





Resilience



NAGA CITY DISASTER RISK REDUCTION AND MANAGEMENT PLAN 2023-2028

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Acronyms and Abbreviations

AIP	Annual Investment Program
APP	Annual Procurement Plan
ACDV	Accredited Community Disaster Volunteer
BDRRMC	Barangay Disaster Risk Reduction and Management Council
BFP	Bureau of Fire Protection
CCA	Climate Change Adaptation
CCC	Climate Change Commission
CDRA	Climate Disaster Risk Assessment
CDRRMO	City Disaster Risk Reduction and Management Office
CDRRMC	City Disaster Risk Reduction and Management Council
CDRRMP	City Disaster Risk Reduction and Management Plan
CLUP	Comprehensive Land Use Plan
DSWD	Department of Social Welfare and Development
IDP	Internally Displaced Person
LCCAP	Local Climate Change Action Plan
LCE	Local Chief Executive
LDRRMC	Local Disaster Risk Reduction and Management Council
LDRRMF	Local Disaster Risk Reduction and Management Fund
LDRRMO	Local Disaster Risk Reduction and Management Office
LDRRMFIP	Local Disaster Risk Reduction and Management Fund Investment Program
LGU	Local Government Unit
NGO	Non-Government Organization

M&E	Monitoring and Evaluation
OCD	Office of Civil Defense
PAGASA	Philippine Atmospheric, Geophysical and Astronomical Services Administration
PDAO	Persons with Disability Affairs Office
PPAs	Programs, Projects, Activities
QRF	Quick Response Fund

Definition of Terms

Adaptation – the adjustment in natural human systems in response to actual or expected climatic stimuli or their effects which moderates harm or exploits beneficial opportunities.

Capacity – a combination of all strengths and resources available within a community, society or organization that can reduce the level of risk or effects of a disaster. Capacity may include infrastructure and physical means, institutions, societal coping abilities, as well as human knowledge, skills and collective attributes such as social relationships, leadership and management. Capacity may also be described as capability.

Civil Society Organizations (CSOs) - non-state actors whose aims are neither to generate profits nor to seek governing power, CSO's unite people to advance shared goals and interests. They have a presence in public life, expressing the interests and values of their members or others, and are based on ethical, cultural, scientific, religious or philanthropic considerations. CSO's include nongovernment organizations (NGO's), professional associations, foundations, independent research institutes, community-based organizations (CBO's), faith-based organizations, people's organizations, social movements, and labor unions.

Community-Based Disaster Risk Reduction and Management (CDRRM) - a process of disaster risk reduction and management in which at risk communities are actively engaged in the identification, analysis, treatment, monitoring and evaluation of disaster risks in order to reduce their vulnerabilities and enhance their capabilities, and where the people are at the heart of decision-making and implementation of disaster risk reductions and management activities.

Contingency Planning - a management process that analyzes specific potential events or emerging situations that might threaten society or the environment and establishes arrangements in advance to enable timely, effective and appropriate responses to such events and situations.

Disaster - a serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which

exceeds the ability of the affected community or society to cope using its own resources. Disasters are often described as a result of the combination of the exposure to a hazard; the condition of vulnerability that are present; and insufficient capacity or measures to reduce or cope with the potential negative consequences. Disaster impacts may include loss of life, injury, disease and other negative effects on human, physical and social well-being, together with damage to property, destruction of assets, loss of services, social and economic disruption and environmental degradation.

Disaster Mitigation - the lessening or limitation of the adverse impacts of hazards and related disasters. Mitigation measures encompass engineering techniques and hazard-resistant construction as well as improved environmental policies and public awareness.

Disaster Preparedness - the knowledge and capacities developed by governments, professional response and recovery organizations, communities and individuals to effectively anticipate, respond to and recover from, the impacts of likely, imminent or current hazard events or conditions. Preparedness action is carried out within the content of disaster risk reduction and management and aims to build the capacities needed to efficiently manage all types of emergencies and achieve orderly transitions from response to sustained recovery. Preparedness is based in a sound analysis of disaster risk and good linkages with early warning systems, and includes such activities as contingency planning, stockpiling of equipment and supplies, the development of arrangements for coordination, evacuation and public information, and associated training and field exercises. These must be supported by formal institutional, legal and budgetary capacities.

Disaster Prevention – the outright avoidance of adverse impacts of hazards and related disasters. It expresses the concept and intention to complexly avoid potential adverse impact through action taken in advance such as construction of dams or embankments that eliminate flood risks, land-use regulations that do not permit any settlement in high- risk zones, and seismic engineering designs that ensure the survival and function of a critical building in any likely earthquake.

Disaster Response - the provision of emergency services and public assistance during or immediately after a disaster in order to save lives reduces health impacts, ensure

public safety and meet the subsistence needs of the people affected. Disaster response is predominantly focused on immediate and short-term needs and is sometimes called “disaster relief”.

Disaster Risk - the potential disaster losses in lives, health status, livelihood, assets and services, which could occur to a particular community or a society over some specified future time period.

Disaster Risk Reduction - the concept and practice reducing disaster risks through systematic efforts to analyze and manage the causal factors of disasters, including reduced exposures to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events.

Disaster Risk Reduction and Management - the systematic process of using administrative directives, organizations and operational skills and capacities to implement strategies, policies and improved coping capacities in order to lessen the adverse impacts of hazards and the possibility of disaster. Prospective disaster risk reduction and management refers to risk reduction and management activities that address and seek to avoid the development of new or increased disaster risks especially if risk reduction policies are not put in place.

Disaster Risk Reduction and Management Information System - a specialized database which contains among others, information on disaster and their human material, economic and environmental impact, risk assessment and mapping vulnerable groups.

Early Recovery - multi-dimensional process of recovery that begins in a humanitarian setting. It is guided by development principles that seek to build on humanitarian programs and catalyze sustainable development opportunities. It aims to generate self-sustaining, nationally-owned, resilient process for post-crisis recovery. It encompasses the restoration of basic services, livelihoods, shelter, governance, security and rule of law, environment and social dimensions, including reintegration of displaced populations.

Evacuation- The planned movement of persons from an unsafe or potentially unsafe

location to a safer location and their eventual return.

Evacuation Centre- A building located beyond a hazard to provide temporary accommodation, food and water until it is safe for evacuees to return to their homes or alternative temporary emergency accommodation.

Exposure- The elements within a given area that have been, or could be, subject to the impact of a particular hazard. Exposure is also sometimes referred to as the 'elements at risk'

Hazard- A process, phenomenon or human activity that may cause loss of life, injury or other health impacts, property damage, social and economic disruption or environmental degradation..

Mitigation- Measures taken in advance of a disaster aimed at decreasing or eliminating its impact on society and the environment.

Monitoring- Continual checking, supervising, critically observing or determining the status to identify change from the performance level required or expected. Monitoring can be applied to a risk management framework, risk management process, risk or control.

Natural hazard- Those which are predominantly associated with natural processes and phenomena.

Preparedness - The taking of preparatory measures to ensure that, if an event occurs, communities, resources and services are able to cope with the effects of the event.

Prevention- The taking of preventative measures to reduce the likelihood of an event occurring or, if an event occurs, to reduce the severity of the event.

Recovery- The taking of appropriate measures to recover from an event, including the action taken to support disaster-affected communities in the reconstruction of infrastructure, the restoration of emotional, social, economic and physical wellbeing, and the restoration of the environment.

Resilience - A system or community's ability to rapidly accommodate and recover from the impacts of hazards, restore essential structures and desired functionality, and adapt

to new circumstances.

Response- The taking of appropriate measures to respond to an event, including action taken and measures planned in anticipation of, during, and immediately after an event to ensure that its effects are minimized and that persons affected by the event are given immediate relief and support.

Risk- The concept of risk combines an understanding of the likelihood of a hazardous event occurring with an assessment of its impact represented by interactions between hazards, elements at risk and vulnerability.

Risk assessment- An approach to determine the nature and extent of risk by analyzing potential hazards and evaluating existing conditions of vulnerability that together could potentially harm exposed people, property, services, livelihoods and the environment on which they depend.

Risk identification- The process of finding, recognizing and describing risks. Risk identification involves the identification of risk sources, events, their causes and their potential consequences. Risk identification can involve [the use of] historical data, theoretical analysis, informed and expert opinions and stakeholders' needs.

Risk management- The systematic application of management policies, procedures and practices to the tasks of identifying, analyzing, assessing, mitigating and monitoring risk.

Standard Operating Procedures- A set of directions detailing what actions could be taken, as well as how, when, by whom and why, for specific events or tasks.

Vulnerability- Vulnerability in relation to disaster events is a fluid and complex concept.

EXISTING DRRM-CCA RELATED POLICIES, GUIDELINES, RESOLUTIONS

International Bases

- Sendai Framework for Disaster Risk Reduction- focuses on the adoption of measures which address the three dimensions of disaster risk (exposure to hazards, vulnerability and capacity, and hazard's characteristics) in order to prevent the creation of new risk, reduce existing risk and increase resilience.
- 2030 Agenda for Sustainable Development- This Agenda includes a new universal set of 17 goals, 169 targets and indicators that UN member states are expected to use to frame their agendas and political policies over the next 15 years.

This Agenda is a plan for action for people, planet, and prosperity. It also seeks to strengthen universal peace in larger freedom. All countries and all stakeholders, acting in collaborative partnership will implement this plan.

The key principles underlying this Agenda are the following:

- National ownership
 - Universality
 - Leaving no one behind
 - Human rights-based approach
 - Inclusive and participatory
 - Integrated approach
- Paris Agreement on Climate Change- central aim is to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. Additionally, the agreement aims to strengthen the ability of countries to deal with the impacts of climate change. To reach these ambitious goals, appropriate financial flows, a new technology framework and an enhanced capacity building framework will be put in place, thus supporting action by developing countries and the most vulnerable countries, in line with their own national objectives. The Agreement also provides for enhanced transparency of action and support through a more robust transparency framework
 - New Urban Agenda- is an action-oriented document that mobilizes Member States and other key stakeholders to drive sustainable urban development at the local level.

National

- Republic Act 10121 (Philippine Disaster Risk Reduction and Management Act of 2010 (DRRM Act) – providing for the National Disaster Risk Reduction and Management Framework and institutionalizing the National Disaster Risk Reduction and Management Plan, appropriating funds therefor and for other purposes
- Climate Change of 2009- this Act aims to integrate disaster risk reduction measures into climate change adaptation plans, development and poverty reduction programs. It recognizes the vulnerability of the Philippine archipelago and its local communities, particularly the poor, women, and children, to potential dangerous consequences of climate change such as rising seas, changing landscapes, increasing frequency and/or severity of droughts, fires, floods and storms, climate-related illnesses and diseases, damage to ecosystems, biodiversity loss that affect the country's environment, culture, and economy.
- Hyogo Framework for Action is a comprehensive, action-oriented response to international concern about the growing impacts of disasters on individuals, communities & national development.

