Executive Summary

Development Strategies and CADP 2.0

The original version of the Comprehensive Asia Development Plan (CADP) was submitted to the East Asia Summit in 2010 (ERIA, 2010). It presented a grand spatial design of economic infrastructure and industrial placement in ASEAN and East Asia and claimed to pursue both deepening economic integration and narrowing development gaps. Five years have passed since the first version of the CADP was publicised, and now is the time to draft CADP 2.0.

By taking advantage of a new type of international division of labour called production networks or the second unbundling, ASEAN and developing East Asia are moving up three unique steps that other parts of the world have not experienced yet. Coming into global value chains, which can be achieved with Tier 3 policy, is now fashionable everywhere in the world. What our region has achieved is to participate in production networks or the second unbundling. This is the step to go up with Tier 2 policy. Then the region is coming into uncharted waters and starts formulating industrial agglomeration, which should be supported by Tier 1a policy. And now forerunners in this region are facing a difficult issue of how to move up to fully developed economies. Here we need to create an innovation hub, supported by Tier 1b policy.

It is important to continuously develop middle-distance physical/institutional connectivity, i.e. Tier 2, to participate in production networks while Tier 3 needs to set appropriate technical grades of infrastructure. In addition, CADP 2.0 emphasises the importance of Tier 1a infrastructure to help an industrial agglomeration grow by securing connectivity with neighbouring industrial agglomerations. Infrastructure is also essential to innovation. Industrial agglomeration and urban amenities are the keys to stimulating and upgrading innovation, particularly after reaching the middle-income level. Infrastructure development for industrial agglomeration and urban amenities in Tiers 1a and 1b policy is expensive though essential to nurturing an innovative society.

The Conceptual Framework

The original CADP (ERIA, 2010) placed the fragmentation theory and new economic geography at the centre of the analytical approach. CADP 2.0 follows the same path and at the same time further extends it to reflect recent changes in the development stages of ASEAN and East Asia as well as the advancement of economic research at ERIA. CADP 2.0 proposes the direction of infrastructure development not only for connectivity but also for innovation.

Based on our conceptual framework, infrastructure development can be tabulated in a 2x3 matrix. The first row refers to infrastructure for connectivity while the second denotes infrastructure for innovation. Each of them is further classified by the degree of involvement in production networks, i.e. Tier 1, Tier 2, and Tier 3. Since infrastructure for Tiers 1a and 1b is often inseparable, the following will work with Tier 1 in total.

The Quality of Infrastructure and Infrastructure Projects

'The quality of infrastructure' and 'the quality of infrastructure projects' are multidimensional. CADP 2.0 discusses the quality issue from the viewpoint of project design, project implementation, macro discipline for development partners, and micro discipline on the partnership between the public and the private sectors.

The Assessment of Industrialisation and Urbanisation

CADP 2.0 assesses the recent development of production networks, industrial agglomeration, and innovation hubs by applying various novel analytical tools. ASEAN and East Asia have advanced a unique development path that has aggressively taken advantage of production networks or the second unbundling. Although the development performance has been widely diversified among countries and regions, it has overall achieved reasonably fast and sustained industrialisation and economic growth in the region. While continuous effort should be paid for Tier 3 and Tier 2, new issues for Tiers 1a and 1b must have heavier weights in the coming years.

Assessment of Soft and Hard Infrastructure Development

CADP 2.0 assesses the progress of projects for logistics and economic infrastructure development listed in the first version of CADP and finds substantial, though somewhat uneven, achievements in the past five years. The progress of soft infrastructure is also evaluated and lists homework to be taken care of.

Three Tiers of Soft and Hard Infrastructure Development

CADP 2.0 connects the conceptual framework with actual infrastructure projects. We list 120 projects by tier, sector, and target outcome (i.e. connectivity or innovation), which are selected from the 761 projects in the list of representative prospective projects. Tiers 1, 2, and 3 have 38, 68, and 14 projects, respectively. By sector, the projects are classified into the following nine categories: road/bridge (41), railway (21), energy/power (18), port/maritime (17), industrial estate/special economic zone (SEZ) (8), airport (6), urban development (5), telecommunications (3), and waterway (1). In the list, 87 and 33 projects are hard infrastructure projects for connectivity and innovation, respectively. The provision of proper quality of infrastructure with good project implementation is emphasised.

Quantitative Assessment on Hard/Soft Infrastructure Development

CADP 2.0 makes the quantitative assessment of further infrastructure development in the horizon of 2030 with the IDE/ERIA–GSM (Geographical Simulation Model) and tabulates our proposed infrastructure-related projects for connectivity and innovation. We conducted simulation for a baseline scenario and other alternative development scenarios in the form of 10-year (2021–2030) cumulative impacts. The development scenarios include eight economic corridor development and subregional development scenarios and four sectoral development scenarios—all infrastructure development (All Infra.); non-tariff barrier reduction (NTB); SEZ development in Cambodia, Lao PDR, Myanmar, and Viet Nam (SEZ); and combination of those three sectoral development scenarios (All-All). The simulation exercise reveals the economic impact of each development scenario in terms of the increment of income level in each province and income distribution among provinces.