

Mapping Exercise For Youth Centric Development in Pakistan



Table of contents

Acknowledgments	3
List of abbreviations	4
List of figures	5
List of tables	6
Foreword	7
How to read this report	8
Executive summary	9
Demographics	11
Mapping exercise design	12
Study Design	12
Data analysis	13
I. Socio - economic indicators	14
Review of Pakistan's Economic Performance	14
Understanding population trends	14
Sex ratio distribution	15
Household Size in Pakistan	15
Financial dynamics	16
Savings – capacity & challenges	19
Spontaneous response	21
Utilisation of modern approaches:	22
Education	24
Gender aspect	25
II. Digital education	28
Technology and its integration	28
Digital transformation of Education: A global perspective	29
Digital Education in Pakistan	29
III. Climate change	38
IV. Global citizenship	52
V. Security concerns	66
Recommendations	73
Prioritized districts – Province wise	74

Acknowledgments

This report was commissioned by the British Council, and its successful completion would not have been possible without the support and collaboration of many individuals and organisations.

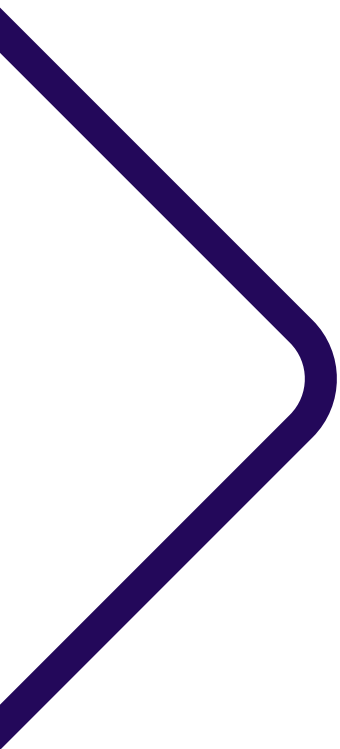
We extend our sincere gratitude to Akhtar Ayub for his leadership and coordination, which were crucial to the successful completion of this report. Special thanks to the research team - Marium Hafeez, Manal Sohail, and Muzammil Khan - for their diligent work and dedication.

Our deep appreciation goes to Rifat Sabzwari at Four Corners Group Pvt. Ltd. for her exceptional guidance, insightful feedback, and unwavering support throughout this project.

We are profoundly thankful to the team at the British Council - Azhar Iqbal, Wajiha Irfan, and Sadia Rahman - for their valuable inputs and support. Their commitment to raising awareness among young women and men in Pakistan regarding social and ethical values has been truly inspiring.

The collaborative efforts and support provided by the administrative and technical team at Four Corners Group Pvt. Ltd. were essential in gathering and analysing the data. Their cooperation and resources were greatly appreciated.

We are immensely grateful to the participants of this study, whose willingness to share their experiences and perspectives greatly enriched this report.



List of abbreviations

BHU	Basic Health Unit
EAA	Education Above All
FGDs	Focus Group Discussions
GBD	Global Burden of Diseases
GDP	Gross Domestic Product
HIMS	Health Information Management System (HIMS)
HEC	Higher Education Commission
ICT	Information and Communication Technology
KII	Key Informant Interviews
PSLM	Pakistan Social and Living Standard Measurement
ROTA	Reach Out to Asia Programme
RHC	Rural Health Centre
SDGs	Sustainable Development Goals
TG	Target Group

List of figures

Figure 1: Distribution of population by age cohort and sex	15
Figure 2: An overview of Financial Dynamics among Families	18
Figure 3: Responsibility of expenses	18
Figure 4: Capacity to save	19
Figure 5: Health consultation scenario	21
Figure 6: Spontaneous response to illness	21
Figure 7: Youth literacy by region	25
Figure 8: Household with at least one facility from computer/ laptop/ tablet	29
Figure 9: Digital education – spontaneous association	30
Figure 10: Disadvantages of digital education	32
Figure 11: Integrating digital education into academic curricula.	34
Figure 12: Utilizing tools for digital education	34
Figure 13: Utilising tools for digital education	35
Figure 14: Learning amplified through digital education	35
Figure 15: Improvements needed in digital education	36
Figure 16: Ease in utilisation of digital education	37
Figure 17: Environmental issues	40
Figure 18: Climate change perception	43
Figure 19: Reasons of climate change	43
Figure 20: Changes in climate	44
Figure 21: Effects of climate change	45
Figure 22: Sources of information of climate change	45
Figure 23: Local practices to address climate change	47
Figure 24: Global citizenship awareness	55
Figure 25: Activities by NGOs regarding global issues	58
Figure 26: Participation in activities related global issues	60
Figure 27: Participation in cleaning programme	61
Figure 28: Bleak law and order situation	69
Figure 29: Responsible and accountable security agencies	70
Figure 30: Confidence on security agencies	71

List of tables

Table 1: Distribution of household by number of persons in percentage	16
Table 2: Advantages of digital education	31
Table 3: Demographic variables	39
Table 4: Climate change risk perception and youth mainstreaming: Challenges and policy recommendations	39
Table 5: Individual's perception of climate change	40
Table 6: Sustainability science (2021)	41
Table 7: Government action plan against climate effects	46
Table 8: Awareness of global citizenship education	54
Table 9: Challenges to impart global citizenship education	54
Table 10: Awareness of global issues	56
Table 11: Youth role in global citizenship	57
Table 12: Type of work done by NGOs	59
Table 13: Participation in social activities	61
Table 14: Actions required to better understand global issues and work on it	62
Table 15: Indicators of personal safety	66
Table 16: Incidence of crime in south Asian countries	67
Table 17: Trend in the overall index of freedom from 'Fear' and its components	67
Table 18: Reasons of security issues	68
Table 19: Consequences of non-implementation of law	69

Foreword

Pakistan's future rests on its youth. This mapping exercise, commissioned by the British Council, dives deep into the critical issues shaping the lives of Pakistani youth. By examining themes like socio-economic demography, digital education, health, climate change, and security, the report offers a comprehensive lens through which to understand the opportunities and challenges faced by this vital generation.

The findings of this mapping exercise provides valuable insights for stakeholders invested in youth development. Understanding the interplay between socio-economic factors and educational access is crucial for empowering youth. Similarly, assessing digital literacy levels and the impact of climate change is essential for preparing them for the demands of the 21st Century.

This report goes beyond mere data. By paying close attention to the specific needs of vulnerable youth groups, it ensures that no one is left behind. Furthermore, the focus on security concerns acknowledges the complex realities faced Pakistani youth and underscores the importance of creating a safe and stable environment for them to thrive.

The British Council is committed to supporting a brighter future for Pakistan's youth. The insights gained from this mapping exercise will guide our ongoing efforts to empower youth through education, skills development, and leadership opportunities. We believe that by investing in Pakistan's youth, we are investing in the nation's long-term prosperity and stability.

This report is a call to action. We invite policymakers, educators, civil society organisations, and the private sector to utilise these findings and work collaboratively towards creating a future where all Pakistani youth can reach their full potential.

How to read this report

The report is divided into two main sections: mapping exercise design, and mapping exercise findings.

Report Structure

The mapping exercise aims to understand the perceptions, attitudes, and challenges of youth and identify the vulnerable districts of Pakistan. The findings from the mapping exercise will enable young men and women to engage in inclusive and responsible actions that impact the local, national, and global sustainable development agenda, providing them with opportunities for growth and development. The emerging themes from literature review and quantitative and qualitative data collected across the four provinces (Khyber Pakhtunkhwa (KPK), Punjab, Sindh and Balochistan) of Pakistan have been discussed under these broader sections:

- Socio-economic indicators of youth
- Digital education, impact and challenges for youth
- Climate change and challenges affecting youth
- Global citizenship education and youth engagement challenges
- Security and challenges affecting the youth

The findings and recommendations are presented for all key stakeholders, including the civil society organisations/ non-governmental organisations, and young leaders themselves including youth with disabilities, ethnic/religious minorities and indigenous youth.

Executive summary

Youth socio-economic demography in Pakistan reveals a critical divide between urban and rural areas, significantly impacting the country's overall development. Over 60% of Pakistan's population comprises youth, whose potential remains underutilised due to disparities in education, employment opportunities, and access to social services. Urban centres like Karachi, Lahore, and Islamabad show higher youth employment rates and better educational outcomes, while rural districts, particularly in Balochistan, Khyber Pakhtunkhwa (KPK), and interior Sindh, lag behind. This urban-rural divide underscores the urgent need for targeted socio-economic interventions to ensure inclusive growth and harness the demographic dividend.

Digital education is a key enabler of socio-economic progress, yet a significant digital divide exists between urban and rural areas. Initiatives such as the "Digital Pakistan" vision have spurred growth in urban districts, providing better internet connectivity and access to digital resources. However, rural districts suffer from infrastructural deficits and economic constraints, exacerbating educational inequalities. The COVID-19 pandemic has highlighted these disparities, making it imperative to enhance digital inclusivity to bridge the education gap and equip the youth with necessary skills for the future.

Health disparities further compound the vulnerabilities of rural districts. Urban areas benefit from superior healthcare infrastructure and services, while rural districts face severe shortages of medical personnel, inadequate facilities, and limited access to essential health services. Provinces like Balochistan and remote areas of KPK are particularly affected, with high maternal and child mortality rates. Addressing these health inequities is critical to improving overall well-being and ensuring a healthy, productive youth population.

The concept of global citizenship is emerging among Pakistani youth, driven by increased connectivity and exposure to global cultures through digital platforms.

However, this awareness is predominantly confined to urban areas where initiatives promoting cultural exchange, volunteerism, and global awareness are more prevalent. Rural youth often lack access to these opportunities, widening the gap in global citizenship awareness. Bridging this divide is essential for fostering a sense of global responsibility and collaboration among all Pakistani youth.

Climate change prompts a real threat to Pakistan, particularly affecting districts prone to extreme weather events such as floods, droughts, and heatwaves. Vulnerable districts include those in southern Punjab, Sindh, and Balochistan, where agricultural livelihoods are heavily impacted by climatic variability. Urban districts face challenges like air pollution and urban heat islands, affecting residents' health and well-being. Enhancing climate resilience in these areas is imperative for sustainable development and protecting vulnerable populations.

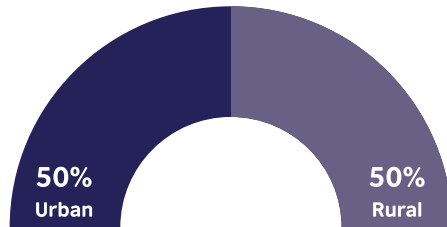
Security concerns, influenced by political instability, terrorism, and ethnic conflicts, vary across Pakistan. Districts in KPK and Balochistan are particularly vulnerable due to ongoing insurgency and militant activities. Although urban centres are relatively more secure, they still face threats from organized crime and sporadic terrorist attacks. Ensuring the safety and security of youth in these regions is crucial for fostering a stable and conducive environment for growth.

In conclusion, the British Council's mapping exercise underscores the interconnectedness of socio-economic conditions, digital education, healthcare access, global citizenship awareness, climate resilience, and security across Pakistan's districts. Addressing these interlinked challenges through targeted interventions and policy measures is essential for empowering youth, fostering equitable development, and building resilience in the most vulnerable districts. This comprehensive approach is crucial for enabling Pakistan's youth to contribute effectively to the country's socio-economic growth and stability.

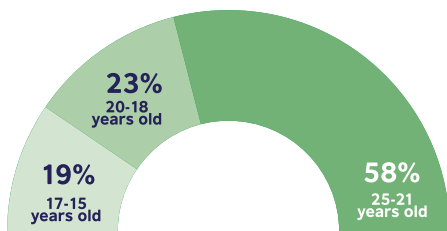
Demographics



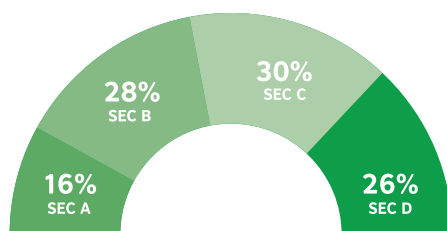
Gender



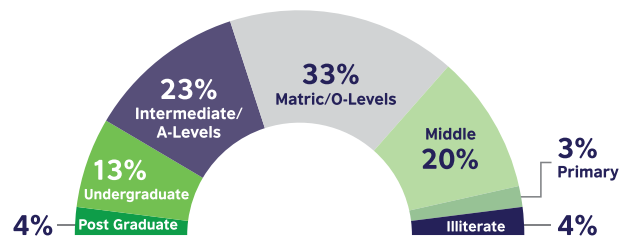
Locality



Age Group



Socio Economic Class



Educational Levels

Mapping exercise design

Study Design

For this study, the research team employed a mixed-methods approach. The literature review provided a foundation for the mapping exercise framework. Quantitative data collection involved surveys using stratified sampling techniques, while qualitative data collection included focus group discussions (FGDs) and key informant interviews (KIIs). Participants for the quantitative portion were young people aged 15 to 25 years, while the FGDs included young people aged 16 to 24 years.

To facilitate an in-depth understanding of the mapping exercise objectives, Key Informant Interviews (KIIs) were conducted using semi-structured interviews. Respondents included pertinent government officials, public representatives, development partners, academia, and civil society members.

Given the study's focus on youth, each district was represented to ensure inclusivity. Of the sampled population, 50 percent were women, and a portion of the sample included young people with disabilities. Surveys and interview questions were translated into local languages to elicit natural responses.

The following section outlines the methodology employed for this mapping. Secondary research began with a literature review to map existing knowledge. A mixed methodology was used for primary data collection, incorporating both qualitative and quantitative elements. The quantitative component utilised a multi-stage, geographically clustered sampling design to gather survey data from youth aged 15 to 25, representing various locations, genders, and occupations. A total of 1,000 responses were collected through face-to-face interactions using an CAPI (Computer assisted personal interviews). Surveys were conducted in both urban and rural areas, with up to 12 districts selected from provinces based on geography, socio-economic disparity, and digital, climate and security vulnerability.

For the qualitative portion, FGDs and KIIs were conducted. A total of 40 FGDs were held across eighteen districts, with both male and female youth participants recruited through snowball sampling and

a recruitment questionnaire. Additionally, 12 KIIs were conducted with policymakers, youth practitioners, and climate leaders from the public, private, and academic sectors. Respondents for the KIIs were selected through purposive sampling, and one-on-one interviews were conducted to understand the youth roles and other key stakeholders in leading climate action within the region. All KIIs and FGDs were recorded, transcribed, and analysed thematically within the analysis framework.

Data analysis

Data obtained from the survey questionnaires was processed using statistical software (MS Excel and SPSS (Statistical Package for the Social Sciences)) to include standard descriptive statistics such as frequencies and means. Comparisons were made among key groups such as gender, age, location (urban/rural), and regional indicators. Additionally, the quantitative data exported to SPSS was cleaned in its raw form, and any discrepancies or potential errors were examined.

All qualitative data from Key Informant Interviews (KIIs) and Focus Group Discussions (FGDs) was analysed with respect to major themes identified in the preliminary research (e.g., country literature reviews). The KIIs and FGDs were analysed by disaggregating data by gender, age group, and location (urban/rural), and by comparing the commonalities and key terms derived from the data with what the preliminary research suggested, using 4AI qualitative analysis software.

The overall reporting mapping process is summarised as follows:



I. Socio - economic indicators

Review of Pakistan's Economic Performance

According to the Pakistan Economic Survey 2023, all of the major economic growth-promoting sectors of the GDP performed terribly. All industries experienced negative growth, with the exception of power and energy. Particularly impacted were sluggish imports and high interest rates for manufacturing. Input costs increased as demand declined. LSM plummeted by nearly 8%. It was intended to increase by 7.4%. Manufacturing as a whole decreased by roughly 4% compared to the 7% anticipated growth rate. Crop production declined, particularly for essential crops. The little improvement in agriculture has been fuelled by increases in forestry, fisheries, and livestock. The industry has been negatively impacted not only by this year's floods but also by persistently inadequate investment and policies. The industry that produces commodities as a whole fell by 0.5%.

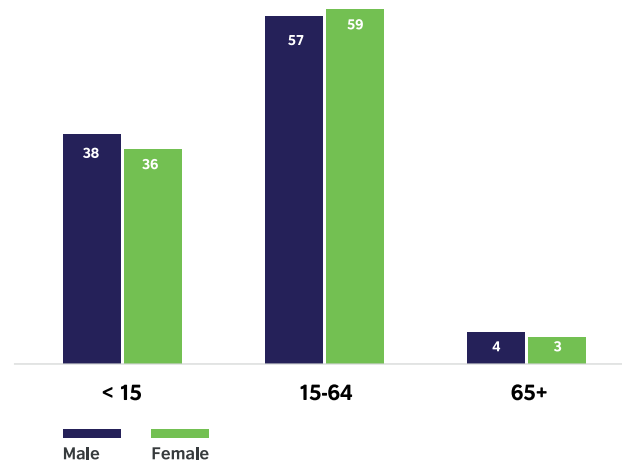
The sharp drop in the value of the Pakistani Rupee, unrelenting unemployment, and the tight monetary policy that followed with a large markup caused a major crisis. Overall, the raised input costs for businesses, which were already negatively impacted by high gas and electricity bills all year round added to the inflation and suffering of the masses¹. The problems such policymaking and planning created for the people is not lessened by the fact that it contradicts rationality. The economy suffered as a result of sudden devaluation, high interest rates, import restrictions, high tariff rates, and high indirect tax rates despite the incessantly growing population.

Understanding population trends

The fundamental reason for variations in age distribution, also known as age composition by sex

in population research, is variations in fertility rate and trends. The population distribution for PDS-2020² shows that 35.5 percent of females and 37.84 percent of males are under the age of 15. The proportion of population is lowest in the age group of 65 and above and largest in the 15-64 year old range. There is a comparable pattern in both males and females. There are relatively few elderly people (65 years of age and above). This age group comprises only 3 to 4 percent of the population. Majority of the population, comprising 57.18 percent of males and 57.78 percent of females, are between the ages of 15 and 64. This demographic trend can be attributed to a currently high fertility rate. Furthermore, the sizeable youth population suggests that Pakistan's population will likely continue to grow even as the fertility rate declines. This momentum effect is because a larger younger population translates to a larger cohort entering childbearing years in the future. (see figure 1)

Figure 1³: Distribution of population by age cohort and sex



1. A Year of Apathy and Lapses: Pakistan Economic Survey, June 23
<https://ipr.org.pk/wp-content/uploads/2023/06/Pakistan-Economic-Survey-FY-23.pdf>
2. https://www.pbs.gov.pk/sites/default/files/population/publications/pds2020/Pakistan_Demographic_Survey-2020.pdf
3. Pakistan Demographic Survey 2020 – April 2022, Ministry of Planning Development & Special Initiatives
www.pbs.gov.pk

Sex ratio distribution

The ratio of men to women in a population is known as the sex ratio. The gender ratio was 98 in the Pakistan Demographic and Health Survey (PDHS) 2017–18 and 105 in the Census 2017, although it was recorded as 103 for Pakistan Demographic Survey (PDS) 2020 and the Labour Force Survey 2018–19. In comparison to rural areas (102), urban areas have a higher sex ratio (104). Since the first population census was conducted in 1951, the overall sex ratio in Pakistan has been steadily dropping, according to a data study conducted between 1951 and 2020. This can be explained by the fact that female mortality has decreased comparatively more quickly as a result of better health facilities, the availability of vaccines for a variety of illnesses, and higher rates of female participation in surveys and censuses.

Household Size in Pakistan

Pakistani homes are typically large, with 6 to 7 people sharing a single meal and living quarters on average. 6 people live in each household in Pakistan, according to PDS-2020⁴. In comparison to urban regions, household (HH) size is larger in rural locations.

Pakistani families typically have 6 people living in them, however, 30% of all households have 4 or less people. There are more members in rural families (6.06 persons) than in urban households (5.87 persons), according to the breakdown by place of residence. Studies revealed that 1.2% of households are headed by a single person. 14% or less of all households are made up of 5 or fewer members. Households with 6 to 9 persons make up 43 percent of the population, while households with 10 or more members make up 8.6 percent. About half of all households in urban areas are made up of 5 or fewer people. 43 percent of people reside in homes with 6 or fewer members.

Table 1: Distribution of household by number of persons in percentage

# of Persons	Pakistan	Urban	Rural
1	1.2	1.3	1.2
2	6.1	5.8	6.2
3	9.2	9.1	9.2
4	14	15.1	13.4
5	17.5	19.1	16.6
6	16.7	17.9	16.1
7	13.1	12.9	13.1
8	8.5	7.4	9.2
9	5.1	4.4	5.5
10	8.6	7.1	9.4

In rural area, household with 5 or less persons are about 47 percent of the total households. 44 percent of the population lives in a household size of 6 to 9 whereas the households constituting 10 or more members in rural area are 9.4 percent. (see table 1)

Financial dynamics

Numerous studies have investigated the determinants of household finance, considering a variety of factors such as wealth and demographic characteristics (Campbell, 2006)⁵, economic attitudes (Renneboog & Spaenjers, 2012)⁶, personality traits (Brown & Taylor, 2014)⁷, social interactions (Hong et al., 2004), and the interplay between demographics and social interaction (Gao & Fok, 2015)⁸. Additional research has explored the influence of social interactions (Liang & Guo, 2015)⁹ and the impact of individual values on financial decisions (Gogolin et al., 2017).¹⁰

4. https://www.pbs.gov.pk/sites/default/files/population/publications/pds2020/Pakistan_Demographic_Survey-2020.pdf

5. Campbell, J. Y. (2006). Household finance. *The Journal of Finance*, 61(4), 1553–1604. <https://doi.org/https://doi.org/10.1111/j.1540-6261.2006.00883.x>

6. Renneboog, Luc and Spaenjers, Christophe, Religion, Economic Attitudes, and Household Finance (January 27, 2011). *Oxford Economic Papers*, Vol. 64, No. 1, 2012, Available at SSRN: <https://ssrn.com/abstract=1406488>

7. Brown, S., & Taylor, K. (2014). Household finances and the ‘Big Five’ personality traits. *Journal of Economic Psychology*, 45, 197–212 <https://doi.org/https://doi.org/10.1016/j.joep.2014.10.006>

8. Gao, M., & Fok, R. (2015). Demographics, family/social interaction, and household finance. *Economics Letters*, 136, 194–196. <https://doi.org/https://doi.org/10.1016/j.econlet.2015.09.027>

9. Liang, P. H., & Guo, S. Q. (2015). Social interaction, internet access and stock market participation – An empirical study in China. *Journal of Comparative Economics*, 43(4), 883–901.

