Chapter 6 IT Audit of 'e-Kalyan' Portal

CHAPTER 6 IT Audit of 'e-Kalyan' Portal

Government of Jharkhand (Welfare Department) started (January 2015) an online scholarship portal '*e-Kalyan*' for processing online applications submitted by the post matric candidates and payment of pre and post matric scholarship. In this chapter audit ascertained adequacy and effectiveness of IT application/software used for scheme management and IT and non-IT controls as part of the fund transfer platform (PFMS or other application) relating to beneficiary de-duplication, bank account validation, transfer of payments to the beneficiary bank accounts and reconciliation and handling of failed transactions/ errors. Important audit observations are:

- Audit instances like payment to non-applicants without matching *Aadhaar* Number, non-capturing of mobile numbers of the beneficiaries, inadmissible payment of scholarship to beneficiaries, excess payment of scholarship to beneficiaries, payment of scholarship to ineligible beneficiaries of Backward Community, payment of scholarship to beneficiaries securing less percentage marks, payment of scholarship to ineligible beneficiaries under pre-matric scholarship scheme, scholarship disbursed to false beneficiaries, scholarship payment to multiple beneficiaries through same *Aadhaar* number which were indicative of failures of '*e-Kalyan*' portal in respect of General control, Application control, Process control and Payment method control.
- Training for all the departmental officers on *e-Kalyan* Version 2.0 (*e*-PASS) was conducted (January 2015) only once after being rolled out and no further training was arranged either by the Welfare Department or by the agency despite several changes were made in the application software.
- Services of PMU were discontinued since 1 November 2017 due to insufficient fund which hampered the monitoring and evaluation of the project.

Conclusion:

e-Kalyan application had gone live (January 2015) in the State under RRR project of GoI without finalisation and approval of SRS and with underdeveloped modules. The features in the application envisaged at the time of project initiation were yet to be delivered (May 2022). The application was not integrated with *Aadhaar* e-KYC and also not linked with the Treasury/ Bank. Migration of the application to the National e-Scholarship Portal (NeSP) was not completed (May 2022). The Implementing Agency

continues to render its services even after completion of the extended project period (March 2018) due to non-development of alternate arrangement by the JAP-IT as stipulated in the Departmental Resolution (August 2019). Institution level Users were not provided adequate training for verification of applications on the e-Kalyan portal as stipulated in the guidelines. The password policy used by the Welfare Department was not robust as pre-defined format of password, masking of password and periodic change of login password were absent. Irregularities viz. non-capturing of student details, same Aadhaar number used by different applicants, parent occupation and total fee paid by the applicant not in sync with annual family income, were noticed in the e-Kalyan database due to lack of input and validation controls in the application. Non/incomplete mapping of business rules in the application resulted in excess payment of scholarship and payment of scholarship to ineligible beneficiaries through e-Kalyan portal. Project Implementation Committee was in hibernation since 2015 and PMU was non-functional since November 2017 hence monitoring of 'e-Kalyan' was ineffective.

6.1 Introduction

The Government of Jharkhand is providing financial assistance to the Scheduled Caste (SC), Scheduled Tribe (ST) and Backward Class (BC) students studying Pre-matriculation and Post-matriculation courses for enabling them to complete their education. The ST, SC, Minority and BC Welfare Department, Government of Jharkhand (Welfare Department) started (January 2015) an online scholarship portal '*e-Kalyan*' for processing online applications submitted by the post matric candidates and payment of Pre and Post Matric scholarship. The key objectives of the '*e-Kalyan*' portal are to provide transparency and accountability for implementation and disbursement of scholarship besides fast tracking the pace of applications processing, sanctioning and its disbursement.

The '*e-Kalyan*' portal aims to reduce drudgery, increase efficiency and provide a hassle-free service to the applicants by the Welfare Department. Two schemes viz. (i) Pre-Matric Scholarship Scheme; and (ii) Post-Matric Scholarship Scheme (within/ outside the state) are on boarded on the '*e-Kalyan*' portal.

6.2 Scope of work

The scope of work consists of replication of 'e-PASS' Application in Jharkhand state. Services offered by the application includes student registration, college registration, verification by college/school of Pre & Post matric scholarship applications, verification by Field Officer, integration with Treasury for fund transfer to the beneficiaries, grievance redressal, integration with counselling centres *etc*.

6.3 Design & Development

The design and development of the e-GOV Solution includes requirement analysis, design of database and user interfaces along with integration with other modules viz. State Welfare Department, Beneficiaries, Scrutiny officers, Academic Institutions, Treasury/Fund disbursement agency, Banks and linked agency.