Local

- Ordinance NO. 2014-018- An Ordinance creating the Naga City Disaster Risk Reduction and Management Office subject to all laws and existing legal rules and regulations and providing funds thereof
- Executive Order 2022-021- Reconstituting the Naga City Disaster Risk Reduction and Management Council
- Executive Order NO. 2019-018- Creating the Naga City Search and Rescue Unit (SARU) in the City of Naga, providing for its composition, office and functions and for other purposes

INTRODUCTION

The Philippines, being in the so-called Circum Pacific belt of fire and typhoon, has always been subjected to constant disasters and calamities. The great ocean and seas around the country, while providing wide avenues for international trade and commerce, and a source of tremendous marine resources also serve as the spawning areas of destructive typhoons and monsoons, as well as geologic hazards. In whatever part of the country we are located, the possibility of our experiencing the gloom and the stark reality of disasters such as typhoons, floods, flash floods, earthquakes and man-made disasters such as fire and conflagration, etc, their resultant toll in lives and properties, is always present. Everyone, even in the safety of his home, has not been spared the sight, now the feeling of loss by the terrific disasters and calamities, not as an abstract tragedy, but in the pictures of stunned faces of the survivors.

Background

Naga City is centrally located in the province of Camarines Sur and nestles at the foot of Mt. Isarog. It is about 460 kilometers south of Manila and about 110 kilometers north Legazpi City. It has a total land area of approximately 7,748 hectares but much of the area or about 5,835.02 hectares are still classified as agricultural lands. The population census of 2010 is about 167,972 and the number of households is 63,632. The population density per hectare in urban is 49 persons/hectare while in rural is 3.6/Person/hectare.

All over the country, environmental risk exists if an area is exposed in a certain levels of danger because of its geography, physical features or proximity particularly to typhoon and flooding. In the Philippines there is an average of 19 typhoons every year visiting the country. It threatens the lives of people, crops and livestock. It destructs properties; public and private properties are destroyed especially if storm winds become too strong. Here in Naga City 17 barangays are situated in the flood prone areas and 10 barangays are threatened by strong winds and flash floods due to its location in the upper part of the city.

With this present condition, The Naga City Disaster Mitigation Program addresses the three faces of disaster, the Pre-disaster, during and after disasters, the Post Disaster Stage.

Naga City with its vision, "Naga SMILES to the World", we need to ensure safety of the lives, buildings, properties, and Life Line Facilities which will encourage more investments, thus improving the city's economic growth through sustainable

development, Thus the we share a common vision “Making Naga City Safer ... Before Disaster Strikes.

Situationer

Naga City is located in the floodplains of Camarines Sur and its urban area was said to be part of San Miguel Bay itself thousands of years ago. The city’s topographic features clearly show that its urban core is in the lowest lying end of the city’s land area. All of the buildup area in the city is within the 0 to less than 5-meter elevation, making the present urbanized area prone to flooding.

Based on the flood hazard map, the flood prone area of Naga City covers about 800 ha. Spread over the 17 out of the 27 barangays of the city. The area affected may appear small relative to the total land area of the city (10% of the total). Given this area is inhabited by 85% of the city’s aggregate population and the site of most of the main economic activities, the impact of flooding hazard becomes highly significant. For all the flood return period analyzed, the extent of flooding is widespread and disastrous. Most of the flooded areas are located in the vicinity of the Bicol and Naga Rivers on the western side of Naga City. The depth of flooding varies from less than a meter, to more than three meters which was recorded in barangay Triangulo, Sabang and Mabolo.

The 10 remaining barangays are prone to wind hazard. They are categorized as high hazard area in view of their location and relatively open as well as dispersed settlements. Overall, about 24% of houses or 7,270 out of 29,208 houses are at high risk due to wind hazards at various return periods. (See Hazard Maps)

Leadership Structure

Pursuant to the IRR of the RA 10121, otherwise known as the Philippine Disaster Risk Reduction and Management Act of 2010, the Naga City Disaster Risk Reduction and Management Council was created through the Executive Order No. 2010-017, on August 24, 2010. Likewise, the Local Disaster Risk Reduction and Management Office was also created and was integrated with the Naga City Public Safety Office since that the Ordinance created the office has already an existing DRRM prior to the RA 10121. The equipment and resources as well as the trained personnel are with the Public safety Office. The functional staffing structure conforms to the provisions of the law, and

this structure was functioning since then, with proficiency and effectiveness in delivering emergency services. Since then, skills proficiency of the staff was upgraded and training was conducted among the personnel. Each personnel are capable of delivering emergency response, whether it is medical, water induced hazards, multi terrain and mass casualty. The LGU implements the Incident Command System as well as integrating the Inter – Agency Joint Operations Center and establishing the unified command, engaging multi agency coming from both National and local government as well as non-government and private organizations, and successfully putting in place the efficient Incident Command System using the Inter Agency –Joint Operations Center approach. The Incident Management Team was trained and organized, where LCE is the designated Incident Commander, in case it is a planned event the IC delegated to the incident manager where the event taking place. Other Structures remains as well as the effectiveness of the command.

PHYSICAL PROFILE

Geographic location. Naga City is centrally located in the province of Camarines Sur, about 377 kms south of Manila and 100 kms north of Legazpi City, Albay. Nestled at the foot of Mt. Isarog, the city has a total land area of 8,448 hectares or 84.46 sq kms.

On the Philippine Map, it is placed between 13 to 14° North Latitude and between 123 to 124° East Longitude. It is bounded on the North by the towns of Canaman, Magarao and Calabanga; on the East by Mt. Isarog; on the South, by Milaor and the capital town of Pili; and on the West by the town of Camaligan.

Topography. The city's terrain generally slopes upward from west to east. Its city center, trisected by the Bicol and Naga rivers which are fed by creeks and riverines that crisscross the city, is located near its lowest point, making it susceptible to flooding when unusually heavy rainfall causes these waterways to overflow.

Slope suitability. The low flatlands from the city center up to the upper barangays of Pacol and San Isidro at foot of Mt. Isarog have slopes of 0-3% (almost level) to 3-8% (nearly level to slightly sloping). Collectively, they account for 58% of the total land area.

On the other hand, the eastern part covering barangay Carolina has slopes of 8-18% while Panicuason, which includes the Forest and Parks Reserve of Mt. Isarog that forms part of the National Integrated Protected Areas System (NIPAS), has the steepest from 18-30% and above.

Climate and rainfall. Naga's climatic type falls under Type II under the Modified Coronas classification. This condition is characterized by a definite absence of dry season and a very pronounced maximum rain period from November to January. Under the Köppen climate classification system, this is equivalent to a tropical savanna climate. It is characterized by monthly mean temperatures above 18 °C in every month of the year and typically a pronounced dry season, with the driest month having precipitation less than 60 mm.

Between 2005 and 2014, the city had an average annual rainfall of 2,450 mm, ranging between a low of 2,083 mm (2007) and a high of 3,393 mm (2011). The 10-year average represents a 19% increase over the 2,104 mm recording during the previous planning period. September to December are usually the wettest, while February and April are the driest. During the same period, mean temperature ranged between a low of 23.4 to a high of 31.3 °C, or an annual average of 26.8 °C.

Typhoons. Naga, as is the whole of Bicol Region, is susceptible to typhoons, lying in the usual east-to-northwest path taken by these weather disturbances that regularly visit the Philippines. Between 2005 and 2016, an average of 18 typhoons entered the Philippine area of responsibility – from a high of 25 in 2013 to a low of 11 in 2010.

While most hardly caused material damage to the city, they remain a threat. In fact, 13 of the 16 strongest typhoons that hit the Philippines from 1947-2016 all passed through Bicol. Three of these took place between 2006 and 2016: "Reming" (Durian) on November 30, 2006, whose winds peaked at 320 kph; "Glenda" (Rammasun) on July 15, 2014, with maximum winds of 215 kph; and "Nina" (Nock-Ten) on December 25, 2016, with maximum winds of 250 kph.

Table 3.1. Most Intense Typhoons that Hit the Bicol Region, 1947-2006

Name	Period of Occurrence	Highest Wind Speed Recorded (in km/hr.)	Distance from Naga City (in km.)
1. STY Reming (Durian)	Nov 26 - Dec 1, 2006	320	15 - South
2. STY Sening (Joan)	Oct 11 - 15, 1970	275	Direct Hit
3. STY Rosing (Angela)	Oct 30 - Nov 4, 1995	260	40 - North
STY Anding (Irma)	Nov 21 - 27, 1981	260	30 - NE
4. STY Nina	Dec 20 - 28, 2016	250	
STY Loleng (Babs)	Oct 15 - 24, 1998	250	35 - NNE
5. STY Sisang (Nina)	Nov 23 - 27, 1987	240	30 - SW
STY Saling (Dot)	Oct 15 - 20, 1985	240	70 - North
STY Herming (Betty)	Aug 7 - 14, 1987	240	70 - SSW
STY Yayang (Vera)	Nov 04 - 07, 1979	240	90 - NE
6. TY Harriet	Dec 28, 1959 - Jan 2, 1960	225	Direct Hit
7. TY Glenda	July 9 - July 20, 2014	215	
TY Trix	Oct 16 - 23, 1952	215	22 - North
TY Unsang (Ruby)	Oct 21 - 26, 1988	215	100 - NE
8. TY Warling (Orchid)	Nov 17 - 27, 1983	205	180 - NE
TY Welming (Emma)	Oct 31 - Nov 08, 1967	205	20 - SW
9. STY Yoling (Patsy)	Nov 17 - 20, 1970	200	90 - North
10. STY Dindo (Nida)	May 13 - 19, 2004	185	117 - ENE
STY Kading (Rita)	Oct 25 - 27, 1978	185	90 - North
TY Huaning (Ruby)	Jun 22 - Jul 2, 1976	185	70 - NE
11. TY Milenyo (Xangsane)	Sep 25 - 30, 2006	180	30 - SW
12. TY Dinang (Lee)	Dec 23 - 28, 1981	175	60 - South
TY Yoning (Skip)	Nov 3 - 12, 1988	175	150 - SW
13. TY Monang (Lola)	Dec 2 - 7, 1993	170	35 - North
14. TY Didang (Olga)	May 12 - 27, 1976	150	200 - North
TY Fran	Dec 27, 1950 - Jan 1, 1951	150	30 - North
TY Jean	Dec 22 - 29, 1947	150	Direct Hit
15. TY Unding (Muifa)	Nov 14 - 21, 2004	130	5-10 - East
TY Konsing (Ora)	Jun 23 - 25, 1972	130	20 - SW
TY Bebung (Vera)	Jul 12 - 16, 1983	130	30 - SW
16. TY Saling (Dan)	Oct 6 - 13, 1989	120	15 - SW

Source: Weather Philippines Foundation

CHAPTER II. Institutional

Institutionalization of the LDRRM organization is an essential element in the formulation of the DRRM plan and the its implementation, monitoring and evaluation. Hence, there must be cooperation among and between LDRRMO, and other department of the city government such as the CSWDO, CAGGO, City Agriculture Office, City Health Office, CENRO, PSO, CEPPIO, PDAO, DepEd, BDRRMC and Accredited Community Disaster Volunteers among others, in the implementation of CDRRM Plan.

