OPINION

On brain drain, and the residuum

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Brain drain has been the cause of serious concern for social scientists, educationists, politicians, planners and all enlightened citizens alike in developing countries. It is defined as the more or less permanent emigration of talented citizens, who have been well educated at the expense of the national exchequer, to greener pastures of the West. Depending on the viewpoint of the observer, the phenomenon has been variously described as 'reverse flow of technology', 'underpriced resource transfer', and 'talent hijacking'; or as 'talent pool on loan', as 'inconsequential non-issue' and even—the most cynical one—as a 'desirable phlebotomy in a country of acute unemployment'. Because of such widespread concern, the issue has been thoroughly investigated and researched by individuals, institutions and governmental agencies like the DST.

Such investigations reveal that the current stock of S&T personnel in the country stands at about 3.3 million (of which, less than 3% is at advanced R&D level) while the number that migrated to USA alone during the period 1966–85 was a mere 45,000; the concern therefore is not so much for the number as for the presumed high quality of that number. 'Pull' factors, such as salary levels, job opportunities, higher living standard and potential for saving accumulation, and 'Push' factors at homeland like poor career prospects, maddeningly slow bureaucracy, emphasis on seniority rather than brilliance etc., have been identified. Remedial and preventive measures have also been suggested.

Apart from furnishing relevent statistics and trend-analysis, such research reports also reveal some interesting and unexpected information. For instance, it has been found that migration proclivity among IIT students correlates most directly to a quantified Socio-Economic Status Index (SESI) based on (a) the place of schooling and (b) educational background of parents—and not on several other seemingly correlatable parameters like affluence. Another interesting finding, a saving grace, is that only 2% of all the Bhatnagar-Awardees, the very best among Indian science talent, and 5–6% of Pool Officers and CSIR scientists had migrated abroad since inception of the schemes; it underscores the fact that the best among our mature but still-young scientists are not opting out–yet.

Analysis of this reverse, and apparently irreversible, flow of Indian talent to the West is however just one part, a well-publicized part, of the social inventory of the total national talent resources. But what goes unaudited and almost unnoticed is the plethoric maldistribution of the remaining talent–'brains', if you wish–in different professional sectors. It goes unnoticed perhaps because its adverse effects are still not glaring at the face of the society, even though its broad contours are already visible to anyone who cares to look closely. Let me explain.

The millennial atmosphere of all-round intellectual prosperity of yester-years continued unabated during the first decade of Independence. Without naming names, there had been no dearth of talent in any sphere of social endeavour; science, arts, philosophy, law, civil service, judiciary, medicine, education—every profession had had its quota of luminaries of whom the profession could be justifiably proud. This happened primarily because bright young people of that generation could, and did, choose subjects and professions of their liking without any apprehension about the future. Brilliant people are destined to shine wherever they are, whichever profession they select—thus ran the conviction. And of course keeping-up-with-the-Joneses-next-door or competitive consumerism or Mammon-worship was not as much an overriding consideration in choosing professions then as it is now.

Accent on science and technology education, increasing job opportunities for S&T personnel, gross disparity of pay between science/technology graduates and those from the Humanities stream, discriminatory social reckoning as reflected even in matrimonial columns ('only Engineers and doctors, preferably with foreign training may contact')—all these dramatically changed the near-random pattern of distribution of brilliant students who began to congregate in science, technology or medical streams. Today virtually the entire bunch of the top 20% bracket, notionally the best brains, from every State Madhyamik School Board aspires to join the science stream. Failure to do so is often considered the end of the world by such students and their families.

There is thus a pronounced, first-order, intellectual 'density' stratification, between the 'useful' technology-science-medicine streams and the "useless" humanities stream.

Within these two major layers there exists a finer, second-order differentiation. Engineering is preferred over sciences; among engineering disciplines computer and electronics attract the best, while agriculture and mining have to make do with lesser mortals. Similarly, among those who are obliged to, and those who grudgingly condescend to, take up the humanities stream, there is a hierarchy of preference; economics and political science are star attractions while vernacular, sanskrit, philosophy, law occur way down the list.

Effects of such highly skewed distribution of talent at the input stage are beginning to show. One hears of many young brilliant computer scientists and electronics wizards who have carved out a respectable niche for themselves in the national, even international, scene before they are thirtyfive. Without meaning any disrespect to any profession, one however does not hear of many equally brilliant, below-thirtyfive lawyers or philosophers or historians. In fact disquieting symptoms of degeneracy are already visible in the Corporate Bodies of some of the most-dignified of professions; professions which, instead of hanging their head in shame for delinquency of its members and debarring such members, are actually lending

moral support of the professional body to such errant members. Even the highest echelon of the country's judiciary, whose honesty and integrity should be—like those of Caesar's wife–above suspicions and beyond reproach, has lately been under a cloud!

What would be the scenario like, twenty years from now? We have every reason to expect a Bardin or a Khurana, a rare sprinkling of Bhabas, Bhatnagars, Sahas; even a Milton Freidman and a few Bhabatosh Duttas and Amartya Sens perhaps: Maybe, we'll have a Walter Lipmann and certainly many a Jack Andersons. But it would be a miracle to come by a Gajendragadkar in the Judiciary, a Sorabji or a Palkivalla in the law, a Sarvapalli Radhakrishna or a Brajen Seal in philosophy, analogues of Ramesh Majumders and Bipin Chandras in history, or Annadasankar Rays, Saibal Guptas in the Civil services. Erudite thinkers, philosophers and teachers of the stature of V. V. John, Shibnarayan Roy, Amlan Datta and their peers are extremely unlikely to be replicated—if intrinsic merit of the input material is any factor at all in determining the quality of the finished product.

It may sound a glib truism: but equitable distribution of 'brains' among different professional sectors is as important for allround development of the society–and perhaps as unattainable–as equitable distribution of wealth. Such extreme imbalance as is witnessed today is bound to have far-reaching impact on the entire fabric of the society. Professions likely to suffer most from acute scarcity of talent would be the Judiciary, the Law, and the Civil Services—especially the State Civil Services. In a democratic policy like ours, responsibilities for decision-making, execution, policy-formulation and administration of justice lie largely on these very professions.

Many years ago C. P. Snow complained that 'the intellectual life of the whole society was increasingly being split into two polar groups' of scientists and non-scientists. He likened these to two galaxies without any communication, without any interface, moving away from each other. But he at least had the consolation that his two galaxies had had statistically random, and therefore approximately similar, number of bright stars in both.

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