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REGULATORY IMPACT ASSESSMENT REPORT ON COMMUNITY INFORMATION CENTRES (CICs)



EXECUTIVE SUMMARY

The digital landscape in Zimbabwe has undergone significant changes, but disparities in access and use of Information and Communication Technologies (ICTs) persist, particularly for rural as well as other urban marginalised communities. The need to address ICT access and use disparities was the main motive for the setting up of Community Information Centres (CICs), through the Universal Services Fund, across all ten (10) provinces of the country. Specifically, the objectives of setting up CICs, according to the concept document by the Ministry of ICT, Postal & Courier Services were to bridge the digital divide, to enhance equitable access to Government information, to create a platform for knowledge sharing, to improve market access through e-Commerce and to enhance communication through internet-based services.

POTRAZ conducted the Regulatory Impact Assessment on the Community Information Centre project by the Universal Services Fund, using the ICT4D Outcome Performance Evaluation Approach, which involves measuring policy related, value chain related as well as CIC specific Key Performance Indicators. The project undertook primary field research by the Authority's Research & Development personnel across all the ten (10) provinces of Zimbabwe. A mixed methodology was used, combining interviews and key informant discussions. Impact was measured across 935 individuals, comprising 882 community members and 53 CIC operators. Key findings were as follows:

■ ***Gaps in the Operationalisation of CICs:***

The proportion of non-operational CICs (11.9%) to the total number of sampled CICs was relatively high, though the majority (88.1%) are operational, highlighting the need to address challenges that hinder CIC operations. 96.2% of the operational CICs had Internet connectivity. However, concerns on the Internet quality were raised. The Internet quality being rated 'poor' at 86% of the CICs that had internet connectivity. Therefore, slow speed, unreliable connectivity and inadequate bandwidth should be addressed as they limit the effectiveness of CICs in meeting user needs. 79.8% of computers in operational CICs were reported to be in good working order, highlighting a maintenance gap of 20.2%. Lack of backup power supplies emerged as a significant challenge as only 25% have backup power supplies. The challenge poses operational challenges as they reduce the reliability of CICs as a dependable resource to the community, especially in areas with prone power outages. The availability of basic reprographic services such as printing, is yet to be ubiquitous as 35% do not offer such services. Addressing this gap could enhance user utility of CICs. There is a significant opportunity to expand digital literacy training, as currently, only 5.6% of CICs offer such programs.

■ ***Considerable Awareness Gap:***

The results revealed a moderate awareness level among respondents as 56% showed awareness highlighting an awareness gap of 43%. This implied that considerable proportion (43%) of the intended beneficiaries of the CICs initiative remained unaware of the existence of CICs within the communities they live. Chi-tests revealed that CIC awareness was significantly associated with gender and geographical location (rural-urban), with rural women exhibiting lower awareness levels. This highlights the importance of implementing targeted community engagement strategies that address identified disparities.

■ ***Underutilisation of CICs was noted:***

Community Information Centres were being underutilised, with only 31.3% of community members reporting to have used the CICs at least once, within three months prior to the data collection demonstrating the need to educate communities about CICs benefits and motivate communities to utilise CICs. Paradoxically, 45.3% of respondents who were aware of the existence of CICs within the under-served communities, had never visited the CICs to access services. Community awareness levels were higher for CVICs as compared to CICs housed within the post office premises due to visibility reasons. Demand for computer use was low, with an average of three (3) computer requests per week. A significant number of users preferred using their own devices, further contributing to the underutilisation of CIC resources. Chi-squared tests revealed that CIC usage was significantly associated with age, gender, and geographical location (rural-urban), emphasising the importance of implementing targeted community engagement strategies to address these disparities. Results also highlighted that access and usage of CICs are influenced by factors such as inadequate engagement strategies, misconceptions about the purpose of CICs, and a lack of digital skills, time, and motivation among consumers.

■ ***Socio-Economic Impact realised.***

The evaluation revealed that Community Information Centres (CICs) demonstrated positive and meaningful contributions, particularly in terms of cost reduction, entrepreneurial support, and improved livelihoods. Furthermore, CICs played a vital role in fostering social cohesion, enhancing connectivity, and providing access to community critical information. While the observed impacts were encouraging, they highlighted the significant potential for CICs to exert a more substantial and transformative influence on community development. With optimised operations and enhanced capacity, particularly in areas such as expanding computer access and improving digital literacy, CICs have the potential to become even more effective drivers of social and economic progress, while simultaneously enhancing universal inclusion and bridging the digital divide.

■ ***Impact on digital literacy not fully realised.***

One of the main objectives of establishing CICs was to bridge the digital divide which not only manifests in a lack of available infrastructure to bring people online, but also a lack of digital literacy and skills to make use of the Internet and digital resources. However, CICs have made no significant impact in this regard. Only 5.6% of CICs were offering digital literacy training to the communities. From the end-user perspective, the proportion of trained users was also very negligible, i.e., 1.7% of the entire sample or 5.4% expressed in terms of CIC users. Neither the minuteness of the number of beneficiaries nor the small proportion of establishments offering digital literacy training support a positive impact, in fact they infer the lack of measurable intervention in that regard. It is important to note that offering assistance to CIC users is not synonymous to digital literacy training.

■ ***Opportunities/challenges and recommendations***

Despite the benefits of Community Information Centres (CICs) to underserved communities, significant challenges hinder their effectiveness. Users primarily encountered unreliable internet connections, slow speed, unavailability of basic services such as printing, frequent power outages, and limited accessibility for people with disabilities, amongst other challenges. Of all marginalised groups, women were the most excluded group, as shown by the usage metrics. For CICs to be effective in meeting the intended policy objectives, the following four pillars of public initiatives should be prioritised— physical, management, services, and human. It is in this light that this report puts forward recommendations that include the establishment of a comprehensive Monitoring and Evaluation (M&E) framework for CICs, advocacy to improve community awareness, adoption of the ‘Living Labs’ concept for CICs, provision of community tailored content and services, scaling up of digital literacy training, re-operationalisation of closed CICs amongst other recommendations.



■ **Ensuring Sustainability of CICs**

The overall impact of CICs against what was intended when the project was initiated was around 50%. CICs could be more effective if the challenges highlighted in this report are addressed. The administrative capacity of ZIMPOST, ZIMPOST human resources challenges, awareness and educational campaigns are some of the major areas needing attention to enhance the sustainability of CICs. Given the potential of CICs in digital transformation, efforts should be made to increase their efficiency, effectiveness and sustainability.



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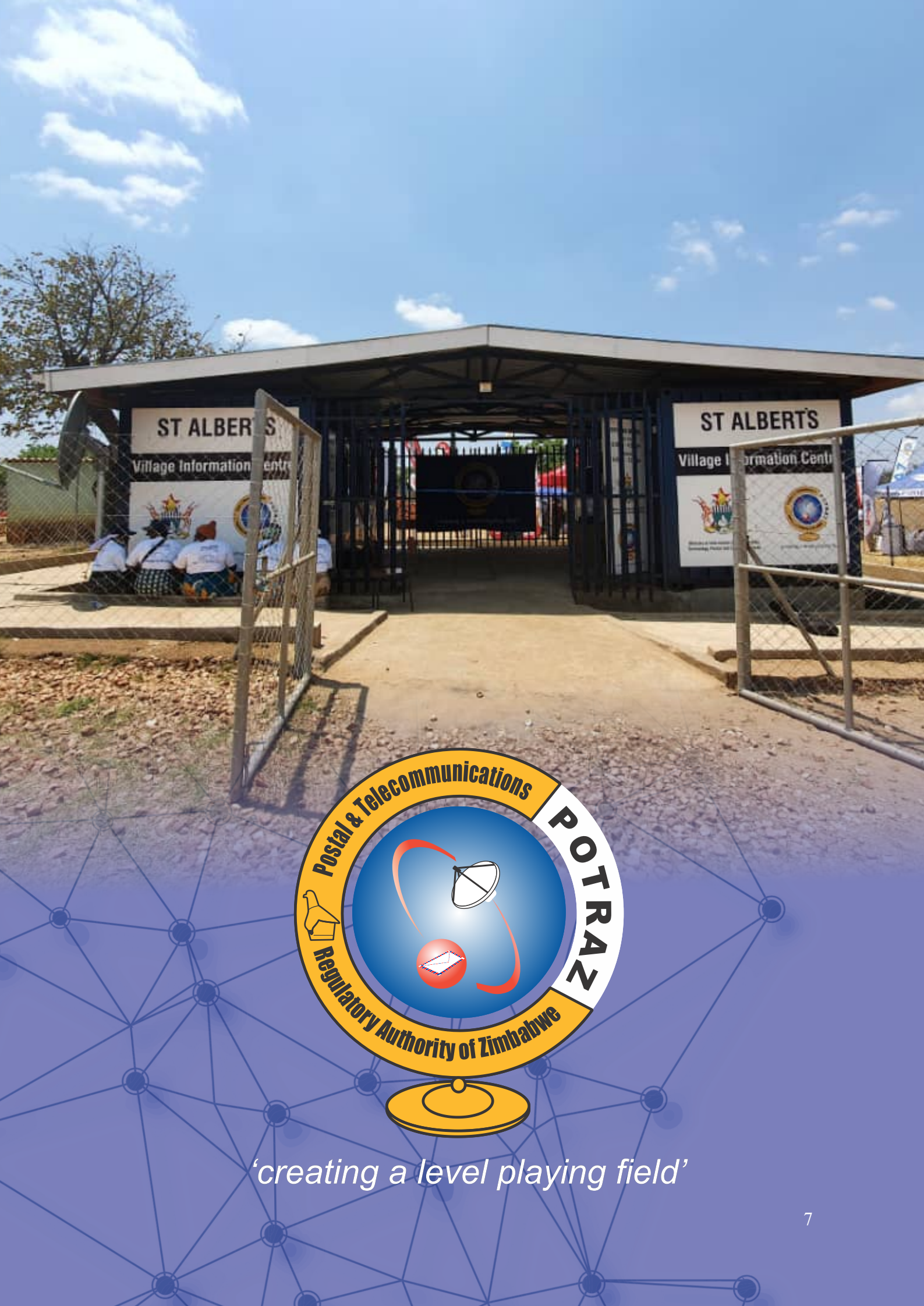
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1. BACKGROUND OF THE STUDY

1.1 INTRODUCTION

The rapid advancement of digital technologies has ushered in a new era of information accessibility. Access to information has become a fundamental element of societal progress. The digitalisation of information not only facilitates communication and education but fosters economic opportunities by connecting people to broader networks. However, this digital transformation has also highlighted the digital divide, with marginalised communities facing significant barriers to accessing and utilising information and communication technologies. In response to this challenge, Zimbabwe implemented targeted initiatives under the Universal Services Fund to expand digital infrastructure and connectivity in underserved areas and promote digital literacy and innovation.

The Postal and Telecommunications Regulatory Authority of Zimbabwe (POTRAZ) has taken proactive measures to enhance digital inclusivity by establishing Community Information Centres (CICs) across urban as well as rural underserved areas. The project commenced in 2016. CICs provides Internet access, ICT training and affordable reprographic services such as (printing, photocopying, and scanning), making digital resources accessible to people who otherwise have limited connectivity. The initiative is fundamental to realising universal service aspirations. According to the CIC concept document by the Ministry of ICT, Postal & Courier Services¹ the objectives of setting up CICs were as follows:

01 To bridge the digital divide

02 To enhance equitable access to Government information

03 To create a platform for knowledge sharing

04 To improve market access through e-Commerce

05 To enhance communication through internet-based services such as e-mail.

Regulatory Impact Assessments (RIAs) offer the means to improve regulatory decision-making and practice; they are a key instrument for assessing the outcome of actions pre and post implementation, thus improving the quality of regulatory decision making. POTRAZ conducted the Regulatory Impact Assessment on the Community Information Centre project by the Universal Services Fund, to establish the effectiveness of the CICs in promoting digital inclusivity.

¹ Ministry of ICT, Postal & Courier Services, 2015, Establishment of Community Information Centres Concept Note document.

This report presents the findings of this assessment, examining how the CICs have impacted local communities, the extent to which they have addressed the intended objectives and identify areas for potential improvement. The analysis is essential for shaping future initiatives and ensuring that marginalised groups in Zimbabwe are effectively served.

1.2 STATEMENT OF THE PROBLEM

Regulatory Impact Assessments bring evidence that is instrumental in improving the quality of new or already implemented decisions, however, they are rarely conducted. According to the World Bank²,

“Billions of dollars are invested each year, globally, in Information-and-Communication-Technologies-for-Development (ICT4D) projects such as telecentres, village phone schemes, e-health and e-education projects amongst others, yet we have very little sense of the effect of that investment”.

Put simply, there is far too little impact assessment of ICT4D projects globally, and Zimbabwe is no exception. The deployment of Community Information Centres in Zimbabwe is a noble initiative as it has progressive objectives, however, there is limited empirical evidence on how these CICs have succeeded in bridging the digital gap. Without a clear understanding of their impact, contribution, and gaps, it is difficult to optimise these centres so that they effectively meet the needs of underserved populations. This study sought to address this gap by assessing the impact of CICs on digital access and inclusion within underserved communities in Zimbabwe.

1.3 SIGNIFICANCE OF THE STUDY

This study is crucial in providing evidence on the effectiveness of CICs in advancing the intended digital inclusivity goals. The study also identified gaps that need to be addressed for enhanced effectiveness. The findings support POTRAZ in refining its strategies, enhancing CIC services, and making data-driven decisions for future expansions. Additionally, this research contributes to the broader discourse on digital inclusion, serving as a valuable reference for other national programs facing similar challenges and aiming to bridge the digital divide in rural and underserved areas.

1.4 RESEARCH OBJECTIVES

The study's main objective was to assess the impact of CICs among underserved communities in Zimbabwe. Specific objectives of the study were to:



1.5 SCOPE OF THE STUDY

The impact assessment study was conducted at a national level. An adequate representation of the urban and rural areas in all ten provinces of Zimbabwe was achieved by visiting sampled CICs, including Containerised Village Information Centres (CVICs) in growth points, rural centres, small towns and cities in Zimbabwe. Participants in the study included both males and females, with ages ranging from 14 years and above.

1.6 ETHICAL CONSIDERATIONS

This study upheld the highest ethical standards, prioritising the rights and well-being of all participants. Informed consent was obtained from all respondents before data collection, ensuring they fully understood the research purpose and that the information gathered would be used exclusively for research. Participation was entirely voluntary, and anonymity was strictly maintained. Additionally, approvals from local authorities were considered, and cultural sensitivities within the communities were respected. Any photographs or video recordings were taken only with the explicit consent of the participants.

METHODOLOGY

2.1 OVERVIEW

This section describes the impact assessment framework, study design, sampling methods, and data collection techniques, detailing the mixed-methods approach that included surveys and interviews with CIC users and operators. It outlines the sample characteristics, data analysis procedures, and tools to assess CIC impact across social, economic, and access dimensions.

2.2 FRAMEWORK FOR ASSESSING CIC IMPACT

As mentioned earlier, the objectives of establishing CICs were developmental in nature; hence, ICT for Development (ICT4D) impact assessment frameworks were most applicable. The ICT4D Outcome Performance Evaluation Approach was used. This approach has been used for the assessment of telecentres across jurisdictions such as Pakistani and India.

- ICT4D OUTCOME-BASED PERFORMANCE EVALUATION APPROACH

This approach follows the ICT4D value chain to define specific metrics for the evaluation of initiatives. A general illustration of the framework is shown in Figure 1 below:

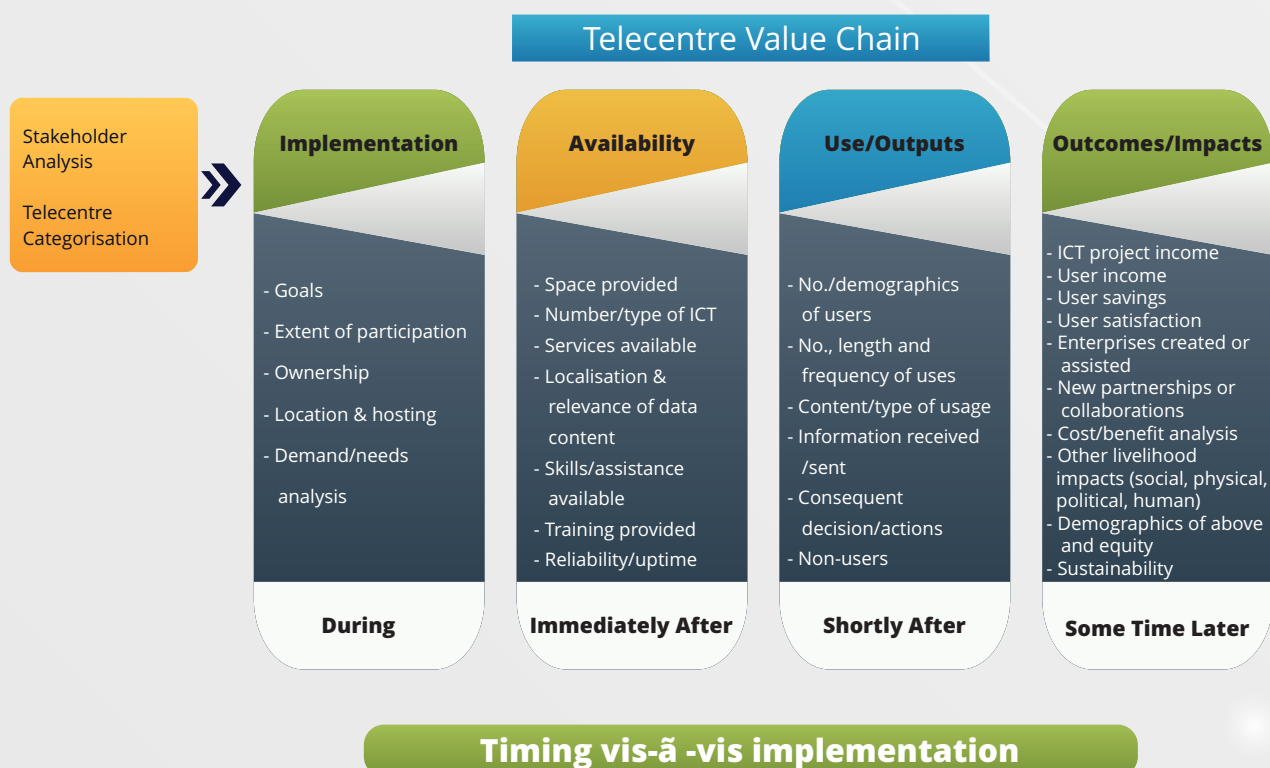
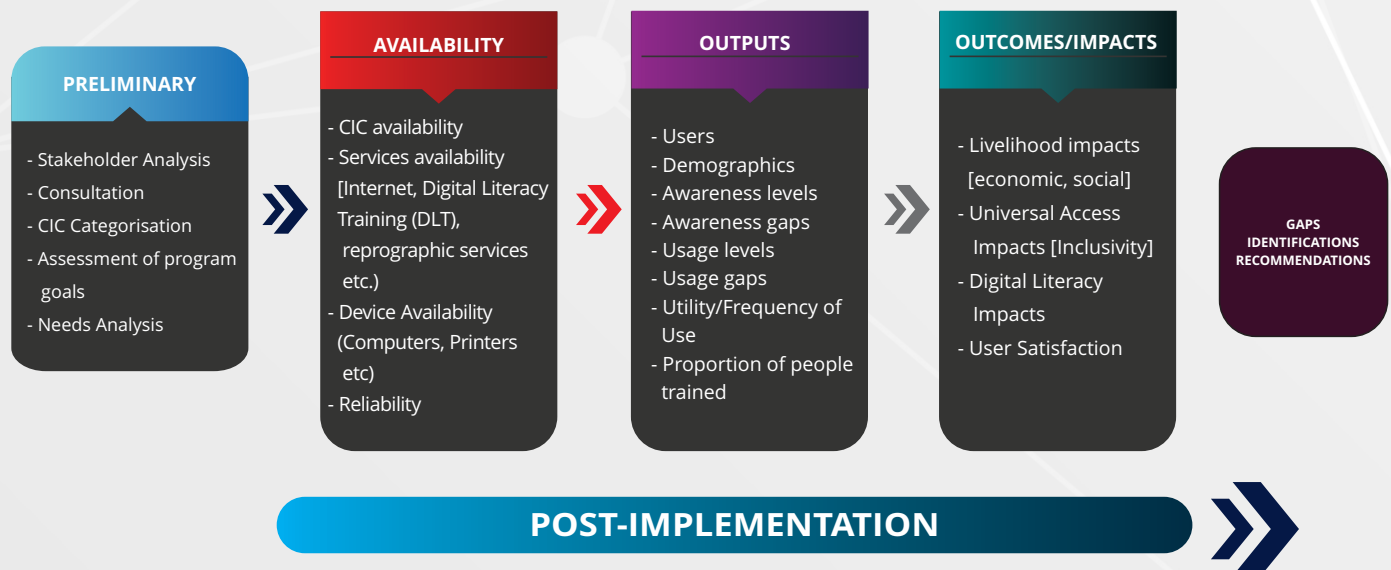