The CDRRMC shall actively participate in local policy proposals including discussions and decisions relative to formulation, amendment and/or modifications of local policies pertinent to local disaster risk reduction especially in four thematic areas' programs namely; disaster prevention and mitigation, preparedness, response and rehabilitation and recovery;

LDRRMC ORGANIZATIONAL STRUCTURE

Pursuant to Executive Order No. 2022-021 issued by the City Mayor dated _____, the composition of the Naga City Disaster Risk Reduction and management Council are the following:

- The City Mayor as the Chairperson of the LDRRM Council
- The Local Disaster Risk Reduction and Management Officer
- The Local Planning and Development Officer
- The City Health Officer
- The City Social Welfare and Development Officer
- The City Agriculturist
- The City Environment and Natural Resources Officer
- The City Budget Officer
- The City Population and Nutrition Officer
- The Public Safety Officer
- The City Engineer

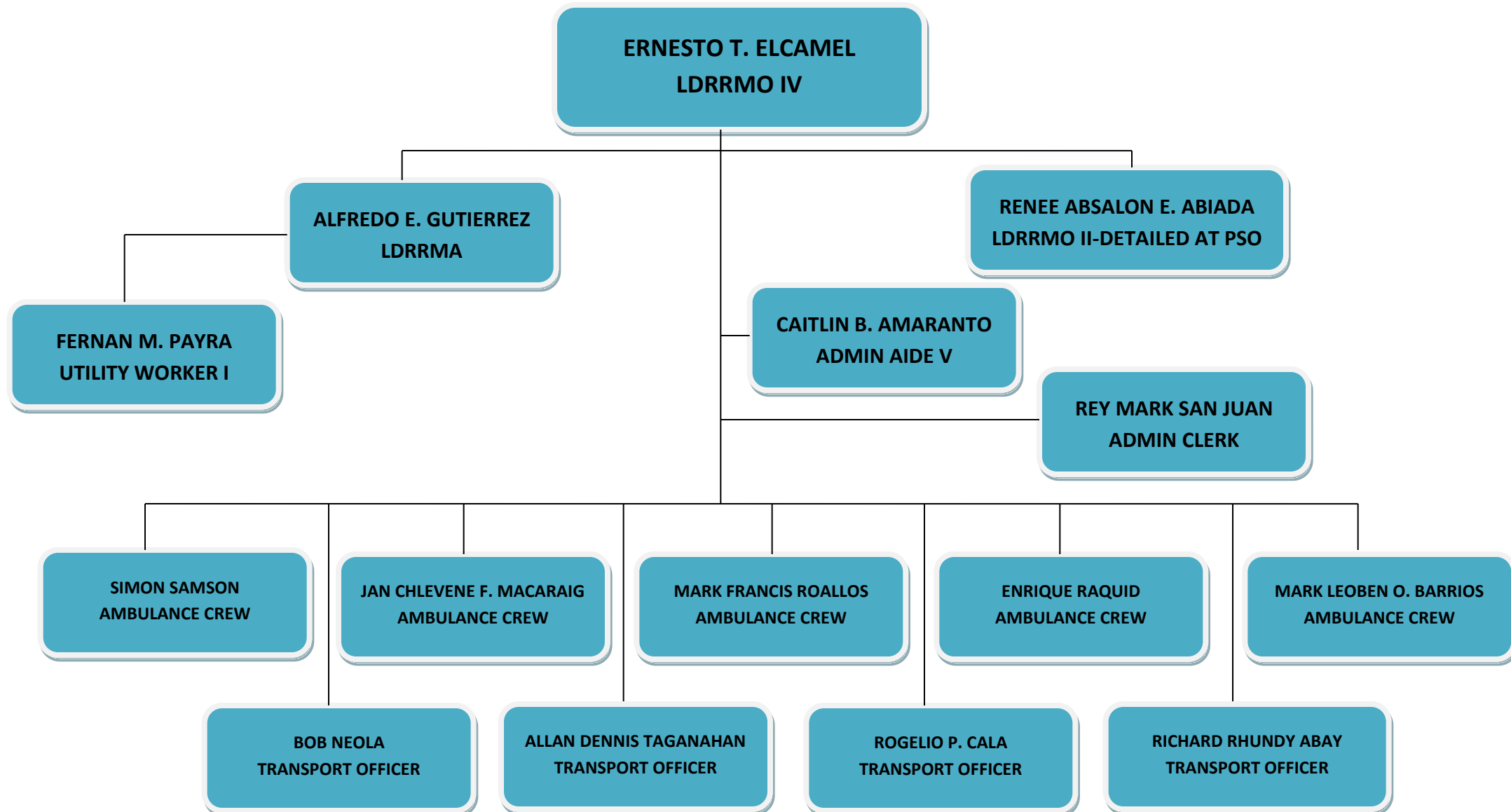
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- The City Events, Programs and Protocols Information Officer
- The City Veterinarian
- The City Solid Waste Management Officer
- The City General Services Officer
- The Persons with Disability Officer
- The Head/ Officer-Department of Interior and Local Government
- The City Fire Marshall of the Bureau of Fire Protection
- The City Chief of Naga City Police Office
- The City Councilor (Committee on Public Safety and Disaster Preparedness)
- Executive Director of Philippine Red Cross-Camarines Sur Chapter
- The Head of Department Education-Naga City
- The President of the Liga ng mga Barangay
- The President of the SK Federation
- The Metro Naga Chamber of Commerce and Industries President-
- The Naga City Peoples Council
- The FMAG Philippines
- The Religious Sector Representative
- The Communications Group Volunteer

The Naga City Disaster Risk Reduction and Management Council shall have the following tasks and functions:

- Disaster Risk Reduction and Management policy recommendatory body to Sangguniang Panlungsod;
- Approve, monitor and evaluate the implementation of the LDRRMPs and annually review, test and develop the plan consistent with other national and local planning programs;
- Ensure the integration of disaster risk reduction and climate change adaptation into local development plans, programs and budgets as a strategy in sustainable development and poverty reduction;
- Recommend the implementation of forced or pre-emptive evacuation of residents, if necessary

NAGA CITY DISASTER RISK REDUCTION AND MANAGEMENT OFFICE ORGANIZATIONAL STRUCTURE



DUTIES AND FUNCTIONS

The City Disaster Risk Reduction and Management Office (CDRRMO), in coordination with concerned national agencies and instrumentalities, shall perform the following functions with impartiality, given the emerging challenges brought by disasters of our times:

- Set the direction, development, implementation and coordination of disaster risk management programs within their territorial jurisdiction.
- Design, program, and coordinate disaster risk reduction and management activities consistent with the National Council's standards and guidelines;
- Facilitate and support risk assessments and contingency planning activities at the local level;
- Consolidate local disaster risk information which includes natural hazards, vulnerabilities, and climate change risks, and maintain a local risk map;
- Organize and conduct training, orientation, and knowledge management activities on disaster risk reduction and management at the local level;
- Operate a multi-hazard early warning system, linked to disaster risk reduction to provide accurate and timely advice to national or local emergency response organizations and to the general public, through diverse mass media, particularly radio, landline communications, and technologies for communication within rural communities;
- Formulate and implement a comprehensive and integrated Local Disaster Risk Reduction and Management Plan (LDRRMP) in accordance with the national, regional and provincial framework, and policies on disaster risk reduction in close coordination with the local development councils (LDCs);
- Prepare and submit to the local sanggunian through the Local Disaster Risk Reduction and Management Council (LDRRMC) and the LDC the annual Local Disaster Risk Reduction and Management Office (LDRRMO) plan and budget, the proposed programming of the Local Disaster Risk Reduction and Management Fund (LDRRMF), other dedicated disaster risk reduction and management resources, and other regular funding source/s and budgetary support of the LDRRMO/BDRRMC;
- Conduct continuous disaster monitoring and mobilize instrumentalities and entities of the Local Government Units (LGUs), Civil Society Organizations (CSOs), private groups and organized volunteers, to utilize their facilities and resources for the protection and preservation of life and properties during emergencies in accordance with existing policies and procedures;
- Identify, assess and manage the hazards vulnerabilities and risks that may occur in their locality;
- Disseminate information and raise public awareness about those hazards, vulnerabilities and risks, their nature, effects, early warning signs and counter-measures;
- Identify and implement cost effective risk reduction measures/strategies;
- Maintain a database of human resource, equipment, directories, and location of critical infrastructures and their capacities such as hospitals and evacuation

centers;

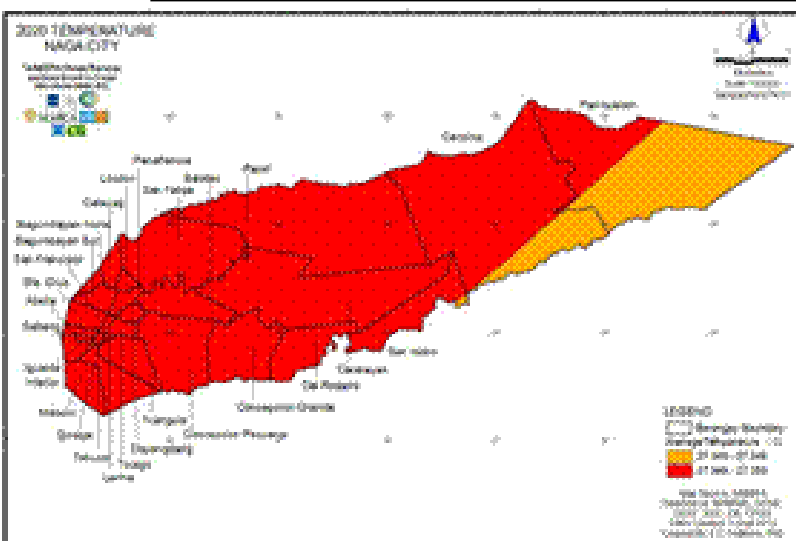
- Develop, strengthen and operationalize mechanisms for partnership or networking with the private sector, CSOs, and volunteer groups;
- Take all necessary steps on a continuing basis to maintain, provide, or arrange the provision of or to otherwise make available, suitably-trained and competent personnel for effective civil defense and disaster risk reduction and management in its area;
- Organize, train, equip and supervise the local emergency response teams and the Accredited Community Disaster Volunteers (ACDVs), ensuring that humanitarian aid workers are equipped with basic skills to assist mothers to breastfeed,
- Respond to and manage the adverse effects of emergencies and carry out recovery activities in the affected area, ensuring that there is an efficient mechanism for immediate delivery of food, shelter and medical supplies for women and children, endeavor to create a special place where internally-displaced mothers and children can find help with breastfeeding, feed and care for their babies and give support to each other;
- Within its area, promote and raise public awareness of and compliance with the Act and legislative provisions relevant to the purpose of the Act;
- Serve as the secretariat and executive arm of the LDRRMC;
- Coordinate other disaster risk reduction and management and activities;
- Establish linkage/network with other LGUs for disaster risk reduction and emergency response purposes;
- Recommend through the LDRRMC the enactment of local ordinances consistent with the requirements of this Act;
- Implement policies, approved plans and programs of the LDRRMC consistent with the policies and guidelines laid down in the Act;
- Establish a City Disaster Risk Reduction and Management Operations Center;
- Prepare and submit, through the LDRRMC and the LDC, the report on the utilization of the LDRRMF and other dedicated disaster risk reduction and management resources to the local Commission on Audit (COA) for provincial/city level and internal audit for municipal and component city level, copy furnished the regional director of the Office of the Civil Defense (OCD) and the Local Government Operations Officer of the Department of Local Interior Government (DILG); and
- Act on other matters that may be authorized by the LDRRMC.