'e-Kalyan' scholarship portal works through the seamless integration of the activities of the diverse entities, viz. the students, colleges, Departments, IT service providers, Banks, Treasuries and State welfare department

6.4 Key Stakeholders

Key stakeholders of *e-Kalyan* portal are:

- **Students**: responsible for applying and uploading required documents as per guidelines issued by the Welfare Department and tracking status of scholarship applied through their Login ID and password in case of post matric scholarship, whereas pre matric applications involved routing through schools, block & district level education department offices to District Welfare Office;
- Universities/ Colleges/ Institutes: responsible for verification of applications with details of students enrolled with them and uploading their fee structure for different courses offered by them;
- Verification Officers: Dealing Assistant assigned by the Welfare Department responsible for verifying student details uploaded on the portal;
- **Designated Officer**: DWO responsible for sanctioning of funds and disbursement to the eligible students and Accounts Assistant for preparing Bills through PFMS for withdrawal from Treasury;
- **Treasury**: Disbursement of earmarked funds to the Sponsor banks;
- **Banks**: Payment of scholarship in the accounts of eligible students through DBT, submission of response file after process of payment (success/failure) to the originator of payment and returning the amount of failed transaction to the Treasury, if any.

6.5 Application Software of e-Kalyan portal

'e-Kalyan' is a single online application software for processing of post matric scholarship applications and payment of Pre and Post Matric scholarship in Jharkhand. Role based unique log-in ID and password is assigned to all the stakeholders of the *'e-Kalyan'* portal. Processing of the applications through *'e-Kalyan'* portal for scholarship payment involves following steps:

- College Registration: Institutes (within and outside State) are required to register themselves on the '*e-Kalyan*' portal by submitting their college details (course name and fee-structure) and uploading desired documents (institution recognition/affiliation certificate, course recognition certificate, fee structure duly approved by government authority/competent authority/University) on the portal. Respective DWO approves the institutes of the State and Tribal Welfare Commissioner approves the institutes situated outside the State after due verification. Thereafter user credentials are provided to the institutes for verification/ forwarding of student application for further verification by the competent authority.
- Student Registration: One time registration is required by the post matric student on the '*e-Kalyan*' portal by filling a generic application form which captures the basic personal details (like name, father's name, date of birth, mobile number and e-mail address) of the student. Log-in ID and password is generated by the system for the student. Student can log-in with the users' credentials for filling the online scholarship application form. The student is also required to upload the scanned copies of the certificates/documents⁵¹ on the portal. However, in case of pre matric the student data in the excel format duly forwarded by the District Education Officer is to be uploaded on the portal by the respective DWOs using his log-in credentials.
- Verification of student applications at District Level: The details of the student's applications forwarded by institutes are being verified by the Dealing Assistant (DA) at the district level using their log-in credentials of the portal and gives approval for accepting, rejecting or keeping the application in pending state.
- Approval by the District Level Authority: The accepted list of the applications is made available to DWO upon logging in the portal. For the accepted applicants pre-populated maintenance fee and tuition fee is calculated by the system. DWO approves the award list and pass it to the Accounts Assistant (AA) for final submission.
- **MIS Reports:** Commissioner of Tribal Welfare is responsible for generation of various reports pertaining to specific Schemes and Budget at the State level.
- **Bill preparation & Payment:** AA prepares bill for the approved list of applicants and sends the bill to the treasury for its approval.
- Amount Disbursal: Treasury approves the amount and transfers it to the DWO's bank account which further, submits the PFMS advice as per final list of approved students to nominated bank for final disbursal through DBT. After payment, the Bank provides Bank Response File to the respective

⁵¹ Caste certificate, income certificate, marks sheet, passbook and bonafide certificate.

DWOs which subsequently uploaded on the '*e-Kalyan*' portal by the district level authority. Since, the amount disbursal process is not integrated with the '*e-Kalyan*' portal as such it is being carried out manually by DWO. Modules of the *e-Kalyan* application is as discussed in **Table 6.1**:

Sl. No.	Module Name	Functional Area	Status of module
1	College Registration	Registration of new colleges under "e-Kalyan'	Fully functional
2	Student Registration	Registration of new student	Functional for Post matric students only
3	College/School verification for Pre & Post matric		matric scholarship only
4	Verification by Dealing assistant	Online scholarship application verification by DA	Fully functional
5	Treasury bill generation by AA	Online generation of bill and formats	Fully functional
6	EID to UID conversion	Conversion of EID to UID by comparing the data in e-Kalyan server with data in UIDAI server.	
7	RASF verification	photograph provided in e-Kalyan server will be matched with UID no. in UIDAI database.	Not functional
8	Bank seeding	The verified UID number with bank account details is provided to the State Level Banker's Committee and Bank's Lead District Manager. They fetch the data seeded and upload it to <i>e-Kalyan</i> server.	
9	AADHAAR DBT	Department fetch the data directly from the approved list of students and send it to treasury for disbursal purpose	Not functional
10	NPCI updation	DWO would be able to check the scholarship data by generating a excel/csv file where it would be be matched with UID details and status can be updated in the <i>e-Kalyan</i> application	Not functional
11	Verification by DWO/ Release order generation	Verifying the student details based on field officer verification repot and sanctions the scholarship for the students.	
12	Treasury	Treasury bill is generated according to Treasury rules/codes and provided to Treasury with QR code.	
13	MIS Report	District/College/Student/ Public level	Fully functional
14	PMU Module	In case of exceptions like change in bank account, change in college/hostel and appending new colleges/courses.	1 st Nov. 2017. However, these functions were operated from CGG level.
15	Grievance Redressal	Redressal for queries/complaints	Functional at CGG level.

