

# FROM MEGA-PROJECTS TO TRANSFORMATIVE CHANGE

**Homi Kharas**

The Brookings Institution

## **EXECUTIVE SUMMARY**

Large investment projects are enormously complex undertakings and take vast effort and attention to successfully pull off. While the direct economic benefits of such projects can seem big, the indirect, spillover benefits are much greater, are more important for generating truly transformational change, and can catalyze the next generation of investments. Aligning incentives across project partners is key to securing these broader benefits.

## **INTRODUCTION**

In 2005, the Lao People's Democratic Republic was one of the poorest countries in ASEAN. With a per capita income of only \$470, poverty was widespread. Large state-owned enterprises and state banks dominated the economy. The total gross domestic product of the country amounted to \$2.7 billion. The government's stated ambition was to exit the group of Least Developed Countries by 2020. The IMF program was off-track as a result of a slow pace of structural reforms.

By 2013, in the span of 8 years, the economy has been transformed. It quadrupled in size to over \$10 billion. Income per capita was around \$1,500. Growth had averaged 8 percent annually over the decade and was one of the least volatile rates in the region. Private foreign investment of over \$2 billion per year had started to flow in. Poverty had declined by 1.5 percentage points per year and the country was on track to meeting its Millennium Development Goal target of halving poverty. Laos became a member of the World Trade Organization in 2013.

Compared to 2005, the country has undergone a massive transformational change. Growth was driven by exploiting abundant natural resources, which in turn provided the financing for government to invest in infrastructure and social service provision and to raise public sector wages and employment. The construction sector took off. Higher wages and employment set off a real estate boom. Private consumption has grown rapidly. Tourism and services have expanded. While there are many risks, especially given the rapid expansion of credit from financial institutions with no history of risk assessments or risk management, there is no question that the new ambition of achieving middle-income status by 2020 is well within reach.

What brought about this change? I believe that history will give considerable credit to the successful execution of a single mega-project, a hydropower dam called Nam Theun 2 (NT2), which is now exporting electricity to Thailand. This project, approved in 2005, provides important lessons on how to use a large project to create a transformational change that yield developmental benefits going well beyond the direct rate of return to the project.

## **LARGE PROJECT DEALS**

Large projects are complex undertakings. They pose considerable engineering, environmental and social problems. All of these were present in the NT2 project which triggered all 10 of the World Bank's safeguard policies, designed to ensure that projects would "do no harm." On the engineering side, the hydropower was to be created by diverting water flow from a river (the Nam Theun) on a high plateau down to the Mekong, flowing some 350 meters below. As a trans-basin-diversion project, there were complexities in modelling the impact of changing water flows in both rivers and in engineering the diversion channels (at one point the channel had to cross another underground stream by tunneling beneath it).

Equally, there were significant environmental issues, including biodiversity conservation, protection of wildlife habitat, addressing illegal logging and downstream risks to fisheries and water gardens. On the social impact side, some families had to be resettled and many more were potentially adversely affected by the shifts in fishing, agricultural and livestock grazing opportunities.

Each issue needed to be studied in detail, with extensive consultations with local communities to ensure they understood risks (including indirect risks like the possibility for the import of AIDS and other diseases via the influx of construction workers and truck drivers) as well as potential benefits. Project sponsors spent significant amounts of money upfront to undertake the studies and also provided a large financial contingency fund to deal with large uncertainties that inevitably remained. Overall, the investment cost of the project was about \$1.45 billion, roughly one-half of one year's GDP for Laos.

The time delays and financial costs that were incurred were substantial, yet they paled in comparison to the overall benefits. The project rate of return was estimated at over 16 percent, but it had a very large variance, depending as it did on a 30-year projection of electricity prices. The base case forecast assumed a world environment with long-term oil prices (one of the alternative fuel sources for electricity generation) at about \$30 per barrel.

## **LEVERAGING PROJECT OUTCOMES INTO DEVELOPMENT IMPACT**

Even large projects have modest direct impact when considered relative to the economy as a whole. As an example, if 50 percent of GDP is invested in a project with a 20 percent rate of return, the

level of GDP will increase by 10 percent, an important amount but not necessarily transformative. Certainly the size of the change in Laos cannot be simply explained by looking at the direct impact of the NT2 project.

There are four indirect effects that seem to have been important catalysts for much more significant developmental change: (1) the articulation of transparent national and sectoral strategies and policies that provide a high-level political commitment to keep a stable and predictable environment needed for a project that has a long pay-back period; (2) the creation of institutional capacity in project financial management expertise, experience with negotiating complex public-private partnership deals, and capacity development and learning in key ministries that permit replication and standardization across other, similar, projects; (3) the improvement of public finance, revenue management and expenditure allocations that generate high returns in parallel with the project; and (4) community consultations and establishment of platforms for local development that provide transformative change in a specific locality.

### ***National and Sectoral Policies***

Large projects involve the commitment of significant amounts of money over considerable periods of time. Investors need to feel confident about the stability of a country, and that confidence, in turn, can be bolstered if there is a credible national development strategy that supports reasonable growth and poverty reduction over time. The process and content of the national strategy are both important—they must reflect a consensus based on broad consultations with major local stakeholders, and also outline key priorities for future investments. In the case of Laos, a National Growth and Poverty Eradication Strategy was approved in 2004, identifying hydropower and mining as two key growth sectors. These sectors were tapped to provide large foreign exchange and budgetary revenues that would then be the basis for public and private investments in other sectors of the economy.

