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Higher Education in Developing Countries: Peril and Promise
Presentation Notes by Joe Ryan

Preface — Capacity Building

O&M problem widely recognized. A capital asset doesn't operate or maintain itself.

A developing society needs more than the capacity to produce current output: the assets that a society has at the beginning of a successful process of development and sustained growth also have to be able to:

- Repair themselves.
- Replace themselves.
- Select their own replacements.
- Create the designs for the replacements.

What sort of asset has this capacity? How do you build that sort of asset?

Context

- Pre-WW II: religious organizations established colleges.
 - Peking Union Medical College expanded by Rockefeller Foundation in 1920s.
 - Tsinghua University expanded by USG using Boxer Rebellion indemnities in 1920s.
- 1950s-1970s: "Heroic" era of assisting LDC universities and recruiting U.S. universities (including 1953 switch from employees to university staff under FOA and Stassen, NPA's 1955 report, Gardner task force report of 1964).
 - 1940s: pre-Fulbright faculty exchanges with Latin America.
- 1970s:
 - Basic Human Needs
 - BIFAD (including Read-Findlay story)
- 1980s: Economic analysis — private benefits only. [NB: Promoters recommend more student fees, not less.]
- 1990s: Knowledge economy awakening
- 1995: TRIPS; fallout from collision with HIV/AIDS
- 2000: Task Force
- World Bank progression.
 - 1994: *Higher Education — Lessons of Experience*. Sectoral technical issues.
 - 2002: *Constructing Knowledge Societies*.
 - Page xviii: "... there is a perception that the Bank has not been fully responsive to the growing demand by clients for tertiary education interventions and that, especially in the poorest countries, lending for the subsector has not matched the importance of tertiary education systems for economic and social development. The Bank is commonly viewed as supporting only basic education; systematically advocating the reallocation of public expenditures from tertiary to basic education; promoting cost recovery and private sector expansion; and

- discouraging low-income countries from considering any investment in advanced human capital. Given these perceptions, the rapid changes taking place in the global environment, and the persistence of the traditional problems of tertiary education in developing and transition countries, reexamining the World Bank's policies and experiences in tertiary education has become a matter of urgency."
- o 2009: *Establishing World-Class Universities*. Concept of "world class" brings forward relations with U.S. universities.
 - NB: World Bank doesn't have home universities. Tends to work on national, systemic issues, not strengthening of individual institutions. But now the WB has a strengthening project for three universities in Vietnam, with an IDA credit for construction and technical assistance that USAID is grant-financing and IU is implementing.
 - Not sure about USAID's trajectory: isolated country initiatives, little emphasis from the U.S. foreign policy establishment.

Task Force Report

Acknowledgments

- page 7: "Ismail Serageldin, who (along with Kamal Ahmad) recognized early on the need for an independent examination of higher education in the context of international development and whose efforts resulted in the establishment and initial funding of the Task Force; ..."
- page 6: "The principal drafters of this report were David Bloom and Henry Rosovsky."

Overview

- page 9: Task Force was "convened by the World Bank and UNESCO ... discussions and hearings over a two-year period ... focusing on higher education as a system ... The world economy is changing as knowledge supplants physical capital as the source of present (and future) wealth."
- page 10: "Since the 1980s, many national governments and international donors have assigned higher education a relatively low priority. Narrow — and, in our view, misleading — economic analysis has contributed to the view that public investment in universities and colleges brings meager returns compared to investment in primary and secondary schools, and that higher education magnifies income inequality."
 - o Comment: If there is one thing that developing countries can do with local resources almost entirely, it is primary schools. Standards are local, high-school grads are fine teachers, and societal myths have to be respected. School system is universal and massively expensive.
Higher and professional education does not compete with this. Professional education, as distinct from liberal arts education, is for leaders and is tiny in size by comparison. Per-student costs higher, but total costs still small and do not impinge on school budgets. Even a small school system generates more than enough candidates for professional schools. Professional education for a sector — say, electrical energy — should compete for budget with power-plant construction, not schools. Professional education's content is global, not constrained by local culture as schools are.

- page 11: "Core qualities."
 - Autonomy (from government).
 - Stratification. [NB: Understanding that political pressures will massify some institutions, other institutions need to be "specialized" in high quality — centers of excellence, etc.]
 - Cooperation between universities.
 - Links with business and society.

Introduction

- page 15: universities in Africa are becoming increasingly obsolete.
- page 16: after independence, "from class to mass."
- Entry of private universities.
- Innovation more based on systematic knowledge in 2000, not "tinkerers" as in 1800.

The Public Interest

- page 43: Knowledge as supra-national.
- page 43: Professional standards are global, not national.