LOCAL CLIMATE CHANGE SCENARIO

Precipitation, Temperature Change

Fig. 3.6 Projected Temperature (2020), Naga City

It is projected that the temperature of Camarines Sur, in which Naga City is a part, during the summer season will increase by 1.1°C for 2020 and by 2.2°C by 2050. There shall be longer El Nino spells. (Fig. 1.20)



Rainfall change.

Rainfall is projected to decrease by almost 15% during the summer months of

March, April and May for 2020 and by 25% for 2050. The projected highest rainfall increase is 9.5% during the rainy months of June, July and August for 2020 and by 16.5% for 2050. This means that Camarines Sur including Naga City will suffer more from heat stress and drought during the summer months for the years 2020 and 2050 while the province will experience more rainfall during the months of June, July and August for the two projected years. (See Table 1.17.)

The frequency of rainfall with greater than 300mm is projected at 4 days by 2020 and 11 days by 2050 which are much higher than the baseline observed value of only 1 day. This simply means more flooding days by 2020 which will further double by 2050. The number of dry days will decrease to 3,698 by 2020 and by 3,811 by 2050 from the observed baseline of Fig. 1.20. Projected Temperature (2020), Naga City 35 6,219 days. This means that Camarines Sur will have longer wet days than dry days in the near and distant future but with extreme El Nino spells.

Sea rising level.

The World Meteorological Organization (WMO) said the Philippines posted the highest average increase in sea levels, at 60 cms, against the global average of 19 cms since the year 1901. As Naga is in the mouth of Bicol River basin, the overflow coming from the Bicol River tributaries results to increase frequency and depth of flooding including the nearby towns downstream of Naga River.

Extreme events.

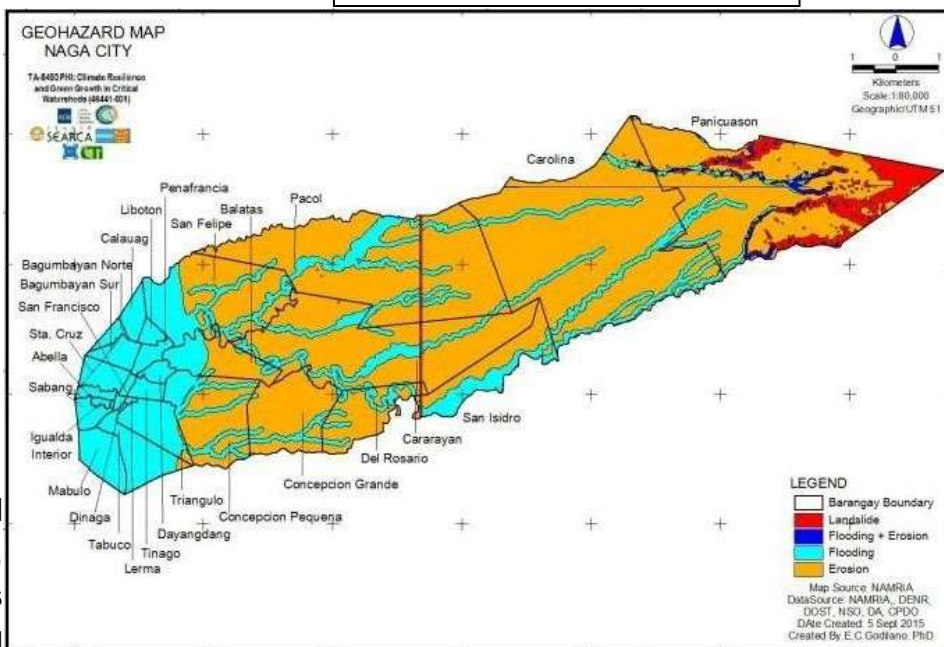
From 1948-2009 or for a total period of 61 years, Camarines Sur recorded a total of 114 tropical cyclones. Out of the 114 tropical cyclones recorded, 1 is considered as super typhoon, 56 typhoons, 35 tropical storms and 23 tropical depressions. The month of October had the most number of tropical cyclones with 26 occurrences and the months of February and April had the least with one occurrence each. From a range of 1 to 10 – 10 being the most vulnerable – Naga City got a score of 6.10 (WWF and BPI Foundation). It is second to Tacloban City (6.74) in being the city most vulnerable to climate change.

ELEMENTS, SECTORS AND INSTITUTIONS EXPOSED TO CLIMATE CHANGE IMPACTS

Under Hazard Exposure Assessment (HEA), existing hazards in the city and their potential future threats are examined considering not only hydrometeorological but also geological hazards that are of major concern to the local governments (Fig. 1.21).

The assessment centered on barangays, population, physical and natural assets that are exposed at varying degrees to different natural hazards.

Fig. 3.7 Hazards affecting Naga City



Barangays exposed to various hazards

- **Flooding.** Seventeen of the 27 barangays or 63% of the total number of barangays in the city have 90-100% of their area exposed to flooding.
- **Landslide:** On the other hand, only six out of the 27 barangays are exposed to landslides. These barangays include: Cararayan, Carolina, Del Rosario, Pacol, Panicuason, and San Isidro. The total area exposed to landslides comprises only 4% of the total area of the city. Two barangays in the city registered high exposure to erosion,

namely: Panicuason (100% of the barangay's total area); and Carolina (98%). About 32% of the city's total land area is exposed to slight erosion and 7% to moderate erosion.

- **Liquefaction.** About 11% of the total land area of the city is exposed to liquefaction. Most of these liquefaction prone areas are located on the western end of the city. Twelve barangays have their whole land area (100%) exposed to liquefaction.

Population exposed to various hazards

- **Flooding.** About 61% of the total population of the city is affected by flooding of different depths. Seventeen of the 27 barangays in Naga city have more than 90% of their total population exposed to floods. These barangays include Abella; Bagumbayan Norte; Bagumbayan Sur; Calauag; Dayangdang; Dinaga; Igualdad Interior; Lerma; Liboton; Mabulo; Penafrancia; Sabang; Sta. Cruz; Tabuco; Tinago; Triangulo; and San Francisco.

- **Landslide.** Of the total population of the city, less than one percent is exposed to landslides. Six barangays which were found to be exposed to landslides are: Cararayan; Carolina; Del Rosario; Pacol; Panicuason; and San Isidro. All these barangays have less than 1% of their total population exposed to landslides except Panicuason, which has 27% of its population exposed to landslides.

- **Liquefaction.** Forty-one percent (41%) of the total population of the city is exposed to liquefaction. The 13 barangays with 90-100% of their total area prone to liquefaction include: Abella (100%); Bagumbayan Sur (100%); Calauag (100%); Dinaga (100%); Igualdad Interior (100%); Liboton (100%); Sabang (99.97%); Mabulo (99.84%); San Francisco (99.78%); Sta. Cruz (99.73%); Lerma (97.71%); Bagumbayan Norte (99.70%); and Penafrancia (96.14%). Population exposed to various hazards such as flood, landslide and erosion is depicted in Figure 3.8

- **Flooding.** Seventeen of the 27 barangays or 63% of the total number of barangays in the city have 90-100% of their area exposed to flooding.

Physical assets of barangays exposed to hazards

Physical facilities exposed to flooding were identified and counted to be 73 in all. These facilities include food/store (14); Hospital/Clinic/Pharmacy (9); Government facilities (6); Police station (5); Motel/Hotel (8); Bank (9); Church (6); Gas Station (6); Tourist Attraction/Recreation (7); Bus Station/Stop/Repair (2); and Train Station (1). A total of 50 physical assets are also exposed to liquefaction. Others are as follows:

Fig. 3.9 Physical Assets exposed to various Hazards, Naga City

- Four bridges in the city are exposed to flooding. These bridges are located in Liboton, San Francisco, Igualdad Interior, and Tabuco. These bridges are also exposed to liquefaction.

- The city has 46 schools located in 17 barangays that are exposed to flooding. On the other hand, 24 schools located in 10 barangays are exposed to liquefaction.

- Of the total length of roads exposed to all types of hazards (i.e., flood, erosion and landslide), about 27% are exposed to flooding. Roads exposed to landslides are located in only two barangays in the city: Cararayan and Panicuason. In addition, about 21 km or 7% of the roads in the city is exposed to liquefaction.

