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Review Article

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National Knowledge Commision Recommendations: Follow Up Action on NKC Recommendations – A Commentary* (Part 2)

India's National Knowledge Commission (NKC): Optimistic Goals amidst Daunting Obstacles

India, from being gripped by a "license and permit raj" has moved towards a more open economy since the 1990s. From that time, the country has experienced sustained high economic growth: a phenomenal leap to 8 per cent from its 2 per cent "Hindu rate of economic growth". A shift to neoliberal economic policy and greater privatization and deregulation/free trade has integrated her into the global economy and pushed her closer to a higher level of global market competition with the most sophisticated of value-added goods and services of advanced economies.

Through an ambitious and comprehensive knowledge push, India aims to achieve in the long-term and during this century, the status of an economic powerhouse along with Brazil, Russia, and China. Wilson and Purushothaman (2003) predicted that India's GDP rate between 2015 and 2050 would exceed that of all other major countries in the world including China. By then, India's total income would reach 80 percent of the United States of America, while others have predicted that it will be the world's second-largest economy behind only China and ahead of the United States.

The NKC has focused its report on the original terms of reference and its recommendations cover both policy formulations at the macro and micro levels to propel India towards a knowledge-economy. The recommendations have a number of useful lessons for emerging and even for advanced nations that have underpinned knowledge-economy as the key to enhance growth, higher income and prosperity. Malaysia too, in its current development trajectory has initiated a New Economic Model (NEM) with the goal to propel the country by 2020 into a high-income nation (NEAC, 2010: 3). The NKC's recommendations

have some useful lessons for Malaysia. In India's case the road to a knowledge society and economic prosperity, though achievable in the long-term, has a number of serious inbuilt constraints. This is the case for Malaysia as well. Both countries have a diverse ethnic population with competing political and economic demands driven by politically dominant and communal-based political groups. Population diversity and competing demands places inbuilt obstacles and limits on policy implementation at the people's level.

In short, in the NKC's view, India has tremendous potential as well as the knowledge-base to move towards a world-class knowledge-economy. In a world that is fast globalizing and integrating economically, the move by India towards a knowledge society is timely and in the right direction. The country is currently blessed with a young and growing workforce, while 45 per cent of the total population of the country is 19 years and below. The "demographic dividend" could benefit its growing economy if it is harnessed and trained (*The Economist*, 2010b:9). The NKC envisages that this could be achieved through a systematic process of coordinated and integrated evidence-based policy reforms from bottom-up.

Through a quantum leap in technological development, innovations and entrepreneurship, India aspires to propel itself into world-class competitiveness and economic prosperity. The key to achieving this leap is an inclusive education and training system with an emphasis on universal acquisition of knowledge and skills. A well-educated and skilled workforce is critical for creating, sharing, disseminating and using knowledge effectively. This could be achieved only through improved efficiency, quality, demand-driven education, curriculum reform with an emphasis on critical thinking, language proficiency including English, linkages between tertiary education and R&D institutes to industry, agriculture and health providers, use of ICT to expand access and quality, provision of lifelong education opportunities and use of distance learning technologies. A well-educated and skilled workforce can only drive economic growth and prosperity if there is a close linkage and synergy between education, innovation, entrepreneurship and the market. This close linkage and synergy is critical to further accelerating India's growth trajectory which is currently driven by millions of private entrepreneurs all furiously doing their own things and marketing them in the competitive domestic and global markets (*The Economist*, 2010: 9).

Useful Lessons

This unprecedented and comprehensive report has a number of virtues coupled with some far-reaching recommendations which have definite relevance to other emerging nations. The central feature is the overwhelming emphasis on the critical role of quality education, training and promoting a knowledge

economy that can accelerate India's competitiveness in a fast changing and expanding domestic and global market. Though in the initial framework science and technology was underpinned as the key to knowledge creation, yet the NKC has in its final analyses and recommendations recognized the important achievements and contributions that have been made in the past in India in science, philosophy, mathematics, astronomy and traditional medicine.

These past contributions had made India a leading knowledge society for millennia. This traditional knowledge pool, both in terms of indigenous human resources and knowledge-bases has to be tapped, tested scientifically for its suitability in a modern economic system and utilized systematically, particularly in the areas of alternative medicine, agriculture, forestry, environment, etc. India as an open society has an obvious advantage and a prerequisite for long-term success in science and knowledge economy. The underlying message is that as the usage of science and technology races ahead in India's industrial and service sectors, the supply of workers with new skills and knowledge is imperative and the education system must prepare them to meet the new demand. In short, the nation's educational attainments must keep abreast with technological advancement.