10. Gogolin, F., Dowling, M., & Cummins, M. (2017). Individual values and household finances. *Applied Economics*, 49(35), 3560–3578. <https://doi.org/https://doi.org/10.1080/00036846.2016.1262528>

In Pakistan, a developing nation, the ability of households to secure financing to meet their financial obligations is a significant concern. Many households in Pakistan face limitations in their financial resources. Even those with surplus funds often lack knowledge on effective investment strategies. Demographic factors play a crucial role in shaping how households manage and utilise their finances. For example, the financial needs and priorities of younger individuals can markedly differ from those of older adults. Similarly, residents of urban areas may allocate their resources differently compared to those living in rural regions.

As the masses face economic instability, limited financial resources, and fewer financing options, these constraints necessitate different approaches to financial decision-making. It is suggested that households exhibit varying behaviours when presented with different financing options (Campbell & Viceira, 2002)¹¹. The financial decision-making processes of households in developed countries may differ significantly from those in developing countries such as Pakistan due to disparities in living conditions, income structures, available financing opportunities, and demographic compositions.

Additionally, the age demographics within a country can profoundly impact financial behaviours. Younger households might prioritize education loans, starting businesses, or saving for future investments, whereas older households might focus on retirement planning, healthcare expenses, and wealth preservation. Urban households often have better access to financial services and investment opportunities compared

to their rural counterparts, who may rely more on traditional and informal financial practices.

Given these distinctions, the study highlights specific factors that shape financial decisions among Pakistani households. By examining variables such as income structure, financing opportunities, living conditions, and demographic characteristics (including age, education, and location), this mapping exercise provides a comprehensive understanding of how these elements influence household financial behaviour in Pakistan.

When investigating the financial dynamics in focus group discussions (FGDs) among various regions of Pakistan participants uncovered noteworthy variations shaped by income level, family size, and geographical location. The study highlighted that household expenditures commonly encompass essential areas such as housing (rent payments), utilities (electricity, gas, water), and food. Transportation costs, including fuel and public transport, also constitute a major part of household budgets.

Furthermore, healthcare and education expenses were frequently cited as critical financial commitments. Beyond these essentials, families also incur miscellaneous costs for clothing, entertainment, and other discretionary spending. These findings underscore the diverse financial challenges faced by Pakistani households, which vary considerably based on their economic standing, the size of their families, and whether they reside in urban or rural areas. Understanding these expenditure patterns is crucial for developing targeted financial strategies and policies that can better support families across different regions of Pakistan.

“There are household expenses which include food and drink, bills, and sometimes it happens that a machine breaks down, so there is an expense for that, or if someone falls ill, then there is an expense for that as well.”

[Male-16-19 YOA- A-Mustang Rural]

“Given the current situation in Pakistan, no matter how much we earn, it does not cover our daily expenses, whether it's household expenses, buying books, fueling up, or getting a mobile package. In the end, there is no benefit even if the income is 50 thousand.”

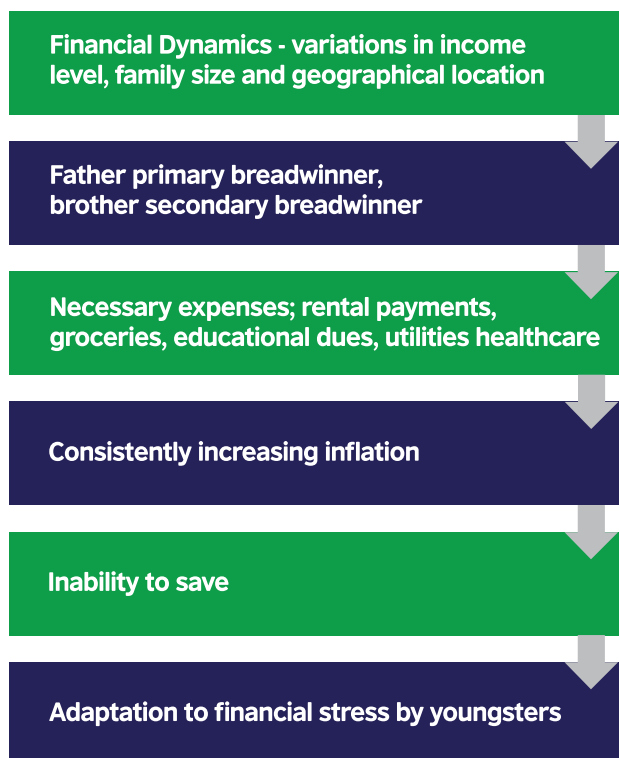
[Male-16-19 YOA- A-Mustang Rural]

11. Campbell, J. Y., & Viceira, L. M. (2002). Strategic asset allocation: Portfolio choice for long-term investors. Oxford University Press.

The study revealed a growing awareness and adaptability among youth participants regarding the diverse financial situations within their families. A common pattern observed in most households was that fathers and older brothers predominantly assume the role of primary breadwinners. In many cases, families adopt a collaborative approach to managing finances, particularly in joint family setups where multiple family members contribute to the household income.

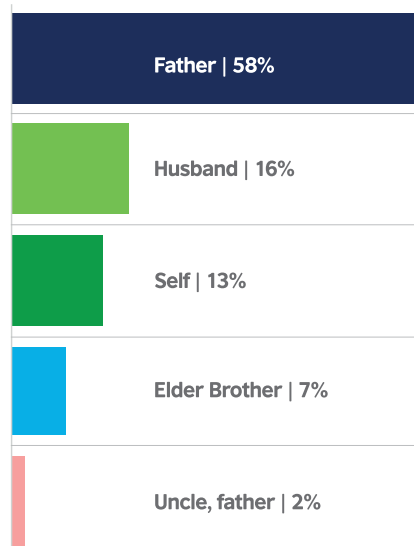
This collective financial management strategy helps distribute the economic burden and ensures that the family's financial needs are met. The youth participants' increasing recognition of these dynamics reflects a broader understanding of their family's financial strategies and the importance of shared responsibility in maintaining financial stability. These insights indicate the significance of familial roles and collective efforts in navigating financial challenges within local households.

Figure 2: An overview of Financial Dynamics among Families



When asked about who bear the expenses in household 58% respondents mentioned their father bear the expenses of household, 16% mentioned their husband and a little more than one tenth 13% mentioned Self. (see figure 2 & 3)

Figure 3: Responsibility of expenses



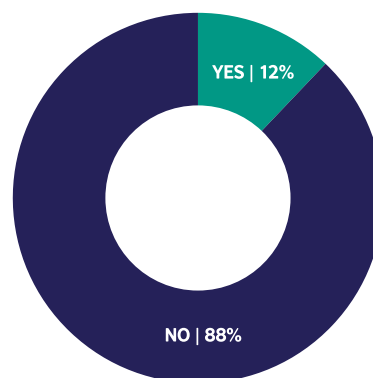
Savings – capacity & challenges

The Target Group (TG) during the survey and focus group discussions conveyed that their families face significant challenges in saving money due to relatively low incomes and high living costs, which leave little room for savings. Economic instability and inflation further exacerbate the financial pressures, making it difficult for families to set aside funds. Unforeseen expenses, such as medical emergencies or unexpected repairs, additionally strain the already tight budgets of many families.

As a result, building a financial cushion for emergencies or future goals becomes a daunting task for the majority of households. These findings underline the critical need for financial strategies and support systems that can help families manage their expenses more effectively and create opportunities for saving.

When asked about saving after expenses only 12% respondents indicated they are able to save money. (see figure 4)

Figure 4: Capacity to save



“Earlier, we used to think that we would save some money, spend a little, and buy things for our wedding. Now, if we can just cover the household expenses, that is a big deal. It is very difficult to manage even that.”

[Male-20-24 YOA-BC-Sahawal Urban]

“The little savings we have come in handy during emergencies, such as if someone falls ill suddenly, or if there is a wedding and we need to give gifts, etc.”

[Female-16-19 YOA-BC- Quetta Rural]

“In today’s times, saving has become very difficult. Previously, when we received our pay, we used to spend and still manage to save something. But now, the situation is such that we cannot save at all. We think about saving and investing somewhere, but it is very difficult.”

[Male-20-24 YOA-A-Lahore Urban]

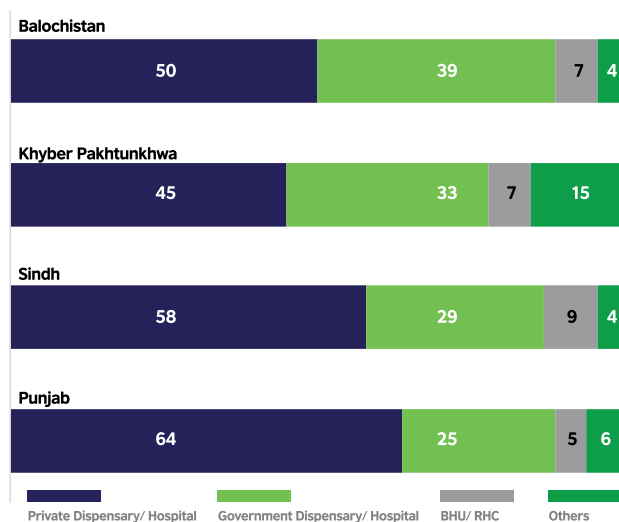
Despite these efforts, Pakistan’s healthcare system faces significant challenges. While progress has been made in the social, agricultural, and economic sectors, and reforms have been introduced in healthcare delivery, the system remains inefficient. Strengths of the healthcare system include the development of health policies, participation in the Millennium Development Goals (MDG) programme, implementation of vertical programmes, and public-private partnerships. Additionally, improvements in human resource development and infrastructure have been made through the establishment of Basic Health Units (BHUs) and Rural Health Centres (RHCs). However, these initiatives are limited in scope, resulting in persistent inefficiencies. Major weaknesses include poor governance, lack of access to services, unequal resource distribution, a deficient Health Information Management System (HIMS), corruption, inadequate policy monitoring, and a shortage of trained staff. Governance issues, in particular, contribute to the system’s incompetency and corruption, leading to unequal access to healthcare services and inequitable resource allocation.

The disparities in healthcare availability between rich and poor are stark, with about 30% of the population living in absolute poverty. Public health facilities often fail to provide satisfactory care, forcing people to seek expensive private services, which are unaffordable for many. In 2005-06, only 0.75% of GDP was spent on health, with 76% of health expenditures being out-of-pocket costs. This financial burden exacerbates poverty, as people are compelled to pay for healthcare irrespective of their ability to afford it, limiting their ability to make informed health decisions.

Geographical disparities further complicate access to healthcare. Most rural hospitals are located in far-flung areas, leaving rural populations reliant on often under-resourced BHUs and RHCs. The absence of healthcare staff and non-functional facilities drive rural residents to expensive private doctors, increasing their financial burden. Additionally, health infrastructure and services are unevenly distributed among different income groups, genders, and regions, leading to varying health indicators across provinces. Poor infrastructure, lack of transportation, and cultural barriers further hinder access to healthcare, making visits to BHUs exhausting for many.

Analysing the present health consultation scenario, it is observed that Punjab has the highest rate for private sick or injured: 7.4% Tetanus: 77% Prenatal: 77% Post-natal: 39% Immunization: 70% Skilled Birth attendant: 68% Diarrhoea: 6.4%, 177 dispensary/hospital for consultation i.e. 64 percent; follow up by Sindh with 58 percent private dispensary/hospital; then Balochistan with 50¹² percent and Khyber Pakhtunkhwa have the lowest level of private dispensary/hospital consultations i.e. 45 percent. Whereas in case of government dispensary/hospitals consultation highest rate prevails for Balochistan i.e., 39 percent, and Sindh with 9 percent rate of RHC/BHU consultation is highest among provinces, however the pattern of consultation varies among the districts. (see figure 5)

Figure 5: Health consultation scenario



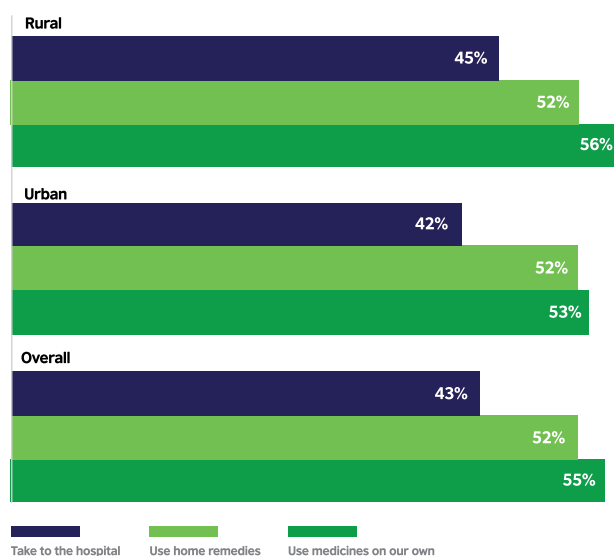
Access to healthcare is a critical aspect of well-being for individuals and families. It is observed during FGDS that the initial response to illness within families reflects a strong prioritization of health and a collective effort to ensure the affected individual receives the necessary care and comfort.

Spontaneous response

During Focus Group Discussions (FGDs), it was observed that a prevalent approach among families when a member falls ill involves a combination of traditional home remedies and self-medication. When queried about immediate care in the event of illness, 55% of youth respondents reported using medicines at home, 52% mentioned resorting to home remedies, and 43% stated they promptly sought treatment at a hospital (see figure 6). This practice highlights a blend of cultural traditions and modern healthcare methods, where families initially resort to culturally ingrained home remedies passed down through generations.

These traditional practices are often supplemented with over-the-counter medications, reflecting an effort to integrate conventional medical interventions for more comprehensive care. This hybrid approach not only implies the importance of cultural practices in health management but also indicates a pragmatic use of available healthcare resources to address illnesses within the family. By combining these methods, families desire to provide effective and immediate relief while navigating the constraints of limited access to formal healthcare services.

Figure 6: Spontaneous response to illness



“When someone in the house falls ill, we first try some home remedies or use medicine prescribed by a herbalist. If there is no relief from that, then we go to the hospital.”

[Female-16-19 YOA- BC- Quetta Rural]

12. https://www.pbs.gov.pk/sites/default/files/pslm/publications/PSLM_2019_20_District_Level.pdf

Utilisation of modern approaches:

Participants were asked what they do when the traditional approach fails to yield the anticipated results as an initial response to illness. Several alternative actions were being taken by the families:



Seeking professional medical help

When traditional remedies fail to yield results, families turn to professional medical assistance from healthcare providers such as doctors, nurses, or specialists. This entailed visiting a local healthcare facility, government hospital, or private clinic for a comprehensive examination and treatment. Some youth participants reported that if traditional methods prove ineffective, they also explore modern medical treatments and interventions. This may include undergoing diagnostic tests or surgical procedures recommended by healthcare professionals.

“Sometimes it happens that someone at home is consistently ill, like my father who gets sick often, so we take him to a big hospital for tests.”

[Male-20-24 YOA-BC-Mardan Urban]

During primary data gathering, the participants were inquired about the challenges that they face regarding healthcare facilities. Initially healthcare system was bifurcated into government and private hospitals by the participants and accessing and utilising healthcare facilities in both urban and rural areas of Pakistan was associated with certain challenges.

Long waiting times are a common issue in government hospitals, as reported by the majority of participants. Overcrowding often leads to extended wait times for appointments, consultations, and treatments. Participants expressed that these situations result in delayed access to healthcare services and increased frustration among patients. A prevalent issue identified in rural areas of Pakistan is the accessibility of government hospitals. Participants noted that limited transportation options and long travel distances often impede patients' ability to access timely medical care.

“In a government hospital, first, they don't pay attention, and second, no matter how critical the patient's condition is, they have to stand in line to get the registration slip, and they even charge 10 rupees for it.”

[Female-20-24 YOA-A-Rajanpur Rural]

“If you ever go to a government hospital, there's an issue with getting the registration slip. You have to wait in a long line for it. If you manage to get the slip, then you have to wait for hours to see the doctor. When it comes to medicine, it's not available, and you have to buy it from an outside medical store.”

[Male-16-19 YOA-A-Kasur Urban]

Participants in focus group discussions (FGDs) expressed concerns about the variability in the quality of care provided at Government hospitals. The majority reported that these facilities often lack adequately trained healthcare professionals and fail to adhere to standardized protocols. This inconsistency in care quality can have a negative impact on patient safety and treatment effectiveness. The majority of Government hospitals in rural areas, and some in urban areas, often experience shortages of medical equipment, supplies, and staff. These shortages can significantly impact the quality of care provided, potentially compromising patient outcome. Administrative hurdles, such as acquiring referrals, appointment scheduling, and accessing medical records, were frequently cited. These complex administrative procedures not only delay the treatment but also aggravate patients' concerns about their health. Many individuals perceive a lack of attentiveness from doctors in government hospitals, which has contributed to a decline in patient trust. Moreover, several senior doctors prioritise their private clinics, where they offer more personalised care but at significantly higher costs. In Balochistan, there are concerns about the authenticity of doctors' qualifications, with some being accused of possessing fraudulent degrees and lacking sufficient medical knowledge. Patients and their families in Punjab and KPK often face trouble with the demeanour of nursing

staff, who are reported to have behaved rudely. In some cases, nurses assert themselves as more knowledgeable than doctors, adding to the challenges faced by patients seeking care. Hygiene concerns pose a primary challenge in Government hospitals, with inadequate cleanliness reported as the primary issue. Patients are discouraged from seeking treatment in these facilities due to unsanitary conditions in bathrooms/toilets and wards. There is a fear that poor hygiene practices may compromise their health and potentially lead to additional illnesses. During the Focus Group Discussions (FGDs), several instances of inadequate specialised care were documented. In Mastung, the lack of female gynaecologists present problems for women seeking gynaecological, pre and post-natal care. Consequently, these women are often compelled to travel to Quetta for childbirth, which can result in delays and, in some cases, fatalities during the journey. Similarly, in Rajanpur, there is a shortage of specialists for specific medical conditions. As a result, all patients receive similar medications from general physicians, regardless of their ailment.

“Doctors don’t take care of patients the way they should. They just get their salary, so they don’t care.”

[Female-16-19 YOA-BC-Tandojam Rural]

“We don’t have maternity facilities here. When someone is about to give birth, and we take them to the hospital, there’s no doctor there. I don’t know where they sit and take their salaries from. We don’t know where the doctor is, as we’ve never found them there. When such a time comes, women have to be taken to Quetta, which is very difficult. Often, women die on the way.”

[Male 16-19 YOA-A- Mastung Rural]

Private hospitals were expressed to offer better treatment facilities as compared to government hospitals; however, their services are considered absurdly expensive, making them inaccessible to

many individuals due to financial constraints. This affordability gap means that not everyone can avail treatment at private hospitals, regardless of the quality of care they provide. As a result, access to healthcare is limited, especially for those with limited financial means, who may have to resort to alternative, often less optimal, healthcare options.

Education

Education has the power to eradicate poverty and reduce socio-economic differences. The UN has placed education as one of its Sustainable Development Goals (SDGs)¹³. Goal 4 of the SDGs is “to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. The goal specifically focuses on including persons with disabilities, indigenous people, refugee children, and poor children in rural areas.

An overview of the country’s education system in terms of these categories of educational institutions. These broad categories will be further analysed based on sector, gender and education level. From Pre-Primary to university level this can be broadly categorised into three levels, namely

- School Education (Pre-Primary - Class 12)
- College Education (Degree Colleges, Class 13-16)
- University Education (16 onwards)

The formal education system comprises of 236,492 institutions¹⁴ out of which 144,977 (61%), 47,182 (20%), 34,210 (14%), 7,102 (3%), and 3,223 (1%) represent primary (including pre-primary), middle, high, higher secondary and Inter-degree colleges/ universities respectively. The percentage distribution of educational institutions up to higher secondary/ inter-college level gives public/private sector divide for the given categories of education at national as well as province/ regions level. Studies also reveal that primary and secondary-age education plays an integral role in raising living standards. Growing rates of literacy (formal and informal education) both, ultimately enhance the employment prospects. Overall, in Pakistan, public expenditure on the education sector accounts for about 2.3% of GDP. In 2015-16,

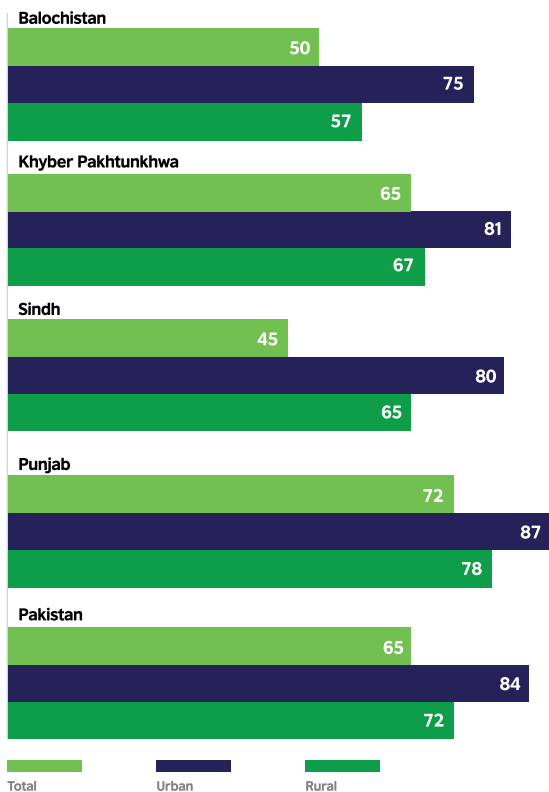
13. United Nations, Sustainable Development Goals, 2017

14. <https://digitalpakistan.pk/pdf/d-education.pdf>

Punjab spent about 37.9%, Sindh about 20.3%, Khyber Pakhtunkhwa about 16.9%, and Balochistan about 6.85% whereas the federal spent 17.9% of total public expenditure¹⁵. Similarly, in the following year, amongst the provinces, Punjab took the lead with a 61% literacy rate, followed by Sindh with 56%, Khyber Pakhtunkhwa with 53%, and Balochistan with 43%. Out of the provinces, Punjab has the highest literacy rate at 63%.

The country's Youth Literacy is premeditated from the age 15-24 years. For the first time, youth literacy is being calculated in PSLM District Level Survey 2019-20.¹⁶ According to the PSLM District Level Survey 2019-20, the results reveal that Youth Literacy is 72 percent at the National level and this proportion is higher in urban areas with 84 percent than in rural areas with 65 percent. However, Youth literacy is higher in males at 79 percent than in females at 65 percent. Similarly, Punjab is at the top among all provinces in Youth literacy with 78 percent, followed by Khyber Pakhtunkhwa with 67 percent, while Balochistan is at lowest with 57 percent. (see figure 7)

Figure 7: Youth literacy by region



However, district wise comparison reveals that Narowal and Sialkot with 93 percent, Korangi with 92 percent, Abbottabad with 95 percent, Pishin and Quetta with 76 percent are at top in their respective provinces, while Rajanpur with 52 percent, Kashmore with 31 percent, Mohmand with 30 percent and Shaheed Sikandarabad with 11 percent are at bottom in their respective provinces.