Figure 1: ICT4D Assessment Framework

This approach has been applied to the evaluation of telecentres in various jurisdictions and is also applicable to the evaluation of Community Information Centres, given the similarities between the two. The evaluation metrics could be policy related, value chain related as well as telecentre/CIC specific and can be developed based on bottom-up participation. It is important to note that this impact assessment was carried out post implementation, no impact assessment was done pre and during implementation, hence the ICT4D framework could not be applied as is but had to be customised. The adapted framework is summarised in Figure 2 below:

Figure 2: Applied Framework



It is important to note that the overriding programme goals within which the Community Information Centres were implemented shaped the focus of the metric selected. This framework not only guided the design of data collection instruments but also informed the categorisation and analysis of findings in this report, ensuring that the assessment captures the multifaceted impact of CICs on communities.

2.3 RESEARCH DESIGN

The guiding philosophy used for the survey was pragmatism, as it focuses on practical solutions and real-world applications, making it ideal for assessing CICs' impact. Pragmatism allows methodological flexibility, integrating qualitative and quantitative insights to capture diverse perspectives. In this regard, a cross-sectional mixed-methods research design was employed, combining quantitative and qualitative data collection and analysis, allowing for a comprehensive understanding of the impact of CICs on digital access, economic development, and inclusivity. Structured questionnaires were administered to community members, including CIC users and non-users, to collect data on awareness, usage, benefits, digital literacy levels, universal access, social and economic impact, and challenges experienced, amongst other issues.

In-depth interviews were also conducted with CIC administrators to capture supply-side experiences, challenges, and perceptions about the centres' social and economic impact. A mixed-methods research design provided both breadth and depth, making it an ideal approach for assessing the complex and multidimensional issues associated with CICs. This approach produced a well-rounded understanding of how CICs reduce the digital divide and improve social and economic outcomes, directly aligning with the study's objectives.

2.4 SAMPLING STRATEGY

A Multistage Sampling Strategy was used for this study. At the first stage, CICs were initially stratified by provinces. This ensured representation from different geographic regions. The second stage involved stratification by location within each province. Within each province, CICs were further stratified based on their location, whether rural or urban areas. Random sampling was then employed within each stratum (rural/ urban) to select a representative sample of CICs.

Purposive sampling was used to select CIC administrators. The sample of community members was determined using stratified sampling. Subjects were divided into subgroups called strata based on age and gender, informed by the CIC traffic data from administrators. This approach targeted community members of various characteristics, including users and non-users, to participate in the study. Study participants were provided information about the research objectives, procedures, and possible benefits. Informed consent was obtained from all participants before their involvement.

2.5 SAMPLE SIZE

Considering that the total number of CICs was known from the January 2024 CIC status report provided by ZIMPOST. The following formula for sample size calculation was used to determine the number of CICs to be surveyed:

$$n = \left(\frac{fz^2\hat{P}(1 - \hat{P})}{e^2 + \frac{z^2\hat{P}(1 - \hat{P})}{N}} \right) / r$$

- *n is the parameter to be calculated, and is the sample size in terms of the number of CIC to be selected.*
- *N Total number of CIC: 154 operational CICs*
- *z^2 is the statistic that defines the desired level of confidence (CI): 95% CI gives a z value of 1.96.*
- *$\hat{P} = 0.5$ is an estimate of a key indicator to be measured by the survey. r is a multiplier that accounts for the anticipated rate of non-response.*
- *e Is the margin of error to be attained: 0.1.*
- *f is the sample design effect, $deff$:1.*

The formula resulted in a sample size of 59 Community Information Centres (CICs), from a total of 154 operational CICs established across the country. The sample is spread across 10 provinces, with the split proportional to the total number of CICs. The sample size determination resulted in 59 Community Information Centres being selected across all ten provinces of Zimbabwe. The proportion to size resulted in the following CIC sample distribution being used for the study:

Table 1: Sampled Community Information

Province	CIC	CVIC	Total CIC	Sample Proportion	CIC Total Sample size	Sampled Areas
Bulawayo	9	-	9	6%	3	Mpompoma, Luveve, Pumula
Harare	21	-	21	14%	8	Epworth, Dzivarasekwa Seke, Glen view, Waterfalls, Mabelreign, Hatfield, Zengeza
Manicaland	19	4	23	15%	9	Sakubva, Dangamvura, Rusape, Nyanga, Murambinda, Chibuwe, Nyanyadzi, Buhera, St Theresa
Mashonaland Central	10	4	14	9%	5	Bindura, Muzarabani, Nyachuru, Concession, Mt Darwin
Mashonaland East	10	2	12	8%	5	Chivhu, Majuru, Murehwa, Jakopo, Arcturus
Mashonaland West	15	3	18	12%	7	Mhangura, Rafingora, Chinhoyi, Murombedzi, Kadoma, Karoi, Darwendale
Masvingo	12	4	16	10%	6	Chivi, Ngundu, Rutenga, Chartsworth, Chiredzi
Matabeleland North	8	2	10	6%	4	Matabisa, Hwange, Dete, Lupane
Matabeleland South	12	1	13	8%	5	Beitbridge, Gwanda, Fulabusi, Jahunda, West Nicholson
Midlands	14	4	18	12%	7	Redcliff, Mnene, Manoti, Zvishavane, Tongogara, Zhombe, Shurugwi
Grand Total	130	24	154	100%	59	

The study sought to interview the communities served by these 59 CICs as well as the administrators serving in these CICs. All the 59 Community Information Centres were successfully visited and sampled, giving an achievement rate of 100%.

The CIC user reports for July 2024 were used as a sampling frame for the selection of survey respondents. The study targeted 966 respondents, comprised of 907 community members and 59 CIC administrators, to ensure a well-rounded analysis of the impact of the Community Information Centres (CICs). The study achieved 936 interviews, comprised of 54 CIC operators/administrators and 882 individual citizens, giving an achievement rate of 91.5% and 97.2% for administrators and community members respectively.

2.6 RESEARCH QUESTIONNAIRE

The questionnaire captured the impact of Community Information centres (CICs) across multiple dimensions, with questions organised to assess universal access, economic impact, social impact, and digital literacy, as shown in Figure 3.



Figure 3: Key Question Areas

2.7 DATA COLLECTION AND DATA ANALYSIS

Data was collected using Computer Aided Personal Interviews (CAPI) with community members and the CIC operators. Stata and Python were used to analyse data and compute inferential statistics such as the Chi-square test and regression analysis. For qualitative data, exploratory analysis was also done using Python. Data cleaning was mostly done using Excel and PowerBI.

2.8 RELIABILITY AND VALIDITY OF THE STUDY

2.8.1 RELIABILITY

Table 2 below presents Cronbach's Alpha values for the reliability analysis of different categories: Social Impact (0.7392), Economic Impact (0.8686), Universal Access (0.7511), and the overall alpha (0.7684). All values fall within the range of 0.7–0.9, indicating acceptable internal consistency for the respective constructs. The lower and upper boundary values confirm that the reliability remains within the acceptable range for each category.

Table 2: Reliability of Study Constructs

	Cronbach's Alpha	Lower Boundary	Upper Boundary	Remark
Social Impact	0.7392	0.6788	0.7995	Acceptable
Economic Impact	0.8686	0.7928	0.9075	Acceptable
Universal Access	0.7511	0.7287	0.8339	Acceptable
Overall alpha	0.7684	0.7115	0.8252	Acceptable

2.8.2 VALIDITY

A pilot study was conducted to validate the research design, data collection tools, as well as the methodology for the CIC Impact Assessment. Survey questionnaires for users and administrators were assessed for clarity, relevance, and time efficiency. Feedback from participants and researcher observations led to refinements, including rephrasing questions, adjusting their sequence, and improving sampling methods. Preliminary analysis confirmed the tools' reliability, ensuring a robust and feasible approach for the main study.

3 IMPACT ASSESSMENT FINDINGS

3.1 OVERVIEW

This section presents the study's results, highlighting key insights from survey responses and interviews conducted with CIC users, non-users as well as operators. It analyses the data across social, economic, and access dimensions, offering a comprehensive view of CICs' impact on community development and digital inclusion.

3.2 DEMOGRAPHICS

The study achieved 936 interviews, comprised of 54 CIC operators/administrators and 882 individual citizens, ensuring a well-rounded analysis of the impact of the Community Information Centres (CICs). The demographic breakdown covers gender, age groups, rural and urban locations, and regional representation across ten provinces.

3.2.1 GENDER DISTRIBUTION

To capture the experiences of CICs' primary users, males were proportionately recruited at a slightly higher rate, as they reportedly constitute a more significant portion of the CIC users according to the July 2024 attendance lists, which showed that males constituted 79.4% of CIC users, as compared to 20.6% by women. The gender distribution of the respondents to the impact assessment study is shown in Figure 4 below:

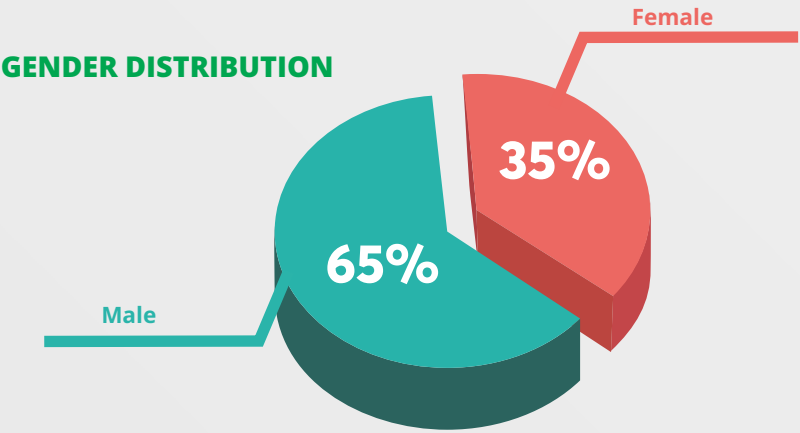


Figure 4: Sample Distribution by Gender

This distribution aligns with CIC usage trends, reflecting the higher frequency of male engagement with the centres. The move to increase the proportion of women respondents beyond the usage threshold was deliberate to effectively capture input from non-users.

3.2.2 AGE DISTRIBUTION

The age composition of respondents provides insights into the generational use of CICs. Participants were categorised into four age groups, and the proportion per age group is shown in Figure 5 below:

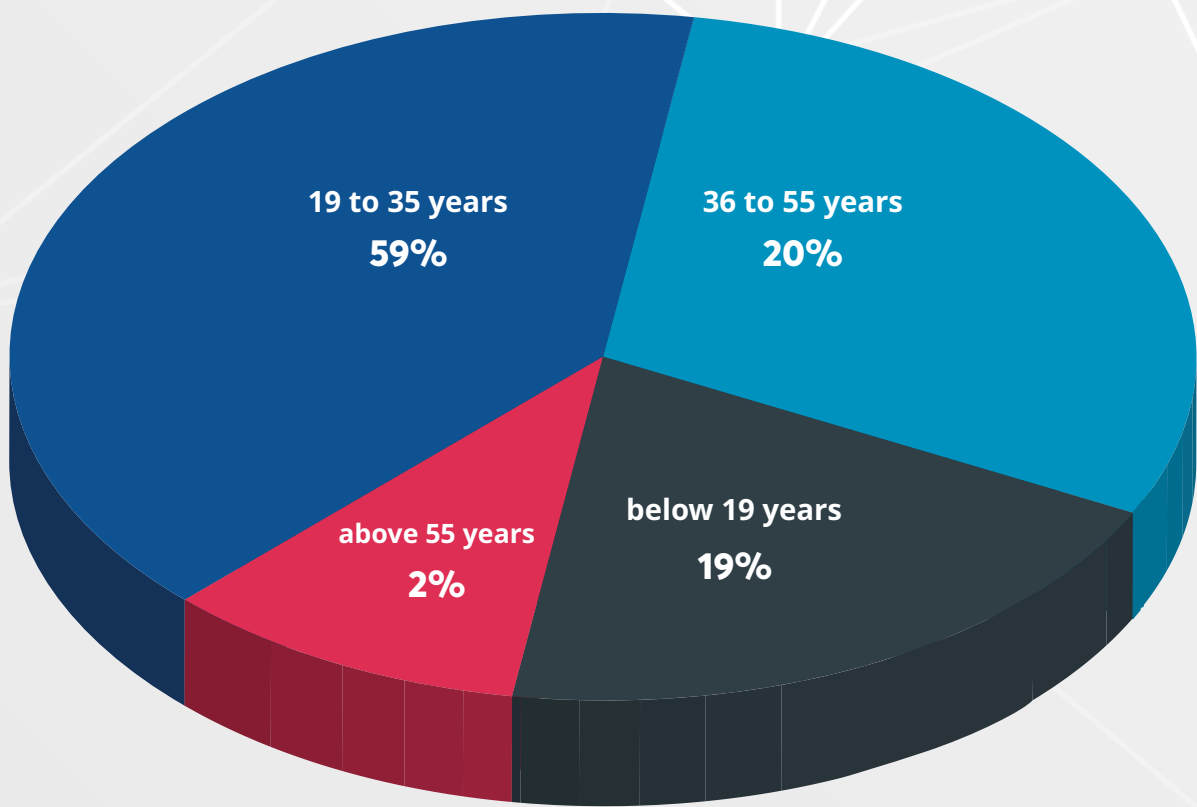


Figure 5: Sample Distribution by Age

The age breakdown of respondents as shown in Figure 5 above, augurs well with the age distribution as per sampling frame. This distribution ensured a representative sample, with reported usage patterns accurately reflected within the sample population.

3.2.3 PROVINCIAL REPRESENTATION

The bar graph below illustrates the distribution across provinces, with variations to accommodate population densities and reported CIC usage levels.

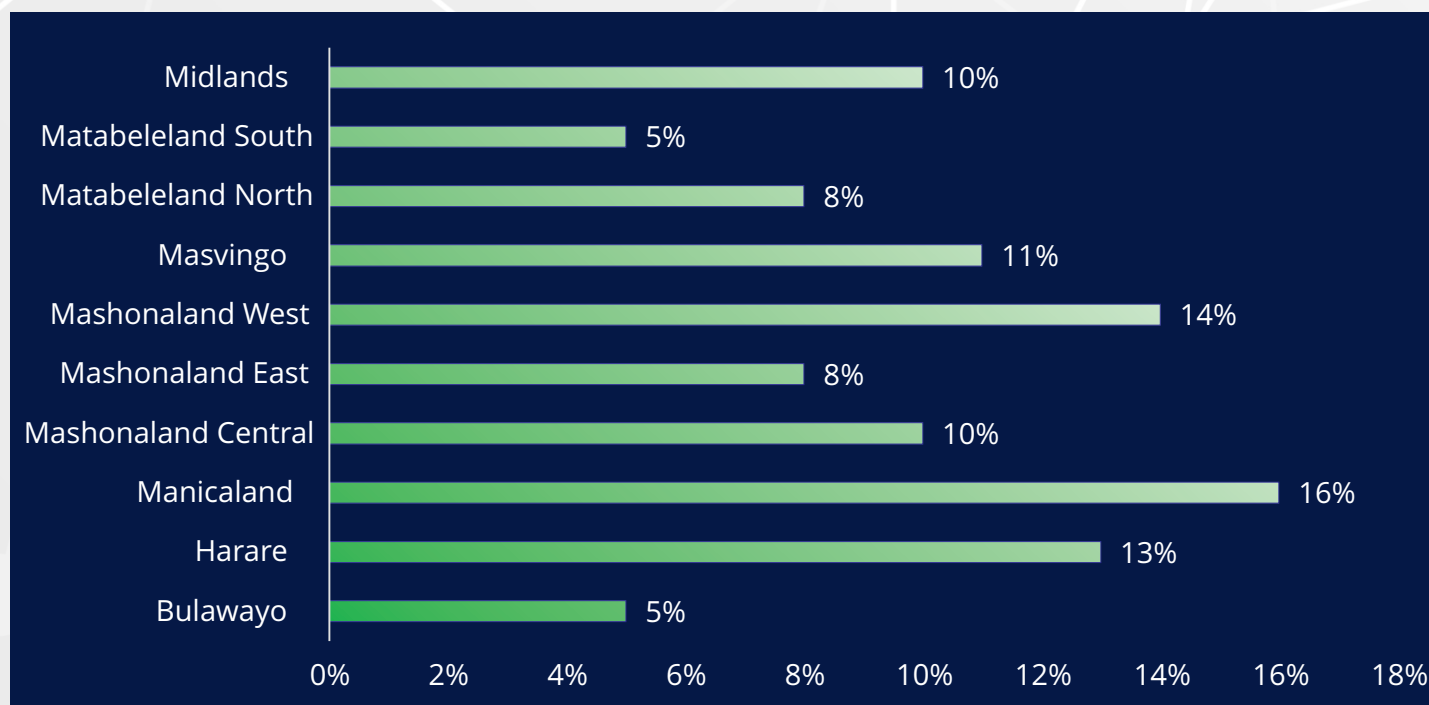


Figure 6: Sample Distribution by Province

As shown above, the study was national in scope, respondents were drawn from all the ten (10) provinces of the country. The regional representation of the respondents for the study was informed by the CIC July 2024 statistics.

