

matters. Hence, it is quite legitimate to ask: Can NKC recommendations change the above scenario? It will not be a surprise if IRAHE (Independent Regulatory Authority on Higher Education proposed by NKC) itself is taken over by the above coterie. Presume that 15% GER (gross enrollment ratio), as desired by NKC, is achieved by 2015. In other words, 85% of the eligible population would still be deprived of enrollment. And one would still find the same rhetoric as of now in 2015 as well, from various groups of people and NKC constituted in 2015 would once again come up with the same three keywords –expansion, equality and excellence. If the present numbers are inadequate, can doubling the number deliver the goods and achieve excellence? Without appreciating the basic problems and ground realities in the already existing institutions, what is the point in starting more number of institutions? Is it not tantamount to accepting the failure of the giant UGC system of university education and research?<sup>3,4</sup> Even with the present numbers, if more than one-third of the colleges and universities are non-viable<sup>5</sup> and a large number of the remaining in different states of survival, how can further expansion achieve excellence? Just because there is a heavy increase of budget, some steps to sharing resources are suggested? This increase in budget and other steps no doubt were required even to strengthen the already existing number of institutions and provide quality education to the existing num-

bers. In fact, even in 1994 a requirement of at least 50,000 dollars per faculty member per year had been suggested<sup>2</sup>. So the recommended expansion in education and the accompanying increase in budget would once again result in the same overall quality and situation as is present now. It is a well known fact that out of the total budget, a lot (70–90%) would go to brick and mortar, salaries and maintenance, etc. with little left to impart training or to do any sensible research. To use the exact phrase of the author<sup>4</sup>, ‘leaving precious little for the *raison d’être*, namely teaching, research and development’. Of course, it has one major advantage. It will keep the social unrest at a lower level. Keeping the unemployed and unemployable youth engaged in higher education is a good strategy to contain the youth and social unrest.

Let me end by appreciating some lines from the NKC Report. The remark by the NKC chairman in the foreword; ‘Our country is too large, too complex and too diverse for “one size fits all” solutions’. It is implied in this statement that whatever you may suggest to the best of your integrity and calibre, there will always be enough number of people to oppose and sabotage what you suggest, because it genuinely does not fit them. Hence it is probably better that we have separate policies framed, keeping in view the state of affairs in different zones of the country. Maybe a similar idea is reflected in the NKC Chairman’s statement, ‘At present we are engaged in discus-

sions with about 17 states . . .’. Hope at the end of these discussions another report would highlight the specific policies being adopted in different states.

Secondly, NKC has rightly pointed out to provide access to Government-held data. ‘Data from different sectors need to be analysed holistically so that planning becomes more data-driven and reflects the ground situation. This means that data that are traditionally collected and managed separately, unrelated to each other, should now be seen together.’ Hope the Editor and others would make use of RTI (right to information) as recommended by NKC and publish the above-required data in *Current Science* and once again initiate a debate, which I feel would be far more useful to the nation.

1. [www.knowledgecommission.gov.in/reports/report07](http://www.knowledgecommission.gov.in/reports/report07)
2. Mahajan, S. M., *Curr. Sci.*, 1994, **67**, 503–508.
3. Burma, D. P., *Curr. Sci.*, 1994, **67**, 681–682.
4. Balasubramanian, D., *Curr. Sci.*, 1994, **67**, 512–515.
5. Srivatsava, P. N., *Curr. Sci.*, 1994, **67**, 508–512.

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## Urbanization and biodiversity loss – Where is Hyderabad heading?

Urbanization is a universal phenomenon and its negative effects on biodiversity, especially in terms of irrecoverable habitat fragmentation and loss, associated physical changes and local extermination of native species is slowly being understood by the urban populace<sup>1</sup>.

The greatest challenge to biodiversity due to urbanization is its current and growing geographical extent and more and more surrounding areas being converted into urban expanse by real-estate and infrastructure-developmental activities. It is known that semi-urban areas are rela-

tively better in terms of biodiversity in comparison to urban cores where non-native, exotic and invasive species tend to dominate. The native species tend to become rare and are restricted to sites that have escaped high-intensity development<sup>2</sup>, such as city parks, graveyards, university campuses, areas adjacent to railway tracks and roads, avenue plantations, etc.

