PC-1

CM Punjab Laptop Program

ORIGINAL APPROVED COST	**PKR Million. 9,966.700/-**
1st REVISED PROPOSED COST	**PKR Million. 27,492.540/-**
ORIGINAL APPROVED GESTATION	**12 Months** **Till June 2025**
1st REVISED PROPOSED GESTATION	**16 Months** **Till October 2025**
APPROVAL FORUM	**ECNEC (ECNEC)**

1. NAME OF THE PROJECT

CM Punjab Laptop Program

2. LOCATION OF THE PROJECT

2.1. DISTRICT(S)

I. ATTOCK, BAHAWALNAGAR, BAHAWALPUR, BHAKKAR, CHAKWAL, CHINIOT, DERA GHAZI KHAN, FAISALABAD, GUJRANWALA, GUJRAT, HAFIZABAD, JHANG, JHELUM, KASUR, KHANEWAL, KHUSHAB, KOT ADDU, LAHORE, LAYYAH, LODHRAN, MANDI BAHAUDDIN, MIANWALI, MULTAN, MURREE, MUZAFFARGARH, NANKANA SAHIB, NAROWAL, OKARA, PAKPATTAN, RAHIM YAR KHAN, RAJANPUR, RAWALPINDI, SAHIWAL, SARGODHA, SHEIKHUPURA, SIALKOT, TALAGANG, TOBA TEK SINGH, VEHARI, WAZIRABAD

2.2. TEHSIL(S)

I. 18-HAZARI, AHMADPUR EAST, AHMEDPUR SIAL, ALIPUR, ALL PUNJAB TEHSILS, ARIFWALA, ATTOCK, BAHAWALNAGAR, BAHAWALPUR CITY, BAHAWALPUR SADDAR, BHAKKAR, BHALWAL, BHAWANA, BHERA, BUREWALA, CHAK JHUMRA, CHAKWAL, CHAUBARA, CHICHAWATNI, CHINIOT, CHISHTIAN, CHOA SAIDAN SHAH, CHOWK SARWAR SHAHEED, CHUNIAN, DAHRANWALA, DARYA KHAN, DASKA, DE-EX.AREA OF D.G.KHAN, DE-EX.AREA OF RAJANPUR, DEPALPUR, DERA GHAZI KHAN, DINA, DUNYAPUR, FAISALABAD CITY, FAISALABAD SADDAR, FATEH JANG, FEROZEWALA, FORT ABBAS, GAGGO MANDI, GOJRA, GUJAR KHAN, GUJRANWALA CITY, GUJRANWALA SADDAR, GUJRAT, HAFIZABAD, HAROONABAD, HASILPUR, HASSANABDAL, HAZRO, ISA KHEL, JALALPUR JATTAN, JALALPUR PIRWALA, JAMPUR, JAND, JARANWALA, JATOI, JEHANIAN, JHANG, JHELUM, KABIRWALA, KAHROR PACCA, KAHUTA, KALLAR KAHAR, KALLAR SAYYEDAN, KALUR KOT, KAMALIA, KAMOKE, KAROR LAL ESAN, KASUR, KHAIRPUR TAMEWALI, KHANEWAL, KHANPUR, KHARIAN, KHUSHAB, KOT ADDU, KOT CHATTA, KOT MOMIN, KOT RADHA KISHAN, KOTLI SATTIAN, LAHORE CANTT., LAHORE CITY, LALIAN, LAWA, LAYYAH, LIAQUATPUR, LODHRAN, MAILSI, MALIKWAL, MANDI BAHAUDDIN, MANKERA, MIAN CHANNU, MIANWALI, MINCHINABAD, MODEL TOWN, MULTAN CITY, MULTAN SADDAR, MURIDKAY, MURREE, MUZAFFARGARH, NANKANA SAHIB, NAROWAL, NAUSHERA, NOWSHERA VIRKAN, NURPUR, OKARA, PAKPATTAN, PASRUR, PATTOKI, PHALIA, PIND DADAN KHAN, PINDI BHATTIAN, PINDI GHEB, PIPLAN, PIR MAHAL, QUAIDABAD, RAHIM YAR KHAN, RAIWIND, RAJANPUR, RAWALPINDI, RENALA KHURD, ROJHAN, SADIQABAD, SAFDARABAD, SAHIWAL, SAHIWAL, SAMBRIAL, SAMMUNDRI, SANGLA HILL, SARAI ALAMGIR, SARGODHA, SHAHKOT, SHAHPUR, SHAKARGARH, SHALIMAR, SHARAQPUR, SHEIKHUPURA, SHORKOT, SHUJABAD, SIALKOT, SILLANWALI, SOHAWA, TALAGANG, TANDLIANWALA, TAXILA, TOBA TEK SINGH, VEHARI, WAZIRABAD, YAZMAN, ZAFARWAL

3. AUTHORITIES RESPONSIBLE FOR

3.1. SPONSORING AGENCY

- HIGHER EDUCATION DEPARTMENT

3.2. EXECUTION AGENCY

- HIGHER EDUCATION DEPARTMENT

3.3. OPERATIONS AND MAINTENANCE AGENCY

3.4. CONCERNED FEDRAL MINISTRY

Punjab Information Technology Board (PITB) is Technical Partner in this project

4. PLAN PROVISION

Sr #	Description
1	**Source of Funding:**Scheme Listed in ADP CFY
2	**GS No:**103
3	**Total Allocation:**6,000.000

Comments:

Scheme is reflected in ADP 2024-2025 at GS # 103 with an original allocation of Rs. 6,000 million; however, in accordance to approval of PC-I at cost of Rs.9,966.7 million with gestation period of 01 year, the remaining amount of Rs.3,966.7 million has also been allocated in current financial year.

5. PROJECT OBJECTIVES

The project objectives are given below;

Project objectives and its relationship with sector objectives

The initiative aims to offer opportunities to young individuals, and laptops will be provided to the students. The Punjab government intends to initiate the laptop program, marking the beginning of a significant effort to empower and support the academic endeavors of gifted students. Such an endeavor is in line with the sectoral objectives where the students would be contributing positively in the indigenous realm of IT and commerce sector.

Background

Undoubtedly, there exists a direct link between knowledge capital and economic development, and for Pakistan to ascend as an emerging power, it is imperative to amplify its intellectual resources and transition into a knowledge-based economy. The strategic framework outlined in the Government of Pakistan's "Vision 2030" recognizes the significance of globalization, as well as the dissemination of information and technology, poised to profoundly alter the scale and nature of human enterprise. Envisaging universities and higher learning institutes as catalysts for economic growth through the provision of knowledge capital, the Higher Education Commission (HEC) employs a strategy aimed at creating a conducive environment for quality education across all higher education institutions through faculty and infrastructure development.

A substantial challenge faced by the higher education sector nationwide is the need to expand access opportunities, with the objective of increasing enrollment from 5.8% to 10% by 2015 and 25% by 2025, in accordance with the National Education Policy 2009. The Higher Education Department (HED) advocates cost-effective and widespread dissemination of knowledge through educational technologies and distance education, ensuring coverage in remote areas while safeguarding quality standards. The ongoing demographic transition presents another challenge, demanding the preparation of youth with the knowledge and skills essential for 21st-century development. While Pakistan stands at a favorable stage of the demographic transition, the potential demographic dividends could turn into a serious threat of an illiterate and intolerant population if left unaddressed.

Significant progress has been made in the higher education sector in Pakistan, marking it as a dynamic and evolving field contributing to the country's socioeconomic development. However, challenges persist, including poor university-industry and university-community interactions, low enrollment, and insufficient capacity for continuous faculty and staff development. Recognizing the transformative role of Information and Communication Technologies (ICTs), the strategic vision of the Higher Education Department emphasizes substantial investments in ICTs to overcome current and future challenges, aligning with global trends. ICT is defined as a perse set of technology tools and resources used to transmit, store, create, share and exchange information. Modern information and communication technologies are deemed essential for improving efficiency, efficacy, and the impact of development programs in the higher education sector.

Leveraging ICTs through distance education and open learning, affiliating universities are crucial players in enhancing quality and broadening access to higher education in Pakistan. It is evident that ICTs cover all technical means used to handle information and aid timely

communication which includes both computers/ laptops and network (software and hardware). Tools like Laptops and computer play pivotal role in the world of ICT's technologies that enable modern computing etc. keeping such global scenario of IT & communication this department envisages a vision to equip the students with all the technicalities with the help of technology tools like Laptops.

Acknowledging these challenges and recognizing the opportunities and strengths of the country, the Government of Punjab, under the directives of the Chief Minister, has launched several initiatives for the youth.

Introduction

In an era dominated by digital advancements, the project endeavors to empower students and enhance their educational journey by providing access to crucial tools and resources. The multifaceted program is designed to address the growing necessity for technology proficiency in education, recognizing that success in both academic pursuits and future endeavors hinges on digital literacy. Unfortunately, a significant number of students in Punjab lack access to essential tools like Laptops and online resources, hindering their ability to fully engage with contemporary educational methodologies.

The pivotal Intermediate exams of the academic year 2023 revealed that a commendable 50,431 out of 459,162 students in Punjab achieved an outstanding score of 80% or higher (A+ Grade). These high- achieving students now stand at the threshold of higher studies at the undergraduate level, representing a pool of talent ready to contribute significantly to the socio-economic development of the region. The program aims to target this specific group of intermediate students, recognizing their academic achievements and providing them with the necessary tools to excel further in their educational pursuits.

Key Benefits:

- Digital empowerment and improved access to educational resources.
- Reduction of socio-economic disparities and promotion of equal opportunities.
- Collaboration with the local ICT industry for economic growth and entrepreneurship.
- Investment in human capital and positioning in the global ICT industry.
- Enabling students to equip with skills to compete with the standards of other countries at global and regional level.

Objectives:

The CM Punjab Laptop Program encompasses several objectives:

- **Empowerment of Students:** The primary goal is to empower and support students enrolled in public sector higher education institutes (HEIs) throughout Punjab. This initiative is centered around providing them with laptops, recognizing the transformative impact of technology not only on their academic journey but also their professional endeavors.

- **Enhancement of Educational Opportunities:** Through the distribution of laptops, the scheme aspires to broaden educational opportunities for young individuals. The

provision of these digital tools aims to facilitate access to a wealth of online resources, fostering a dynamic learning environment.

-**Digital Inclusion:** This initiative is to promote digital inclusion by equipping students with laptops, ensuring that they can actively participate in the digital age. Such interventions acknowledge the role of technology in shaping modern education.

-**Skill Development:** The provision of laptops serves as a catalyst for developing essential digital and technology skills among students. By integrating technology into their academic pursuits, the scheme aligns with the evolving requirements of the 21st-century workforce.

-**Academic Support:** The laptops provided under the scheme are designed to serve as valuable tools for academic support. Students can use them for research, online learning, and accessing educational materials, thereby enhancing their overall academic success.

-**Bridging the Digital Divide:** A fundamental aim of the scheme is to bridge the digital divide between national and international students. Moreover, it takes into account equitability & impartiality, irrespective of socio-economic backgrounds, the initiative ensures that all talented students have equal access to essential technology resources for their education.

-**Transparency in Selection Process:** The establishment of a scrutiny committee and the development of an application for data collection underscore the scheme's commitment to transparency. This ensures a fair and balanced approach for provision of laptops, reinforcing the integrity of the selection process.

-**Long-Term Impact:** The scheme anticipates a lasting impact on the academic and professional development of students. By contributing to their growth, the initiative aims to have a positive influence on the overall progress.

Project Scope

The scope of the CM Punjab Laptop Program encompasses various key components which cover following major facets:

1. **Student Survey**:

-Conducting a comprehensive survey to identify and assess the eligible students (as per criteria to be approved by the Steering Committee) who meet the criteria for receiving laptops.

-Gathering relevant information on students' academic backgrounds and preferences to tailor the distribution process effectively.

1. **Procurement of Laptops:**

-Higher Education Department being an executing agency shall procure Laptops through its relevant wing. Being a technology partner in CM Punjab Laptop Program PITB shall develop a portal for complete monitoring and evaluation of the program along with facilitating the **e- procurement & distribution process** of the laptop in accordance with the relevant procurement rules etc.

-HED would execute a transparent procurement process, **(as approved by the Steering**

Committee) to acquire enough laptops that meet the required specifications and standards **as given / recommended by the technology partner i.e., PITB.**

-Being a technology partner of this program, PITB will assist HED/Steering Committee in finalizing specifications of the laptops to be procured under the program and will ensure that the laptops are equipped with necessary software and features to support academic activities and digital learning. Procurement process may be assigned to another procuring agency in terms of Rule 64 A of the Punjab Procurement Rules 2014, with prior approval of the Steering Committee.

-**Guidelines/Mechanism for Security & Storage etc. (as observed by P&D Board in its 13th PDWP Meeting held on 05-08-2024):**

A detailed mechanism for fool proof securing, storage, preservation of laptops received at proposed venues will be finally decided by the Steering Committee. However, the broader parameters for fool proof securing, storage, preservation of laptops received are as follows:

1) PHEC shall conduct surveys of universities where Laptops are to be delivered as per recommendations of Steering Committee.
2) The survey and selected universities will be incorporated/integrated with portal (to be developed by Technology Partner, PITB).
3) A Committee shall be constituted under Chairmanship, PHEC to look after and ensure Security storage and delivery of Laptops as per criteria of Steering Committee.
4) The committee shall nominate at least two Focal Persons from each selected University/Institute who will ensure storage, fool proof security and proper delivery of Laptops to the Students.
5) Selected Vendor shall open up its center at District Level in entire Punjab and shall be responsible for logistics and delivery of Laptops with selected Specifications etc. to the selected Universities. This settlement of logistics & delivery etc. will be finalized by the Steering Committee.

-**Distribution of Laptops:**

-HED will be establishing a structured distribution plan on the portal designed by PITB to ensure fair and equitable allocation of laptops among eligible among eligible students in coordination with relevant departments/institutions.

-HED will coordinate with educational institutions to ensure a smooth and organized distribution process. Punjab Higher Education Commission (PHEC) will assist for coordination with educational institutions for distribution of Laptops

-HED in collaboration with PHEC and other related institutions /departments will be implementing logistical measures to securely transport laptops to various educational institutions across Punjab.

Student Feedback:

-The portal developed by the PITB will entail mechanism for collecting feedback from students who receive the laptops to evaluate the impact of the initiative.

-HED in collaboration with PHEC and technology partner PITB will analyze feedback

to identify areas of improvement, address any issues or concerns, and refine future iterations of the program.

-The portal will also cover utilization of feedback mechanism as a valuable tool for evaluation.

1. **Monitoring and Evaluation:**

-HED in collaboration PHEC and technology partner (PITB) will be establishing a monitoring and evaluation framework linked with the portal to assess the overall effectiveness of the scheme.

-It will also encompass regular reviewing of the progress, ensuring it aligns with its objectives and makes a positive impact on students' academic experiences.

-It will also incorporate lessons learnt and best practices to improve the efficiency and impact of the scheme over time.

1. **Documentation and Reporting:**

-HED through PITB developed portal, will establish a robust system to keep track of all stages of the project, including surveys, procurement, distribution, and feedback.

-A portal developed by technology partner (PITB) will generate regular reports to update key stakeholders, including government officials, on the progress, challenges, and achievements.

By addressing these components, the project can effectively achieve its goals of empowering students through the distribution of laptops and promoting technology inclusion in education.

-**Human Resource Development**

The Government of Punjab is also undertaking this project because human resource development has been accepted as one of the major initiatives towards promotion of IT knowledge and culture in the country. The services sector in Pakistan has grown considerably during the last few years and the IT savvy personnel are generally considered more efficient service providers. Therefore, the project is intended to boost IT and ICT awareness and skill development by providing an enabling environment to the students.

In recent times, the laptop from a student's perspective have following commonly cited advantages over desktop computers:

-Laptop allow students the freedom to easily transport all of their work and research anywhere they need.

-Educational institutes in Pakistan are switching to Wi-Fi so that students can access the internet on their own laptops to begin working on homework instead of having to wait for a lab or library computer to become available.

-Laptops today weigh less than some textbooks. Students can easily take them in their backpacks or under their arm for transportation to class and back.

-Using a laptop to take notes during a class lecture allows a student to quickly and easily record a lecturer's important points.

-The features on a computer can be specifically tailored to an individual's preference to allow for optimum and efficient organization of files and information.
-This is easier than dealing with hard copies of files, papers, and folders enabling students to be more organized.

6. DESCRIPTION AND JUSTIFICATION OF PROJECT

6.1 JUSTIFICATION OF PROJECT:

The justification of the project is given below;

Description and justification:

Description:

The CM Punjab Laptop Program is a targeted initiative aimed at providing laptops to talented students in public sector higher education institutions (HEIs) across Punjab. This project seeks to bridge the digital divide, empower students through technology, and enhance their academic experiences. It includes a comprehensive approach involving student surveys, laptop procurement, organized distribution, feedback collection, and continuous monitoring and evaluation.

The Steering Committee which was notified on February 06, 2025 after the approval of the Chief Minister, Punjab will look after and oversee the entire CM Punjab Laptop Program (Notification of Steering Committee is attached at Annex-6). The constitution of the approved Steering Committee along with approved TOR's are as follows:

1. Minister Higher Education — Convener/Chairman
2. Chairman, P & D Board — Member
3. Secretary, Higher Education Department — Member
4. Secretary, Finance Department — Member
5. Secretaries (Specialized Health and Medical Education, Industries, Agricultural, Livestock and Dairy Development Departments) — Members
6. Special Secretary, Higher Education Department — Member
7. Chairman, Punjab Information Technology Board — Member
8. Chairman, Punjab Higher Education Commission — Member
9. Additional Secretary, (P&B), HED — Member
10. Director Public Instruction (Colleges), Punjab — Member/Secretary
11. Any other officer / technical expert deemed relevant by the committee — Co-opted Member

The Terms of Reference (ToRs) of Steering Committee are as under (as observed by P&D Board in its 13th PDWP Meeting held on 05-08-2024):

- Approve mechanism for implementation of the project and take necessary decisions related to projects design and scope.

