

## **Factors that Contributed to the Acceptance and Successful Implementation of Performance Based Contracting in the Maintenance and Management of Road Infrastructure in Kenya**

ケニアにおける道路維持管理業務の外部委託化に関する監理能力強化プロジェクトの受け入れと成功の要因

Keywords: Performance Contracting, Road Maintenance, Strengthening Capacity

47-176787 Nduma John Nganga  
Advisor: Professor Riki Honda

### **Background:**

Road authorities are responsible for the construction and maintenance of road network systems. They strive to ensure that the road infrastructure is kept in an efficient state and quality maintenance operations are carried out. One of the main aims of road authorities is to reduce the cost and time spent on maintenance activities while still ensuring the quality is not affected. Performance Based Contracting (PBC), where road authorities contract out road maintenance to the private sector, has been noted as an effective method of lowering cost and time. The application of PBC improves the road maintenance system by applying more efficient technologies and work methods. Since its introduction into road maintenance practices, this method of contracting has been shown to be successful in minimizing road maintenance costs in many developed countries. However, effectively implementing PBC in developing countries still remains a challenge due to factors such as shortage of funding, mismanagement of finances and limited resources. Despite this fact, PBC has still been able to be successfully introduced and implemented in some developing countries. Hence, the aim of this thesis is to examine one such case, specifically the implementation of PBC in the maintenance of road infrastructure in Kenya with technical assistance been provided by JICA. If implemented effectively, performance based contracting can be beneficial not only to the road users of a developing country but also to the road authorities and contractors who are responsible for maintaining the road conditions. This research aims to investigate the ways in which the behavior and mindset of both parties may create challenges that hinder the

successful adoption and implementation of PBC, and how a change in these attitudes may help promote the achievements of PBC. Moreover, by examining the case study of PBC implementation in Kenya, real examples of how different mindsets and behaviors' positively influenced PBC implementation are presented.

### **Research Objectives:**

The primary objective of this research is to investigate the reasons for the successful adoption and implementation of performance based contracting in the road maintenance sector of Kenya. If implemented correctly, performance based contracting can be beneficial not only to the road users of a developing country but also to the road authorities and contractors who are responsible for maintaining the road conditions.

### **Methodology:**

The primary data was collected by use of an interview survey. The JICA offices in Japan and Kenya helped in the initial collection of data through interview surveys of consultants and experts. Interviews were later administered to PBC trainers in Kenya, road contractors, planning officials at the Kenya Roads Board (KRB) as well as engineers at the various road authorities and the Ministry of Transport.

### **Discussion and Conclusions:**

Stability of resources and funding enhances motivation from all parties. When resources and funding are provided as per the contract, the road contractors are able to focus on their maintenance work without being distracted by unnecessary issues. Additionally, a well-defined training program supplemented with adequate documentation for the public servants is also essential in successfully implementing PBC. When trainees are trained effectively and issued certificates upon completion, there is a willingness to utilize what they learned when they carry out road maintenance projects. This mindset also contributes to the sense of ownership of the project.

### **References:**

JICA, 2016, Performance Based Road Maintenance Contract Guideline.  
JICA, 2016, The Project for Strengthening Capacity on Road Maintenance Management through contracting – Phase 2 Project Completion Report