3.3 ASSESSMENT OF CIC OPERATIONS

The first port of call in a post-implementation impact assessment of a development intervention, such as Community Information Centres, which involves infrastructure, services as well as facilitative devices, is to assess the operational aspects. This section covers issues of availability of the following to the intended beneficiaries: the Internet, computers, and the CIC itself, amongst other issues.

3.3.1 PROPORTION OF OPERATIONAL CICs

As highlighted earlier in the report, the study sampled a total of fifty-nine (59) Community Information Centres. Of these, seven (7) were not operational, representing 11.9% of the sampled population. In this case, 'Operational' means open to receive and offer at least one of the core CIC services to community members; core services being the Internet, reprographic services, and digital literacy training. The list of CICs which were not operational was as follows:

- 1 **Sadza:** The Internet service provider withdrew services after a major fault; the CIC operated without Internet for a while, until it was closed.
- 2 **Mnene CVIC:** Although the CVIC was commissioned and fully equipped, the facility was yet to open its doors to the community.
- 3 **Tongogara CVIC:** like Mnene, Tongogara CVIC was fully equipped, but no services were being offered to the community. CIC administrators were engaged at some point but had since left.
- 4 **Jahunda:** Jahunda CIC was closed. It was reported that the CIC had various infrastructural challenges, such as damage to the ceiling and walls, arising from the time the premises were rented out by Zimpost to a private college.
- 5 **West Nicholson:** Although West Nicholson is open, the CIC is technically non operational as it is not offering any service to community members. It failed to attract users due to issues such as the unavailability of Internet. The area is also predominantly inhabited by illegal miners, the CIC's close proximity to the police station premises is also deterrent according to feedback from the community members.
- 6 **Concession:** There had been no CIC administrator for more than a month; hence, no services were being offered to the community as the CIC was closed.
7. **Dzivarasekwa:** The CIC did not have power supply for a period exceeding two months.

Additionally, there was a unique case of Rusape CIC whose doors were open, and an administrator was on duty, however, the only service they were offering was space. This was mainly for students who wanted reading space on the desks as well as local enterprises who wanted space for business activities such as meetings or interviews.

The proportion of non-operational CICs (11.9%) to the total number of sampled CICs is quite high. It is a cause for concern as this represents wasted expenditure, should the phenomenon persist. In absolute terms, it is evident that many more Community Information Centres are not operational, as the study focused on a sample and not the population.

3.3.2 COMPUTERS

Computers represent the core channel through which all digital services are offered within Community Information Centres. Hence, an assessment of their availability, condition and demand is requisite to the impact assessment. This information was provided from the supply side, that is the CIC administrators and is shown in Figure 7 below:

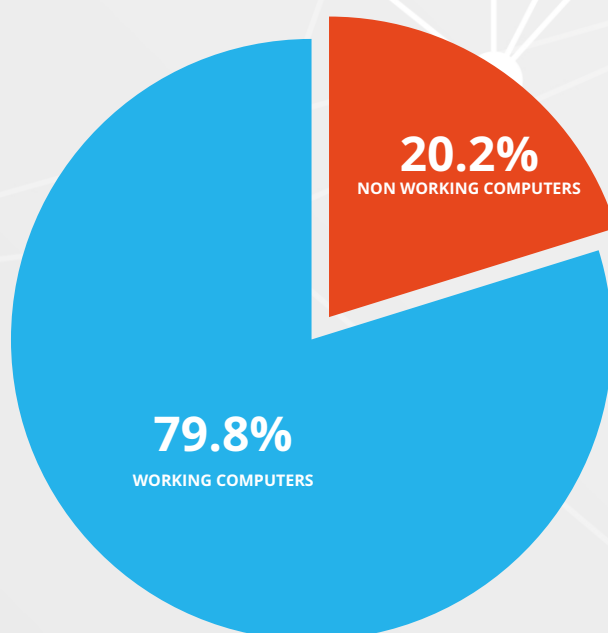


Figure 7: Computers

As shown above, 79.8% of computers in operational CICs were reported to be in good working order. Although most computers were reported to be functional, several performance issues were raised. Prominent among these issues was outdated software, mostly due to a lack of regular updates, which could potentially lead to security vulnerabilities and compatibility issues. Other issues mentioned included non-functional and insufficient chargers as well as non-functional computer batteries, hindering usage when there is no electricity. Some computers were reported to be very slow, making it difficult to access anything with them within the given time.

Highlighted below are some sentiments shared about the condition of computers at the centres:

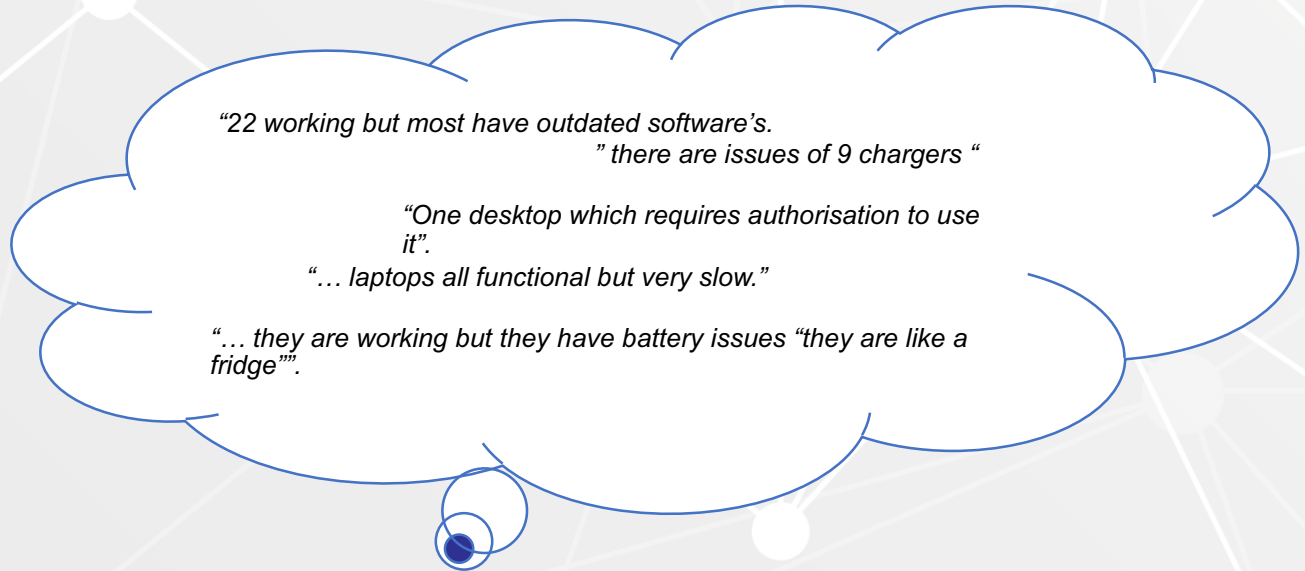


Figure 8: Sentiments on CIC Computers

Interestingly, though CICs have computers, only a small number of people use them. On average, three (3) computer requests per CIC were processed on a weekly basis, highlighting the low demand of computers at CICs. The study revealed that most CIC visitors used their personal gadgets, mainly mobile phones. This may be attributable to several factors such as lack of awareness on the availability of computers at the centre, as some respondents cited lack of devices as a reason for not accessing Internet in CICs. Lack of awareness on the availability of computers for use by community members cannot be disregarded, considering that laptops are not readily displayed in the CIC, but are locked in safes for security reasons and only released upon request. The convenience of using own devices, particularly to download, save and carry content home, is another contributory factor. The electricity outages being experienced in the country are also a major contributory factor to the low computer use at CICs.

3.3.3 SERVICE AVAILABILITY: THE INTERNET

One of the main motives for the establishment of CIC was to improve access and use of the Internet by underserved communities. Hence, the assessment of the availability and quality of Internet within the CICs was pertinent. The proportion of CIC with available Internet availability is shown in Figure 9 below:

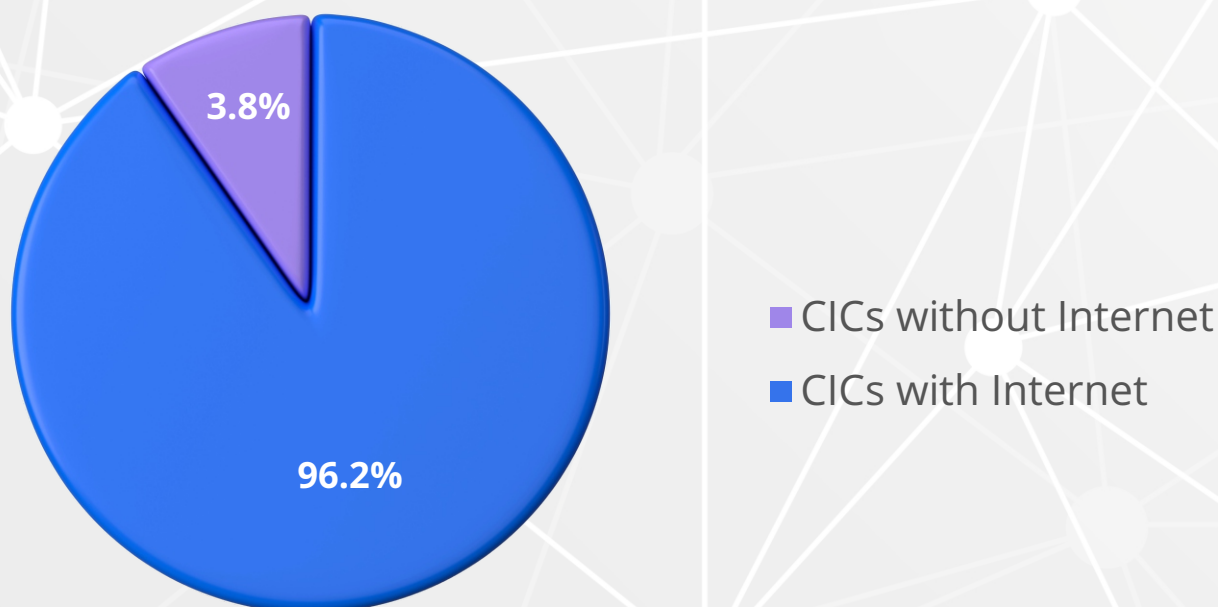


Figure 9: Internet Availability

As shown above, the majority (96.2%) of operational CICs had Internet. The following CICs did not have functional Internet connectivity:

- ☑ Jakopo: The initial subscription from POTRAZ had been depleted, and no payment plans had been established some time.
- ☑ Rusape: The internet cannot reach the CIC facility due to a long-overdue, unaddressed technical fault.

Despite the widespread availability of Internet in CICs, concerns on the Internet quality were raised by users as well as administrators. The internet quality was rated 'poor' at 86% of the CICs that had internet connectivity. Users expressed concerns about the Internet becoming slower as more people connected, which indicates insufficient bandwidth at CICs. This limitation makes the assigned 30-minute to one-hour daily sessions inadequate for individual users. The administrators also raised the challenge of delays in Internet subscription payments, resulting in disruptions in service delivery.

3.3.4 SERVICE AVAILABILITY: DIGITAL LITERACY TRAINING

One of the main objectives of establishing CIC was to bridge the digital divide. It is important to note that the digital divide exists in two different ways:

- ☑ Lack of available infrastructure to bring people online.
- ☑ A lack of digital literacy and skills to make use of the Internet and digital resources.

This implies that the expansion of broadband infrastructure and connectivity is only as effective as the ability to use the services from the infrastructure. According to UNESCO³ digital literacy involves the confident and critical use of a full range of digital technologies for information, communication and basic problem-solving in all aspects of life. It is underpinned by basic skills in ICT: the use of computers to retrieve, assess, store, produce, present and exchange information, and to communicate and participate in collaborative networks via the Internet.

Community Information Centres are regarded as a channel for advancing digital literacy and digital skills to underprivileged communities; this is particularly so where targeted digital literacy programs are in place. It is important to note that offering assistance to CIC users is not synonymous to digital literacy training. Digital literacy training (DLT) involves sequential learning, with a curriculum, that teaches individuals how to effectively as well as safely use and understand technology. The graph below highlights the proportion of CICs offering digital literacy training programs.

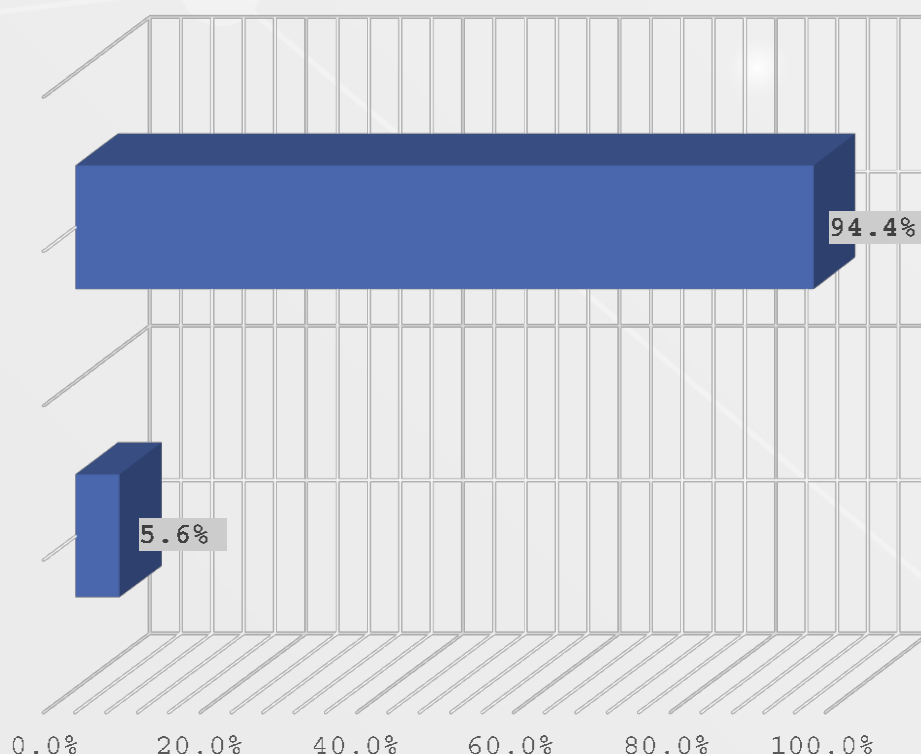


Figure 10: Digital Literacy Training without CICs

³ UNESCO, <http://tcg.uis.unesco.org/wp-content/uploads/sites/4/2021/08/Metadata-4>

Only 5.6% of CICs highlighted that they offered digital literacy training programmes to the community, suggesting a significant gap in the availability of such programs within centres. This can be attributable to several factors. There is a lack of Trainer of Trainers (ToT) programs, resulting in most CIC administrators lacking the necessary knowledge and skills to train the communities. There is also a lack of coherence in digital literacy programs at national level.

3.3.5 SERVICE AVAILABILITY: REPROGRAPHIC SERVICES

Reprographic services, printing and photocopying, are key services for individuals and businesses, particularly in rural areas, as the facilitative equipment, i.e., printers, are rarely available within households. Businesses offering these services are also hardly found in rural areas. The availability of printing services at CICs is shown in Figure 11:

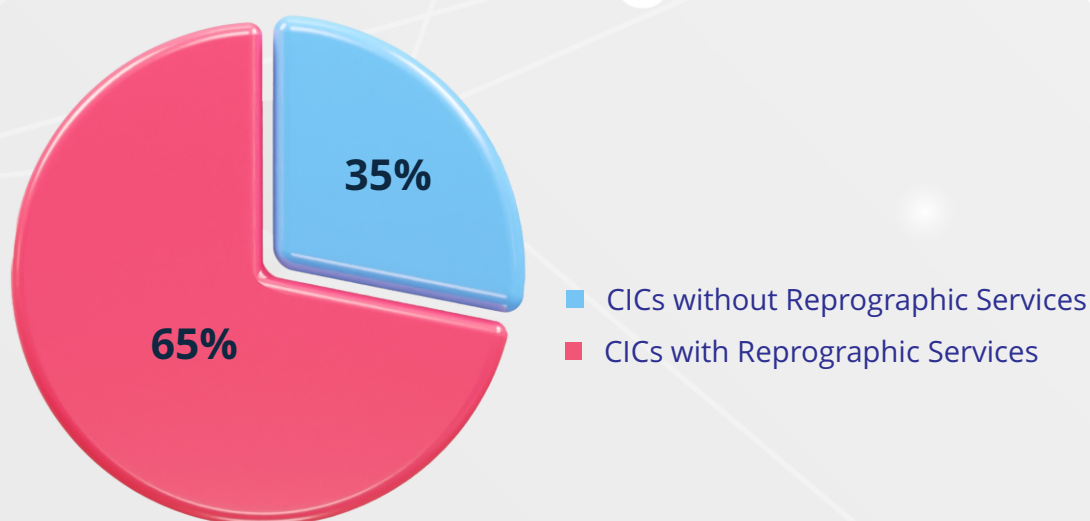


Figure 11: Availability of Reprographic Services

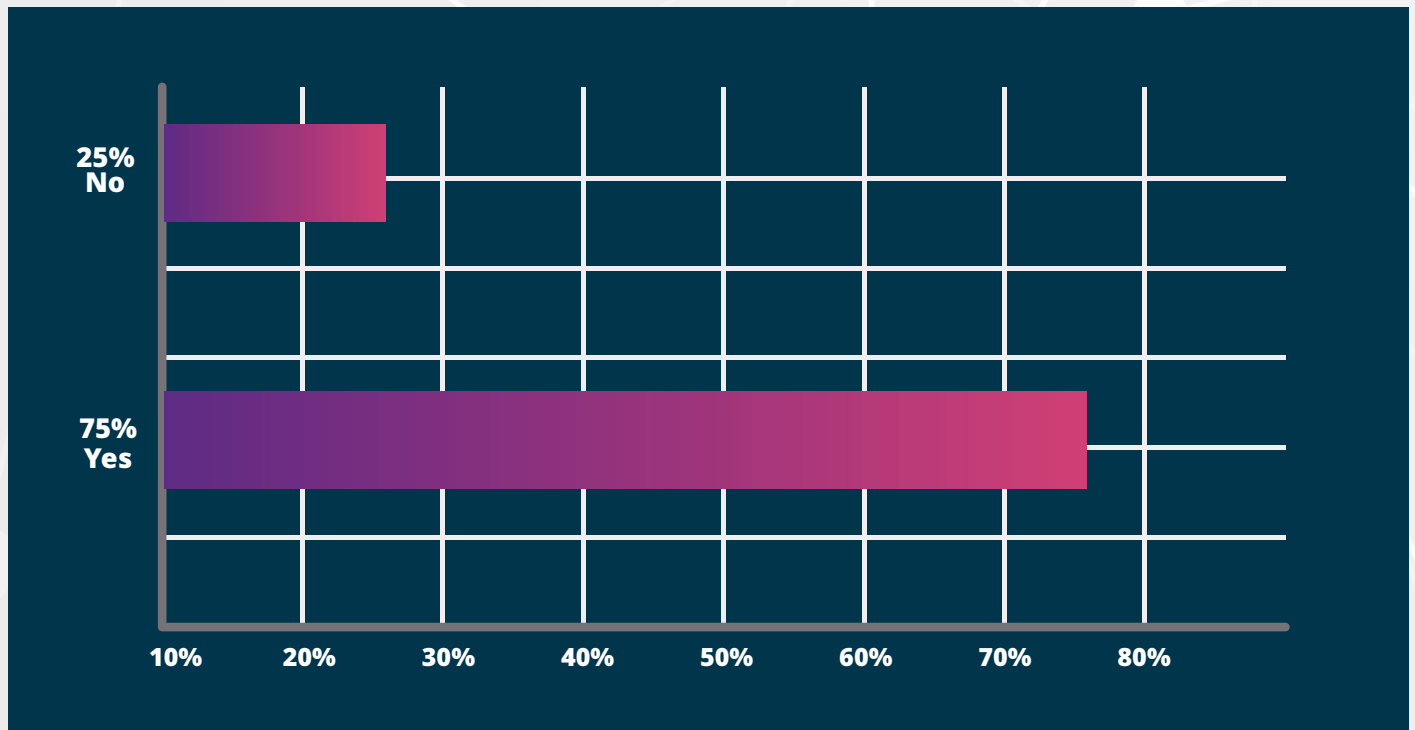
Reprographic services are a basic offering that should be readily available in all CICs. However, 35% of operational CICs do not provide reprographic services, photocopying, or scanning. The cited reasons for not offering printing services include:

- ☑ Cartridge unavailability
- ☑ Malfunctioning printers
- ☑ Software challenges

These challenges impact the overall ability to deliver reliable and efficient services to the community. Addressing this gap could enhance user utility.

