



Regional Policy Paper for the Philippines

Integrating e-Sustainability and Resilience into Low-cost and School Building Development

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Contents

List of Tables

List of Figures

Chapter 1	Introduction	6
1.1	Objective of Policy Paper	6
1.2	Scope of Policy Paper	6
1.3	Disasters and Environmental Sustainability	7
1.4	Environmental Sustainability (ES) and Disaster resilience (DR) in Built Environment	8
Chapter 2	Overview of Existing Policies	10
2.1	Overview	10
2.2	Existing Policies and Strategies	10
2.2.1	Policy initiated by the United Nations	10
2.2.2	Hyogo Framework for Action	11
2.2.3	Policy Recommendation by ESCAP	11
Chapter 3	Multi-aspect Integration	13
3.1	Overview	13
3.2	Structural and Non-structural Aspects	13
3.3	ES and DR Integration	13
3.4	Interdependence and Conflicting Areas of DR Measures and ES Requirements	13
3.5	Areas where ES and DR may have Complementing Requirements	14
3.6	Areas where Various Multi-hazard DR Requirements may Conflict	14
3.7	Key Features to be considered for Integration	15
3.7.1	For Environmental Sustainability	15
3.7.2	For Disaster Resilience	17
Chapter 4	Low-cost School Buildings as the Focus	19
4.1	Why Start with Schools?	19
4.2	What are Low-cost Buildings?	19
4.3	Why Focus on Low-cost Buildings?	20
4.4	Low-cost Buildings and Disaster Resiliency	21
4.5	Low-cost Buildings and Environmental Sustainability	21
4.6	Key Issues with Low-cost Buildings	22
4.7	Special Challenges for Schools	22
4.8	Key Policy Suggestions	23
Chapter 5	Building Codes	24
5.1	Overview of International and Regional Building Codes	24
5.2	Development of Low-cost Building Codes	25
5.3	Overall Framework	25
5.4	Nature of the Code	28
5.5	Customizable Codes	29
5.6	Enforcement Considerations	30
Chapter 6	Relevance to the Philippines	31
6.1	Key Considerations	31

6.1.1 Frequent and Multiple Natural Disasters.....	31
6.1.2 Population Growth and Urbanization	32
6.1.3 Quality of Built Environment.....	32
6.1.4 Student Density in Schools	33
6.2 Environmental Sustainability in the Philippines.....	34
6.3 Building Codes in the Philippines.....	36
6.4 Integrated Framework for Low-cost Building Codes.....	37
Appendix A: Review of Good Practices - Nepal.....	39
Appendix B: Some Pictures-National Workshop on Sustainable Urban Infrastructure Development in the Philippines, Manila, 10-11 Sept 2014	41
Appendix C: References	43

List of Tables

Table 3-1: Various considerations for environmental sustainability	16
Table 3-2: Various considerations for disaster resilience	17
Table 5-1: Key characteristics of the items included in integrated framework	27

List of Figures

Figure 1-1 : Disaster, its sub-components and environmental correlation	7
Figure 1-2 : ES and DR in built environment	9
Figure 2-1 : ES and DR considerations and the flow of information	10
Figure 3-1 : Indicative interdependence of DR measures and ES requirements	14
Figure 5-1: Building codes and regulations in California, United States	24
Figure 5-2: Building codes and regulations in Singapore	25
Figure 5-3: Proposed considerations for integrated code for low-cost buildings	26
Figure 5-4: Conceptual framework for the development, acceptance, and enforcement of building code for low-cost buildings	29
Figure 6-1: Percentage distribution of major natural disasters and the resultant human and economic damages (2000 – 2013)	31
Figure 6-2: ASEAN population growth projection	32
Figure 6-3: Number of occupied housing units by type of construction materials of outer walls and roof	33
Figure 6-4 : No. of elementary schools and students enrollments (2008 – 2013)	34
Figure 6-5 : No. of secondary schools and students enrollments (2008 – 2013)	34
Figure 6-6 : Seven strategic priorities by Climate Control Commission (CCC)	35
Figure 6-7 : The building codes and regulations in the Philippines	37
Figure 6-8 : Integration framework for low-cost building codes	37



Chapter 1 Introduction

1.1 Objective of Policy Paper

This regional policy paper, specifically focused on the Philippines, was prepared to target the integration of environmental sustainability and disaster resilience in school building development and its implication. This paper was developed in continuation of the efforts by the Environment and Development Division (EDD), ESCAP since 2008 in the area of eco-efficient urban infrastructure in the Asia-Pacific region.

