Executive Summary

Purpose to undertake this audit

According to the Twelfth Five Year Plan (FYP) document, higher education in India suffers from two basic concerns: the low Gross Enrolment Ratio (GER) i.e. 25.8 per cent in 2017-18 and the quality of higher education marked by lack of world class higher educational institutions (HEIs) in the country. National Education Policy (NEP)-2020 reiterates the issues plaguing Indian higher education system, such as limited access, less emphasis on research, restricted institutional autonomy etc. Further, the India Skills Report 2020 has observed that more than fifty per cent of the students graduating from Indian HEIs are unemployable.

According to All India Survey on Higher Education Reports published by Ministry of Human Resources Development (MHRD), the ranking of Rajasthan for GER among all States/Union Territories (UTs) in higher education declined from 20 (2010-11) to 23 (2018-19).

Since Rajasthan fared poorly in terms of both gross enrolment and quality of education being provided by the HEIs, it was decided to conduct a Performance Audit of the 'Outcomes of Higher Education in Rajasthan'.

Identification of outcomes and their measurement in higher education was a challenging task. Based on extensive interactions with domain experts and on various policy documents, it was concluded that students desire 'employability and higher studies' as the primary outcome of higher education and society wants higher education to contribute towards 'creation of new knowledge through research' and 'diffusion of knowledge through effective teaching/learning processes' while the Government aims to 'create a high-quality higher education system which is easily accessible to all sections of society'. It also emerged that a robust and strong governance structure was paramount in achieving these outcomes.

This performance audit was conducted to assess and evaluate the State's performance in achieving outcomes of higher education in student progression, access, equity, quality and governance in selected three¹ state universities, three constituent colleges and 66 affiliated government and private colleges providing education in general streams (Science/Arts/Commerce). Records of Commissioner of College Education were also scrutinised. The audit was conducted for the period 2014-19.

Performance Audit of "Outcomes of Higher Education in Rajasthan"

¹ University of Rajasthan (UoR), Jaipur; Jai Narain Vyas University (JNVU), Jodhpur; Govind Guru Tribal University (GGTU), Banswara.

Results in brief

Audit observed that system of maintenance of data related to student progression to employment/higher studies/performance in competitive examinations was either poor or non-existent at all levels of higher education system. Job facilitating mechanisms were either dysfunctional or non-existent.

Feedback from stakeholders were not obtained before designing/revision of curriculum of programmes. The availability of Information and Communication Technology (ICT) facilities was poor and very few teachers were using ICT teaching tools in test checked HEIs.

Student Teacher Ratio was high and substantial number of teachers in test checked private colleges did not possess the prescribed National Eligibility Test (NET) qualification. Sufficient steps were not taken for professional development of teachers. The evaluation systems in JNVU, Jodhpur and GGTU, Banswara suffered from operational and monitoring inadequacies. The performance of the test checked HEIs was abysmal in conducting research activities.

Though GER of Rajasthan increased marginally over last nine years, it consistently remained lower than the national figure. GER of both SCs and STs in Rajasthan increased during 2014-19 but Government of Rajasthan (GoR) did not maintain data regarding GER of OBCs, minorities and disabled categories. Gender parity index of all the categories of Rajasthan matched the All India average in 2018-19. Community Education Development Cells were not functional in all the test checked HEIs. Basic infrastructural facilities were inadequate in most of the test checked HEIs and disabled friendly infrastructure except ramps was absent in all the test checked HEIs.

The position of National Assessment and Accreditation Council (NAAC) accredited HEIs in the state was dismal and prescribed meetings of Governing bodies were not held in the test checked universities.

Principal findings and recommendations of the performance audit

The chapter wise audit findings that led to audit conclusions and recommendations are as follows.

Chapter II: Student Progression towards Employment and Higher Studies

 Career counselling cell/placement cells and alumni associations were either dysfunctional or non-existent. Employability enhancement programmes were not organized in 99 per cent of the test checked HEIs. None of the students undertook field projects/internships during 2018-19 in the testchecked HEIs.

(Paragraphs 2.1.1.1 and 2.1.2.2)

 Very few new courses focusing on employability/entrepreneurship/skill development were introduced in UoR, Jaipur and JNVU, Jodhpur during 2014-19.

(Paragraphs 2.1.2.3 and 2.1.2.4)

 Data related to student employment and progression to higher studies was not maintained either by Commissionerate, College Education for State level or by test checked universities as well as their affiliated colleges.

(Paragraphs 2.1.3.1 to 2.1.3.2)

Recommendation:

Every higher educational institution should constitute well-functioning placement cell, career counselling cell and encourage a vibrant alumni association to facilitate graduating students in getting employment or to progress to higher studies,

Chapter III: Quality of Higher Education

Effective Learning Processes

 Feedback from stakeholders such as industrialists, entrepreneurs, students were not obtained in UoR, Jaipur and JNVU, Jodhpur during designing/ revision of curriculum of general degree programmes.

(Paragraph 3.1.1.2)

Curriculum/syllabus of 96 per cent programmes in UoR, Jaipur and 64 per cent programmes in JNVU, Jodhpur were revised during 2014-19 (in 11 selected departments), while GGTU, Banswara did not revise curriculum of any programme since its establishment in 2012 up to 2019.

(Paragraph 3.1.1.3)

Effective Teaching Process

 During 2018-19 in the three test checked universities, only 10.75 per cent classrooms were ICT enabled and 30.59 per cent teachers were using ICT tools in teaching.