3.3.6 BACKUP POWER

Backup power has become a necessity for any venture, considering the prolonged power cuts of up to sixteen (16) hours a day. The majority of CICs did not have any form of backup, at the time of the study, as show in Figure 12 below:



CICs with Backup Power

Figure 12: Backup Power

Of the 13 (25%) CICs with backup, 8 were solar powered, and these were mostly CVICs. Only a few indicated that they used generators; however, the generators belonged to the post office. Hence, the post office was prioritised such that generators were only switched on when there was business at the post office and switched off thereafter, regardless of demand for services within the CIC.

BACKUP POWER INSIGHTS

KEY INSIGHTS

The proportion of non-operational CICs (11.9%) to the total number of sampled CICs is quite high. It is a cause for concern as this represents wasted expenditure, should the phenomenon persist.

79.8% of computers in operational CICs were reported to be in good working order. Nevertheless, demand for computer use was low, with an average of three (3) computer requests per week.

94.6% of CICs had Internet availability. However, concerns on the Internet quality were raised, with users giving an overall Internet quality rating of 'poor' at 86% of the CICs.

The lack of back-up power supply poses serious operational challenges, as only 25% of CICs had back-up power.

The availability of basic reprographic Services such as printing, is yet to be ubiquitous as 35% do not offer such services. Addressing this gap could enhance user utility of CICs.

Only 5.6% of CICs offered digital literacy training, suggesting a significant gap in the availability of such programs.

3.4 ASSESSMENT OF CIC AWARENESS LEVELS

It is important to gauge the awareness levels and deduce inferences therefrom, as awareness begets utilisation. Of the 882 interviewed respondents, 505 respondents (57%) were aware the existence of CICs within their communities, indicating that awareness levels are relatively moderate. A considerable proportion (43%) of the intended beneficiaries were unaware of the existence of CICs within the communities they live demonstrating the need for more awareness campaigns.



3.4.1 PROVINCIAL BREAKDOWN OF AWARENESS LEVELS

Geographical disparities in CIC awareness levels were noted. Figure 13 below illustrates the differences in awareness levels of CICs across various regions:

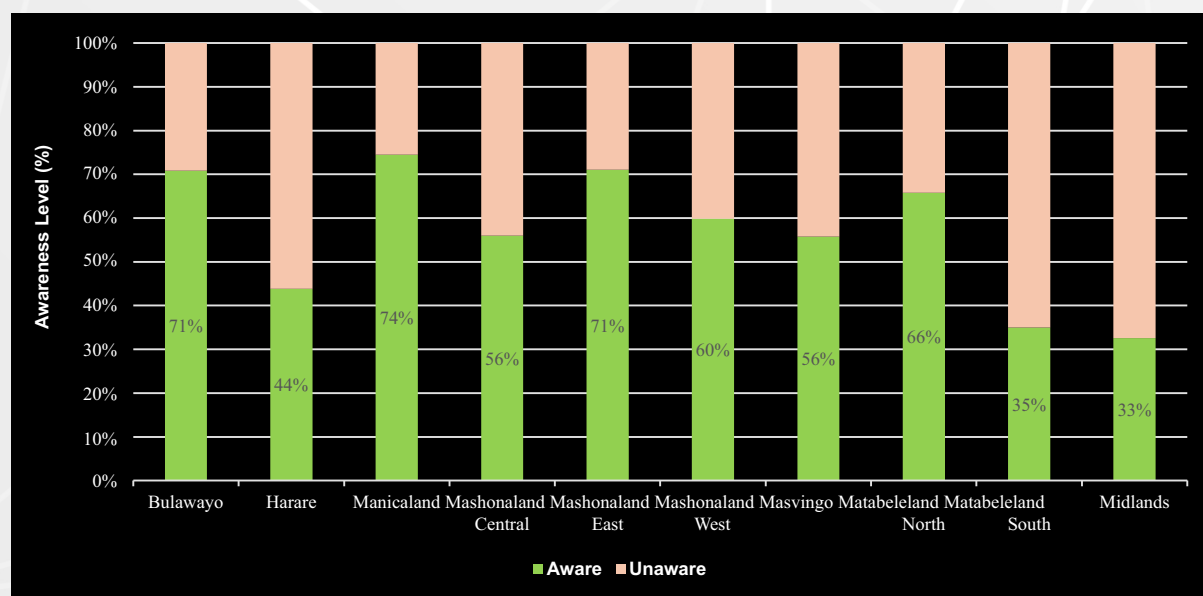


Figure 13: Awareness Level of CICs by Region

As shown in Figure 13 above, there were stark disparities across provinces, with Manicaland, Bulawayo, and Mashonaland East provinces leading, with over 70% of the surveyed individuals being aware of CICs. Conversely, Midlands, Harare, and Matabeleland South exhibit much lower awareness levels below 50%. The result points to the need to have targeted awareness in these provinces.

3.4.2 AWARENESS: DEMOGRAPHIC INFERENCES

Understanding demographic patterns is essential for effectively tailoring outreach efforts and service offerings, ensuring they resonate with the community's diverse needs. Community Information Centre (CIC) awareness analysis among different demographic groups revealed significant insights. Awareness appeared to vary across age, gender, and location, with Chisquare (χ^2) tests indicating statistically significant differences for certain variables, particularly gender and location as shown in table 3 below:



CIC AWARENESS

		Aware	Unaware	% Aware	χ^2 P-value
Age	18 and below	102	68	60.0%	0.323
	19 to 35	284	235	54.7%	
	36 to 55	108	68	61.4%	
	56 and above	11	6	64.7%	
Gender	Male	362	212	63.1%	p < 0.0001
	Female	143	165	46.4%	
Location	Rural	289	143	66.9%	p < 0.0001
	Urban	216	234	48.0%	
Level of Education	No Formal Education	9	5	64.3%	0.7029
	Primary	86	63	57.7%	
	Secondary	327	256	56.1%	
	Tertiary	83	53	61.0%	

Table 3: Chi-square (χ^2) CICs Awareness Analysis

- Age and CIC Awareness Analysis

The distribution of CIC awareness by age did not yield a statistically significant Chi-square result ($p = 0.350$), indicating that awareness levels did not differ substantially by age group. Although younger groups, particularly those aged 19-35, showed the highest absolute awareness, this difference was not statistically significant. This finding suggested that, while a large proportion of younger individuals were aware of CICs, awareness was likely influenced by other factors not directly tied to age.

- Gender and CIC Awareness Analysis

Gender, on the other hand, demonstrated a highly significant difference in CIC awareness ($p = 0.0001$). Male respondents reported substantially higher awareness compared to female respondents, where 144 were aware versus 165 unaware. The significant result implied that targeted awareness campaigns to increase female engagement and outreach could have helped balance CIC utilisation across genders. The analysis underscores the importance of sustaining initiatives such as “Girls in ICT,” which play a crucial role in bridging the gap in digital participation among girls.

- Location and CIC Awareness Analysis

Location, on the other hand, showed a significant impact on awareness ($p = 0.0001$). Rural respondents were more likely to report awareness of CICs in contrast to their urban counterparts. This difference could be attributed to existing access disparities. In urban settings, where people may have access to alternative digital resources, individuals may have less need of exploring access through public initiatives such as CIC services.

- Level of Education and Awareness

The relationship between level of education and CIC awareness was also tested. However, the Chi-square (χ^2) produced a p-value of 0.7029. This indicates that there was no statistically significant association between education level and CIC awareness, since the p-value is above the typical significance level of 0.05. This implies that level of education does not have a significant influence on CIC awareness, suggesting that awareness campaigns should target individuals across all educational backgrounds rather than focusing on specific groups. Overall, the analysis highlighted that CIC awareness was significantly associated with gender and geographical location, with rural males showing the highest levels of awareness. However, age and education levels did not appear to be a significant factor in determining CIC awareness, implying that demographic outreach efforts may have needed to focus more on gender and geographic location. It would be beneficial to implement targeted awareness and engagement strategies that address these disparities.

3.4.3 AWARENESS OF CICS BY TYPE

There are two types of Community Information Centres:

- 1** CICs housed within the post office premises.
- 2** CICs housed in prefabricated containers. These are referred to as Containerised Village Information Centres (CVICs).

Awareness levels between the two types of CICs were compared as shown in Figure 14 below:

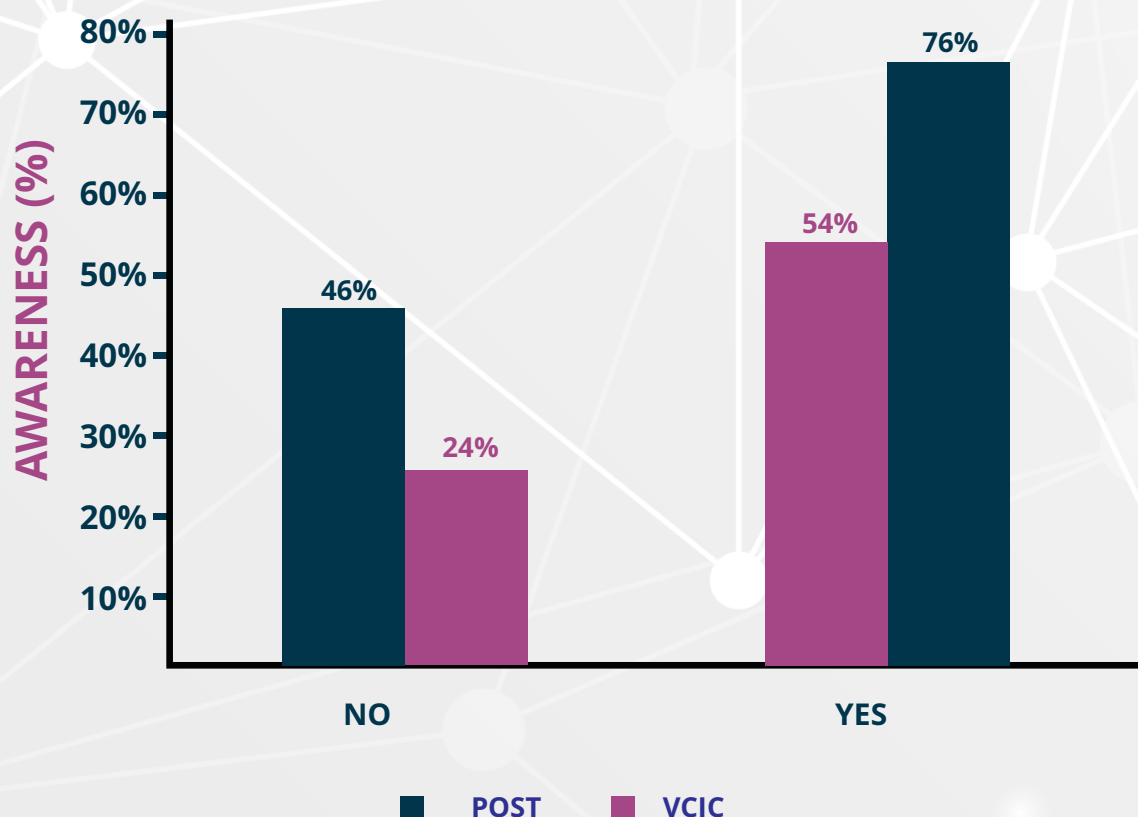


Figure 14: Awareness of CIC by Type

As shown above, community awareness levels were higher for CVICs as compared to CICs housed within the post office premises. A key factor in this difference is visibility: as standalone buildings, CVICs are more prominent in the community, while CICs within post offices are often overshadowed by the other businesses, such as pharmacies, that occupy the same spaces which Post Offices rent out. This multi-use environment not only limits CIC visibility but also presents a security risk for CIC equipment, as increased traffic from unrelated business activity poses potential security concerns for CIC resources.

Additionally, some CICs in Post Offices face space constraints, and the absence of signage often causes them to be overshadowed by primary postal services. This reduced visibility could lead to diminished awareness and accessibility. To maximise their effectiveness, both CICs and CVICs would benefit from increased visibility, dedicated spaces free from unrelated business activities, and efficient resource utilisation to ensure that all operational centres fulfil their intended purpose of bridging the digital divide.

REACH OF CIC's

KEY INSIGHTS ON AWARENESS

A considerable proportion (43%) of the intended beneficiaries of the CICs initiative remain unaware of the existence of CICs within the communities they live.

Chi-tests revealed that CIC awareness was significantly associated with gender and geographical location (rural-urban), highlighting the importance of implementing targeted community engagement strategies that address identified disparities.

Community awareness levels were higher for CVICs (76%) as compared to CICs housed within the post office premises (54%). A key factor in this difference is branding and visibility. CVICs are more prominent in the community, while CICs within post offices are often overshadowed by the other businesses that occupy the same space e.g., pharmacies that rent from the post office.

3.5 USAGE LEVELS

Assessment of usage levels is prerequisite to the assessment of impact on the users. The study also assessed the usage of CICs. Of the 882 interviewed respondents, 276 respondents (31.3%) had used CICs within their communities, indicating very low utilisation levels.

3.5.1 PROVINCIAL BREAKDOWN OF USAGE

Geographical disparities in CIC utilisation levels were noted. Figure 15 illustrates the differences in usage levels of CICs across the ten provinces of Zimbabwe:

REGULATORY IMPACT ASSESSMENT REPORT ON COMMUNITY INFORMATION CENTRES (CICs)

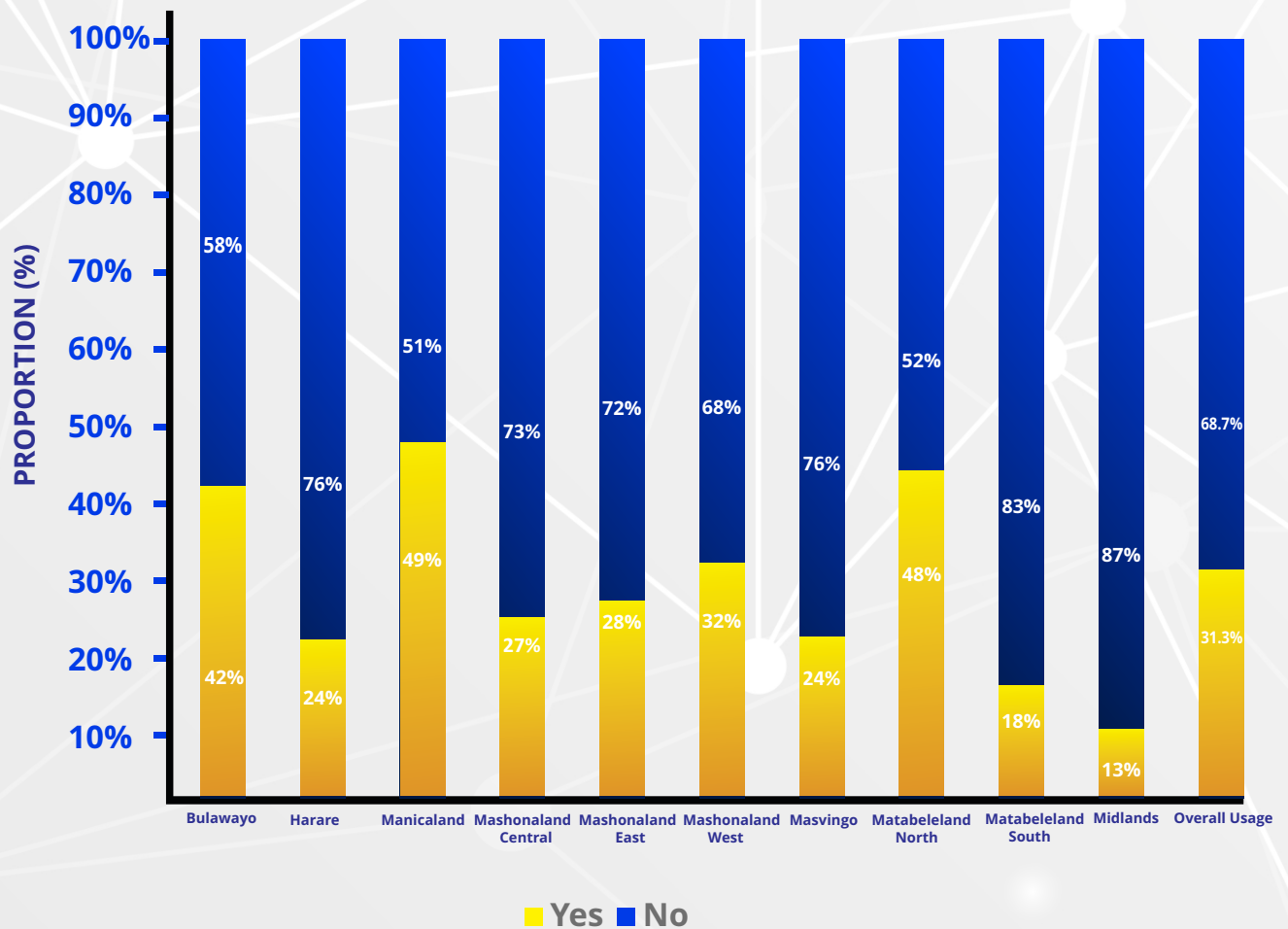


Figure 15: Provincial Breakdown of CIC Usage

Matabeleland North and Manicaland recorded the highest usage rates of 48% and 49% respectively, while Midlands and Matabeleland South recorded the lowest usage rates of (13%) and (18%) respectively. This reveals significant regional disparities, with most provinces needing targeted strategies to boost engagement. These findings highlight the need to address barriers in low-usage areas, like Midlands and Matabeleland South, while continuing to enhance support for high-demand regions, such as Manicaland and Matabeleland North.