With the recent spurt in growth resulting from the recognition of Hyderabad, as an upcoming IT hub and with a newly acquired metropolitan city status, the urban

expansion has seen a manifold increase, resulting in large-scale destruction of semi-wilderness areas and hacking of thousands of avenue trees. This loss of carbon sink not only affects the burgeoning pollution levels, but also renders thousands of species homeless which are dependent on these trees.

The GMR Hyderabad International Airport Limited has constructed a futuristic international airport with A-380 compatible runway and a passenger capacity of 12 million passengers per annum. This airport is located in Shamshabad, which

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is approximately 30 km from the city centre. To ease the traffic flow from various sites within the city to the airport, infrastructure development planned and implemented by Greater Hyderabad Municipal Corporation (GHMC). The road-widening activities have resulted in mindless hacking of an estimated 30 lakh avenue trees so far, of which around 70,000 were over 50 years old and a few were even 100–150 years old. Each tree of average growth helps humans by sequestering carbon dioxide, cleaning particulate pollution from the air and returning oxygen to the environment – a service worth crores of rupees that directly benefits the common man. This mindless destruction of green cover will increase the existing woes related to ambient temperature, water-table level, solid particulate

matter in air, noise pollution, and respiratory diseases.

The Andhra Pradesh Water, Land and Trees Act, 2002 prohibits the felling of trees and the GHMC has been allowed by the State Government to hack trees to smoothen developmental activities with an understanding that for each felled tree three saplings would be planted. An utopian vision, indeed; but where is the mechanism to check and ensure that the promises are kept? The State Government and GHMC should initiate habitat restoration programmes in appropriate sites. Empty lots, city parks, campuses under universities and other institutions and wastelands should be brought under revegetation projects. These programmes should be executed with holistic ecological and scientific approach as restoration

of native plant communities would attract and promote native animal diversity. Hyderabad needs to shift its focus from silico-development to eco-development.

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1. McKinney, M. L., *BioScience*, 2002, **52**, 883–890.
  2. Godefroid, S., *Landscape and Urban Planning*, 2001, **52**, 203–224.
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## Web of Science: Science trapped in a spider's web

Success in science today is commonly measured by one magic index, comprehensively used in nearly all fields of science: The ISI Web of Science® (WoS) Impact Factor (IF). Since the concept of IF is easy to understand and the IF simple to calculate, its usage has widely spread: uncomplicated evaluation of the quality of scientific journals using the ISI *Journal Citation Reports*®, assessment of competitors' performance, productivity of research departments, efficiency of investments in research and performance of different fields of research. Many important decisions in science are made on the basis of WoS: Which is the most suitable journal for the next paper? Who is most qualified to join our research team? Who should get/how much incentives? Even scientific programmes, directions of scientific efforts, and scholarly topics are strongly directed by the outcomes of WoS<sup>1</sup>.

But, what is WoS? It is the most profitable product of Thomson Scientific, a world leading information provider. WoS

covers 250 scientific disciplines with approx. 8700 peer-reviewed journals, a rather impressive number. However, seminal works in influential books, special issues in non-listed journals or other important sources are hardly tracked. Calculation of the IF as such is rather problematic too: journals publishing large proportions of non-citable sections can artificially increase their IF<sup>2</sup>. Furthermore, calculation of personal and department IFs is not standardized, which leads to selective usage of current journal IFs or those of the corresponding publication year.

Last but not least: What does scientific impact, mean? First of all, scientific impact should be defined as the penetration of the scientific community, which means that the distribution of publications should neither be hindered by means of copyright restrictions<sup>3</sup> nor should the search for such publications be limited by selective offers of journals listed by WoS. Second, the definition of a commercial company could be an anchor

point, but should by no means be the gold standard. Tools such as IFs or h-index<sup>4</sup> can be valuable if we understand them properly, use them unequivocally, and apply them cautiously. Otherwise, science is trapped in a spider's web.

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1. Adam, D., *Nature*, 2002, **415**, 726–729.
  2. Hopkins, K. D., Golligly, L., Ogden, S., and Horton, R., *Nature*, 2002, **415**, 732.
  3. Carbon, C. C., *Science*, 2008, **319**, 1483.
  4. Ball, P., *Nature*, 2005, **436**, 900.
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