Table 6.1: Modules in the 'e-Kalyan' application

Various stakeholders of the '*e-Kalyan*' application are using different user interfaces as per their service requirements viz. "Student User Interface" for the student registration and uploading of required documents; "College User Interface" for universities/colleges/institutes registration, uploading of required documents and updating of college details; "*e-Kalyan* Official Login Interface" for Dealing Assistant, District Welfare Officer, Accounts Assistant and Tribal Welfare Commissioner for verification and approval of applications, preparation of bills for forwarding to Treasury and generation of various reports

and "*e-Kalyan* PMU User Interface" for approval of registered colleges and generation of status report. However, PMU at the State level in Jharkhand (JAP-IT) was not functional since November 2017 but these functions were being operated from CGG level as discussed in **Table 6.1**.

6.6 Technology used in e-Kalyan portal

'*e-Kalyan*' Scholarship Portal is web-based application, which is hosted on the CGG Data Centre Servers, Hyderabad. The hosting environment is Tomcat server and Postgre SQL server is used to build the database for the application. The clients using web browser (e.g. Internet Explorer (IE) or Mozilla Online Intermediate Admission System, Fox 2.0) is required to enable cookies. The following software were used for form design, Application and Database servers:

- Form Design: Java Development Kit, Java Server Pages, Servlets, JDBC, Struts;
- Client Side: Web Browser;
- Server Operating System: RHEL6.x;
- Application Server & Web Server: Tomcat 7; and
- Database Server: Postgre SQL 9.2

6.7 Audit Objectives

"IT Audit on *e-Kalyan* portal" covering the period from 2017-18 to 2020-21 (up to July 2020) was undertaken to ascertain whether:

- 1. IT application/software used for scheme management had adequate and effective controls for (a) beneficiary management, benefit processing and approval etc. and (b) ensuring the integrity and reliability of all data?
- 2. IT and non-IT controls as part of the fund transfer platform (PFMS or other application) relating to (a) beneficiary de-duplication and bank account validation (b) transfer of payments to the beneficiary bank accounts and (c) reconciliation and handling of failed transactions/ errors were adequate and effective?

6.8 Audit Criteria

The audit criteria were drawn from the following:

- Documents, circulars, instructions, resolutions and notifications issued by DBT Mission, GoI and State Government;
- User/ System Requirement Specification, IT control documents, generation of various reports of *e-Kalyan* application;
- Guidelines on Scholarship schemes for the students of SC, ST and BC category;
- Instructions/notifications of Government/ Department on implementation of e-Kalyan application;

• General Financial Rules (GFR)/ Jharkhand Financial Rules (JFR) and Jharkhand Treasury Code (JTC).

6.9 Scope and Methodology

Audit scope and methodology includes design, development and acquisition of scheme management software/ application (*e-Kalyan*) portal. The data dump of *e-Kalyan* for the period April 2017 to July 2020 was procured (April and June 2021) from the Department by Audit. Analysis of data dump was done with the assistance of Computer Assisted Audit Tools (CAAT) viz. R Data Analytic Software and Excel. Records of the Welfare Department and Department of Information Technology & e-Governance were examined. Besides, records of DWOs in the sampled districts⁵² as well as sampled institutes were test checked on the basis of leads obtained from analysis of data dump.

6.10 Project Implementation

A pilot project 'e-Kalyan' was launched (May 2006) by the Department of Information & Technology (DoIT), Government of Jharkhand (GoJ) for webbased information and service delivery system for the scholarship schemes under Welfare Department, GoJ. After implementation (2010) of 'e-Kalyan' application, all the procedures for obtaining applications for scholarship payment was made online and was functional up to 2013-14. Afterwards, a new application 'e-PASS', developed by the CGG, rolled out (January 2015) in Jharkhand under RRR in place of 'e-Kalyan', however, the nomenclature of the application remained the same as agreed (May 2014) by the PRSG, GoI. In terms of contract agreement (October 2014), total project tenure was 30 months including implementation period of six months and Operations and Maintenance (O&M) period of 24 months. Though, first instalment of $\gtrless 1.00$ crore was released (January 2014) by GoI before entering into agreement with the agency in October 2014, the project could go live (January 2015) conditionally only after approval of application filing by the State Government without finalisation and approval of System Requirements Specification (SRS) and with underdeveloped modules. Moreover, the agency still continues to operate the portal even after completion of extended project tenure (March 2018) selected on nomination basis with the approval (August 2019) of Jharkhand Cabinet on the recommendations of the Finance Department, GoJ. Though Resolution (August 2019) of the Welfare Department stipulates an alternative arrangement for online operation of scholarship schemes to be developed by the JAP-IT⁵³ but no such arrangement was made as of May 2022.

⁵² 1. Chatra; 2. East Singhbhum; 3. Godda; 4. Hazaribag; 5. Palamu; and 6. Ranchi.