3.5.2 USAGE: DEMOGRAPHIC INFERENCES

An analysis of Community Information Centre (CIC) usage analysis among different demographic groups revealed significant insights. Use appeared to vary across age, gender, and location, with Chi-square (χ^2) tests indicating statistically significant differences for certain variables, particularly gender and location as shown in table 4 below:

CIC usage

		Yes	No		χ^2 P-value
Age	18 and below	68	102	40.0%	0.00615
	19 to 35	152	367	29.3%	
	36 to 55	47	129	26.7%	
	56 and above	9	8	52.9%	
Gender	Male	218	356	38.0%	<0.0001
	Female	58	250	18.8%	
Location	Rural	156	276	36.1%	0.0025
	Urban	120	330	26.7%	

Table 4: CIC Usage Inferential Statistics

■ **Age and CIC Usage Analysis:**

The analysis of CIC usage by age group revealed a statistically significant relationship (χ^2 $p = 0.00615$). While, the 19-35 years age group had the highest proportion of users, the 56 years and above age group had the highest usage rate, as shown in the table, followed by the 18 years and below group. The results reflected the elderly's reliance on CICs due to limited alternatives, while lower rates among the 19-55 group suggested better access to other resources or time constraints.

● **Gender and CIC Usage Analysis:**

Gender demonstrated a statistically significant relationship with CIC usage χ^2 $p < 0.00001$. Male respondents showed higher usage compared to females. The significant difference could be attributable to factors such as differences in digital exposure, cultural norms e.g. "rural women are predominantly occupied with household duties", which may affect use of CIC services. The result underscores the need for targeted interventions to encourage greater female engagement with CIC facilities.

- **Location and CIC Usage Analysis**

Location exhibited a statistically significant relationship with CIC usage (Chi2 $p=0.0025$). Rural respondents showed higher usage compared to their urban counterparts. This trend aligns with the role of CICs in bridging the digital divide in underserved areas, where reliance on these facilities for internet access and digital services is higher. Urban residents may have alternative access options, which could explain their comparatively lower engagement.

3.5.3 FREQUENCY OF USE

Figure 16 below illustrates the frequency of Community Information Centre (CIC) usage among respondents who used the facilities:

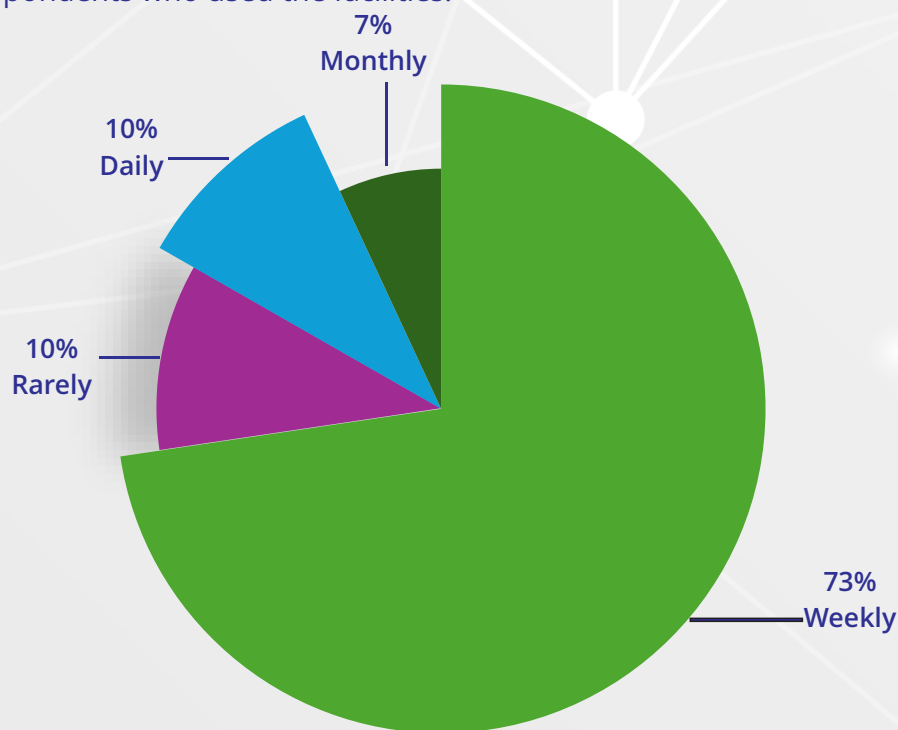


Figure 16: Frequency of Use

As shown above, a significant majority of users (73%) reported using CIC services on a weekly basis, indicating a consistent and routine reliance on these facilities. This highlights the critical role CICs play in the lives of their users for accessing information, services, or resources regularly. Daily usage was reported by 10% of respondents, showing a smaller segment with a higher level of engagement, potentially for work, study, or other frequent needs. Another 10% indicated they rarely use the facilities, suggesting limited utility for this group. Meanwhile, 7% of respondents reported using CICs monthly, representing a minimal but steady interaction with the services. Overall, the findings demonstrate that weekly usage dominates, underscoring the relevance and importance of CICs in providing consistent services to the community.

3.5.4 MOST USED SERVICES

As mentioned earlier, CICs offer several services besides the Internet. These include printing, photocopying, scanning, digital literacy training amongst other services. Feedback from end users on their service use is shown in Figure 17 below:

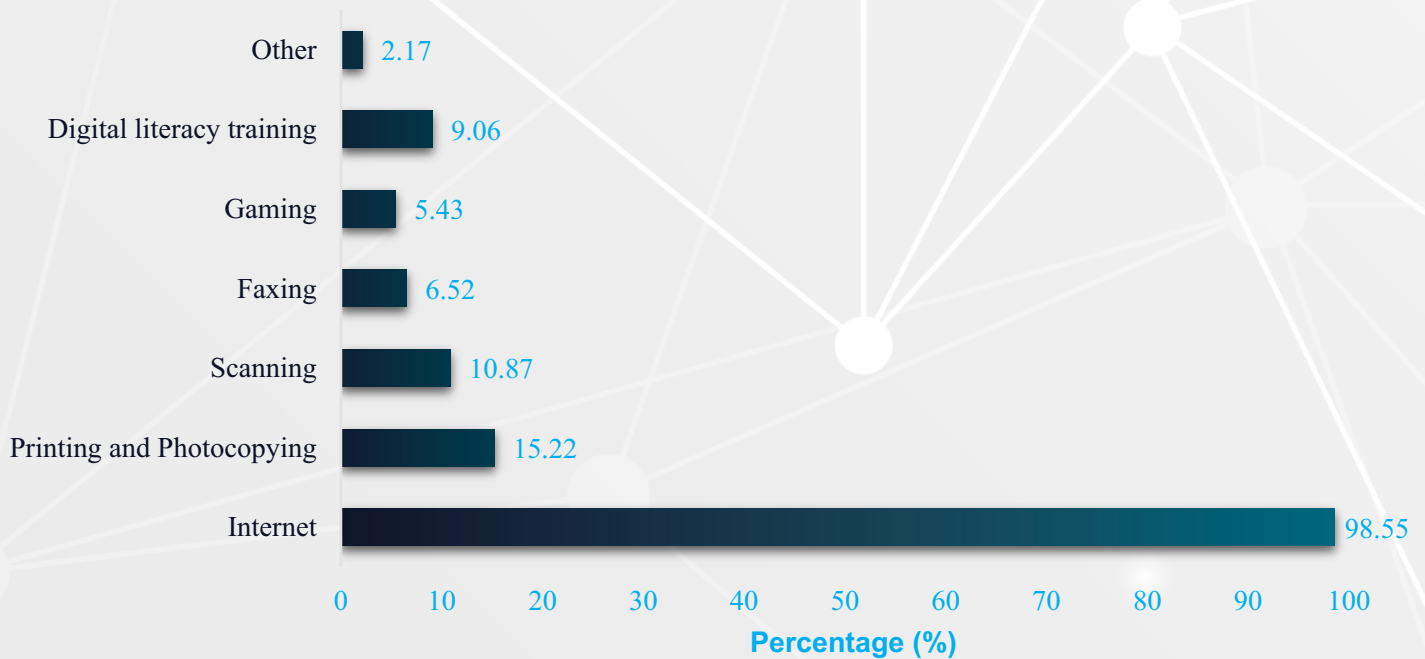


Figure 17: Services utilised at Community Information Centres

As expected, Internet emerged as the most frequently used service, with 272 respondents (98.55%) reporting Internet usage. This highlights the essential role of Internet in the lives of citizens. Other services, however, showed notably lower utilisation rates. For instance, printing and photocopying services were used by only 15.22% and 15.94% respectively. Scanning and faxing services were even less popular, with only 10.9% of the respondents utilising scanning services and 6.5% using faxing. Recreational resources, such as gaming facilities, reported minimal engagement, with only 5.43% indicating usage. Similarly, digital literacy training, a service designed to enhance users' digital proficiency, was reported by just 9.1%. The low user engagement of these services may not reflect low demand of these services but may reflect supply gaps since they are not extensively provided by CICs, as compared to Internet. Figure 18 compares service usage between rural and urban areas:

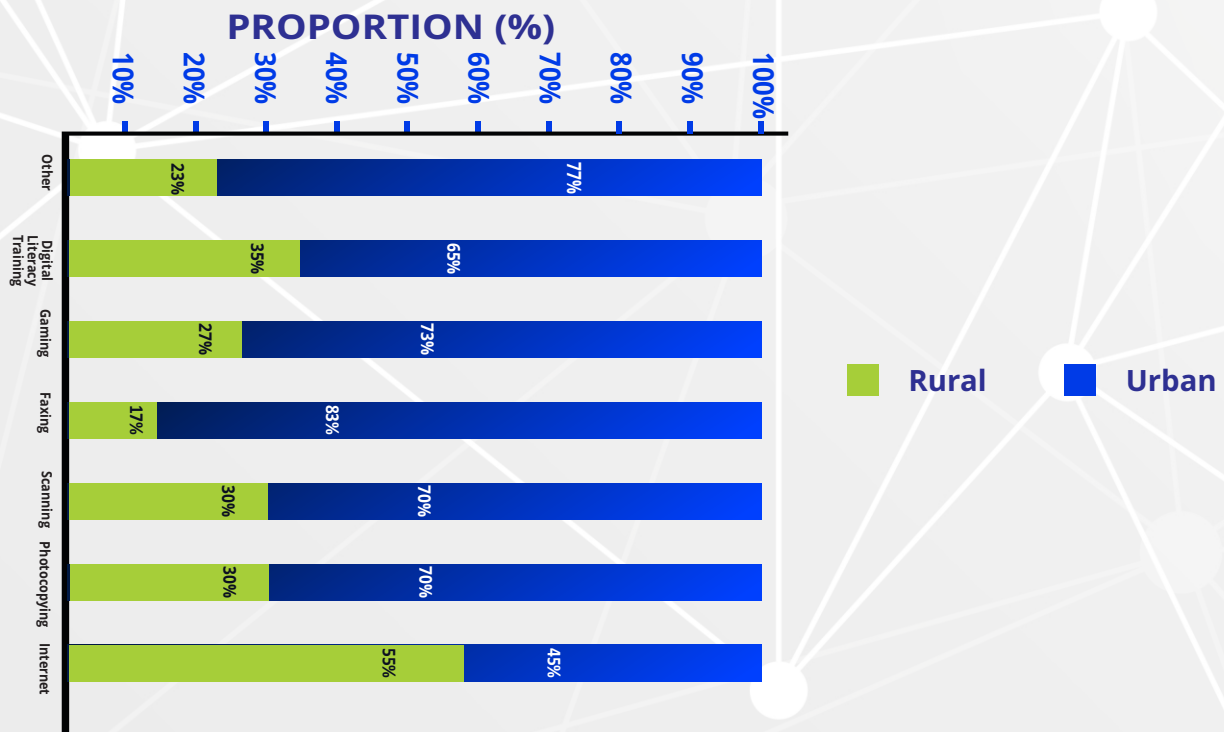


Figure 18: Rural vs Urban Service Utilisation

As shown above, rural users had higher engagement with the Internet, digital literacy training as well as photocopying, conceivably due to limited alternative resources or a stronger reliance on CICs for educational and administrative tasks. Conversely, urban users demonstrate higher usage of services like faxing (83%) and gaming (73%), likely reflecting greater demand for professional communication tools and recreational activities in urban settings. These differences suggest that rural areas benefit from CICs addressing foundational needs.

3.5.5 REASONS FOR NOT USING CICs

It is worth noting awareness was not the only determinant of usage, as a significant portion (45.3%) of respondents who were aware of the existence of CICs within their communities, had never visited the CICs to access services. An exploratory analysis highlighted several common reasons for the underutilisation of CICs among consumers that were aware of the CICs as highlighted in figure 19 below:



3.6 IMPACT ASSESSMENT: ADVANCING DIGITAL LITERACY

As mentioned earlier, one of the main objectives of establishing CICs was to bridge the digital divide which not only manifests in a lack of available infrastructure to bring people online but also a lack of digital literacy and skills to make use of the Internet and digital resources. However, CICs have made no significant impact in fostering digital literacy owing to the non availability of digital literacy training programs, as only 5.6% of CIC were training community members. From the end-user perspective, the proportion of trained users was also very negligible i.e., 1.7% of the entire sample of respondents or 5.4% expressed in terms of CIC users as shown in Figure 20 below:

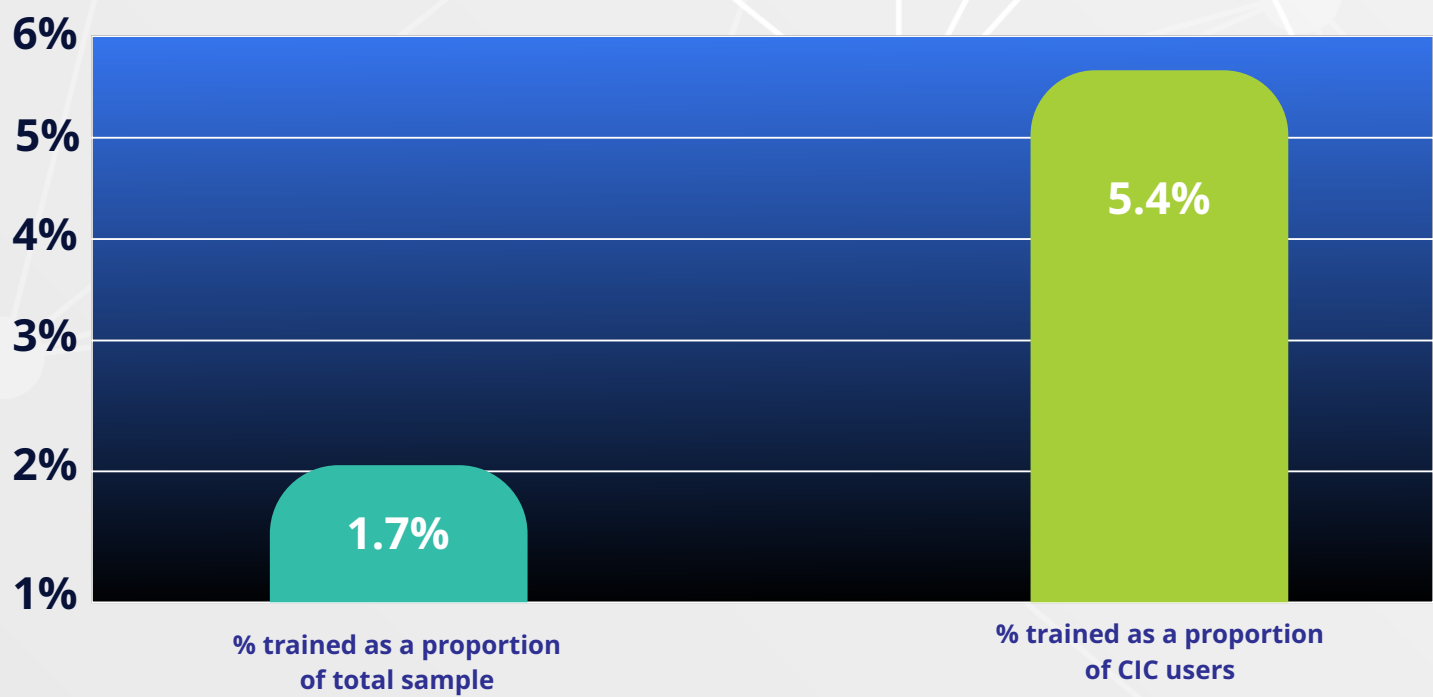


Figure 20: Proportion of Citizens who received Digital Literacy Training by CICs

The DigComp Digital Literacy Framework was used to assess the digital skills acquisition from the CIC training. The new skills gained by the very few who were trained include the following:



Table 5: Digital Literacy Skills

Skills Level	Category DigComp	Skills Description	% Capable
Basic	Communication & Collaboration	Use of digital tools to communicate with others (e.g., email, messaging apps, etc.)	100%
		Ability to participate in online forums or social media platforms	100%
	Safety	Awareness of the importance of keeping my digital devices secure and basic strategies.	100%
Intermediate	Information & Data Literacy	Ability to search for information online effectively.	87%
	Information & Data Literacy	Ability to regularly updated passwords and used strong passwords for my accounts."	87%
	Information & Data Literacy	Awareness of the risks associated sharing information online."	87%
	Problem Solving	Ability to adapt to new digital tools and technologies quickly	87%

Table 5 above is just a snapshot of some of the new skills gained by participants from the Digital Literacy trainings. Overall, all participants passed the basic appreciation level, whereas 87% progressed to the Intermediate stage, demonstrating significant improvement in practical skills. The rescaling of the CIC training program could significantly enhance its effectiveness in addressing digital skills gaps nationwide and reducing the digital divide. By equipping individuals with foundational and intermediate digital competencies, the program has demonstrated its potential to empower communities with essential skills for communication, information management, and digital security. If revitalised and adequately resourced through agent training, structured curricula, and improved facilities, the program could serve as a cornerstone in fostering digital inclusion, ensuring more equitable access to technology and knowledge across all regions.

