

CHAPTER II: MINISTRY OF CHEMICALS AND FERTILIZERS

National Institute of Pharmaceutical Education and Research

2.1 Review of status of National Institute of Pharmaceutical Education and Research (NIPER)

2.1.1 Background

Government of India set up the National Institute of Pharmaceutical Education and Research (NIPER) at Mohali as per the provisions of the NIPER Act, 1998 to nurture and promote quality and excellence in pharmaceutical education and research. The objective of the Institute was to concentrate on courses leading to master's degree, doctoral and post-doctoral courses and research in pharmaceutical education. The Institute was to innovate and train teachers in the art or science of pharmaceutical teaching and to support creation of new knowledge and transmission of existing information in pharmaceutical areas. It also aimed to develop a multi-disciplinary approach in carrying out research and training of pharmaceutical manpower to serve the larger interests of the profession, academia and pharmaceutical industry.

The NIPER Act was subsequently amended in 2007 and accordingly the Central Government accorded in-principle approval (August 2007) to set up six new NIPERs at Hyderabad, Ahmedabad, Kolkata, Guwahati, Raebareli and Hajipur which started functioning from 2007-08. NIPERs are working as autonomous bodies under the Department of Pharmaceuticals (DoP), Ministry of Chemicals and Fertilizers (MoCF). Details of grants sanctioned and released and expenditure incurred by each of the seven NIPERs from 2007-08 to 2017-18 are mentioned in **Annexure-I**.

2.1.2 Audit Objectives, Criteria, Scope and Methodology

A test check of records was carried out to assess whether the Governance structure prescribed under the Act is in place and adequate infrastructure facilities, faculty, technical and administrative staff for the NIPERs was available, to achieve the objectives envisaged under the Act. The audit criteria were derived from the NIPER Act and related statutes and manuals, minutes of the Board of Governors (BoG) /Steering Committee meetings, agreements signed between NIPER and respective State Governments, Memorandum of Understanding (MoU) signed between mentor Institutes and MoCF and relevant records of the seven NIPERs and DoP/MoCF. Audit examined the records for the period 2007-08 to 2017-18.

2.2 Audit Findings

2.2.1 Non-constitution of Board of Governors (BoG) in six new NIPERs

As per Section 8 (1) of the NIPER Act, the general superintendence, direction and control of the affairs of NIPER rests with the BoG. Constitution of BoG was essential for smooth governance and efficient functioning to ensure the achievement of the objectives envisaged by the setting up these Institutes. Audit noted that despite the fact that the Board of Governors was the Apex body responsible for the Institute, the process of

constitution of BoGs at the six new NIPERs was delayed by the Ministry by more than 8 years since the setting up of the Institutes and finally initiated in July 2015. In the absence of BoG, the Steering Committee¹ (SC) under the chairmanship of Secretary (Chemicals and Pharmaceuticals) discharged the functions of the BoG for all the new NIPERs. At NIPER, Mohali, the BoG was required to be re-constituted in June 2014 but was actually reconstituted after a delay of two years in July 2016.

The Ministry stated (March 2019) that Boards of Governors in six new NIPERs viz. Ahmedabad, Hajipur, Hyderabad, Guwahati, Kolkata and Raebareli have been constituted on 9 March 2019. The reply of the Ministry was silent on the reasons for delay in constituting the BoGs. Audit noted that the new NIPERs have been constrained in respect of permanent infrastructure, faculty, staff etc. in the absence of dedicated BoGs for each Institute, which has been discussed in succeeding paragraphs.

2.2.2 Adequacy of Infrastructure facilities and Manpower

2.2.2.1 Absence of regular campus and premises

The Detailed Project Report (DPR) for six NIPERs was prepared by MoCF in November 2008 and subsequently modified in December 2010 and January 2011 and projected the total cost of ₹2778.21 crore. The Expenditure Finance Committee (EFC) approved (January 2011) setting up of the six NIPERs under Phase-I (Phase I would cover construction of permanent infrastructure facilities) at a total capital cost of ₹633.15 crore through Government funding subject to availability of suitable land. The proposal was approved by the Union Cabinet in September 2011.