⁵³ Jharkhand Agency for Promotion of Information Technology (JAP-IT) is an autonomous society under the Department of Information Technology, intended for managing Project Monitoring Unit of e-PASS (e-Kalyan Scholarship Online Application).

Project Implementation/Steering Committee⁵⁴ approved (January 2015) 'e-PASS' scholarship application with online filling start date as 2 January 2015, after getting confirmation by the CGG regarding completion of pre matric scholarship and post matric student registration module during User Acceptance Testing (UAT) of the Application Software conducted between August 2014 and December 2014.

Moreover, the features like Remote Aadhaar Seeding Framework (RASF), Repository Linking, Pull up services, Treasury Linking, Bank Linking, Minority Schemes, Integration of various other scholarship schemes running within the State, envisaged at the time of project initiation were yet to be delivered as of May 2022.

6.11 Planning

After conditional implementation of e-PASS it was decided in the Interdepartmental meeting (June 2015) that the application was to be integrated with e-KYC, where information of the beneficiaries were automatically fetched from the *Aadhaar* database, integrated with treasury application so that the benefits could be directly transferred to the beneficiary accounts and migration of e-PASS application to National *e*-Scholarship (NeSP) Portal by June 2016 and the work was assigned to CGG. But the assigned and desired works were not completed as of May 2022 as a result several irregularities in implementation of scholarship scheme were noticed which are being discussed in succeeding paragraphs.

6.12 IT Controls failures

In the subsequent paragraphs implications of failures under General control, Application control, Process control and Payment method control of *e-kalyan* have been discussed. Following findings are based on the analysis of data dump of *e-Kalyan* provided by the Welfare Department for the period 2017-18 to 2020-21 (up to July 2020).

6.12.1 General Controls failures

• Inadequate Physical control: Physical access controls are specifically aimed at ensuring that only those who have been authorised by management have physical access to the computer systems to prevent unauthorised access and interference to IT services. In meeting this objective, computer equipment and the information contained should be protected from unauthorised users. Analysis of '*e-Kalyan*' database relating to Post Matric Scholarship scheme for the period 2017-20 revealed that physical access to

 ⁵⁴ An Inter-Departmental committee headed by the 1. Principal Secretary, IT Dept., Jharkhand as Chairman; 2. Principal Secretary, Welfare Department, Jharkhand; 3. Sr. Director, IT Dept., GoI; 4. Director, IT Department, GoI; 5. Tribal Welfare Commissioner;
6. Director/Special Secretary, IT Dept., Jharkhand; 7. CEO/ OSD, IT Department, JAPIT, GoJ; 8. SIO, NIC; 9. Assistant. Director, IT Department, Jharkhand.

the computer systems by the designated users (district level and above) of '*e-Kalyan*' portal was found logged-in between 00:00 Hrs. to 05:00 Hrs. (beyond office timings) in 1770 cases. As such, unauthorised access and interference to IT services could not be ruled out.

• *Inadequate Logical control:* The most common form of logical access control is login identifiers (IDs) followed by password authentication. For passwords to be effective there must be appropriate password policies and procedures, which are known to all staff and adhered to. Organisations may be able to tailor the password system by, for example, setting minimum password lengths, forcing regular password changes and automatically rejecting purely numerical passwords, peoples' names, or words which appear in the English dictionary.

The Welfare Department stated (May 2022) that password policy for 'e-Kalyan' portal exists but data analysis of '*e-Kalyan*' database revealed that passwords of only 37,242 out of 2,14,110 users created between January 2017 and September 2018 were updated during this period. Moreover, the passwords stored in the '*e-Kalyan*' database were found in unmasked format using purely numerical, people's names or words against the provisions of appropriate password policy and procedures. Though application testing and certification was done through Centre for Development of Advanced Computing (CDAC) with final stage test (November 2020 and March 2021) and an audit certificate was issued (March 2021) with five recommendations and is valid till no changes are done on the application's dynamic content or one year from the date of issue whichever is earlier. CDAC also recommended that audit trails, sanitized logging and regular monitoring of logs are to be maintained for at least one year.

Audit noticed that sanitized logging was not implemented despite recommended by CDAC. However, no case of security breach was found during field audit but it was noticed that in official login (DA and DWO level), passwords of the registered students are displayed in unmasked format in student details screen. As such, chances of security breach cannot be ruled out due to weak password policy used by the department.

6.12.2 Application Controls failures

• *Inadequate input control:* Controls over input are vital to the integrity of the system. Input control reasonably guarantee that (i) the data received for processing are genuine, complete, not previously processed, accurate and properly authorised; and (ii) data are entered accurately and without duplication. Further, automated validation checks should be sufficient to ensure that all data accepted into the system is capable of acceptance by all subsequent processes including acceptance into other systems where there is an automatic transfer of data.

Data analysis of '*e-Kalyan*' database relating to Post Matric Scholarship scheme for the period 2017-20 revealed that (i) in 3,437 cases annual family income of the applicants was below Rupees one lakh despite that either or both parents were in government service; (ii) in 164 cases (*Appendix-6.1*) difference between year-of-birth and year-of-admission is ten (10) years or less; (iii) in 602 cases (*Appendix-6.2*) different applicant names were captured against one/same *Aadhaar* number and (iv) in 1,04,536 cases column for capturing details of SSC/Matric (10th standard) were left blank. This clearly showed that robust data input and validation controls were absent in the "*e-Kalyan*" application.