The implicit message of the NKC's report is that if countries want to grow and prosper through high-incomes and full employment then they must develop and execute policies that emphasize the acquisition of knowledge and skills by everyone, not just a select few. Singapore's economic success story can be largely attributed to her recognition as early as the 1960s of the critical value of human capital to development. Therefore, Singapore gave top priority to the development of an inclusive high quality education system with English as the main medium of instruction. Such a system, the Singapore leadership believed, was the key to upgrading the education and skills of its people to an international level to generate ideas and innovations which are the prerequisites for economic success and high-incomes (Selvaratnam, 1994: 87).

The NKC's recommendations as well as the Singapore policy strategy have a direct relevance to Malaysia's aspiration of graduating to a high-income country by 2020. If Malaysia wants to achieve her high-income status within this decade, she has to put in place an inclusive and high-quality education and training system that produces an educated and skilled workforce able to create, share, disseminate and use knowledge to compete like Singapore and India in the global marketplace. Unless an inclusive indigenous talent development policy is prioritized and implemented rapidly, Malaysia might lose out to countries like India and China as the latter's massive education and training system will be able to attract foreign investors by providing high-skilled workers at highly competitive wages.

The NKC's emphasis on the continuity and promotion of English as a critical language for India's continuous progress is commendable. This policy has a long historical antecedent. India to its credit has from its Independence in 1947 recognized the importance of English as a world language and its overwhelming role as a link language for Indians to continuously gain access to advancement in knowledge in the critical areas of science, technology, commerce as well as western ideas and culture. Indian leadership has always emphasized that English is a gateway to modern knowledge, commerce and the country's economic progress. This has been demonstrated by the phenomenal contributions and achievements of English educated Indian scientists, engineers and doctors who had migrated to the advanced industrial economies. The contribution of English educated Indian scientists and engineers to the American Silicon Valley's technology development and its boom and subsequently, to India's development as a knowledge-economy and economic take-off is something to be marveled at. This is a useful lesson for other emerging countries to emulate. China has taken an unprecedented leap forward to teach English to three hundred million of its young population. Perhaps it might be useful for the Malaysian Talent Corporation to study these two "best practices" of India and China and their implications to Malaysia's aspirations to develop, retain and attract our overseas talents to propel its high-income status.

Apart from the success of Indians in technological development, many English educated Indian academics and writers have excelled in the world of scientific and economic research and English literature and have won prestigious awards including the Noble and Booker prizes. India is today the third largest publisher in the English language in the world and it is flourishing as well as being a huge economic boost to its publishing industry. The NKC reiterates that continual upgrading of English proficiency is fundamental to India's progress. The use of English and the enormous benefits India and Singapore have achieved as a result is a highly significant lesson for countries like Malaysia which aspires to become a high income country by 2020. The significant achievements of Indian scientists and engineers have been possible because the country's leadership recognized the inherent limitation of its national language. Hindi was less developed, being a localized literature and language of science, technology and politics, unlike the English language which was an established world language of science, technology, literature and culture (Chandra *et al*., 1999: 89-90).

In many countries public universities are increasingly facing from their political leadership, utter disdain regarding universities' autonomy, academic freedom and leadership and their theoretical contributions. In their view, academics are cloistered in their ivory tower and therefore divorced from social reality. Recent studies have pointed out that increasing government interventions

have transformed universities from a 'community of scholars' to 'workplaces' (Deem *et al*., 2008). On the contrary, the NKC points out, the organization and management of research universities and institutions should be driven by academic-administrators of high standing and their selection process should be entrusted to an independent commission or a search committee. This is to ensure that heads of academic universities and research institutions are led by dedicated researchers who have exhibited leadership and excellence in their respective fields of study.

A study by Amanda H. Goodall (2009) provides overwhelming evidence that top ranked World Class universities are invariably led by brilliant scholars who are also scholar-leaders. The study goes on to show through empirical data that business people or politicians are usually not suitable for leading top ranking research universities and institutes (Goodall, 2009: 104). Goodall's study has direct relevance to the current leadership qualities of and appointments to, Malaysian public universities where Vice-Chancellors are appointed at the behest of the Ministry of Higher Education. Malaysian universities are saddled with quality issues and are not able to produce the skills demanded by industry (NEAC, 2010: 6). To enhance their quality performance, Vice-Chancellors are increasingly expected to focus their organization and management on ideas drawn from a public management ideology and their achievements are measured by key performance indicators. In spite of this thrust, all Malaysian universities were not able to reach the top 200 in World University Rankings administrated by both the *Times Higher Education Supplement* (THES) and the Shanghai Jioa Tong University (SJTU) in 2010. However in 2011 SJTU world rankings, the University of Malaya was ranked 164.

