

A MULTICRITERIA ASSESSMENT FOR SUSTAINABILITY AND DISASTER RESILIENCE IN THE CONTEXT OF URBAN AREAS AND REMOTE REGIONS IN SOUTH EAST ASIA

**Ruben Paul Borg¹, Glorianne Borg Axisa², Francesco Romagnoli³, Claudio
Rochas⁴, Harkunti Rahayu⁵, Bambang Istijono⁶, Mohamed
Haikal⁷, Chaminda Bandara⁸, Ranjith Dissanayake⁹, Edgar Vallar¹⁰,
Crisanto M. Lopez¹¹, Day Wa Aung¹²**

^{1,2}University of Malta, Malta

^{3,4}Riga Technical University, Latvia

⁵Bandung Institute of Technology, Indonesia

⁶Andalas University, Indonesia

⁷Maldives National University, Maldives

^{8,9}University of Peradeniya, Sri Lanka

¹⁰De La Salle University, Philippines

¹¹Ateneo de Manila University, Philippines

¹²University of Yangon, Myanmar

The CABARET Project aims to improve multi-hazard early warning systems and disaster resilience amongst coastal communities in South East Asia: Indonesia, Philippines, Maldives, Myanmar and Sri-Lanka. The discourse regarding MHEWS is however considered within the broader framework of the Global Sustainable Goals. The SD Goals and the setting-up of MHEWS have common objectives: to safeguard and improve the quality of life of communities. Sustainability and resilience present points of convergence; yet there are divergent aspects and different optimization scenarios. A key aspect is to evaluate to which extent resilience plays a primary role in sustainable development and vice versa, with emphasis on urban areas and remote regions in South East Asia. This study aims at analysing sustainable community rating systems and their effect on the assessment of resilience, in order to develop a new optimization tool involving both resilience and sustainability. A research methodology based on both sustainable community rating systems and resilience frameworks is proposed to be integrated within a Multi Criteria Analysis (MCA). Thematic workshops were organized to define sets of indicators based on the experience of participants and key sustainability and resilience frameworks. In the first workshop focus groups were split by country for participants to set, rank and relate sustainability and resilience indicators that reflect different contexts the coastal communities of these countries may be experiencing. In the second workshop four focus groups that included representatives from each country, identified a priority list and defined gaps among indicators with respect to remote regions and urban areas, as a mean to validate the first exercise. The outcomes of the workshops described how multi-hazard early warning systems may complement or contrast the Global Goals of Sustainable practices. This paper presents a comparative analysis based on a multi-criteria assessment of sustainability and resilience of coastal remote and urban regions.

Keyword : Sustainability rating systems, Resilience frameworks, Multi Criteria Analysis, Multi Hazard Early Warning Systems, Urban Areas, Remote Regions

Email: ruben.p.borg@um.edu.mt