Audit noted that, even after a lapse of more than ten years since inception, none of the six new NIPERs were operating from their regular campuses or premises. NIPER, Ahmedabad was functioning in a temporary building while the other five new NIPERs were operating through designated mentor Institutes² (except NIPER, Guwahati which was shifted to a private rented campus in August 2017). The delay on the part of the Ministry in ensuring setting up of permanent campuses for the Institutes, adversely affected the availability of quality infrastructure facilities for students and faculties. The status of allotment of land and construction of permanent campus is shown in Table 2.1 below:

Table 2.1: Status of allotment of land and construction of permanent campus

Name of NIPER	Area of land allotted (acre)	Date of allotment of land	Initial cost estimates (₹ in crore)	Status
Mohali	Own premises	Own premises	Not applicable	Not applicable
Guwahati	89	March 2008	159.69 (December 2014)	After a lapse of more than seven years from the allotment of land construction of building

¹ Steering Committee was constituted by the MoCF in December 2007 to oversee the working of all the new NIPERs and take policy decisions for them till the BoG for each NIPER is formed.

² NIPER, Guwahati- Guwahati Medical College, Guwahati (till 2 November 2016); NIPER, Hajipur-Rajendra Memorial Research Institute of Medical Science, Patna; NIPER, Hyderabad-CSIR-Indian Institute of Chemical Technology, Hyderabad; NIPER Kolkata-CSIR-Indian Institute of Chemical Biology, Kolkata; and NIPER, Raebareli-CSIR-Central Drug Research Institute, Lucknow

				is completed only 43.45 <i>per cent</i> upto March 2018.
Ahmedabad	60	April 2009	198.87 (September 2011)	The initial estimate of ₹198.87 crore (2011) was escalated (September 2015) to ₹497.40 crore resulting in cost overrun of ₹298.53 crore which was yet to be approved by the Ministry.
Hyderabad	50	January 2014	499.24 (May 2016)	Land lease period expired in December 2017 but NIPER, Hyderabad had not taken any steps to extend the same.
Raebareli	48.57	May 2013	Not Finalised	PMC was yet to be decided and construction had not commenced.
Kolkata	10	January 2018	Not Finalised	Initially Govt. of West Bengal (GoWB) allotted (July 2009) 35 acres of land at Baruipur to NIPER, Kolkata which was cancelled in July 2017 due to non-payment of the development cost by NIPER and NIPER's unwillingness to spare 10 acres of land for common area. Again GoWB decided to allot 10 acre of land in January 2018.
Hajipur		Land not yet allotted	Not Applicable	Land has not been allotted by State Govt. due to non-submission of Model Plan by Institute.

The Ministry stated (March 2018) that it is constantly pursuing with the Department of Expenditure, Ministry of Finance for release of fund for construction of building. The Ministry further stated (March 2019) that construction of a regular campus for NIPERs Ahmedabad and Guwahati only at a cost of ₹103.88 crore each has been sanctioned. Sixty *per cent* construction work of NIPER Guwahati has been completed whereas construction of NIPER Ahmedabad campus will start shortly.

The Ministry's reply needs to be viewed in light of the fact that Institutes have been operating from rented premises since the last ten years. Further, the approval for construction of regular campus for remaining four NIPERs (Hyderabad, Hajipur, Kolkata and Raebareli) was yet to be accorded by the Ministry.

2.2.2.2 Non-recruitment of regular academic and administrative staff

The six new NIPERs had no permanent academic and administrative staff, except Director. The administrative and academic work of the Institutes was being carried out entirely through contractual staff/ faculty. Audit observed that none of the posts in the six new NIPERs (except Director) had been sanctioned by MoCF till March 2018. Recruitment could be taken up as per norms only after the regular posts of both academic and administrative staff were sanctioned by the Ministry.

In the absence of regular sanctioned posts and permanent faculty the quality of faculty and staff available and transparency in recruitment of contractual staff at NIPERs could not be assured by Audit. There was no uniformity in the basis for determining the number and category of posts while making temporary appointments. NIPER, Hyderabad followed a faculty- student ratio as 1:12 whereas Ahmedabad followed a ratio of 1:8 (AICTE norms). Academic and non-academic staff at Kolkata, Guwahati, Raebareli and Hajipur were appointed based on the requirement.

The Ministry stated (March 2018) that regular academic and administrative staff are appointed with the approval of the Department of Expenditure, Ministry of Finance. It further added (March 2019) that Department of Expenditure has approved 156 posts of faculty staff and 150 posts of non-faculty staff in six NIPERs in February 2019. Recruitment Rules for the same are under finalisation.

The Ministry's reply needs to be viewed in light of the fact that even though the new NIPERs have been functioning since last ten years, the Ministry failed to complete the procedural formalities and therefore permanent qualified faculty and staff was not available at the new NIPERs.

