar, and local civil society organizations to assess vulnerability to climate change and develop approaches to build resilience. The collaborative initiative is entitled the Urban Climate Risk Management Plan, and has two main objectives: 1) to translate the recommendations from the Climate Change Vulnerability Assessment (CCVA) into a planning document, and 2) to develop an urban climate risk management plan for the cities of Kupang and Makassar.

This Manual for Urban Risk Management Planning shares Kota Kita’s process of developing an Urban Climate Risk Management Plan (UCRMP), based on our experiences in Makassar. Building from the city’s vision, the UCRMP strengthens resilience strategies, assembles programs and activities, and connects different institutions to create one resiliency action plan. Central to this approach is the creation of a city working group, or POKJA, to monitor and evaluate the action plan. We hope that this UCRMP process will provide a useful framework for cities facing severe climate change effects to build resiliency and create effective management plans.
Why Plan for Climate Change?

While many Indonesian cities are beginning to think about climate change, truly understanding vulnerability and how to take action is a growing challenge. Building urban “resiliency,” or ways of protecting a city’s most vulnerable people, places, and systems, can still be better integrated into governments’ planning goals. The ACCCRN has already shown how working groups (POKJAs) can improve multi-stakeholder participation, and increase direct community involvement in government planning processes to build climate change resilience. Since climate vulnerability and hazards are still a relatively new priority for local governments, POKJAs can play an indispensable role in pushing for budgets, projects, and coordination that reflect the needs of the city’s most vulnerable populations and places.

CCVA and UCRMP Overview

Our first manual, the Manual for Gender-Responsive Climate Change Vulnerability Assessments, shares our process for identifying urban vulnerability. By conducting workshops with vulnerable communities, namely women and poorer, informal communities in rapidly urbanizing areas, to better understand context-specific climate hazards and adaptive capacities, cities can address these challenges more effectively.

This manual shares a process for local government to take action on CCVA results. The process is outline as follows:
1. Creating an Urban Climate Risk Management Plan (UCRMP) by
2. Creating A City Vision for resiliency by aligning existing government initiatives from the RPJMD with CCVA results
3. Creating strategies to achieve the City Vision for Resiliency Strategies are executed by government departments, private sector stakeholders, civil society groups, and community members
4. Creating a working group to implement and monitor the UCRMP (POKJA)

Expectation for the UCRMP Document

This document provides mid-term resilience visions, which we intend for cities to use as pathways to build resilient policies, programs, institutions, and communities. The strategies outlined cover physical development, economic empowerment, social programs, and data and monitoring programs addressing vulnerability issues in a comprehensive way. The programs and activities following each strategy can be updated or changed based upon annual achievement. Institutions will implement these activities, but the working group, POKJA, will monitor and evaluate progress to attain the city resiliency goal.

Importance of Participation

The process of creating this report has been participatory and also pedagogic. In both processes, we brought key city officials and stakeholders together to educate them about the impacts of climate change, identify how climate change makes their city vulnerable, and strength government and community management efforts by improving coordination amongst groups. Leaders and city governments must seek feedback from poorer, informal communities, women, children, and elderly populations to understand the city’s complete vulnerability profile. Ideally, working groups will not just have government officials and civil society organizations, but community members from marginalized groups thoroughly involved.
STEP 1: CREATING THE CITY RESILIENCY VISION

This step shows how climate change resiliency goals can strengthen the city’s general vision, particularly for the most vulnerable populations.

The first step to building resiliency is to create a City Vision for Resiliency. This vision should align CCVA results with the Mayor’s official planning goals, which manifest in planning documents like the RPJMD, RTRW, and RKPD. Cities should create this vision before designing strategies, so that all actions support the resiliency goal. Usually, visions are best when they are specific, focused in the most vulnerable geographic areas, and connect existing departmental efforts. They must also prioritize problems raised by marginalized groups from the CCVA.