Another research result determined that in Punjab Attock, Bahwalnagar, Bahwalpur, and Bahawalpur are the most progressive districts in context to youth literacy. While, Shiekupura, Sialkot, T.T Singh, and Vehari scored the lowest in urban and rural sphere. Similarly, it was found that Badin, Dadu, Ghotki in Sindh are the advanced districts in terms of youth literacy compared to Tando Mudh Khan, Tharparkar, Thatta, and Umar Kot. KPK included Bajur, Bannu, Batagram, and Bonair as the youth evolving districts. Swat, Tank, Tor Garh and Upper Dir retreated as the conventional areas in terms of learning and progress. Last but not the least; Awaran, Barkhan, Dera Bugti, and Duki in Balochistan outperformed the other districts such as Sibbi, Shobatpur, Washuk, and Ziarat.

Gender aspect

Holistically, education is perceived as a robust force for eliminating gender inequities within the society, though addressing inequalities within the education system itself is a tremendous challenge.

There are significant gender disparities between public and private institutions as well. Public institutions have a higher representation of males among both students and teachers, whereas private institutions are predominantly female dominated in both categories.

In Pakistan, due to society's patriarchal nature and several reasons such as remote school location, conveyance inconvenience, and cultural norms of veiling in the rural/periphery areas; the ratio of male teachers is higher in public sector compared to the female teachers ration.

Gender composition of the enrolled students is 55 percent males compared to 45 percent female students, whereas there are 39 percent male and 61 percent female teachers imparting education up to the

15. Economic Survey of Pakistan (2016-17) – Education”, Ministry of Finance, Government of Pakistan, Retrieved on May 11, 2017 from: http://www.finance.gov.pk/survey/chapters_17/10-Education.pdf

16. <https://www.pbs.gov.pk/publication/pakistan-social-and-living-standards-measurement-survey-pslm-2019-20-provincial>

degree colleges in the year 2020-21.

During focus group discussions (FGDs), the educational infrastructure was bifurcated into private and government systems of education. Both private and government education systems were expressed to play crucial roles in Pakistan's educational landscape, each with its strengths and weaknesses.

Majority of the youth participants believed that private schools cater to families seeking better quality education and more opportunities, while government schools aim to provide education to a broader segment of the population, particularly those from lower-income backgrounds. There were several distinctions perceived by the youth participants in both the educational systems. They highlighted the fact that private schools are funded by tuition fees paid by students, while government schools receive funding from the government's budget. Parents of children enrolled in private schools or colleges exhibit heightened concern and involvement in their children's advancement due to their investment in superior quality education. In contrast, parents of children attending government schools or colleges often feel neglected by the staff, who do not perceive themselves as responsible for addressing parental concerns. Additionally, many across districts believed that the funding allocated to government education systems is not effectively utilised, primarily due to deep-rooted corrupt practices within the system. There was a noticeable difference of opinion regarding the quality of education offered by private and government systems. The majority participants in both urban and rural districts believed that private education was more effective due to several factors: teachers' heightened concern and dedication, the use of diverse techniques like visual and practical learning, and smaller class sizes. A Climate Change activist highlighted during key informant interview that rural areas suffer from diminished teacher enthusiasm for using technology, mainly due to energy shortages, while private schools in urban regions actively integrate technology into their educational approaches. However, the government's efforts seem limited, focusing only on establishing basic computer labs without promoting innovative educational practices. Participants also

highlighted the limited availability of government education institutes in various urban and rural districts of Pakistan. Specifically, there are fewer female schools in close vicinity in areas like Rajanpur (Punjab), Swat (KPK - rural), Pishin, Mastung, and Killa Saifullah (Balochistan). Additionally, the lack of public universities in districts such as Punjab (Kasur & Rajanpur), Balochistan (Killa Saifullah, Pishin, and Mastung) Additionally, the lack of public universities in districts such as Kasur, Rajanpur, Killa Saifullah, Pishin, and Mastung poses a significant challenge for both male and female students. They often need to travel to other regions for higher education, incurring additional accommodation costs, which can be a considerable financial burden. They also believed that the government education system employs more competent faculty members through proper procedures compared to the private education system. However, it still falls short in providing quality learning to students for various reasons. In rural regions, youth noted that the government system primarily caters to naturally gifted students who require minimal assistance and receive favouritism and praise from their teachers. Many believed that government schools struggle with teacher absenteeism and low morale. For instance, in Mansehra (KPK), a biometric system has been implemented to monitor teachers' attendance. In Peshawar, teachers' dedication was often compromised because they were stationed far from their homes, making it challenging to focus on their responsibilities. Additionally, instances of disrespectful behaviour by teaching staff towards students were noted, including the use of derogatory language such as "dull-minded" or "useless," which diminishes students' interest in learning. There were differing opinions regarding the curricula followed by the two education systems. Many youth participants believe that private schools implement various curricula, including international ones such as Cambridge or Oxford, while government schools typically adhere to a national curriculum established by the government. Additionally, some participants noted that the Imran Khan government introduced the single curriculum policy, aiming to provide equal education opportunities for all students. The lack of utilisation of an integrated system was

reported in the government education system across various regions. The private education system was mentioned to be allocating more resources towards implementing integrated education systems, allowing for greater flexibility and innovation. Conversely, government schools were reported to have limited or no resources, which impacts the implementation of integrated systems. The government education system across various regions lack the utilisation of an integrated system, while the private education system allocated more resources towards implementing such systems, allowing for greater flexibility and innovation. Government schools often have limited or no resources, impacting the implementation of integrated systems. Participants perceived that private school systems promote conceptual learning, which emphasises critical thinking, problem-solving, and a deep understanding of underlying concepts, in contrast to the rote learning focus of government schools, where students memorise information without understanding the underlying principles. Additionally, private schools have greater access to technology and resources, enabling the integration of digital tools and online learning platforms, which enhances the overall learning experience. In contrast, government schools widely lack effective implementation of technology for learning purposes, highlighting a significant difference between the two systems.

“In government schools, teachers don’t even respect the students and call them by bad names. When they repeatedly tell the children that they are useless, the children stop studying. Private school teachers praise the students, which motivates them to study well.”

[FGD-Females-16-19 YOA-Mardan Rural]

“The teaching method is not right; there’s no practical learning. My friend studied in a government school, and I studied in a private one. During the viva, he didn’t know about a plant in biology, but I knew everything because my college teacher taught us using multimedia, so it stayed in my mind.”

[FGD-Males-20-24 YOA-Mardan Urban]

Stakeholders from IT, Climate Change, and Planning have highlighted various government initiatives to enhance digital literacy in Pakistan. The National Freelance Training Programme, operational for four years, aims to train over 20,000 individuals this year. Future plans include addressing 85% of accessibility issues across Pakistan by 2030 and introducing 5G by the end of 2024 to improve infrastructural accessibility. Additionally, UNICEF has played a crucial role in establishing computer labs in KPK institutes, contributing to the enhancement of digital education infrastructure.

II. Digital education

Technology and its integration

Youth participants were asked about technology and its integration in their lives during Focus Group Discussions. The pandemic has significantly accelerated the integration of technology into daily life of the masses. As people were confined to their homes, they increasingly turned to social media platforms on their cell phones and engaged in digital education through various online mediums.

Technology has become deeply embedded in the lives of target groups across diverse demographics. For many, it enhances quality of life by providing convenience and comfort in various aspects, while for others, it serves as a source of entertainment.

“Technology has made life much easier; now transferring money has become very easy, you can study on the internet, and you can do online business from home.”

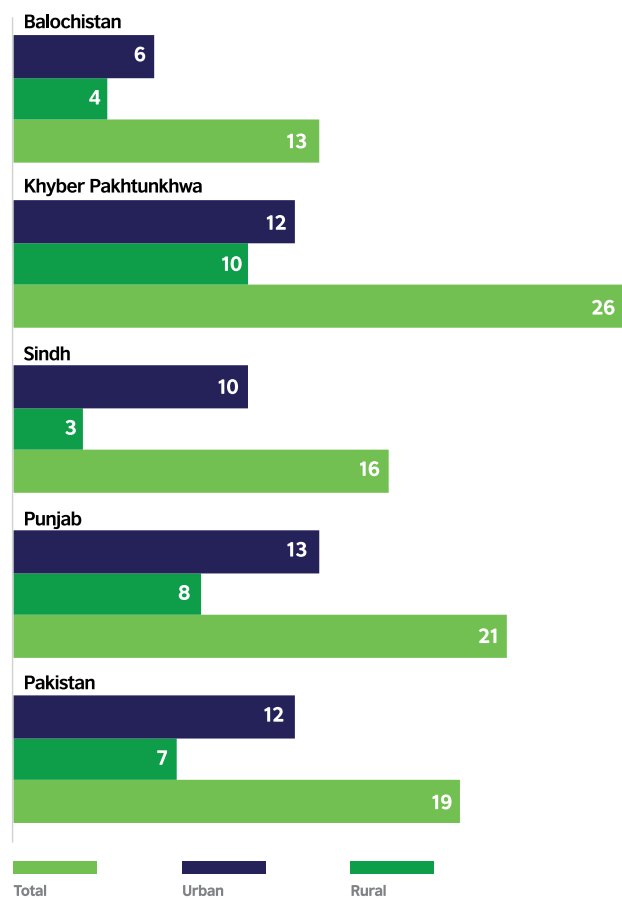
[Male- 16-19 YOA-B-Rajanpur Urban]

Since the integration of technology into the daily lives of young participants, diverse changes have been reported across various spheres. Technology has revolutionised communication, enabling instant connectivity with people around the world through smartphones and social media platforms. This has allowed for seamless communication and connectivity with friends and family in different cities or countries, overcoming geographical barriers. Remote work and virtual meetings now provide flexibility, cost-effectiveness, and accessibility, enhancing professional communication. Moreover, online classes offered by colleges and universities have transformed traditional learning methods, although nationwide connectivity issues exist, particularly in rural areas of Pakistan.

When the participants were inquired about the awareness of various gadgets; smartphones, followed by laptops and desktops were reported. The prevalence of smartphones was reported to increase

during the 2019 pandemic, making them the most commonly used devices. Meanwhile, laptops and desktops were increasingly encouraged for use by teachers in colleges and universities. The widespread utilisation of smartphones was apparent across both urban and rural areas. However, the limited availability of laptops and desktops was predominantly observed in urban settings. Literature review showed that currently, approximately 12 percent of households possess at least one digital device, such as a computer, laptop, or tablet. This percentage is higher in urban areas (19 percent) compared to rural areas (7 percent), highlighting the disparity in digital access between different regions. (see figure 8)

Figure 8: Household with at least one facility from computer/ laptop/ tablet



Participants were also probed about the issues related to technology usage during focus group discussions (FGDs). Youngsters in both urban and rural areas of Pakistan encountered difficulties in adapting to the use of smartphones, desktops, or laptops, however, no incident of formal training or education provided for their usage was reported. They acquired the skills to operate digital devices by self-exploration, modelling the behaviours of their peers by engaging in discussions with siblings or cousins or by surfing on YouTube.

“In the beginning, there were difficulties, like I didn’t understand Gmail, but then I asked my cousin, and he taught me. Besides that, anything I don’t understand, I can find out from YouTube.”

[FGD-Males-16-19 YOA-Larkana Rural]

Digital transformation of Education: A global perspective

Around the world, countries are rapidly embracing the opportunity to digitalise their education systems. Many nations are adopting national-level strategies and concerted efforts to build comprehensive digital ecosystems. While digital communication was once seen as a luxury, the digital age has revolutionized how people communicate, seek assistance, access information, and learn. Information and Communication Technology (ICT) as it impacts nearly every aspect of life, from work and social interactions to learning and recreation. Today’s youth have unprecedented access to the internet through various devices, including computers, laptops, tablets, and mobile phones.

Digital Education in Pakistan

In Pakistan, the development of a digital education system is still in its early stages. Programmes initiated by the corporate sector, funding organisations, and donor agencies are gradually gaining public acceptance. On the governmental side, both federal and provincial governments are taking steps to implement digital education initiatives in local universities and educational institutions.

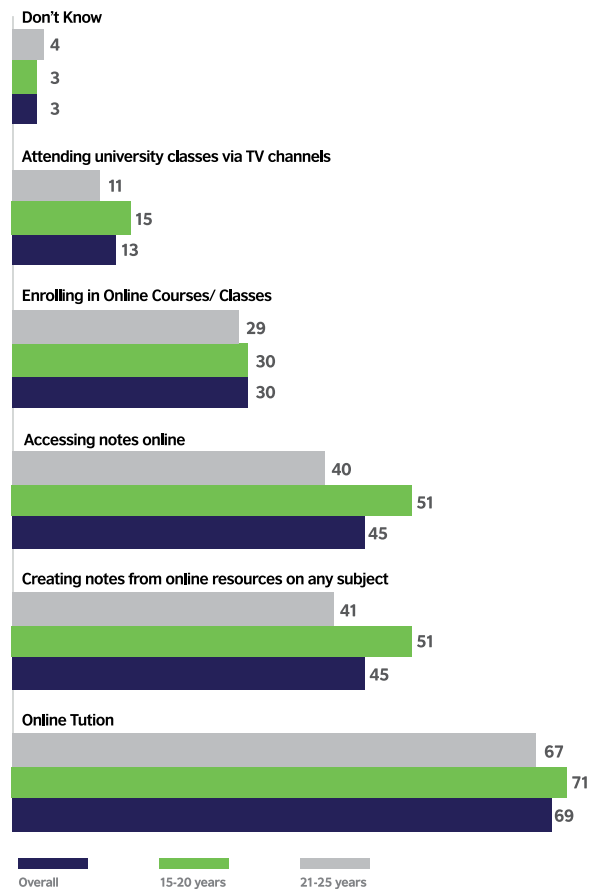
The Higher Education Commission (HEC) aims to transform Pakistani universities into Smart Universities,

ultimately fostering Smart Education. The initial phase of this transformation involves the Smart Bags initiative, which provides students with laptops. The subsequent phase focuses on creating Smart Classrooms and integrating ICT into the educational framework.

Young participants were also asked about the spontaneous associations with digital education. Broadly speaking, over two-thirds of respondents (69%) indicated that digital education brings online tutoring to mind while nearly half of the respondents (45%) mentioned the practices of making notes from online materials and accessing notes online.

Among school and college going individuals, 51% respondents against 41% in working professionals associated digital education with creating notes from online resources, 51% respondents against 40% in working professionals associated digital education with accessing notes online, 15% respondents against 11% in working professionals associated digital education with attending classes via university TV channels. (See figure 9)

Figure 9: Digital education – spontaneous association



Participants during focus group discussions (FGDs) informed that the traditional educational institutions faced closures and restrictions due to the pandemic of Covid-19 which led to the usage of online resources, virtual classrooms, and digital learning platforms by majority of the educational institutes. This shift towards digital learning was attributed to several factors. The necessity for remote learning has grown, driven by the need to ensure uninterrupted education during crisis such as pandemics or natural disasters.

This shift allowed educational institutions to maintain continuity in learning despite physical restrictions. Additionally, the overall availability of internet access and smartphones has facilitated the adoption of digital learning, enabling students to access educational resources and participate in online classes from virtually anywhere.

Furthermore, most educational institutions were identified to be embracing digital learning tools and platforms to enhance teaching and learning experiences. These tools range from virtual classrooms to interactive multimedia resources and online assessments, streamlining educational delivery, promoting engagement, and accommodating diverse learning styles.

Despite the increasing trend of utilizing technology for educational purposes, participants in primary research expressed a variety of perspectives regarding its impact. Many view technology as a valuable tool that

enhances learning experiences. They highlighted its benefits in facilitating access to educational resources, promoting interactive learning, and fostering skills relevant to the digital age. However, numerous participants have voiced concerns or scepticism regarding its effectiveness. They articulated worries about potential drawbacks, including excessive screen time, distractions, unequal access to technology, or the erosion of traditional teaching methods.

When inquired about the benefits of learning through digital mediums, nearly two-thirds of participants (63%) consider remote learning as the primary feature of digital education. Whilst, 54% highlighted online brainstorming (idea exploration), 53% emphasized acquiring reliable information through online platforms, and 52% mentioned increased opportunities for self-learning. Approximately one-third of participants (41%, 27%, and 25%) desired the expansion of research opportunities, access to expert mentorship, and the ease of accessing learning materials on the internet, respectively. A smaller group (11%) mentioned the enhancement of creativity.

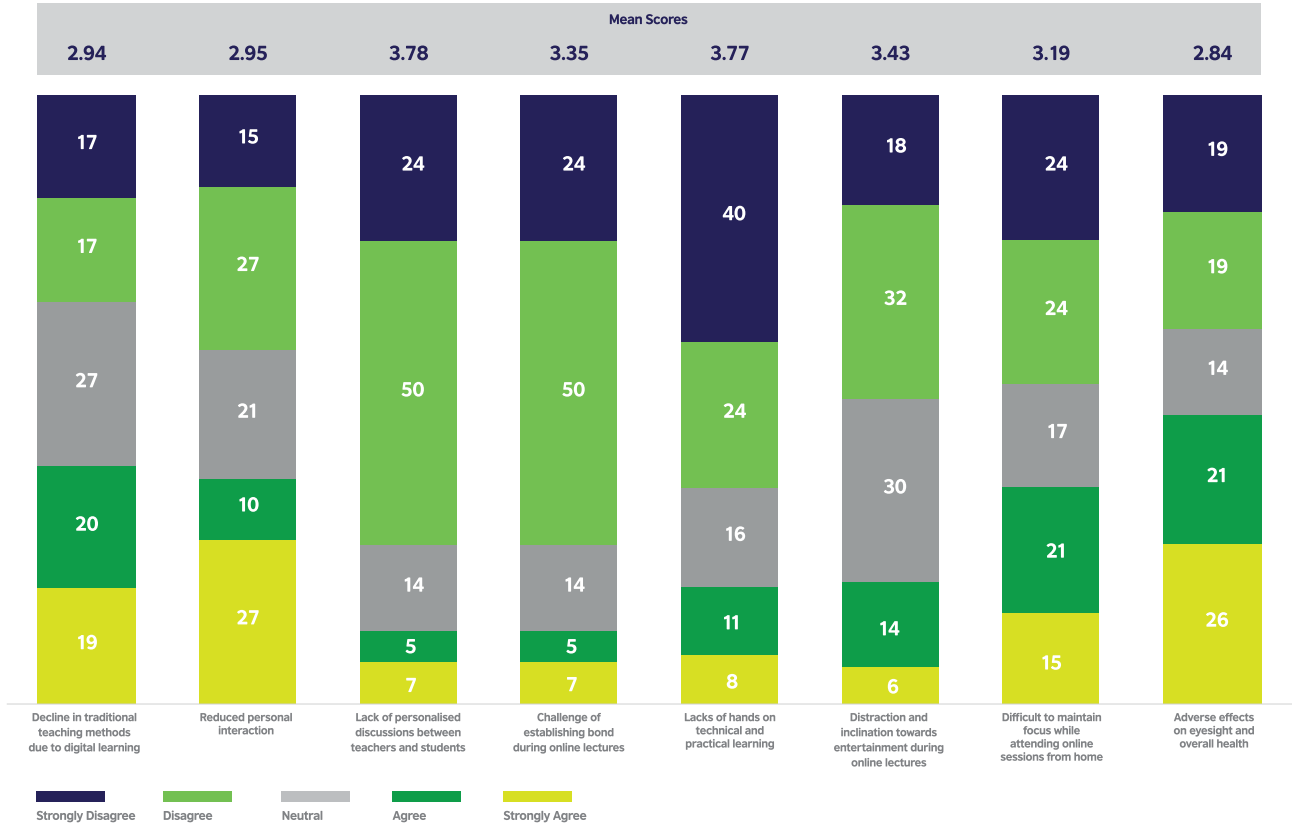
Among College-going individuals, 48% respondents mentioned particularly the expansion of research opportunities more than university students and working professionals in 39% respondents mentioned the same. In working professionals, 30% respondents indicated that access to expert mentorship compared to school-going individuals where 22% of respondents mentioned same (see table 2)

Table 2: Advantages of digital education

		Online classes can be taken at home	Discovering fresh ideas	Increasing acquisition of information	Self-learning opportunities are more	Research opportunities are more	More opportunities for connecting with experts	Convenient accessibility to educational materials online	Fosters creativity	Don't know
Overall	Total	63%	54%	53%	52%	41%	27%	25%	11%	3%
Age Group	15-17	67%	56%	54%	55%	39%	22%	21%	7%	3%
	18-20	62%	59%	56%	50%	48%	26%	24%	11%	4%
	21-25	61%	52%	52%	51%	39%	30%	27%	12%	3%

When participants were asked about disadvantages of digital education on agree disagree scale, 74% agreed that due to the modern learning methods one-to-one interaction discussion between the teacher and the student is reduced, 64% participants informed that few subjects that needs laboratory can be difficult, 53% participants agree that in online lecture, bonding cannot be established, 50% participants stated that online leisure and entertainment options appeal more to the users compared to informative content. (see figure 10)

Figure 10: Disadvantages of digital education



Transitioning to digital learning methods was reported as having drawbacks from a learning perspective for students. One central concern was the loss of traditional teaching methods. Many participants expressed that digital learning environment lack face-to-face interaction between students and teachers, leading to feelings of isolation or detachment. Immediate feedback and clarity on doubts during lectures and community discussions were also reported to be compromised. Additionally, some subjects, such as science experiments, art projects, or hands-on technical training, greatly benefit from hands-on experiences and practical demonstrations, which were considered challenging to replicate in digital sphere. Technological barriers, including a lack of access to reliable internet connections, further

intensify disparities in learning opportunities. Head of Operations for Youth Development in Balochistan during KII, identified that electricity and signal issues create hinderance in the usage of digital technologies in areas like Balochistan, especially in interior regions. Distractions and multitasking were also prominent concerns, as digital platforms often come with various distractions such as social media and notifications, diverting students’ attention away from learning tasks and hindering deep engagement with educational content.

Young participants also identified the disparities in access to technology contribute to unequal learning opportunities among students. According to them economic status plays a crucial role, as lower socioeconomic classes may face difficulties affording

electronic gadgets necessary for digital learning. Varying levels of digital literacy also impact students' ability to effectively utilise technology for educational purposes.

Many participants reported that young students from lower socioeconomic classes are more inclined to use technology for recreational activities rather than educational or productive purposes. Peers and cultural trends play an essential role in shaping this preference, with entertainment content often being more appealing due to its immediate gratification and social interaction. Although, minority may struggle with basic tasks while using technology for education, such as managing settings or customizing preferences within digital applications or devices.

