Sustainable Infrastructure Requires Sustainable Institutions – a Role for Universities

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Abstract

International Development Banks (IDBs) such as the Asian Development Bank (ADB), Asian Infrastructure Investment Bank (AIIB) and International Bank for Reconstruction and Development (IBRD) – part of the World Bank Group are providing billions of dollars of loans for infrastructure on an annual basis. In addition, they provide technical assistance and grant aid. Technical assistance is usually contracted to an international consult with an associated local firm to strengthen the capability of the executing agency, usually a Government ministry responsible for delivery of the project. As this paper is focused on infrastructure it is more likely to be an organization such as a Department of Public Works or a Ministry of Construction.

The processes of the banks ensure that the specifications are robust and that provided they are followed the infrastructure is fit for purpose. The work will be overseen by the agency's Project Management Unit (PMU) with consultant support. Whilst there will be consultant support it is critical that there be an informed client. For a road construction project a wide range of trained and skilled agency staff are required including: planners, construction engineers, road safety engineers, bridge engineers, geotechnical engineers, materials engineers, social scientists (resettlement, gender, poverty alleviation and empowerment), environmentalists, information technology professionals, drafters, procurement specialists, occupational health and safety professionals, and accountants. During the planning and preparation stage this is particularly critical as the consultants are working on behalf of the client agency and the agency needs to ensure that the requirements of both the client agency and all associated laws and regulations are met. The problem in many developing countries is that many of required professionals are not employed by the organization and if they are they are too busy to commit the required time to the project.

To be able to effectively cooperate with the international team local project staff need to be suitably qualified and experienced. Unfortunately, many local staff lack knowledge and experience. This is compounded by the fact that their study background is often inadequate for the current needs of a developing country.

The international consultants and contractors have the required technical skills and are keen to train the agency staff but their time in-country is limited and in the end they do the work in isolation without required immersion of the staff in the process.

This is where universities should play a key role. There are four key areas:

- Ensuring that the tertiary education syllabus is relevant to the country's and industry's needs. This is not a call for a "dumbed-down" degree but rather that it be relevant to the development goals of the country;
- Work with stakeholders to provide on-going short courses and extension activities to enhance staff skills and competencies. International guest lecturers should be engaged as required. It must be borne in mind that in-country training that reaches large numbers of staff is of much greater benefit than sending a select few overseas for training;

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- Develop centers of excellence in conjunction with other universities and government agencies to develop
 strategies and techniques relevant to the stage of development whilst, at the same time, seeking to be
 innovative; and
- Provide ongoing mentoring and guidance to staff in the various agencies.

Finally, the universities should encourage all students to undertake intensive courses in spoken and written English. Our connected world requires such skills.

Clearly, some of these initiatives will require additional funding. This requires the universities to build on their strengths and develop strategic partnerships with government agencies and seek their support. It is highly likely that the agency has limited funding. The key is to seek the funds and not wait until an opportunity arises. Even a small allocation from a donor budget would bring significant benefits to the country. The donor may be an international development bank, a non-government organization, a foreign government or even a philanthropic organization.

Little will happen unless universities are proactive and drive the initiative!

Keywords

international develop assistance, capacity building, institutional strengthening, sustainable development, infrastructure

Biography

Dr Robert Smith has extensive experience on technical assistance and institutional strengthening projects funded by International Development Banks in Cambodia, Egypt, India, Indonesia, Myanmar, Sri Lanka and Timor Leste. He is now applying his expertise as an academic adviser at Walailak University. He previously worked for a major Australian based international consultancy. He is passionate about sharing his experiences and encouraging others to reach their full potential. He has written technical papers in a number of fields.

Dr. Nucharee Nuchkoom Smith recently received her PhD from the Western Sydney University in International Trade Law with a thesis on the Thailand-Australia Free Trade Agreement from a Thai perspective. Immediately following her graduation, she was appointed as a Lecturer in Business Law at Walailak University. Prior to her PhD studies she was a Legal Officer for the Foreign Affairs Committee of House of Representatives of the Thai parliament. She has authored and co-authored a number of papers focusing on international trade law and alternative energy.