For example, Makassar City Government’s vision, “The Livable City of Makassar through Reducing Vulnerability and Adaptation to Climate Change,” is based on the official RPJMD 2014-2019 Plan and focuses on two conditions: livability and resilience. A livable city must guarantee the security, human health and comfort, and inclusive-egalitarian relationships amongst city stakeholders (RPJMD 2014-2019). This requires governments to be able to cope with threats and hazards by providing adequate public services, having access to critical technology, and improving the quality of city infrastructure to provide resources, like water and emergency health care, during natural disasters. Building resiliency means that Makassar must understand the specific and most urgent climate change risks it faces, who and where are its most vulnerable populations, and its ability to prevent and respond to disasters (UNISDR 2015).

EXERCISE: ARTICULATING THE CITY RESILIENCE VISION

Here we will describe specific steps towards creating the City Resiliency Vision. Again, this will align CCVA results with existing RPJMD vision. It is important to remember that the City Resilience Vision is not separate form the RPJMD vision; it simply connects existing programs with goals for making the city more resilient.
In the Indonesian context, having a legal framework for new programs and activities is initially very important. As many Indonesian cities do not yet have a resilience vision, it can be considered as a new proposed agenda. Using the RPJMD as a foundation can integrate the resilience vision into city’s legal framework. It can also help clarify how the city interprets its goals, and what its plans are. If possible, it’s best to review the Long Term Development Plan (RPJP and RTRW) to see the common concerns in both terms. This process should be done before the workshop.

Invite both local government institutions, including: Bappeda, BPBD, BLHD, DKP, BMKG, PDAM, the Office of Women’s Empowerment, and other related institutions and non-government institutions such as local NGO, Women’s Organizations, and representatives of civil society to contribute in the discussion.

Articulating the resiliency vision can be done by separating the participants into several groups, and letting them discuss their ideas. Two important things to consider are the understanding of participants about the current city vision, and their medium and long-term goals to make the city more resilient.

After the group discussion, each group will share their proposed vision. There should be a facilitator who can record key words from these results, for the combined, final vision. Often many groups already have the same key words. The next step will be combining and mixing the words together, and then asking the participants whether they agree, and improving it together in the discussion.
STEP 2: CREATING STRATEGIES AND ASSEMBLING PROGRAMS

Strategies bring together different actions, projects, policies and regulations to create coherent and targeted actions. Cities can have several strategies that all work together to achieve resilience and characterize the City Resiliency Vision. Strategies integrate the projects and activities of different government agencies and stakeholders and so require coordination to achieve impact.

WHAT ARE STRATEGIES?

Strategies focus vulnerability reduction efforts on specific sectors, places or people. They are useful because they integrate the actions of several departments, which can often be uncoordinated and haphazard, and also tie them together into a clear and understandable set of actions. This can help the public, and different government agencies, understand them better, mobilize around them, and seek to reach more attainable goals. This can result in creating a bigger impact. There should not be a long list of strategies, because they are meant to summarize the actions of the city into clear, distinct, initiatives, we suggest that each city has between 3 and 5 strategies.

HOW DO STRATEGIES ACHIEVE THE CITY RESILIENCY VISION?

All the strategies should relate to and move the city towards achieving the City Resilience Vision. The strategies are basically the actionable components of that city vision, in more detailed and specific steps. It is important that the City Resilience Vision is explained in terms of the strategies because it helps demonstrate what actions the city is taking to reduce vulnerability and increase resilience, by providing a narrative that explains it.

HOW DO YOU CREATE A STRATEGY?

Creating a strategy requires discussion among government officials and other stakeholders to identify the priorities for the city. This can be started by considering the recommended actions given by the CCVA, as well as reflection upon the particular the places, people and sectors that are most vulnerable and in need of support. But developing strategies then requires being creative about integrating existing and future actions to target these vulnerabilities.

An example of a strategy could be targeting a place. For example, a strategy called ‘strengthening the resilience of coastal communities’ would entail a set of actions, policies, and projects focused upon coastal communities. This may include environmental protection, such as mangrove restoration, as well as economic development support, such as building the capacity of the fishing industry and monitoring packaging practices. Another possible component of this strategy could be to improve the education of the children of fishermen, or creating savings groups for the wives of fishermen. These all fit together into a strategy focused on vulnerable coastal communities.

