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UNIVERSITY OF MORATUWA

**PRIVATE SECTOR PARTICIPATION
IN
URBAN WATER SUPPLY**

by

SUNIL PALITHA WANIGASUNDARA



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Supervised by

PROF. MALIK RANASINGHE

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**DEPARTMENT OF CIVIL ENGINEERING
UNIVERSITY OF MORATUWA
SRI LANKA**

**PRIVATE SECTOR PARTICIPATION
IN
URBAN WATER SUPPLY**

By

Sunil Palitha Wanigasundara

M.Sc (Civil), State University, Tashkent

***A REPORT SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENT FOR THE DEGREE
OF MASTER OF ENGINEERING IN
CONSTRUCTION MANAGEMENT***



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IN

***THE FACULTY OF ENGINEERING
DEPARTMENT OF CIVIL ENGINEERING***

Supervised by

Prof. Malik Ranasinghe

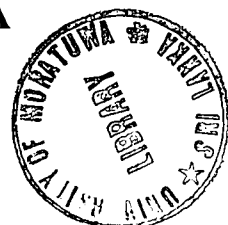
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ABSTRACT

Today, there is a growing consensus in developing countries that public utilities and infrastructure projects should be entrusted to the private sector. It is the stated policy of the Government of Sri Lanka (GOSL) that future investment for new infrastructure services will be procured through the private sector participation (PSP), particularly through the form of Build Operate Transfer (BOT) and Build Own Operate (BOO) arrangements. This research identifies the general approaches of PSP with their advantages and disadvantages and explores the main features of the BOT/BOO arrangements. This project also analyses the impacts of new procurement on the policy objectives of the urban drinking water sector through a case study.

Financial analyses of a bulk supply project (production system) and a distribution project are carried out for the case study. The analyses look at four pricing options for the production and sixteen pricing option for the distribution from the view point of the utility and the GOSL. It is further expanded to look at two cases of non revenue water (NRW) when the projects are carried out by the utility/GOSL and one case for the private sector.



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The analyses show that the best option for the utility to obtain the distribution system through the PSP using the BOT/BOO arrangements when considering the risk of NRW. It is also clear from the case study that to reap the maximum benefit for the economy, the Government should review the policy on water tariff with reasonable increases in prices, taking into consideration of factors like reduction of cross-subsidy (minimizing the price difference between domestic and non domestic tariff) which currently exists and affordability of the domestic consumer.

The financial analysis shows that it is not viable to obtain the production of water through PSP as the cost of production in private sector is high. However, as the Government will not have adequate resources to implement the water production (bulk supply) through the utility in future, this research suggests several methods to reduce the cost of production in private sector.