

Executive Summary

1. A data bank of a large pool of Indian scientists would benefit the country and act as a powerful tool for showcasing India's scientific and research capabilities at a time when nations are integrating intellectual capital. This study is a step in that direction.
2. At the instance of Department of Science & Technology (DST), National Science and Technology Management Information System (NSTMIS) Division; a research project titled "Profile of Indian Scientists in Major Scientific Agencies" was undertaken by the Group for Economic & Social Studies (GESS).
3. The scientific agencies covered in the project include Department of Science and Technology (DST), Council of Scientific and Industrial Research (CSIR), Indian Council of Medical Research (ICMR), Ministry of Earth Sciences (MoES), Department of Biotechnology (DBT) and Indian Council of Agricultural Research (ICAR).
4. The information has been collected through specially designed questionnaire, desk research, personal visits, emails, telephone calls and fax Messages from scientists holding position of grade 'B' and above and employed in the six major scientific agencies covered in this project.
5. The responses from scientists on overseas experience/exposure indicate that very few scientists had the opportunity of going abroad for higher studies or to attend conferences or training.
6. This trend however varies from institute to institute. 368 Scientists are Ph.D. in Biology followed by 180 in agricultural and Veterinary Science, 160 with Chemistry, 154 with Physics and so on.
7. From the replies received it has been found that the pool of scientists engaged in basic research, product development, patents filed, patents sealed, industrial management, publication of research papers and scientific books, consultancy, R&D Management, planning etc. is small except in the case of senior scientists. The trend also differs from institute to institute.
8. The ratio of scientists between female & male varies from institute to institute. It is 11.31% in ICAR where as percentage of female scientists is 33.33% in DBT.
9. The age profile of scientists is also not commensurate with the increasing demand of scientists in the wake of globalisation of Indian economy. An Analysis of age profile of scientists based on questionnaires received indicate that majority of scientists covered under the project fall in the age group of between 41-50 and 51-60. ICMR respondents indicate a trend of higher age group while DBT respondents show a trend of early age group.
10. As per responses received, majority of scientists (77 per cent) have indicated preference for health check at the age of 60 years only a small percentage of scientists are in favour of critical performance review for working beyond the retirement age.

11. The objective of the study was to create a data bank through a web enabled software program - *website* which will have security features to protect the confidentiality and keep the data secured and provide a built in search engine within the software. This program can be accessed with secured login and password with the agency nominated or appointed by DST.
12. Keeping in view the objectives of the project, a web-enabled software/*website* titled www.indianscientist.in has been created. This *website* contains data of 2007 scientists covered in the project.
13. Accordingly, an exclusive *website*, with the domain name www.indianscientist.in has been registered. The site has inbuilt features for addition, deletion, up-gradation and other changes as and when required. The *website* contains data of 2007 scientists of six major scientific agencies who responded to GESS and filled the questionnaire.
14. The *website* contains data bank of individual scientists - their age structure, institutional information, personal profile, academic qualifications, professional experience, areas of specialization, awards, overseas experience/ exposure, details of research/ papers/ publication/ patents and total experience.
15. The *website* www.indianscientist.in is different from other *websites* of institutions and labs as it has additional features over other *websites* with scope for continuous changes and up-gradation. A scientist will be able to update his/her profile automatically through a designated mode, which will be made available by DST or GESS on request.
16. The *website* has been designed in such a way as to give access to information to government organizations to enable them to plug the gap in demand and supply of senior scientific manpower (which may result in part from across the board ban on recruitment imposed by the Government for the last several years).
17. The *website*, having data at one place, can help in plugging the gap in demand and supply for teaching staff in colleges and universities imparting higher education even after the retirement of scientists. It is important to note that Government has allowed the academic institutes to employ experienced and skilled personnel up to the age of 65 years and even up to 70 years on case-to-case basis.
18. An organization/ industry/ R&D institutes/labs will be able to out source their requirement of scientists according to their needs and requirements in formulating future manpower policy.
19. The *website* contains personal and professional data of scientists. The data available for public view is limited to the brief profile as agreed by the LPAC team based on the primary, secondary and tertiary data classification.
20. Basic features of the website include easy to use search capability, search engine, new registration, editing the existing profile and change of password in addition to the security of data bank.

21. The *website* would require future enhancements for optimal use of the data by the government industry and academic institutions. Classification of data by designation, age group, qualification and specialization has been arrived at by collecting data from individual scientists.