• Non-capturing of Mobile Numbers of the beneficiaries: During monitoring meeting (July 2013) of 'e-Kalyan', Chief Secretary, Jharkhand directed DoIT, Government of Jharkhand to prepare an SMS Gateway for providing information through SMS to the students on their respective mobile numbers in three stages viz. (i) on receipt of complete application from students; (ii) on approval of scholarship amount; and (iii) after disbursement of scholarship amount. Further, SRS document of 'e-Kalyan' portal also stipulates communication to the students through SMS alerts and e-mail in case of pendency of their applications and non-reimbursement of scholarship for compliance for which the application has a facility to capture mobile number during online application filing by the candidates.

Analysis of *e-Kalyan* database of Post-Matric Scholarship Schemes (Within and Outside State) for the period of 2017-20 revealed that status of 30,826 applications for scholarship submitted by the students were shown as pending at different levels. Audit observed that the field for capturing mobile number was not made mandatory in the portal and hence, mobile numbers were not captured at the time of application filing by the students. Thus, the beneficiaries could not be communicated about objection against their applications through SMS alerts. As a result, the students were deprived from availing scholarships during 2017-20.

• Inadmissible payment of scholarship to beneficiaries: According to the guidelines, only those students will be eligible for scholarship scheme who have enrolled in succeeding class in new academic year after passing previous class in previous academic year. Further, the Institute is wholly responsible for verifying the entries of the documents uploaded by the students with the original documents before recommendation for scholarship. The 'e-Kalyan' portal has also facility to capture details of the candidates, course details and institute details.

Data analysis of '*e-Kalyan*' database for the Post-Matric Scholarship Scheme during the period from 2017-18 to 2019-20 revealed that:

i. Applications of 257 students (*Appendix-6.3 A & 6.3 B*) with same applicant name, fathers' name, bank account number and Unique Identification (UID)

(*Aadhaar* Number) were granted scholarship of ₹22.56 lakh for pursuing same course in different academic years from 125 other institutes (within State: 114 and outside State: 11) in which the students were previously pursued same courses for which they were granted scholarships.

Physical verification of records maintained in 21 sampled Institutes⁵⁵ in four test-checked districts revealed that payment of scholarship (₹2.65 lakh) was approved for 34 beneficiaries for pursuing same course in different academic years from different Institutes due to absence of control in the application software for preventing students applying for scholarship in different academic years for the courses already pursued.

Case Study-1

In Chatra district, Audit noticed that one applicant, Anuradha Lakra (Application ID: 1399494 of 2017-18), was awarded scholarship from Upendra Nath Verma Inter College, Chatra (Institute code: 2236) for the academic year 2016-17 and 2017-18 for pursuing course of Intermediate of Science (I.Sc). Again, the same student (Application ID: 1691374 of 2018-19) was awarded scholarship for pursuing same course (I.Sc, 2nd year) from different institute (R D S Inter Mahavidyalaya, Jitni More, Chatra having Institute code: 2213).

Another applicant, Balram Kumar Ravi (Application ID: 1812200 of 2019-20), was awarded scholarship for pursuing course Intermediate of Arts (I.A) during academic year 2019-20 (1st year) and 2020-21 (2nd year) from Upendra Nath Verma Inter College, Chatra (Institute code: 2236) but the same student was awarded scholarship for pursuing same course (I.A) during academic year 2017-18 (1st year) from St. Columbas College, Hazaribag (Institute code: 502).

ii. Similarly, 205 students (within state 201 students and outside state 04 students) applied for scholarship in same/different academic years with same applicant name, fathers' name and bank account number but with different Unique Identification Number (*Aadhaar* Number) as detailed in *Appendix- 6.4 A & 6.4 B*. Due to absence of *Aadhaar* validation control in the application software, scholarship of ₹ 40.31 lakh (within state ₹ 38.31 lakh and outside state ₹ 2.00 lakh) granted to 205 students through 410 applications using different UID in same/different academic years was doubtful.

⁵⁵ Chatra: 04 cases in 02 Institutes (₹ 0.26 lakh); Hazaribag: 07 cases in 05 Institutes (₹ 0.30 lakh); Palamu: 06 cases in 03 Institutes (₹ 0.47 lakh); and Ranchi: 17 cases in 11 Institutes (₹ 1.62 lakh).

Physical verification of records maintained in 08 sampled institutes⁵⁶ in three test-checked districts revealed that payment of scholarship (₹ 1.19 lakh) was approved for 13 out of 14 test-checked beneficiaries in different academic years with different *Aadhaar* Numbers (UID). This is because of the fact that the application software is not designed with effective input and validation controls for preventing approval of applications of students pursuing same/ different courses from the same/ different institutes in different academic year.