- Approve the comprehensive criteria for the provision of laptops to the students including modalities for distribution to the students of different categories.

- Approve the final list of students of different categories for distribution of laptops.

- All the changes in the design/execution of the scheme involving any deviation from the provisions of the approved PC-I may accordingly be placed before the relevant competent from through revised PC-I before completion of the scheme.

- Any proposal(s) for revision of the PC-I may be cleared by the PSC prior to placing the revision before the relevant competent forum.

- Ensure effective inter-Departmental coordination among all the implanting partners.

- The PSC shall ensure effective oversight by conducting periodic reviews.

Justification:

The CM Punjab Laptop Program is supported by a multifaceted justification, aligning with key imperatives for educational advancement. This program/project aims at provision of laptops approximately 112,000 students **(as per allocation of current ADP 2024-25 which will be directly proportional to revised/ enhanced allocation in the same financial year)** at their respective institutions currently studying at public sector educational institutes in Punjab. The list of total students' strength of 558,832 studying BS/MS/MBBS/Engineering programs in the Public Sector colleges and universities will be prepared by the respective institutions as per laid down criteria, as approved by Steering Committee. However, the final criteria for selection of institutions and the students will be finalized and approved by the Project Steering Committee.

Pakistan ranks third globally in freelance industry contributions, following India and Bangladesh. This ranking is based on data from major online labor platforms such as Fiverr, Freelancer, Guru, and People-Per-Hour. Approximately 38.9 percent of freelancers in Pakistan work in software development, making up about 5.5 percent of the global software development freelance workforce. Distributing laptops to deserving students will enhance their ability to engage in freelancing, thereby boosting the economy. Figure.1

Students will utilize these laptops to use valuable skills such as web development, graphic design, content marketing, and digital marketing, which are highly sought after in the freelance market which in turn will boost economy of Pakistan.

Providing free laptops to women can significantly boost economic growth and social empowerment. Access to laptops enhances productivity and education by offering educational resources and professional development tools, making women more productive in the workforce. It also creates new business opportunities, enabling women to start businesses, find freelance work, and participate in the gig economy. Laptops facilitate greater workforce participation by overcoming barriers such as lack of transportation or childcare through remote work and flexible arrangements. Improved communication and collaboration foster better networking and idea-sharing. Furthermore, owning a laptop fosters a sense of empowerment and independence.

The role of IT equipment and gadgets in fostering digital empowerment amongst the youth is profound and multifaceted. With the rapid advancement of technology, access to IT equipment has become increasingly vital in shaping the educational, social, and economic landscape for young people. These gadgets serve as powerful tools, enabling the youth to access information, communicate with others, and acquire digital skills essential for success in the current age. Besides, these gadgets also contribute towards access to quality education which otherwise remains a challenge for countries like Pakistan and Punjab Province which are lagging behind at global as well as regional level. Through e-learning platforms and educational apps, students can engage in self-paced learning, explore perse subjects, and gain valuable skills regardless of their geographical location. Furthermore, IT gadgets play a crucial role in fostering digital literacy and skill development among the youth. In today's digital world, pro%uFB01ciency in technology is increasingly becoming a prerequisite for employment and socioeconomic advancement. By providing access to IT equipment, youth in Punjab can acquire essential digital skills such as coding, graphic design, and digital marketing, empowering them to pursue lucrative career opportunities in various industries besides empowering them to enter the freelancing market globally. By leveraging IT gadgets, youth can connect with like-minded individuals, organize grassroots initiatives, and access information that empowers them to become active agents of change in their communities. Additionally, IT-enabled platforms facilitate greater transparency and accountability, enabling youth to hold authorities accountable and demand greater responsiveness to their needs and concerns.

The evolutionary transition brought about by Information Technology globally to educational realm - creation of knowledge content, repository of knowledge content, management of content, delivery of content, management of the teacher and the taught interaction/affairs, linkages of the knowledge institutions with outside world, information processing and dissemination precisely has the following key features:

-Digital Empowerment:

The scheme is founded on the urgent requirement to empower students by providing essential digital tools. This initiative is fueled by a dedication to establish an enriching learning environment that aligns with the ever-evolving educational landscape. Acknowledging the transformative impact of technology, the scheme seeks to equip students with the resources necessary to excel in a digitally-driven academic sphere.

Remittances received by resident individuals and households from reputable overseas IT firms and online platforms for freelance services amounted to USD 397.3 million in FY2021-22. The export remittance earnings by current full-time freelancers are projected to reach USD 1 billion by 2030. This growth will be further accelerated by providing free laptops to graduate students and providing skills to potential new freelancers.

According to research, Pakistani freelancers represent a significant 12.5% of the global freelance workforce, with 2.37 million individuals actively participating on various freelancing websites and portals. Notably, around 552,000 of these freelancers from Pakistan are full-time professionals, each having completed at least 10 projects and earned a minimum of USD 1,000. Providing free laptops to students in Punjab province can significantly boost this growing freelancing community by equipping young talent with the necessary tools to access online work opportunities, enhance their digital skills, and contribute to both local and global economies. Figure.2

-Academic Enhancement:

Central to the scheme's rationale is the role of laptops as catalysts for academic success. These devices act as enablers, facilitating students' access to a myriad of online resources and engaging in digital learning experiences. Furthermore, laptops play a pivotal role in cultivating crucial technology skills among students, aligning with the dynamic requirements of contemporary education and the broader workforce.

-Equal Access:

This project prioritizes tackling educational inequality by ensuring everyone has the resources they need to succeed in educational career. By distributing laptops to a wide range of students, the program levels the playing field, giving talented students from all socioeconomic backgrounds an equal opportunity to reach their full potential. No matter a student's financial situation, this initiative empowers them to participate fully in their education and compete for scholarships and future opportunities. This focus on equal access reflects the project's deep commitment to building a truly inclusive learning environment where students feel supported and valued, regardless of their background.

-Distant Learning

Distant learning through video-rich and multimedia- supported lectures around the world on various topics using IT networks is a popular trend of the day - a lecture from a famous lecturer can be arranged easily and at economical cost by the Institutes using IT networks. E-classroom is a new and interesting phenomenon. Knowledge content is just one click away provided an individual has the gadgets such as laptop.

Detailed cost estimates of each component/ head are attached at **Annex-A**.

Technology Partner (PITB), being technical expert has proposed Hardware Component along with its specifications which will be subject to approval of Steering Committee & following conditions:

-The current specifications are preliminary and subject to change.
-Final requirements will be established upon RFP release.
-The final specifications will incorporate appropriate technology available.
-Final specifications (as approved by the Steering Committee) will be part of tender.

Detailed preliminary specifications are attached at **Annex-B.**

As per Gartner (July 2024), Preliminary Worldwide PC vendor unit shipment estimates for 2Q24 (Thousands of Units) with market share percentage are attached at **Annex-C**. All data estimates are based on a preliminary study.
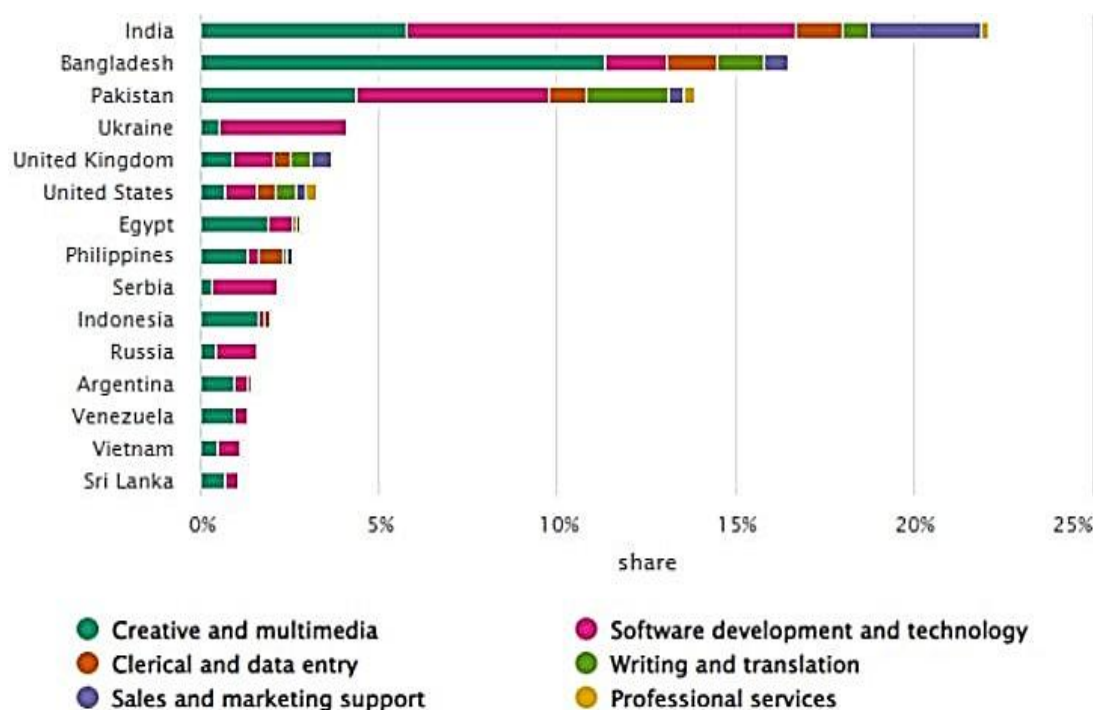
Source: Online Labour Index

Figure 3.8: Pakistani Freelancers as a Part of Global Freelance Workforce

---

[27] https://ilabour.oii.ox.ac.uk/how-many-online-workers/

Impact Assessment of Project: Provision of Laptops to the Students of Public Sector Universities of Punjab (Pakistan) is at Annexure-07

Reason for 1st revision:

Original scheme of Laptops consists of 39,200 laptops for talented students in Punjab. The Higher Education Department mentioned 40,000 laptops in the bid document anticipating savings under various heads. After comparative bidding as the per unit cost stood reduce from Rs. 0.250 million provided in the approved PC-I to Rs. 0.235 million, therefore, this department after the approval of the cabinet placed the supplementary repeat order for the purchase of 2,000 laptops.

Initially 39,200 students were marked for the distribution of the laptops; however, the provincial cabinet recognizing the positive academic and job-related impact of computer technologies on the welfare of students, and in order to mitigate the digital divide between have and have nots in the global context of permeating influence of technologies and artificial intelligence, decided to increase the provision of laptops to the students studying in higher education institutions. Accordingly, as per the statistics, 110,000 students enrolled in various higher education institutions having high grades and academic achievements in their educational career were earmarked for the distribution of the laptops. The proposal of the department for awarding laptops to 110,000 students was approved by the provincial cabinet in its meeting dated 11-02-2025 (**Annex-D**). The critical decisions of the cabinet in this regard are reproduced as under:

The following proposals duly highlighted in at agenda No.67 read with 76.5 were considered by the Provincial Cabinet:

i. Permission may be granted to revise the cost of the existing approved scheme for procurement of laptops appearing at G.S. No 103.of. ADP/2024-25 from Rs: 9,966.7 million to approximately Rs. 27,000 million for the procurement of an additional 70,000 laptops and place the revised scheme for approval of the relevant competent forum i.e. ECNEC through PDWP.

ii. Provision of supplementary grant to the tune of Rs. 17,033.3 million for procurement of additional 70,000 laptops during CFY subject to approval of revised PC-1 through ECNEC, through inter/intra sectoral re-appropriation by the P&D. Board.

iii. Approval for placement of a supplementary, order of 2,000, laptops from the savings of the existing approved laptop scheme in favor of NRTC being covered under 59(c) (iv) of Punjab Procurement Rules, 2014.

iv. Allow HED/ Procuring Agency to enter into negotiated tendering-process .with Public Sector entity(s) i.e. M/s National Radio & Telecommunication Corporation (NRTC) and M/s Frontier Works Organization *(FWO) for procurement: of another 70,000 laptops under the captioned revised scheme after approval from ECNEC, in accordance with already approved specifications given in the approved PC-1, in terms of provisions of Rule 59(d)(lv) of Punjab Procurement Rules, 2014. However, this process will be carried out subject to the prior approval of the revised PC-1 of the scheme by ECNEC.

v. Authorize the existing Steering Committee (already approved on a separate summary) to define detailed modalities of distribution of additionally procured 70,000 laptops besides its earlier assigned ToRs.

The Provincial cabinet approved the above mentioned proposals of the department. The decision of the cabinet highlights the importance of the availability of digital technologies with the students to prepare them for knowledge and technologies based national and global economy. The decision is also stand strengthen by very high percentage of Pakistani youth contributing in e-commerce and freelancing.

The gestation period has been revised from June, 2025 to October, 2025 as the procurement of laptops will be completed in CFY but the operational expenditures will be carried through next financial year 2025-26

6.2 SECTORAL SPECIFIC INFORMATION:

The CM Punjab Laptop Program in Pakistan is strategically aligned with the country's sectoral objectives, playing a pivotal role in advancing education, fostering digital literacy, and contributing to overall socio-economic development. Aligned with the goal of educational enhancement, the scheme ensures that students in public sector higher education institutes across Pakistan have equitable access to essential digital tools, creating a technology integrated learning environment. By distributing laptops, the initiative directly supports the objective of promoting digital literacy, thereby equipping students with crucial technology skills essential for navigating the evolving landscape. The scheme also effectively addresses the goal of providing equal access to educational resources, mitigating socio-economic disparities, and ensuring that all students enjoy an equitable opportunity to benefit from digital tools. As part of broader sectoral goals, the initiative contributes to economic empowerment through education, human capital development, and the encouragement of innovation and entrepreneurship. By strategically investing in students' education and technology capabilities, the CM Punjab Laptop Program emerges as a pivotal initiative in closing the digital pide and propelling Pakistan towards a more advanced, inclusive, and economically vibrant future.

7. CAPITAL COST ESTIMATES:

Financial Components: Revenue
Cost Center:OTHERS- (OTHERS)
Fund Center (Controlling):LE4274

Grant Number: Development Revenue - (PC22036)
LO NO:LO24000224
A/C To be Credited: Account-I

PKR Million

Sr #	Object Code	2024-2025		2025-2026	
		Local	Foreign	Local	Foreign
1	**A09201**-Purchase of Hardware	26,383.840	0.000	0.000	0.000
2	**A09202**-Purchase of Software	0.000	0.000	0.000	0.000
3	**A03204**-Electronic Communication	7.200	0.000	0.000	0.000
4	**A03902**-Printing and Publication	0.000	0.000	0.000	0.000
5	**A03907**-Advertising and Publicity	100.000	0.000	200.000	0.000
6	**A03901**-Stationery	0.000	0.000	1.500	0.000
7	**A03407**-Rates and Taxes	0.000	0.000	0.000	0.000
8	**A03903**-Conference / Seminars / Workshops / Sy	150.000	0.000	250.000	0.000
9	**A03806**-Transportation Of Goods (Govt)	50.000	0.000	150.000	0.000
10	**A05270**-To Others	70.000	0.000	130.000	0.000
	Total	**26,761.040**	**0.000**	**731.500**	**0.000**

Annexure01- Annex A
Annexure – A: Cost Estimates Summary

Summary of Cost Estimates *(In million)*

Sr. No.	Component/ Head	Approved Cost	Revised Cost
A.	Hardware	9,800.00	26,383.84
B.	Software	135.00	0
C.	Operations	27.1	908.7
D.	Contingency	4.60	200
	Total Cost	**9,966.70**	**27,492.54**

Component Wise Detailed Cost Estimates *(in million)*

				Original Cost (in millions)			1st Revision (in millions)		
A.	**Hardware**								
Sr. No	Object Code	Item	Description	Qty.	Cost *(Per Unit)*	Total Cost	Qty.	Cost *(Per Unit)*	Total Cost
1	A09201	Laptops	Core i7	*39200	0.250	9800	112,000	0.23557	26,383.84

* Original scheme of Laptops consists of 39,200 laptops for talented students in Punjab. The Higher Education Department mentioned 40,000 laptops in the bid document anticipating savings under various heads. After comparative bidding as the per unit cost stood reduce from Rs. 0.250 million provided in the approved PC-I to Rs. 0.235 million, therefore, this department after the approval of the cabinet placed the supplementary repeat order for the purchase of 2,000 laptops.

Subtotal (A) Hardware						**9,800.00**			**26,383.84**
B. Software									
Sr. No	Object Code	Item	Description	Qty.	Cost *(Per Unit)*	Total Cost	Qty.	Cost *(Per Unit)*	Total Cost
2	A09202	Software	Miscrosoft Support and Subscrition for software	1	135.000	135	0	0.000	0.00
Subtotal (A) Hardware						**135.00**			**0.00**
C. Operations									
3	A03204	Electronic Communication	Electronic Communication	12	0.300	3.600	12.000	0.600	7.200
4	A03902	Printing & Publication	Printing & Publication	1	3.500	3.500	0.000	0.000	0.000
5	A03907	Advertisement & Publicity	Advertisement in Print & Electronic Media for Public Awareness, Project achievements and Promotional activities	1	8.000	8.000	1.000	300.000	300.000
6	A03407	Rates & taxes		1	1.000	1.000	0.000	0.000	0.000

7	A0390 1	Stationary		0	0.000	0.000	1.000	1.500	1.500
8	A0390 3	Conference/ Seminar/ Workshop/ Synopsis	Distribution Events at Universities/Divisio nal/ District etc. levels,	1	11.000	11.000	1.000	400.00 0	00.000
9	A0380 6	Transportati on of Goods	Warehousing, insurance and transportation to nine divisions across Punjab	0	0.000	0.000	1.000	200.00 0	200.000
Subtotal (C) Operations						**27.100**			**1108.700**
D.		**Contingency**							
10	A0527 0	Contingency	-	1	4.6	4.600	1.000	200.00 0	200.000
Subtotal (D) Contingency						**4.600**			**200.000**
Grand Total				**-**	**-**	**9,966.7 00**		**-**	**27,492.5 40**

Note: Procurement and payments of 112,000 laptops will be completed in CFY 2024-25 and operational expenditures will be carried through next financial year.