2.2.2.3 Appointment and regularisation of contractual employees

As per Clause 6 of the Statute of NIPER, NIPER, Mohali was making appointments on contract basis. MoCF, vide notification dated 3 July 2014 amended Clause 6 to stipulate that the NIPER adopts a policy of making appointments on regular basis and a High Level Committee (HLC) may be constituted with the approval of NIPER, Mohali for recommendation and regularisation of existing contractual employees.

Between December 2015 and February 2017, out of 151 contract employees, HLC recommended 140 employees for regularisation. 132 were recommended for regularisation without any condition and remaining eight employees were also recommended for regularisation subject to court decision and outcome of CBI investigation. In respect of the remaining 11 employees, the Committee observed irregularities in their initial appointment and recommended that these cases be placed before the BoG for consideration.

A test check of records relating to regularisation revealed the following:

- (i) Despite BoG's clear direction to re-examine all the 140 cases with reference to the Ministry's direction before regularisation, the Institute regularised (April 2017) eight employees against whom court/CBI cases were pending.
- (ii) Further, with respect to the 11 employees in whose case the HLC had found irregularities, BoG recommended to the Ministry (May/June 2017) regularisation of seven out of these eleven employees based on production of further documents by those employees. Orders for regularisation in respect of these seven employees were however put on hold till the disposal of the litigation filed by these employees (May 2017).

Audit noted that, out of the seven cases recommended by BoG to the Ministry for regularisation, in one case, an employee was an Associate Professor in Pharmaceutical Department despite possessing an M.Com. degree though the requisite qualification was a basic degree in science/pharmacy or engineering. In another case, the Board granted relaxation in essential qualifications for the post of Scientist Grade I and Junior Technical Assistant on the basis of ICMR (Indian Council of Medical Research) guidelines though ICMR rules had neither been adopted in statute/ordinance nor included in the recruitment policy of the NIPER, Mohali.

The Ministry stated (March 2018/March 2019) that though NIPER, Mohali was directed (April 2016) to fix responsibility for violation of the NIPER Act during recruitment process, it is practically impossible to fix responsibility and accountability on the concerned officers as they had either left the Institute long back or had superannuated. The reply of the Ministry establishes the fact that there were lapses in recruitment and regularisation of staff at Mohali and in the absence of transparent recruitment, Audit could not gain assurance on the quality of faculty and staff available at the Institute.

2.2.3 Academic Performance of NIPERs

Details of enrolment of students, number of seats envisaged, number of students who joined and those who completed the course at all the NIPERs during 2007-08 to 2017-18 are given in Table 2.2:

Table 2.2: Details of enrolment of students from 2007-08 to 2017-18

Name of NIPER	Envisaged initially (1)	Students joined (2)	% of students joined (3) = (2)/(1)	Course completed (4)	% of students who completed the course (5) = (4)/(2)
Ahmedabad	779	596	77	563	94
Guwahati	370	333	90	332	99
Hajipur	511	403	79	385	96
Hyderabad	1080	1055	98	1025	97
Kolkata	572	470	82	469	99
Mohali	3036#	2980	98	2785	93
Raebareli	392	352	90	343	97

in the absence of data in respect of number of students envisaged for Ph.D. course, the actual students enrolled has been considered as the envisaged number. Number of students who completed the course includes the students who were still pursuing the course.

From the table above, it is seen that 77 per cent to 98 per cent of seats in all NIPERs during 2007 to 2018 were filled and more than 90 per cent of the students completed the course.

2.2.3.1 Placement of Students

The placement of students after completion of the course would be a benchmark for assessing the performance of the NIPERs. Audit observed that lack of independent, well-developed permanent campus, non-availability of permanent training and placement officer and lack of pharmaceutical companies near the Institutes affected the placements

in NIPERs which remained poor during 2007-18. The trend of placements in NIPERs was mostly erratic over the years ranging from 22 *per cent* to 100 *per cent* except NIPER Hyderabad which showed consistently good performance in terms of placement of students and placement hovered around 80 *per cent*.

The Ministry stated (March 2018) that placement is likely to increase on improvement of infrastructure facilities like labs, library and appointment of more contractual /regular faculty and staff. It further stated (March 2019) that Steering Committee has directed (June 2018) NIPERs to develop a mechanism for appointment of a Placement Officer on contractual basis. The reply of the Ministry reinforces the audit observation that the poor placement of the Institutes was attributable to poor infrastructure and faculty/staff at the NIPERs. Further, it is only after more than ten years since functioning of the new NIPERs that the necessity of a placement officer at the Institutes was considered by the Ministry.