“Online classes do have the advantage that your studies aren’t disrupted in that way, but they aren’t as effective because in face-to-face lectures, you form a bond with the teachers. There’s an influence from the teachers, which makes you more eager to learn and strive to advance. This element is missing in online lectures.”

[FGD-Males-20-24 YOA-Nawabshah Rural]

“The school never did anything for online classes, and they wouldn’t even let us go to the computer lab at school. It was always locked.”

[FGD-Females-16-19 YOA-Kasur Rural]

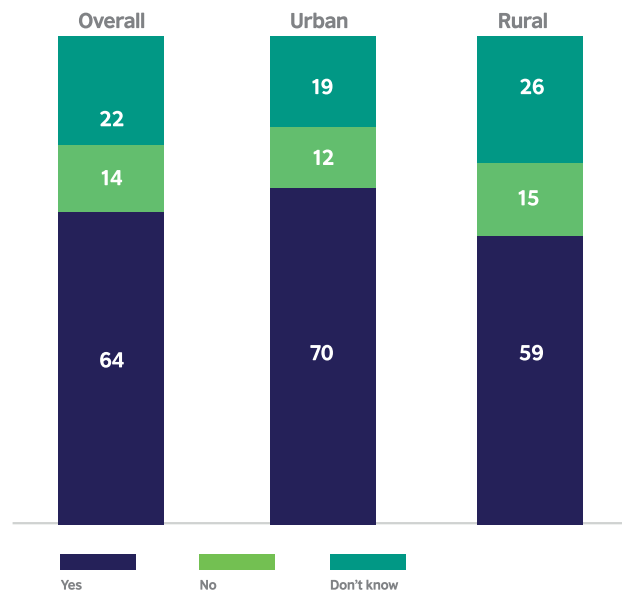
Some stakeholders highlighted the concern of inadequate oversight within educational institutes, particularly in rural areas of Pakistan. They cited that lack of supervision has resulted in smaller schools neglecting to provide computer classes or labs; a situation deemed unacceptable by these stakeholders. Similarly, the existence of policy gaps was also observed as stakeholders accentuated the absence of coherent and consistent government policies, noting that these policies tend to fluctuate with each change in government without a thorough assessment of the merits and impacts of preceding policies. This

inconsistency leads to confusion, inefficiency, and ineffectiveness in addressing societal needs and achieving long-term goals.

When participants were surveyed about whether schools, colleges, and universities should incorporate a digital education system into their curriculum, nearly two-thirds (64%) responded affirmatively, expressing that digital education should indeed be included. Conversely, slightly over one-tenth (14%) indicated disagreement, suggesting it should not be incorporated, while approximately one-fifth (22%) remained undecided on the matter.

Urban areas show a higher rate of support for the integration of digital education into academic curricula by 70% of respondents compared to rural areas by 59% respondents (see figure 11)

Figure 11: Integrating digital education into academic curricula



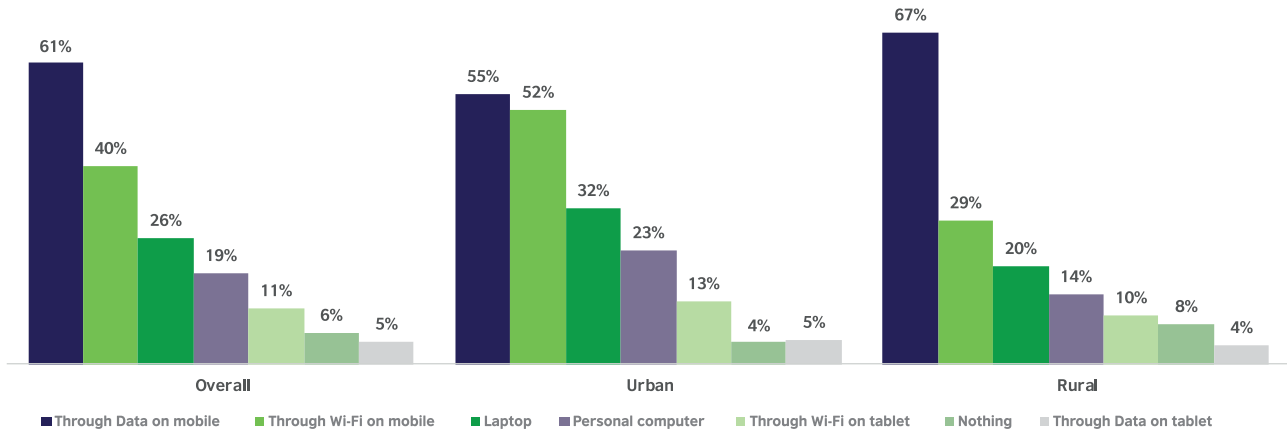
When participants were queried about the tools they employ for digital education, the findings reveal that 61% of respondents utilise data services on their cell phones for digital learning, while 40% rely on Wi-Fi connections. Laptop usage is represented by 26%, Personal Computers by 19%, and tablets by 11%, aiding in understanding and practicing digital learning concepts.

Among urban residents, 52% respondents rely on Wi-Fi connections against 29% in rural, 32% respondents

mentioned using Laptop against 20% in rural areas, 23% respondents mentioned using Personal computer against 14% in rural areas,

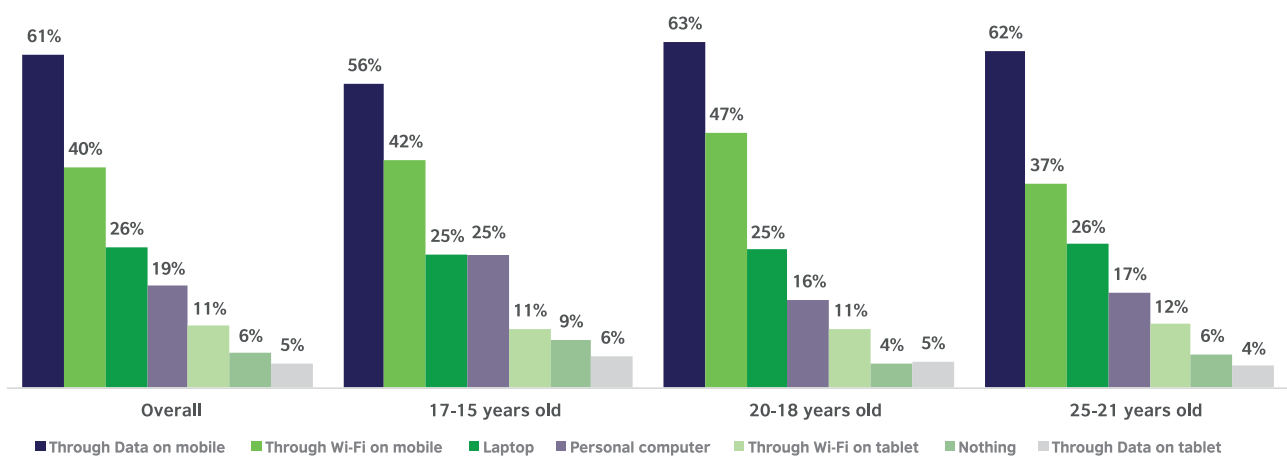
Among rural residents, 67% of respondents utilise data services on their cell phones for digital learning against 55% in urban areas. (see figure 12)

Figure 12: Utilizing tools for digital education



Among school-going individuals, 25% respondents using Personal computer against 16% in college going individuals and 17% in working professionals. In College-going individuals, 47% respondents rely on Wi-Fi connections against 37% in working professionals. (see figure 13)

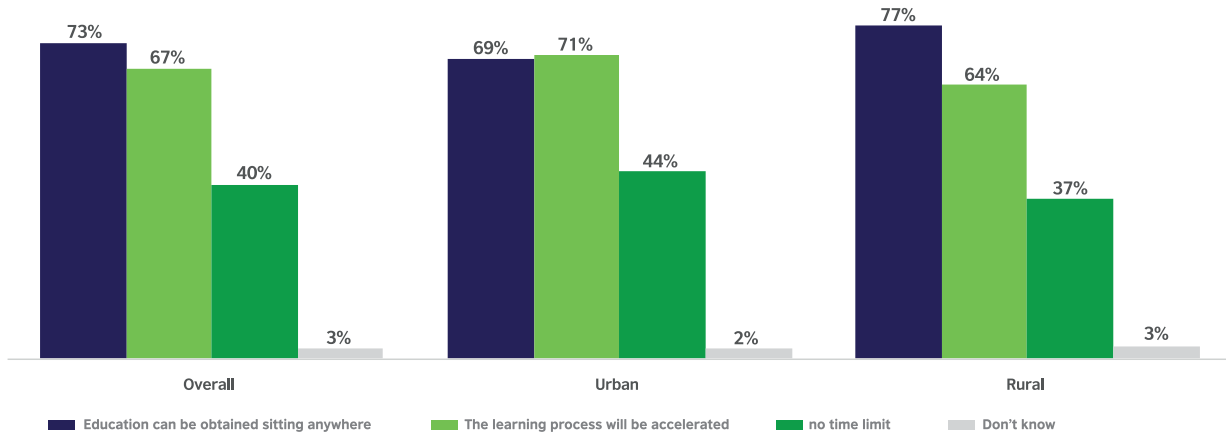
Figure 13: Utilising tools for digital education



When participants were surveyed about how digital education systems could enhance their learning process, majority (73%) emphasised the ability to acquire education remotely, while two-thirds (67%) highlighted the potential acceleration of the learning process with digital education, and 40% mentioned the absence of time restrictions in their learning process.

Among urban residents, 71% of respondents highlighted the potential acceleration of the learning process with digital education while 64% in rural residents, 44% respondents mentioned the absence of time restrictions in their learning process against 37% in rural residents. In rural, 77% respondents emphasized the ability to acquire education remotely against 69% in urban residents (see figure 14)

Figure 14: Learning amplified through digital education

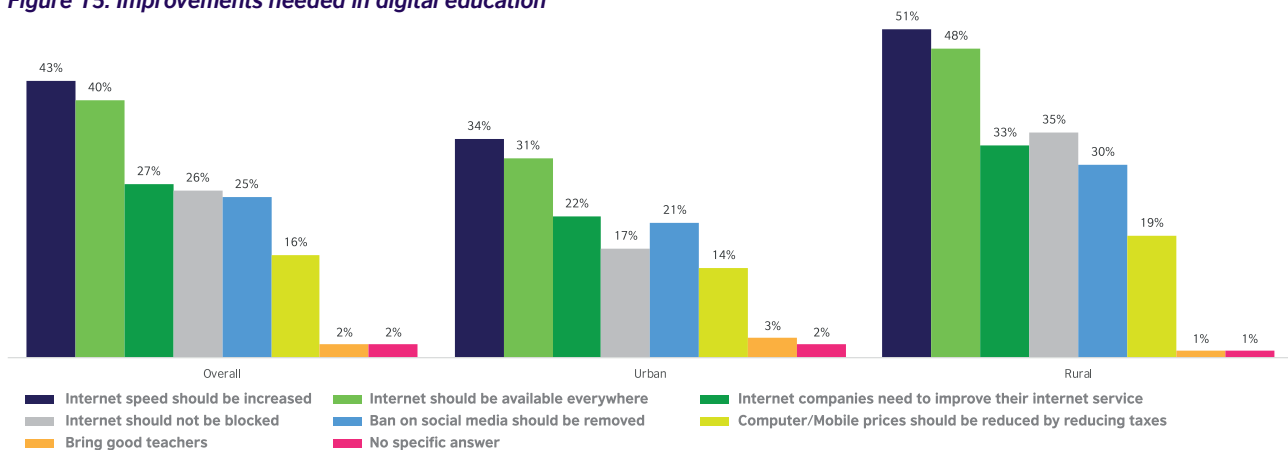


When asked about necessary enhancements in digital education, nearly half of respondents (43%) emphasized the need for prompt resolution of lagging internet speed, while 40% suggested the widespread availability of internet facilities. Participants in minority, 26% expressed the importance of unblocked internet access, and 27% urged internet companies to enhance their services. As, 25% of respondents advocated for the lifting of bans on social media platforms, while 16% highlighted the necessity of reducing taxes to lower computer and mobile prices.

The need for improvements in digital education is

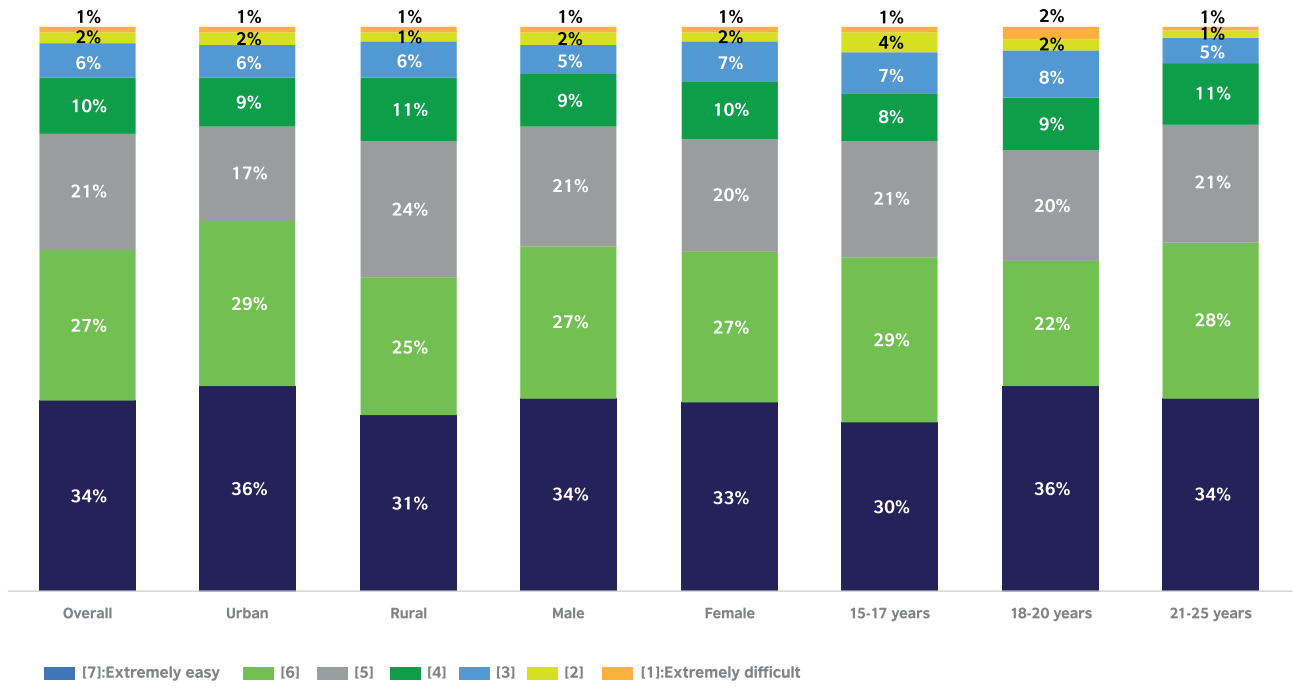
more pronounced in rural areas compared to urban areas as 51% of respondents emphasized the need for prompt resolution of lagging internet speed against 34% in urban areas, 48% of respondents suggested the widespread availability of internet facilities against 31% in urban areas, 35% of respondents expressed the importance of unblocked internet access against 17% in urban areas, 33% of respondents urged internet companies to enhance their services against 22% in urban areas, 30% of respondents advocated for the lifting of bans on social media platforms against 21% in urban areas. (see figure 15)

Figure 15: Improvements needed in digital education



When participants were questioned about the ease of using digital education systems, they were asked to rate it on a scale of 1 to 7, where 1 indicates extremely difficult and 7 represents extremely easy. 8 out of 10 participants, 81% rated digital education as easy to use, while 10% remained neutral, stating it is neither easy nor difficult. Additionally, 9% found it difficult to use digital education systems (see figure 16)

Figure 16: Ease in utilisation of digital education



III. Climate change

Understanding the varied perceptions of climate change across different contexts remains limited despite extensive research on its impacts (Ayeb-Karlsson et al., 2016)¹⁷. Pakistan's diverse geography, which includes coastal plains, deserts, mountains, and agricultural regions (e.g., Sindh, Thar, Punjab, Hunza, Gilgit, and Chitral), necessitated a nuanced approach. By capturing narratives from these varied landscapes, this mapping exercise aimed to shed light on the unique struggles, suffering, and adaptation strategies employed by communities on the frontlines of climate change.

Youth play a crucial role in climate change mitigation and adaptation due to their heightened awareness and lower climate skepticism compared to older generations (Poortinga et al., 2011)¹⁸. This underscores their potential as agents of change in building a more sustainable society. Policy instruments, including social and market-based approaches, effective public policy, and sustainability assessments, can significantly address climate threats (Druckman, 2015)¹⁹. These tools provide strategies for government intervention to promote environmental protection.

Studies indicate a strong willingness among young people to take action on climate change (Boyes et al., 2009)²⁰, highlighting their potential for active engagement in climate solutions. The need for adaptation to climate change was a growing area of discussion (Adger et al., 2009)²¹, emphasizing the necessity for societies to adjust to the changing climate landscape. Challenges exist, however, as citizens of developed nations tend to

contribute more to environmental protection compared to those in developing countries, including Pakistan. This highlighted the need to bridge the gap in environmental action between nations.

Climate change risk perception was heavily influenced by individual risk judgment, making effective communication strategies essential to raise awareness and promote a sense of urgency. Public attitudes towards climate change significantly impacted government policies and individual behaviour (Leombruni, 2015; Myers et al., 2013)²². Understanding public perceptions is vital for developing effective climate action plans. In conclusion, understanding youth perceptions of climate change is considered essential to fostering their engagement in moderation and pragmatic strategies.

Building upon existing research on youth climate change perceptions, the study conducted in Pakistan aimed to achieve clear and essential objectives. Specifically, it sought to uncover youth perceptions of climate change, explore their sense of responsibility, and examine the influence of demographics on climate knowledge.

The tables below present the demographic information of respondents: 55% male and 45% female, with 49% aged 17–20 years and similarly 49% being college students. Additionally, 71% of respondents were from urban areas, and 49% were enrolled in the Intermediate/A-level programme. Upon inquiring about climate change awareness sources and institutional involvement in building campaigns, the following responses were acquired.

17. Ayeb-Karlsson S, Geest KV, Ahmed I, Huq S, Warner K (2016) A people-centred perspective on climate change, environmental stress, and livelihood resilience in Bangladesh. *Sustain Sci* 11(4):679–694

18. Poortinga W, Spence A, Whitmarsh L, Capstick S, Pidgeon NF (2011) Uncertain climate: an investigation into public skepticism about anthropogenic climate change. *Glob Environ Change* 21(3):1015–1024

19. Druckman JN (2015) Eliminating the local warming effect. *Nat Clim Change* 5(3):176–177

20. Boyes E, Skamp K, Stanistreet M (2009) Australian secondary students' views about global warming: beliefs about actions, and willingness to act. *Res Sci Educ* 39(5):661–680

21. Adger WN, Dessai S, Goulden M, Hulme M, Lorenzoni I, Nelson DR et al (2009) Are there social limits to adaptation to climate change? *Clim Change* 93(3):335–354

22. Leombruni LV (2015) How you talk about climate change matters: a communication network perspective on epistemic skepticism and belief strength. *Glob Environ Change* 35:148–161

Table 3²³: Demographic variables

Description of variables	Frequency	Percent
Gender		
Male	62	55
Female	50	45
Age		
14–16	22	20
17–20	55	49
21–23	25	22
24 and above	10	9
Educational status		
School	40	36
College	55	49
Universities	17	15
Educational institution type		
National	45	40
Private	67	60
Area students belong to		
Rural	33	29
Urban	79	71
Degree program students enrolled in		
Matriculation/O-level	13	12
Intermediate/A-level	55	49
BS	34	30
MS/M.Phil.	10	9

In the study, one of the questions was asked to tap youth's perception of what does climate change mean to them. As presented in table 5, almost 50% had identified climate change concerning the change in weather conditions, whereas 13% viewed climate change as a change in climate due to global warming. Further, the results indicated that 12% viewed change in temperature is climate change. About the effects of climate change, participants mentioned, that 60% youth believe that it is because of the global warming. Interestingly, 12% identified the increase in sea level as an agent to climate change, whereas 11% youth believe that rising temperature is also caused by climate change.

Table 4²⁴: Climate change risk perception and youth mainstreaming: Challenges and policy recommendations**Table 2** Respondents awareness about climate change

Items	Responses	Percentage
In what level of the educational institution were you taught about climate change?	School level	13
	College level	21
	University level	29
	Both and school and university	38
Climate change campaigns carried out by the educational institute?	Yes	35
	No	65
Main sources of climate change information?	Internet	29
	Educational institute	35
	Government agencies	4
	NGOs	9
	No source of climate change information	22

23. https://www.researchgate.net/publication/326250543_Climate_Change_Risk_Perception_and_Youth_Mainstreaming_Challenges_and_Policy_Recommendations

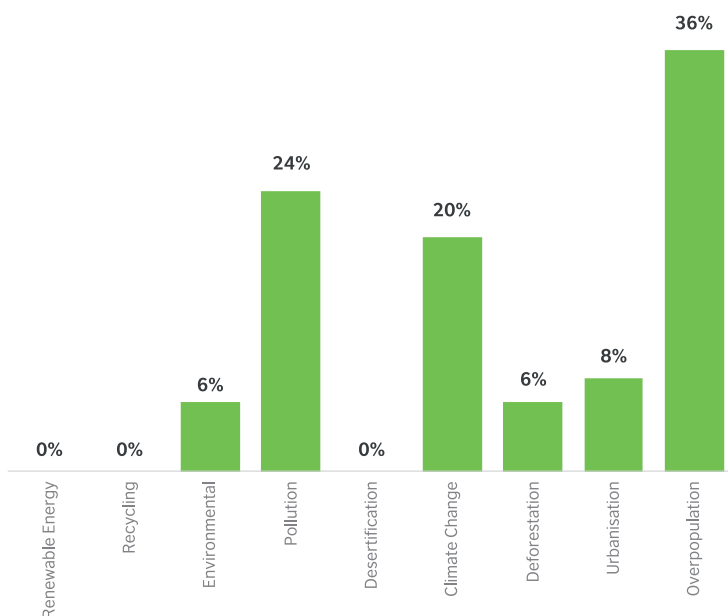
24. 3Earth Systems and Environment | <https://doi.org/10.1007/s41748-018-0058-6>

Table 5²⁵: Individual's perception of climate change

Items	Responses	Percentage
What does climate change mean to you?	Change in temperature	12
	Change in environment	6
	Change in weather condition	50
	Change in climate due to human pollution	10
	Change in climate due to global warming	13
	I do not know	9
What do you think are the effects of climate change?	Sea level rise	12
	Drought	6
	Global warming	60
	Rising temperatures	11
	Increasing intensity and frequency of extreme weather events	9
	None	3

The study, instinctively directed youth to look at their surroundings and environment where they belonged to. Several conclusions were drawn from the findings of this mapping exercise. First, the youth perception on climate change was based upon weather conditions; change in temperature and due to global warming, whereas significant reasons of climate change were the environment and human population. (see figure 17)

Figure 17: Environmental issues



Another study was conducted as part of a project funded by a grant from the National Geographic Society²⁶. For this study, the researchers interviewed a total of 108 respondents, which included 97 community members (78 men and 19 women) and 11 environmental experts (10 men and 1 woman) from across the country. (see table 6)

The research team tried to interview as many women as men, but this was not possible due to the highly patriarchal culture in the study sites. The community members included fishermen, farmers, orchard farmers, pastoralists, school teachers, community health workers and social workers. The participants were selected after consultations with local collaborators from each area, while some were identified during the community interview sessions. It was ensured that each respondent was a native of the area and reflected a diversity of socio-economic backgrounds, livelihood activities and climate change experiences. The methodology employed included a combination of semi-structured interviews and focus group discussions. The open-ended questions in the interviews allowed people to share their stories and lived experiences regarding climate change.