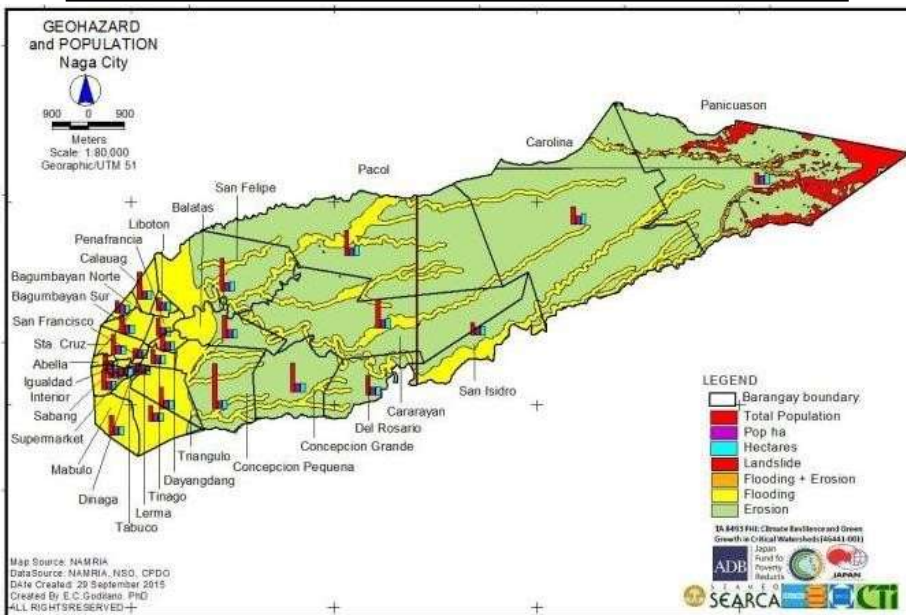


Figure 3.9 depicts the physical assets located in different barangays which are exposed to various hazards.

Land uses exposed to hazards

Total built-up areas exposed to various flooding depths comprise about 8% of the total city area. Of the total built-up areas exposed to flooding, about 8% is susceptible to deep floods of more than 1.5m depth. Three barangays are considered critical since more than 75% of their total built-up areas prone to floods are susceptible to deep flooding. These barangays are: Dinaga (82%); Mabulo (79%) and Tabuco (77%).

About 2,252 hectares of agricultural areas in the city that are planted to annual and perennial crops are exposed to flooding of various depths. Of the total agricultural areas that are exposed to flooding, 15% is affected by deep floods of more than 1.5m depth. Two barangays registered the largest proportion of agricultural areas that are exposed to deep flooding: Tabuco with 84% of its agricultural areas affected; and Mabulo with 74% affected.

SUMMARY FINDINGS OF VULNERABILITY ASSESSMENT (EXPOSURE, SENSITIVITY AND ADAPTIVE CAPACITY)

Sectoral CCVA Assessment, Health Sector

Diarrhea/diarrheal diseases. Twelve of the 27 barangays in Naga City have moderate vulnerability to a diarrhea outbreak. These include Mabolo, Tabuco, Triangulo, Abella, Bagumbayan Sur, Dayangdang, Igualdad Interior, Sabang, Santa Cruz, Tinago, Lerma, and Bagumbayan Norte, with the rest of the barangays having low vulnerability to a diarrhea outbreak. All barangays with moderate susceptibility to a diarrhea outbreak have the highest proportion of total population residing in flood-susceptible areas at > 60% to 80%

Dengue fever/dengue hemorrhagic fever. Twenty-three (23) barangays in Naga City have moderate vulnerability to an outbreak of dengue fever/dengue hemorrhagic fever while four, namely Carolina, Dinaga, Panicason, and Penafrancia have low vulnerability. The observed gradient in the vulnerability of barangays to a dengue fever outbreak can be explained – in part – by differences in sensitivity to the given climate change impact. In particular, barangays with low vulnerability to an outbreak of dengue fever / dengue hemorrhagic fever are among the barangays with the lowest susceptibility to flooding (< 0.1 meter), and the lowest proportion of total population residing in flood-susceptible areas.

Leptospirosis. Mabulo and Tabuco have moderate vulnerability while the rest of the barangays having low vulnerability to a leptospirosis outbreak. The observed gradient in the vulnerability of barangays to a leptospirosis outbreak can be explained – in part – by differences in sensitivity to the given climate change impact. In particular, Mabulo and Tabuco have the highest susceptibility levels to flooding (>1.5 meters) among barangays in Naga City.

Sectoral CCVA Assessment, Water Resources Sector

Drought. Overall, Naga City's water resources are moderately vulnerable to drought. Forest cover and land use attributes are factors that increase the drought susceptibility wherein, the built-up area is increasing in all directions from the center of the city. On the average, sixteen (16) barangays have built up area of 11 to 30% of the total land area while 31 to >50% of the total land area is already building up in eleven (11) barangays.

Flood. The water resources of Naga City is moderately vulnerable to flood with two barangays qualifying under the “high vulnerable” category: Mabolo and Triangulo. Both were found to have the largest portion of their total area (more than 90%) under the high inundation zones. Barangays that belong to higher limit of moderately vulnerability include Dayangdang, Dinaga, Igualdad Interior, Lerma, Sabang, San Francisco, Tabuco and Tinago. Barangay Penafrancia has no apparent flooding. However, its settlements and communities are located along or adjacent to the Bicol and Naga rivers thereby making it moderately vulnerable to floods. Panicuason registered the lowest vulnerable area to flooding mainly because 89% of its total area is located in rolling to hilly terrain. A review of the flood inundation maps would show that deep flooding would occur in the western portion of Naga City in the vicinity of Bicol and Naga rivers.

Sectoral CCVA Assessment, Transportation

Flooding. All of the city’s roads, which include primary roads situated in its western part, are vulnerable to flooding. Historically, the eastern portion, which part covers Mt. Isarog, is not prone to flooding. Within the sub-watershed, the city proper is located in the downstream area making it highly sensitive and exposed to inundation as water flows westward from eastern uplands. Roads in the following 7 barangays have high vulnerability to flooding based on the flood model results conducted by the Project: Cararayan; Carolina; Mabulo; Pacol; San Isidro; San Felipe; and Triangulo. The rest of the 20 barangays in the city have moderate vulnerability to floods.

Landslide. Generally, the whole city is not susceptible to landslides except for barangays Carolina and Panicuason. Some road segments in the following five (5) barangays are highly vulnerable to landslides: Cararayan; Carolina; Pacol; Panicuason; and San Isidro. The other 22 barangays have their road segments moderately vulnerable to landslides.

Liquefaction. Naga City has low to moderate vulnerability to liquefaction. Except for strips of land around the town and within Barangay Carolina, the city is less vulnerable to liquefaction. Historically, only one fifth of the city or the entire town proper, is susceptible to liquefaction. The land area outside the city proper and going eastward to Mt. Isarog, is not prone to liquefaction. Seven barangays have road segments with moderate vulnerability to liquefaction: Balatas; Calauag; Carolina; Concepcion Pequeña; San Felipe; Tabuco; and Triangulo. The other 20 barangays have low vulnerability to liquefaction. Overall, the road segment with highest vulnerability to liquefaction belongs to Triangulo, a barangay that is historically prone to the hazard.

Sectoral CCVA Assessment, Forestry sector

The barangays that were identified to harbor forests are Carolina, Pacol, Panicuason and San Isidro. The forestry sector of Naga City is composed of the forestry areas in the Mt. Isarog National Park (MINP) that are inside the administrative boundaries of the city. This consists of 484.02 hectares of closed broad leaved forest and 8.87 hectares of communal forest. The sector also includes the areas consisting of strips in river banks planted to trees and are part of the National Greening Project of the city. The findings are as follows:

- **Erosion.** The forests of all the four barangays (Carolina, Pacol, Panicuason and San Isidro) have moderate level of overall vulnerability to soil erosion. All the forests of the four barangays were rated to have moderate vulnerability to erosion.
- **Flooding.** Except for Barangay Panicuason, which has a low vulnerability to flooding, the other three forested barangays are moderately vulnerable to flooding when the rivers and tributaries traversing them swell and overflow.
- **Landslide.** The overall vulnerabilities to landslides of the forestry sector of the four barangays are moderate in Pacol, Panicuason and San Isidro. Carolina forestry sector has a high vulnerability to landslide.
- **Drought.** All four barangays (Carolina, Pacol, Panicuason and San Isidro) have high vulnerability to drought based on projected rainfall volume.
- **Wildfire.** Barangays Carolina and Pacol have moderate vulnerability to wildfire while Pacol and Panicuason have low vulnerability to wildfire.

Sectoral CCVA Assessment, Agriculture sector

Naga City remains primarily an agricultural community. Of the city's total land area of 8,448 has, around 4,550 (54%) is devoted to agriculture and the sector employs 14 percent of the total households. Eleven of the city's 27 barangays are crop production areas. These barangays include: Carolina (Upland/Hilly); San Isidro (Upland/Hilly); Cararayan; Pacol (Upland/Hilly); Panicuason (Upland/Hilly); San Felipe; Mabolo; Balatas; Concepcion Grande; Del Rosario; and Concepcion Pequeña.

Floods, Drought, Typhoons, Soil Erosion and Pests and Diseases. All the eleven 11 agriculture crop areas, namely: Carolina (Upland/Hilly); San Isidro (Upland/Hilly); Cararayan; Pacol (Upland/Hilly); Panicuason (Upland/Hilly); San Felipe; Mabolo; Balatas; Concepcion Grande; Del Rosario; and Concepcion Pequeña are moderately vulnerable to flood, drought, typhoon, soil erosion and pests and diseases.

SWOC ANALYSIS

ASSESSMENT AREA	INTERNAL ANALYSIS		EXTERNAL ANALYSIS	
	STRENGTH	WEAKNESS/PROBLEM	OPPORTUNITY	CHALLENGES
DISASTER PREVENTION AND MITIGATION				
	With existing SP Resolution and Ordinances	Stakeholders mis prioritize the needs	CSO, Academe, Local resilience council assistance	Presence of support from the Private sector
Financial Resources	Availability of LDRRM Funds	Programs not mandated and approved	Support from government & other agencies	Enforcement of DRRM Mainstreaming
Management/ Leadership	With structured leadership & management	Roll over of management thrusts to departments and Barangays	Availability of Support from stakeholders	Mainstreaming of Programs down to community level
PPA	Availability of hazard maps	Needs more appreciation of the stakeholders on the needs and usefulness of the Maps	Support from the academe in translating GIS maps to a more user friendly maps (Technology adopts to the needs of the community)	Barangay DRRM Focal persons gets the headway in using the maps and interpreted in their community .
	Availability of Hazard Specific Contingency Plans	Geographic Location (direct exposure to hazards) Undergoing repair and construction of flood mitigation projects	Willingness of other agencies to extend technical assistance	Direct exposure of adjacent and nearby LGUs to hazards
	Existence of Early Warning Equipment in hazard prone barangays	Limited number of EWS Limited control of the operation of early warning devices/ equipment	EWS for typhoon and flooding are located in flood prone areas for easy monitoring	Vulnerabilities and exposure to natural hazards
	Majority of the barangays have functional BDRRM Councils	Not all barangays have functional and established BDRRM Councils	Willingness of CSOs, NGOs and the local government to provide capability trainings	Lack of political will among barangay council

