**6.2.1 The institutional Strategic plan is effectively deployed.**

**Describe one successfully implemented activity based on the strategic plan within a maximum of 500 words**

One of the elements of the strategic plan of HBNI is to introduce additional academic programs focused on skill and professional development. HBNI endeavors to create and organize courses and programs that meet growing requirements of nuclear science and engineering and their applications for benefit of the country. These programs benefit not only employees of DAE units, but also the practicing professionals in industries and other institutions. Along these lines, HBNI has initiated important professional and skill-based programs and strengthened on-going professional courses. Some examples are given below:

* **Professional courses in health sciences: Two professional courses, namely MD in Nuclear Medicine and DM in Onco-Pathology have been introduced.** Nuclear medicine is a branch of medicine that uses a small quantity of radioactive material (radiopharmaceutical) to diagnose, evaluate, or treat a variety of diseases in a safe, painless, and cost-effective way. Two CIs of HBNI, namely BARC and TMC, have initiated this academic program with the approval of Academic Council. Presently, TMC and BARC together offer 12 MD (Nuclear Medicine) seats per year with the permission of MCI. In addition to this, TMC has also introduced an important DM program in Onco-Pathology with three seats per year. This branch of science deals with the study of malignant and non-malignant tumours, metastasis, tumorigenesis, and carcinogenesis.
* TMC has significantly increased the number of seats in many on-going DM, MCh and MD professional programs during the last few years, towards meeting the demand for such professionals in the country. Some of these are:

M.Ch. (Surgical Oncology) - by eight seats

M.Ch. (Plastic & Reconstructive Surgery), D.M. (Medical Oncology) and M.D. (Palliative Medicine) - by two seats each

D.M. (Interventional Radiology), D.M. (Paediatric Oncology), D.M.(Critical Care Medicine) - by one seat each.

* Diploma in Analytical Chemistry: With analytical techniques and instrumentation becoming ever more sophisticated, there is an increasing demand for qualified analytical chemists in the industry. However, due to the high capital cost as well as maintenance cost, such sophisticated instruments are not affordable by most of educational institutes. Therefore, chemistry graduates coming from the educational institutes lack the skill or knowledge base to handle such techniques or instruments. With a high level of expertise in analytical chemistry and world class analytical equipment available in its CIs, HBNI is uniquely placed to offer courses to upgrade the skills of chemists. Accordingly, a diploma course in analytical chemistry has been introduced in BARC.
* Introduction of MSc (Radiopharmacy) course: This is another skill-based program introduced in TMC with the approval of Academic Council. This course provides opportunities to the students to develop knowledge, understanding and skills in principles and practice of radiopharmaceutical science and equips them to work as a radiopharmaceutical scientist.

The above mentioned courses are unique courses of high value, available only in a few Universities in the country. HBNI will continue its endeavour to identify and offer more such skill-based and professional courses for the benefit of the society and country.