# A FRAMEWORK TO MANAGE POST DISASTER RECONSTRUCTION PROJECTS IN SRI LANKA

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Degree of Master of Science

Department of Building Economics

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Dissertation submitted in partial fulfillment of the requirement for the degree Master of Science in Project Management

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# DECLARATION

I declare that this is my own work and this dissertation dose not incorporate without acknowledgement any material previously submitted for a Degree or Diploma in any other University or institute of higher learning and to the best of my knowledge and belief it does not contain any material previously published or written by another person except where the acknowledgement is made in the text.

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# ABSTRACT

World is facing an increasing number of natural disasters and Sri Lanka is no exception. Sri Lanka continues to experience deadly natural disasters in the past and post disaster reconstruction projects carried out so far in Sri Lanka have been poorly responsive due to poor management and have failed in meeting their objectives. The aim of this research is to investigate and explore a specific process to successfully manage post disaster reconstruction projects in Sri Lanka. The methodology adopted was qualitative. An extensive literature review was carried out to obtain a comprehensive knowledge about disasters, life cycle of post disaster reconstruction projects, project management methodologies of post disaster reconstruction projects. Case studies were used to obtain an in-depth understanding of post disaster reconstruction projects in Sri Lanka and Semi-structured interviews were the primary method of data collection. Content analysis, theme identification, cognitive mapping and cross-case analysis were incorporated to analyze the collected data. Findings revealed that post disaster reconstruction projects are distinct due to its nature and the chaotic context they get executed during the unique six staged life cycle of post disaster reconstruction projects. Six stages of project life cycle identified are: 1) assessing and designing, 2) common planning, 3) phase planning, 4) phase implementation, 5) phase closure) and 6) complete closure. Stages identified, proceeded to successive phases in both linear sequential manner and cyclic repetitive manner. Accordingly, a mixed Tradi-Agile project management approach was disclosed to manage post disaster reconstruction projects. Further, a unique an effective management framework for post disaster reconstruction projects was synthesized which contained 52 managerial processes that require to get carried out during six staged life cycle of post disaster reconstruction projects. Key considerations for each managerial process were also identified and incorporated.

Key words: project management, post disaster, project life cycle, housing

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# LIST OF ABBREVIATIONS

| Abbreviation | Description |
|---|---|
| BBB | Build Back Better |
| DRR | Disaster Risk Reduction |
| GN | Grama Niladari (Village officer) |
| GoSL | Government of Sri Lanka |
| HDCT | Housing Design and Construction Technology |
| KC | Key Consideration |
| MP | Managerial Process |
| PDR | Post Disaster Reconstruction |
| PLC | Project Life Cycle |
| PMI | Project Management Institute |
| TO | Technical Officer |
| UDA | Urban Development Authority |

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