Another way to create strategies is to focus on vulnerable people. Targeting the urban poor, for example would require actions, policies, and projects to be cross-sectoral, like investing in infrastructure to protect urban poor settlements, as well as social welfare programs, or job skills and training. These might fit under a strategy called ‘increasing the resilience of the urban poor to climate hazards,’ for example. Another type of strategy focuses on a particular sector or urban system, like resilient economic development, or improving public service delivery to bolster resilience.
Resilience strategies are cross-sectoral; they involve different actions from different departments, institutions, and communities acting together in one place, or to solve a particular problem, for a certain group or sector. They target this problem by bringing several actions, policies and projects together, all acting to bring about change. For this reason they are complex and have a lot of actions that require coordinating, as well as many institutions or agencies, that have to work together. Therefore coordination and leadership are needed to ensure that actions can be prioritized and different institutions can work together effectively. This leadership is required from the highest level, in particular the Mayor, but also at the departmental level, to help ensure that different agencies communicate and coordinate their actions. The POKJA is the body best suited to supporting coordination, because they can convene meetings, but all the institutions and agencies involved will have to also agree to work together. By doing so they can be more effective in achieving targeted goals.

The following are examples of Resilience Strategies from the city of Makassar:
1. Increase the amount of green space and parks in the city
2. Increase infrastructure quality and expand public services (especially for informal communities)
3. Increase social and economic welfare
4. Increase public participation
5. Increase institutional capacity of government, NGOs and community
6. Improve environmental conservation and climate change awareness campaigns
7. Strengthen and enforce law regulation

RESILIENCE STRATEGIES REQUIRE COORDINATION AND LEADERSHIP

The following diagram shows how Makassar’s 7 Strategies connect to the Resilience Vision:
EXERCISE: DEVELOPING RESILIENCE STRATEGIES

This exercise shows how strategies can be allocated within the official RPJMD plan. It can help citizens and officials understand how building resilience is not just about projects, but other supporting policies and practices too. Strategies can be focused on a particular sector (i.e. building a resilient economy), place (strengthening coastal communities), or system (i.e. improving public services to reduce social vulnerabilities); what is important is that they propose achievable goals and are able to integrate actions. The strategies will be the actual scheme for implementation, as it will be followed by the set of programs and activities.

1 Review the Results of CCVA
Strategies and interventions should reflect CCVA results—especially concerning the types of hazards addressed, who they affect and how they might affect different populations differently (i.e. men and women, or informal communities), and where and when those hazards will be most severe. This analysis should also take advantage of existing strategies, analyzing any gaps these efforts have in light of the CCVA results, and improving them.

2 Invite Stakeholders to the Workshop
In developing resilience strategies, first review the CCVA to understand the city’s vulnerability profile. This profile includes:
- People: who are the vulnerable groups of people? For whom are the strategies designed?
- Place: where are the most vulnerable places? Where the program will be implemented?
- System: What systems are most vulnerable to climate change? What systems receive more impacts?

3 Propose Strategies
Create small discussion groups made up of stakeholders from various sectors, populations, and institutions to brainstorm and propose strategies. We can separate the participants into 3-4 groups, each group has 6-8 members, to deeply discuss the possible strategies to reduce vulnerability. In proposing strategies, these points should be discussed:
- What are the issues / hazards to be addressed?
- Who are the target populations, where, and when?
- What kinds of actions are necessary to address these issues?

4 Present and Simplify the Strategies
Each group will then present their strategies. The facilitator should write them down one by one and review the strategies together with the participants. We usually get some similar strategies amongst different groups, so we can combine and simplify them into one.

5 Make Sure Strategies Reflect the Vision and Build Consensus
All of the strategies should be steps towards achieving the vision. Are they enough to achieve the desired goals? Ask the participants to freely comment, combine, separate, or propose new strategies. If there are no more inputs, ask them whether they are agree, and build consensus from the strategies.
STEP 3: CREATING THE URBAN CLIMATE RISK MANAGEMENT PLAN

The UCRMP Document provides an agenda for implementing resiliency strategies, carried out by the POKJA Working Group. This plan is just the beginning of a process, and requires critical monitoring, adjustment, and improvement, as well as input from underrepresented groups (i.e. women and informal urban communities).

