

# The challenges rural women face in using Telecentres: The case of the Eastern Cape Province

*Nozibele Gcora, Amanda Gopeni, Mbali Tuswa  
University of Fort Hare  
South Africa*

*Tandi Lwoga  
Muhimbili University of Health and Allied Sciences  
Tanzania*

*Wallace Chigona  
University of Cape Town  
South Africa*

## **Abstract**

Shared Information and Communication Technology (ICT) facilities such as telecentres offer people opportunities to access digital technologies that may facilitate socio-economic development. This is particularly important in rural areas where the citizens are less likely to own technologies. However, despite a huge investment in such interventions, developing countries have not fully realised the benefits. In particular, due to a myriad of social factors, women in rural areas seem to benefit the least from such interventions. The aim of the paper is to explore the challenges rural women face in using telecentres. The study employed a qualitative approach and was based on an interpretivism paradigm. Data for the study came from both secondary sources and semi-structured interviews. The interviews were conducted with women in two Eastern Cape rural towns. The challenges which limited the usage of telecentres were grouped into: (1) institutional, (i.e. financial sustainability, staff shortage, poor ICT infrastructure, location, lack of awareness), and (2) community challenges (perception, operational times, affordability, lack of ICT skills). The study concludes that through awareness; improvement of ICT capacity (infrastructure and literacy); and women empowerment in terms of ICT; use of telecentres can be successfully integrated in rural communities. The findings of the study may be used by those seeking to improve the impact of telecentres in rural areas, especially on women.

## **Keywords**

telecentres, women, rural areas, challenges, ICT. South Africa, Eastern Cape

## **1. Introduction**

Information and Communication Technologies (ICTs) are vital for the development of both the urban and rural areas. However, accessibility and impact of ICTs in deprived areas such as the urban poor and the rural areas is limited, due to challenges such as

availability, affordability and accessibility (Chisango, 2014). Shared ICT facilities such as telecentres offer opportunities to people to access the digital technologies. The shared technologies have the potential to facilitate different spheres of socio-economic development of communities. This is particularly important in rural areas where the citizens are less likely to own their own technologies. However, although the number of computers and Internet users have increased over the past years in developing countries (ITU, 2011), the under-served areas of developing countries have, to a large extent, failed to fully realise the potential of the technology.

In particular, women generally benefit the least from technological interventions. This is due to a myriad of social factors which limit the women from having meaningful access to ICT. The factors are the results of their unfavourable conditions including education, employment and income (Hilbert, 2011). As emphasised in the report by the Eastern Cape Provincial Government, exclusion of women in ICT continues to leave a large gap in economic participation that deprives women of equal opportunities in a range of competitive roles (Office of the Premier, 2009). This is because, in rural areas, ICTs are still mainly viewed as the purview of men and most women are housewives who depend on their husbands for support (Cecchini & Scott, 2003; Chilimo, 2008).

The aim of this paper is to explore the challenges women in rural areas face in using and benefiting from telecentres. The study focuses on the case of the Eastern Cape Province of South Africa. The reason for focusing on the Eastern Cape is twofold: (1) the province is one of the least developed in South Africa, and (2) previous studies have noted that women from the province lack knowledge about benefits that telecentres can offer to empower them and their communities (Lesome & Seti, 2014). The setup gives us an ideal context for the study and an opportunity for the study to have an impact on a real-life context.

The study employed a qualitative approach based on an interpretivist paradigm. Data for the study was collected through semi-structured interviews with the users and non-users of the telecentres. Data for the study was collected from women and managers of the telecentres.

## **2. Telecentres**

### **2.1. Telecentres overview**

A telecentre is a public facility where people access computers, the Internet and other digital technologies, often at a subsidised fee. Services provided at telecentres include public phone facilities, computer typing, faxing, printing, photocopying, laminating, access to Internet services, and computer training courses (Conradie, Morris & Jacobs, 2003; Latchem & Walker, 2001). In most instances telecentres are aimed at supporting communities in socio-economic development activities such as education, agriculture and health (Bailey & Ngwenyama, 2010). Telecentres can empower communities through various ways including: providing a platform for common projects; bringing people of different social and economic backgrounds together; delivering community services; drawing young people into community life and giving them new opportunities; and capturing and building on community history (Bailey & Ngwenyama, 2010). Telecentres can help communities through the use of technologies to improve their lives by taking the opportunity to innovate, and become stronger and more connected to each other.

Telecentres have a varied range of potential for development in rural areas. They can help

rural communities overcome computer literacy barriers by providing computer training and allowing the people an opportunity to improve their ICT skills (Kapondera, 2014). Hansson, Mozelius, Meegamma and Gaina (2010) add that telecentres provide employment opportunities in the rural areas – these include working at the telecentre. Furthermore, they provide rural communities with access to information and knowledge. The rural communities can also save on travelling costs and time to access services which are normally in urban centres (Kapondera, 2014).

Telecentres in rural areas can also be used for educational purposes. Here students registered with educational institutions who reside in rural areas can use the centres to access their study work (Andrew, 2007).