Systems of Higher Education

- pages 46-47: A higher education system consists of three basic elements: ... [2nd] the organizations that are directly involved in financing, managing, or operating higher education institutions, comprising a range of both public and price bodies; ... the system is not sealed from the outside world.
- page 54: Most universities in Africa have had great difficulty in extricating themselves from an inherited model in which their role ... depends upon total state control and finance.
- page 56: Given that a purely public system is ill-positioned to satisfy the demands for excellence and access, and that a purely private system does not adequately safeguard the public interest, hybrid systems deserve serious consideration.

Conclusions

- page 93: "The Major Obstacles — [1st] The absence of vision."

What to do?

- U.S. foreign policy determination that developing-country universities are an across-the-board priority.
- Re-balancing participant training in the U.S. with university strengthening in developing countries.
- Re-balancing U.S. universities' "service" function with their "research" function (and "teaching").
 - State-level recognition in the U.S. of international partnerships as a valuable function.

What Is "Capacity"? How Do We Build It?

The Imperative of Capacity Building

We probably all agree that capacity building is the essential development assistance activity. Development achievements can only reach national scale if there is local capacity to expand them from initial models. Local capacity is also essential for mobilizing local information and gaining local legitimacy, which foreign projects cannot provide. And finally socioeconomic development is not a one-time achievement but rather a process. Biological pests mutate and reappear; roads and dams crumble; in policy, each new generation challenges the inherited consensus and then must construct one afresh from first-hand experience. These permanent challenges can only be met by permanent local capacity.

The permanence of change is particularly well established in the case of economic growth. Imagine a situation where growth has been sustained for a couple decades, doubling incomes. Now try to imagine the population buying double the quantities of all the same products they bought at the beginning of the process, when they had half the income. Doesn't seem likely, does it?

Actually, as income grows people abandon inferior goods, adopt improved varieties, and diversify their consumption. A cancer-like expansion in the output of unchanged products would go unsold and growth would stall. If a growth process has been sustained, it is because new products entered the market while old products shrank in importance.

This simple but profound truth, which dates at least from Schumpeter's 1911 book on *The Theory of Economic Development*, has some important implications. One is that the old debate that opposed growth and development was sterile: sustained growth has always been and can only be the result of development of new products and processes. A second and more important point is about the nature of "capacity" that a society must have to develop itself.

What Kind of "Capacity" Is Needed to Meet the Development Challenge?

We ordinarily think of "capacity" in the sense of the ability to produce current services, or "productive capacity." But we have seen that development with sustained growth is an inherently dynamic process that plays out over time. To succeed in development, an economy therefore needs assets that are sustained and that evolve along with the evolving product mix.

For starters, the economy must be capable of maintaining its assets. It's a little hard to visualize a collection of assets that maintains itself. But as ambitious as that may be, it's not nearly enough. When, despite continuous maintenance, individual assets reach the end of their useful lives, the economy must have the ability not just to repair them but also to build their replacements.

And those replacements can't be just duplicates, as then they would only produce unchanged products. Rather, the economy has to have the capacity to put in place newly designed productive assets suited to work in new production processes for new types of outputs.

But what "newly designed assets" are these? Where do they come from? Clearly, society needs to be able to invent them and select among them to find the best designs available to replace depreciated assets.

So we immediately see that a developing society needs more than the capacity to produce current output: the assets that a society has at the beginning of a successful process of development and sustained growth also have to be able to repair themselves, to replace themselves, to select their own replacements, and to create the designs for the replacements.

What sort of asset has *this kind* of capacity? A road? A factory? A pharmaceutical compound? An operations manual?

The only asset that gives a society the capacity for ongoing development is *a collection of professionally educated human beings*, who work, perform maintenance, invest, invent, and adapt.

Okay, Sounds Great. But Is That Enough?

Let's review for a moment: sustained growth requires ongoing development, for which it is necessary to always have a supply of professionals in a variety of fields. So having a system that maintains a supply of such professionals is necessary for society to have the capacity for development.

This conclusion, however, is not sufficient to establish what constitutes the capacity for development, because we haven't considered that other factors might prevent development. For example, maybe the lack of an initial endowment of machinery, energy supplies, chemical compounds, scientific procedures, governance principles, or other factors could prevent the human factor alone from succeeding. If so, then the human factor wouldn't by itself constitute development capacity.

It might seem impossible to evaluate the innumerable complementary assets that could be envisaged by this kind of conjecture, but at least we can specify what a solution looks like: if development ever once occurred starting from a state in which all the conceivable complementary factors were absent, then it would be established that the human factor is, in principle, sufficient.