After identifying strategies, and indicating the projects corresponding with each one, the resulting plans have to be reviewed and approved in the UCRMP Workshop. The UCRMP Workshop is a multi-stakeholder discussion to create Urban Climate Risk Management Plan for the city. It translates the CCVA assessment into a ready-to-implement agenda, using the City Resiliency Vision and Resilience Strategies created in the last two steps. The most important outcome from the UCRMP Document is the formulation of city working group, POKJA, which will be responsible for monitoring the implementation stages. In this step, it is especially important that the strategies align together with the Mayor’s official vision, and that consensus is reached amongst groups.
EXERCISE: ORGANIZING THE UCRMP WORKSHOP

The following steps for Writing the UCRMP Document (i.e. the UCRMP Workshop) provide a sequence for stakeholders to receive information, discuss, give inputs and additional information, and build consensus on city resilience strategies. The previous two exercises to create the City Resilience Vision, and Create Resilience Strategies, are steps within this comprehensive process.

1 Preparation for the UCRMP Workshop

This step includes all of the preparatory actions like consolidation of CCVA results, which will be materials for the UCRMP process, and reviewing the City Vision from City Planning Document as a framework. You should also invite different stakeholders from both government institutions and civil society organizations to the workshop. Note: it is important to select those officials who represent government departments that have a comprehensive knowledge of what that department’s programming and activities are; otherwise they may not be able to contribute meaningfully to the exercise.

2 Conducting the Workshop:

In developing resilience strategies, first review the CCVA to understand the city’s vulnerability profile. This profile includes:

a. Articulating Resilience Vision: State the resilience vision as the goals to be achieved in medium-term planning.

b. Develop Resilience Strategies: Develop sectoral strategies to reduce vulnerability in a comprehensive way.

c. Assemble Program and Activities for Each Strategy: Each institution should propose program and activities related for each strategy. Again, this does not necessarily mean creating new programs, but identifying existing programs that different government departments may have planned, and match them to the corresponding strategy. For example, for a strategy focused on building coastal communities’ resiliency, the Department of Health’s efforts to increase health care for vulnerable communities, especially during natural disasters, and the Department of the Environment’s programs to improve mangrove conservation, should both be monitored as part of the City Resiliency Vision. Though both projects involve separate departments, both departments should recognize how their goals align to make coastal communities more resilient, and coordinate efforts, share resources, and collaborate when possible.

d. Develop Institutional Framework and Program Implementation Planning: While each institution should recognize how their goals fit together in the City Resiliency Vision, there must be a third-party working group responsible for monitoring and evaluating the coordination and implementation of these efforts. The three primary tasks of the working group are 1) to coordinate: facilitate the implementation of program and communication between stakeholders, 2) to synergize: the POKJA is not executing the plan, but steering towards better results, and 3) monitoring and evaluating the implementation of the program so it can be measured and implemented in structure.

3 The Dissemination Workshop and the Launching of POKJA

Once the UCRMP document is complete it has to be disseminated to stakeholders during an official meeting, this is the ‘Dissemination Workshop’. During this workshop all climate change-related stakeholders will be invited, especially those departments working on the different resilience strategies. The UCRMP will be introduced to all participants and the POKJA officially launched. The role of the POKJA will be to monitor the progress of each group, coordinate actions, and promote synergy between strategies, in order to better achieve goals. Copies of the UCRMP should be distributed to all participants.
STEP 4: BUILDING THE WORKING GROUP (POKJA)

POKJA is essentially a resiliency task force, or working group, which monitors UCRMP implementation and success. Because its structure is flexible, it should meet regularly and include members from government, civil society, and underrepresented groups.

WHAT DOES POKJA DO?

UCRMP is a strategy and action plan document, and in order to be able to monitor the implementation of the plan, it requires an institutional framework that allows different stakeholders to participate in implementing the plan. This task is carried out by a working group, called POKJA (Kelompok Kerja) in Makassar, which facilitates three essential functions:

Coordination

POKJA’s role is to facilitate the coordination mechanism among government agencies, and outside government agencies involved in the working groups, such as academics, NGOs and community representatives. Thus, POKJA must hold regular meetings (For example in Makassar, once every three months) to make sure that project and policy initiatives are well coordinated in the resilience vision framework.

