An assessment on the effective preparedness and disaster response: The case of Santa Rosa City, Laguna

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Abstract

The Sendai Framework for Disaster Risk Reduction 2015-2030 was adopted at the Third UN World Conference in Sendai, Japan, in 2015. It is the successor instrument to the Hyogo Framework for Action (HFA) 2005-2015: Building the Resilience of Nations and Communities to Disasters. The Sendai Framework emphasizes the need for a shift from disaster management to disaster risk management, rather than reactive response. The new DRR framework also revised its priority areas which can be aligned to the new “Ten Essentials of Making a City Resilient”. An independent preliminary assessment using the LGSAT as a guide can inform us if the new priority areas are addressed. This paper presents the assessment of a city in Laguna, namely Santa Rosa City to gather baseline data for a more rigorous and detailed study. The assessment report presents the scores on the level of progress that focuses on Essential 9, “Ensuring Effective Preparedness and Disaster Response” aligned to priority 4 of the Sendai Framework. Based on the assessment of City of Santa Rosa, the major natural hazards that the city will face are typhoons, flood due to its proximity to Laguna Lake and Earthquake due to West Valley fault that passes through Barangay Sto. Domingo. The City of Santa Rosa is doing its best to effectively prepare the city for disasters to happen and to respond quickly to avoid further damage to people and infrastructure. However, City of Santa Rosa only has an average score of 3.67 based on the score on the level of progress on the preliminary assessment to “Effective Preparedness and Disaster Response”, substantial achievement has been attained, but with some recognized deficiencies in commitment, financial resources or operational capacities.

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1. Introduction

The Sendai Framework for Disaster Risk Reduction 2015-2030 was adopted at the Third UN World Conference in Sendai, Japan, on March 18, 2015. The Sendai Framework is the successor instrument to the Hyogo Framework for Action (HFA) 2005-2015: Building the Resilience of Nations and Communities to Disasters [1].

The Sendai Framework emphasizes the need for a shift from disaster management to disaster risk management, rather than reactive response. The Sendai Framework is built on elements which ensure continuity with the work done by States and other stakeholders under the HFA and introduces a number of innovations as called for during the consultations and negotiations [2]. Several frameworks has been adopted by international crisis management organizations [1,3] and one of them is the “resilient city concept”. The concept stems from an idea that the cities have much more intense relations with local citizens as it is on national level. They have greater impact on local conditions and can expediently enforce adoption of necessary changes and regulations in all areas of city social life [4]. It also suggest that sharing lessons and best practices can be an important tool for reducing disaster risks within the city level [5]. Cities participating in the Making Cities Resilient Campaign are taking action to reduce deaths, injuries and the economic impacts of extreme weather, earthquakes and other events, according to the Ten Essentials for Making Cities Resilient [6]. And based on the report of Barangay residents are very supportive of the program on disaster preparedness, especially if they are involved in events that showcase their experience to other agencies, partners and organizations [7]. Planning for resilience to the impacts of stressors within cities requires an evaluation of the vulnerable components of cities[8], an understanding of the key processes, procedures, and interactions that organize these components and develop the capacity to address various structuring of components and their interactions with the ultimate goal of achieving resilience. However, resilience is not only the capacity to absorb shocks and maintain function, but it also includes a second aspect concerning the capacity for renewal, re-organization and development, to be taken into consideration for redesigning a sustainable future [9].

Disaster risk has become an acute and increasingly urban issue. Poorly-planned urban environments, weak urban governance, an old and fragile infrastructure, and rapid population growth have increased pressure on the urban environment and triggered exposure to disaster risk [10]. Currently there is no universal definition of personal disaster preparedness, but in the literature, there are two operational constituents of personal preparedness: preparation of an emergency kit and creation of a family emergency plan [11]. However, the levels of household disaster preparedness are often low even in disaster-prone areas [12].

The Philippines is considered one of the most disaster-prone countries in the world [13]. It lies along the western segment of the Pacific Ring of Fire, a most active part of the Earth characterized by an ocean encircling belt of active volcanoes and earthquake generators, it also lies in the path of turbulent typhoons, with about 20 crossing the Philippine area of responsibility, therefore floods are common due to rains brought by typhoons and the monsoon [14].

Due to the over population of Metro Manila urban areas, the trust of urban developers is to expand in the nearby provinces as potential urban development in the country, and one of this is the City of Santa Rosa in the province of Laguna. The aim of the study is to assess the level of progress that focuses on Essential 9, “Ensuring Effective Preparedness and Disaster Response” aligned to priority 4 of the Sendai Framework of the City of Santa Rosa in Laguna province in the Philippines.

1.1 The City of Santa Rosa

Progress and development came to the town of Santa Rosa at a very fast pace several decades after liberation period. From a sleepy agricultural community regarded as a “bedroom area” of Metro Manila, it was transformed into a boomtown of less than 300,000 people, the center of business, commerce, and industry not only in Laguna but also the whole of CALABARZON (Cavite, Laguna, Batangas, Rizal, Quezon) sub-region, the fastest growth center of the country.

With the timely opening of the South Luzon Expressway (SLEX) in the 1980s, many private business enterprises, big and small, started to come in, particularly the now mothballed Filipinas Synthetic (Filsyn), followed by the Coca-Cola Bottling Company plant – the biggest in Southeast Asia. The Ayala owned Laguna Technopark Inc. (LTI) on joint venture with Japanese companies that opened its more than 300 hectares world class industrial estate to locator companies known in the global business, namely National Panasonic, Fujitsu Ten, Emerson, Honda Cars Philippines,
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