8. ANNUAL OPERATING COST (POST COMPLETION)

Financial Components: Revenue
Cost Center:OTHERS- (OTHERS)
Fund Center (Controlling):LE4274

Grant Number: Development Revenue - (PC22036)
LO NO:LO24000224
A/C To be Credited: Account-I

PKR Million

Sr #	Object Code	2026-2027		2027-2028		2028-2029		2029-2030		2030-2031	
		Local	**Foreig**	**Local**	**Foreig**	**Local**	**Foreig**	**Local**	**Foreig**	**Local**	**Foreig**
1	**A09203**-Purchase of IT Equipment	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Total	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**

9. Demand and Supply Analysis:

Demand and Supply Analysis

This Program tackles the real-world needs of students in Punjab's public colleges and universities. It considers both what students need (demand) and what the government can provide (supply).

Higher Education Department in consultation with technology partner, (Punjab Information Technology Board (PITB), explored different options of IT gadgets and obtained estimated cost with speci%uFB01cations thereof. In order to assess the actual need and requirement of the students, Higher Education Department (HED) tasked Punjab Higher Education Commission (PHEC) to conduct an online survey for the University and College students in Punjab. The response to this survey was quite positive and a total 128,029 students responded to the online survey from 67 universities and 213 colleges. As per result of the survey, 88% (113,160) students of colleges & universities shown their preference for laptop being more effective & useful tool for enhancing their digital skills. The detailed results of the survey are placed at **Annex-E. (Figure.3)**

Students today need digital tools to succeed. Online resources are crucial, and tech skills are essential in a constantly changing educational environment. The scheme responds to this demand by giving students laptops.

On the other hand, the government has to consider its resources and how to get the best laptops at the best price. To be successful, the program needs to find the right balance. There need to be enough laptops for all the students, considering how many students there are, and how many shall meet the criteria to be finalized by the Steering Committee.

The program constantly checks how well it's meeting these needs and makes changes as required. This ensures students get the laptops they need to keep up with the latest advancements in education and technology.

Annual Operating and Maintenance Cost after completion of the Project

There will be no annual operating and maintenance cost after completion of the Project. However, operation & maintenance guarantee/warranty would be from 1 year to three years as per agreed terms of work order. Moreover, issues/complaints (if any) will be submitted by the beneficiary students through portal developed by PITB, which will be forwarded to the relevant/concerned venders/their designated locations/stores/shops at pisional and district level to address those issues/ complaints during the warranty period. The whole process will be monitored through portal developed by the PITB for said purpose.

10. FINANCIAL PLAN AND MODE OF FINANCING

10.1 FINANCIAL PLAN EQUITY INFORMATION:

10.2 FINANCIAL PLAN DEBT INFORMATION:

undefined

10.3 FINANCIAL PLAN GRANT INFORMATION:

This project is funded through development fund as reflected in ADP 2024-25 at GS No. 103.

10.4 WEIGHT COST OF CAPITAL INFORMATION:

undefined

11. PROJECT BENIFITS AND ANALYSIS

11.1 PROJECT BENEFIT ANALYSIS INFORMATION:

-Benefits
The Program offers a holistic set of benefits, positively impacting education, the economy, and society at

large. By distributing laptops to students, the initiative promotes digital empowerment, fostering a technology adept learning environment and enhancing access to educational resources. This contributes to academic success and helps reduce socio-economic disparities.

The scheme also stimulates economic growth by collaborating with the local ICT industry, creating entrepreneurial opportunities, and supporting economic persification. By investing in human capital and promoting technology advancements, the initiative positions Pakistan as a competitive player in the global ICT industry.

Additionally, the scheme enhances educational infrastructure through Smart University initiatives, attracting investments and improving the overall quality of tertiary education. Its focus on distance education and virtual collaboration ensures cost-effective learning while reducing the environmental impact associated with traditional educational practices.

Overall, the CM Punjab Laptop Program represents a comprehensive approach to empowering students, strengthening the economy, and fostering a more inclusive and sustainable educational landscape.

- **Social Benefit**
- **Promotes Social Inclusion and Reduces Inequality:**
  Access to laptops empowers marginalized communities by providing tools for education and self-improvement. This reduces social disparities and fosters a more inclusive society where everyone has the opportunity to succeed. Equal access to technology enhances social mobility, breaking the cycle of poverty for disadvantaged groups.
- **Fosters Innovation, Creativity, and Critical Thinking:**
  Exposure to digital tools and online resources encourages students to think creatively and solve problems using technology. It inspires innovation by allowing inpiduals to experiment with coding, design, and digital content creation. This culture of innovation benefits society by nurturing future leaders, inventors, and entrepreneurs.
- **Strengthens Community Development and Civic Engagement:**
  Digitally literate inpiduals are more informed and engaged citizens, contributing to a more active and aware society. Access to online platforms allows people to participate in discussions, advocate for social causes, and stay updated on current events. This increased civic engagement leads to a more vibrant, democratic, and socially responsible community.
- **Educational Benefit**
- **Improves Access to Online Learning and Educational Resources:**
  Laptops provide students with access to digital libraries, online courses, and educational platforms, broadening their learning horizons. This allows them to explore perse subjects and gain knowledge beyond traditional classroom settings. Enhanced access to information fosters independent learning and critical thinking skills, improving overall academic performance.
- **Promotes Interactive and Engaging Learning Experiences:**
  Digital tools and multimedia content make learning more interactive and visually engaging, capturing students' interest. This shift from passive textbook-based learning to active digital engagement increases student motivation and retention of information. Interactive learning platforms also allow for personalized education, catering to different learning styles and paces.
- **Bridges the Digital Divide and Ensures Educational Equity:**
  By providing laptops to students from perse socio-economic backgrounds, the scheme reduces the digital pide and promotes equal educational opportunities. Students who previously lacked access to technology can now participate in digital learning, leveling the playing field. This ensures that all students, regardless of their financial background, can compete in an increasingly digital world.
- **Economic Benefit**
- **Enhances Digital Literacy and Workforce Readiness:**
  By providing laptops, the scheme equips students with essential digital skills such as artificial

intelligence, machine learning, data analytics, web development, and app development required in today's job market. This fosters a tech-savvy workforce capable of meeting the evolving demands of various industries. As a result, the economy benefits from a more skilled labor force, driving productivity and innovation.

-Boosts Employment Opportunities and Entrepreneurship:

Access to technology enables inpiduals to explore online job opportunities and freelance work, expanding employment prospects. It also empowers aspiring entrepreneurs to launch digital businesses, contributing to economic persification. This leads to increased income generation and economic self-reliance, reducing unemployment rates.

-Strengthens Freelance Workforce and IT Exports:

Equipping students with laptops enhances their ability to participate in the global freelance market. Pakistan, for instance, has over 1.5 million freelancers contributing significantly to the economy, with IT exports reaching $3.2 billion in the fiscal year 2023-24. This growth in freelancing and IT exports showcases the potential economic benefits of widespread digital access.

-Enhancement of High-Technology Exports:

The free laptop scheme can lead to an increase in high-technology exports by fostering a generation proficient in advanced technological skills. In 2023, Pakistan's high-technology exports were reported at approximately $384 million. Equipping students with laptops can further enhance their capabilities, potentially leading to a rise in the development and export of high-tech products and services.

-Promotion of Self-Employment and Entrepreneurship:

Access to laptops empowers inpiduals to pursue self-employment opportunities, reducing reliance on traditional job markets. As of 2023, 57.11% of Pakistan's total employment comprises self-employed inpiduals. The scheme encourages entrepreneurial ventures, leading to job creation and economic persification.

-Attraction of Foreign Investment:

A digitally literate population enhances the country's appeal to foreign investors seeking skilled labor for technology-driven projects. Improved digital infrastructure and a tech-savvy workforce can lead to increased foreign direct investment in the IT sector. This influx of investment capital can further stimulate economic growth and technological advancement.

-Development of a Knowledge-Based Economy:

Investing in digital education through initiatives like the free laptop scheme transitions the economy towards knowledge-based industries. A workforce skilled in information technology can drive innovation, research, and development. This shift leads to sustainable economic growth and positions the country competitively in the global market.

-Enhancement of Global Competitiveness:

A digitally proficient workforce improves the country's competitiveness in the global market. Businesses can offer high-quality services and products, attracting international clients and partners. This competitive edge can lead to increased exports and a stronger presence in the global economy.

-Facilitation of E-Governance and Public Services:

A population well-versed in digital technologies can effectively engage with e-governance initiatives. This engagement leads to more efficient public service delivery and improved transparency. Efficient governance contributes to a favorable business environment, encouraging economic activities and investments.

11.2 ENVIROMENTAL IMPACT ANALYSIS:

The CM Punjab Laptop Program is expected to have a positive environmental impact by promoting sustainable and eco-friendly practices. The scheme's emphasis on digital learning and providing laptops to students aligns with the principles of environmental conservation. By reducing reliance on traditional paper-

based educational materials, the initiative contributes to the conservation of forests and minimizes the carbon footprint associated with the production and distribution of printed resources. Additionally, the integration of technology into education promotes a paperless approach, leading to reduced waste generation. Furthermore, the scheme's focus on distance education and virtual collaboration reduces the need for extensive travel, contributing to a decrease in greenhouse gas emissions.

Overall, the CM Punjab Laptop Program embraces environmentally conscious practices, fostering a more sustainable educational ecosystem and aligning with global efforts to mitigate the environmental impact of traditional educational practices.

11.3 ECONOMIC ANALYSIS:

The CM Punjab Laptop Program isn't just about giving student's computers, rather it's about building a stronger economy for Punjab. Here's how:

-**Empowering the workforce:** By giving students laptops and digital skills training, the scheme creates a generation of tech-savvy graduates ready to boost productivity and efficiency in businesses.

-**Supporting local businesses:** The program works with Pakistani companies to buy the laptops and create educational content. This helps these businesses grow and create new jobs.

-**Driving innovation:** The focus on content creation encourages students to develop new ideas and applications. This fosters innovation in the tech sector and positions Pakistan as a leader in the global ICT industry.

-**Entrepreneurship and persification:** By helping students develop their tech skills, the scheme opens doors for them to start their own businesses. This persifies the economy and creates new opportunities.

-**Attracting investment:** Better-equipped universities and a skilled workforce make Punjab more attractive to investors. This brings in new money that fuels further economic growth.

Overall, the CM Punjab Laptop Program is an investment in Punjab's future. By focusing on people and technology, it has the potential to create a more competitive and stable economy.

-Employment Generation (Direct and Indirect)

The scheme under consideration and the project is expected to bring a change through distribution of Laptops and outreaching ICT, to create direct and indirect job opportunities in the local community to absorb from and extend skilled, trained and experienced workforce to the countries in the region, relating to electronic device manufacturing/ assembling industry.

11.4 FINANCIAL ANALYSIS:

The CM Punjab Laptop Program is expected to yield significant financial advantages for both students and the broader economy. By distributing laptops to students, the initiative reduces the financial burden on inpiduals, mitigating the costs associated with purchasing personal devices for educational purposes. This fosters equal access to educational resources and narrows socio-economic gaps. Additionally, the scheme's collaboration with the local ICT industry not only stimulates economic growth but also creates entrepreneurial opportunities, potentially leading to new revenue streams. Strengthening colleges and implementing Smart University initiatives contribute to improved educational infrastructure, attracting more students and investments. Furthermore, the emphasis on cost-effective distance education enhances the financial sustainability of educational institutions. Overall, these financial benefits range from immediate cost savings for students to long-term contributions to economic growth, entrepreneurship, and the resilience of the educational sector.

12. IMPLEMENTATION SCHEDULE

12.1 IMPLEMENTATION SCHEDULE/GANTT CHART:

The tentative timeline for various activities of the program will be as under:

Sr. No.	Scope of Work/ Activities	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	March	April	May	June	July	August	Sept	Oct
1	Tendering for the procurement of Laptop				▓	▓					▓						
2	Procurement of Laptop						▓	▓	▓	▓	▓	▓	▓				
3	Distribution of Laptop										▓	▓	▓	▓	▓	▓	▓
4	Media Campaigns										▓	▓	▓	▓	▓	▓	
5	Student Feedback												▓	▓	▓	▓	▓

12.2 RESULT BASED MONITORING (RBM) INDICATORS:

N/A

12.3 IMPLEMENTATION PLAN:

The strategy for implementing the CM Punjab Laptop Program in Punjab outlines a collaborative effort involving key stakeholders. The technology partner of this program, Punjab Information Technology Board (PITB) will ensure suitable (specifications) and cost-effective laptops. The technology partner of this program (PITB) will design/develop portal for execution, monitoring and evaluation of the program. This portal will also facilitate the distribution of the laptop and will secure the entire record as well. The Steering Committee will play a crucial role in establishing transparent criteria for laptop distribution, considering academic performance, financial need, and other relevant factors. The HED through its relevant wing i.e. Admin & General will ensure execution and distribution and will collaborate with PHEC on logistics, storage and coordination with related educational institutions. Establishing effective communication channels among PITB, PHEC and HED will foster transparency and accountability throughout the implementation. A public awareness campaign will inform stakeholders about the scheme, while a robust monitoring and evaluation framework will assess its impact for continuous improvement. This strategy aims to ensure the efficient and fair distribution of laptops to eligible students, fostering digital empowerment and academic success across Punjab.

12.4 M&E PLAN:

There will be a Steering Committee which is responsible to oversee the whole program and made decision as per term of references. Moreover, the monitoring and evaluation mechanism for the CM Punjab Laptop Program will be based on comprehensive portal deigned framework to ensure transparency, fairness, and effectiveness throughout the initiative. Dedicated monitoring teams, consisting of qualified inpiduals and perse representatives, will conduct random spot checks at distribution as approved by the Steering Committee of the program. Moreover, the technology partner of this program (PITB) will design a portal integrated proforma to get feedback from the beneficiary after six months of completion of this program. The results of this feedback will be a useful data/ information for further planning & decision making for the technology interventions.

12.5 RISK MITIGATION PLAN:

The Risk mitigation plan is given below;

Sr. No.	Risk Identification	Impact Analysis	Mitigation Approach
1	Timely Release of Fund	Delay in the release of funds will impede subsequent deliveries and the distribution of laptops to students, potentially hindering the scheme's impact.	Punjab Planning and Development Board, along with the Finance Department, must ensure timely fund release according to the cash plan aligning with the project timelines.
2	Delay in Procurement	Procurement delays can severely impact project execution, leading to both time and cost overruns. Given the Punjab context, any imposition of a procurement ban by the federal government during the project life should be actively managed to avoid disruptions.	· HED along with its technology partner (PITB) and PHEC, shall be implementing measures to prevent the imposition or effectiveness of procurement bans during the project duration, ensuring smooth procurement processes specific to Punjab's needs. Adjustments should be made in collaboration with the Planning and Development Board. · The e-portal for effective procurement and its timely process will be developed by technology partner (PITB) which would also include mechanism of monitoring and evaluation.
3	Project Execution Staff	Initiation and execution of a project of this magnitude depend on appropriate staff. Delays in recruiting project staff can directly impact project execution in Punjab, potentially slowing down the distribution of laptops to deserving students.	· Representatives of technology partner PITB and PHEC act as the Project Staff, ensuring continuity and efficiency in Punjab's context. · Adjustments should be coordinated with the Higher Education Department (HED).
4	Tax Waivers/ Exemptions	The cost per unit of the laptop is calculated with the consideration of a GST Tax. Failure to secure the necessary tax waivers/exemptions may affect the overall project budget in Punjab.	· Ensure the support and approval of relevant authorities for the identified waivers/exemptions outlined in the project PC-1 · Specifically tailored to the tax regulations in Punjab. · Adjustments should be coordinated with the Punjab Revenue Authority and other relevant bodies.

12.6 PROCUREMENT PLAN:

-Higher Education Department being an executing agency shall procure Laptops through its relevant wing. Being a technology partner in CM Punjab Laptop Program PITB shall develop a portal for complete monitoring and evaluation of the program along with facilitating the **e- procurement & distribution process** of the laptop in accordance with the relevant procurement rules etc.

-HED would execute a transparent procurement process, **(as approved by the Steering Committee)** to acquire enough laptops that meet the required specifications and standards **as given / recommended by the technology partner i.e., PITB.**

-Being a technology partner of this program, PITB will assist HED/Steering Committee in finalizing specifications of the laptops to be procured under the program and will ensure that the laptops are equipped with necessary software and features to support academic activities and digital learning.

13. MANAGEMENT STRUCTURE AND MANPOWER REQUIREMENTS

There will be no new staff required rather existing staff of various wings of HED will execute the scheme in coordination with field formation of HED, PHEC and its technology partner PITB.

Following are the activities identified for the implementation of the project:

Sr. No.	Activity	R = Responsible I = Input required		
		Stakeholders		Relevant Departments/ Institutions
		HED	PITB	
1.	Development of Portal for execution of the program/ scheme	I	R	-
2.	Student's Data Collection for finalizing eligibility criteria by Steering Committee and distribution of Laptops	R	I	I
3.	Management of the Project	R	I	I
4.	Continuous Support and Overall Project ownership	R	I	I
5.	Technical Support	I	R	-
6.	Procurement of Laptops	R	I	I
7.	Distribution of Laptops	R	I	R

14. ADDITIONAL PROJECTS / DECISIONS REQUIRED

15. CERTIFICATE

Focal Person Name: Higher Education Department   **Designation:**Higher Education Department
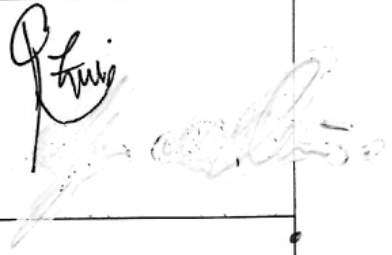
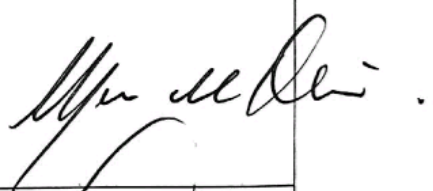**Email:**ds.planning.hed@gmail.com   **Tel. No.:**04299212238

Fax No:

Address: Higher Education Department Punjab Lahore

16. Certificate:

Certified that the project proposal has been prepared on the basis of instructions provided by the Planning Commission for the preparation of PC-I for Social Sector projects.