25. 3Earth Systems and Environment | <https://doi.org/10.1007/s41748-018-0058-6>

Table 6: Sustainability science (2021)

Location	District	Province	Number of respondents	Climate stressors
Kakapir village	Karachi	Sindh	7	Cyclones, seawater intrusion, heatwaves, change in rainfall pattern
Mubarak village	Karachi	Sindh	4	Heatwaves, drought
Soomar village	Karachi	Sindh	3	Sea-level rise, heat waves
Keti Bandar	Thatta	Sindh	6	Seawater intrusion, cyclones, change in rainfall pattern
Jamshoro	Jamshoro	Sindh	3	Change in rainfall pattern, floods
Nagarparkar	Tharparkar	Sindh	4	Drought, heat waves, change in rainfall pattern
Umerkot	Umerkot	Sindh	1	Drought, heat waves, change in rainfall pattern
Lake Manchhar	Dadu	Sindh	8	Change in rainfall pattern, heatwaves
Depalpur	Okara	Punjab	10	Heat waves, change in rainfall pattern, flash floods
Bumburet, Kalash valley	Chitral	Khyber-Pakhtunkhwa	10	Heatwaves, GLOF
Booni	Chitral	Khyber-Pakhtunkhwa	3	Change in rainfall pattern, GLOF, heatwaves
Reshun valley	Chitral	Khyber-Pakhtunkhwa	4	GLOF, change in rainfall pattern, flash floods
Sonoghar valley	Chitral	Khyber-Pakhtunkhwa	4	GLOF, heatwaves, change in rainfall pattern
Bagrote valley	Gilgit	Gilgit-Baltistan	3	Change in rainfall pattern, heatwaves, landslides
Badswat	Ghizer	Gilgit-Baltistan	9	GLOF, flash floods
Gilgit	Gilgit	Gilgit-Baltistan	3	Change in rainfall pattern, flash floods
Hassanabad	Hunza	Gilgit-Baltistan	3	GLOF
Karimabad	Hunza	Gilgit-Baltistan	8	Landslides, heatwaves
Passu	Hunza	Gilgit-Baltistan	4	Flash floods, change in rainfall pattern
Total	11 Districts	4 Provinces	97 Respondents	

Conclusively, participants in all study areas had observed the changing weather patterns and reported about the lack of rainfall as well as the changes in temperatures and the onset of seasons in their areas. Observations about the unpredictability of rain were shared by respondents from Punjab highlighting its impacts on harvesting times and crop yields:

“For the past few years, the rain has not come on time and the winds have become more aggressive. This has caused damage to our crops. Before, we used to cut the crop 10-15 days earlier, but the rains got late this year (2019). The rains have really become unpredictable now”

[Hadil Sera, Male, Depalpur, Okara, 28 April 2019]

“Even rainfall patterns have changed. Because of it, now there are different kinds of diseases that affect the local fruits, crops and vegetables”

[Imtiaz Alam, Male, Booni, Chitral, 2 May 2019]

The impacts of the changing weather patterns can also be observed on the reduced quality and yields of crops and delayed harvesting, as mentioned by one of the participants:

“We used to harvest all our wheat in August and September. Now it's delayed because of the weather. The harvest also doesn't ripen properly. We cut and gather it, but the wheat is not of as good quality as before”

[Nargis Iqbal, Female, Passu, Hunza, 7 May 2019]

Farmers' survival depend on the rains and any change in their timing or intensity can jeopardize their livelihoods and plunge them further into a cycle of debt. Precipitation patterns have also changed in the mountainous regions, as described by a participant from Chitral:

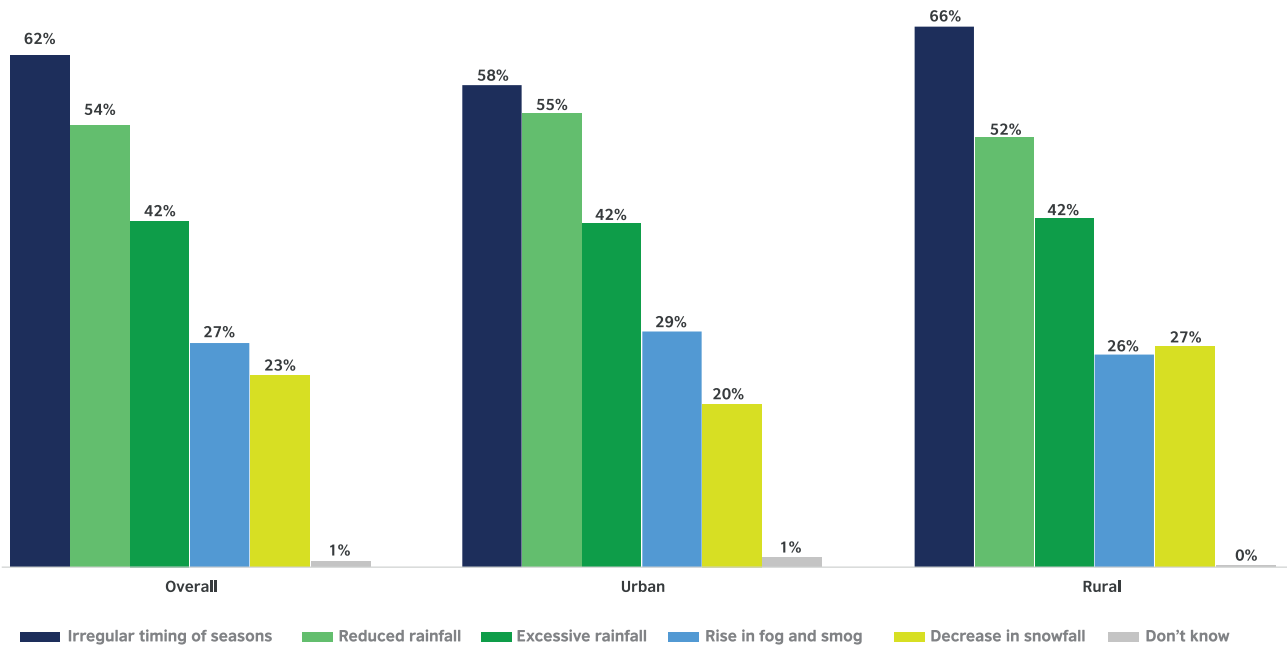
In some areas such as Kalash valley in Chitral, people rely on snowfall and rainfall to replenish water supplies and provide electricity. With reduced or unpredictable precipitation, their water and energy security are at risk.

“If there is no snow by December, we grapple with water shortage here as the springs shrink. After December if there’s less water due to reduced or no snowfall, we also experience electricity shortage and load-shedding as every village depends on small hydropower plants”

[Nazar Gill, Male, Kalash, Chitral, 1 May 2019]

When questioned about climate change; the majority of participants (62%) initially cited irregular delays in seasonal occurrences. Additionally, just over half of respondents (54%) noted a noticeable decrease in rainfall, while (42%) reported unexpected heavy precipitation. Moreover, (27%) mentioned an increase in fog and smog, and (23%) observed a decline in snowfall. Among rural residents, 66% respondents cited irregular delays in seasonal occurrences against 58% in urban residents, 27% respondents observed a decline in snowfall against 20% in urban residents. (see figure 18)

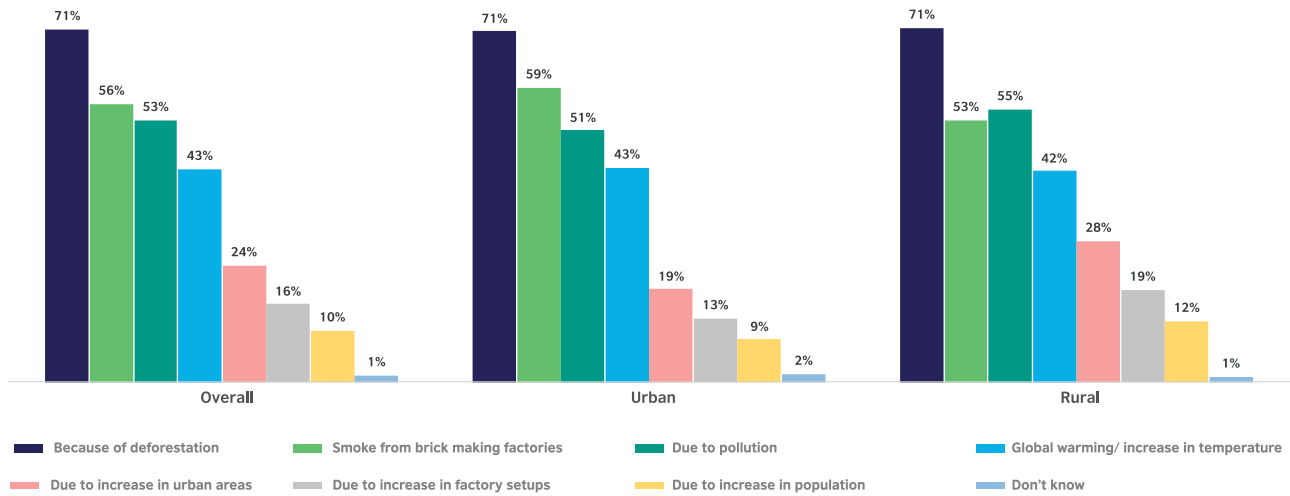
Figure 18: Climate change perception



When participants were queried about the factors behind climate change; nearly three-quarters (71%) cited deforestation as the primary cause. Slightly over half of the respondents (56%) attributed climate change to emissions from factories. Likewise, half of the sample population (53%) mentioned pollution, while 43% identified global warming as the main contributing factor.

Among urban residents, 59% of respondents attributed climate change to emissions from factories against 53% in rural resident. In rural, 28% of respondents mentioned an increase in urban areas as a reason for climate change against 19% in urban areas, 19% respondents mentioned an increase in factory setups as reason for climate change against 13% in urban areas. (See figure 19)

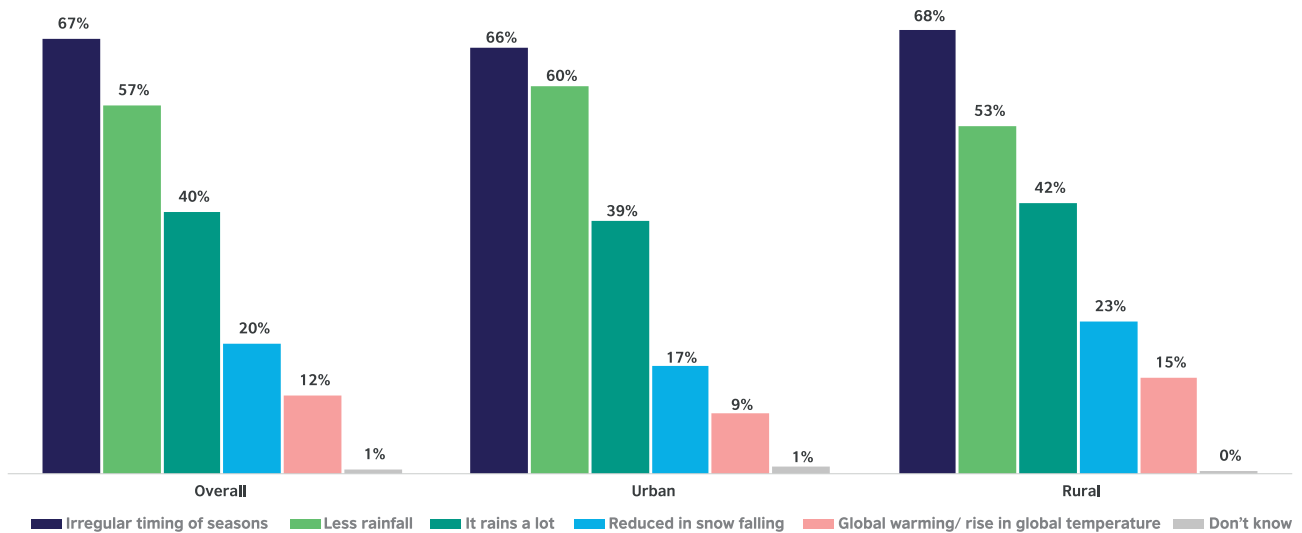
Figure 19: Reasons of climate change



Participants were questioned about recent climate changes; findings indicate that two-thirds of respondents (67%) perceive the most significant change as the irregular timing of seasons, either delayed or arriving early. Over half of the participants (57%) noted a decrease in rainfall as a notable climate change, while 40% cited unexpected heavy rainfall as a prominent shift.

Among urban residents, 60% of respondents noted a decrease in rainfall as a notable climate change against 53% of rural resident. In rural residents, 23% respondents mentioned reduced snowfall against 17% in urban areas, 15% of respondents mentioned the rise in global warming against 9% in urban areas. (see figure 20)

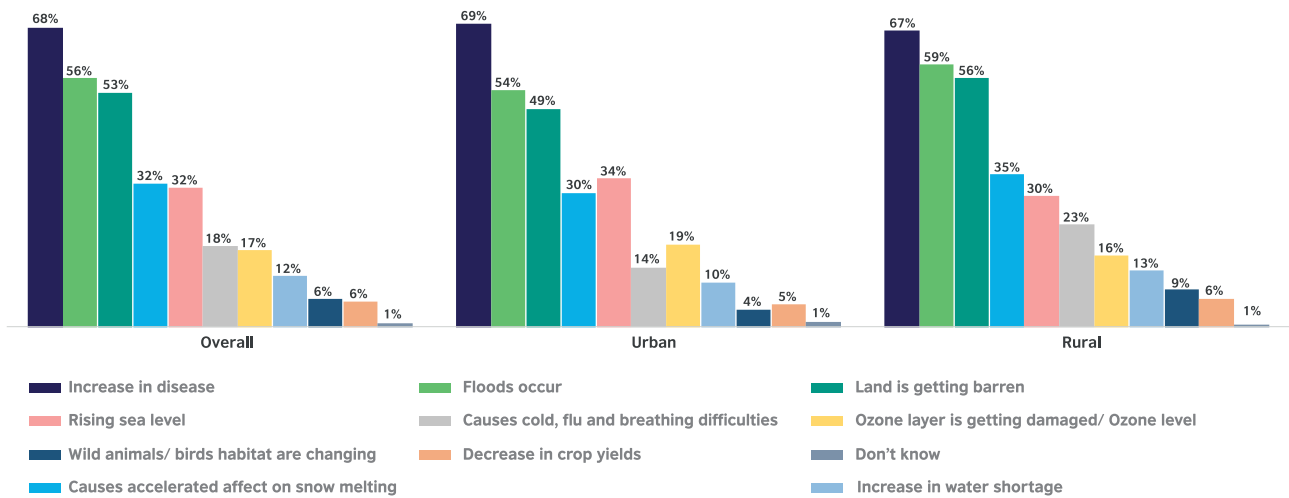
Figure 20: Changes in climate



When questioned about the impacts of recent climate change on the environment; participants were keenly aware of its effects. Nearly 68% of them pointed out spike in disease occurrence as a direct consequence. Floods were cited by 56% of respondents, while 53% highlighted the problem of land degradation due to climate change. Additionally, around two-fifths of participants (18% and 17%) noted an increase in diseases like flu and damage to the ozone layer, respectively. Furthermore, 32% of respondents observed snow melting and rising sea levels as evident outcomes of climate change.

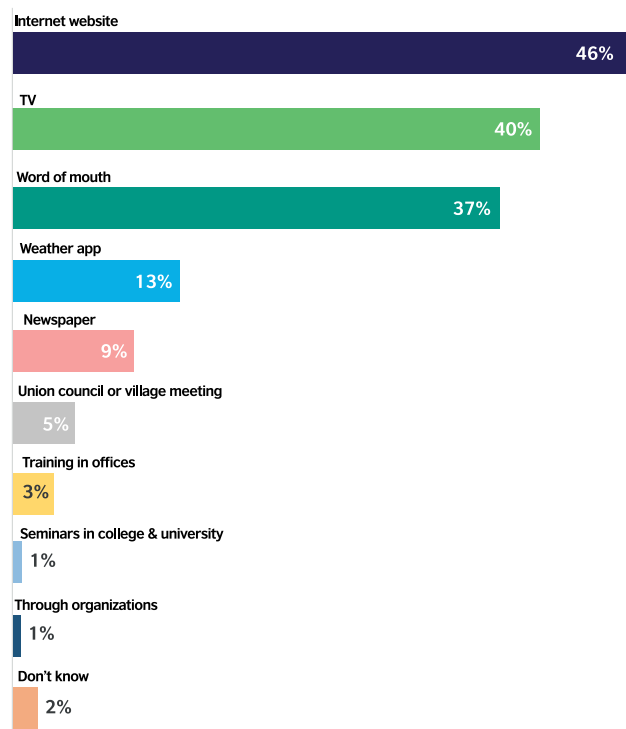
Among rural residents, 56% of respondents highlighted the problem of land degradation due to climate change against 49% in urban areas, and 23% of respondents noted an increase in diseases like flu against 14% in urban areas, (see figure 21)

Figure 21: Effects of climate change



When questioned about their primary sources of information regarding climate change It was discovered that nearly half of the respondents (46%) identified internet websites as their main source, while 40% mentioned television. Additionally, 37% stated that word of mouth to gain knowledge and understanding of climate change dynamics. A small proportion of respondents (13%) cited weather apps as their source of information. (see figure 22)

Figure 22: Sources of information of climate change



When asked about what actions the government should take to address the effects of climate change; participants emphasized the need for a proactive approach. Seven out of ten respondents (70%) suggested constructing dams to conserve water, while 57% advocated for adopting precautionary measures. Half of the respondents (50%) recommended discouraging excessive construction along riversides, and 46% proposed imposing fines on institutions or companies contributing to pollution. Additionally, 42% highlighted the importance of reducing air pollution, while 36% emphasized the significance of protecting riverbanks.

Among rural residents, 50% respondents stressed the importance of imposing fines on institutions or companies that contribute to pollution against 42% in urban, 45% respondents highlighted the importance of reducing air pollution against 38% in urban, 23% respondents mentioned tree plantation against 14% in urban.

Among males, 60% respondents advocated for adopting precautionary measures against 54% in females, 54% respondents recommended discouraging excessive construction along riversides against 46% in females, 52% respondents stressed the importance of imposing fines on institutions or companies that contribute to pollution against 40% in females. (see table 7)

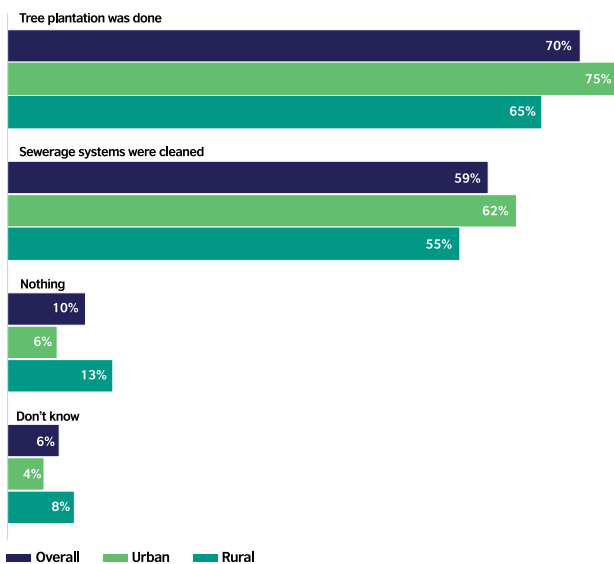
Table 7: Government action plan against climate effects

		Government should build dams to reserve water	Precautions should be taken	Discourage settlements near riverbanks	The companies spreading pollution should be fined	Reduce air pollution	Protection should be built on the sides of the river	Increase tree plantation	Electric vehicle/ Motorbikes	Don't know
Overall	Total	70%	57%	50%	46%	42%	36%	19%	6%	1%
Locality	Urban	70%	57%	50%	42%	38%	35%	14%	4%	2%
	Rural	70%	56%	50%	50%	45%	36%	23%	8%	0%
Gender	Male	73%	60%	54%	52%	43%	39%	19%	6%	0%
	Female	68%	54%	46%	40%	41%	33%	19%	6%	2%

When asked about climate change mitigation efforts in their area, nearly three-quarters of respondents (70%) reported tree plantation initiatives, while 59% noted sewerage cleaning activities. One-tenth of respondents stated that no actions have been undertaken in their area, and 6% were unaware of any such initiatives.

Among urban residents, 75% respondents reported tree plantation initiatives against 65% in rural residents, 62% of respondents noted sewerage cleaning activities against 55% in rural residents. (see figure 23)

Figure 23: Local practices to address climate change



The participants were asked about the climate change during focus group discussions. The responses showed that the young participants were well informed about the prevalent events and issues concerning climate change. The awareness was stemmed from personal observations, community dialogues and exposure to information on social media. According to young participants the climate change has significantly affected Pakistan, influencing its weather patterns, agriculture, water resources, and overall environment.

The young participants were inquired about the climate change impacts. The analysis of participants' responses regarding climate change impacts revealed several key findings. Firstly, there was a strong recognition of the role of temperature variations, including rising temperatures, extended seasons, and heatwaves, in contributing to climate change, indicative of the broader effects of global warming. Additionally, stakeholders from climate control departments highlighted the impact of melting glaciers on Pakistan's rivers and coastal regions, leading to rising sea levels. Furthermore, alterations in rainfall patterns, such as intense precipitation events observed in specific

regions, significantly affect various areas, influencing water resources, agriculture, and flooding risks. The uptick in reported illnesses, including those related to heat or cold exposure and water-borne diseases, underscores the health impacts of climate change on the general population.