(*Paragraph 3.1.2.2*)

• Availability of faculty was insufficient in government colleges which resulted in Student Teacher Ratio (STR) being as high as 88:1 (average), more than four times the prescribed limit of 20:1.

(Paragraph 3.1.2.3 (A))

• In the 30 test checked affiliated private colleges, 45.71 *per cent* teachers did not possess prescribed NET qualification. Efforts towards professional development of teachers were also insufficient.

(Paragraph 3.1.2.3 (B) and 3.1.2.4)

Effective Research

• UoR, Jaipur could utilize only 45.82 per cent of approved grants on research projects and complete only 39 per cent research projects. Further, no patent could be awarded as an outcome of the completed research projects. In JNVU, Jodhpur, none of the 14 research projects could be completed even after utilising 62.60 per cent of research grants. No research project was undertaken in GGTU, Banswara. Alarmingly, in UoR, Jaipur, 72 thesis submitted by PhD students were pending for evaluation/examination with the examiners since 2007 upto 2019.

(Paragraph 3.2.1)

Recommendations:

- The Universities should:
 - Revise/design curriculum timely considering the need of industry, local/national market.
 - Endeavor to improve the learning process by implementing Choice Based Credit system and semester system in all the programmes and encourage continuous evaluation of students through term papers, internship, projects and weekly assignments so that employability of students is enhanced. This would also be in line with the New Education Policy which promotes multi-disciplinary education.
 - Ensure that all the research projects are conducted with due quality and are completed in timely manner to extend significant gains to the society.
- To keep pace with technological advancement and innovations in delivery of education, the HEIs should encourage teachers to use ICT teaching tools.

Chapter IV: Access and Equity in Higher Education

 GoR did not have a specific policy for establishment of new colleges in unserved areas and did not undertake geographical mapping to identify habitations that lacked higher education facilities.

(Paragraph 4.1.1.1 and 4.1.1.2)

• There were urban/rural and region wise imbalances in availability of HEIs. Availability of seats in Science and Commerce streams decreased while availability of Arts stream increased during 2014-15 to 2018-19.

(Paragraph 4.1.2.1 to 4.1.2.3)

• Though GER of Rajasthan increased from 18.2 per cent in 2010-11 to 23 per cent in 2018-19 but it has consistently been lower than national figure.

(Paragraph 4.2)

 Institutional mechanisms to assist disadvantaged groups such as Community Education Development Cells (CEDCs) were not functional in all the test checked universities and colleges

(Paragraph 4.2.2)

 Adequate basic infrastructure like academic and administrative building, laboratory, library and furniture was not available in GGTU, Banswara and majority of the test checked government and private colleges. Moreover, disabled friendly facilities, except ramps, were not available in all the 66 test checked colleges.

(Paragraph 4.4.1)

Recommendation:

- The State Government may:
 - Provide access to higher education in rural areas and undertake planned efforts to enhance GER across all categories;
 - Recognising the direct relationship between availability of quality infrastructure and higher education outcomes, the State Government should take urgent measures to provide prescribed high-quality basic infrastructure in government colleges for facilitating effective teaching, improving access and increasing retention rates of students.
- The Universities should prepare proper plans for infrastructure augmentation including development of e-library and procurement and utilization of advanced scientific equipment.

Chapter V: Governance and Management

 Even after completion of the Twelfth FYP, only four out of 1,761 general stream colleges had attained autonomous status in Rajasthan as of March 2019.

(Paragraph 5.2)

• The position of NAAC accredited HEIs in the state was dismal as only 6.04 per cent of eligible HEIs were NAAC accredited as of January 2020. Further the fact that only 0.66 per cent of accredited HEIs obtained A⁺/A grade indicated poor quality of higher education being imparted in HEIs in the state.

(Paragraph 5.4)

Recommendation:

• In order to increase the number of NAAC accredited institutions, State Level Quality Assurance Cell should effectively monitor functioning of Internal Quality Assurance Cell of colleges and HEIs should also strengthen their Internal Quality Assurance Cell.

• The universities should strengthen the affiliation process for the colleges and ensure that renewal of affiliation is completed before start of academic year so that the future prospects of students are not adversely impacted.

Indicators based evaluation of performance of test checked universities

- Assessment of the performance of the three test checked universities was based on nine outcomes indicators and 17 input-output indicators (26 in total) developed using NAAC accreditation criteria and measured using grades given by NAAC to universities accredited by them. Overall grade awarded by NAAC to a university is the cumulative result of marks (from zero to four, four being best) awarded individually against each indicator decided by NAAC.
- UoR, Jaipur did not provide/maintain data needed to evaluate 18 of these indicators. It scored zero marks against four indicators, one mark against three indicators and four marks against one indicator. JNVU, Jodhpur did not provide/maintain data needed to evaluate 18 of these indicators. It scored zero marks against five indicators, three marks against one indicator and four marks against two indicators. GGTU, Banswara did not provide/maintain data needed to evaluate four of these indicators. It scored zero marks against 16 indicators, one mark against two indicators and four marks against four indicators.

The indicators for which marks were awarded indicated the performance of Universities but significantly, even though NAAC had earlier accredited UoR, Jaipur (in 2016) and JNVU, Jodhpur (in 2011), both universities did not maintain basic data required for accreditation process. Due to this, most of the indicators could not be evaluated. It was the responsibility of Internal Quality Assurance Cell (IQAC) of the universities to ensure that information relevant to accreditation be regularly updated and maintained.