Prepared by	Deputy Secretary (Planning & Development) Higher Education Department, Govt. of the Punjab	
Reviewed By	Director (Development & Procurement) Punjab Information Technology Board (PITB)	
Verified By	Chief Information Security Officer Punjab Information Technology Board (PITB)	
Checked By	Additional Secretary (Planning & Budget) Higher Education Department, Govt. of the Punjab	
	Director General (IT Solutions) Punjab Information Technology Board (PITB)	
Approved By	Secretary Higher Education Department, Govt. of the Punjab	

16. REVISION HISTORY

16.1 ORIGINAL

Original scheme of Laptops consists of 39,200 laptops for talented students in Punjab. The Higher Education Department mentioned 40,000 laptops in the bid document anticipating savings under various heads. After comparative bidding as the per unit cost stood reduce from Rs. 0.250 million provided in the approved PC-I to Rs. 0.235 million, therefore, this department after the approval of the cabinet placed the supplementary repeat order for the purchase of 2,000 laptops.

Initially 39,200 students were marked for the distribution of the laptops; however, the provincial cabinet recognizing the positive academic and job-related impact of computer technologies on the welfare of students, and in order to mitigate the digital divide between have and have nots in the global context of permeating influence of technologies and artificial intelligence, decided to increase the provision of laptops to the students studying in higher education institutions. Accordingly, as per the statistics, 110,000 students enrolled in various higher education institutions having high grades and academic achievements in their educational career were earmarked for the distribution of the laptops. The proposal of the department for awarding laptops to 110,000 students was approved by the provincial cabinet in its meeting dated 11-02-2025 (Annex-D). The critical decisions of the cabinet in this regard are reproduced as under:

The following proposals duly highlighted in at agenda No.67 read with 76.5 were considered by the Provincial Cabinet:

i.Permission may be granted to revise the cost of the existing approved scheme for procurement of laptops appearing at G.S. No 103.of. ADP/2024-25 from Rs: 9,966.7 million to approximately Rs. 27,000 million for the procurement of an additional 70,000 laptops and place the revised scheme for approval of the relevant competent forum i.e. ECNEC through PDWP.

ii.Provision of supplementary grant to the tune of Rs. 17,033.3 million for procurement of additional 70,000 laptops during CFY subject to approval of revised PC-1 through ECNEC, through inter/intra sectoral re-appropriation by the P&D. Board.

iii.Approval for placement of a supplementary, order of 2,000, laptops from the savings of the existing approved laptop scheme in favor of NRTC being covered under 59(c) (iv) of Punjab Procurement Rules, 2014.

iv.Allow HED/ Procuring Agency to enter into negotiated tendering-process .with Public Sector entity(s) i.e. M/s National Radio & Telecommunication Corporation (NRTC) and M/s Frontier Works Organization *(FWO) for procurement: of another 70,000 laptops under the captioned revised scheme after approval from ECNEC, in accordance with already approved specifications given in the approved PC-1, in terms of provisions of Rule 59(d)(lv) of Punjab Procurement Rules, 2014. However, this process will be carried out subject to the prior approval of the revised PC-1 of the scheme by ECNEC.

v.Authorize the existing Steering Committee (already approved on a separate summary) to define detailed modalities of distribution of additionally procured 70,000 laptops besides its earlier assigned ToRs.

The Provincial cabinet approved the above mentioned proposals of the department. The decision of the cabinet highlights the importance of the availability of digital technologies with the students to prepare them for knowledge and technologies based national and global economy. The decision is also stand

strengthen by very high percentage of Pakistani youth contributing in e-commerce and freelancing.

The gestation period has been revised from June, 2025 to October, 2025 as the procurement of laptops will be completed in CFY but the operational expenditures will be carried through next financial year 2025-26

18. RELATION WITH OTHER PROJECTS

20. FOCUS ON MARGINALISATION

SR.NO.	CRITERIA	YES/NO	ACTION	COMMENTS
Description & Objectives				
1	Do the description / Objectives of the PC-I specify link / alignment with provincial strategies and sectoral policies?	YES	SDGs, Punjab Growth Strategy, Sector Policy	
Use of Gender Disaggregated Data				
1	Was gender disaggregated data used to determine rationale / need of the project for select beneficiaries?	NO		its for both male & female students. the laptops will be distributed on merit
Social Impact				
1	Do project objectives/justification include focus on marginalised groups (women, PWDs, minorities, transgender, poor etc.)?	NO		its for both male & female students. the laptops will be distributed on merit
1a	Have marginalised groups (Women, PWDs, Minorities, Transgender Persons, Poor etc.) been included in project objectives / justification and / or as beneficiaries of the project?	NO		its for both male & female students. the laptops will be distributed on merit
2	Does the PC-1 include specific provisions for capacity building / training of marginalised group (if applicable)?	NO	Minorities	not aplicable. its for both male & female students. the laptops will be distributed on merit
Results Based Monitoring				
1a	Does the PC-I include a Results Based Monitoring Framework (RBMF)/Logical Framework?	YES		
1b	Does the Framework include measurable targets / indicators relating to impact on marginalised groups?	NO		its for both male & female students. the laptops will be distributed on merit

2	Were SDG indicators used for determining targets included in the PC-I?	YES	4- Quality Education	
Inculsion/Participation				
1	Did the Stakeholder consultation(s) held during ADP Formulation and / or PC-I development include experts and representatives of marginalised groups and CSOs?	YES	Others (Please specify)	yes stake holders including punjab information technology board (pitb), dpi(c), phec was conducted during pc-i formulation.
Monitoring & Evaluation				
1	Does the project provide a role to communities in project monitoring and/or implementation (if relevant)?	NO		no. the project provide a role to communities in project monitoring and/or implementation (if relevant)?
2a	Does the project include formation of a Steering Committee and/or Project Implementation Committiees?	YES		
2b	Is there a provision to ensure representation of women in these committees?	NO	Others (Please specify)	there is no such provision to to ensure representation of women in these committees?

Annexure01- Annex A
Annexure – A: Cost Estimates Summary

Summary of Cost Estimates *(In million)*

Sr. No.	Component/ Head	Approved Cost	Revised Cost
A.	Hardware	9,800.00	26,383.84
B.	Software	135.00	0
C.	Operations	27.1	908.7
D.	Contingency	4.60	200
Total Cost		**9,966.70**	**27,492.54**

Component Wise Detailed Cost Estimates *(in million)*

				A. Hardware					
				Original Cost (in millions)			**1st Revision (in millions)**		
Sr. No	**Object Code**	**Item**	**Description**	**Qty.**	**Cost (Per Unit)**	**Total Cost**	**Qty.**	**Cost (Per Unit)**	**Total Cost**
1	A09201	Laptops	Core i7	*39200	0.250	9800	112,000	0.23557	26,383.84

* Original scheme of Laptops consists of 39,200 laptops for talented students in Punjab. The Higher Education Department mentioned 40,000 laptops in the bid document anticipating savings under various heads. After comparative bidding as the per unit cost stood reduce from Rs. 0.250 million provided in the approved PC-I to Rs. 0.235 million, therefore, this department after the approval of the cabinet placed the supplementary repeat order for the purchase of 2,000 laptops.

Subtotal (A) Hardware					**9,800.00**			**26,383.84**

				B. Software					
				Original Cost (in millions)			**1st Revision (in millions)**		
Sr. No	**Object Code**	**Item**	**Description**	**Qty.**	**Cost (Per Unit)**	**Total Cost**	**Qty.**	**Cost (Per Unit)**	**Total Cost**
2	A09202	Software	Miscrosoft Support and Subscrition for software	1	135.000	135	0	0.000	0.00
Subtotal (A) Hardware					**135.00**			**0.00**

				C. Operations					
3	A03204	Electronic Communication	Electronic Communication	12	0.300	3.600	12.000	0.600	7.200
4	A03902	Printing & Publication	Printing & Publication	1	3.500	3.500	0.000	0.000	0.000
5	A03907	Advertisement & Publicity	Advertisement in Print & Electronic Media for Public Awareness, Project achievements and Promotional activities	1	8.000	8.000	1.000	300.000	300.000
6	A03407	Rates & taxes		1	1.000	1.000	0.000	0.000	0.000

7	A03901	Stationary		0	0.000	0.000	1.000	1.500	1.500
8	A03903	Conference/ Seminar/ Workshop/ Synopsis	Distribution Events at Universities/Divisional/ District etc. levels,	1	11.000	11.000	1.000	400.000	00.000
9	A03806	Transportation of Goods	Warehousing, insurance and transportation to nine divisions across Punjab	0	0.000	0.000	1.000	200.000	200.000
Subtotal (C) Operations						**27.100**			**1108.700**
D.	**Contingency**								
10	A05270	Contingency	-	1	4.6	4.600	1.000	200.000	200.000
Subtotal (D) Contingency						**4.600**			**200.000**
Grand Total				**-**	**-**	**9,966.700**		**-**	**27,492.540**

Note: Procurement and payments of 112,000 laptops will be completed in CFY 2024-25 and operational expenditures will be carried through next financial year.

Annexure - B: Laptop

SR #	Item	Description (**Minimum Specifications**)
Laptop Core i7	
1	**Processor**	13th generation Intel Core i7 or higher
2	**Chipset**	Integrated with TPM 2.0
3	**System Memory**	08 GB DDR4 or higher
4	**Hard Disk Drive**	512GB NVMe SSD or higher
5	**Keyboard/Touchpad**	Standard backlit keyboard and Precision Touchpad
6	**Display**	14" with FHD Display
7	**WIFI and Bluetooth**	2x2 Wireless (802.11 b/g/n/ac or WiFi6) with Bluetooth 5.0 or higher
8	**Carrying Case**	Original Backpack of same brand with branding (**CM Punjab Laptop Program**)
10	**Audio:**	built-in speakers and built-in Microphone
11	**I/O Ports**	Audio/ Microphone Jack, 2 x USB 3.0/3.1/3.2 or more, 1 x USB Type C or more, 1 x HDMI port, 1 x RJ45
12	**Battery and Adaptor**	minimum 3 cell battery with AC power adaptor
13	**Camera**	Built-in HD 720P or higher Camera
15	**Body Material**	Aluminum (Top and Bottom)
16	**OS**	OEM Pre-Installed Windows 11 (Home) or Latest Version of Windows

Note:

- All laptops should be delivered with printed branding of CM Punjab Laptop Program to be provided to the successful bidder by the client. (In Bios and on Lid)
- Bidder will be responsible for delivering the laptops across Punjab, which includes warehousing, insurance and transportation of these laptops

Annexure – C: Preliminary Worldwide PC Vendor Unit Shipment Estimates for 2Q24 (Thousands of Units)

Table 1. Preliminary Worldwide PC Vendor Unit Shipment Estimates for 2Q24 (Thousands of Units)

Company	2Q24 Shipments	2Q24 Market Share (%)	2Q23 Shipments	2Q23 Market Share (%)	2Q24-2Q23 Growth (%)
Lenovo	14,822	24.4	14,327	24.1	3.5
HP Inc.	13,691	22.6	13,461	22.6	1.7
Dell	10,140	16.7	10,394	17.5	-2.4
Apple	5,455	9.0	4,823	8.1	13.1
Acer	4,434	7.3	3,989	6.7	11.2
ASUS	4,329	7.1	3,874	6.5	11.7
Others	7,822	12.9	8,689	14.6	-10.0
Total	**60,694**	**100.0**	**59,559**	**100.0**	**1.9**

Notes: Data includes desktop and laptop PCs that are equipped with Windows, macOS and Chrome OS. All data is estimated based on a preliminary study. Final estimates will be subject to change. The statistics are based on shipments selling into channels. Numbers may not add up to totals shown due to rounding.

Source: Gartner (July 2024)

**CABINET BUSINESS/TOP PRIORITY/
THROUGH SPECIAL MESSENGER**

$SHE

No.SO(CAB-II)1-24/2025
**GOVERNMENT OF THE PUNJAB
SERVICES & GENERAL ADMINISTRATION DEPARTMENT**
(CABINET WING)
Dated Lahore, the 21ˢᵗ February, 2025

To,

1. The Secretary, Govt. of the Punjab, IC&I Department
2. The Secretary, Govt. of the Punjab, Home Department
3. The Secretary, Govt. of the Punjab, Info. & Cul. Department
4. The Secretary (I&C), Govt. of the Punjab, S&GAD
5. The Secretary, Govt. of the Punjab, School Education Department
6. The Secretary, Govt. of the Punjab, LG&CD Department
7. The Secretary, Govt. of the Punjab, Transport & Masstransit Department
8. The Secretary, Govt. of the Punjab, Cooperatives Department
9. The Secretary, Govt. of the Punjab, Energy Department
10. The Secretary, Govt. of the Punjab, Law & PA Department
11. The Secretary, Govt. of the Punjab, P&SHC Department
12. The Secretary, Govt. of the Punjab, Zakat & Ushr Department
13. The Secretary, Govt. of the Punjab, SHC&ME Department
14. The Secretary, Govt. of the Punjab, Mines & Minerals Department
15. The Chairman, Planning & Development Board
16. The Secretary, Govt. of the Punjab, HUD&PHE Department
17. The Senior Member, Board of Revenue, Punjab
18. The Secretary, Govt. of the Punjab, Agriculture Department
19. The Secretary, Govt. of the Punjab, Irrigation Department
20. The Secretary, Govt. of the Punjab, Management & PD Department
21. The Secretary, Govt. of the Punjab, L&DD Department
22. The Secretary, Govt. of the Punjab, PC&CM Department
23. The Secretary, Govt. of the Punjab, Literacy & NFBE Department
24. The Secretary, Govt. of the Punjab, C&W Department
25. The Secretary, Govt. of the Punjab, Higher Education Department
26. The Secretary, Govt. of the Punjab, Auqaf & RA Department
27. The Secretary, Govt. of the Punjab, Emergency Service Department
28. The Secretary, Govt. of the Punjab, Special Education Department
29. The Secretary, Govt. of the Punjab, FW&F Department

Subject: **MINUTES/DECISIONS OF THE 23ʳᵈ MEETING OF THE PROVINCIAL CABINET HELD ON 11.02.2025 IN THE COMMITTEE ROOM OF 8-CLUB, GOR-I, LAHORE**

I am directed to refer to the subject cited above and to enclose a copy of the minutes / decisions of **23ʳᵈ Meeting of the Provincial Cabinet held on 11ᵗʰ February, 2025 at 03:25 P.M. in the Committee Room of 8-Club,**

Sr.#	Agenda	Department
Segment – VI		
19.	Reconstitution of Board of Directors of Punjab Transport Company (PTC)	Transport & Masstransit
20.	Relaxation of Ban for Recruitment in Punjab Masstransit Authority (PMA)	
21.	Appointment of Chairperson, Board of Governors, Child Protection and Welfare Bureau (CP&WB), Punjab	Home
22.	Relaxation of Ban against Recruitment of various Posts in Child Protection & Welfare Bureau (CP&WB), Punjab	
23.	Re-Constitution of Punjab Zakat and Ushr Council	Zakat & Ushr
24.	Appointment of Administrator, Punjab Human Organs Transplantation Authority (PHOTA)	SHC&ME
25.	Continuation of Staff working on contract basis to strengthen the Information and Communication Technology (ICT Cell) established under Performance Management System of Specialized Healthcare and Medical Education Department	
26.	Appointment of Teaching Staff on Contract Basis in the Specialties of Basic Sciences and Clinical Sciences for a period of 03 Years / upto the Age of 65 Years by the Special Selection Committee	
27.	Filling of Vacant Post of Information Commissioner in Punjab Information Commission	Information & Culture
28.	Completion of 04 Daanish Schools at Taunsa (D.G.Khan) and Mankera (Bhakkar) – Requirement of Staff for making these School Operational	School Education
29.	Constitution of New Board of Directors of Punjab Mineral Company (Pvt) Limited (5-7/17-PMC(P)	Mines & Minerals
Segment – VII		
30.	Transfer of PSDP Projects	P&D
31.	Request to seek permission for grant financing from Korean International Cooperation Agency (KOICA) for "Establishment of Flood Disaster Prevention Master Plan & Construction of Storm Water Storage System in Multan City for Climate Change Adaptation in Punjab Province, Pakistan"	HUD&PHE
32.	Transfer to Assets of Punjab Saaf Pani Company (PSPC) to Punjab Saaf Pani Authority (PSPA)	
33.	Permission to Seek Grant from JICA for WASA Faisalabad for Provision of Smart Water Meters	
34.	Dissolution of Task Force and Constitution of Ministerial Committee for review of Boundaries of Divisions, Districts and Tehsils in the Punjab	BOR
35.	Revision of Hiring Rates and Rehabilitation / Rebuilding of Old Komatsu D50A-17 Bulldozers at Heavy Industry Taxila	Agriculture
36.	Wheat Production Incentives for Farmers in 2024-25	
37.	Free Traveling Facilities on Masstransit Systems for Disabled Persons, Senior Citizen and Students	Transport & Masstransit