Participants also noted the considerable impact of climate change on crop yields and agricultural productivity, attributed to erratic weather patterns disrupting planting seasons and hindering crop growth, ultimately contributing to food insecurity. Moreover, changes in rainfall patterns were identified as causing water stress in numerous provinces and districts, posing challenges for meeting water demands across various sectors. Finally, participants emphasised the observable effects of climate change on natural environments, with shifts in vegetation, wildlife habitats, and biodiversity highlighting the disruption of ecological balance and the vulnerability of ecosystems. Overall, these findings underscore the urgency of addressing climate change to protect both human health and the integrity of natural ecosystems.

“The weather isn't like it used to be. For instance, winter lasts very long now and doesn't start properly. Then suddenly, when it's time for winter to end, it becomes very intense. The same thing happens in summer. Previously, it used to snow in winter in our Swat, but now it doesn't, due to these climate changes.”

[Male-16-19- A-Swat Rural]

“Nowadays, people fall sick frequently. Some have breathing problems, while others suffer from persistent colds. We hear about new diseases all the time.”

[Male-20-24-BC-Pishin Urban]

Participants were inquired about the factors that influence these changes in climate and a consensus regarding the significant contributions of human-induced factors to climate change was documented. Specifically, the factors of deforestation, urbanisation, industrialisation, and population growth were identified as key drivers of environmental degradation and subsequent climate change impacts.

Deforestation emerged as a central concern among the majority of participants and stakeholders. They emphasized its pivotal role in aggravating climate change and associated consequences. The removal of trees, whether for urban expansion or as a source of heat, was noted as a direct contributor to heightened risks of flooding and increased pollution levels. This observation underscored the interconnectedness of deforestation with various environmental hazards, including altered water cycles and compromised air quality.

The recognition of deforestation as a significant driver of climate change reflects an understanding of its broader implications beyond carbon emissions. Participants acknowledged the intricate relationship between forest ecosystems and climate regulation, highlighting the importance of preserving and restoring forested areas as a climate mitigation strategy.

The perspective shared by some males in Mansehra and Swat (KPK) concisely outlined the relationship between population growth and environmental degradation also, particularly in terms of increased pressure on natural ecosystems and consequent deforestation. Population growth was understood as directly translating to heightened demand for resources, energy, and land. As communities expand, a greater need for agricultural land, housing, and infrastructure increases, often leading to the clearing of forests and other natural habitats. This process exaggerates deforestation, which not only diminishes biodiversity but also disrupts vital ecosystem services such as carbon sequestration and water regulation.

“The extensive tree cutting by people has caused a lot of harm. Trees are essential for maintaining environmental balance, but we have brought this damage upon ourselves by cutting down so many trees.”

[Female-20-24-A-Gujranwala Urban]

Recognition of industrial emissions was also marked as a substantial contributor to the country's carbon footprint underscores a crucial understanding of the environmental and public health ramifications. Participants' acknowledgment of the link between industrial emissions and phenomena like smog, water-borne diseases, and respiratory illnesses directed toward their comprehensive awareness of the multifaceted impacts of industrial activities. Industrial emissions not only intensify climate change by adding to the overall carbon footprint but also directly degrade air and water quality. The formation of smog due to industrial pollutants affects visibility and results in serious health risks, particularly respiratory ailments.

Additionally, contaminants discharged into water bodies from industrial sources contribute to water-borne diseases and ecological disruption. This called for the need to emphasize the pressing need for robust measures to curb industrial emissions and mitigate their adverse effects. Implementing stringent regulations, investing in cleaner technologies, and promoting sustainable industrial practices are imperative steps toward addressing both environmental degradation and public health concerns associated with industrial emissions.

“The areas with factories release a lot of smoke, and these factories also dump their waste into the water. There is no proper system in place, so people are bound to get sick. For example, there are so many news reports about smog in Lahore, and because of this, people develop respiratory diseases.”

[Female-16-19-A-Quetta Urban]

Participants were then asked about the vulnerable districts of Pakistan due to climate change. The districts were identified by the participants based on their geographical status and current vulnerability status. Faisalabad (Punjab), is characterized by extreme temperatures, experiencing hot summers and relatively cold winters. Participants quoted that climate change has intensified heat waves, resulting in adverse health effects and increased energy demand for cooling purposes. Common concerns cited by the participants included heat stress that has negatively impacted agricultural

productivity and the health of livestock, thereby affecting the local economy.

Likewise, known for its industrial activities, particularly textile manufacturing, which contribute to air pollution in the region, poor air quality has significant health impacts on the population, particularly vulnerable groups such as children and the elderly. The presence of pollutants in the air lead to respiratory illnesses and other health complications, posing a serious public health concern. Lahore, notorious for its severe air pollution, especially during the winter months when smog levels spike. This pollution was primarily attributed to a combination of vehicular emissions and industrial activities. The resultant smog not only affect air quality but also altered weather patterns and intensified temperature inversions, leading to adverse health effects for the population.

Youth participants from Khyber Pakhtunkhwa (KPK) and Punjab identified Swat Valley susceptible to flash floods and landslides, particularly during the monsoon season. Factors contributing to this vulnerability included the region's steep terrain, deforestation, and high precipitation intensity. With the increasing impacts of climate change, there has been a rise in the frequency and intensity of extreme rainfall events, further heightening the risk of flash floods and landslides. These hazards increase the threats to human life, infrastructure, and livelihoods, particularly for communities residing in hazard-prone areas.

Nonetheless, youth in Quetta shared the sentiment that the city's limited drainage infrastructure struggle to manage the sudden influx of water during rainfall events. The poorly designed or inadequate drainage systems often result in localized flooding, especially in low-lying areas and regions with insufficient stormwater management. This flooding specifies safety risks for residents, including students and teachers, making it unsafe to travel to and from school, resulting in school closures may occur during periods of heavy rainfall. Hyderabad city participants mentioned their concerns about the widespread municipal solid waste, including household waste, and the unsatisfactory waste management practices prevalent in the district. Open dumping and burning of waste were cited as common practices in various Punjab districts, contributing to land pollution and releasing harmful pollutants into the environment. These pollutants pose health hazards to residents, resulting in respiratory illnesses and other health concerns.

“In Swat, there are frequent floods, causing damage to people's property. The areas along the riverbanks suffer the most, with homes and livestock being affected. We cut down trees for our own use but do not replant them, which leads to these floods.”

[Male-20-24-BC-Mardan Urban]

“In Quetta, when it rains, schools and colleges close because of the water. Children cannot go to school for many days because there is no proper system to manage it.”

[Female-16-19-BC-Quetta Urban]

Primary research revealed that people in different districts of Pakistan employ various adaptation strategies to cope with the impacts of climate change quoted by the young participants. The sentiment of insufficient government support for climate change adaptation in Pakistan was voiced.

In mountainous areas such as KPK, where traditional farming methods were prevalent, farmers have strategically modified their practices. This involved fine-tuning planting schedules, implementing terracing techniques to combat soil erosion, and improving soil fertility and water retention. In regions facing water scarcity such as KPK, Balochistan, and segments of Punjab, communities were actively employing diverse water management approaches. These initiatives aimed to address the challenge of water shortage and promote sustainable water utilisation. Strategies included drilling boreholes, adopting efficient irrigation methods, and embracing water conservation measures, all intended to bolster resilience against the impacts of climate change.

Youth participants were also engaged in tree-planting initiatives organised at educational institutions and within local communities. These efforts were aimed at combating deforestation and promoting soil stabilisation. Involvement in community-driven local cleanup campaigns was also reported. These initiatives targeted the removal of litter, debris, and waste from streets, parks, waterways, and other communal areas. The overarching goal was to elevate sanitation standards, mitigate pollution, and enhance public health and overall well-being.

“In our village, people now build slightly elevated walls around their fields to protect them from floods. When the floodwaters come, these walls help to some extent in saving the crops.”

[Male-20-24-BC-Mardan Urban]

Young participants from focus group discussions believed that the impacts of climate change were significant and wide-ranging, emphasizing on the importance of addressing climate change-related challenges in Pakistan. While recognizing the importance of addressing these challenges, they also stressed on a perceived gap in government efforts to effectively tackle these issues. They emphasized that volunteer efforts were often the primary means of assisting flood victims, with limited external assistance provided. However, the active involvement of numerous NGOs across various regions in reaching out to vulnerable areas in Pakistan was also registered by many participants. These organisations were identified to be actively involved

in reaching out to vulnerable areas, demonstrating a significant commitment to addressing the challenges posed by climate change.

Young participants proposed several key strategies for addressing climate change and disaster management in Pakistan. They suggested that government teams should appoint community leaders in affected areas to enhance local coordination and response to climate-related challenges. The stakeholders advocated for aggressive tree planting campaigns, led by both the government and university green clubs, to combat rising temperatures and incorporate climate change modules into educational curricula.

In flood-prone regions like KPK and Sindh, there is a need for the construction of dams to control flooding, with some youth groups organizing drills to enhance preparedness. Reconstruction of flood-affected areas, particularly in urban Sindh and rural KPK, was deemed essential for restoring livelihoods and building resilience to future disasters. Lastly, participants stressed the need for transparent and accountable aid distribution mechanisms to ensure international assistance reaches those most in need.

IV. Global citizenship

Green et al. (2007)²⁷ define globalization as the cross-border movement of capital, labour, goods, knowledge, ideas, and information. This concept has been particularly relevant for developing countries like Pakistan, driven by necessity according to Yoganandan (2010)²⁸.

One consequence of globalization is the evolving concept of citizenship. Increased global interconnectedness fosters a broader understanding of what it means to be a citizen, potentially influencing rights and responsibilities associated with citizenship.

Technological advancements play a significant role in shaping global awareness. Easy access to information, including images of disasters around the world, fosters a sense of shared vulnerability and interconnectedness (Torres, 2017)²⁹. This heightened awareness can lead to increased empathy and collective action in response to global suffering.

Holistically in the realm of Global Citizenship, youths' educational and social inclusion remains a global challenge. This is particularly concerning due to the increasing complexity of global issues requiring informed and engaged young people.

The "Gender-Sensitive Global Citizenship and Life Skills Education for Youth" project addresses this challenge. This initiative, supported by Reach Out to Asia Programme (ROTA) of Education Above All Foundation (EAA), equips young people with the tools they need to navigate a globalized world.

The project targets vulnerable youth in Indonesia, Nepal, and Pakistan as these countries face significant

challenges regarding youth inclusion, potentially due to factors like poverty, inequality, and human rights violations.

Pakistan serves as a specific example.³⁰ Pakistani youth struggle with limited access to quality education, unemployment, and a lack of opportunities for meaningful community engagement. These issues are likely compounded by a skills gap in the job market, discrimination, and rural-urban and gender disparities.

The project is being implemented in Pakistan across 34 schools and 4 non-formal education centres in Sukkur district (Sindh) and Jaffarabad district (Balochistan) between 2021-2024. This targeted approach aims to empower vulnerable youth in these specific regions.

Pakistan's most recent national education policy, published in 2009, marks a noteworthy shift in perspective. While maintaining a focus on national identity, the policy now highlights tolerance and justice as its core value (Ministry of Education, Government of Pakistan, 2009)³¹.

The policy outlines twenty aims and objectives, primarily geared towards national development through economic and social advancements. However, the seventh objective presents a particularly substantial development: it defines the purpose of education as fostering "a self-reliant individual, capable of analytical and original thinking, a responsible member of society, and a global citizen"³². This emphasis on individual development and global awareness represents a subtle but important change in Pakistan's educational philosophy.

27. Green, A., 2007. Education, globalisation and development. In: Green, A., Little, A.W., Kamat, S., Oketch, M., Vickers, E. (Eds.), Education and Development in a Global Era: Strategies for 'Successful Globalisation'. DFID, London

28. Yoganandan, G. (2010). Globalization of Pakistan: Lessons for politically unstable countries. *International Journal of Marketing Studies*, 2 (1), 133-9.

29. Torres, C. A. (2017). *Theoretical and empirical foundations of critical global citizenship education* (Vol. 1). New York: Routledge

30. <https://www.aflatoun.org/latest/news/gender-sensitive-global-citizenship-and-life-skills-education-for-youth-in-pakistan/>

31. Ministry of Education, Government of Pakistan (2009) National Education Policy. Online. <http://tinyurl.com/pgw7epn>

32. Ministry of Education, Government of Pakistan (2009) National Education Policy.

Consequently, the concept of global citizenship in a postcolonial nation like Pakistan imparts unique challenges. Traditionally, citizenship in such contexts is often tied exclusively to the nation-state, making the broader concept of global citizenship a complex proposition. Limited opportunities for international interaction and a history marked by turbulence further complicate the fostering of a sense of global connection. However, these limitations don't negate the potential value of global citizenship education in Pakistan. As Peters et al. (2008) argue³³, the terms "global," "citizenship," and "education" are all open to interpretation and adaptation within specific contexts. Therefore, exploring the applicability and appropriateness of global citizenship education for Pakistan requires contextual understanding.

A significant knowledge gap exists regarding research on global citizenship education in Pakistan. While national policy objectives and existing programmes acknowledge the concept, a lack of research hinders a comprehensive understanding of its effectiveness in the Pakistani context. Isolated programmes may have limited impact in such a complex environment.

This study aims to address this gap by encouraging discussions on the design of global citizenship education programmes that are sensitive to the specific realities and complexities of Pakistan. The ultimate goal is to develop programmes that positively influence the lives of those residing within this context.

One of the research studies conducted in Punjab Pakistan consisted of all public-sector general university faculty members in Punjab, Pakistan³⁴. As of December 2019, the Higher Education Commission of Pakistan website listed 36 public universities in Punjab, with 30 categorized as general universities. To achieve a manageable and representative sample size, a two-stage sampling approach was employed. First, ten universities were randomly selected from the pool of 30 public-sector general universities. Second, a convenience sample of 25 faculty members was drawn from each chosen university. This resulted in a final sample size of 250 participants.

The first part of the questionnaire was about personal information of respondents like gender, department and teaching subject etc. The second part of the questionnaire was about teacher's awareness level about global citizenship education (see table 8). The third part of the questionnaire was about teacher's attitude level about global citizenship education. In the fourth part, teachers were inquired about major challenges while implementing global citizenship education. Each part of the questionnaire was divided into subparts. It was revealed that the value of Cronbach Alpha of teacher's awareness level about global citizenship education and global citizenship attitude of university teachers were 0.96 and 0.91, respectively, which showed that the instrument was highly reliable.

-
33. Peters, M.A., Blee, H., and Britton, A. (2008) 'Introduction: Many faces of global civil society: Possible futures for global citizenship'. In Peters, M. A., Britton, A. and Blee, H. (eds) *Global Citizenship Education: Philosophy theory and pedagogy*. Rotterdam: Sense, 1-13.
 34. *Global Citizenship Education: A New Approach to Global Citizenship Development*
 35. https://www.researchgate.net/publication/351687336_Global_Citizenship_Education_in_Pakistan_Awareness_Attitude_and_Challenges?enrichId=rgreq-aa9621fc06819997487fc1d39c456815-XXX&enrichSource=Y292ZXJQYWdIOzM1MTY4NzZmZjUzOxMDI1MDc0NzU2ODY2MDUxQDE2MjE0MDgyNzU3OTc%3D&el=1_x_2&_esc=publicationCoverPdf

Table 8³⁵: Awareness of global citizenship education

S. No	Statements	Yes		No		Don't know	
		N	%	N	%	N	%
1	I heard about the term of global citizenship education.	185	79%	48	20%	2	1%

Tahira Saddiqa, Muhammad Nadeem Anwar and Asma Khizar

S. No	Statements	Yes		No		Don't know	
		N	%	N	%	N	%
2	I can define the global citizenship education.	71	30%	157	67%	7	3%
3	I comprehend the concepts of global citizenship education and the relevant kinds of education	48	20%	175	75%	12	5%
4	I am familiar with the objectives of global citizenship education	24	10%	207	88%	4	2%
5	I know the different aspects of global citizenship education, so I am not prejudice	66	28%	165	70%	4	2%
6	I know the content and themes for global citizenship education.	35	15%	197	84%	3	1%
7	I have plenty of knowledge to put into practice GCE.	40	17%	181	77%	14	6%
8	I am an innovator and creator, so I cope up the global issues.	47	20%	176	75%	12	5%
9	Global citizenship education supports cultural diversity.	176	75%	47	20%	12	5%
10	Global citizenship emphasis respect for human rights.	184	78%	47	20%	4	2%
11	Global citizenship emphasizes gender equality and social justice.	181	77%	47	20%	7	3%

According to the results, a significant majority, 185 (79%), of the participants have heard about the term of global citizenship education, whereas 71 (30%) of the participants correctly answered that they could define global citizenship education. A majority, 175 (75%), of the participants were not in the favour that I comprehend the concept of global citizenship education. A majority, 207 (88%), were not aware of the objectives of global citizenship education. A majority of participants, 165 (70%), knew about different aspects of global citizenship education. A large majority of participants, 197 (84%), had denied the statement that they know the content and themes for global citizenship education. A very small number of participants, 40 (17%) agreed that they have plenty of knowledge to put into practice global citizenship education. A majority, 176 (75%) of the participants, denied the statement that they are innovator and creator, so they cope with the global issues. A large majority of participants, 176 (75%) agreed that global citizenship education supports cultural diversity. A large majority, 184 (78%) and 181 (77%) of participants remarked that global citizenship education underline respect for human rights and that global citizenship education emphasis on gender equality.

In the table 9, results indicated the responses of teachers about major challenges to impart global citizenship education. About 37% of respondents opined about lack of educational environment fostering global citizenship as the biggest challenge to impart global citizenship education. While 33% of respondents

had an opinion in favour of lack of teacher's knowledge, and skills were the second biggest challenge to implement global citizenship education in universities. About 11.9% of respondents pointed out that lack of educational policies is the third biggest challenge to impart global citizenship education in universities. Global citizenship education ambiguous position within the regular curriculum with 4% was considered as a fourth challenge to implement global citizenship education. Only 3% of respondents had raised voice in context of lack of teacher's willingness to impart global citizenship education.

When enquired about their familiarity with the term "global citizenship," approximately three-fourths of the participants (75%) expressed unfamiliarity. Among the remaining 25% who are aware of the term, 18% have only heard about it without much detail, while 6% claimed to be well-informed about global citizenship.

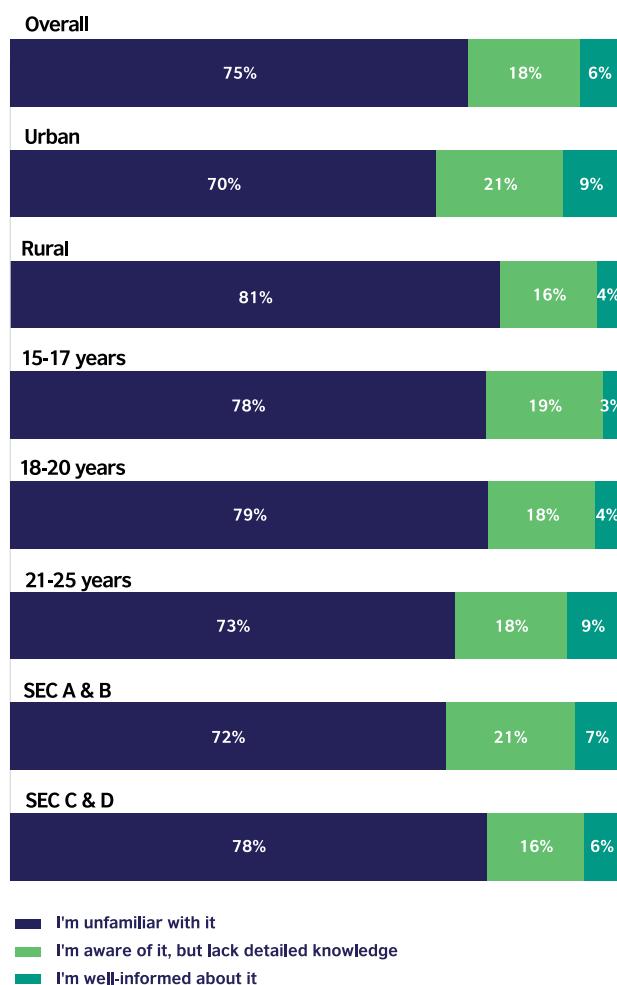
In rural areas, 81% respondents indicated unfamiliarity with global citizenship compared to urban areas where 70% respondents are unfamiliar.

Among university students and working professionals 9% respondents demonstrate awareness of global citizenship compared to school and college students where 4% are aware. Individuals in lower socio-economic classes (SECs) C and D 78% exhibit unfamiliarity with the term global citizenship compared to those in upper SECs A and B where 72% are unfamiliar with global citizenship (see figure 24).

Table 9: Challenges to impart global citizenship education

S. No	Ways of Carrying out GCE	Frequency (n)	Percent (%)
1	By lack of teachers knowledge and skills	77	33
2	By lack of teachers willingness	07	03
3	By lack of suitable teaching materials	06	02
4	By lack of educational environment fostering global citizenship	85	37
5	By lack of educational policies	50	21
6	By global citizenship education ambiguous position within the regular curriculum	10	04

Figure 24: Global citizenship awareness



When participants were asked about the existing global issues, the results revealed that 90% of respondents were aware of the conflict between Palestine and Israel, identifying it as one of the prominent global issues. Similarly, 64% of respondents mentioned the Kashmir issue, 37% cited climate change as an existing contemporary global issue, 33% mentioned racial discrimination, and 26% specified the conflict between Ukraine and Russia.

Among Individuals residing in urban areas 92% of respondents demonstrate awareness of the conflict between Palestine and Israel compared to those in rural areas where 87% respondents are aware. Males exhibit greater awareness of global issues compared to females except for war between Palestine and Israel, and Kashmir issue of which both male and female are evenly aware.

Participants belonging to upper socio-economic classes (SECs) A and B 29% respondents were aware of the conflict between Ukraine and Russia compared to those in lower SECs C and D where 23% respondents were aware. (see table 10)

		War between Palestine and Israel	Kashmir	Climate changes	Discrimination of colour	War between Ukraine and Russia	Pak-Afghan tensions	Yemen tensions	Don't know
Overall	Total	90%	64%	37%	33%	26%	24%	7%	1%
Locality	Urban	92%	67%	36%	34%	27%	22%	7%	1%
	Rural	87%	61%	38%	31%	25%	27%	6%	2%
Gender	Male	90%	62%	42%	37%	38%	28%	10%	0%
	Female	89%	67%	32%	28%	13%	21%	3%	2%
SEC	SEC AB	91%	65%	40%	35%	29%	26%	9%	1%
	SEC CD	89%	64%	35%	31%	23%	23%	5%	2%

When participants were questioned about the role of youth in global citizenship, it was revealed that 80% of respondents recognized the importance of using social media effectively to raise awareness and express opinions, while 64% emphasised the necessity of protesting against oppression. Additionally, 26% of respondents stressed the significance of unity and consensus among youth, while 13% advocated for increased participation of women in issues as a young citizen.