2.2.3.2 Research Papers and Patents filed

Besides the number of patents approved, the number of research papers published and the impact of such research are measures of the academic achievements of NIPERs. NIPERs have published research papers in international and national Journals like European Journal of Pharmaceutics and Biopharmaceutics, Journal of American Chemical Society, TrAC Trends in Analytical Chemistry, Indian Journal of Traditional Knowledge, Indian Journal of Pharmaceutical Sciences, Indian Journal of Pharmacology etc. The Table 2.3 below shows the details of number of research papers published, patents filed by students etc in NIPERs during 2007-18.

Table 2.3: Details of number of research papers published, patents filed per student from 2007-08 to 2017-18

Name of NIPER	Research Papers Published	Patents filed	Number of students passed out	Number of research paper published per student	Number of patents filed per student
Mohali	2279	179 (45 obtained)	2785	0.81	0.06
Hyderabad	300	14	1025	0.29	0.01
Ahmedabad	189	3	563	0.33	0.005
Guwahati	132	0	332	0.39	0
Hajipur	55	0	385	0.14	0
Kolkata	54	0	469	0.11	0
Raebareli	38	0	343	0.11	0

The performance of NIPERs other than Mohali in respect of number of research papers published and patents filed was not encouraging. NIPER Mohali published more research papers in absolute numbers, and per student number of research papers published was also higher. It had filed for 179 patents and obtained 45 patents of which seven were commercialised. Only two other NIPERs apart from NIPER Mohali had filed patents.

The Ministry did not fix any criteria for analysing the impact of the research conducted by the NIPERs.

To analyse the impact of research, Audit reviewed Impact Factor³ of Journals in which research papers of NIPER Mohali were published (as it constituted almost 75 per cent of the total research papers published by all NIPERs). Management furnished Impact Factor of Journals in which 1958 papers of NIPER Mohali⁴ were published (out of 2495 papers published by it till February 2019). 190 papers (10 per cent) were published in Journals that had Impact Factor greater than 5, 1591 papers (81 per cent) in Journals with Impact Factor between 1 and 5, and 177 papers (9 per cent) in Journals with Impact Factor less than 1.

The Ministry stated (March 2018/March 2019) that number of patents/research papers would increase considerably once infrastructure like lab/equipment/regular staff are in place, which could not be developed due to fund constraints. It further stated (April 2019) that an inter-Departmental Committee (IDC) has been constituted in January 2019 with Secretary (Pharma) as its Chairperson to periodically review and coordinate the research work undertaken by various governmental organisations under different Central Ministries/Departments in a collaborative, synchronised and synergised way for optimum utilisation of funds and to avoid duplication of efforts and resources in conduct of research.

The reply of the Ministry, further establishes the fact that the envisaged objectives of NIPERs could not be achieved due to its inability to put the necessary infrastructure in place, even after ten years since the constitution of the new NIPERs.

2.2.4 Financial Management

2.2.4.1 Non-generation of sufficient fund from internal sources

As per the provisions of Rule 208(iii) General Financial Rule (GFR) 2005 and Rule 229 (iv) GFR, 2017, "all autonomous organisations, new or already in existence should be encouraged to maximise generation of internal resources and eventually attain self-sufficiency". MoCF directed (July 2017) that the Government cannot continue to fund the Institutes indefinitely and they have to generate their own resources. Henceforth, only a part of the expenditure on salaries would be reimbursed and the remaining would need to be earned by the faculty itself from consultancy, projects etc.

Audit noted that the Institutes were largely financed by grants from MoCF and only a very small portion of the expenditure was met through their own revenue, as can be seen from the Table 2.4:

³ *Impact Factor in a given year is the average number of citations received per paper published in that Journal during the preceding 2 years.*

⁴ *Source: Scopus which is an abstract citation database of scientific journals, books and conference proceedings maintained by Elsevier and PubMed database which contains abstracts of peer-reviewed biomedical literature and is maintained by the National Center for Biotechnology Information, at US National Library of Medicine.*

Table 2.4: Statement showing percentage of total expenditure met from own revenue in the NIPERs during 2007-08 to 2017-18

Name of NIPER	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Mohali	NA	24	24	27	24	24	18	18	16	14	16
Ahmedabad	6	6	7	16	18	20	18	20	11	7	6
Hyderabad	5	1	4	9	9	6	7	13	8	10	15
Hajipur	4	6	9	7	30	14	6	7	2	7	7
Guwahati	NA	8	8	23	17	4	9	11	1	3	1
Raebareli	NA	2	3	6	9	10	13	10	8	11	8

Thus, the Institutes have failed to generate sufficient funds from internal sources to meet expenditure to comply with GFR and directions of the Ministry. It was also observed that on account of excess of actual expenditure over and above grants available and Internal generated revenues, NIPER, Mohali could not transfer the required funds to its Pension Fund.

