

Methodology of Urban Disaster Diagnosis for Enhancing Safety and Security of Urban Space and Infrastructure

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Urban Disaster Diagnosis (UDD) is proposed as a methodology to overall assess the spatial risks of urban, regional and community areas under disaster threats. The characteristics of UDD are discussed such as its relevance to PDCA cycle process, participatory planning and management, and its analogy with medical doctor-patient liberal relationship. It is also shown that UDD provides a useful framework to systematically classify and position various tools and methods which have been developed in the ongoing COE research activities of DPRI.

1. Introduction

Urban Disaster Diagnosis (UDD) is proposed as a methodology to overall assess the spatial risks of urban, regional and community areas under disaster threats. As explained later, this methodology serves as a scientific framework to make a holistic diagnosis of the current status (status-quo) of safety and security of the urban space focused, and then to prescribe prospective countermeasures to enhance their quality.

2. UDD to be used in a PDCA cycle process

UDD is related to a PDCA cycle process. As shown in Fig. 1, the PDCA cycle consists of Plan-Do-Check-Action repetitive process. Unlike conventional public planning and management, UDD starts with “Check” on the current status (status-quo) of safety and security of the urban space focused. This requires participatory approach and public-private partnership. After that UDD proceeds to “Action” which necessitates continued formation of communication platform, thereby involving further stakeholders if necessary. With this done, UDD sets up “Plan” with a view to prescribing prospective countermeasures to enhance the quality of the current common

space.

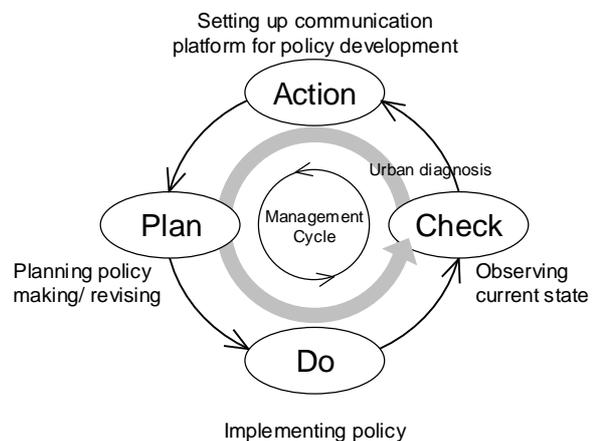


Fig. 1 PDCA Cycle Model

3. UDD as Analogy with Physiological Risk Assessment

Characteristically UDD is designed analogous to a liberal, sound relationship between medical doctors (corresponding to disaster and urban experts) and patients (corresponding to local citizens). Moreover it is intended to explicitly indicate that the methodology has its foundation on the vision that cities, regions and communities are living body systems, and not mechanistic body one as conventionally treated.

4. UDD as a Framework for Classification

This is discussed in the presentation.