Case Study-2

In Palamu district, one beneficiary, Kajal Kumari (Application ID: 822437 of 2017-18), was awarded scholarship for pursuing ISc. from Yog Singh Namdhari Mahila College, Daltonganj with UID (No. XXXXXXX3873). Again, in academic year 2018-19, the same beneficiary (Application ID: 1539150 of 2018-19) awarded scholarship for pursuing Bachelor of Arts (Honors) in Hindi from SSMS Degree College, Tarhasi, Palamu with a different UID (No. XXXXXXX6284).

Another student, Sonam Bharti (Application ID – 1469689 of 2017-18), with UID (No. XXXXXXX8326) awarded scholarship for pursuing Master of Arts from Ganesh Lal Agrawal College, Daltonganj (Palamu) and again the same beneficiary (Application ID: 2024574 of 2019-20) awarded scholarship for pursuing Bachelor of Education from Jyoti Prakash Mahila B.Ed College, Palamu with UID (No. XXXXXXX8750) which reflected that the application software lacks validation control of UID with the student personal details.

6.12.3 Inadequate Process Controls

• Excess Payment of scholarship to beneficiaries: According to the guidelines, scholarship and maintenance allowance shall be paid to all eligible students (Day Scholars and Hostellers) pursuing study in post matric institutes (within and outside State) according to the type and nature (Government of India/ State Government/ Private Institutions), classification of courses in different groups and scholarship slabs. The 'e-Kalyan' portal has a facility to auto calculate the amount of tuition fee and maintenance allowance being payable to an eligible candidate as per the data captured for the fields type and nature of scholar, group of course and the institute as envisaged in the guidelines.

Analysis of *e-Kalyan* database of Post-Matric Scholarship Schemes (within and outside State) for the period from 2017-18 to 2019-20 revealed that scholarship was approved by DWOs through '*e-Kalyan*' portal to the beneficiaries for

East Singhbhum: 04 cases in 02 Institutes (₹ 0.27 lakh); Godda: 04 cases in 02 Institutes (₹ 0.35 lakh); and Palamu: 05 cases in 04 Institutes (₹ 0.57 lakh).

pursuing different courses in various institutes against the payable amount of scholarship as described in *paragraph 3.8.3*.

Data analysis revealed that data in the fields containing values for College type/College nature in the College Master table were filled incorrectly (type of institute filled as institute belonging to GoI in place of institute belonging to State Government/private institutes) by the respective Institutes and were also not verified and corrected by the DWO/TWC, because DWOs/TWC are responsible for verification of the college details filled by the institutes in the master database during registration of institutes in the '*e*-Kalyan' portal along with documentary evidence and physical verification for the institutes within state and outside state respectively. They were responsible for rectification of the errors too. As a result, an excess payment of scholarship of ₹ 23.21 crore was approved by the DWOs during 2017-20 due to misclassification of institutes/courses.

During physical verification, Audit noticed excess payment of scholarship in five test-checked districts as discussed in *paragraph 3.7.3*.

Payment of scholarship to ineligible beneficiaries of Backward *Community:* As per the guidelines of GoJ (February 2018) for post matric scholarship, those applicants are eligible for scholarship whose parent or guardian annual income from all sources does not exceed the income limit prescribed by the GoI. Further, Notification issued (July 2018) by the Tribal Welfare Commissioner, GoJ related to inviting applications from eligible candidates of BC category for Post Matric Scholarship prescribes that only those candidates were eligible for applying scholarship whose annual family income is not more than ₹ 1.00 lakh from all sources of their parents/guardians. As per guidelines (February 2018), the institutes are responsible for verifying the entries of the online applications with the available documents in the institutes before making recommendation for scholarship. Further, the DWO is also responsible for verification of uploaded documents (income certificate, caste certificate and residential certificate) from the website "jharsewa.jharkhand.gov.in" before sanctioning of the scholarship.

Analysis of *e-Kalyan* database for the period 2017-18 to 2020-21 revealed that students of BC category in the State, were awarded scholarship amounting to ₹ 36.33 lakh during 2018-19 despite of the fact that the figures of annual family incomes entered in the database were more than the prescribed limit of ₹ 1.00 lakh, but the application software did not restrict the applicant from applying for the scholarship as their family income was more than the prescribed limit as described in *paragraph 3.8.2*.

This is due to the fact that the scholarship rules were not properly mapped in *'e-Kalyan'* application software and the system was not designed with effective

controls for preventing approving of such applications of BC candidates having annual family income more than prescribed limit.

Further the institutes/DWO, are responsible for verification of eligibility criteria of the candidates before making recommendation/approval of scholarship, but they failed to comply with their responsibilities as stipulated in the guidelines. As a result, scholarship was disbursed to ineligible beneficiaries.

During field visit Audit noticed payment of scholarship to ineligible beneficiaries of BC category in test-checked institutes in six test-checked districts as discussed in *paragraph 3.7.2*. The Head of the Institute (Ram

Narayan Memorial College, Huntergunj, Chatra) replied that the fact of excess family income of the candidate was overlooked by them and stated that they must be careful and follow guidelines in future.