Sr.#	Agenda	Department
56.	Mid-Year ADP Review and Implementation Status of Annual Development Programme 2024-25	
57.	Inclusion of Development Schemes of Public Buildings Sector pertaining to District Mandi Bahauddin in ADP 2024-25	BOR
58.	Enhancement in total cost of three (03) new Development Schemes of ADP 2024-25 of Literacy & NFBE Department	Literacy & NFBE
59.	Construction of Smart Police Stations at different Districts — one at Smart PS Sadar Bhalwal, District Sargodha	Home
60.	Request for capping of Scheme titled, "Water Supply Scheme Village Dhela from Malkot" Murree	
61.	Request for Provision of Grant in Aid for Up gradation / Construction of Nullahs and Laying of New Water Supply Pipe Line in Pasrur City	LG&CD
62.	Rehabilitation/ Reconstruction/ Widening of Road from N-5 (Ghousia Chowk) to Lodhran – Jalalpur Road (Jindu Morr) via DC Office & Pathanwala including Construction of Flyover at Pathanwala Railway Crossing, Length=3.00km, District Lodhran	
63.	Rehabilitation/ Re-Construction/ Improvement of Road from Pasrur to Kingra Village via Burhanpur, Chahiyewali, Balaggan, Hargan, Shahzada, Seowal, Jhatoky, Mandi Throo, Khanpur Syedan & Sabaz Kot, Length=29.70km, District Sialkot	C&W
64.	Inclusion of 1-No. Development Scheme of District Bahawalpur in ADP (2024-25)	
65.	Construction of Additional Carriageway (Jhang – TT Singh – Chichawatni – Burewala Road, M-3 to M-4), District Toba Tek Singh	
66.	Request for Change of Nomenclature of New ADP Schemes 2024-25	PC&CM
67.	Procurement of Laptops under the Development Scheme titled "CM Punjab Laptop Program"; Appearing at GS No-103 of ADP 2024-2025	Higher Education
68.	Request for Inclusion of scheme titled as "Conservation / Restoration of Shrine Hazrat Daud Bandagi (RA), Sher Garh, District Okara (Phase-II)" in ADP 2024-25 of Auqaf & Religious Affairs Department at the Estimated Cost PKR 28.00 Million	Auqaf & R.A
69.	Replacement of 353 Emergency Ambulances exceeding 300,000 KMs Mileage	Emergency Services
70.	Establishment of a Health Facility at Bhurbhan Rest House, Murree	P&SHC
Segment – IX		
71.	Flood Plains Survey for Mapping of Settlements/ Encroachments within Flood Plain of Punjab -- Up-Scaling of Multi Hazard Vulnerability Risk Assessment	BOR

Sr.#	Agenda	Department
89. Ex-Agenda	Inclusion of Scheme titled Community Empowerment and Strengthening of Healthcare Access through Maryam Nawaz Health Clinic" as a Supplementary Scheme in ADP 2024 25	P&SHC
90. Ex-Agenda	Request for Grant in Aid / Soft Loan to Execute Missing Links in Structural Plan Roads of Lahore City	HUD&PHE
91. Ex-Agenda	The Punjab Water & Sanitation Authority Act, 2024	
92. Ex-Agenda	Request for Financial Assistance for the Medical Treatment of Mr. Muhammad Saleem S/o Muhammad Anwar R/o Billage Phalkote District Abbottabad	SHC&ME
93. Additional Discussion	Compensation to the Affectees of LPG Explosion incident occurred on 26-01-2025 midnight at Hamidpur Kanora, Muzaffargarii Road, Multan	BOR

2.   The acknowledgment certificate is enclosed for signature and same may please be returned to Cabinet Wing, S&GAD.

21-02-25

(IMRAN ALI HARAL)
SECTION OFFICER (CABINET-II)

PC:

1. The Principal Secretary to Chief Minister, Punjab
2. The Secretary (I&C), S&GAD
3. The Additional Secretary (Gen.)/Staff Officer to Chief Secretary, Punjab
4. The Deputy Secretary (Cabinet), S&GAD

AGENDA ITEM NO.67	**PROCUREMENT OF LAPTOPS UNDER THE DEVELOPMENT SCHEME TITLED "CM PUNJAB LAPTOP PROGRAM"; APPEARING AT GS NO-103 OF ADP 2024-2025.**

67.1　　The Secretary Higher Education Department briefed the Cabinet that pursuant to the approval of the Chief Minister, the case for approval of proposals were placed before the Provincial Cabinet in its meeting held on 22-10-2024 and the Cabinet approved the following proposals:

　　a.　Permission may be accorded in favor of HED/Procuring Agency to enter into negotiated tendering process with Public Sector entity(s) i.e. M/s National Radio & Telecommunication Corporation (NRTC) and M/s Frontier Works Organization (FWO) for procurement of laptops under the captioned scheme in accordance with the approved specifications given in the PC-I, in terms of provisions of Rule 59(d)(iv) of PPRA Rules, 2014 in the wake of the following reasons:

　　　　i.　Urgency involved in the procurement and distribution of the laptops on emergent basis, within 3 months of award of contract/singing of the agreement, in view of commencement of the academic session.

　　　　ii.　Reduced gestation period of 01 year i.e. FY 2024-25 during which procurement process including a cumbersome requirement of Letter of Credit (LC), import/shipment, delivery and storage as well as distribution to eligible students has to be completed before end of the fiscal year, which may not be possible without the proposed negotiated tendering process.

　　b.　Permission may also be accorded to seek competitive bids from both the Public Sector Organizations i.e. NRTS & FWO, to ensure a competitive price of the laptop and signing the purchase agreement with the lowest bidder after vetting of draft agreement by the Law Department

67.2　　The Cabinet was further apprised that the Administrative Department has carried out negotiated competitive tendering amongst M/s National Radio & Telecommunication Corporation (NRTC) and M/s Frontier Works Organization (FWO) and after due process the contract for procurement of 40,000 laptops was awarded to NRTC at the unit price of Rs. 235,570 and 1st shipment of 5,000 laptops has been received as well. Additionally, a supplementary order of 2,000 more laptops is being proposed to be placed to NRTC while utilizing the existing savings available in the current approved scheme.
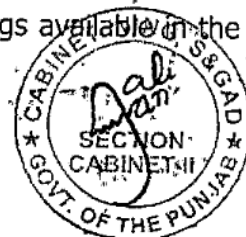
67.3   However, during recent Honhaar Scholarships distribution events across Punjab, which were chaired by the Chief Minister Punjab, a large number of students urged the Government to enhance the volume of laptops so as to ensure availability of the same to maximum number of students for their academic as well as research needs and skill training etc. In this context a meeting was held on 06-02-2025 under the convenership of the Chief Minister Punjab wherein it was decided that the number of laptops being procured under current ADP scheme "CM Punjab Laptop Program" appearing at G.S no 103 shall be increased from 42,000 to 112,000, with a view to provide laptops to all already enrolled BS (1st-year) / Medical (1st professional - academic session 2024) students who have secured at least 65% / 80% marks respectively in their intermediate examinations. It was further decided that the existing scheme will be revised upwards and will be submitted for approval of the ECNEC through PDWP, as the cost of the existing scheme will be increased from Rs. 9,966.7 million to approximately Rs. 27,000 million during CFY.

67.4   Foregoing in view, it was proposed that:

i.   Permission may be granted to revise the cost of the existing approved scheme for procurement of laptops appearing at G.S. No 103 of ADP 2024-25 from Rs. 9,966.7 million to approximately Rs. 27,000 million for the procurement of an additional 70,000 laptops and place the revised scheme for approval of the relevant competent forum i.e. ECNEC through PDWP.

ii.   Provision of supplementary grant to the tune of Rs. 17,033.3 million for procurement of additional 70,000 laptops during CFY subject to approval of revised PC-I through ECNEC.

iii.   Approval for placement of a supplementary order of 2,000 laptops from the savings of the existing approved laptop scheme in favor of NRTC being covered under 59(c) (iv) of Punjab Procurement Rules, 2014.

iv.   Allow Higher Education Department/Procuring Agency to enter into negotiated tendering process with Public Sector entity(s) i.e. M/s National Radio & Telecommunication Corporation (NRTC) and M/s Frontier Works Organization (FWO) for procurement of another 70,000 laptops under the captioned revised scheme after approval from ECNEC, in accordance with already approved specifications given in the approved PC-I, in terms of provisions of Rule 59(d)(iv) of Punjab Procurement Rules, 2014. However, this process will be carried out subject to the prior approval of the revised PC-I of the scheme by ECNEC.

v. Authorize the existing Steering Committee to define detailed modalities of distribution of additionally procured 70,000 laptops besides its earlier assigned ToRs.

67.5 Accordingly, the Cabinet was requested to consider and approve the following:

i. Permission may be granted to revise the cost of the existing approved scheme for procurement of laptops appearing at G.S. No 103 of ADP 2024-25 from Rs. 9,966.7 million to approximately Rs. 27,000 million for the procurement of an additional 70,000 laptops and place the revised scheme for approval of the relevant competent forum i.e. ECNEC through PDWP.
ii. Provision of supplementary grant to the tune of Rs. 17,033.3 million for procurement of additional 70,000 laptops during CFY subject to approval of revised PC-I through ECNEC, through inter/intra-sectoral re-appropriation by the P&D Board.
iii. Approval for placement of a supplementary order of 2,000 laptops from the savings of the existing approved laptop scheme in favor of NRTC being covered under 59(c)(iv) of Punjab Procurement Rules, 2014.
iv. Allow HED/ Procuring Agency to enter into negotiated tendering process with Public Sector entity(s) i.e. M/s National Radio & Telecommunication Corporation (NRTC) and M/s Frontier Works Organization (FWO) for procurement of another 70,000 laptops under the captioned revised scheme after approval from ECNEC, in accordance with already approved specifications given in the approved PC-I, in terms of provisions of Rule 59(d)(iv) of Punjab Procurement Rules, 2014. However, this process will be carried out subject to the prior approval of the revised PC-I of the scheme by ECNEC.
v. Authorize the existing Steering Committee (already approved on a separate summary) to define detailed modalities of distribution of additionally procured 70,000 laptops besides its earlier assigned ToRs.

DECISION No. 67:

The Cabinet considered and approved the proposal as mentioned in para 67.5 above.

(TO BE RETURNED TO THE CABINET WING, S&GAD, AFTER SIGNATURE)

ACKNOWLEDGEMENT
CERTIFICATE

Certified that Cabinet decision (s) on agenda items No.(s) _67, 77, 78,_

as discussed in **23rd Meeting of the Provincial Cabinet,** held on **11.02.2025**

has / have been received by me for information and necessary action as required

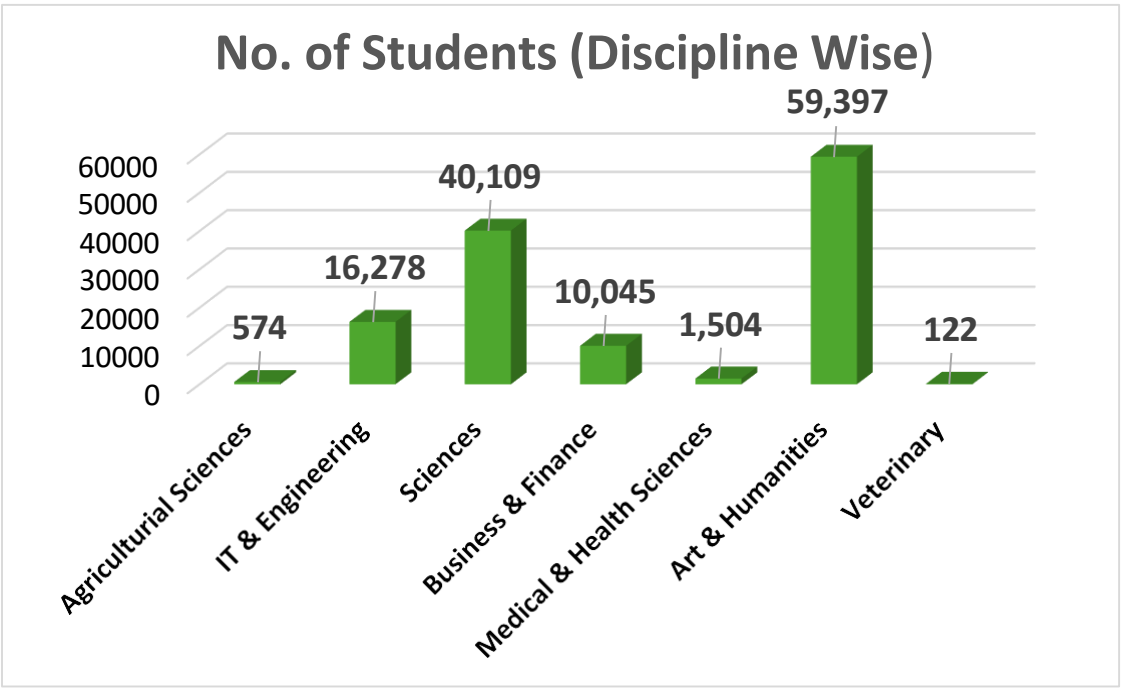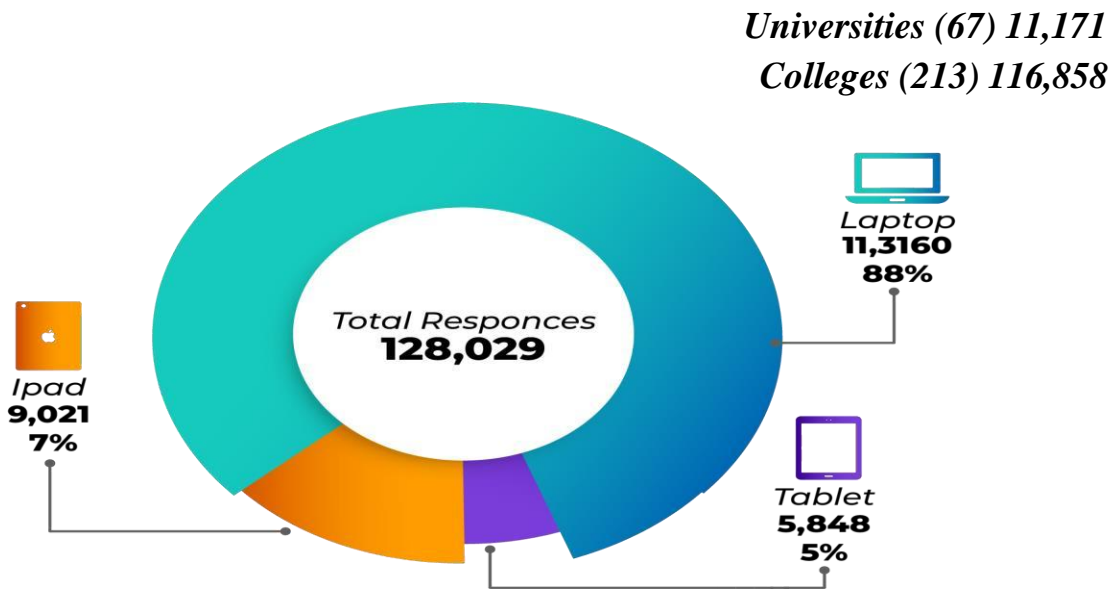under Rules 28(15) & 30 of the Punjab Government Rules of Business, 2011.
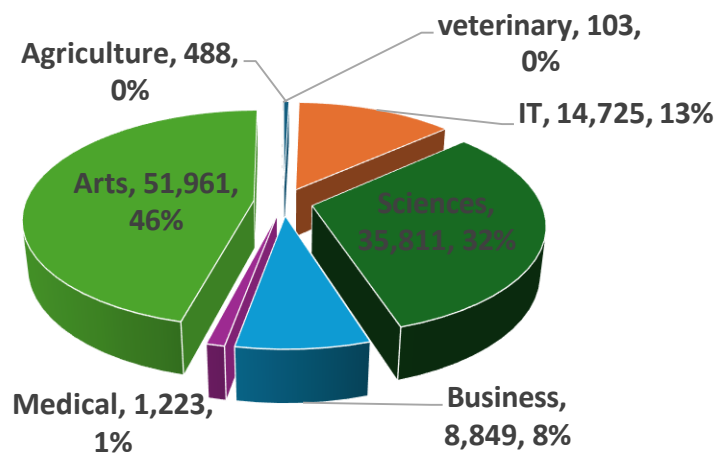
(NAME & SIGNATURE OF THE SECRETARY CONCERNED)

Dated:_____

To,

The Section Officer (Cabinet-II),
Cabinet Wing, S&GAD.
Government of the Punjab.