The methodology followed by the NKC (identifying key focus areas then going on to tease out their key elements through the active participation of a broad spectrum of players from bottom-up) is commendable. This is not something new. Nehru, the first Prime Minister of India initiated the idea that policy planning in a democratic and secular India must be consensual and capable of carrying society along, thus giving rise to the concept of "growth from below" (Chandra *et al*., 1999: 343). It epitomizes a unique virtue: a report that incorporates the articulation of a broad-based point of view as far as is possible from within and out-side the government including members of the society and all stakeholders involved in the advancement of India. In short, the NKC has devolved policy making to a wide section of the people through the participation of endogenous working groups, making the whole process democratic, transparent and proactive.

Therefore, this bottom-up report that has been produced through extensive consultation at various levels of Indian society has a greater chance of being readily accepted for implementation by the people of India. This methodology

has relevance to countries like Malaysia which continue to depend on external consultants to formulate its development and project plans. Malaysia's policy formulations should not only be evidence-based but move towards a democratic, transparent and interactive mode. There are pronouncements that the Malaysian Government wants people-driven policies to initiate change (*New Straits Times*, 2011: 28 March).

For India to sustain as well as accelerate its growth momentum, a knowledge economy is imperative. In particular, it has to adopt internationally benchmarked standards to educate and train its workforce. Only countries with educated and highly skilled workforces can successfully compete in the vibrant domestic and expanding global marketplace. India is convinced that the skills required for competitiveness in a complex and continuously changing modern workforce can be acquired only through high-quality all-round education. This is in marked contrast to what Andrew Carnegie said a century ago in his "Empire of Business", "The almost total absence of the graduate from high positions in the business world seems to justify the conclusion that college education, as it exists, is fatal to success in that domain" (Carnegie ,1902: 98). A similar tradition was deep rooted in the Indian joint-family business houses both large and small. However, this is changing and education and training it seems, is now a prerequisite for members of the family to be involved in the family business.

Inbuilt Constraints

Can a second wave of educational institution building create and sustain a knowledge society that can deliver over a long period of time a high quality knowledge-based and skilled workforce to drive economic prosperity for India? Education has a major role to play in the drive toward a knowledge-economy and economic growth. The implementation of an array of improvement measures in education, including universal primary education, has slowed down due to pervasive underfunding on the part of the State Governments (*The Economist* 2010a:30). However, education alone is not a sufficient condition for driving economic prosperity. It is through education and work that people acquire human capital. This makes them productive and ensures prosperity for their societies. Therefore, appropriate jobs have to be created rapidly in critical sectors in order for school leavers and graduates to be employed and initiated into a work ethic and a learning curve. This will give rise to the development of the country's human capital stock.

Education too matters more for individuals today than 50 years ago. In India's highly competitive employment market, having the right qualifications, in the right subjects, from the right institutions is of paramount importance. The evidence for this is the immediate and universal employability of the graduates

educated through an English medium from the IITs and other high ranking engineering schools as well as the elite teaching institutions. In contrast, there is massive unemployment among graduates from the numerous low-quality institutions both public and private. This is despite the fact that India is facing a critical shortage of skilled workers in certain high-tech and service sectors. Recognizing this perennial dilemma the NKC has underpinned the importance of a demand-driven high-quality and differentiated higher education provision. Singapore has been pursuing from the 1960s a differentiated and a strongly merit and need-based, high-quality and demand-driven higher education system and has thus been able to supply the right mix of high and middle-level manpower that is required for her economic success. Except during severe economic downturns, Singapore's tertiary education graduates continue to experience immediate employment (Selvaratnam, 1994). Like India, Indonesia and the Philippines, Malaysia too has a similar experience. Graduates in Malaysia with the right qualifications are readily employed, while it is currently estimated that there are more than 70 thousand unemployed graduates, the majority of whom are unemployable as they lack the right educational credentials and skills.

The massive educational expansion that has been recommended by the NKC needs substantial resources to drive a uniformly high-quality and inclusive education system. Does this pose a number of insurmountable obstacles in a low-income and resource poor country, like India? Any massive expansion of a high-quality education system with an inbuilt provision of equitable access entails an efficient bureaucracy and high cost. The Indian bureaucracy though well trained does not seem to have the necessary people-centered practical ingredient to suit the needs of a democratic and developing society and the particular capabilities of executing and successfully implementing new economic and social welfare policies (Chandra *et al*., 1999: 139-40). In India, there is a growing political demand and expectation that the state should provide equitable public funded education at all levels. To provide quality education in India's schools with an orientation towards a child-centred education where the child is made to understand concepts, develop communication skills and access knowledge independently, and then the country's schools must have small-sized classes and a high-quality teaching profession. This is very labour intensive and entails high-cost. The shift towards a child-centred education as suggested by the Commission might not follow a definite, pre-set, year-by-year curriculum. A child-centred critical-thinking schooling can only be useful and effective if it is accompanied by a curriculum that builds up the background knowledge necessary for critically understanding the subject matter and measures for progress year by year (Hirsch, 2011: 16-19) In many countries a supply-driven expansion has invariably placed huge strains on public expenditure and has led to an all-round implementation of cost-effective measures resulting in

a fall in the real level of spending. In most countries this has resulted in the reduction of the teacher-student ratio as well as lower instructional hours. As Wolf (2002: 247) points out:

> These pressures are not specific to any particular political party or any particular country, they are inherent in any large-scale expansion of state-funded post-compulsory education. They are most obvious in higher education, because that is where change has been so recent and rapid. But the repercussions are not confined to this level.