3.7 IMPACT ASSESSMENT: SOCIAL

The social impact of Community Information Centres is three-fold i.e., one, in providing physical social spaces; two, by providing the connectivity to enhance social capital and three, providing access to information, which is an essential component in a progressive society. Figure 21 below showcases respondents' feedback of the social impacts of CIC services:

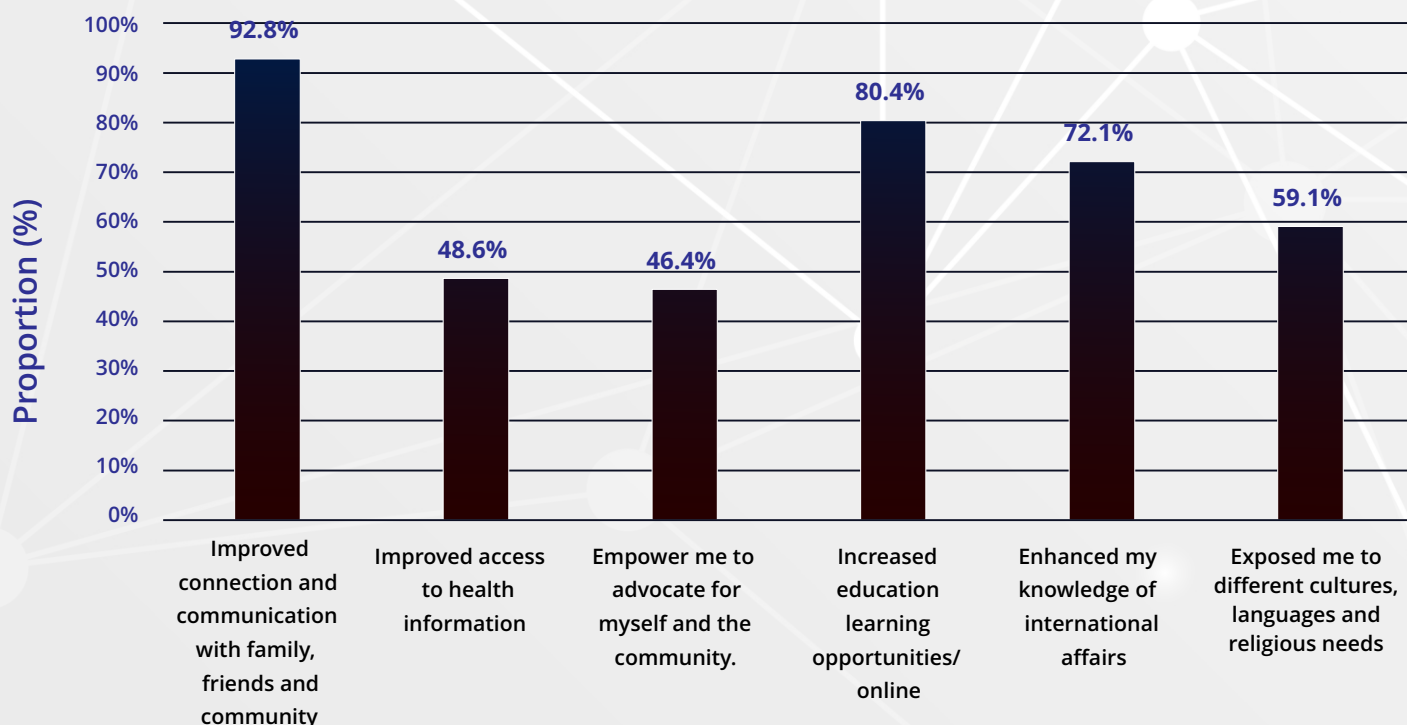


Figure 21: Perceived Social Impact

The most prominent benefit, reported by 92.8% of respondents, was 'improved connection and communication with family, friends, and the community'. This highlights the role of CICs in fostering social cohesion and enhancing relationships through better access to communication tools. Enhanced knowledge of international affairs was reported by 72.1% of users, reflecting the value of CICs in expanding users' global awareness and understanding of broader societal issues. A modest 59.1% of respondents highlighted that CICs exposed them to different cultures, languages, and religious needs, fairly demonstrating their role in promoting cultural exchange. Additionally, 48.6% of users reported improved access to health information, while 46.4% acknowledged that CICs empowered them to advocate for themselves and their communities.

3.7.1 SOCIAL IMPACT INFERENCE ANALYSIS

This analysis explores CICs' social impact on respondents from rural and urban areas, highlighting the associations and significant differences in how CIC services are perceived and utilised across these communities.

Table 6: Social Impact Inferential Analysis

Perceived Impacts		Urban	Rural	χ^2 P-value
Improved connection and communication with family, friends and community	yes	113	143	0.719
	No	8	12	
Improved access to health information.	yes	71	63	0.0029
	No	50	92	
Empower me to advocate for myself and the community.	yes	67	61	0.008
	No	54	94	
Increased education learning opportunities/ online	yes	105	116	0.0014
	No	13	42	
Enhanced my knowledge of international affairs	yes	91	107	0.349
	No	31	47	
Exposed me to different cultures, languages and religious needs	yes	78	84	0.116
	No	44	70	

■ **Improved Communication with Family, Friends, and Community**

There was no significant difference between the rural and urban groups (p -value = 0.719). This result suggests that CICs serve as vital hubs for social interaction and community engagement across both rural and urban settings.

■ **Improved Access to Health Information.**

A significant difference was observed ($\chi^2 = 8.846$, $p = 0.0029$), indicating that urban respondents reported more important benefits from accessing health information and services through Community Information Centres (CICs). This could be attributed to better infrastructure and higher digital literacy in urban areas, which makes it easier for users to find and use health-related resources.

■ **Empowerment to Advocate for Self and Community**

Urban respondents were more likely to feel empowered to advocate for themselves and their communities through CICs ($p = 0.008$). This difference may stem from urban users' greater familiarity with digital tools and resources, which can enhance their capacity for self-advocacy.

■ **Increased Educational and On-line Learning Opportunities**

Access to educational and learning opportunities was also reported more frequently by urban respondents compared to rural respondents, with a statistically significant difference ($p\text{-value} = 0.014$). This result indicates a more substantial impact of CICs in urban areas, possibly due to better digital infrastructure and resources in urban settings. Educating the rural community on the endless benefits of CICs could help bridge this gap, promoting more equitable access to educational opportunities nationwide.

■ **Enhanced Knowledge of International Affairs**

CICs helped enhance knowledge of international affairs for both rural and urban communities, with no statistically significant difference $p\text{-value} = 0.294$. This indicates that CICs are equally effective in providing access to global information, regardless of area of residence.

■ **Exposure to different cultures, languages, and religious needs**

Although the difference in exposure to different cultures, languages and religious needs is not statistically significant ($p = 0.116$) between urban and rural. The relatively similar proportions suggest that CICs provide exposure to diverse cultural resources in both rural and urban areas, allowing individuals to connect with broader perspectives and learn about different lifestyles, regardless of their area of residence.

3.8 ECONOMIC IMPACT ANALYSIS

As shown in Figure 22, the most recognised economic impact from CICs by beneficiaries was cost savings. Other economic impacts were as follows:

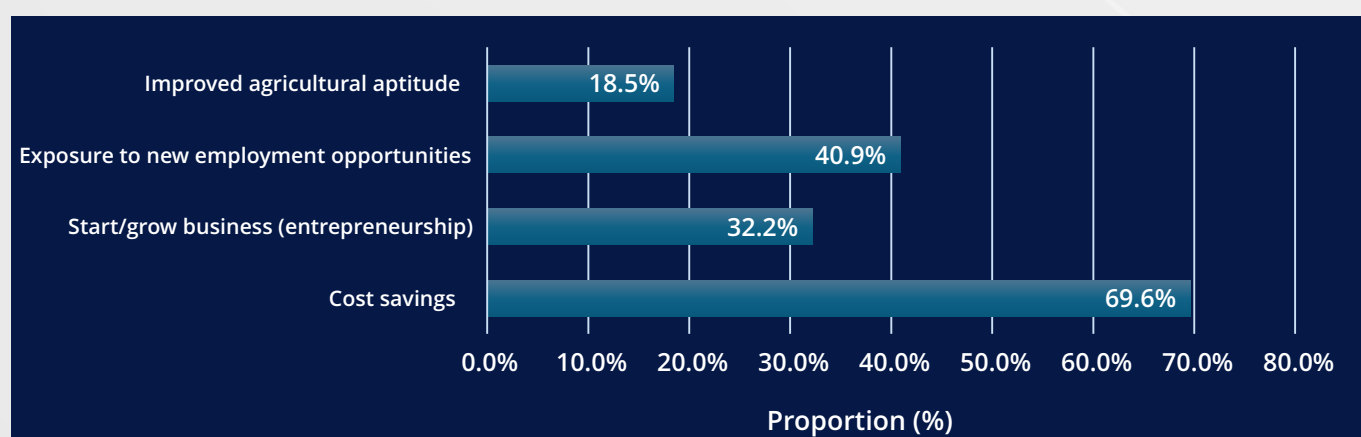


Figure 22: Perceived Economic Impact

The most significant benefit, noted by 69.6% of respondents, was cost savings on communication expenditure. This is rightly so, as CICs offer subsidised services, particularly the Internet. Additionally, 40.9% of users identified exposure to new employment opportunities, emphasising CICs as vital resources for job searches. Around 32.2% acknowledged CICs' positive impact on entrepreneurial ventures, particularly in helping start or grow small businesses through access to resources and markets. Lastly, 18.5% of respondents reported improved agricultural aptitude, demonstrating CICs' contribution to rural livelihoods through access to agricultural information, including weather and markets. These findings underscore CICs' diverse economic benefits.

3.8.1 ECONOMIC IMPACT INFERENTIAL ANALYSIS

The inferential analysis in Table 7 below shows distinct patterns of economic impact between rural and urban areas:

Table 7: Economic Impact Inferential Analysis

		Urban	Rural	χ^2 P-value
Cost savings	yes	73	119	0.719
	No	48	36	
start or grow my business. (Entrepreneurship)	yes	49	40	0.0029
	No	72	115	
Exposure to new employment opportunities	yes	51	62	0.008
	No	70	93	
Improved agricultural aptitude	yes	29	22	0.0014
	No	92	133	

Discussion

Based on the analysis of Table 7 above, the following conclusions were drawn:

■ Cost savings

CICs contributed significantly to cost savings among rural respondents as compared to rural respondents ($\chi^2 = 8.6784$, $p = 0.0032$). This suggests that CICs economic value are more realised in rural areas perhaps due to their role as essential resources in communities with limited alternatives.

■ **Starting or Growing a Business (Entrepreneurship)**

CICs were reported to have helped more urban respondents than rural respondents in entrepreneurship, with a significant difference ($\chi^2 = 6.7113$, $p = 0.0096$). This may be attributable to the fact that there are more entrepreneurial activities in urban areas than in rural areas.

■ **Exposure to new employment opportunities.**

There was no significant difference ($p = 0.72$) between rural and urban areas. This result indicates that CICs are similarly effective in providing platform to expose communities to employment opportunities across rural and urban areas.

■ **Improved Agricultural Aptitude**

Surprisingly, urban respondents reported slightly more benefits in increased agricultural aptitude and income therefrom, as compared to rural respondents, with a significant difference ($\chi^2 = 4.2042$, $p = 0.040$). This signifies the need to educate the rural populace on the availability of agricultural content online and use of the Internet and information therefrom, for enhancing agricultural productivity.

3.9 IMPACT ANALYSIS: UNIVERSAL ACCESS

The study measured the impact of CICs on universal inclusion from the end user perspective, and not from the service provider perspective. One of the key barriers to universal access is cost, particularly cost of the Internet. CIC users were asked to rate the affordability of CIC services relative to their incomes and the results are depicted in Figure 23 below:

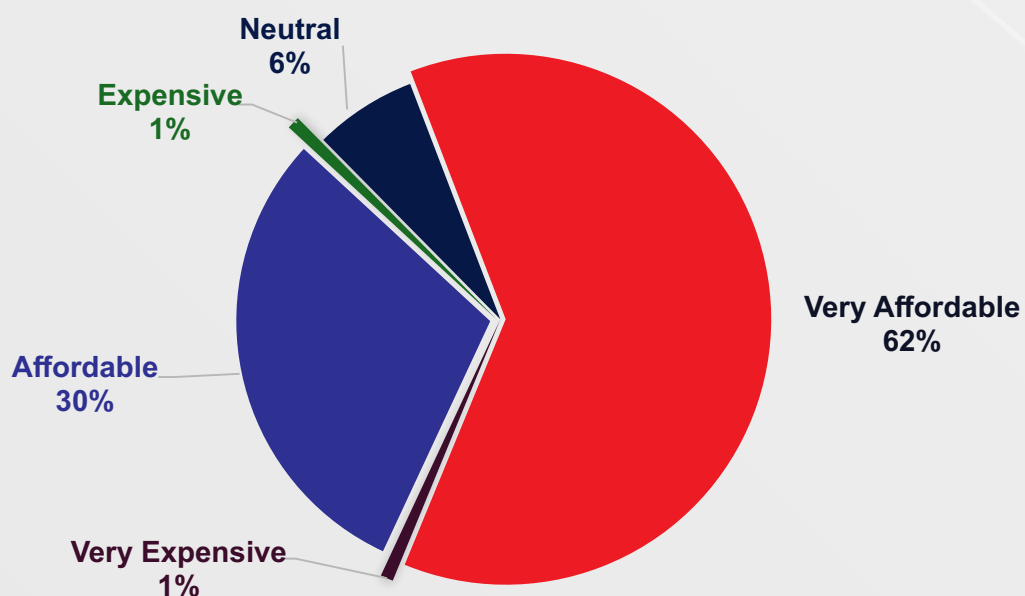


Figure 23: Affordability of Community Information Centre (CIC) services relative to income

As depicted in Figure 23, CIC services were largely considered affordable, rated the services as "Very Affordable" with 62%, while another 30% found them "Affordable." This combined 92% positive perception suggests a positive impact. The feedback from end-users on the impact of CICs on access to the Internet and computers is shown in Figure 24 below:

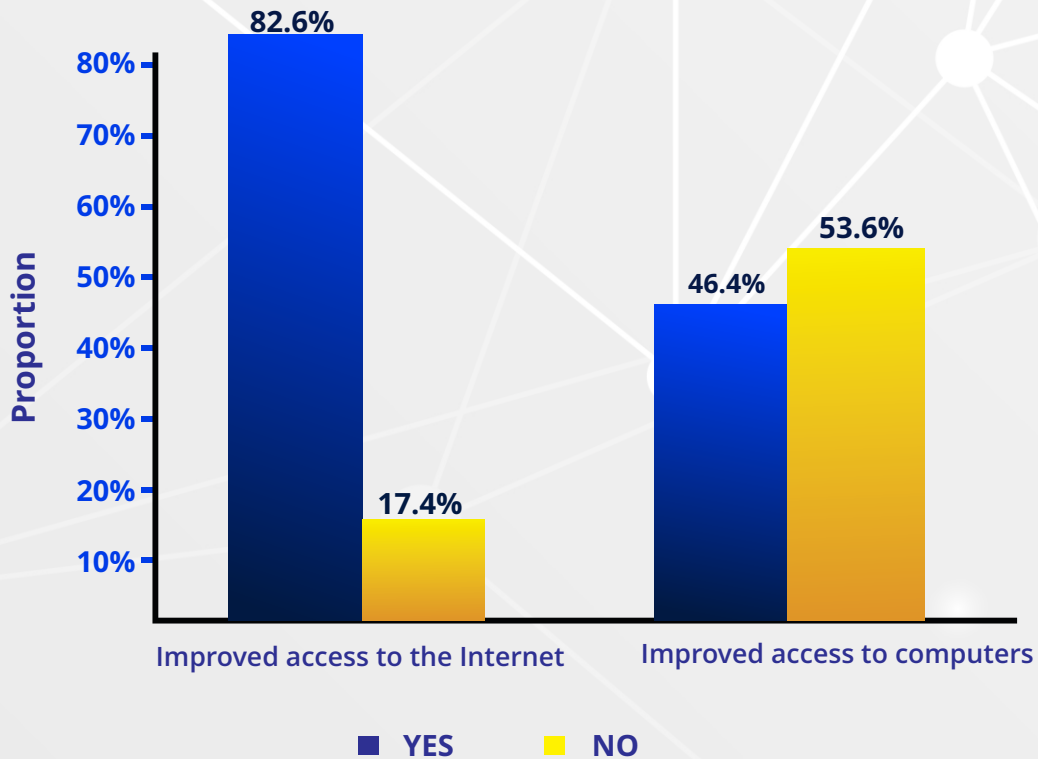
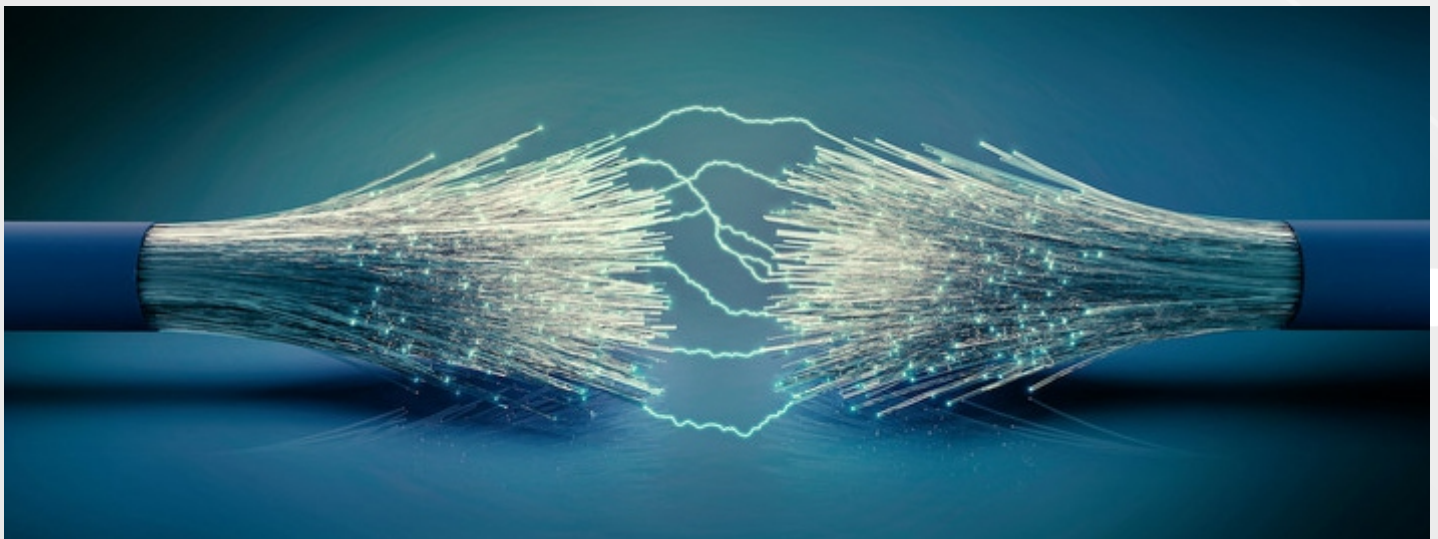


Figure 24: Impact of CICs on Access

Whilst users agree that CICs improved their access to the Internet and increasing their frequency of use, the feedback was not so positive for access to computers. The result aligns with findings on low usage of computers at CICs.



3.9.1 INFERENCE ANALYSIS

Table 8 below provides an inferential analysis on the impact of Community Information Centres (CICs) on universal inclusion.