Annexure - D: Results of Online Google Form Survey conducted from students of public sector Universities & Colleges

Universities (67) 11,171
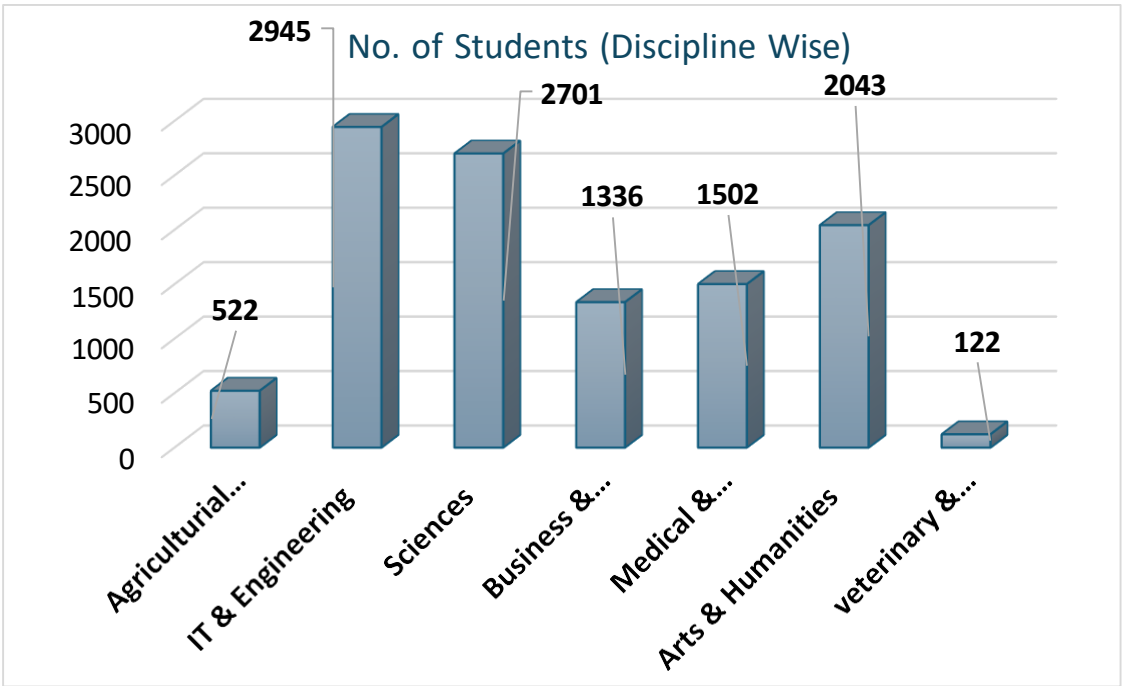*Colleges (213) 116,858*

Total Responces
128,029

Laptop
11,3160
88%

Tablet
5,848
5%

Ipad
9,021
7%

No. of Students (Discipline Wise)

Discipline	No. of Students
Agriculturial Sciences	574
IT & Engineering	16,278
Sciences	40,109
Business & Finance	10,045
Medical & Health Sciences	1,504
Art & Humanities	59,397
Veterinary	122

DEVICE-WISE RESPONSES

Laptop

- veterinary, 103, 0%
- Agriculture, 488, 0%
- IT, 14,725, 13%
- Sciences, 35,811, 32%
- Arts, 51,961, 46%
- Medical, 1,223, 1%
- Business, 8,849, 8%

iPAD

- veterinary, 16, 0%
- Agriculture, 67, 1%
- IT, 1,023, 11%
- Arts, 4,228, 47%
- Sciences, 2,693, 30%
- Medical, 223, 2%
- Business, 771, 9%

Tab

- Agriculture, 19, 0%
- veterinary, 3, 0%
- IT, 530, 9%
- Sciences, 1,605, 28%
- Arts, 3,208, 55%
- Business, 425, 7%
- Medical, 58, 1%
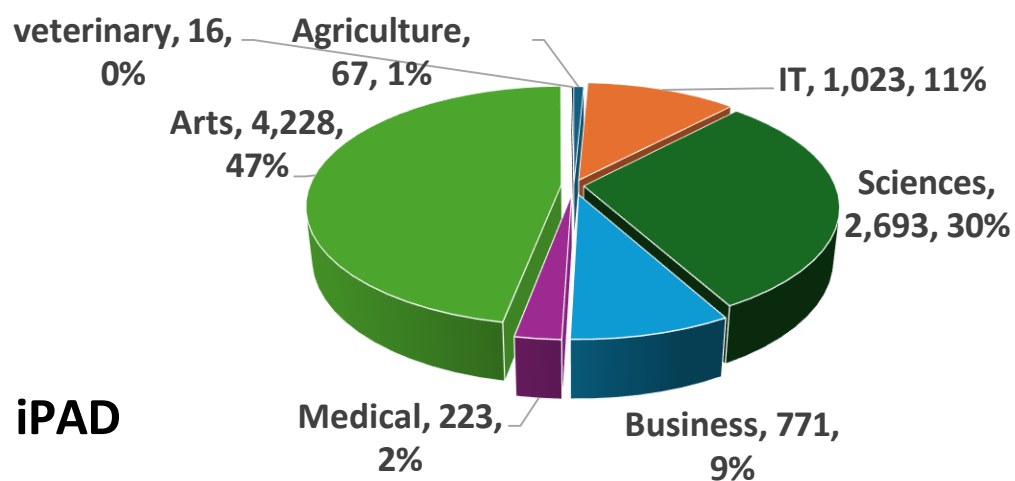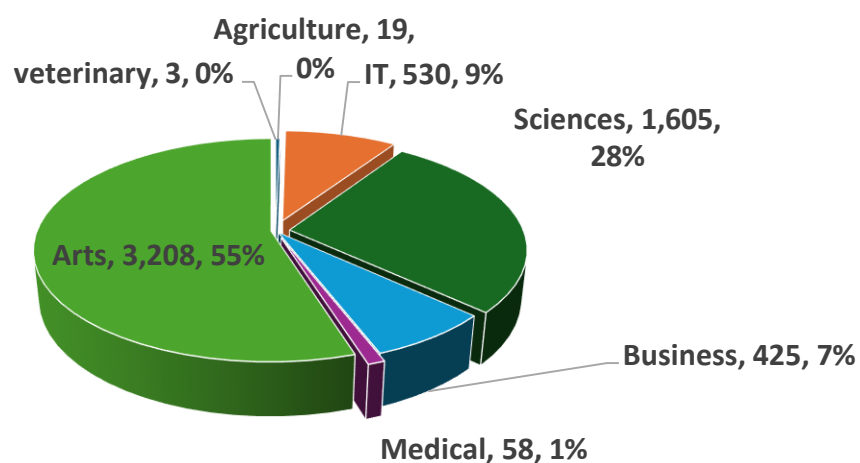
UNIVERSITY STUDENTS' SURVEY RESULTS

1368
12%

433
4%

9370
84%

■ Laptop ■ iPAD ■ Tablet

No. of Students (Discipline Wise)

2945
2701
2043
1336
1502
522
122

3000
2500
2000
1500
1000
500
0

Agriculturial... IT & Engineering Sciences Business &... Medical &... Arts & Humanities veterinary &...
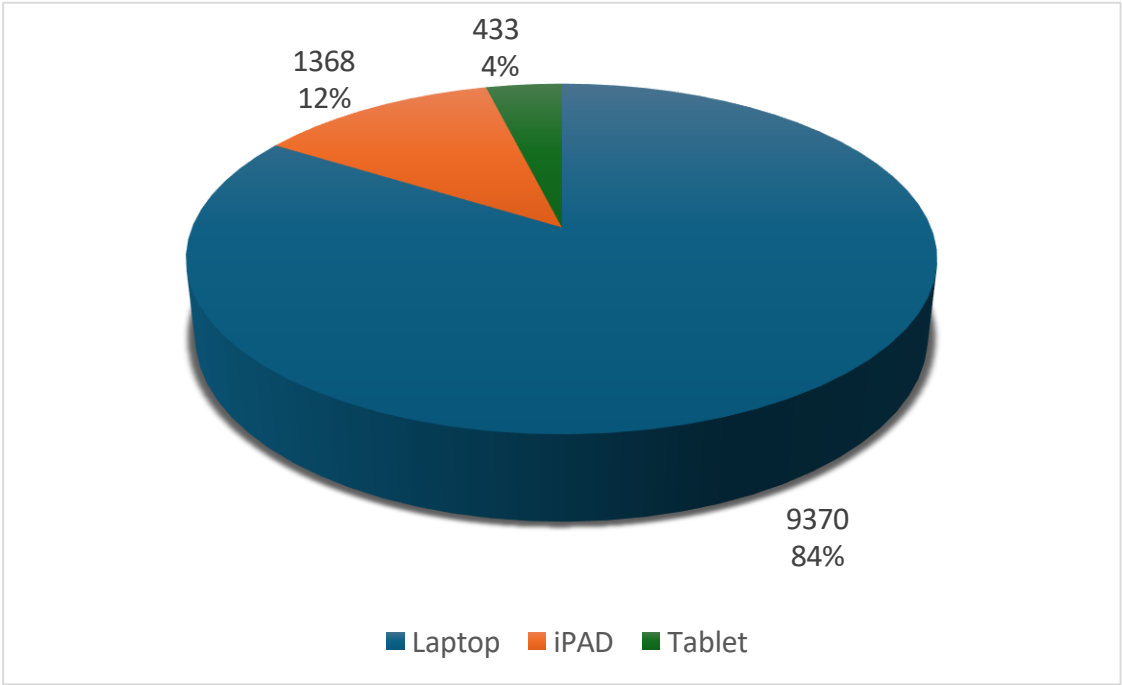
COLLEGE STUDENTS' SURVEY RESULTS

7653
6%

5415
5%

103790 89%

■ Laptop   ■ iPAD   ■ Tablet

No. of Students (Discipline Wise)

57354

37408

13333

8709

52

2

60000
50000
40000
30000
20000
10000
0

Agriculture   IT & Engineering   Sciences   Business & Finance   Medical & Health...   Arts & Humanities
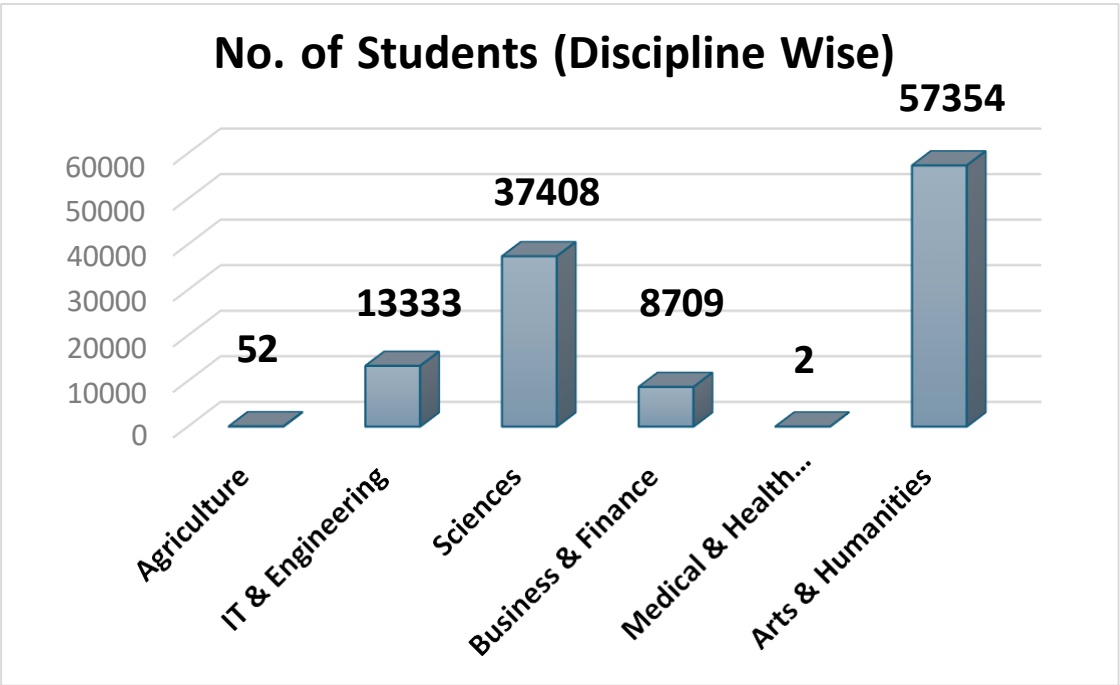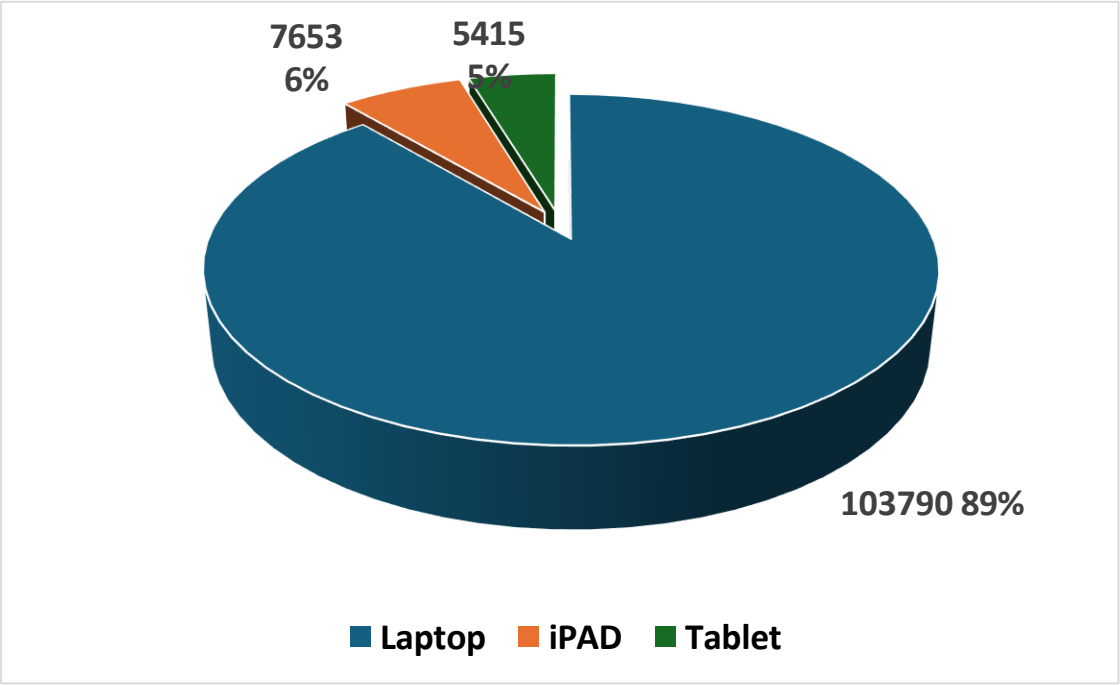
SUBJECT WISE SURVEY RESULTS

Agricultural Sciences

Device	Value
Laptop 14"	201
Laptop 15"	287
iPAD 10.9 Inch	17
iPAD 12.9 Inch	50
Tab 11 Inch	6
T a b 12.4 Inch	2
Tab 14.6 Inch	11

IT & Engineering

Device	Value
Laptop 14"	5,215
Laptop 15"	9,510
iPAD 10.9 Inch	217
iPAD 12.9 Inch	806
T a b 11 Inch	205
Tab 12.4 Inch	133
Tab 14.6 Inch	192

Sciences

Device	Value
Laptop 14"	10,518
Laptop 15"	25,293
iPAD 10.9 Inch	576
iPAD 12.9 Inch	2,117
T a b 11 Inch	569
Tab 12.4 Inch	438
Tab 14.6 Inch	598

Business & Finance

Device	Value
Laptop 14"	2,879
Laptop 15"	5,970
iPAD 10.9 Inch	206
iPAD 12.9 Inch	565
T a b 11 Inch	139
Tab 12.4 Inch	137
Tab 14.6 Inch	149

Arts & Humanities

Category	Value
Laptop 14"	15,651
Laptop 15"	36,310
iPAD 10.9 Inch	1,060
iPAD 12.9 Inch	3,168
Tab 11 Inch	1,248
Tab 12.4 Inch	874
Tab 14.6 Inch	1,086

Medical & Health Sciences

Category	Value
Laptop 14"	404
Laptop 15"	819
iPAD 10.9 Inch	28
iPAD 12.9 Inch	195
Tab 11 Inch	19
Tab 12.4 Inch	18
Tab 14.6 Inch	21

Annexure05 - Annex E

Veterinary & Animal

Category	Value
Laptop 14"	39
Laptop 15"	64
iPAD 10.9 Inch	2
iPAD 12.9 Inch	14
Tab 11 Inch	0
Tab 12.4 Inch	2
Tab 14.6 Inch	1

GOVERNMENT OF THE PUNJAB
HIGHER EDUCATION DEPARTMENT

NOTIFICATION

NO.SO(DEV-F)11-05/2024. The Competent Authority is pleased to constitute the following Steering Committee to oversee & execute the **CM Punjab Laptop Program**. The composition of the 'Steering Committee' is as follows:

i.	Minister, Higher Education Department	**(Convener/ Chairperson)**
ii.	Chairman, P&D Board	(Member)
iii.	Secretary, Higher Education Department	(Member)
iv.	Secretary, Finance Department	(Member)
v.	Secretaries (Health, Industries, Agriculture, L&DD)	(Member)
vi.	Special Secretary, Higher Education Department	(Member)
vii.	Chairman, Punjab Information Technology Board	(Member)
viii.	Chairman, Punjab Higher Education Commission (PHEC)	(Member)
ix.	Additional Secretary (P&B), Higher Education Department	(Member)
x.	Director Public Instruction (Colleges), Punjab	**(Member / Secretary)**
xi.	Any other Officer /technical expert deemed relevant by the Committee	(Co-opted Member)

2.   The Terms of Reference (ToRs) of Steering Committee are as under:

   i.   Approve mechanism for implementation of the project and take necessary decisions related to projects design and scope.

   ii. Approve the comprehensive criteria for the provision of laptops to the students including modalities for distribution to the students of different categories.

   iii. Approve the final list of students of different categories for distribution of laptops.

   iv. All the changes in the design/execution of the scheme involving any deviation from the provisions of the approved PC-I may accordingly be placed before the relevant competent from through revised PC-I before completion of the scheme.

v.   Any proposal(s) for revision of the PC-I may be cleared by the PSC prior to placing the revision before the relevant competent forum.

vi.   Ensure effective inter-Departmental coordination among all the implanting partners.

vii.   The PSC shall ensure effective oversight by conducting periodic reviews.

BY THE ORDER OF THE CHIEF MINSTER

Dated Lahore the
6ᵗʰ February, 2025

SECRETARY
HIGHER EDUCATION DEPARTMENT

NO & DATE EVEN

A copy is forwarded for information and necessary action to:

i.   The Chairman, P&D Board, Punjab, Lahore.
ii.   The Secretary, Government of the Punjab, Finance Department, Lahore.
iii.   The Secretary, Government of the Punjab, Health, Industries, Agriculture, L&DD).
iv.   The Secretary, Government of the Punjab, Industries Commerce Investment &Skill Development(ICI&SD) Department Lahore.
v.   The Secretary, Government of the Punjab, Agriculture Department Lahore.
vi.   The Secretary, Government of the Punjab, Livestock & Dairy Development Department (L&DD) Lahore
vii.   The Chairperson, Punjab Higher Education Commission (PHEC), Lahore.
viii.   The Chairman, Punjab Information Technology Board (PITB), Lahore.
ix.   PS to Senior Minister for Planning & Development Board, Punjab Lahore.
x.   PS's to Secretary, Higher Education Department, Lahore.
xi.   PS to Special Secretary, Higher Education Department, Lahore.
xii.   PA to Additional Secretary (P&B), Higher Education Department, Lahore.
xiii.   PA's to Deputy Secretary (P&D), Higher Education Department, Lahore.

