

# The University and the Development Agenda.

Milind Sohoni (sohoni@cse.iitb.ac.in)

CTARA and CSE, Indian Institute of Technology, Bombay.‡

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**Abstract:** *The development agenda and effective governance have once again come to the forefront, along with the recipe of robust, non-corrupt and lean governance. We argue that besides this, a knowledge and practice deficit, and the inability of higher education institutions to professionalize development are key lacunae which need to be overcome. However, this will need the University to reinvent itself and for elite institutions to develop a more accessible notion of knowledge and rigour.*

As another hot summer draws to a close, the people of India must now add a deficient monsoon to the usual list of hardships in making both ends meet. This includes a host of macroeconomic factors such as poor employment opportunities, poor returns on education and also badly performing developmental services such as *sadak*, *bijli*, *paani* and health. Repeated governments have focused on the provisioning of such services through various missions and programs, the latest being the *Swachh Bharat Abhiyan*. However, the outcomes of many of these missions remain poor. Take for example, cooking energy and drinking water. As per the 66th round of the NSSO survey (2010), 3 in 4 rural households still use firewood and chips as their primary source of cooking energy, and they burn this in smoky *chulhas* of doubtful efficiency. Moreover, this number has not changed in the preceding 25 years. For drinking water (69th round, 2012), about 1 in 7 rural households and 1 in 10 urban households do not have year-round access to drinking water. These numbers are worse than in the earlier round of 2008.

Such living conditions have a serious consequence for livelihoods, migration and health. The crucial point is that these numbers have not changed despite, for example, spending over Rs. 10,000 crores every year for the last 5 years, on drinking water alone. And despite flagship programs such as National Rural Drinking Water Program (NRDWP), Jawaharlal Nehru National Urban Renewal Mission (JNNURM), the involvement of experts of the World Bank and an activist member of the Planning Commission. So, good intentions and treasure have certainly not been lacking.

## The question of knowledge

It is customary to blame these poor outcomes on problems of governance, corruption, and social or cultural backwardness. While this may be true, our article wishes to point to

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*knowledge and practice deficit* as a key problem area and suggests a route to overcome this. I will use, as a running example, rural drinking water and Maharashtra, where shockingly, 1 in 4 rural households are under stress.

A typical drinking water solution consists of a piped water supply scheme (PWSS) with either a groundwater or a surface water source and serves about 500 people of a habitation<sup>1</sup>. The design of a successful and durable scheme requires a careful execution of several protocols, such as estimating the ability of the community to pay and manage, measurement of source strength, design of key assets and the hand-over to *gram panchayat*. Ideally, each of these protocols must be periodically assessed and adapted to changing circumstances. Moreover, the performance at the village level must be collated and analysed at the *taluka* and district level. Recurring or hard problems should set up the research agenda for the sector within state or national institutions.

Sadly, none of this holds true. The design protocols have not changed in decades. Groundwater, the basis of most drinking water schemes, is poorly understood and failing and yet very few new practices have emerged. Regional knowledge institutions are largely unaware of these processes and do not participate in district or regional planning or evaluations. The connection with research institutions such as the Indian Institutes of Technology (IITs), Jawaharlal Nehru University, Indian Institute of Science or the newly formed Indian Institutes of Science, Education and Research (IISERs), is largely non-existent and knowledge formation in key sectors remains stunted.

Moreover, most departments of the government are trapped in a vicious cycle of obsolete knowledge, low productivity, poor outcomes and an over-whelming work-load. A *taluka* of about 200 habitations must be served by 2-3 engineers and a quarter-time geologist. A district collector must sit on a 100 committees. To compound this is a discourse of “*minimum government, maximum governance*”, i.e., a pressure to reduce the size of an already small public sector even further. In other words, even if every official were honest and punctual and did what he/she was supposed to do, a significant part of the problem would remain.