NAGA CITY DISASTER RISK REDUCTION AND MANAGEMENT PLAN 2023-2028

DISASTER PREPAREDNESS				
Individual, Family, community Preparedness	Trained, skilled & well-equipped personnel to conduct training	Lack of full time staff for the conduct of training	Partner Agencies willing to help in the conduct of training	Due to pandemic communities were able to understand that emergency preparedness is a must not for natural calamities
	Availability of Support from OCD-RDRRMC-CBTS	Lack of interest from stakeholders	With the new normal , trends in delivering training program gets new acceptance from stakeholders	The office will push thru with the new normal
	Capacitated LDRRM Personnel	Some regular positions within CDRRMO are not constituted	Employment opportunity for professional individual in the community	Limited personnel to respond during disasters and emergencies
	Availability of public schools, commercial bldngs, churches, and residential houses can serve as alternate evacuation center/ areas at times of disasters	Lack of Memorandum of Agreement with schools, commercial establishments, churches and residential houses	Possible MOA with school principals, owners of private establishments and residential houses	Urge the favorable and supports and participation of public and private partnership approaches
	Conduct of regular earthquake drills with private agencies and the barangay council	Insufficient DRR training especially those people in the barangay and private sector	Willingness of other stakeholders and private agencies for earthquake preparedness measures	Confusion and disorganize response during disasters
	Availability of rescue equipment	Rescue equipment not available in the barangay level	Willingness of the city government and	At the barangay level cannot respond on

NAGA CITY DISASTER RISK REDUCTION AND MANAGEMENT PLAN 2023-2028

	and vehicle at the city level		other stakeholders to provide necessary assistance	their own due to lack of equipment
	Presence of Ordinance on Pre-emptive and forced evacuation	The community unwillingness to evacuate and follow orders	Enforcement of the city ordinance	Poor appreciation of the people of the city ordinance
		No camp management coordination in the barangay level	Camp management capability building/ activities/ training	Institutionalizing the camp management coordination starting from the barangay level
DISASTER RESPONSE				
	Functioning ICS	Lack of ICS Training of personnel	Trainings conducted by other agencies (OCD) on ICS	No clear understanding of the roles and responsibilities of individuals
Capacity of DRRM Personnel	Designated well-trained CDRMO Personnel & volunteers	Lack of manpower, Multitasking of staff Lack of adequate & proper training	With support from OCD & other agencies	Commitment through conduct of regular trainings
PPAs	Use of DANA	Lack of participation of stakeholders	Clear guidelines on disaster relief, camp management & evacuation	Lack of coordination between the LGU and stakeholders
	Established mechanism for relief distribution	Lack of first responders from Barangay DRRM Committee	Available of emergency support from the City Government	Poor coordination mechanism with stakeholders
	Availability of heavy equipment use for response	Barangay are dependent on the availability of heavy equipment	Willingness of the City Government and private institutions to provide necessary assistance	Barangay cannot respond on their own immediately
DISASTER REHABILITATION AND RECOVERY				
Emergency	With existing	Lack of manpower		

NAGA CITY DISASTER RISK REDUCTION AND MANAGEMENT PLAN 2023-2028

rehabilitation programs and projects	infra & development plan			
		Prioritized PPA's validated thru PDNA and RDANA were not priority when implemented	Opens new avenue for reprogramming	CEO understands what are prioritized projects
	Accessibility of government offices to the communities	Geographic location	Increasing trade and commercial activities	Lack of appreciation for public-private partnership in the locality
	Standby funds for livelihood assistance	Livelihood and diverse option for residents are limited	Availability of agricultural assistance programs	Lack of livelihood option

THEMATIC AREA PLAN

1. DISASTER PREVENTION AND MITIGATION

Goal: Safer and Resilient populace against all forms of disasters

Objectives:

- To ensure zero casualty during disasters and emergencies
- To reduce the impacts of hazards
- To minimize damage in properties

Outcome 1: DRRM and CCA mainstreaming and integration in national, sectoral, regional and local development plans, policies and budget.

Indicators: Functional CDRRM Council and Office

Programs, Projects and Activities

- Establishment of functional CDRRM Office and Disaster Emergency Operations Center
- Procurement of supplies and equipment
- Establishment of the Incident Command System
- Conduct of Risk Assessment and updating of risk and hazards maps
- Conduct performance M&E to review and integrate DRR/CCA into various environmental policies
- Construction of permanent evacuation per clustered barangay with availability of stockpile

Outcome 2: End-to-End Monitoring System (Monitoring and Response), forecasting and early warning are established and/or improved

Indicators: Number of Early warning System (EWS) established and functional

Programs, Projects and Activities

- Installation of warning signages at hazard prone areas
- Installation of weather information boards
- Availability of communication equipment

2. DISASTER PREPAREDNESS

Goal: Establish and strengthen the capacities of communities to anticipate, cope, and recover from the negative impacts of disaster and natural calamities

Objectives:

- Increase awareness of the communities against all forms of hazards and disasters
- Increase knowledge and skills of communities to cope with the negative impacts of disasters
- Develop plans mainstreamed with other plans

Outcome 3: Increased level of awareness and enhanced capacity of community to the threats and impacts of all hazards

Indicators: Number of IEC activities conducted

Programs, Projects and Activities

- Development and reproduction and distribution of IEC Materials
- Conduct of IEC campaign Activities

Outcome 4: Communities are well equipped with the necessary skills and capability to cope with the impacts of disasters

Indicators: Institutionalized and equipped DRRM Personnel

Programs, Projects and Activities

- Provide training to the members of the vulnerable sectors in the community
- Conduct Trainings on Incident Command System
- Conduct skills training
- Conduct trainings, seminars and workshop on DRRM related topics

Outcome 5: Increased DRRM and CCA capacity of Local DRRM Council and Office at all levels

Indicators: Functional and operational LDRRM Council and Office

Programs, Projects and Activities

- Accreditation of CSOs and Volunteer Groups
- Organization of Youth School Based DRR Volunteers/ Groups
- Organize Women DRR Volunteers
- Organizing and institutionalization of BDRRM Committee
- Maintenance of DRRM Rescue Equipment and Supplies, EWS and Communication Equipment/ Devices

Outcome 6: Developed and implemented comprehensive national and local preparedness and response policies, plans and systems

Programs, Projects and Activities

- Conduct community based DRRM Planning workshop and formulation
- Conduct BDRRM Plan and enhancement sessions

- Conduct contingency planning workshops and formulation
- Identification of possible evacuation sites
- Allocation of funds for the inventory of vulnerable families
- Conduct of table top simulation exercises/ drills
- Conduct of refresher courses

3. DISASTER RESPONSE

Goal: Provide life preservation and meet the basic subsistence needs of affected population based on acceptable standards during or immediately after a disaster

Objectives:

- Immediate activation of necessary systems, procedures and protocols
- Effective and efficient delivery of basic services to the affected community

Outcome 7: Well establish disaster response operations

Indicators: Activated functional Incident Command System and timely, accurate and reliable information during disasters

Programs, Projects and Activities

- Activation of Incident Management Team and Disaster Emergency Operations Center
- DANA reports submitted
- Issuance of public advisories and weather updates
- Provision of food subsistence and relief goods to affected families

Outcome 8: Adequate and prompt assessment of needs and damages at all levels

Indicators: Rapid disaster assessment and needs analysis in all affected areas

Programs, Projects and Activities

- Activation and deployment of RDANA Teams

Outcome 8: Deployment of Rescue teams and activation of pre-emptive or forced evacuation

Indicators: Number of individuals or families rescued and evacuated

Programs, Projects and Activities

- Development and implementation of system for SRR
- Provision of temporary shelters for IDPs
- Establishment of child friendly and gender sensitive evacuation centers
- Establishment of community kitchen

4. DISASTER REHABILITATION AND RECOVERY

Goal: Restore and improved facilities, and living conditions and organizational capacities of affected communities, and reduce disaster risks in accordance with the “build back better” principle.

Objectives:

- To restore peoples continuity of economic activities and business
- To normalize life after disaster

Outcome 9: Damages, losses and needs assessed

Indicators: 90% of livelihood activities restored

Programs, Projects and Activities

- Conduct Post Disaster Needs Assessment
- Conduct formulation of strategic action planning for disaster affected areas
- Coordination with other agencies for livelihood assistance

NAGA CITY DISASTER RISK REDUCTION AND MANAGEMENT PLAN 2023-2028

Local Disaster Risk Reduction and Management Fund Investment Plan (LDRRMFIP)
SY 2023

City of Naga

Functional Classification (1)	Program/Project/Activity Code and Description (2)	Implementing Office (3)	Schedule of Implementation		Expected Output (6)	Funding Source (7)	Amount of Approb/ Allo		
			Starting Date (4)	Completion Date (5)			MOOE (8)	CO (9)	Total (10)
9- Other Purposes	94-Disaster Risk Reduction and Management Program								
	Creation of Disaster and Emergency Operations Center and CDRRMO Operations Center Database Management Program/ 911 Project	CDRRMO, CEO	January	December	Operational Disaster Emergency Operations Center with standard equipment and monitoring system	LDRRMF	100,000.00	500,000.00	500,000.00
	Infrastructure information/ Infrastructure audit	CDRRMO, CEO	January	December	Updating of Infrastructure Audit for government facilities	LDRRMF	100,000.00		100,000.00
	Insurance Premiums for vital government facilities	CDRRMO, GSO	January	December	Bolsters fiscal resilience, and provides predictable payout expectations and a solution to narrow the funding gap between available resources and postdisaster response costs for severe events.	LDRRMF	3,000,000.00		3,000,000.00
	Review and updating of the Barangay Contingency Plan and BDRRM Plan for multi hazards Profiling of barangays as to their risk and exposures	CDRRMO, LNB, BDRRMO	January	December	Institutionalized BDRRMOs & BDRRMCs	LDRRMF	150,000.00		150,000.00
	Attendance and participation to local, regional and national DRRM trainings, seminars, conferences, summits and expositions	CDRRMO	January	December	Massive barangay based DRR-CCA Community Education and Public Awareness One focal person per barangay in charge of DRRM related PPAs	LDRRMF	50,000.00		50,000.00
	Provide ICS Training to members of CDRRMC ; conduct training on DRRM-CCA	CDRRMO, LDRRM COUNCIL MEMBERS	January	December	Well trained and knowledgeable members of the LDRRM in Disaster Preparedness and Response	LDRRMF	500,000.00		500,000.00