(RAI MUHAMMAD ATIF)
SECTION OFFICER (DEV-F)

Impact Assessment of Project: Provision of Laptops to the Students of Public Sector Universities of Punjab (Pakistan)

Sajjad Mubin*
Ekaterina Gavrishyk**
Ghazanfar Mubeen***

Abstract

Government of the Punjab (GOP) initiated a development project through which two hundred thousand (200,000) laptops were provided to meritorious students in two phases of the project along with free of cost on campus access to internet facility to cope with the challenges of the digitization brought about by the spread of Information and Communication Technology. The rationale behind the project was enhance the IT skills of students and to help students overcome the obstacles in the way of learning and professional growth in the modern times. It was envisaged that the laptops will improve the IT skills along with improvement in grades and outcomes of students'. At completion, the project was evaluated for assessment of outcomes and impact of the project on the beneficiaries. Moreover, the qualitative aspect of scheme was also analyzed, in terms of quality of laptops, warranty support, quality of internet connectivity, laptop distribution on merit and etc. Questionnaire was developed covering all the aspects of the project. Data was collected online from 3600 sampled students through Google form on a broad based methodology. Based on the data analysis, positive outcomes were observed almost in almost all quantitative and qualitative indicators defined for this evaluation. Detailed conclusions and recommendations are given in the last section of the paper.

Keywords: Punjab, development project, IT sector, laptops, Impact Evaluation.

Introduction

In this modern age, Information Technology (IT) plays a vital role (Quinonez, 2014).

_____

*Professor & Chairman, AED, University of Engineering and Technology, Lahore, Pakistan (Former Director General-Monitoring and Evaluation, Govt. of Punjab), Email: sajjadmubin@uet.edu.pk
**Assistant Professor, University of the Punjab, Lahore Email: ekaterina.iol@pu.edu.pk
***Senior Specialist (Research and Development), Directorate General M&E, P&D Department, Govt. of Punjab, Email: ghazanfarmubin@gmail.com

1

The overwhelming revolution of IT and its impact on the society has been experienced all over the world. Its role in the development and progress of any country cannot be overlooked. If rightly used, IT can be a powerful tool to propel change (Education and Manpower Bureau, 2004).

Information Technology as a tool, provides tremendous opportunities to overcome its historical disabilities and ensures leapfrog (by compressing time) to attain a position of economic strength and respect in the comity of nations. Its role has been significantly increased in the education sector. The role of Information Technology in Education is discovering the potential for technology to redefine the terms of teaching and learning (The Hitachi Foundation, 2010). The ways of education are changing as the modern world continues to grow in IT age. It is essential that students should have access to modern ways of education. So they are better prepared for the future. The students of today are the scientists, leaders, teachers, and businessmen of tomorrow. Without IT skills, these students will not have the preparation needed to survive in the future.

In most to the European public and private sector universities and colleges the entire campuses are provided wired or wireless infrastructure to provide access to information. Students are connected to the internet, e-learning and information portals through a high-speed Internet gateway. Moreover, these higher education institutions of different countries across the globe are emphasizing on the use of websites, electronic submission of assignments and online quizzes. In 2007 in Massachusetts Institute of Technology, a non-profit organization, One Laptop per Child Association (OLPC) was created with the concept of producing affordable laptops for the use of children less than twelve years in developing countries. It was observed after the OLPC model that students having long term access to the computer performed consistently well in their academic programs.

Context of the Study

In very context, it was planned by the Government of the Punjab to equip two hundred thousand (200,000) meritorious students in phase-I & II of the project entitled "Provision of Laptops" (Planning Commission Proforma-I, 2012-13). Further, it was also planned to provide free of cost on campus access to internet facility, where needed, to prepare them to cope with the challenges of the digitization brought about by the spread of IT. The rationale behind the provision of thousand laptops along with access to World Wide Web was to help students overcome the obstacles in the way of learning and professional growth in the modern times. Moreover, it was also envisaged to create IT skills and awareness among the students and teachers. The government's investment

2

in students, through direct subsidy in the shape of free laptops, is a public investment in human capital and a mean for ensuring better and competitive educational opportunities. It is an initiative to encourage and reward merit based achievers towards a larger goal of national economic development. The both phases of laptop scheme are continuation of many such efforts that has been done in the past around the world to overcome the digital divide.

Upon completion this project assigned to Directorate General Monitoring & Evaluation (DGM&E), Planning & Development Department, for the evaluation. The detailed, in-depth evaluation was conducted by the team of DGM&E.

Objectives of the Study

To measure pre versus post impact of the intervention (provision of laptops), the indicators were derived from the objectives mentioned below:

- Change in grades of students before and after the laptop
- Change in IT skills (operating system) before and after the laptop
- Change in IT skills (MS office) before and after the laptop
- Change in IT skills (Software proficiency) before and after the laptop
- Change in IT skills of families of beneficiaries before and after the laptop
- Change in computer usage time before and after the laptop
- Change in internet usage time before and after the laptop
- Satisfaction Level on the quality of laptop
- Satisfaction level on the specification of the laptop
- Satisfaction Level on the warranty claim
- Satisfaction on fairness of distribution criteria
- Average income level of beneficiaries
- Gender analysis
- Quality and functionality of laptop

Review of Literature

The role of IT in various sectors had been explored by various researchers. A meta-analysis of findings from 254 controlled evaluation studies revealed that computer-based instruction (CBI) created positive effects on students (Kulik & Kulik, 1991). They further explained that CBI programs raised student examination scores by 0.30 standard deviations in the average study, a moderate but significant effect. Sivin-Kachala & Biala (1994) reviewed 133 research studies to evaluate the effect of technology on learning and achievement. They concluded that students in

3

technology rich environments experienced positive effects on achievement in all major subject areas. Moreover, education technology had been found to have positive effects on students' attitudes toward learning and their own self-concept. Hill (1999) also identified that as information technology became advanced, it resulted in increasing opportunities, options and strategies for education. (Hill, 1999). A study conducted by Furneaux (2004) presented evidence that information technology affected changes in the methods, purpose and the perceived potential of education. (Furneaux, 2004)

On the other hand, Yusuf (2005) in his paper presented an analysis of the Nigerian National Policy for Information Technology. The analysis revealed that the policy was not adequate to impact positively on the Nigerian education system. (Yusuf, 2005)

Grinager (2006) investigated that the use of technology in education provided students with technology literacy, information literacy, capacity for life-long learning and other skills necessary for the 21st century workplace. (Grinager, 2006)

A study was conducted by Jumhur, Riza, Reynolds, & Olcay (2007) to find the opinion of undergraduate students on the role of the information technology (IT) in higher education. The analysis of the responses had shown, the students strongly agreed that computer labs, personal computers, internet and IT tools were necessary components of successful education. (Jumhur, Riza, Reynolds, & Olcay, 2007)

Negi, Negi, & Pandey (2011) explored that IT tools had some relative advantages as compared to conventional modes of information sharing. It was investigated that the combination of education and technology was the main key to human progress as it affected the methods, the purpose and perceived potential of education. Safdar, et al. (2012) found that about 91.7% of the respondents signified the information technology as vital for educational development (Safdar, et al., 2012). The research findings by Higgins, Xiao, & Katsipataki (2012) using experimental and quasi-experimental designs indicated that well use of technology to support teaching and learning made the difference. (Higgins, Xiao, & Katsipataki, 2012)

On the Other hand, Toni Mora and Joseph Oriel (2018) analyzed the impact of a "One Laptop per Child Program", introduced by the Catalan Government on student achievement in secondary education during the period 2009–2016. In contrast to the previous studies, the empirical results of this research consistently indicate that this program had a negative impact on student performance in the subjects of Catalan, Spanish, English and mathematics. Test scores fell by 0.20–0.22 standardized points, which represent 3.8–6.2% of the average test score. This negative effect was stronger

4

among boys than it was among girls (differences ranging from 10% to 42%). (Toni Mora, 2018)

Methodology

A well designed methodology was developed for this research followed by development of questionnaire, pre-test the questionnaire to validate questionnaire and for estimating response rate, determination of sample size for the survey, data collection and analysis, finalizing findings, conclusions and recommendations.

Questionnaire Design

The questionnaire was specially designed to cater all relevant information from primary beneficiaries of the project or scheme in the framework of objective indicators. The questionnaire contained questions pertaining to the participant's general information, income level, institution, grades and IT skills before and after the use of laptop. The questionnaire was broadly divided in three parts, i.e. i) Demographics, ii) Students' satisfaction and iii) Improvement in academics/IT skills as mentioned below;

Section - I (Demographics)

Name, institution, field of study, city, gender, age, income of head of family, telephone number which is used as unique ID in data analysis.

Section - II (Participant's Satisfaction over laptop)

Functioning, working, quality, warranty support, software provision, fairness of criteria of laptop distribution among students

Section - III (Change in academic grades and IT skills)

Type of previous computer, preparation of assignments, academic percentage (before and after use), improvement in overall IT skills, skills of operating systems, skills of MS Office, advanced software knowledge, internet and surfing skills, family IT awareness.

Pilot survey was conducted to validate the question and estimate the response rate for the probable survey.

Determination of Sample Size

Mwanzia suggested that calculated sample size should truly represent the population and should consider accuracy, confidence level, response rate, variability and population of survey (Mwanzia, 2014). Sample size for this evaluation was calculated by using the following formula.

5

$$n = \left[\frac{\dfrac{P(1-P)}{\dfrac{A^2}{Z^2} + \dfrac{P(1-P)}{N}}}{R} \right]$$

Where, n is the sample size determined by the aforementioned relationship. 'N' is the number of people in the population. 'P' is the estimated variance for the population of survey, which was slightly high in our case as the population was slightly heterogeneous therefore taken as 70% i.e. 0.7. 'A' is the desired precision level of survey which is expressed as decimal in the formula and in this case it was taken as 5% i.e. 0.05. 'Z' is the required confidence level of the survey and its value is different for different levels. For 95% confidence level value of Z is 1.96 and for 99% confidence level, its value is 2.578. Since, high confidence level was required, so 99% confidence level was used for sample size calculations. 'R' is the response rate of the audience in the population which is given the questionnaire to fill and came out to be 50.5% on the basis of pilot survey. Since, the survey was conducted online, as described in next section therefore, response rate remained low. 'N' is the number of studied population and in our case, as describe above the population of survey was 200,000 since laptops were distributed to around 200,000 students of two phase of the project.

$$n = \left[\frac{\dfrac{0.7\,(1-0.7)}{\dfrac{0.5^2}{2.5758^2} + \dfrac{0.7\,(1-0.7)}{200,000}}}{0.5} \right]$$

$$n = 3600.033 \approx 3600$$

Data Collection

There were 200,000 beneficiaries of the project/scheme which were geographically dispersed. Therefore, an online survey, on Google Docs, was conducted to collect data from representative samples. The online survey link was shared with the Registrars and Vice Chancellors of the public universities and educational institutions in which laptops were distributed through E-mail to get the responses from the students. As described above that a sample size of 3600 students was selected for this evaluation and accordingly responses of 3600 students randomly selected (beneficiaries of the scheme) were recorded and automatically saved in Database developed by evaluating organization i.e. Directorate General Monitoring and Evaluation (DGM&E), Planning and Development Department, Govt. of Punjab (Pakistan). The recorded data was

6

further analyzed statistically for the evaluation of the scheme. Descriptive statistical analysis was made using Statistical Package for Social Sciences (SPSS).

Results & Discussions

By analyzing the data of responses, the following findings were made in terms of each indicator.

Skills of Operating Systems (Windows, Linux, etc.)

It was observed that after the initiation of this scheme IT skills of the students regarding operating windows and LINUX etc. has been improved significantly as depicted in figure 1.
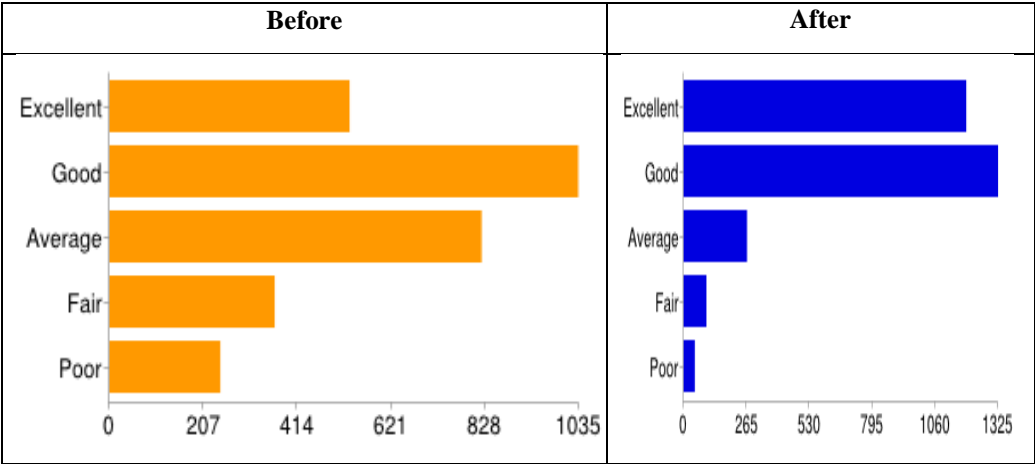
Figure 1: *Improvement in uderstanding of Operating System*

MS Office (Word, Excel, Power Point, Access) Skills

The data shows that the proficiency/expertise of participants in MS office has been improved after the intervention of the laptop scheme. The percentage on excellent and good scale has been increased from 22% to 35% and 37% to 44% respectively Table 1.

Table 1: *Improvement in understanding and know how of MS Office*

	Before			After	
1	Excellent	22%	1	Excellent	35%
2	Good	37%	2	Good	44%
3	Average	24%	3	Average	14%
4	Fair	11%	4	Fair	4%
5	Poor	6%	5	Poor	2%

7

Advanced Software Skills of in Professional Field

Twelve percent (12%) of the student replied that they had already excellent skill on advanced tools / software. But after the initiation of the scheme 35% students had excellent skills on advanced tools / software, which is increased by 23%. On the other had before launching the scheme13% students had poor skills on advanced software but after the free laptop scheme it is observed that this percentage has been decreased up to 4 %,Which shows that student capabilities on advanced tools / software are gradually increasing as shown in Figure 2.

Before	After
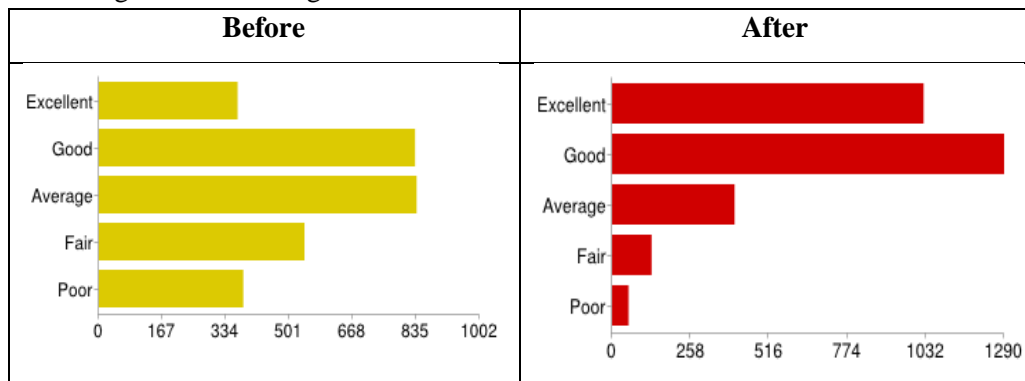
Figure 2*: Improvement in Advanced Software Skills*

Monthly Cumulative Income of Students' (sampled project beneficiaries)

The statistics revealed that a considerable percentage of students who received laptops under this project belonged to lower and middle income class families. Figure 3 shows that 35% of the students belong to families having monthly income less than Rs. 10,000 per month, while 48% belong to families having monthly income between Rs. 10,000 to 40,000 per month as shown in figure 3. Data was collected in 2013-14.

Up to Rs. 10,000 per month	35%
Rs.10,000 - 40,000 per month	48%
Rs. 40,000 – 70,000 per month	12%
Rs.70,000-100,000 per month	3%
Above Rs.100,000 per month	2%
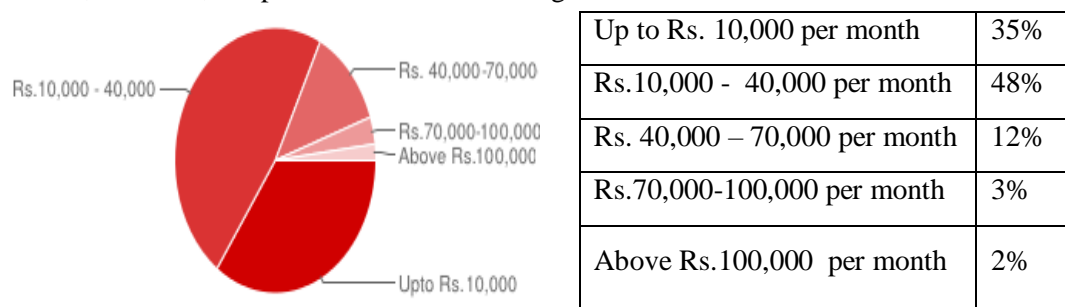
Figure 3: *Representation of students' house hold income*

8

Change in IT Awareness / Skills of Family

After the feedback from respondents it is observed that not only IT skills of students' was improved but IT skills and awareness of student's families was also improved significantly from 13% to 31%. Moreover, percentage of students was remarkably reduced having poor IT skills of family from 14% to 3% as shown in figure 4.