The solution to this to recognize is that governance is a collection of social and technical protocols or algorithms embedded in a framework of political and administrative accountability. For correct and desirable outcomes, the protocols and the framework must adapt to changing scenarios and the agents themselves must be re-trained in new methods of design, implementation and assessments. Much of the knowledge should be embedded in empirical systems of “*good practices*” within various departments and enriched by key collaborations with knowledge institutions. New knowledge demands should create new professions and new technological innovations, and a clutch of new companies which deliver value.

## The University.

So how is this new knowledge and practice to emerge and who is to train the *development professional*? Historically, the University, i.e., institutions of higher education and research, has been a key site for knowledge formation within societies. Europe proudly (and rightly) claims the modern university as its primary contribution to civilization. With other societies too, such as USA, Japan, Korea, more recently, China, the university has been an important intellectual resource in their path to a good life for their people. Moreover, in some societies, it is the backbone of an independent and vibrant civil society which provides a variety of role models for its young people. It also moderates the conduct of the state and the market, thereby ensuring better outcomes for its people. And so must it be for India.

Closer home, the Indian University now functions as two disjoint sets of institutions, viz., the *elite or global aspirational* and the *regional* institutions. The elite universities, which admit 2-3 % of the total student population, aim to be counted as members of the global knowledge elite. This over-riding criterion defines their academic and research programs. On the other hand, many of the regional and local institutions at best satisfy a training role of preparing a vernacular body of students for industrial profiles which have long disappeared. Increasingly, through accreditation and other quality-improvement programs, these regional institutions who teach the bottom 97%, follow curricula and a research agenda, which are largely influenced by the elite institutions. Thus, as a result, there is neither an indigenous tradition nor an empirical basis, such as a *needs analysis*, for the curricula followed by the elite or the regional university. Moreover, there is little systematic research or practical training in important developmental areas such as groundwater, cooking energy or sanitation, or socio-economic areas such as district-level planning, *panchayat raj* or the cooperative sector.

The second structural feature of Indian higher education is the competitive exam, a “*fair*” device used by elite universities to reject 97% of the exam-takers. Perhaps unknown to them, it may be this, rather than their training, which connects students to high-paying global service sector jobs and in turn, determines the elite university<sup>2</sup>. Unfortunately, the competitive exam also serves to define and measure the outcome of school or college education. Thus, a student’s learning of a subtle, cultural, plural and practical skill such as science is tested by a time-bound objective multiple-choice exam in which most students must fall in their own esteem.

These ingredients of elitization leading to poor relevance, the absence of the regional or the vernacular, and the aspirational dysfunction caused by competitive exams, constitute the current crisis in higher education. Whence, the current structure of the university and the public sector and state agencies together pose a great challenge to both, the generation

of suitable knowledge, and also its absorption by development agencies.

### **The way out**

The way out is for the elite university to recognize that the development agenda requires an intellectual rigour and a trans-disciplinary approach which it does not have, and which is a hall-mark of most elite universities of the world. It must devote *a part* of its energy to (i) legitimize the problems of development and bring rigour to them, and (ii) prepare an inclusive academic framework for regional colleges to participate and the community to access as a resource.

The first step would be to develop a sequence of *case studies* which understand local situations, work with local stake-holders and develop a framework for reporting, analysis and solution. The case-study is a fairly nuanced device and has been used by both management schools and also by philosophers of science. The eminent philosopher, Karl Popper, in (Popper 1958) calls it “*piecemeal social engineering*”, and uses it to illustrate the construction of rigour. For us, these could be, e.g., a failed water supply scheme, an evaluation of a regional watershed program, design and deployment of solar-power systems, mathematical models for the local *chulha* or even a socio-economic analysis of public transport provisioning within a *taluka*. These case studies will help students, faculty members and university administrators to appreciate the development problem in its full social, cultural and technical context. It will also develop the creative and inter-disciplinary skills, and the field work needed for effective solutions.