• **Payment of scholarship to beneficiaries securing less percentage marks:** As per the guidelines for post-matric scholarship, students are eligible who have secured minimum 45 *per cent* for BC category marks and minimum 40 *per cent* marks for SC and ST categories in the last examination passed. The application has facility to capture the details related to previous examination passed by the candidate viz. total marks, marks obtained and percentage marks in the *e-Kalyan* database.

Analysis of *e-Kalyan* database for the period 2017-18 to 2020-21 revealed that students of BC category pursuing post matric courses in Post Matric Institutes (within and outside State) were awarded scholarship through *e-Kalyan* portal despite of the fact that percentage marks obtained by the students in last examination passed were less than prescribed marks of 45 *per cent* as described in *paragraph 3.8.2*.

Similarly, students of SC/ ST category pursuing post matric courses in Post Matric Institutes (within and outside State) were awarded scholarship during 2017-20 through *e-Kalyan* portal despite the fact that percentage marks obtained in last examination passed was less than prescribed 40 *per cent* as described in *paragraph 3.8.2*.

The application software did not restrict the applicants from applying for the scholarship although marks in the last examination obtained by them was less than prescribed. This is due to the fact that the scholarship rules were not properly mapped in '*e-Kalyan*' application software and the system was not designed with effective controls for preventing approving of such applications of BC/SC/ST candidates having marks obtained less than the required marks.

• Payment of scholarship to ineligible beneficiaries under Pre-Matric Scholarship Scheme: According to the provisions of the guidelines for Pre Matric scholarship, names of those students are to be considered for sanction of scholarship who have completed study satisfactorily and promoted in

higher class with prescribed minimum attendance. List of eligible students is being prepared by the schools and are required to be submitted to the ITDA/ DWO through the District Education Officer. An assurance that "names of all eligible students have been included and name of any ineligible student is not included in the list" is required to be submitted by the Headmaster/Principal of the school. Further, as per System Requirement Specification, the DWO is responsible for uploading list of students in excel format after getting approval from the District Sanctioning and Monitoring Committee.

Analysis of *e-Kalyan* database for the Pre-Matric Scholarship Scheme for the period from 2017-20 revealed that students (Repeater Students awarded scholarship in same class in same school/different school) were irregularly awarded scholarships for the same class in two consecutive years as discussed in *paragraph 3.8.5*.

As per the provisions under Software Requirement Specification – '*e-Kalyan*' Jharkhand, the Dealing Assistant is responsible for online verification of the beneficiaries list and gives approval for rejecting, accepting or keeping the application in pending state. Further, the DWO is responsible for online verifying the beneficiary list for approval, pending and rejection cases. Approval of Pre Matric scholarship applications of ineligible students was due to improper mapping of Business rules in the application software.

6.12.4 Payment control failure

Payment to non-applicants without matching *Aadhaar* **Number in** *e-Kalyan database: Aadhaar* Payments Bridge System (APBS) facilitates end-to-end processing of bulk electronic payment instructions primarily facilitating the government departments to make DBT using *Aadhaar* number as the financial address of the beneficiaries. The benefit can be disbursed to the account of the beneficiary based on mapping of *Aadhaar* number to the Institution Identification Number (IIN)⁵⁷ of the beneficiary's bank. UIDAI also claims that seeding of *Aadhaar* in the scheme ensures that nobody else can claim benefits by impersonating others.

DBT is implemented to ensure a better and timely delivery of benefits to the people by speeding up payments and enhancing financial inclusion. When the payment file is received with authorization to process payment by Public Financial Management System (PFMS), the sponsor bank is required to submit response file after process of payment (success/failure) to the originator of

⁵⁷ IIN is a unique six digit number issued by NPCI to every APB system participating bank and is used to uniquely identify a bank to which the APB transaction has to be routed in the APB system.

payment file with the maximum permissible time of four days excluding the day of transaction.

Audit cross checked the bank response files of three⁵⁸ out of six test-checked districts⁵⁹ in respect of post-matric scholarship schemes with *e-Kalyan* database for the year 2017-18, 2018-19 and 2019-20 and notices the following:

• Scholarship disbursed to false beneficiaries: According to guidelines, the student is required to provide *Aadhaar* number and own bank account details at the time of applying scholarship. On submission of bank details of person other than applicant, the application is liable to be cancelled. The applicant is also responsible to get their bank account seeded with *Aadhaar* and to ensure that their bank account is mapped with NPCI. Further, the DWO is responsible to examine that bank accounts of all the applicants have seeded in their name with *Aadhar* number and duly mapped with NPCI. The guidelines also stipulate that "the DWO will e-Transfer the approved amount into the savings bank accounts of eligible students through *Aadhaar* based DBT channel on PFMS."

Audit cross verified the details of the applicants of *e-Kalyan* database and details of the beneficiaries as per the bank response files on the basis of common *Aadhaar* number in three test-checked districts (Chatra, Palamu and Ranchi) for the period 2017-20 and observed that name and bank account number of the applicant as per *e-Kalyan* database did not match with the name and bank account number of beneficiary as per bank response file against same *Adhaar* in 2,126 cases. As a result, scholarship amounting to ₹ 2.79 crore got disbursed to another person in place of applicants.