Youth in rural areas demonstrated a stronger inclination towards forming alliances among youth by 30%, engaging females in issues by 16%, and soliciting donations by 13% compared to their urban counterparts where 21%, 9% and 9% respondents mentioned respectively.

Male participants exhibited a greater vocalisation regarding the role of youth in global citizenship compared to females except for ensuring female participation in global issues on which both male and female are equal with 11% and 14% respectively.

Moreover, participants in upper socio-economic strata A and B 83% respondents underlined the appropriate use of social media for awareness and expressing opinions compared to lower SECs with 77% respondents, and 68% mentioned protesting against violence in comparison to lower SECs C and D where 62% mentioned the same. (see table 11)

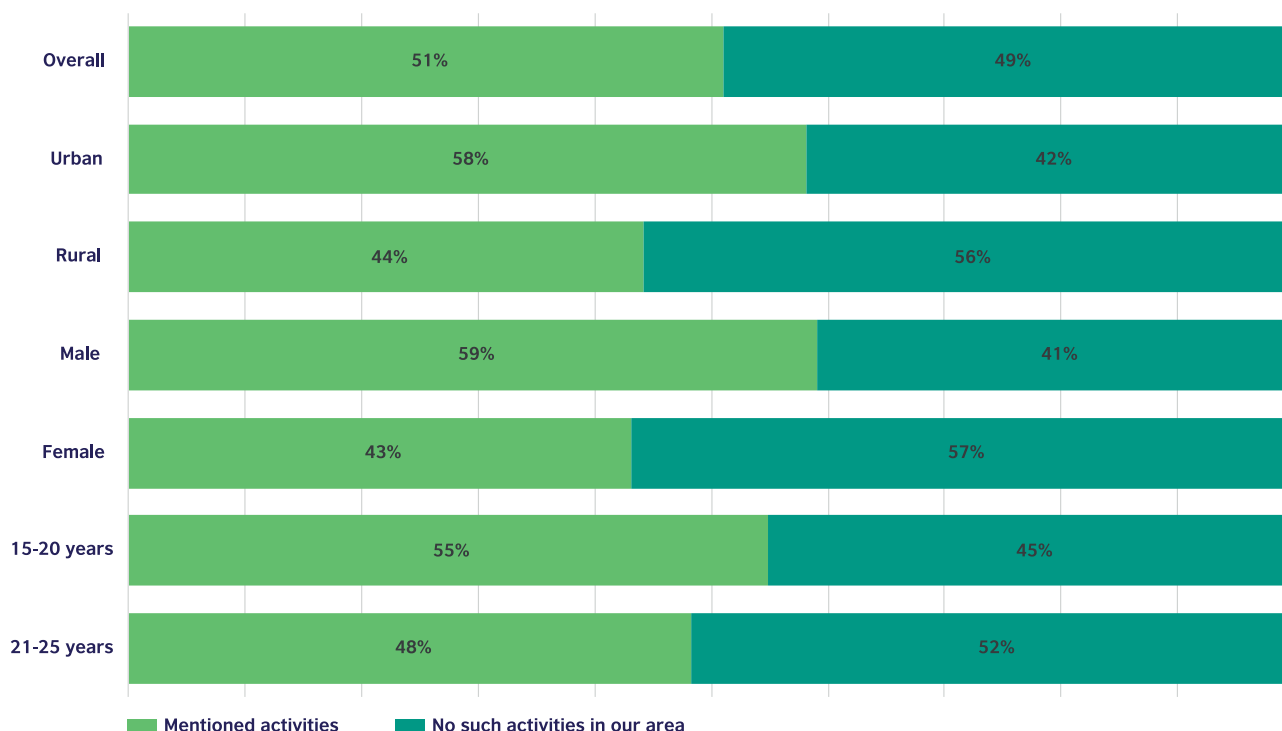
Table 11: Youth role in global citizenship

		Raise voice on social media	Protesting against violence	A consensus among the youth	Ensuring females participation in issues	Soliciting donations	Don't know
Overall	Total	80%	64%	26%	13%	11%	3%
Locality	Urban	81%	62%	21%	9%	9%	2%
	Rural	79%	67%	30%	16%	13%	4%
Gender	Male	86%	69%	28%	11%	14%	1%
	Female	73%	60%	23%	14%	8%	5%
SEC	SEC AB	83%	68%	22%	12%	11%	1%
	SEC CD	77%	62%	28%	13%	11%	5%

When participants were asked about the efforts of NGOs against global issues, nearly half of respondents (49%) stated they no activities conducted by NGO work related to global problems.

In urban areas (42%), In rural areas (56%), among males (41%), among females (57%), among school and college-going individuals (45%), among working professionals (52%) stated they no activities conducted by NGO work related to global problems. (see figure 25)

Figure 25: Activities by NGOs regarding global issues



26 percent of respondents mentioned protests occurring in schools and colleges as a form of activism. Additionally, 23% of respondents indicated knowledge of social work conducted by NGOs, including 21% who cited speeches on social responsibilities delivered by these organisations. 17% of respondents mentioned the organisation of cultural festivals in their area, while 14% mentioned tree plantation initiatives, and 8% referenced cleanliness campaigns.

Among urban residents, 31% of respondents against 21% in rural mentioned protest at school and college level, 29% of respondents against 16% in rural mentioned social work by NGO, 25% of respondents against 18% in rural mentioned conducting speeches on social responsibilities, 20% respondents against 14% in rural mentioned conducting cultural festivals.

34% of male respondents against 17% in females mentioned protest at school and college level, 33% of respondents against 12% in Females mentioned social work by NGO, 30% respondents against 13% of Females mentioned conducting speeches on social responsibilities, 23% respondents against 12% in Females mentioned conducting cultural festivals.

Among school and college-going individuals, 33% of respondents against 20% of working professionals mentioned protest at school and college level, 27% respondents against 20% of working professionals mentioned social work by NGO, 26% respondents against 18% in working professionals mentioned conducting speeches on social responsibilities, 21% respondents against 15% in working professionals mentioned conducting cultural festivals. (see table 12)

Table 12: Type of work done by NGOs

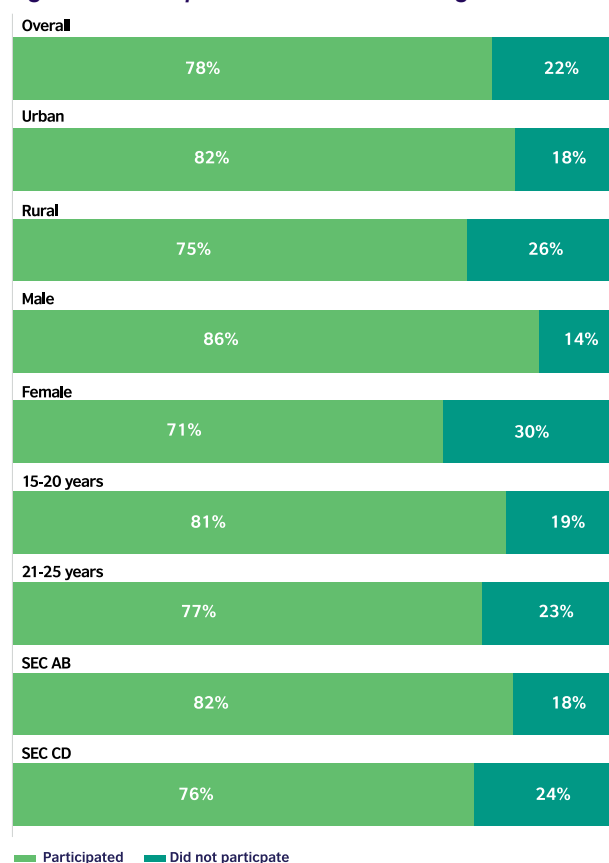
		Protest at school and college level	Social work through NGO	Conduct speeches or lectures on social responsibilities	Conduct cultural festival	Tree plantation	Cleanliness of the environment	NGO-operated schools for Special persons
Overall	Total	26%	23%	21%	17%	14%	8%	2%
Locality	Urban	31%	29%	25%	20%	15%	7%	3%
	Rural	21%	16%	18%	14%	13%	9%	1%
Gender	Male	34%	33%	30%	23%	16%	7%	3%
	Female	17%	12%	13%	12%	12%	9%	1%
Age Group	15-20	33%	27%	26%	21%	13%	7%	1%
	21-25	20%	20%	18%	15%	15%	9%	2%

When asked about their involvement in social activities, 22% of respondents stated they did not participate in any activities while the remaining 78% participated in activities regarding global issues

In urban areas (18%), In rural areas (26%), among males (14%), among females (30%), among school and college-going individuals (19%), among working professionals (23%), among higher SECs (18%), among Lower SECs (24%) stated they did not participate in activities regarding global issues. (see figure 26)

Nearly half of the respondents reported participating in plantation campaigns, while almost one-fourth (23%) mentioned engaging in cleaning activities within their area. Additionally, one-fourth of respondents (24%) assisted others during natural disasters, with 21% participating in social welfare work. Nineteen percent of respondents also mentioned involvement in activities related to addressing climate change. Lastly, 13% participated in promoting education, and 11% collected funds to purchase school equipment.

Among urban residents, 48% respondents against 39% in rural mentioned participation in tree plantation, 28% respondents against 21% in rural mentioned assisted others during natural disasters, 27% respondents against 19% in rural mentioned engaging in cleaning

Figure 26: Participation in activities related global issues

activities within their area, 27% respondents against 15% in rural mentioned participating in social welfare work. 51% of male respondents against 35% in females mentioned participation in tree plantation, 30% respondents against 18% in females mentioned assisted others during natural disasters, 28% respondents against 17% in females mentioned engaging in cleaning activities within their area, 29% respondents against 13% in females mentioned participating in social welfare work, 28% respondents against 10% in females mentioned participating in initiatives regarding climate change.

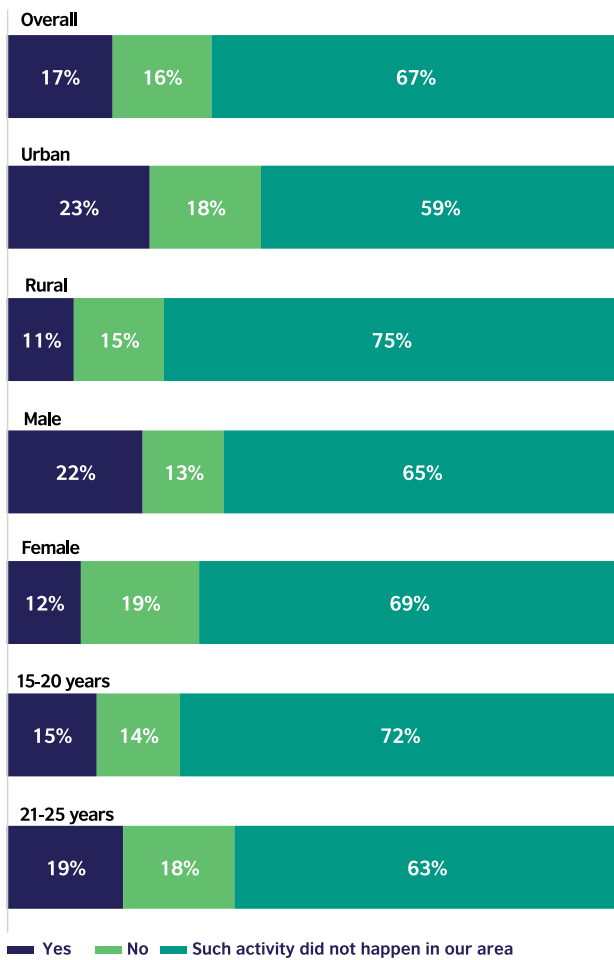
Among school and college going individuals, 49% respondents against 39% in working professionals mentioned participation in tree plantation, 25% respondents against 19% in working professionals mentioned participating in social welfare work, 24% respondents against 15% in working professionals mentioned participating in initiatives regarding climate change. (see table 13)

		Participated in tree plantation	Helped people affected by natural disasters	Engaged in cleanliness initiatives	Welfare activities at social level	Took part in initiatives related climate change	Participated in programmes promoting education	Raised funds to purchase school supplies	Aided individuals affected by floods	Helped those impacted by earthquakes
Overall	Total	43%	24%	23%	21%	19%	13%	11%	7%	5%
Locality	Urban	48%	28%	27%	27%	21%	17%	15%	7%	4%
	Rural	39%	21%	19%	15%	17%	9%	8%	7%	5%
Gender	Male	51%	30%	28%	29%	28%	15%	13%	7%	7%
	Female	35%	18%	17%	13%	10%	10%	10%	7%	3%
Age Group	15-20	49%	25%	25%	25%	24%	13%	13%	6%	3%
	21-25	39%	24%	21%	19%	15%	13%	10%	8%	6%

Participants were asked if they had participated in any clean-up or anti-pollution activities or campaigns in their area, two-thirds of respondents (67%) stated that no cleaning programmes had taken place in their vicinity. Among the remaining one-third, half (17%) confirmed their participation in cleaning programmes or activities within their vicinity, while the other half (16%) stated they had not participated in such activities.

In urban areas (59%), In rural areas (75%), among males (65%), among females (69%), among school and college-going individuals (72%), among working professional (63%), stated that no cleaning programmes had taken place in their vicinity. (see figure 27)

Figure 27: Participation in cleaning programme



When participants were asked to suggest actions for a better understanding of global issues, the data revealed that slightly more than half of respondents (53%) emphasized the importance of justice prevailing

in the courts. (37%) highlighted the immediate need for action against oppression towards women, while (38%) encouraged an optimistic approach and positive activities. Additionally, (31%) emphasized the promotion of noble deeds. Almost one-fourth of respondents (23%) stressed the advocacy of global issues in various schools and colleges. 36% of respondents also emphasized the utilisation of social media platforms to raise awareness. Moreover, 19% of respondents suggested that the government should adopt a solution-oriented approach to address and resolve issues at the macro level. Lastly, almost one-tenth (8%) of respondents mentioned that seminars and programmes related to global problems should be organized for awareness purposes.

Among rural residents, 41% respondents against 35% in urban mentioned encouraging an optimistic approach and positive activities, 40% of respondents against 33% in urban mentioned highlighted the immediate need for action against oppression towards women, 37% of respondents against 29% in urban emphasized the promotion of noble deeds, 29% respondents against 18% in urban stressed the advocacy of global issues in various schools and colleges. while among urban residents, 23% of respondents against 15% in rural suggested that the government should adopt a solution-oriented approach to address and resolve issues at the macro-level

Among males, 35% respondents against 26% in females emphasized the promotion of noble deeds, and 21% of respondents against 16% of females suggested that the government should adopt a solution-oriented approach to address and resolve issues at the macro-level. (see table 14)

Table 14: Actions required to better understand global issues and work on it

		Provide prompt justice in courts	Encourage good works	Swift punishment for oppressing women	Raise awareness about global issues through Social Media	Acknowledging acts of kindness	Discussing global issues in schools and colleges	Efforts at government level to solve global problems	Organizing seminars and programmes	Don't know
Overall	Total	53%	38%	37%	36%	31%	23%	19%	8%	1%
Locality	Urban	53%	35%	33%	35%	24%	18%	23%	9%	1%
	Rural	53%	41%	40%	37%	37%	29%	15%	8%	2%
Gender	Male	52%	38%	38%	35%	35%	25%	21%	8%	0%
	Female	53%	39%	36%	38%	26%	22%	16%	9%	2%

During the focus group sessions, participants were questioned about the concept of Global Citizenship Education (GCE). Majority of them exhibited a lack of awareness regarding the concept in its literal term initially. However, upon further prompting, discussions tended to emphasize and deliberate more on national issues rather than international ones within the context of GCE. The sources of awareness were highlighted to be community discussions and social media.

Participants were then asked about the education that they receive in context to global education. Majority of participants expressed a lack of formal or informal means of education on global citizenship. Few of them mentioned that although it may be part of the school curriculum, there is minimal focus on such topics by academic staff, hindering understanding and awareness among youngsters. A broader sentiment among young participants and stakeholders was the perceived lack of national-level efforts in creating awareness and platforms for Global Citizenship Education (GCE), indicating a significant gap in understanding their rights and responsibilities as global citizens. Further inquiry into awareness of initiatives, institutes, or platforms contributing to GCE revealed that many youngsters in rural areas pointed out the role of NGOs, particularly in volunteering during natural calamities and addressing societal issues in remote areas. Additionally, some mentioned initiatives such as cultural weeks or debates in universities concerning GCE.

In addition to this, participants were asked about the challenges they experience in exercising their rights as global citizens. The primary obstacles identified included restrictions on freedom of speech, political conspiracies, and corruption. Many participants stated that the masses are usually prevented from expressing their opinions through any means; a sentiment corroborated by incidents of individuals being detained or having their social media accounts blocked for voicing their views on certain national or international issues. These challenges reportedly foster feelings of harassment and fear, leading to a lack of initiative or action among the masses.

However, it is noteworthy that the youth have recently been observed taking action on national issues. Many reported volunteering with various national and international NGOs during natural disasters. Additionally, few groups have been involved in fundraising efforts at personal or community levels. Young participants also participated in projects such as planting trees, installing water pumps, conducting clean-up drives, and engaging in WASH (Water, Sanitation, and Hygiene) campaigns.

During focus group discussions and key informant interviews, participants were also asked about ongoing global issues, where they identified several fundamental national and international concerns.

At the national level, there was a widespread perception that individuals were deprived of their basic right to

speak on various issues due to security concerns, including kidnapping attempts on family members. This issue was highlighted for both urban and rural/semi-urban areas, with a more pronounced impact in rural regions. Freedom of speech was a significant concern in both areas, particularly in the vulnerable districts of KPK and Balochistan.

Regarding gender equality, opinions were mixed. While some understand the concept of females having the same status as males in different roles, societal acceptance of gender balance remains low. Women face numerous obstacles, including restrictions on employment and mobility imposed by male family members and harassment by men. This issue was more prominent in rural areas, where women were often deprived of basic rights such as inheritance, Haq Mehar (a religious entitlement), and education. In semi-urban and urban areas, gender discrimination persists, with many believing that women should only conduct household chores instead of working.

Despite this, a majority in these areas support gender equality and recognise that women are deprived of basic rights and subjected to domestic violence. Participants also highlighted government negligence in addressing critical issues. For example, air pollution from industrial activities is causing health problems, and there is a lack of cleanliness efforts, particularly in rural areas. Although some urban areas, like Karachi and Larkana, have witnessed initiatives for road cleaning, however, these were exceptions.

Human rights and social justice issues were also highlighted, with discrimination based on class and widespread nepotism. The legal system is often biased, favouring the wealthy, while police corruption undermines justice. Inadequate educational and medical facilities, especially in rural areas, exacerbate social inequalities. Early marriages and poverty further aggravate these issues. Many rural areas lack basic services like SUI gas, colleges, universities, and hospitals, forcing residents to travel long distances for medical care. Poverty affects over 60% of the population, depriving people of basic necessities like clothing, shelter, and clean water. This widespread poverty compounds issues of inadequate education, healthcare, and social justice, creating a cycle of deprivation and inequality.

Similarly, cultural conflicts were declared as pervasive issues extending beyond localized contexts to the global community. Diminished levels of tolerance, unity, and acceptance contribute to the marginalization of

individuals from diverse cultural, caste, and religious backgrounds. Within various castes also, (Sindhi, Balochi, Punjabi, Pathan, etc.), a prevalent belief in superiority fosters egoism and divisiveness, fuelling animosity and conflict. Specific instances include females in unfair treatment with Siraikis, the Shia/Sunni conflicts etc.

Moreover, with reference to the socio-economic perspective, Inflation was also identified as a key national issue, with recent price hikes causing extensive suffering and significantly impacting people's lifestyles. Many stakeholders cited that the burden of inflation has forced people in marginalized areas to engage their children into labour to meet daily expenses.



“The system works in the favour of those who bribe, you can have verdict in your favour if you can bribe the authorities”

[Female, 16-19 YOA, SEC BC, Faisalabad Rural]

Furthermore, the participants were inquired about the issues on global level during focus group discussions (FGDs) and Key Informant Interviews (KIIs). They mentioned multiple issues, with the situation in Palestine being the most prominent. Participants reported numerous instances of boycotts of Israeli products and peaceful protests. However, some stakeholders in Balochistan believed that protests in Pakistan regarding Palestine were primarily aimed at collecting donations for Gaza rather than demonstrating solidarity or advocating for change highlighting the harsh reality of corruption at national level. This perspective was echoed by a stakeholder in Balochistan, who noted that public protests in support of Gaza predominantly occur in Western countries. Young people feel restricted from raising their voices or showing solidarity for the Muslims of Palestine due to several incidents they have witnessed or experienced, including restrictions on free speech regarding the Palestinian genocide. Some males in Sahiwal (urban) anticipated fear of police arrest for discussing the Palestinian genocide, discouraging open discourse, and risking imprisonment for expressing political beliefs online. Additionally, some females in Nawabshaw (urban) expressed doubts about the supply of aid to Palestinian victims due to their lack of trust in corrupt politicians.

Other international issues mentioned include the Kashmir conflict, the wars between America and South

Korea, and China and India (Larkana rural - males), the Ukraine and Russia war, mosque demolitions and Hindu-Muslim conflicts in India, and blasphemy against Prophet Muhammad (PBUH).

Participants also reckoned pollution (air and land) as a cause of climatic changes around the globe, damaging the ozone layer and increasing exposure to harmful ultraviolet rays, leading to skin diseases and natural calamities (flooding in Saudi Arabia as a consequence of weather changes). Nonetheless, overpopulation was also marked as a growing issue, contributing to increased air pollution, water contamination, and various environmental problems. This impacts human health and the entire ecosystem, leading to natural calamities such as floods and storms due to climatic changes and pollution. Young male participants in Gujranwala (rural), Swat and Mansehra mentioned that overpopulation affects natural resources, causing water scarcity and climatic changes.

Young participants in the primary research advocated

for integrating comprehensive education on global citizenship into the curriculum, viewing it as essential for enabling the younger generation to play a more meaningful role. Additionally, they emphasised the importance of government involvement in creating platforms that empower young students to actively contribute. There was also strong support for campaigns and workshops advocating for freedom of expression, ensuring the protection of individuals' rights to express political views without fear of reprisal, and fostering an environment conducive to open dialogue on global issues.