NAGA CITY DISASTER RISK REDUCTION AND MANAGEMENT PLAN 2023-2028

1-General Public Services									-
	Construction of preventive/ mitigating structures	CDRRMO, CEO	January	December	Lesser incidence of flooding in the city	LDRRMF		32,600,000.00	32,600,000.00
	Construction and rehabilitation of infrastructure facilities and gender sensitive evacuation centers; establishment of child-friendly spaces or temporary learning area in the evacuation center	CEO, CDRRMO, NCCW, DSWDO	January	December	One permanent evacuation center per clustered barangay with gender friendly amenities / gender sensitive EC	LDRRMF			-
	Risk Analysis, Hazard identification and vulnerability assessment Updating of hazard maps	CDRRMO, LNB	January	December	Maps of barangay profiles, updated risk maps at city level Identified vulnerable facilities and infrastructure and people at risk hazard maps; Policy and institutional arrangements for disaster risk management and healthrelated emergencies, including social protection	LDRRMF	800,000.00		800,000.00
	Conduct drills and simulation exercises Earthquake drills Fire drills Evacuation drills	CDRRMO	January	December	Simulation drills in different barangays, schools and community conducted	LDRRMF	100,000.00		100,000.00
	Enhancement of community Preparedness - Skills Training and Development on Search and Rescue, First Aid, Extraction, CBDRRM, Simulation Drills/ Exercises, Contingency Planning & others.	CDRRMO, LNB	January	December	Increased skills and capabilities of volunteer groups in integrating gender perspective in community based disaster risk management	LDRRMF	100,000.00		100,000.00
	Conduct of lectures/ trainings/ seminars on handling women, children, PWD during disasters	CDRRMO, NCCW, PDAO, NCCFPWC	January	December	Integration of measures to address COVID 19 related gender issues and concerns	LDRRMF	500,000.00		500,000.00
	Conduct of emergency drills and simulation exercises	CDRRMO	January	December	Reduce/ zero casualty during disasters and calamities	LDRRMF	150,000.00		150,000.00
	Procurement and upgrading of emergency response vehicles and equipment and supplies	CDRRMO	January	December	Ready and safe quick response equipage	LDRRMF	200,000.00	250,000.00	450,000.00

NAGA CITY DISASTER RISK REDUCTION AND MANAGEMENT PLAN 2023-2028

	Support to CDRRMC and IMT Operations	CDRRMO	January	December	Manage the logistical, fiscal, planning, operational, safety and community issues related to the incident/	LDRRMF	1,000,000.00		1,000,000.00
	Improvement of early warning system Installation of Early Warning System and Enhancement Program	CDRRMO, DOST	January	December	Integrated Weather and Flood Monitoring System for the City of Naga	LDRRMF	200,000.00		200,000.00
	Repair and maintenance of rescue vehicle and equipment	CDRRMO	January	December	Responder vehicle well maintained	LDRRMF	100,000.00		100,000.00
	Establishment of Emergency Services	CDRRMO	January	December	Zero casualty during emergencies	LDRRMF	240,000.00		240,000.00
	Travelling expenses of personnel during emergencies, calamity response/ relief operations & trainings	CDRRMO	January	December	Quick response before, during and after disasters and calamities	LDRRMF	150,000.00		150,000.00
	Conduct of DRRM Competency Enhancement Programs, Trainings and Capability building	CDRRMO	January	December	Trained and certified emergency response teams with standard certification from concerned agencies	LDRRMF	500,000.00		500,000.00
						LDRRMF			-
4- Health									-
	Support to Ereid Programs	CDRRMO, CHO	January	December	Reduce the incidence of, or to eliminate, a particular disease by protecting individuals against the disease.	LDRRMF	1,000,000.00		1,000,000.00
	Formulation and updating of City DRRM Plan to include public health emergencies and NIE	CDRRMO, CPNO	January	December	Officially approved LDRRM Plans with budget Updated and compliant DRRM Plan	LDRRMF	100,000.00		100,000.00
	Initiate the formulation of COVID 19 response and rehabilitation framework for disease outbreaks and pandemics by harmonizing existing DRRM and crisis management framework	CDRRMO, CHO	January	December	To strengthen pandemic preparedness and response at the LGU level, the government will amend the local disaster risk reduction and management plans of LGUs to include business continuity	LDRRMF	500,000.00		500,000.00

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	DRRM for health	CDRRMO, CHO	January	December	Develop goals, strategies, plans and policies for ensuring an efficient syste, for managing emergencies and disaster in the health sector	LDRRMF	200,000.00		200,000.00
	Nutrition in emergencies	CDRRMO, CPNO	January	December	Reduction of recurring malnutrition and nutrition deficiency to victims of calamities and disasters	LDRRMF	200,000.00		200,000.00
	Dengue Infection Prevention Program	CDRRMO, CHO	January	December	To enhance Dengue prevention and control	LDRRMF	500,000.00		500,000.00
	Resilience of national government assets and LGUs to disaster and climate risks	CDRRMO, LNB	January	December	Resilient community and mitigate serious damage to individual families and communities	LDRRMF	610,000.00		610,000.00
	Purchase of CPR/ Training Mannequin	CDRRMO	January	December		LDRRMF	100,000.00		100,000.00
									-
3-Education									-
	Education in emergencies (Examining the role of DRR in educational achievement as well as the role of education in strengthening DRR efforts)	CDRRMO, DEPED	January	December		LDRRMF	300,000.00		300,000.00
									-
6-Housing & Community Development									-
Total								33,350,000.00	50,462,597.30

Prepared by:

Approved by:

ERNESTO T. ELCAMEL
LDRRM Officer IV

NELSON S. LEGACION
City Mayor

NAGA CITY DISASTER RISK REDUCTION AND MANAGEMENT PLAN 2023-2028

AIP Reference Code	Program/Project/Activity Description	Implementing Office/ Department	Implementing Schedule		Expected Outputs	Funding Source	PS	MOOE	CO	TOTAL
			Starting Date	Completion Date						
1000-21-9940 (1) 0	General Administration					DRRM Fund		0.10		0.10
1000-21-9940 (1) 1	Establishment of flood proof city	CDRRMO, CEO	January	December	Lesser incidence of flooding in the city	DRRM Fund				-
1000-21-9940 (1) 2	Construction of preventive/ mitigating structures	CDRRMO, CEO							32.60	32.60
1000-21-9940 (1) 3	Insurance Premiums for vital government facilities	CDRRMO, GSO	January	December	It bolsters fiscal resilience, and provides predictable payout expectations and a solution to narrow the funding gap between available resources and postdisaster response costs for severe events.	DRRM Fund		3.00		3.00
1000-21-9940 (1) 4	Infrastructure information/ Infrastructure audit	CDRRMO, CEO	January	December	Infrastructure assessed on structural integrity Enhanced disaster mitigation and preparedness strategies for infrastructural system	DRRM Fund		0.10		0.10
1000-21-9940 (1) 5	Construction and rehabilitation of infrastructure facilities and gender sensitive evacuation centers; establishment of child-friendly spaces or temporary learning area in the evacuation center		January	December	Retrofitting & build back better facilities, gender sensitive and child friendly spaces or temporary learning area in the evacuation center established					-
1000-21-9940 (1) 6	Creation of Disaster and Emergency Operations Center and CDRRMO Operations Center Database Management Program/ 911 Project	CDRRMO	January	December	Provide and coordinate warnings, disaster evacuation, asset inventory and emergency services integration	DRRM Fund		0.10	0.60	0.70
1000-21-9940 (1) 7	Review and updating of Barangay Plans and profiling barangays as to their risks and exposures	CDRRMO, LNB	January	December	Institutionalized BDRRMOs and BRDDMCs	DRRM Fund		0.15		0.15
1000-21-9940 (1) 8	Support to Ereid Programs	CDRRMO, CHO	January	December	Reduce the incidents, or to eliminate a particular disease by protecting individuals against the disease	DRRM Fund		1.00		1.00
1000-21-9940 (1) 9	Formulation and updating of City DRRM Plan to include public health emergencies and NIE	CDRRMO, CPNO	January	December	Updated and compliant DRRM Plan	DRRM Fund		0.20		0.20
1000-21-9940 (1) 10	Risk Analysis, Hazard identification and vulnerability assessment and updating of hazard maps	CDRRMO, LNB	January	December	Identified vulnerable facilities and infrastructure and people at risk hazards maps	DRRM Fund		0.80		0.80
1000-21-9940 (1) 11	Conduct drills and simulation exercises	CDRRMO	January	December	Disaster resilience and pandemic response of institutions and communities strengthened and financial preparedness for disasters improved	DRRM Fund		0.10		0.10
1000-21-9940 (1) 12	Resilience of national government assets and LGUs to disaster and climate risks	CDRRMO, NRC	January	December	Resilient community and mitigate serious damage to individual families and communities	DRRM Fund		0.61		0.61
1000-21-9940 (1) 13	Initiate the formulation of COVID 19 response and rehabilitation framework for disease outbreaks and pandemics by harmonizing existing DRRM and crisis management framework	CDRRMO, CHO	January	December	To strengthen pandemic preparedness and response at the LGU level, the government will amend the local disaster risk reduction and management plans of LGUs to include business continuity planning for public health emergencies	DRRM Fund		0.50		0.50
1000-21-9940 (1) 14	Enhancement of community Preparedness - Skills Training and Development on Search and Rescue, First Aid, Extraction, CBDRRM, Simulation Drills/ Exercises, Contingency Planning & others.	CDRRMO	January	December	Increased skills and capabilities of volunteer groups in integrating gender perspective in community based disaster risk management	DRRM Fund		0.10		0.10
1000-21-9940 (1) 15	Programs with Ordinance	CDRRMO, NCCFRPMO	January	December		DRRM Fund		2.00		2.00
1000-21-9940 (1) 16	DRRM for health	CDRRMO, CHO	January	December	Develop goals, strategies, plans and policies for ensuring an efficient system, for managing emergencies and disaster in the health sector	DRRM Fund		0.20		0.20