Case Study-3

In Palamu district, Audit noticed that two applicants (Ekta Kumari in 2019-20 and Monika Mini in 2020-21)using same UID (XXXXXXX4876) applied for scholarship on 'e-Kalyan' portal. Audit noticed that after final approval of the applications by the DWO, the payment was credited in the bank account (Holder name: Purusottam Pandit), which was confirmed from the Bank Response File generated by the banks and uploaded on the 'e-Kalyan' portal. In another case payment of scholarship was credited in the bank account (Holder name: Surendra Kumar Yadav) for the application filled by Manju Bek using UID (XXXXXXX5520) during 2020-21.

⁵⁸ Chatra, Palamu and Ranchi districts.

⁵⁹ Two test-checked districts viz. Godda and Hazaribag did not provide the bank response files though called for whereas response file provided by East Singhbhum was incomplete as such it could not be used for analysis.

This happened since the application software lacks validation control of UID submitted by the applicants with the UIDAI Jharkhand server. Though, there is a provision for capturing status and date regarding Remote *Aadhaar* Seeding Framework (RASF) verification, Bank Account number confirmation and NPCI verification in the 'e-Kalyan' database, but no data was found entered against these fields in database during 2017-20. Hence, scholarship was disbursed to false beneficiaries.

Scholarship payment to multiple beneficiaries through same Aadhaar number: Software Requirement Specification of e-Kalyan provides Remote Aadhaar Seeding Framework (RASF) verification module which will match student name, father's name, date of birth and photograph provided in the 'e-Kalyan' server with the UID number in UIDAI Jharkhand database. Further, as per scholarship guidelines, the DWO is responsible to examine that the bank accounts of all the applicants have seeded in their name with Aadhaar number and duly mapped with NPCI. Analysis of bank response files for the period 2017-20 of three (Chatra, Palamu and Ranchi) testchecked districts it was observed that scholarship of ₹ 28.07 lakh was disbursed to two different beneficiaries using same Aadhaar number in different academic years in 188 cases (Appendix-6.5). This is because of the fact that RASF module of 'e-Kalyan' software was not working and student details could not be validated from the UIDAI Jharkhand database. Moreover, the DWOs also failed to ensure that bank account of all the applicants were seeded with their Aadhaar numbers and duly mapped with NPCI. As a result, uniqueness of financial address of the beneficiaries under DBT scheme could not be ensured.

Recommendations:

- 1. Envisaged features should be incorporated into the application.
- 2. The application should be integrated with the Aadhaar e-KYC and linked with Treasury/ Bank as per scope of work under the RRR project.
- 3. Disbursement of scholarship through e-Kalyan portal should be either migrated to the NeSP portal or an alternate arrangement to be developed by the JAP-IT for reducing dependency on the service provider.

6.13 Training and capacity building

As per the approved project proposal, a formal training structure was required to be developed combining classroom style training, independent end-user training via manuals and on-line help. The training requirement of the state was also to be documented and agreed upon during the customisation phase. User Manuals, System Admin Manuals and Troubleshooting Manuals were required to be prepared and updated in case of new changes or addition of new services.

Scrutiny of the records of the Welfare Department and DoIT, Jharkhand revealed that training for all the Welfare Department officers on *e-Kalyan* Version 2.0 (*e*-PASS) was conducted (January 2015) only once after being rolled out and no further training was arranged either by the Welfare Department or by the agency despite several changes were made in the application software. Further, no user manual for different level of users were documented and updated against the provision of the approved project proposal. Moreover, on-line help to the end user were also not made available on the portal.

The Head of the Institute (Gossner College Ranchi), being one of the stake holders, stated (September 2022) that neither training before using the portal nor on-line help to perform activities as per the guidelines were provided. Absence of training needs analysis and proper training adversely affected the functioning of various stakeholders of *e-Kalyan* which resulted in several irregularities performed by stakeholders as illustrated in *paragraphs 6.12.2*, *6.12.3 and 6.12.4*.

Recommendation:

Stakeholders of the application should be provided adequate training for optimal usage of the application.

6.14 Monitoring

The Project Implementation/Steering Committee is responsible for computerisation of Welfare Department and implementation of the RRR project of '*e*-PASS' application in Jharkhand. The minutes of meeting of the committee held in June 2015 were found in records of the Welfare Department and thereafter the recommendations/instructions issued by the committee during 2016-21, if any, were not available with the department. Thus, the planned works as per approved project proposal were still not completed (May 2021).

Further, the services of PMU for management and administration of project locally, monitoring & evaluation and reporting on the project was discontinued since 1 November 2017 citing fund crisis. This hampered the monitoring and evaluation of the project.

Matter has been referred to State Government (October 2022), however, the reply is awaited.

Ranchi The 23 June 2023

(ANUP FRANCIS DUNGDUNG) Accountant General (Audit) Jharkhand

Countersigned

New Delhi The 27 June 2023

(GIRISH CHANDRA MURMU) Comptroller and Auditor General of India