### TECHNICAL ASSISTANCE COMPLETION REPORT

Division: Southeast Asia Energy Division (SEEN)

TA No., Country and Name			Amount Approved: \$400,000	
TA 7706-REG: Comparative Infrastructure Development Assessment of the Kingdom of Thailand and the Republic of Korea			Revised Amount: Not applicable	
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## Description

The Kingdom of Thailand (Thailand) and the Republic of Korea is a tale of two countries, two societies and one vision which is "quality growth". For the Republic of Korea it is manifested in the pursuit of low-carbon green growth: promote eco-friendly growth engines, enhance the quality of life and fight climate change. Thailand, on the other hand focuses on "sufficiency economy" meaning a happy society with equality, fairness, and resilience for its people. Since 1960s, both countries have achieved dynamic growth, reduced poverty, rapid urbanization, technological progress, resilience to economic crisis, and growth promoting institutions. Infrastructure development is an important part of economic growth. There are lessons to learn from the Korean experience, and much to reflect on with regard to the successes and gaps in Thailand's infrastructure development. Infrastructure is a key driver of inclusive economic growth and closer regional economic integration founded on regional transport and communication corridor, regional energy markets, and integrated cross border water resources management and monitoring. Rural infrastructure development in both countries contributed to poverty reduction. A comparative assessment of infrastructure development of the two countries was undertaken to gain a better understanding of the enabling environment for the development of urban infrastructure development, and the participation of private sector in the financing of infrastructure development.

# **Expected Impact, Outcome, and Outputs**

The impact of the TA was sound infrastructure for sustainable economic growth in developing member countries of the ADB is based on lessons learnt from Thailand and the Republic of Korea on planning and a strategic framework for infrastructure, investment prioritization, investment financing modalities, and optimal package of policies and institutions. The outcome of the TA was a comparative assessment of the transport, energy, and water sectors of Thailand and the Republic of Korea. The TA outputs were (i) individual sector assessments in each country, (ii) sector-specific lessons; and (iii) sector recommendations. The TA was implemented over 47 months, from February 2011 to December 2014 compared to the original 11 months. The reason for the several extensions was due to agreeing on the structure of the final outline of the knowledge product which was only printed in November 2014. However no additional financing was required. The overall TA outcome was satisfactory.

## **Delivery of Inputs and Conduct of Activities**

The TA provided 26 person-months of consulting services, of which 13 months international and 13 months national whilst the Republic of Korea through the Export-Import Bank of Korea (KEXIM) provided three Korean experts. The consultants were hired on an individual basis. Extensive consultations were carried out on the relevance, scope, content and methodology of the study with the stakeholders in both Thailand and the Republic of Korea. Strong support and significant input was received from the National Economic and Social Development Board (NESDB), Thailand Development Research Institute (TDRI), Secretary General to the Cabinet in the Prime Minister's Office, and ADB Thailand Resident Mission (TRM) in Bangkok. In Seoul, Republic of Korea the study was sponsored and financially supported by the Ministry of Finance which outsourced the day to day conduct of the study to KEXIM. The counterparts expressed their appreciation and support for the workshops and other events. The performance of ADB and the IAs is rated satisfactory.

## **Evaluation of Outputs and Achievement of Outcome**

The TA delivered the expected outputs and achieved its expected outcome. The individual consultants as well as the experts financed by KEXIM provided valuable inputs in the preparation of the final report and all three outputs were diligently achieved and TA findings well documented and summarized. The comparative profile was drawn from three

outputs of the TA namely, individual sector assessments in each country, sector-specific lessons and sector recommendations. Sector assessments contained quantitative profile of sector progress, contribution to growth and qualitative assessment of policies and institutions. Sector-specific lessons were related to the role of the private sector, cross-sectoral synergies and the role of macro and sector policies and legal and regulatory framework will be highlighted. The outputs were derived from inputs which were obtained from a combination of literature review, secondary data collection, field survey and assessment, policy dialogue, discussion with counterpart and stakeholders including the private sector, and workshops and seminars and comments on draft reports which were shared with both Thai and Korean counterparts at the final workshop in Seoul in March 2013.

#### **Overall Assessment and Rating**

The TA is assessed as *successful* in achieving its outputs and its outcome. Although the TA incurred several extensions, these were necessary for finalizing the overall report as a knowledge product and not because of implementation issues. On the basis of hard data an analysis of historical (past 20 years) evolution of relevant sectors and subsectors was carried out together with current inventory showing their links with investment allocations, relative contribution of public and private sectors in building assets and maintaining assets, and the enabling and/or restraining roles played by policies and institutions in promoting infrastructure development in Thailand and the Republic of Korea. The role of technology particularly information and communication technology was explored in depth in light of its increasing importance in management of logistics. The purpose of such an analysis was to draw lessons for other Asian countries on (i) the importance of planning and strategic framework for infrastructure development, (ii) prioritization in the allocation of investment resources, (iii) alternative modalities of financing infrastructure investments including foreign direct investment and infrastructure development fund or infrastructure financing facility, and (iv) a suggested optimal package of policy and institutional reforms. The TA intended to complement its efforts with other TAs covering public-private partnerships (PPPs) which did not happen as they did not include Thailand as agreed at the outset.

#### **Major Lessons**

In Thailand and the Republic of Korea, as in other countries of the region, development is primarily assisted by infrastructure investment that follows an integrated plan at the national level supported by long-term sector master plans. The quality of such plans depends on if they are based on thorough comparisons of the likely benefits of possible projects for efficiency, productivity, and social and environmental objectives, compared with their likely costs. Moreover, the practicality of the plans depends on if they are consistent with medium-term fiscal strategies and annual budgets. Following the Republic of Korea's example, Thailand should form a comprehensive territory or land-use plan synchronized with the national infrastructure investment plan. Another key lesson learnt based on the assessments undertaken is that both countries would benefit from clearer separation of sector regulation from policy formulation and implementation, with more protection for the independence of regulatory authorities. The need for a separate, independent regulator is especially important where the implementing agency has responsibility for contracting. Similarly, in several infrastructure subsectors, both countries would benefit from more competition to drive improvements in service quality and efficiency and obtain more private financing for new investments, if their policies and regulations provided a more reliable basis for private participation. This involves operators' long-term ability to set user charges that fully recover the costs of investment, operation, and maintenance. At times this also can depend on well-specified, sustainable subsidies. Experience in both Thailand and the Republic of Korea has shown the importance of this for the financial viability of PPPs. Their experience with PPPs also suggests that for the sake of obtaining the most effective investments and protecting the public from unduly high user charges, social cost-benefit analysis should be applied to all proposals with assistance from national planning bodies.

#### **Recommendations and Follow-Up Actions**

The Republic of Korea and Thailand's experience with infrastructure development holds many lessons that could be used to define the way forward since country situations differ. Therefore a single blueprint is unlikely to fit them all. It would be beneficial for ADB to pursue other comparative assessments across other developing member countries where cross-partnering would yield lessons for both countries as was the case under this TA. Future TAs can also explore the possibility of preparing the feasibility of priority infrastructure projects which can have immediate impacts. However when considering future TAs of a similar nature, the additional time needed to prepare a publication or a knowledge product needs to be factored well in advance during TA design to avoid several TA extensions.

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