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1000-21-9940 (1) 17	Nutrition in emergencies	CDRRMO, CPNO	January	December	Reduction of recurring malnutrition and nutrition deficiency to victims of calamities and disasters	DRRM Fund		0.20		0.20
1000-21-9940 (1) 18	Dengue Infection Prevention Program	CDRRMO, CHO	January	December	To enhance Dengue prevention and control	DRRM Fund		0.50		0.50
1000-21-9940 (1) 19	Attendance and participation to local, regional and national DRRM trainings, seminars, conferences, summits and expositions	CDRRMO	January	December	Massive barangay based DRR-CCA Community Education and Public Awareness One focal person per barangay in charge of DRRM related PPAs	DRRM Fund		0.05		0.05
1000-21-9940 (1) 20	Provide ICS Training to members of CDRRMC ; conduct training on DRRM-CCA	CDRRMO	January	December	Well trained and knowledgeable members of the LDRRMC in Disaster Preparedness and Response	DRRM Fund		0.50		0.50
1000-21-9940 (1) 21	Education in emergencies (Examining the role of DRR in educational achievement as well as the role of education in strengthening DRR efforts)	CDRRMO, DEPED	January	December	Mainstream DRR into the education system, which includes programs, strategic framework, planning, institutional structure, facilities and infrastructures	DRRM Fund		0.30		0.30
1000-21-9940 (1) 22	Conduct of lectures/ trainings/ seminars on handling women, children, PWD during disasters	CDRRMO, NCCFPWC, NCW, PDAO	January	December	Integration of measures to address pandemic related gender issues and concerns	DRRM Fund		0.50		0.50
1000-21-9940 (1) 23	Massive Information, education and communication advocacy campaign regarding disaster, hazards and climate change	CDRRMO	January	December	Localized IEC/ Advocacy Materials were developed, reproduced, posted and distributed to 27 barangays	DRRM Fund		0.05		0.05
1000-21-9940 (1) 24	Protocol/ module formulation Development of core manual	CDRRMO	January	December	Protocols and modules developed and published for uniformity	DRRM Fund		0.05		0.05
1000-21-9940 (1) 25	Celebration of National Disaster Resiliency Month	CDRRMO	January	December	Raised awareness of DRRM among the public	DRRM Fund		0.20		0.20
1000-21-9940 (1) 26	Conduct of emergency drills and simulation exercises	CDRRMO	January	December	Reduce/ zero casualty during disasters and calamities	DRRM Fund		0.15		0.15
1000-21-9940 (1) 27	Procurement and upgrading of emergency response vehicles and equipment and supplies	CDRRMO	January	December	Sufficient and effective management of emergency medical services	DRRM Fund		0.20	0.25	0.45
1000-21-9940 (1) 28	Support to CDRRMC and IMT Operations	CDRRMO	January	December	IMT and EOC Activated	DRRM Fund		1.00		1.00
1000-21-9940 (1) 29	Strategic stockpiling of personal protective equipment, decontamination needs and other supplies (Provision of Personal Protective Gears and decontamination materials)	CDRRMO	January	December	Reduce or eliminate the role of contaminated environmental surfaces and noncritical equipment in transmission of SARS-CoV-2.	DRRM Fund		0.10		0.10
1000-21-9940 (1) 30	Improvement of early warning system Installation of Early Warning System and Enhancement Program	CDRRMO	January	December	Limited loss of life and damage to properties during disasters; resilient city EWS in 27 barangays; EWS in every barangay enhanced	DRRM Fund		0.20		0.20
1000-21-9940 (1) 31	Purchase of CPR/ Training Mannequin	CDRRMO	January	December		DRRM Fund		0.10		0.10
1000-21-9940 (1) 32	Repair and maintenance of rescue vehicle and equipment	CDRRMO	January	December	Well Maintained and good running condition rescue vehicle	DRRM Fund		0.10		0.10
1000-21-9940 (1) 33	Establishment of Emergency Services	CDRRMO	January	December	# of individuals responded for rescue & emergency; # of patients transported to medical facilities	DRRM Fund		0.24		0.24
1000-21-9940 (1) 34	Travelling expenses of personnel during emergencies, calamity response/ relief operations & trainings	CDRRMO	January	December	Payment of travelling expenses during response and relief and admin operations	DRRM Fund		0.15		0.15
1000-21-9940 (1) 35	Conduct of DRRM Competency Enhancement Programs, Trainings and Capability building	CDRRMO	January	December	Local DRRM Council are strengthened and empowered thru conduct of skills enhancement trainings/ capability trainings	DRRM Fund		0.50		0.50

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1000-21-9940 (1) 36	Activate ICS, deployment of ERT, medical teams, response teams, DANA teams and submission of report to DRRMC	CDRRMO	January	December	Limited loss of life and damage to properties and scale up LGUs readiness to response	DRRM Fund		0.10		0.10
1000-21-9940 (1) 37	Stockpiling of food and non food items	CDRRMO	January	December	operations	DRRM Fund		1.61		1.61
1000-21-9940 (1) 38	Conduct immediate DANA for pre, post and during disaster	CDRRMO	January	December	Reports as basis for LDRRMC actions, plans and operations	DRRM Fund		0.10		0.10
1000-21-9940 (1) 39	Organization of camp management committees and establishing evacuation centers before imposing forced evacuation	CDRRMO, CSWDO	January	December	Evacuation center and camp management committees organized	DRRM Fund		0.50		0.50
1000-21-9940 (1) 40	Conduct of Post Disaster Damagee and Needs Assessment Report	CDRRMO	January	December	Damages assessed	DRRM Fund		0.05		0.05
1000-21-9940 (1) 41	Agricultural Support to farmers during disasters and calamities and provision of agriculture and livestock rehabilitation program	CDRRMO, CAGGO	January	December	Provide support to farmers; rehabilitated crops and livestock	DRRM Fund		1.00		1.00
1000-21-9940 (1) 42	Program for Disaster Related Damages Rebuild Program AND Standby funds for immediate rehabilitation of government vital infrastructure	CDRRMO	January	December	Rehabilitation and recovery activities conducted (government vital activities and lifelines facilities)	DRRM Fund		2.00		2.00

19.41 33.45 52.86

MONITORING AND EVALUATION

THEMATIC AREA: DISASTER PREPAREDNESS

PROGRAMS, PROJECTS, ACTIVITES	BASELINE	ASSUMPTION/ RISK	OBJECTIVELY VERIFIABLE INDICATORS	TARGETS	DATA SOURCES	COLLECTION METHODS	FREQUENCY AND AUDIENCE	OPR/ PPR	RESOURCES NEEDED
Capacity buildings for ERTs and responders	Number of trained DRRM personnel	Lack of trained and knowledgeable personnel	Atleast 1 brgy 1 st responder, 30% of ERTs are female, 100 % of brgys are trained	Trained 1 st Responders in barangays	CRRMO, BDRRMO	Certificate of Completion, after activity reports	Semi-annual	CRRMO	
Maintenance and operational DRRM Office with state of the art equipment	Inventory	Procurement of needed equipment	A facility with personnel and equipment and functional	Complete equipment for hazards	CRRMO, SARU	Accomplishment reports	Quarterly	CRRMO, SARU	Rescue Equipment
Formulation of SOPs and Protocols	SOP	Lack of training	Develop emergency dispatch protocol	27 brgy personnel trained	CRRMO, BDRRMO	Accomplishment report, sitrep	Daily	CRRMO	Modules
Operational and equipped DEOC	Past disasters/ emergencies	Lack of knowledge on protocols/ trainings	EOC established	DEOC personnel	CRRMO	Sitrep		CRRMO	
Updating of plans	LDRRM Plan, Contingency Plan		Annual updating of plans	CRRMO	CRRMO, Barangays	Approved and adopted by the council and the SP	Annual	CRRMO	

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Formulation of needed plans such as PSCP, Risk Communication Plan	PSCP	Lack of personnel and knowledge on formulation of plans	Formulated PSCP of the city government	Departments/ Offices	CDRRMO, PDRF	Approved and adopted with resolution	Annual	CDRRMO	
Conduct of drills and simulation exercises	Contingency Plan	Lack of coordination and execution	Training course developed and evacuation plans drafted and approved	27 barangays and private offices	CDRRMO, CSOs	Approved and adopted by SP or council	Quarterly	CDRRMO, LDRRMC	
Develop a standard response plan or operations manual	Operations manual	Lack of coordination	Standard Response Plan drafted	CDRRMO, member agencies, council members	CDRRMO	Approved and adopted by the council	Annually	CDRRMO	
Advocacy and awareness campaign	Risks Maps	Not regularly updated	Risk and hazards maps are developed	CDRRMO, BDRRMO	CDRRMO	Approved Risk and hazards maps	Every 3 years	CDRRMO, CSOs	

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THEMATIC AREA: DISASTER PREVENTION AND MITIGATION

PROGRAMS, PROJECTS, ACTIVITIES	BASELINE	ASSUMPTION/ RISK	OBJECTIVELY VERIFIABLE INDICATORS	TARGETS	DATA SOURCES	COLLECTION METHODS	FREQUENCY AND AUDIENCE	OPR/ PPR	RESOURCES NEEDED
Flood Free City		Lack of info/ coordination, delay due to constraints	Completion of Program of Work	Naga City Govt	CEO, CPDO, CDRRMO, Barangay	Approval by the Sanggunian		CEO, CPDO, CDRRMO	
Risk Transfer Program			100% of vital facilities are insured		CDRRMO, GSO			CXDRRMO, GSO	
Early Warning System Enhancement Programs	EWS-Naga	Lack of EWS awareness of barangays	100% established and functional EWS	27 barangays	CDRRMO, BDRRMC			CDRRMO, BDRRMCs, stakeholders	
EWS Modernization	Trial of weather instruments	Difficulty in procurement process	Established EWS, effective response	27 barangays, city wide	CDRRMO	Approved by LDRRMC		CDRRMO, CEO, ENRO, PSO	
Formulation of various legislations			SP enacted DRRM Ordinances		Stakeholders, brgy	Approval by SP		SP, CDRRMO, LDRRMC	
Build capacity with partners, CSOs to carry out risk and vulnerability assessments								CDRRMO, CSOs	

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Mainstreaming DRR initiatives into the development process	2018-2022 DRRM Plan	Lack of coordination with agencies	CDP DRRM compliant	citywide	CDRRMO, CPDO, Brgy Council			CDRRMO, CPDO	
Integration of Community based Disaster Preparedness		Uncooperative barangay	Knowledge on basic and common household emergencies and its intervention	27 barangays	Barangay Councils			CDRRMO, LNB, CSWDO, DILG	

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THEMATIC AREA: DISASTER RESPONSE

PROGRAMS, PROJECTS, ACTIVITIES	BASELINE	ASSUMPTION/ RISK	OBJECTIVELY VERIFIABLE INDICATORS	TARGETS	DATA SOURCES	COLLECTION METHODS	FREQUENCY AND AUDIENCE	OPR/ PPR	RESOURCES NEEDED
Formulation and adoption of standard evacuation plan	Evacuation plans of barangays	Uncooperative barangay personnel	100% formulated evacuation plans	27 barangays	BDRRMC, CDRRMO)	BDRRMPs	Annual	BDRRMC, CDRRMO	
DEOC Upgrading	No. of barangay w/ DEOC	Uncooperative barangays	27 established barangay DEOC	27 barangays	CDRRMO, BDRRMO	27 established DEOC		BDRRMC, CDRRMO	
Deployment of RDNA Teams		Lack of trained personnel	Deployment of RDA Team during disasters and calamities	citywide	Brgy, CDRRMO, stakeholders	27 barangays, stakeholders	Continuing	CDRRMO	
Procurement of emergency rescue vehicle	AIP	Lack of budget, unbudgeted	Ensure zero casualty	2 rescue vehicle	CDRRMO, CPDO	CDRRMO		CDRRMO	
Pre emptive and forced evacuation			Zero casulaty						

FOUR DRRM THEMATIC AREAS