Table 8: Inferential Analysis on Universal Inclusion

			Rural	Urban	χ^2 P-value
Availability	Sufficient	yes	86	69	0.694
		No	70	51	
	Appropriate	yes	140	107	0.876
		No	16	13	
	Always Available	yes	60	54	0.274
		No	96	66	
Affordability		Very Affordable	97	72	0.600*
		Affordable	45	37	
		Neutral	8	9	
		Expensive	5	1	
		Very Expensive	1	1	
Accessibility	Access to computers improved	yes	75	53	0.518
		No	81	67	
	Internet use/ frequency increased	yes	133	95	0.186
		No	23	25	
Non-Discrimination		yes	14	18	0.121
		No	142	102	
		No	13	12	

Of all the attributes of Universal services assessed, the results show no statistically significant differences between rural and urban areas for most indicators, as all p-values are above the standard significance threshold (0.05). Therefore, according to this survey, the availability, Affordability, accessibility, quality, non-discrimination, and sustainability of services are perceived similarly in rural and urban areas, implying that CICs are having a positive equitable impact across rural and urban areas.

3.10 MODELLING CICS IMPACT

This analysis employed an Ordinary Least Squares (OLS) regression model to evaluate the relationship between a variety of independent variables and the composite scores of Social Impact, Economic Impact, and Universal Access as dependent variables. These composite scores were derived from factors that collectively measured the performance of Community Information Centres (CICs) in achieving their intended objectives. The study aimed to quantify how various attributes, services, and demographic characteristics influenced the outcomes across the three dimensions of impact. The dependent variables were as follows:

- **Social Impact:** A composite score that represented the extent to which CICs contributed to enhancing community well-being, engagement, and societal benefits.
- **Economic Impact:** A composite score reflecting the contribution of CICs to economic empowerment, income generation, and overall economic resilience within communities.
- **Universal Access:** A composite score that evaluated the accessibility of CICs to a diverse range of individuals, considering factors such as affordability, inclusivity, and ease of access.

The model incorporated a variety of independent variables, including:

- **Demographic factors:** Age, gender, and area of residence.
- **Usage patterns:** Frequency of CIC usage and the specific services utilised (e.g., internet access, printing, photocopying, gaming, etc.).
- **Service quality:** Ratings of overall affordability and ease of access, especially for individuals with disabilities.

The regression model provided insights into the key factors influencing the effectiveness of CICs in delivering social, economic, and accessibility benefits. It also identified areas for improvement, enabling policy makers and stakeholders to design targeted interventions. These interventions aim to enhance the overall impact, effectiveness, and inclusivity of CICs, ensuring they better serve their intended communities.

3.10.1 MODELLING SOCIAL IMPACT

Table 9 below, presents the findings of a regression analysis investigating the factors that influence social impact. The model incorporates various variables, including area of residence, gender, age, frequency of use, internet access, reprographic services, gaming, digital literacy training, affordability, and access. The coefficients in the table reveal the effect and magnitude of each variable's impact on social impact. Statistical significance of each independent variable in relation to the dependent variable (Social Impact) is determined at the 5% significance level

using p-values ($P > |t|$). Furthermore, the [0.025 and 0.975] columns provide the 95% confidence intervals for the coefficients of each independent variable, offering a range within which the true coefficient value is likely to fall.

	Coefficient	std err	t	$P > t $	[0.025	0.975]
Constant	-0.0964	0.153	-0.63	0.529	-0.398	0.205
Area of Residence	0.0418	0.031	1.352	0.177	-0.019	0.103
Gender	0.025	0.037	0.683	0.495	-0.046	0.097
Age	0.0004	0.001	0.289	0.773	-0.002	0.003
Frequency of Use	0.0543	0.015	-3.573	0.000	0.084	0.024
Internet	0.4972	0.126	3.949	0.000	0.249	0.745
Reprographic services	0.0897	0.064	1.399	0.163	-0.037	0.216
Gaming	0.0311	0.109	0.284	0.777	-0.184	0.247
Digital literacy training	0.0843	0.077	1.096	0.274	-0.067	0.236
Other	0.0397	0.069	0.578	0.564	-0.096	0.175
Affordability	0.0806	0.017	4.657	0.000	0.047	0.115
Access	0.0408	0.038	1.087	0.278	-0.033	0.115

Adjusted R^2 : 0.217 Prob (F-statistic): <0.00001

Social Impact = 0.0543*frequency of use + 0.4972*Internet + 0.0806* Affordability

The model's Adjusted R^2 value is 0.217, which indicates that approximately 21.7% of the variance in the dependent variable, Social Impact, is explained by the independent variables included in the model. This metric adjusts for the number of predictors, penalizing the inclusion of variables that do not improve the model's explanatory power. A value of 0.217 suggests a modest fit when dealing with cross-sectional data in social sciences such as this assessment, implying that other factors not included in the model may also influence social impact. The **F-statistic** of the model is significant ($p\text{-value} < 0.00001$), indicating that the overall model is statistically significant. In other words, at least one of the independent variables contributes meaningfully to explaining the variation in the dependent variable.

■ **Frequency of CIC use**

This variable has a positive coefficient (0.0543), indicating a direct relationship between frequent CIC usage and perceived social impact. As usage increases, the social impact score also increases. The $p\text{-value} < 0.00001$ indicating that we have strong evidence that frequency of use has a meaningful effect on different social components that are vital to users such as communication, and entertainment.

■ **Internet**

The Internet variable has a positive and statistically significant coefficient of 0.4972 ($p\text{-value} < 0.00001$), indicating that internet usage at CICs is strongly associated with higher social impact. This result highlights the pivotal role that internet services play in the effectiveness of CICs. The confidence interval (0.249 to 0.745) of the coefficient further reinforces the robustness of this relationship. This finding supports the premise that internet access is the main service driving social impact at CICs. The internet enables various transformative opportunities, including access to information, online learning, communication, and digital inclusion, all of which directly contribute to the well-being of communities. Given its strong influence, the prioritisation of reliable and affordable internet services at CICs is critical to maximising their social impact and bridging the digital divide.

■ **Affordability of Services Relative to Household Income**

The coefficient (0.0806) suggests that as users rate CIC services as more affordable relative to household income, the perceived social impact increases. This underscores the importance of affordability in ensuring the effectiveness of CIC services.

3.10.2 MODELLING ECONOMIC IMPACT

Table 10 below, summarises the regression analysis findings, investigating the economic impact and its key determinants. Similar to the analysis of social impact, this model also incorporates factors related to Community Information Centres (CICs) access and usage.

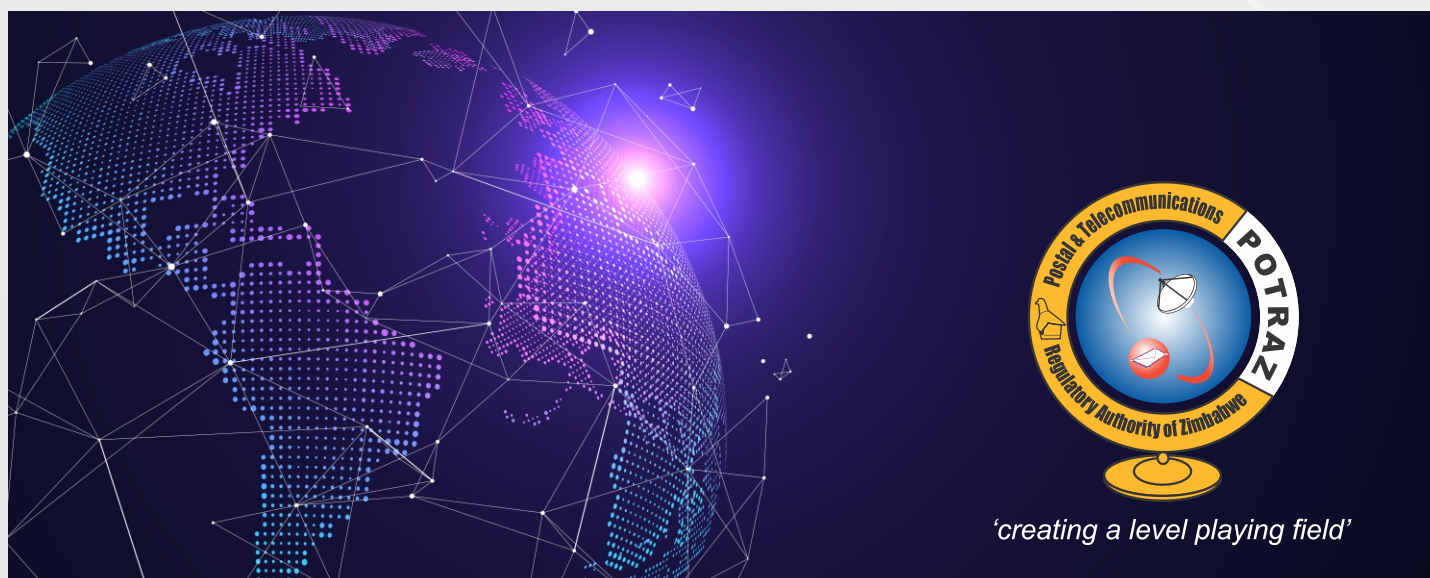


Table 10: Regression Analysis results on Economic Impact

	Coefficient	std err	t	P> t	[0.025	0.975]
Constant	-0.107	0.128	-0.833	0.405	-0.36	0.146
Area of Residence	0.0077	0.026	0.298	0.766	-0.043	0.059
Gender	-0.0078	0.031	-0.255	0.799	-0.068	0.053
Age	0.0023	0.001	2.193	0.029	0.000	0.004
Frequency of Use	0.0513	0.013	4.021	0.000	0.076	0.026
Internet	0.1541	0.106	1.459	0.146	-0.054	0.362
Reprographic services	0.1204	0.054	2.239	0.026	0.015	0.226
Gaming	-0.0886	0.092	-0.965	0.335	-0.269	0.092
Digital literacy training	0.1198	0.065	1.857	0.064	-0.007	0.247
Other	-0.067	0.058	-1.163	0.246	-0.181	0.046
Affordability of Services	0.0566	0.015	3.903	0.000	0.028	0.085
Access of CICs by People Including those with Disabilities	0.1137	0.032	3.606	0.000	0.052	0.176

Adjusted R²: 0.247

Prob (F-statistic): < 0.00001.

Economic Impact = 0.0023*Age + 0.0513*Frequency of Use + 0.0566*Affordability + 0.1137*Access of CICs, Including PLWDs + 0.1204*Reprographic services

The metrics of the model for Economic Impact indicate an Adjusted R² of 0.247, which means that approximately 24.7% of the variation in Economic Impact is explained by the independent variables included in the model. This value suggests a modest explanatory power of the model since the modeled data was cross sectional. The F-statistic probability (Prob F-statistic) less than 0.0000001, a very low value that demonstrates the model is statistically significant overall. This means that the combination of independent variables provides a meaningful explanation of Economic Impact beyond what would be expected by random chance. These metrics suggest the model has a good foundation but also indicates room to incorporate additional variables or refine predictors to improve its explanatory power further.

■ Age

The variable Age (coefficient = 0.0023, p = 0.029) was statistically significant, indicating that older individuals report a slightly higher economic impact from CIC usage. The positive relationship may reflect greater reliance on CICs for economic activities such as accessing financial services, job applications, or entrepreneurial ventures among older users who may lack alternative resources. However, the effect is on the lower end suggesting that age alone is not a strong driver of economic outcomes from CIC services.

■ **Frequency of CIC use**

Frequency of CIC is statistically significant with engagement $p < 0.00001$ and shows a positive relationship $\beta=0.0513$. This suggests that individuals who use CICs more frequently report a higher economic impact. This relationship may indicate that frequent usage is driven by unmet needs or barriers preventing effective utilisation of services, such as inadequate resources or quality issues.

■ **Reprographic services**

Reprographic service with coefficient $\beta= 0.1204$ and $p\text{-value} = 0.026$ is statistically significant and positively associated with economic impact. Reprographic services are likely crucial for activities such as CV printing, business-related documentation, or academic material preparation, all of which contribute directly to economic productivity.

Affordability of Services to Household income

This variable (coefficient $\beta= 0.0566$, $p < 0.00001$) was highly significant, emphasizing the affordability of CIC services as a key driver of economic impact. Affordable services lower the barrier for individuals and businesses to access resources, enabling greater economic opportunities for users, particularly those with limited financial means.

■ **Access of CICs, including people with disabilities**

Access is a statistically significant variable, highlighting its critical role in economic impact ($\beta = 0.1137$, $p < 0.00001$). Improved accessibility ensures broader inclusion, particularly for marginalised groups such as individuals with disabilities, enabling them to participate in economic activities facilitated by CICs.

3.10.3 MODELLING UNIVERSAL ACCESS

Table 11 presents the results of a regression analysis on the impact of universal access, showing various determinants and their respective coefficients, standard errors, t-values, p-values, and confidence intervals. Key findings include significant positive impacts from "Internet" (coefficient 0.2534) and "Access of CICs by People Including those with Disabilities" (coefficient 0.1223), both with p-values less than 0.01. Other determinants such as "Frequency of Use" and "Affordability of Services Relative to Household Income" also show positive but statistically significant results. Meanwhile, factors like "Area of Residence" and "Gaming" exhibit negligible or non-significant effects.

Table 11: Regression Analysis results on Universal Access

	Coefficient	std err	t	P> t	[0.025	0.975]
Constant	0.2394	0.089	2.677	0.008	0.063	0.416
Area of Residence	-0.0268	0.018	-1.485	0.139	-0.062	0.009
Gender	-0.0255	0.021	-1.19	0.235	-0.068	0.017
Age	0.0003	0.001	0.377	0.707	-0.001	0.002
Frequency of Use	0.0253	0.009	2.845	0.005	0.043	0.008
Internet	0.2534	0.074	3.445	0.001	0.109	0.398
Reprographic services	0.0271	0.037	0.723	0.47	-0.047	0.101
Gaming	-0.0807	0.064	-1.262	0.208	-0.207	0.045
Digital literacy training	0.0123	0.045	0.0275	0.784	-0.076	0.101
Other	0.0202	0.04	0.503	0.615	-0.059	0.099
Affordability of Services Relative to Household Income	0.038	0.01	3.761	0	0.018	0.058
Access of CICs by People Including those with Disabilities	0.1223	0.022	5.57	0	0.079	0.166

Adjusted R²: 0.229

Prob (F-statistic): <0.00001.

Universal Access= 0.2394+ 0.1223*Access of CICs, Including PLWDs + 0.0253*Frequency of Use + 0.038*Affordability + 0.2534*Internet

Based on the results of the model, the Adjusted R² of the model is **0.025**, which indicates that approximately 22.9% of the variation in Universal Access is explained by the independent variables included in the model. This value also suggests a modest explanatory power of the model indicating that there exist factors that contribute to the outcome. The F-statistic probability (Prob F-statistic) is 6.44e-12, which is extremely low and indicates that the overall model is statistically significant. This means that the combination of the independent variables in the model collectively provides a better explanation for Universal Access than would be expected by chance.

■ Internet

The model shows a positive coefficient of 0.2534 on the variable 'Internet' indicating that the Internet has a positive relationship with Universal Access and its p-value of 0.001 which is less than the significance level of 0.05, which shows that Internet has a very strong effect on universal access. This implies that providing reliable internet in CICs is very critical for improving universal access in both rural and urban areas.

■ **Frequency of Use**

Higher frequency of CIC usage is positively associated with Universal Access, as indicated by a coefficient of 0.0543 and a highly significant p-value ($p < 0.000$). This demonstrates that increased frequency of use has a strong effect on Universal Access. However, this positive relationship suggests a potential concern: over-reliance on CICs without adequate capacity or resources could reduce their universal accessibility. In addition to that, excessive dependency might strain resources, compromise service quality, and limit equitable access for others.

■ **Affordability of Services Relative to Household Income**

The affordability of CIC services relative to household income is positively associated with Universal Access, as indicated by a coefficient of 0.038 and a highly significant p-value ($p < 0.000$). This suggests that as services become more affordable relative to household income, Universal Access improves. Affordability likely lowers financial barriers, enabling more households, particularly low-income ones, to access CIC services.

■ **Ease of Access for People with Disabilities**

The model indicates that ease of access for people with disabilities has a very significant ($p\text{value} < 0.00001$) and positive relationship ($\beta = 0.1223$) with Universal Access, implying that making CICs more accessible to individuals with disabilities has a substantial positive effect on Universal Access. This highlights the importance of inclusive design and adaptive technologies to ensure that CIC services effectively cater to people with diverse needs. Furthermore, improved accessibility for individuals with disabilities may encourage broader societal participation, reducing inequalities and fostering greater economic and social contributions. Therefore, addressing physical, technological, and informational barriers could also enhance the overall usability of CICs for all users, creating a ripple effect on Universal Access.



3.11 CHALLENGES

3.11.1 CHALLENGES FACED BY USERS

As part of the impact assessment of Community Information Centres, community respondents were asked whether they face any challenges that prevented effective utilisation of CICs, and an overwhelming 68% responded in the affirmative. The challenges are summarised in Figure 25 below:

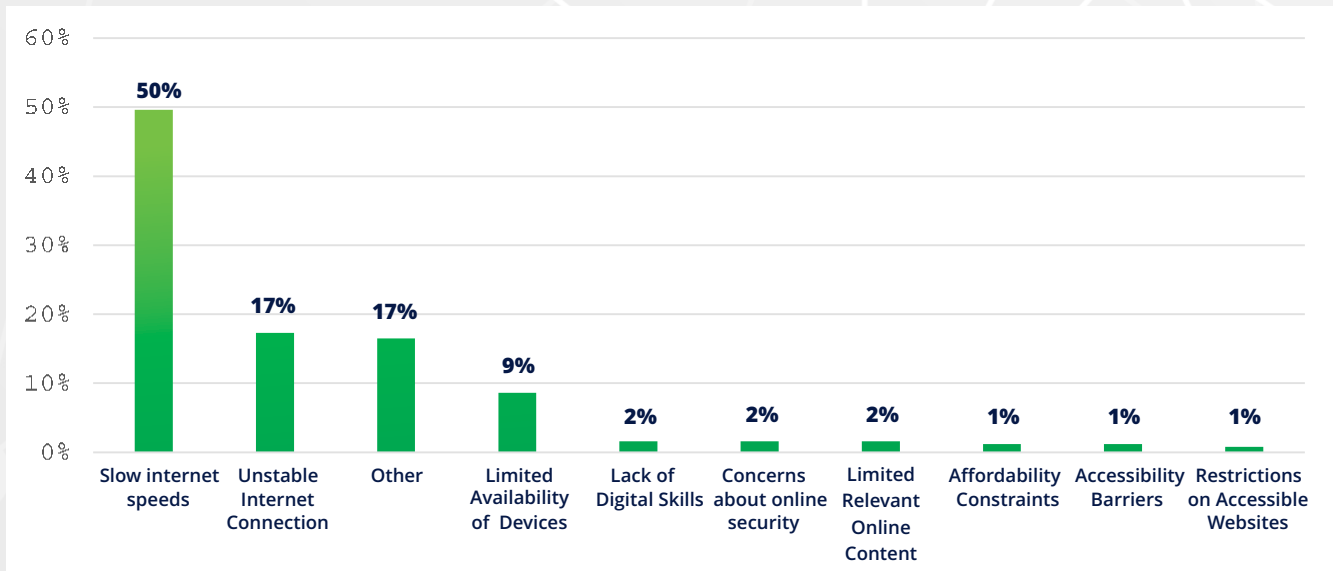


Figure 25: Challenges Faced by Users

As shown in Figure 25 above, the challenges centred on the Internet. "Slow Internet Speeds" emerged as the most significant issue, with 50% of those who use CICs citing it as a major obstacle. Other notable challenges included:

■ **Time Management at CICs:**

- o Limited "time" or restricted session durations per person, e.g., the gazetted one-hour or 30-minute slots, made it difficult to finish the intended purpose in that stipulated time, making people reconsider if it is necessary to visit CIC and not achieve the intended purpose.
- o Most CICs close at lunchtime; if one's time couches over lunch, they are forced to terminate the session and resume after lunch.
- o CICs switch off their router after four and are also closed on Sundays, hence, making it difficult for those who will be busy during working hours to access this service e.g., students.