A thematic collection of such case-studies, e.g., in drinking water, and executed by a team of researchers and students should be the basis of interacting with communities, district administrations and elected bodies. This would develop the sector and bring in new techniques of evaluation, design, coordination and innovation. For example, in drinking water, it could bring in the use of GIS, optimal design, better tariff mechanisms, regional planning between groundwater and surface water, and cheaper meters and survey equipment. This will eventually lead to the absorption of new practices and new professions, and also pave the way for new research.

It is important that the *mechanism* of case studies is woven into the academic structure so that over time, these lend rigour to the subject enabling the larger academic community to participate and meaningful research and practice to emerge. This brings us to the second step of abstracting the above experience into an elective curriculum which articulates the *practical* structure of society and situates the subject of development. A perspective course, a few key case-studies, and 2-3 sectoral courses should constitute a *development minor*, i.e.,

an elective sequence of courses. Such a minor program will serve as the seed around which a discourse of science, society and culture may emerge. It should also prepare the student for an exciting future within the development sector and enable the fresh graduate to explore creative and gainful opportunities within it.

The third step would be to extend this framework to regional institutions and to develop a regional basis for applied research. A structured collaboration will allow elite institutions to develop research in areas which need long-term engagements, such as regional groundwater, and to deepen and broaden the conduct of higher education. This should also be the time for the launch of graduate professional and research programs in development. These graduates would serve as *development professionals*, i.e., professionals who are trained to work in typical situations which arise in the development sector, and deliver value. These may be positions in the public and private sector, as coordinators of various programs, in district planning bodies, as consultants and in think-tanks.

The role for the state and its agencies is clear. It must be a willing partner with the University in the program of professionalizing development. It must be willing to create new forms of engagements, to try out new designs, to share data and to allow itself to be evaluated. And yet, it must also demand relevance and action-ability from the University. It should also find funding for topical studies through its research and innovation budget or through funds earmarked for evaluation and assessment. Besides supporting topical research, it should also explore the actual exchange of staff and students. Such avenues are already open within universities which routinely hold training programs. However, for students, internships with district collectors and at program offices, and for fresh graduates, 1-year fellowships at various agencies on specific objectives, would be very attractive. It would strengthen the engagement between the University and state agencies and eventually pave the way for lateral entry of suitably trained professionals into governance positions.

The above suggested sequence is not as unrealistic as it may sound. Many institutions already have academic or research initiatives which have similar objectives. Indeed, the recipe itself is based on the 30-year experience of CTARA ([www.ctara.iitb.ac.in](http://www.ctara.iitb.ac.in)) at IIT Bombay in enabling engineers to work on rural problems.

## **Finally**

I could have used cooking energy or the small and medium enterprise sector for a similar analysis. This too would have yielded the same conclusion that we lack many socio-economic and technological protocols and that these must come about by a more intimate relationship between the university, the state and private enterprise.

Thus, the development agenda is really about an indigenous and robust definition of rigour in identifying, analysing and solving problems and of identifying the role of the university as its custodian. It is also clear that the elite university must make the first move for the regional university has very little legitimacy. It must set out and develop this sound and yet inclusive rigour for concrete problems so that these get the wider participation and attention that they need. In the long run, the elite institutions need to grapple with their vision and root it not only within the global knowledge order but also within the inter-disciplinary and “practical” problem of forging a culture for modern India. Second, they must prepare for a civil society role for themselves and their mofussil brethren, for otherwise we will be a society without the diversity and plurality of role models that we sorely need.

## Notes

<sup>1</sup>See (Prasad et al 2014) for a detailed account of rural drinking water, its processes and allied issues.

<sup>2</sup>This *global* diversion of graduates has always been a problem. Three decades ago, it was brain drain, i.e., fresh graduates leaving the country to work in the West, see (Sukhatme et al 1988). More recently, due to globalization of jobs, it is now the global service sector which absorbs a large fraction of elite graduates, see (Ananth 2011). Also see (Kathuria et al 2014) for a related analysis.

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