Synergy

Synergy means unifying various types of activities and harmonizing conflicts to ensure smooth coordination between agencies. POKJA does not execute the program, but ensures that groups work together effectively, that they communicate their efforts, and keep up with their activities in compliance with agreed upon timelines. POKJA can also help reconcile potential barriers between agencies, or communication challenges.

Monitoring and Evaluation

POKJA’s monitoring and evaluation role is to manage data related to outcomes and impacts of the program. These outcomes must be measurable and structured. This is more about conducting regular monitoring about the implementation of each program and activities and evaluate how the achievement in the specific period. This will be helpful to see how the effectiveness of the work of POKJA in reducing vulnerability in the city.

HOW DOES POKJA WORK?

POKJA may work differently depending on the city context. For example in Makassar, while the Mayor of Makassar is responsible for overall mechanism of coordination, the key institution to invite for meeting is the Mayor’s secretary. In each of the division, there is one key department responsible for inviting their members to the meeting. POKJA membership is to individual embedded to his/her roles in the department. So when the person is leaving his position in the department, the new staff in the department will replace his/her membership in POKJA. POKJA should determine how many meeting in a year for general coordination, and how many meeting in each division every year.
WHO SHOULD BE INVOLVED AND HOW TO STRUCTURE POKJA?

The group’s size and constituents may differ from city to city, depending on local institutional capacity as well as local budget and local needs. The UNDP, in consultation to BNPB, suggests that POKJA have two components: advisory and executive. The advisory will consist of a high level official, such as Head of Bappeda, Head of BPBD, Head of BLH, and other department, who is responsible to guide and maintain its substantive materials and policy-making. While the executive level will play roles as technical team who maintain the regular agenda work, updating data and regular evaluating achievement.

EXAMPLE: STRUCTURE OF POKJA IN MAKASSAR

**Mayor of Makassar**

**Advisory Board**

**Leader:** Sekda Kota Makassar  
**Secretary:** Kepala BAPPEDA Kota Makassar  
**Anggota:**  
- Head of BPBD  
- Head of DPU  
- Head of Dikpora  
- Head of DTRB  
- Head of DKP3  
- Head of BPS  
- Head of PDAM  
- Head of BLHD  
- Head of DINAS

**Executive Team**

**Mitigation and Adaptation**  
**Leading Agency:** BPBD (Kepala Bidang Mitigasi dan Kebencanaan)  
**Member:** BPBD, BLHD, DPU, DTRB, DKP, dan DKP3

**Emergency and Post-Disaster**  
**Leading Agency:** DINAS SOSIAL / BPBD  
**Member:** DINAS SOSIAL, BPM,

**Data and Monitoring**  
**Leading Agency:** BAPPEDA (Bagian Statistik dan Pelaporan)  
**Member:** BAPPEDA, BPS, BMKG, BLHD, dan LSM
**NEXT STEPS**

**MOVING FROM PLANNING TO IMPLEMENTATION**

Once the UCRMP planning process is completed, the next stage is to ensure that the strategies and projects can be implemented. This task falls largely to POKJA and city leadership to approve the plans. POKJA should continue to advocate and justify the inclusion of the projects when they are defended in the annual and medium-term budget review. They also have the task of ensuring coordination amongst government departments. Moving from planning to implementation can be a political process, so it is important that POKJA is able to raise awareness amongst key decision-makers and leverage political influence to ensure that climate change resilience is prioritized.

**REMEMBERING THAT CCVA IS THE FOUNDATION FOR THE UCRMP**

It is also important to remember that the UCRMP is the second stage of our planning process, and depends on the foundational framework laid out from the CCVA. The CCVA Manual linked issues of gender injustice, climate change hazards, and urbanization to broaden our perspectives on vulnerability. These perspectives must be recognized in the creation, implementation, and evaluation of UCRMP outcomes. Readers of this manual should also be sure to read the CCVA manual to inform the UCRMP process.

**CONCLUSION**

Hopefully this manual has provided clear, useful steps for implementing an Urban Climate Risk Management Plan through the POKJA working group. While this manual draws from our experiences in Makassar and Kupang, we hope working groups like POKJA can help other Indonesian cities meet their resiliency goals, by making government-community efforts more efficient, powerful, transparent, and unified.