The Ministry stated (March 2018) that proposal for enhancement in budget allocation for salary and office expenses were sent to Department of Expenditure which did not allocate fund sought for NIPER, Mohali. The reply of the Ministry is silent regarding the efforts made and the proposed road map towards making the Institutes self-sufficient for funds.

2.2.4.2 Delay in submission of annual accounts

The Committee on Papers Laid on the Table of the House recommended in its First Report (Fifth Lok Sabha), 1975-76 that every Autonomous Body should complete its accounts within a period of three months after the close of accounting year i.e. by 30 June and make them available for audit. Audit noted that there was considerable delay in submission of accounts for the Institutes as shown in Table 2.5:

Table 2.5: Delay in submission of accounts

Name of NIPER	No. of years in which the accounts were submitted with delays	Delays in submission of accounts
Hyderabad	10 (2007-08 to 2016-17)	10 months to 79 months
Hajipur	10 (2007-08 to 2016-17)	6 months to 68 months
Kolkata	10 (2007-08 to 2016-17)	1 months to 41 months
Raebareli	9 (2008-09 to 2016-17)	1 months to 44 months
Ahmedabad	6 (2011-12 to 2016-17)	9 days to 30 months
Guwahati	8 (2008-09 to 2011-12 & 2013-14 to 2016-17)	2 months to 23 months
Mohali	3 (2014-15, 2015-16, 2016-17)	3 days to 16 months

The issue related to timely submission of Accounts by NIPERs was discussed by Parliamentary Standing Committee in February 2018 which directed that Annual Report along with Statement of Annual Accounts henceforth should be laid in Parliament timely.

The Ministry stated (March 2019) that Steering Committee had directed the NIPERs to send the Annual Accounts in time for laying on the table of Parliament. The BoG of six NIPERs have been constituted and it is expected that the Annual Accounts of NIPERs will be laid on time. The reply of the Ministry establishes the fact that non-constitution of BoG led to gaps in the management of the Institutes and the delay in timely submission of accounts of the Institutes was one such instance.

2.2.4.3 Infructuous expenditure on account of inability to recover fellowship paid to dropped out students

As per the NIPER Ordinance 2005, students pursuing M.S., M.Tech., and Ph.D., course are entitled for fellowship. However, no safeguards in the form of personal bond were put in place by NIPER to ensure that in the event of a student dropping out of the course or on termination, the amount spent on fellowship could be recovered from such students.

Audit noted that out of the 550 students pursuing M.S. Pharma and 46 students pursuing Ph.D courses at NIPER, Ahmedabad during 2007-18, 40 and 11 students respectively did not complete the course and dropped out midway. As a result, stipend of ₹41.30 lakh paid to these students became infructuous. Similarly, NIPER, Mohali, Hyderabad and Raebareli incurred wasteful expenditure of ₹33.30 lakh, ₹5.13 lakh and ₹2.63 lakh on account of fellowship/ stipend paid to 41 students, 18 students and 7 students respectively during 2004-18, 2007-16 and 2012-18 respectively.

The Ministry stated (March 2018/March 2019) that possibility of recovery was being explored comparing the rules prevailing in IITs. Steering Committee decided (December 2017) that if the students leave the Institute, the fee would not be refunded and the students will have to refund the entire fellowship amount received by them. Also, the amount of caution money has been increased from ₹10,000 to ₹25,000. The reply of the Ministry may be viewed in the light of the fact that due to absence of such safeguards, stipend of ₹41.30 lakh was paid to dropped out students which could not be recovered.

2.3 Conclusion

Audit observed that the BoGs were not constituted in the six new NIPERs till March 2019 and the Steering Committee was discharging the functions of the BoG. The BoG at NIPER, Mohali was reconstituted after a delay of two years. In the absence of a dedicated governing body, permanent academic staff and adequate infrastructure facilities, the Institutes have been unable to achieve their objective to further pharmaceutical education in the country in a significant way, which was reflected in poor performance in terms of Research papers published and patents awarded and poor placement of students.

2.4 Recommendations

- The Ministry and the NIPERs should take steps to ensure that infrastructure required for proper functioning of NIPERs is completed at the earliest.
- Recruitment rules for faculty should be notified by the Ministry at the earliest.
- MoU, clearly laying out performance parameters and output targets, should be entered into between the Ministry and the NIPERs.

The Ministry accepted (July 2019) the recommendations and assured to take necessary action.