Fortunately, this solution isn't as demanding as it might appear, since the standard for "development" isn't some kind of perfection but rather just the most advanced society in existence now. (Why else would there be assistance?) By definition, whichever society might be chosen as the standard exists and is the product of real history, which started from a state of barbarism more deprived than any society we observe now. So it qualifies as an occurrence of development in the absence of complementary factors that theories of the last couple generations might have suggested were necessary.

We can conclude that the human factor is in principle sufficient: there has been no necessary, complementary factor that the human factor could not invent, construct, operate, maintain, and replace as required to reach the state of development that is currently the standard of reference for today's development assistance.

So now it does seem fair to say that the capacity for development is indeed constituted by the human factor. * Anything else falls short of having development capacity, and "capacity building" for successful development must target that sort of capacity.

How Can We Build This Kind of Capacity?

Technical assistance and training routinely create productive capacity, but to build "development capacity" — access to a continuous supply of locally based professionals providing up-to-date global knowledge and best practice for management and production — development assistance must supplement training and technical assistance by *strengthening local professional education institutions*. The key institutions are universities that bring together the range of different types of knowledge needed for global best practice.

It's vital to recognize the breadth of what is required. Technology today demands inputs from a variety of knowledge areas that cannot all be mastered by an individual person. Adaptation and development of competitive new products and processes are carried out by multi-disciplinary teams.

Creating and managing such teams is an art in itself. Innovation takes place at the level of the organization, and for innovation to occur the organization needs to embrace learning and innovation, to get access to the breadth of knowledge needed to identify new opportunities, and to internalize the ability to imitate and adapt as well as to communicate, explain, and persuade. The challenge of building these traits into an organization, along with the challenge of building society's associated "governance" inputs, explains in part why non-technical "liberal arts" education is still in demand.

The U.S. in particular has two tremendous advantages in confronting the challenge of building professional education institutions. First, the U.S. university system is a huge asset. In addition to being state-of-the-art in each discipline, the U.S. university system is institutionally oriented towards serving the needs of socioeconomic development, thanks in part to the influence of the land-grant university legislation dating back to 1862. U.S. universities are also tremendously interested in international links: U.S. higher education's revenues from foreign students in the 2010-11 academic year totaled over \$20 billion.

Second, U.S. development assistance has an outstanding legacy of building professional education institutions. From the 1950s to the 1970s USAID and its predecessor agencies were heavily engaged in major institution-building projects that frequently paired U.S. and foreign universities for decade-long efforts. Indeed, U.S.-assisted institutions are still

* Actually, "necessary and sufficient" implies an even stronger conclusion, but as a practical matter we have what we need.

among the leaders in developing countries. Today's development projects often draw heavily, whether they know it or not, on local leaders whose professional abilities are substantially based on quality professional education they received in local universities built with an earlier generation of U.S. assistance.

The heroic era of U.S. assistance for professional education appears to have ended in the 1970s as a result of the increased emphasis on Basic Human Needs and the inability to identify social, as opposed to private, returns from higher education. Over the thirty years that followed the 1970s, however, experience as reviewed in the World Bank's 2002 publication, *Constructing Knowledge Societies*, led to the conclusion that technical and managerial leadership for innovation is more important than previously appreciated.

What To Do

To build true development capacity, the U.S. should adopt a new development assistance policy. Under this policy, U.S. development assistance would investigate opportunities to support local professional education institutions as a routine program element in any sector where it works. Indeed, any project that has ever considered financing U.S. training should also consider building local professional education institutions for the sector. The assisted institutions in addition to being strengthened as sources of quality professional graduates should be cultivated as centers of research, consulting, and public dialogue. As local institutions, they will give full-time attention to local issues (while maintaining professional quality through global links).

A typical program would last five to ten years and would engage U.S. universities to deliver assistance. The traditional governance strengths of U.S. university partners should be drawn on to develop nonacademic stakeholder engagement in local universities. For example, developing universities could constitute advisory boards and financing relationships with industry and government. Assistance should also include direct financial support to local universities and should be ready to provide in-kind start-up inputs like facility remodeling, equipment, and faculty-development scholarships.

Support for professional education institutions should be designed and managed by the sectoral "demand" side — the foresters, public finance managers, legislators, and all those whose sectors need professional skills. Higher education experts who have experience in the issues of university management and relations with the U.S. university sector should serve as consultants.

Fortunately, institution building for professional education programs is affordable: most professional programs (such as terminal master's degrees) can be developed on a project basis without requiring reform of the entire university sector. The modest cost and diverse financing streams available for sectoral professional education programs also eliminate any material budgetary competition with the vastly more expensive national school system.

What is most needed is not a bigger budget but a clearer vision within the U.S. foreign affairs establishment of what constitutes development and development capacity.