

**KNOWLEDGE TRANSFER OF JOINT VENTURE
CONTRACTORS IN FOREIGN FUNDED WATER
SECTOR CONSTRUCTION PROJECTS**

**MASTER OF SCIENCE
IN
CONSTRUCTION PROJECT MANAGEMENT**

M.S. Jayalath
Department of Civil Engineering
University of Moratuwa
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SECTOR CONSTRUCTION PROJECTS**

BY

M.S. Jayalath

Supervised by

Prof. R.U. Halwatura

“This dissertation was submitted to the Department of Civil Engineering of the University of Moratuwa in partial fulfilment of the requirements for the Master of Science in Construction Project Management”

Department of Civil Engineering

University of Moratuwa

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DECLARATION

I certify that this thesis does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any university to the best of my knowledge and believe it does not contain any material previously published, written or orally communicated by another person or myself except where due reference is made in the text. I also hereby give consent for my dissertation, if accepted, to be made available for photocopying and inter library loans, and for the title and summary to be available to outside organizations.

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ABSTRACT

The economy of a country highly depends on its investments in the construction industry. The construction industry has been widely described as a very competitive industry (Shen and Cheung 2017). In this context capacity development of the local contractors is utmost important for long term sustainability.

In Sri Lanka, the involvement of foreign contractors to undertake large scale construction projects has increased recently. One of the major benefits offered by the involvement of foreign contractors in construction projects is the “Knowledge Transfer” (Bandara 2014). The most favourable collaboration type between local and foreign contractors in terms of knowledge transfer is Joint Venture (JV). However, the effectiveness of the knowledge transfer under JV is moderately discussed in past studies. Hence it is important to undertake a comprehensive study to analyse in Sri Lankan construction industry.

The main objectives of this research are (i) to identify the global knowledge transferring and critical knowledge areas which contribute to the knowledge transfer under ICJVs in water sector projects, (ii) to analyse the degree of knowledge and to determine the knowledge gaps between the local and foreign contractors in water sector projects, (iii) to analyse success and failures of knowledge transfer under past ICJVs and (iv) to recommend best practices to remedy the knowledge gaps through enforcing/enhancing the existing ICJV mechanism. The scope of the study is limited to water sector construction projects only.

The research is based on literature review and data collected through Unstructured/Structured interviews and questionnaire survey among the professionals. The data were analysed qualitatively and quantitatively. The main findings of the study are, local contractors lacked in all the considered Project Management and Contract Management knowledge areas compared to the foreign contractors and knowledge transfer in past ICJV water projects was very low. Amend the existing JV mechanism, introduction of contractual provisions in the contract documents, introduction of Government policies and effective involvement of donor funding agencies are within the recommendations for the knowledge transfer process to be successful.

Key Words: Knowledge, Knowledge Transfer, Joint Venture (JV), International Construction Joint Venture (ICJV), Projects, Water Sector, Construction Industry, Contractors

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ABBREVIATIONS

- ADB – Asian Development Bank
- BOQ – Bills of Quantities
- CIDA – Construction Industry Development Authority
- D&B – Design and Build
- DRC – Department of Registrar of Companies
- ENAA – Engineering Advancement Association of Japan
- FDI – Foreign Direct Investment
- FIDIC – Fédération Internationale Des Ingénieurs – Conseils
- HR – Human Resources
- HRM – Human Resource Management
- ICJV – International Construction Joint Venture
- ICTAD – Institute of Construction Training and Development
- IJV – International Joint Venture
- JV – Joint Venture
- KT – Knowledge Transfer
- MNC – Multi-National Companies
- PM – Project Manager
- R&D – Research and Development
- RII – Relative Important Index
- SA – Strategic Alliances
- SCA – Sub Contract Agreement
- TT – Technology Transfer
- UK – United Kingdom