In addition to this high cost, any educational expansion will require more physical and administrative facilities such as classrooms, laboratories, computers, teaching-aids and libraries as well as administrators, inspectors, coordinators, advisers and a huge support staff. All this would have a big strain on cost and push down staff salaries and facilities.

The NKC in its recommendations underpins innovation as a key to driving economic growth. Innovation, particularly in science and technology has to be supported by research and development. To achieve this "countries need a sizeable, but not a vast, number of top-class, superbly trained researchers and developers, not a large (number of) imperfectly trained ones" (Wolf, 2002: 247). This has to be supported by state-of-the-art scientific research facilities. Will India, given its resource constraints, be able to afford to equip all its long existing and proposed numerous research universities and institutes with state-of-the art research facilities and high quality research personnel? This has relevance to other countries which are in a similar trajectory, such as Malaysia.

This transformation toward a knowledge economy and economic-powerhouse is breathtaking, as India confronts extreme social and income inequality, employment insecurity, a growing energy crisis, severe water shortages, a fast degrading environment, global warming, a rising HIV/AIDS epidemic, terrorism, sporadic communal violence and the perennial problem of political and bureaucratic corruption and inefficiency. To crown these issues India faces a critical infrastructure deficit. Appropriate policy measures and substantial resources have to be continuously put in place to address these pressing problems as well as to oversee the upgrading of the country's infrastructure, education and training and technology. These issues do make a huge dent on India's resources as well as a severe strain on its day-to-day administration. Can India transform itself into a world-class knowledge society and at the same time address its more pressing problems of wider health services, piped water, schools, rural roads and electricity supply?

In short, India faces a dilemma. It has to continue providing the basic physical and social infrastructure that underpins an acceptable quality of life for its sizeable underprivileged and poverty stricken population, while driving

its current growth trajectory of massive expansion in high quality inclusive education to create employment opportunities for its fast growing population. Both are vital and they will contribute to India's success and prosperity. India's consecutive Five Year Plans and its numerous Commission reports have made a significant contribution to education and skill training developments leading to technological, economic and social progress. Can India with her huge competing demands and resource constraints graduate into an inclusive knowledge society and economic prosperity within this century? To achieve such a goal it is vital that the recommendations proposed by the NKC be effectively translated into action through purposeful implementation policies and that the success of the reforms be regularly monitored.

Note

* India (2009).

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References

Carnegie, A. (1902) The Empire of Business. New York: Doubleday Page and Co reprointed by Elbron Classic Series (2006).

Chandra, B., Mukherjee, M. and Mukherjee, A. (1999) *India after Independence*, New Delhi: Viking Penguin India.

Deem, R., Hillyard, S. and Reed, M. (2008) *Knowledge, Higher Education, and the New Managerialism: The Changing Management of UK Universities*, Oxford: Oxford University Press.

Goodall, A.H. (2009) *Socrates in the Boardroom: Why Research Universities Should be Led by Top Scholars*, Princeton, NJ: Princeton University Press.

Hirsch, E.D. Jr. (2010) "How to Save the Schools", New York: The New York Review of Books, 13 May, pp. 16-19.

India (2009) *Report to the Nation 2006-2009, National Knowledge Commission*, New Delhi: Government of India.

National Economic Advisory Council (NEAC) (2010) *New Economic Model for Malaysia: Part 1*, Kuala Lumpur: Percetakan Nasional Malaysia Berhad.

National Knowledge Commission (2009) *Report to the Nation 2006 – 2009*, New Delhi: Government of India, downloaded from
http://www.knowledgecommission.gov.in/downloads/report2009/eng/report09.pdf.

New Straits Times (2011) "People-Driven Change", 28 March.

Selvaratnam, V. (1994) *Innovations in Higher Education: Singapore at the Competitive Edge*, Washington, DC: World Bank Technical Paper number 222, Asia Technical Department Series.

The Economist (2010a) "The Contest of the Century: India vs China", 21 August.

The Economist (2010b) "Much Less Than Promised", 4 September.

Wilson, D. and Purushothaman, R. (2003) "Dreaming with BRIC's: The Path to 2050", New York: Goldman Sachs Global Economic Paper No. 99.

Wolf, A. (2002) *Does Education Matter? Myths about Education and Economic Growth*, London: Penguin Books.