Many stakeholders acknowledged the influence of social media in shaping youngsters' awareness of global citizenship but also stressed the importance of formal education in further enhancing this awareness. They believed that integrating structured educational initiatives can equip youth with actionable insights, enabling them to fully embrace their responsibilities as global citizens beyond the digital realm.

V. Security concerns

The personal safety index has three components, as follows:

I	II	III
Incidence of crime	Incidence of injuries	Incidence of terrorism & violence

Potentially, the greatest threat to lives and property in Pakistan is acts of terrorism. These acts started after Pakistan joined the USA after 9/11 in the war in Afghanistan. It is estimated that the cumulative life cost is over 80,000, including military personnel and civilians. The economic losses aggregate to over USD 225 billion.

There has recently been an upsurge in acts of terrorism, especially in Khyber-Pakhtunkhwa and Balochistan. This could emerge once again as a major threat to human security³⁶ in Pakistan.

Table 15³⁷: Indicators of personal safety

	2001-02	2005-06	2010-11	2015-16	2017-18	2018-19	Latest Year
INCIDENCE OF CRIME							
1. Expenditure on Law and Order as % of GDP							
Index	0.657	0.154	0.577	0.313	0.804	0.657	0.674
2. Weighted Crimes per 10,000 population (Index 2001-02 = 100)							
Index	0.739	0.624	0.592	0.567	0.563	0.560	0.380
INCIDENCE OF INJURIES/FATALITIES							
3. % of Workers Injured or Getting Diseases in the Workplace							
Index	0.491	0.678	0.520	0.376	0.438	0.573	0.746
4. Number of Traffic Accidents							
Index	0.545	0.608	0.581	0.652	0.421	0.460	0.584
5. Number of Fatalities							
Index	0.481	0.615	0.534	0.700	0.396	0.398	0.502
INCIDENCE OF TERRORISM							
6. Number of Terrorist Attacks							
Index	1.000	0.830	0.250	0.812	0.875	0.891	0.948
Number Killed							
Index	1.000	0.867	0.250	0.793	0.840	0.891	0.968
OVERALL INDEX	0.674	0.563	0.446	0.572	0.552	0.590	0.656

36. Human Security in Pakistan by Hafiz. A. Pasha, September 2023

37. Human Security in Pakistan by Hafiz. A. Pasha, September 2023

The values of the indicators of personal safety are shown in Table 15. The table revealed that the overall index of personal safety has had a cyclical pattern. It declined sharply in 2010-11 when terrorism was at its peak. Thereafter, it has shown a better trend. However, a rise in the incidence of crime was observed, especially in the primate city of Karachi. Table 16 shows the safety factor in relation to crime in some South Asian cities. Karachi has a lower safety factor than Lahore and Rawalpindi but higher than that of Dhaka and Delhi.

Table 16³⁸: Incidence of crime in south Asian countries

The website *numbeo.com* gives a ranking of the incidence of crime globally in a number of cities. The cities of South Asia have the following safety factors as of 2022:

City	Safety Factor*	City	Safety Factor*
PAKISTAN		SOUTH ASIA	
• Karachi	45.8	• Delhi	40.8
• Rawalpindi	50.1	• Dhaka	36.8
• Lahore	63.6	• Mumbai	55.0
		• Chennai	59.8
		• Kathmandu	63.0

**Ranges from 0 to 100. The higher the value, the higher the safety.*

Karachi has the lowest safety factor among the three big Pakistani cities. However, Delhi and Dhaka have even lower safety factors.

The magnitude and trends in the index of freedom from 'fear' and its components are shown in Table 17 below. Overall, it has effectively followed an inverted U-shaped trend. It showed a rising trend after 2001-02, and the index reached the peak value of 0.543 in 2015-16. Since then, it has declined by 23% to only 0.367 in the latest year.

Table 17: Trend in the overall index of freedom from 'Fear' and its components

Index of	2001-02	2005-06	2010-11	2015-16	2017-18	2018-19	Latest Year
1. Territorial Security	0.420	0.534	0.494	0.608	0.658	0.481	0.354
2. External Financial Vulnerability	0.307	0.419	0.530	0.496	0.228	0.268	0.130
3. Personal Safety	0.674	0.563	0.446	0.572	0.552	0.590	0.656
4. Health Hazards and Diseases	0.342	0.412	0.488	0.583	0.565	0.690	0.589
5. Environmental Protection and Natural Disasters	0.621	0.562	0.507	0.498	0.468	0.499	0.376
OVERALL INDEX OF FREEDOM FROM 'FEAR'	0.450	0.493	0.492	0.549	0.480	0.483	0.367

The two biggest factors contributing to the fall were territorial sovereignty and external financial vulnerability. As shown above, environmental protection and natural disasters have also played a role. These trends were clearly revealed in the enclosed charts of the indices.

When participants were questioned about the reasons behind security issues, it was found that unemployment was perceived as a major threat by nearly 9 out of 10 respondents (89%). Inflation was identified as another primary reason for societal vulnerability by 72% of respondents, while poverty was cited by 68%. Additionally, 39% of the sample population pointed to political disagreements, and 35% mentioned external enemies as major security concerns. Lack of harmony was identified by 34% of respondents, and cultural incompatibility by 26%.

Among urban residents, 39% of respondents mentioned religious opposition against 21% in rural,

Among rural residents, 91% respondents found that unemployment was perceived as a major threat against 87% of rural residents, 75% of respondents mentioned poverty as reason of security issues against 61% in urban residents. (see table 18)

Table 18: Reasons of security issues

		Unemployment	Inflation	Poverty	Political opposition	Enemies	Religious opposition	Lack of consensus	Cultural incompatibility	Lack of religious education	Don't know
Overall	Total	89%	72%	68%	39%	35%	34%	34%	26%	20%	1%
Locality	Urban	87%	70%	61%	40%	37%	39%	34%	28%	18%	2%
	Rural	91%	75%	75%	38%	34%	30%	34%	24%	21%	0%

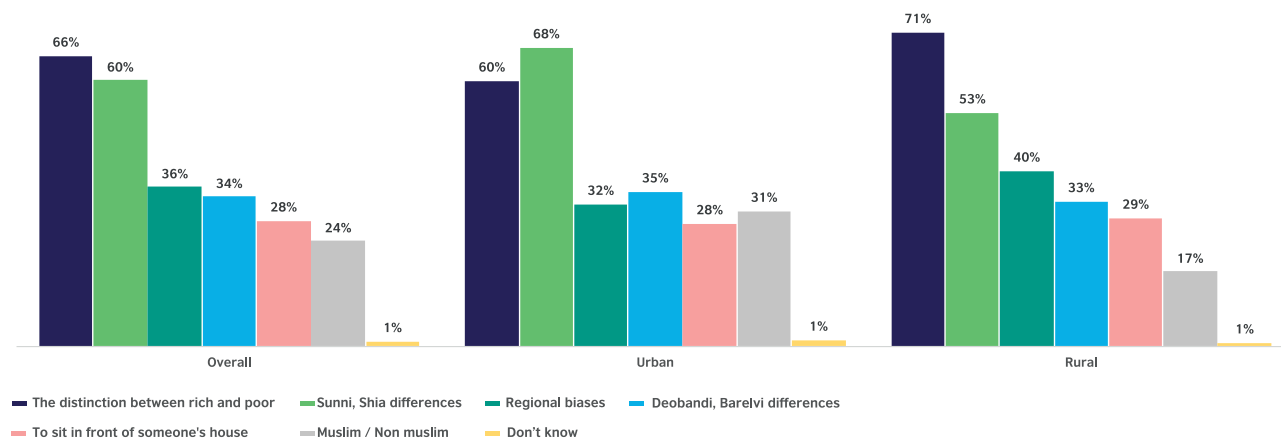
When participants were questioned about factors that could exacerbate law and order issues; two-thirds (66%) participants emphasized that the socio-economic disparity between the affluent and the underprivileged has noticeably widened, causing unease among members of society.

Research results showed 60% religious divides as reported by the participants, such as those between Sunni and Shia Muslims, with 34% mentioning differences between Deobandi and Barelvi sects, and 36% citing regional biases as contributing to disturbances in law and order.

Among urban residents, 68% respondents mentioned Sunni-Shia differences as a threat to security situation while 53% in rural, 31% respondents mentioned religious differences as contributing to disturbances in law and order while 17% in rural.

Among rural residents, 71% of respondents emphasized that the socio-economic disparity against 60% of urban residents, and 40% of respondents cited regional biases as contributing to disturbances in law and order against 32% in urban residents. (see figure 28)

Figure 28: Bleak law and order situation



When inquired about the effects of not enforcing the law, a majority of respondents (78%, 65%, and 61%) believe that theft, cellphone robberies, and motorcycle thefts persist due to law enforcement gaps. They attribute incompetence among legal authorities to the prevalence of kidnapping (39%) and violent acts like target killings (40%). Land and property disputes are also identified by 38% of respondents as significant disruptors.

Table 19 shows, 66% of urban respondents mentioned motorcycle thefts as a consequence of the non-implementation of law against 55% in rural residents, 43% respondents mentioned kidnapping as a consequence of the non-implementation of law against 35% of rural residents

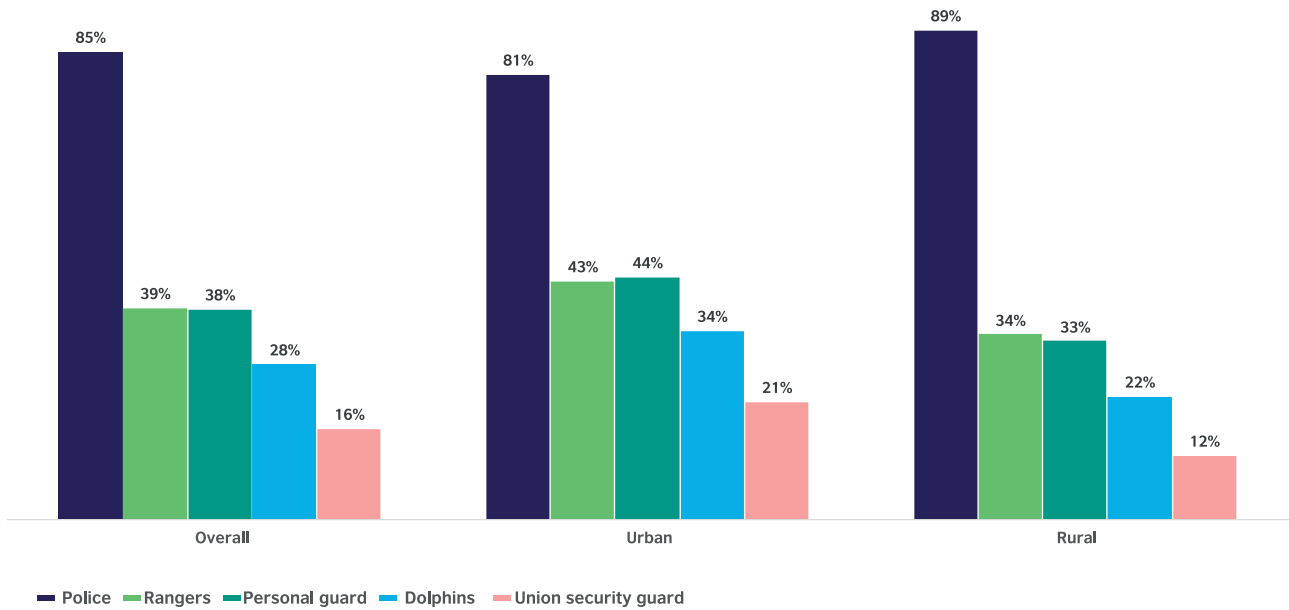
Among rural residents, 44% of respondents mentioned land issues as a consequence of the non-implementation of the law against 32% of urban residents, and 44% of respondents cited property disputes as a consequence of non-implementation of the law against 29% of urban residents.

		Stealing	Mobile stolen	Motorcycle theft	Robbers	The car is stolen	Target killing	Kidnapping for ransom	Land issues	The quarrel of property	Group who illegally seizes property
Overall	Total	78%	65%	61%	48%	46%	40%	39%	38%	37%	19%
Locality	Urban	80%	63%	66%	47%	45%	38%	43%	32%	29%	18%
	Rural	76%	66%	55%	48%	47%	41%	35%	44%	44%	21%

When asked about the responsible security agencies for maintaining law and order, the majority of respondents (85%) cited the police. However, 39% mentioned Rangers, 38% specified personal guards, and 28% mentioned dolphins as accountable for security. A small number of respondents (16%) mentioned union security guards.

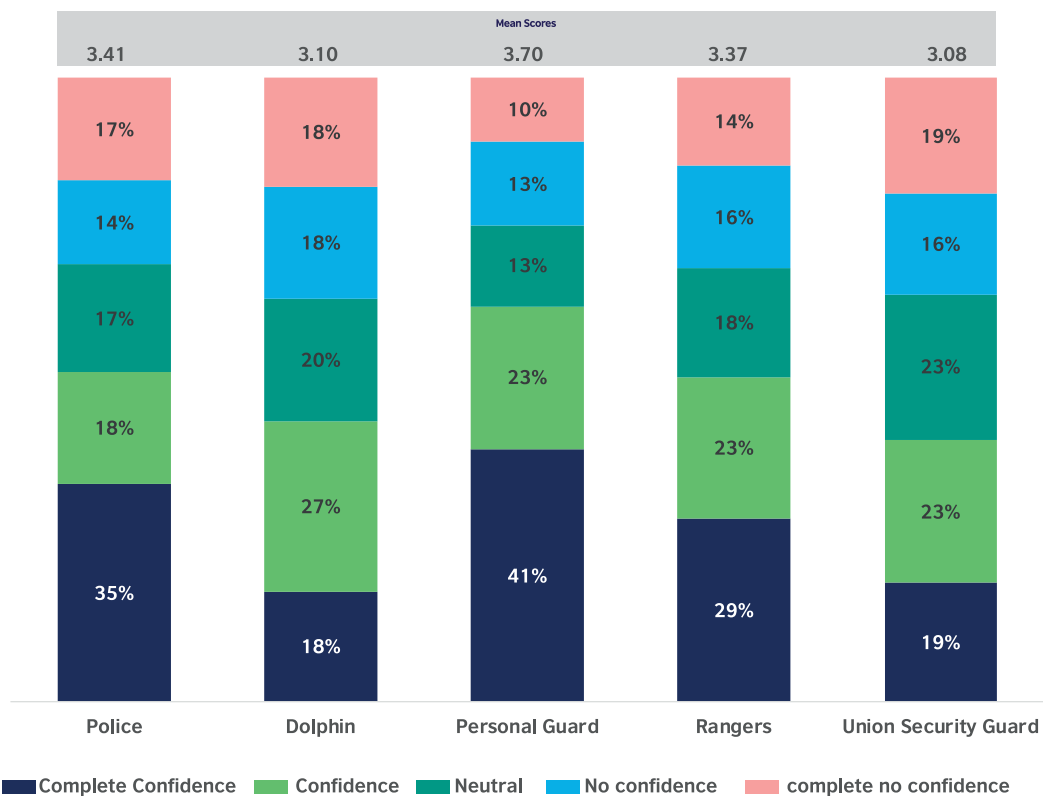
Among urban residents, 43% respondents cited rangers responsible for security against 34% in rural residents, 44% respondents cited personal guard responsible for security against 33% in rural residents, 34% respondents cited dolphins responsible for security against 22% in rural residents, 21% respondents cited union security guard responsible for security against 12% in rural residents. Figure 29 shows 89% of respondents cited police responsible for security against 81% in urban residents.

Figure 29: Responsible and accountable security agencies



When participants were questioned about their confidence on security agencies, they were asked to rate it on a scale of 1 to 5, where 5 indicates complete confidence and 1 represents complete no confidence.

74% respondents shown confidence on personal guards, 53% respondents shown confidence on police, 52% respondents shown confidence on rangers, 45% respondents shown confidence on dolphin, 42% respondents shown confidence on union security guards. (see figure 30)



Primary research findings revealed widespread security concerns, eliciting emotions such as fear and worry. Young participants emphasized the need for a threat-free environment, citing crimes like snatching, robberies, rape, and killings, particularly among different ethnic and religious groups. Security was deemed crucial for daily life, with constant worry in both rural and urban areas. Maintaining security was seen as essential for stability, economic growth, societal progress, and political steadiness, reducing tensions and promoting harmony.

Participants identified caste and religious divisions as major security concerns, especially in rural and semi-urban areas. For example, males in Rajanpur mentioned Muslim extremists opposing temple construction, while young males in Hyderabad highlighted caste-based disparities in government access. In Larkana, Shia/Sunni tensions were prominent. Political discord was also evident with multiple parties competing for power, leading to conflict and disillusionment with leadership. Reports from Sahiwal indicated political arrests, while Gujranwala females raised concerns about election rigging in 2024.

Poverty and unemployment were identified as intensifying security issues, leading to social unrest and crime. A stakeholder from KPK noted 400,000 to 500,000 young people emigrated this year due to lack of opportunities. Gas and electricity shortages, along with inflation, sparked violent protests, further increasing societal tensions. Corruption was highlighted as undermining stability by eroding trust in government, increasing inequality, and facilitating crime.

Natural disasters, such as earthquakes and floods, added to security threats by causing destruction and displacement. Harassment was a significant barrier for women's education and independence, with rising rape incidents exacerbated by systemic corruption. Rural areas faced greater security vulnerabilities, with reports of political coercion and harassment by government employees in places like Killa Saifullah and Mastung.

Participants were inquired about the role of authorities and youth can play in reforming security concerns. Overall, the sentiment shared was that ensuring security within communities' hinges on the establishment of a fair and just system, a responsibility that falls upon

relevant authorities and senior officers. By fostering an environment where law-abiding behaviour is encouraged and illegal activities are deterred, the safety and well-being of the populace can be upheld.

Community involvement was cited to play a pivotal role, as exemplified by instances in Killa Saifullah where locals attest to the efficacy of community engagement in curbing crime at a grassroots level. Moreover, accountability within law enforcement agencies was considered paramount, not only for operational efficiency but also for upholding principles such as those found in Islamic Sharia laws, including severe punishments for crimes such as rape and theft.

Social welfare organisations were further perceived to contribute substantially to the promotion of peaceful societies by addressing various societal issues, such as domestic violence and support for vulnerable individuals, as evidenced by initiatives in Kasur (Rural). Additionally, stakeholders suggested that efforts such as start-up loans, vocational training programmes, and the establishment of IT centres and parks, uplift communities and address pressing security concerns. Organisations like High Pakistan, Extremely Together Pakistan, The Aga Khan Foundation, and UNICEF, mentioned by stakeholders, play crucial roles in advocating for minorities, transgender individuals, and other vulnerable communities, thus contributing to overall societal security and well-being.

Participants and stakeholders underscored the prospering impact that youth can wield in fostering peace and addressing security issues. This involves initiatives aimed at raising awareness among young people about effective anger management strategies, emphasizing the resolution of minor conflicts at both personal and community levels to prevent significant harm. Moreover, collaboration with relevant organisations was advocated, facilitating interventions and support systems geared towards societal improvement, including the promotion of peace and security. The importance of providing self-defence training, particularly for females, within educational institutions, as a means to bolster independence and self-reliance among this demographic was documented as well.

Recommendations

The research advocates for a youth-led community improvement strategy that underscores the significance of incorporating local knowledge into the planning and management of development projects. This strategy prioritizes youth involvement, placing young people at the forefront of community improvement efforts. By giving youth a central role in the development process, this approach can empower them, ensuring their voices and ideas are not only heard but also acted upon. Leveraging local knowledge ensures that development projects will be tailored to the community's specific needs and conditions, enhancing the relevance and effectiveness of these initiatives. Additionally, by promoting participation, the strategy fosters collaboration among community members, which can result in more innovative and widely accepted solutions.

1. Selection and Training of Community Leaders:

- **Identification:** Community leaders can be selected from within the community based on their influence, commitment, and understanding of local issues.
- **Capacity Building:** These leaders can then be trained in various aspects of project management, leadership, and community mobilisation to equip them with the necessary skills to lead the initiatives effectively.

2. Formation of Local Teams:

- **Team Creation:** Trained community leaders will establish teams consisting of local youth

and other community members. These teams will be responsible for managing and executing development activities aimed at assessing levels of awareness, knowledge, and participation in digital learning, climate change initiatives, global citizenship education, and peacebuilding efforts.

3. Development and Implementation of Activities:

- **Local Initiatives:** The teams can develop and implement activities that address specific local challenges. These activities can range from creating awareness to development of behaviour change programmes aimed at empowering youth to take inclusive and responsible actions that influence the local, national, and global sustainable development agenda.
- **Innovation:** Local teams can leverage their understanding of community dynamics to introduce innovative solutions that are culturally appropriate and feasible.

4. Informing Programme Development:

- **Feedback Loop:** The experiences and outcomes of these community-led projects will provide valuable insights that can inform broader programme development. This feedback loop will help in refining and scaling up successful initiatives.
- **Replication:** Effective strategies and practices identified through these local projects can be replicated in other communities, leading to wider impact.

Prioritized districts – Province wise

Overall, the list of top 30 districts that are vulnerable based on multi-dimensional poverty Index.

MPI (Multi-dimensional poverty Index) constitutes three dimensions mentioned below.

- Education
- Health
- Standard of Living

Another Index used in prioritizing the districts was Human Development Index.

HDI (Human Development Index) is also based on the above three attributes.

Out of the 132 districts in Pakistan the following are the 30 most vulnerable districts.

Most of these districts are in Balochistan province.

KPK	Balochistan	Sindh
Kohistan	Bolan/Kachhi	Badin
Torgarh	Harnai	Mirpurkhas
Upper Dir	Jaffarabad	Umerkot
Batagram	Jhal Magsi	Sujawal
	Awaran	Thatta
	Kharan	
	Barkhan	
	Chagai	
	Dera Bugti	
	Killa Abdullah	
	Kohlu	
	Nasirabad	
	Zhob	
	Ziarat	
	Lasbela	
	Sherani	
	Kalat	
	Loralai	
	Musakhel	

Punjab province is better off than rest of the three provinces as not any district in Punjab came in the first thirty prioritized districts.

In order to have an opportunity to work in the under developed districts of Punjab province we have come up with another list keeping the fair share of each province in the prioritized list as an option.

KPK	Balochistan	Sindh	Punjab
Kohistan	Bolan/Kachhi	Badin	Nankana Sahib
Torgarh	Harnai	Mirpurkhas	Bahawalnagar
Upper Dir	Jaffarabad	Umerkot	Bhakkar
Batagram	Jhal Magsi	Sujawal	Chiniot
		Thatta	Gujrat
		Dadu	Khushab
		Jacobabad	Rajanpur
			Rawalpindi
			Sheikhupura

Penetration of Mobile Phones and Internet usage is also taken into consideration while coming up with the list of districts.