Phrases like “short sessions” and “slots” were used by respondents to suggest that they often cannot complete their activities in the allocated time. Although these time limitations are put in for a good cause to ensure many access the services, they can frustrate users and discourage frequent use, especially for tasks requiring extended focus, such as academic research or e learning.

- **Electricity Outages:**

- o “Frequent electricity outages further disrupted access to services, as most CICs lack backup power supply. In some instances, backup power supply was only restricted to the post operations front office, hence power was usually switched off once the postal front office finished servicing customers, without considering whether people were still using the services at the CIC.
- o Generally, power outages (ZESA interruptions) were a recurring problem, particularly in Zimbabwe, where load shedding is a common thing affecting not only CIC services' continuity but everyone. However, Frequent power disruptions would severely reduce availability of services within CICs, leading to dissatisfaction and eventually underutilisation of resources.

- **CIC Infrastructural Issues**

- o Some CICs (e.g. Muzarabani, Zengeza, Lupane and Chivhu) no longer have adequate sitting chairs as most chairs are broken, resulting in some cases people sharing a chair and cubical, some kneeling, standing, and others resorting to sitting on the floor in some instances.
- o Some Community Information Centres (CICs) are inaccessible to people with disabilities, e.g., Mt Darwin. In contrast, the CVCIC sites we visited were fully accessible. This situation suggests that the needs of people with disabilities (PWDs) may not be well addressed, limiting the CICs' overall impact.

- **CIC Personnel Issues**

- o Some users bemoaned unwelcoming attitudes of some CIC operators. Poor customer service can deter recurrent use of CICs.
- o Negative staff behaviour could discourage users from seeking help or returning to the CICs, ultimately limiting their impact.

3.11.2 CHALLENGES FACED BY CIC ADMINISTRATORS

Highlighted below were the most encountered challenges by CIC administrators:

Inadequate resources:

- Shortage of basic resources such as bond paper, staplers, cartridges was hindering the ability of administrators to discharge their duties effectively.
- Gazetted prices of the printing, scanning and photocopying services were said to be a “bit pricy”; hence, they could not compete competitively on the market, leading to less revenue from these services.
- Lack of cleaning supplies to ensure the ambience of the CIC environment, with some bringing their own resources.
- Security was highlighted as a major challenge especially in CICs without security guards, with some CICs experiencing theft of laptops. Agent-user conflicts were also reported, particularly in the enforcement of internet access time limits.
- Various labour and industrial matters were raised e.g., lack of human resource contingency planning hence no leave, compensation issues resulting in high turnover.
- Lack of power backup was among the barriers that hindered operators from effectively executing their duties.
- Internet speed was the main pain point of the operators, with some highlighting that the more people connected to the network, the slower it became. In some networks, it becomes slower if more than 5 people are connected.
- Apart from the speed of the Internet, connectivity and stability were also mentioned as the major issues.

These challenges not only affect the day-to-day operations of CICs but also hinder their ability to achieve their broader goal of bridging the digital divide and fostering community development. Targeted solutions will, therefore, be essential in addressing these issues.

4. CONCLUSION & RECOMMENDATIONS

Available, affordable, and accessible digital connectivity can help deliver essential services, such as education and health care, and lead to an increase in economic growth.

The World Development Report 2016: Digital Dividends (World Bank 2016)⁴ noted that although digital technologies had boosted growth, expanded opportunities, and improved service delivery, their aggregate impact had fallen short and was unevenly distributed as the “digital divide” persists. The need to bridge the digital divide was a key motive for the establishment of Community Information Centres. This study revealed several aspects regarding CICs service:

- Gaps in awareness of CICs was revealed, with gender and location significantly influencing levels. Male respondents and rural communities showed higher awareness, while age and education had no significant impact. CVICs had greater visibility compared to post office based CICs, which were affected by shared spaces and reduced prominence.
- The assessment results showed low utilisation levels of CICs, with only a small proportion of community members actively engaging with these facilities. Usage varied significantly by demographic factors such as age, gender, and location, with rural areas demonstrating higher reliance on CICs due to limited alternative resources. Internet services emerged as the most frequently used resource, underscoring their critical role in bridging the digital divide. However, other services, including digital literacy training and reprographic functions, were underutilised, likely reflecting gaps in availability rather than demand.
- Full potential of Community Information Centres’ impact has been evident, with significant contributions to social inclusion, economic activities, and digital access in underserved communities. CICs have been particularly effective in universal access, as reflected in the absence of significant differences between rural and urban areas. This consistency highlights their role in successfully bridging the digital divide, ensuring equal access to essential services and information, and fostering inclusion across diverse settings. Among the key impact areas, universal access emerges as the strongest, followed by social impact, with economic impact being the least pronounced. This underscores the need to further strengthen CICs’ role in driving economic empowerment while continuing to enhance their social and digital accessibility contributions.

While CICs have shown considerable potential, the full realization of their impact can only be achieved by addressing operational inefficiencies. Enhancing aspects such as service reliability, infrastructure quality, and support programs is essential for unlocking the full potential of CICs.

⁴ World Bank, 2016, World Development Report. <https://www.worldbank.org/en/publication/wdr2016>

- **Barriers and Challenges:** Key barriers to usage included time constraints, misperceptions about required personal devices, and competition from alternative access points like schools and hospitals. The effectiveness of CICs has been undermined by several challenges, including poor internet quality, limited reprographic services, and inadequate infrastructure such as the lack of backup power and accessibility for people with disabilities. Furthermore, the absence of widespread digital literacy training and a significant number of non-operational CICs have hampered their ability to fully achieve their objectives. To address these issues and maximise the impact of CICs, the following recommendations are proposed for consideration:

Establish a comprehensive Monitoring and Evaluation Framework for CICs:

- The study revealed that there was no clear CIC focused performance monitoring and evaluation framework in place. A top-down approach to goal setting and performance monitoring should be considered, with national goals informing CIC level targets.
- There is need to implement regular performance evaluations for Community Internet Centres (CICs) based on measurable Key Performance Indicators (KPIs) such as facility usage rates, user satisfaction, service availability, amongst others to identify potential pitfalls in time and address them.
- Establish feedback mechanisms to guarantee a feedback loop, allowing for evidence based adjustments to project strategies. This iterative process ensures that CIC improvements are sustainable, impactful, and responsive to community needs, ultimately enhancing the long-term success of CICs in bridging the digital divide.

Improve Community Awareness:

- Stakeholders should enhance community outreach through informational campaigns, using local media channels and community events to raise awareness about CIC locations and available services.
- Develop Community-Specific Outreach Programs, tailoring outreach initiatives to the unique needs of each community. For instance, partnering with schools to encourage regular engagement.

- Signage around CICs should be improved, providing clear and visible descriptions of services offered, operational hours, and costs.

Ensure the Sustainability of CICs:

- CICs should consider incorporating the concept of **Living Labs**. This approach would enable active collaboration with local communities, businesses, and educational institutions to co-develop solutions that meet specific local needs.
- By embedding sustainability initiatives and community-driven projects, CICs could become digital centres for innovation, supporting areas such as smart solutions in renewable energy, digital literacy, and local entrepreneurship ecosystems. This integration would ensure CICs remain responsive to user needs while promoting longterm, sustainable impact, transforming them into Community Digital Centres.
- The Public-Private Partnerships (PPPs) model should be pursued more proactively.

Provide Community Tailored Services:

Consider digitalising communities by expanding CIC services based on specific community needs. For example, in rural areas reliant on agriculture, CICs can offer resources or digital workshops on incorporating ICTs in farming best practices, market trends, and weather updates. Tailoring services to local interests would increase CIC impact and encourage higher engagement.

Scale up Digital Literacy Training

- Digital literacy training programs are important in developing digital skills to help build a more inclusive and participatory ecosystem. There is need to fully exploit CICs for the provision of nationwide digital literacy training to underserved communities.
- There is need for a coherent and structured program, implemented across all CICs, anchored on international digital literacy frameworks. Emerging digital literacy frameworks incorporate data protection and cybersecurity awareness. This implies the need for comprehensive training of CIC administrators, so that they are able to offer the requisite training to community members.

Strengthening the Universal Access Model

- POTRAZ should consider expanding the CIC concept beyond immovable buildings to mobile units to reach more isolated populations. Similar efforts have been incorporated for digital literacy training in several countries such as Tunisia, Pakistan, Rwanda, Mauritius, Malaysia, the United States, Canada, and China amongst others.
- Mobile units could serve as a bridge to permanent CICs, allowing stakeholders to assess demand, while providing immediate benefits.

Other Recommendations:

- Investing in off-grid electricity sources such as solar should be prioritised to ensure Internet availability.
- User experience could be improved by upgrading the bandwidth and infrastructure to resolve the issue of slow speed and unstable connectivity. This would allow more users to connect faster, ensuring the Internet service is sufficient and appropriate.
- Ensure regular maintenance of reprographic machines and reliable cartridge replacements to ensure printing and photocopying services are always available.
- Enhance CIC Engagement Through Youth-Focused Initiatives. Re-establish gaming zones with functional, updated gaming equipment to make CICs more appealing to youth. This could reduce idle time and increase centre engagement among younger community members.
- Infrastructure repairs and maintenance should be prioritised upgrades, e.g., falling ceilings pose safety hazards and inadequate sanitation facilities pose health risks.
- Interviews with the CIC administrators revealed the challenge of a high turnover rate of CIC staff. Human resource issues at CICs need to be addressed as the CIC personnel are key to the overall attainment of policy objectives relating to CIC.

By implementing these recommendations, stakeholders can maximise the impact of CICs and better serve Zimbabwe's rural and underserved communities. These improvements will foster increased digital literacy, social connectivity, and economic empowerment, furthering the Government's goal of reducing the digital divide and promoting inclusivity across Zimbabwe.

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4. World Bank, 2016, World Development Report. <https://www.worldbank.org/en/publication/wdr2016>

ANNEXURES

A. Survey Instruments

FOR OFFICE USE ONLY
QRN No:

INTRODUCTION: Good morning/afternoon. POTRAZ is conducting a feedback assessment to evaluate the impact and effectiveness of the Community Information Centre (CIC) in your community. Your participation in this questionnaire is instrumental as it will help us understand how the CIC has influenced access to information, digital literacy, community engagement, and economic opportunities within your community.

Please Note: Your responses will be kept confidential and will only be used to improve the services offered by the CIC. There are no right or wrong answers, so please provide your honest opinions and insights. Thank you for taking the time to share your feedback with us. Your input will contribute to enhancing the CIC's role in serving the needs of our community and fostering positive change.

Consent

S1. Are you willing to participate in this survey?

Yes	☐	CONTINUE WITH THE INTERVIEW
No	☐	THANK AND CLOSE THE INTERVIEW AND SUBSTITUTE

S2. **If YES in S2, ASK:** Do you consent to the use of video(s) and/or photo(s) taken of you during the interview in the authority's reporting of findings?

Yes	☐	CONTINUE WITH THE INTERVIEW
No	☐	CONTINUE, BUT DO NOT TAKE PICTURES

Section A: Demographic Information.

1. Tick from which province you are from. **Tick Appropriate**

Province	Code	Province	Code
Harare	/01	Matabeleland North	/06
Bulawayo	/02	Matabeleland South	/07
Midlands	/03	Mashonaland West	/08
Masvingo	/04	Mashonaland East	/09
Manicaland	/05	Mashonaland Central	/10

Specify the following areas where you reside.

Area	Tick Appropriate	Specify location
Urban		
Rural		

3. Indicate your gender **by using a Tick!**

	Tick Appropriate	
Male		Recruit to quota
Female		Recruit to Quota

4. What are your main languages spoken at home?

	Tick applicable
Shona	
Ndebele	
English	
Tonga	
Venda	
Kalanga	
Ndau	
Other Specify	

5. How old are you? The interviewer **records the approximate age if the respondent is hesitant.**

6. What's your highest level of

Education Level	Tick Appropriate
No Formal Education	1
Not Completed Primary Education	2
Completed Primary	3
Not Completed Form 4	4
Completed Form 4	5
Completed A-Level	6
Not Completed College/Poly/Training Centre	7
Completed College/Poly/Training Centre	8
Not Completed University	9
Completed University	10
Post Grad	11

Assess Community Awareness & Engagement with CICs

7. Before today, were you aware of the existence of a CIC within your community?

Yes		Recruit to Quota
No		Recruit to Quota (THANK AND CLOSE)

8. If yes, how did you learn about the existence of CIC in your community?

	Tick appropriate
Word of mouth	
Community events	
Promotional materials	
Online channels	
Educational institutions	
Local government announcements	
Referrals from other organisations	
Media coverage	
Direct outreach campaigns	
At CIC launch	
Personal research or exploration.	
Other Specify-----	

Evaluate access & use of CICs

9. Have you ever used or received any service from the Community Information Centre (CIC) in your community?

Yes		Recruit to Quota
No		Recruit to Quota

10. If No in Qn 9. What are your reasons for not using the CIC? (THANK AND CLOSE)

11. If yes to Qn 9. How often do you visit the Community Information Centre (CIC)? **SINGLE MENTION ONLY (SMO)**

Frequency	Tick Appropriate
Daily	
Weekly	
Monthly	
Rarely	

12. If yes to Qn 9, please specify the types of services/resources you have utilised at the CIC. (Tick all that apply)
MULTIPLE MENTION POSSIBLE (MMP)

Services	Yes	No
Internet		
Printing		
Photocopying.		
Scanning.		
Faxing.		
Gaming.		
Digital literacy training		
Other: _____		

13. Have you ever received any digital training from the CICs?

	Tick Appropriate	
Yes		continue
No		Skip to 18

Impact

14. If yes, in Qn 12, ask which of the following digital skills are you now able to do **after** the training/ assistance you received at the CIC.

Digital Literacy		Yes	No
Information and Data Literacy	I can search for information online effectively.		
	I can assess the credibility of the information you find on the Internet.		
	I can retrieve and use data from different digital sources.		
	I know how to organise and store digital information efficiently.		
Communication and Collaboration	I can use digital tools to communicate with others (e.g., email, messaging apps, etc).		
	I can participate in online forums or social media platforms.		
	I collaborate with others using digital tools (e.g., cloud-based documents, project management software)		
	I can manage your digital identity and online reputation effectively.		
Digital Content Creation	I can create digital content such as text, images, or videos.		
	I am familiar with basic copyright laws and licenses for digital content.		
	I can edit and improve digital content using various tools.		
	I know how to use programming or coding for digital projects.		
Safety	I am aware of the importance of keeping my digital devices secure.		
	I regularly update your passwords and use strong passwords for my accounts.		
	I am aware of the risks associated with sharing personal information online.		
	I know how to identify and avoid online scams and phishing attempts.		
Problem-Solving	I troubleshoot and solve technical problems with my digital devices on my own.		
	I am able to adapt to new digital tools and technologies quickly.		
	I use digital technologies to innovate and create solutions to everyday problems.		
	evaluate the effectiveness of the digital tools and resources you use		

On a scale of 1 to 5, where 1 represents Novice and 5 represents Expert, how would you rate your computer proficiency **After** the training or use of CIC's services?

	Tick appropriate
Novice	
Beginner	
Intermediate	
Advanced.	
Expert	

16. How would you rate the Affordability of the Community Information Centre (CIC) services relative to your household income or financial resources?

17.

Universal Access			
Availability	a. Does the CIC offer the services that are:		
		Yes	No
	Sufficient		
	Appropriate		
	Always Available		
Affordability's	b. How would you rate the overall Affordability of the Community Information Centre (CIC) services relative to your household income or financial resources?		
		Tick Appropriate	
	Very Affordable		
	Affordable		
	Neutral		
	Expensive		
	Very Expensive		
Accessibility	c. Is the CIC easy to access, including people with disabilities?		
	Yes		
	No		
Quality	d. Are the services you are receiving from the CIC meeting your needs?		
	Yes		
	No		
Non Discrimination	e. In your opinion, does the CIC discriminate based on gender, age, race, socioeconomic status, or disability?		
	Yes		
	No		
Sustainability	f. In your opinion, would you say that the CIC will continue to be operational in the long run?		
	Yes		
	No		

18. To the best of your knowledge, after using the CIC, please indicate whether it has impacted your life on each of the following statements below.

			Yes	No
Social Impact	1	Improved connection and communication with family friends and community		
	3	Improved access to health information and services		
		Empower me to advocate for myself and the community.		
	4	Increased learning opportunities/ online		
	5	Enhanced my knowledge of international affairs		
	6	Exposed me to different cultures and religious needs		
	7	Access to the Internet has improved through the		
Economic Impact	8	Improved my household's financial stability.		
		Helped start or grow your business.		
		Helped you or your family secure better employment opportunities through Internet searching at the CIC		
		Improved my access to government services online	Universal	

19. If yes, on helped grow or start businesses, ask to explain how.

Information on how to start a business.	
Improved market access or gain new customers	
Access to new, cheaper suppliers	
Other Specify	

20. Would you refer someone to the CIC?

Yes	
No	

Challenges and Improvements

21. If the Internet is mentioned in Q12, ask to what extent would you say that the Internet access provided by the CIC has helped bridge the community's digital divide/gap?

	Tick Appropriate
To a considerable extent	
To a large extent	
To some extent	
To little extent	
To no extent	

22. Do you face challenges in accessing the services at the CIC?

	Tick Appropriate
Yes	
No	

23. If YES in 20 ASK, what challenges, do you still face in accessing the Internet or utilising online resources despite the presence of the CIC? (Tick Appropriate)

	Tick Appropriate
Slow Internet speeds	
Limited availability of devices.	
Lack of digital skills.	
Unstable Internet connection.	
Concerns about online security.	
Restrictions on accessible websites.	
Limited relevant online content.	
Affordability constraints.	
Accessibility barriers.	
Other Specify	

24 Based on your recent experience with your Community Information Centre,

- a. what improvements would you suggest to your Community Information Centre (CIC) to better serve the needs of its community members?-

THANK THE RESPONDENT FOR THEIR TIME AND CLOSE INTERVIEW



'creating a level playing field'