Before	After

Figure 4: *Change in IT skills of students' family after getting laptops*
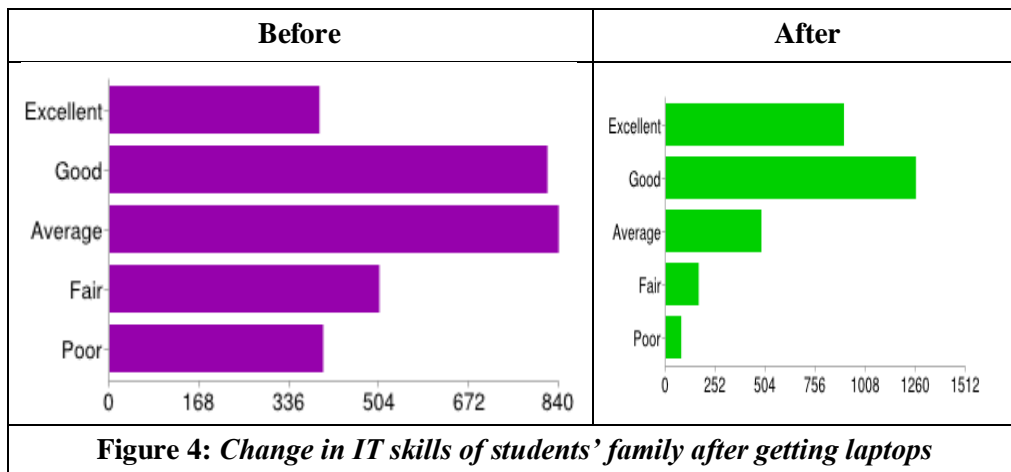
1	Excellent	13%
2	Good	28%
3	Average	28%
4	Fair	17%
5	Poor	14%

1	Excellent	31%
2	Good	44%
3	Average	17%
4	Fair	6%
5	Poor	3%

Changes in Students' Grades (pre and post laptop)

Laptops were given to the students' on the basis of selection criteria based approved in PC-I i.e. percentage of marks secured in last semester or exam should be more than 70% and 60% for semester and annual system respectively. Therefore, at the time of award of laptops results of students was recorded. At the time of evaluation, question was asked about the percentage of marks obtained by the students in the last semester or exams after award of laptops. Analysis and comparison of both (pre and post) results show that that student's overall class grading / percentage was improved as mentioned in figure 5 below. Before the award of laptops, 10% students secured more than 85% marks in their last semester, however, after one year of award of laptop i.e. at

9

the tie of evaluation, 12% students falling in sample size secured more than 85% marks in their semester / annual exam results.
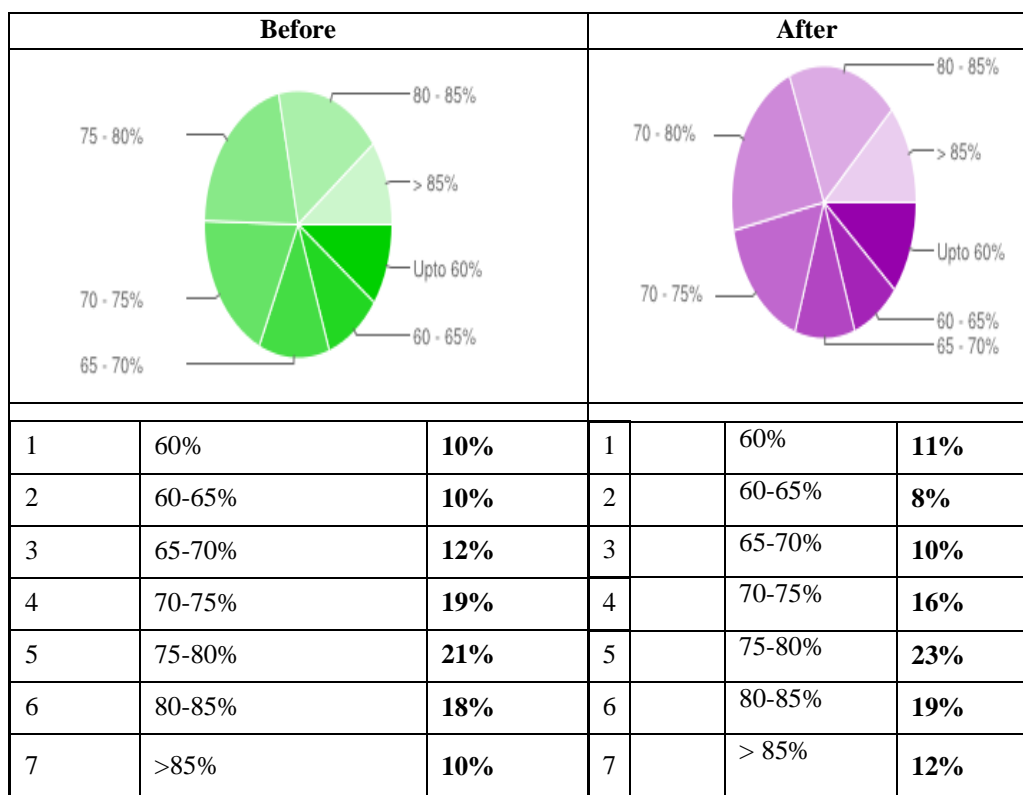
Before			After		
1	60%	**10%**	1	60%	**11%**
2	60-65%	**10%**	2	60-65%	**8%**
3	65-70%	**12%**	3	65-70%	**10%**
4	70-75%	**19%**	4	70-75%	**16%**
5	75-80%	**21%**	5	75-80%	**23%**
6	80-85%	**18%**	6	80-85%	**19%**
7	>85%	**10%**	7	> 85%	**12%**

Figure 5: *Comparative analysis of change in grades of students before and after laptops*

Satisfaction on the Quality of Laptop

Quantitative analysis was also made to find the satisfaction level on the quality of laptops provided to   The Figure 6 shows that a
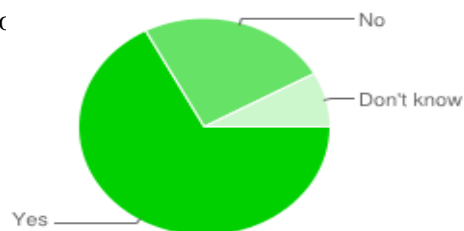
Yes(68%) No (24%) Don't know (8%)
Figure 6: *Satisfaction level over the quality of laptops*

Significant percentage of students i.e. 68% are satisfied with the quality of laptop while 24% students are not satisfied with the quality of laptop.

10

Fairness of the selection criteria for the Distribution of Laptops

In response of the above stated question, 82% students replied that selection criteria for distribution of laptop was fair which reveals the transparency of the scheme and participants confidence in it while and 13% are of the opinion that merit and selection criteria was not fair as shown in figure 7.
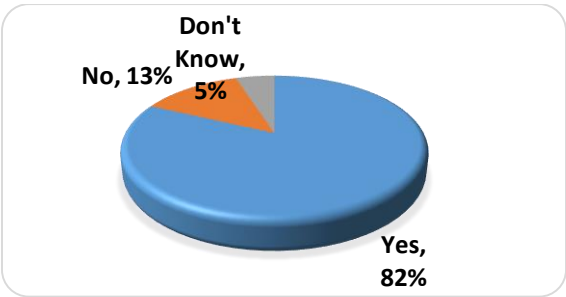
Figure 7: *Satisfaction over Laptop distribution criteria*

Which computer you had before this scheme?

The figure 8 shows that before the intervention of the scheme majority of the students were using desktop computers i.e. 63%. It is pertinent to mention that a very low percentage of the students were having laptops before the intervention of the scheme i.e. only 14% as shown in figure 11. Laptops far overweigh desktop computers in terms of benefits and perks because of the power bank (battery) system and portability they have. Students carry their laptops to their classrooms, libraries and other places for assistance in their academic activities. Because of internet service available in the universities, student s use laptops for preparing notes in their classrooms and their assignments while sitting anywhere in the university campus. Thus, there are many chances that laptops will improve knowledge and learning capabilities of students as compared to desktop computers.

Laptop (14%) Desktop (63%) None (22%)
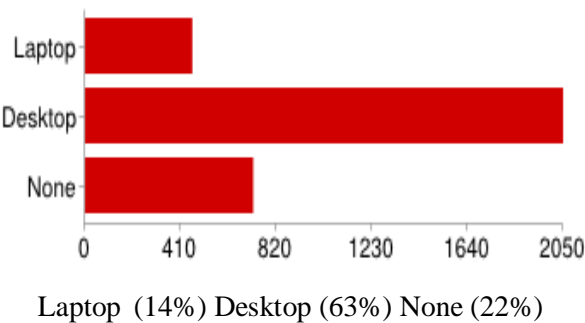
Figure 8: *Types of Computer already used before this Scheme.*

11

Preparation of Class Assignments

As analyzed and mentioned in figure 9 that a high percentage of students i.e. 71% used laptop computer for the preparation of assignments. Therefore, it has been observed that provided laptop under the project has made things easier for the students in terms of improvements in digitization, IT skills and by and large preparation of class assignment as shown in figure 9.
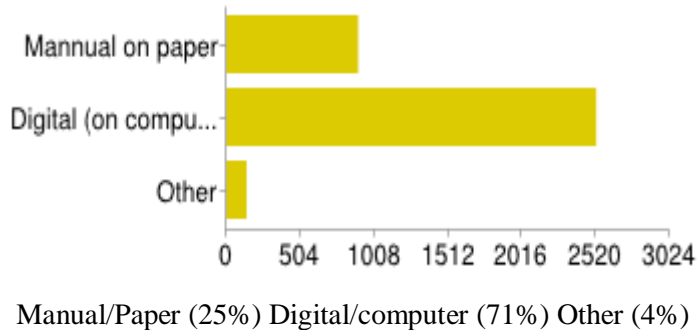

Manual/Paper (25%) Digital/computer (71%) Other (4%)

Figure 9: *Mode of Assignment Preparation*

Satisfaction on the specification of Laptops and fulfilment of the academic needs of students

Figure 10 shows that a considerable majority of students i.e. 83% are satisfied with the specification of laptops. This shows that the machine provided to the students is compatible with the prevailing standards/trends of the market.

Fulfilling (83%) & Not Fulfilling (17%)
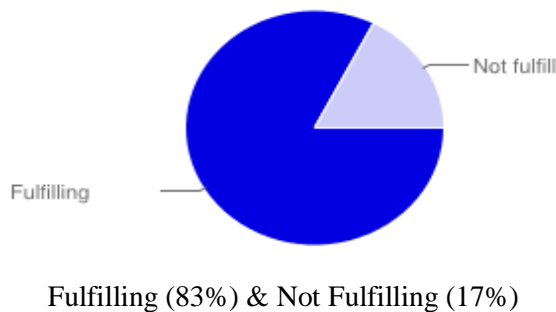
Figure 10: *Satisfaction over the specification of Laptop*

Satisfaction of the working / functionality of laptops

Figure 11 shows the satisfaction of participants regarding the working and functioning of laptops. The results show that a good percentage of students have shown their satisfaction over the working and functioning of laptops. However, a significant

12

number of students (21%) were not satisfied with quality, working and functionality of laptops.

Yes (79%) & No (21%)

Figure 11: *Satisfaction over the functioning of laptop*

Satisfaction on the Warranty Support of Laptops

Figure 12 shows the satisfaction of the participants over the warranty provided by the company. The statistics shows a mixed trend of responses. The reason could be that some proportion of the students is not much familiar with the warranty provisions of the company. But still a fair amount of students are satisfied with the warranty of the machine provided.
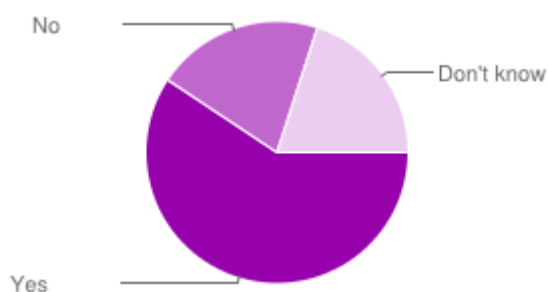
Yes (59%), No (21%) & Don't Know (20%)

Figure 12: *Satisfaction over the warranty support of the Laptop*

Gender Analysis

The Figure 13 shows that a high percentage of male participants i.e. 61 % participated in the survey while 39 % of female students took part in assessment survey of project titled "Provision of laptop".

13

.

Male (61%) & Female (39%)
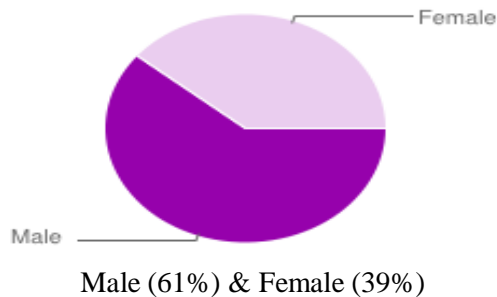
Figure 13*: Gender wise participation of students in the survey*

Conclusion and Recommendations

Almost in all parameters, the positive change and impact was observed including grades of students, IT skills (operating system and MS office), gained knowledge as an indirect measure of computer and internet usage time. Majority of students' showed satisfaction on the quality of laptops, specification of the laptop, warranty claim, fairness of distribution criteria of laptops among students. Not only IT skills of the individual students were improved but also IT skills of their families were also enhanced. Majority of students are now preparing their assignments in digital form which is a positive move. Laptops are again fulfilling their requirements as responded by 83% of sampled students. After having laptops, grades of the sampled students were improved which may be due to the following factors and co-relation may be developed in this regard during further studies.

Further studies may be conducted to exactly find out the reasons for improvement in students' performance, however, followings factors may be considered and linked for this improvement.

- Internet and laptop / computer usage was increased so it is presumed that students acquired more knowledge and skills and that enhance students' performance and grades.
- Laptops are helping the students to learn the course material through internet surfing through web browsing. It has also been observed that due to provision of laptops, students are using computer and internet more than they used before getting laptops.
- Due to battery backup time, students may be working in downtime of load shedding to learn their course material or doing class assignments.
- Easy using of internet for research work, convenience for writing and editing of research assignments and better presentations.

14

Gender analysis showed equitable distribution of laptops between males and females. Majority of the students were satisfied with the selection criteria for the provision of laptops therefore, it may be concluded that true merit was adopted for n accordance to predefined criteria given in project documents. Similarly, around 83% students were those whose family cumulative income was less than PKR 40,000 per month therefore, it may concluded that the laptops were distributed I majority of the cases to the beneficiaries from middle income families and seems to be best use of the resources among middle class and left behind segment of the society with meager opportunities. It is pertinent to mention here that not only IT skills of the students, who received laptops under the project, were improved but also significant positive change and improvements were observed in the IT skills of the other family members of students after receiving and usage of laptops. It is positive step that after getting laptops, majority of students are making their assignments on laptops which is way forward for digitization and advancement in technology.

Government should take necessary action to improve the quality of laptops and the support provided by vendors in term of warranty in next phases of same project of similar projects. Economic return of the scheme is not possible in that case where laptops are provided to the students of public universities who already possessed laptops. There were 14% such students were found in the survey. Therefore, a strategy may be developed for those students already having laptops in future similar schemes. Future studies may also be conducted to study the impact on income / earnings of beneficiaries with the provision of laptops in their professional jobs since more than 8 years have been passed after the completion of first phase of project and majority of students, who received laptops under this project must be working in their respective fields.

Acknowledgment

15

References

Education and Manpower Bureau. (2004). *Information Technology in Education-Way Forward.* Hong Kong: Education and Manpower Bureau. Retrieved 1 17, 2015, from http://www.info.gov.hk/archive/consult/2004/wayforward-e.pdf

Furneaux, C. (2004). How does Information Technology impact the methods, potential and purpose of education? *ETL Conference.* Australia: Griffith University Logan Campus.

Grinager, H. (2006). How Education Technology Leads to Improved. *Education Issues*. Washington DC, USA: National Conference of State Legislatures. Retrieved 1 18, 2015, from http://www.ncsl.org/portals/1/documents/educ/item013161.pdf

Higgins, S., Xiao, Z., & Katsipataki, M. (2012). *The Impact of Digital Technology on Learning: A Summary for the Education Endowment Foundation.* Durham: Education Endowment Fund. Retrieved 1 17, 2015, from http://educationendowmentfoundation.org.uk/uploads/pdf/The_Impact_of_Digital_Technologies_on_Learning_FULL_REPORT_(2012).pdf

Hill, M. (1999). *The Impact of Information Technology on Society.* London: Bowker Saur.

Jumhur, Riza, A., Reynolds, K. M., & Olcay. (2007). The Role of Information Technology in Higher Education: Motivation and Enhancement of Student Learning. *4th International Silk Road Symposium* (pp. 219-227). Georgia: International Silk Road Symposiumm. Retrieved 1 17, 2015, from http://silkroad.ibsu.edu.ge/previous/fourth/8_02.pdf

Kulik, C., & Kulik, J. A. (1991). Effectiveness of Computer-Based Instruction: An Updated Analysis. *Computers in Human Behavior, 7*, 75-94.

Negi, P. S., Negi, V., & Pandey, A. C. (2011). Impact of Information Technology on Learning, Teaching and Human Resource Management in Educational Sector. *International Journal of Computer Science and Telecommunications, 2*(4), 66-72.

Planning Commission Proforma-I. (2012-13). Provision of Laptops Phase-I & II. Lahore, Government of the Punjab, Pakistan.

Quinonez, N. (2014, 5 23). *The Importance of Information Technology and Its Disadvantages.* Retrieved 1 17, 2015, from Udemy: https://www.udemy.com/blog/importance-of-information-technology/

Safdar, M. R., Sher, F., Iqbal, S., Shakir, K. A., Ali, W., Sohail, M. M., & Saeed, S. (2012). The Role of Information Technology in Education Sector (A Case Study of Faisalabad - Pakistan). *International Journal of Asian Social Science*, 1294-1299. Retrieved 1 17, 2014, from http://www.aessweb.com/pdf-files/ijass%20pp.%201294-1299.pdf

16

Sivin-Kachala, J., & Biala, E. R. (1994). *Report on the Efectivenes of Technology in Schols, 1990-1994.* New York: Interactive Educational Systems Design. Retrieved 1 18, 2015, from http://0-files.eric.ed.gov.opac.msmc.edu/fulltext/ED371726.pdf

The Hitachi Foundation. (2010). *The Role of Information Technology in Education.* Retrieved 1 17, 2015, from The Hitachi Foundation: http://www.hitachifoundation.org/our-work/business-and-work-grants-program/initiatives/past-initiatives/24-the-role-of-information-technology-in-education

Toni Mora, J.-O. E. (2018). Computers and students' achievement: An analysis of the One Laptop per Child program in Catalonia. *International Journal of Educational Research,*, 145-157.

Yusuf, M. O. (2005). Information and Communication Technology and Education: Analysing the Nigerian National Policy for Information Technology. *International Education Journal, 6*(3), 316-321.

17