The 2004 strategy also outlined a number of policy and institutional reforms to be taken in transitioning to a market-based economy. At the start of the project, Laos had a complex system of (sometimes incoherent) government regulations and bureaucratic red-tape that created a highly opaque system of decision-making. The strategy document helped guide investor expectations as to the long process of policy reform and generated consistency across government departments in prioritizing key sectors and projects.

Sectoral strategies are also important. It was clear that NT2 would be only one of several hydropower projects to be undertaken. As a member of the integrated greater Mekong subregion power market, Laos had plans for the export of electricity to its larger neighbors, Thailand and Vietnam. The sectoral strategy indicated the various other possible projects that could be developed.

### ***Creating Institutional Capacity***

Most big deals require a range of supporting institutional innovations that are often absent in developing countries and that have to be created from scratch. A significant benefit of NT2 was that it provided a template for an organizational and management structure that could later be repeated for other projects. This created an opportunity to achieve much greater scale. The Nam Theun Power Company (NTPC) was a public-private consortium that became a model for later projects. The Concession Agreement (part of which, including all the environmental and social provisions, was made public for the first time in Laos) detailed the rights and obligations of parties and the legal dispute resolution mechanisms. Other legal documents included a Shareholders' Agreement, a Power Purchase agreement, and a construction contract.

The institutional structure governing hydropower was also put in place. A Ministry of Energy and Mines was created. An independent Water Resources and Environment Agency was established. The State Audit Organization had a peer exchange with a team from New Zealand. A Power Sector Development Planning process was put in place with a toolkit to promote projects that met least-cost, efficiency and sustainability criteria. In short, the institutional structures to provide more predictability to similar projects in the power sector were introduced. At the same time, many individuals within government gained experience with and expertise in negotiating with foreign companies and development agencies and a cadre of seasoned professionals was created. This helped ease the development of a pipeline of future projects.

### ***Public Financial Management***

Big deals provide significant resources to the government through taxes, royalties, dividends and other channels. With strong public financial management and effective public spending mechanisms in place, the deals can have a multiplier impact across the economy.

Problems arise when the revenue and expenditure management frameworks are inadequate, as was the case for Laos. The NT2 project was expected to deliver close to \$2 billion to treasury revenues over its lifetime, but budgets were opaque, highly politicized (with local authorities having extensive powers over tax collection and spending) and audits and other checks were weak.

The solution was to develop a public expenditure management strengthening program (PEMSP), funded by the World Bank and with other donor support, as a freestanding project in support of NT2. The PEMSP included programs to improve fiscal planning and budgetary preparation, Treasury functions, accounting and reporting (it introduced an entirely new Chart of Accounts for the public sector), information systems and a legislative framework for public expenditure management.

At the same time, the government of Laos committed itself to using the proceeds from NT2 for specific developmental programs. Priority programs in poverty reduction and environmental areas, health and education, agriculture and rural development and other developmental spending were identified, and revenues channeled into these programs through a designated sub-account in the Treasury. This provided a basis for an audit trail to monitor spending. The government also initiated a series of public expenditure tracking surveys and public expenditure reviews to ensure that resources reached their intended beneficiaries.

### ***Community Consultations and Local Development Platforms***

Big deals need to have the support of the local community behind them, or else they risk resentment and unrest. Most project benefits flow to a far-away central government, while costs (resettlement, environmental changes) are borne in a specific location. The projects themselves can afford to pay for a range of services, but when project operations cease, these payments dry up and sustainable development is not achieved.

An alternative is to build into project design a separate component for local development. In the case of NT2 this had several features. A portion of the electricity being generated was reserved to meet local needs. Specific livelihood programs were developed for those affected by resettlement, but in addition development programs that had a broad impact on the local area (health, education, irrigation) were introduced with the participation of local authorities. Sustainability of programs after project implementation is over also was considered by embedding programs into local government activities.

In parallel, local communities and other stakeholders were intensively involved in a series of consultations. There is a big difference between consultations and public relations. The latter is about advocacy by government and project sponsors about the merits and benefits of a project. The former is about more listening and less talk. It seeks to incorporate issues of local context and importance into the design of community development options. Consultations may need contextualized approaches, like small group interactions, pictorial (rather than written) explanatory material, trained facilitators and independent monitors. In the case of Laos, the resettlement locations and the design of livelihood and other local development programs were significantly influenced by the consultation process.

### **ALIGNING INCENTIVES ACROSS PARTNERS**

Sponsors of large projects, especially on the private sector side, are often keen to maintain a narrow focus on project-specific issues and hesitate to get involved in the broader issues that are needed to go from a big project to a transformative development impact. Taking on such issues implies a broader scope of works which translates into time costs, financial costs, and risk.

The time dimension is especially critical. Programs like public financial management system reform are 7 to 10-year undertakings. Institutional and policy reforms are also long-term processes where regular setbacks cannot be avoided. Government champions (and project sponsors) can easily become distracted during such long periods and lose interest. And as many of the development benefits are external to the project, it is not surprising that private investors and sponsors are uncomfortable with getting too closely involved. The issues are also often outside of their specific area of expertise.

Yet treating deals as stand-alone projects implies a missed opportunity for generating truly transformational change and catalyzing the next generation of big deals.

Multilateral agencies can play an important role in supporting the ancillary dimensions of large deals. When a multilateral development bank or other large donor agency gets involved they can help defray some costs and gauge the scope for longer-term reform efforts. Such agencies can also take on broader responsibilities for delivery where government capacity might be limited. Some risks may need to be taken on the government's ability and willingness to stay the course on reforms. Ultimately, the right balance has to be found between adding even more complexity by tackling the tough issues of policy and institutional reform in a systematic way, and allowing the agenda to become so broad that it collapses under its own weight and nothing is achieved.