The main objective of this paper is to develop guidelines that will enhance the capacity of the policy/decision makers involved in infrastructure design and planning, especially water and energy infrastructure at the central as well as local level. This effort aims to enable the application of the concept of eco-efficiency in water-energy infrastructure design and planning in the context of the green economy and sustainable urban development. The paper also focuses on the development and application of integrated building codes to address disaster resilience (DR) and environmental sustainability (ES) for low-cost buildings in general, and school buildings in particular.

This document also includes constructive feedback received during the National Workshop on Sustainable Urban Infrastructure Development in the Philippines organized by ESCAP and the Philippines' Department of Science and Technology on 10-11 September 2014 at Dusit Thani Hotel, Manila.

1.2 Scope of Policy Paper

Buildings constructed today are most likely to dictate city and town development and consumption patterns for the decades to come. An incremental investment trend has been seen in the low-cost building sector in many countries including Thailand, Brazil, Mexico, and Peru (Sushi, 2013). These are just a few of the many countries noted for embracing and promoting sustainable low-cost building solutions.

Currently, there are several international and national codes that govern the general buildings and large structures addressing various aspects of design and construction. These codes are often voluminous and sometimes complex, as they need to cover and address many types, sizes, configurations, usage, and varying materials involved. The application of building codes to low-cost buildings, which are often low-rise and of simpler configurations and material, and usually not designed and constructed by highly qualified professionals, is more difficult. This may lead to a lower level of adoption, enforcement, and may result in reduced DR and ES.



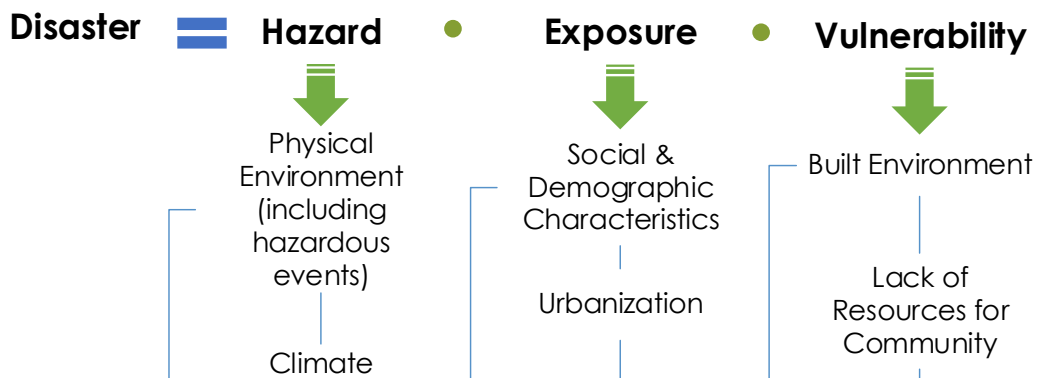
With respect to the trend and the need for sustainable low-cost buildings, it is important that the environmental and disaster resilient features are not compromised or neglected when these alternative buildings are designed and constructed. This can be facilitated and reinforced by having dedicated building codes for the low-cost buildings that take into account these aspects in an integrated, simplistic, and enforceable manner.

This policy paper specifically focuses on the need, development, and ways to implement a dedicated building code for low-cost buildings in general, and school buildings in particular, especially in the Philippines which is both vulnerable to disasters and has environmental constraints.

1.3 Disasters and Environmental Sustainability

The linkage between environmental sustainability and disasters is inextricable. The continued strain on the environment and the impact of climate change will increase both the severity and the frequency of natural events.

The term disaster is generally viewed from the angle of the disruption caused to the human, economic, and environmental factors associated with a community. This view of disaster often overlooks the factors contributing to a disaster which include: Hazard, Exposure, and Vulnerability of the community and the natural environment. The criticality of the factors defines the severity of the consequences.



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