## **2.2. Telecentres and women**

Women, compared to men, seem to benefit less from opportunities that telecentres offer (Chisango, 2014). This is due to a myriad of social factors such as perceptions that women have concerning the telecentres (Buhigiro, 2012). Kupalelwa (2012) adds that women in rural areas struggle to access telecentres since they have limited time to access the telecentres due to their multiple roles and heavy domestic responsibilities. Their leisure time is limited and their mobility is more restricted than that of men (Kupalelwa, 2012). As a result, their participation in ICT facilities is low (Chisango, 2014).

## **2.3. Background of telecentres in the Eastern Cape rural towns**

The majority of telecentres in South Africa are run by government and are based in rural areas. Telecentres were introduced into the province to promote ICT use and propel economic, educational and social development in rural areas (Andrew, 2007). They were meant to facilitate such a rural development process through the use of ICT applications, in particular through the telecentres. These telecentres provide sources of employment and income in the rural areas (Jozanc & Van Dijk, 2011). Some telecentres in South Africa are based in Thusong Service Centres. Thusong Service Centres are one-stop centres meant to address the inequalities in accessing government services such as Social Development and Home Affairs. These centres house a wide range of government services including Health, Social Development and Home Affairs (Kapondera, 2014).

Telecentres in rural areas of the Eastern Cape, as is the case in most parts of South Africa, are run in a franchise-mode. These centres were initially run under the Universal Service Access Agency of South Africa (USAASA). The equipment in the centres is provided by government (Dagada, 2010). The centres are then handed over to locally-based managers to operate. The managers assist communities with training on how to use telecentre facilities, as some community members do not know how to use computers (Malek, Ahmad & Awang, 2014).

Some telecentres in South Africa are in partnership with the University of South Africa (UNISA), a leading distance-learning South African institution (Minnaar, 2011). Through the partnership, UNISA students use the telecentres for their studies at no cost to the student.

Centane and Cala are both rural towns in the Eastern Cape province. Cala is in the Sakhisizwe Local Municipality which falls under the Chris Hani District Municipality. Centane (Kentani) is a settlement in Mnquma Local Municipality under Amathole District Municipality (Statistics South Africa, 2012).

### **3. Research methodology**

The researchers employed a qualitative approach and the study was based on an interpretivist paradigm where reality is viewed as socially constructed (Collis & Hussey, 2009). We were cognisant that studying challenges and benefits of the use of ICT facilities such as telecentres in rural areas required an in-depth understanding of the context of the individuals that are affected (Ratnasingam, 2005). Hence it was necessary to adopt a qualitative case study strategy. A case study suited this study since it focused on the interaction between individuals and technology facilities, and the challenges of using telecentres in a real life context (Maonake & Isabirye, 2014). Data for the study comes from both secondary sources and semi-structured interviews.

#### **3.1. Sample and data collection**

Two cases were used for this study: Cala and Centane Telecentres. We selected the two centres since we wanted centres from different districts of the province. Purposive sampling was used when selecting the cases for the study. We chose the cases based on those with the highest contribution towards the objectives of the study. The study employed a comparative case studies method (Yin, 2014).

The respondents for this study consisted of women users and non-users of the telecentres, as well as managers of the telecentres. The sample consisted of 20 users, 20 non-users and two managers. At Centane 10 users, 10 non-users and a manager of the telecentre were interviewed; in Cala 10 users, 10 non-users and a manager of the telecentre were interviewed. The interviews were conducted mainly in isXhosa, the local language of the area. The interviewers were isXhosa first-language speakers.

#### **3.2. Data analysis**

The interviews were transcribed soon after they had taken place. The interviews were translated to English for analysis. We analysed the data using thematic analysis. The analysis employed within-case and cross-case analysis (Forester, 2009).

#### **3.3. Ethical consideration**

The respondents were only interviewed after they had given us their informed consent. The respondents were informed that their participation in the study was voluntary and could be withdrawn at any time. The identities of the respondents in the study were anonymised. Due to ethical purposes, the sample was limited to women over the age of 16.

### **4. Case study description**

#### **4.1. The Centane Telecentre**

Centane is a rural town; the nearest major town is Butterworth which is 35km away. The telecentre in Centane was initiated and sponsored by government as part of the USAASA telecentre project. The telecentre project started in 2004 with the aim of providing the entire community with ICT services to help equip members of the community with ICT skills, and to have access to government services without travelling to urban centres. The telecentre faces the challenge of low use of it as there is a cybercafé in the town that offers similar services to those that the telecentre provides. Furthermore, the schools in the areas had acquired their own computers and therefore students from surrounding schools

had stopped using the telecentre.

The telecentre also faces the challenge of residents being scattered. Lack of ICT skills is another challenge that the telecentre faces; many community members do not have the skills to use services such as the Internet services or typing. The lack of skills discourages some community members from using the telecentre.

The telecentre also faces financial challenges. They have to meet their operational costs from the revenue generated at the centres. If the telecentre makes a loss, the staff members do not get paid.

## **4.2. The Cala Telecentre**

Cala is a small town in the northern region of the Eastern Cape Province. The telecentre project was implemented in 2012. The aim of the telecentre was to provide ICT services to community members of the Cala community. The telecentre aimed at providing ways of communication and information access, as there are limited sources of information in the community of Cala.

This telecentre is also facing the challenge of low usage. Members of the community do not know about it, probably due to unsuccessfully marketing of it.

## **5. Results of the research**

The challenges, which limit the usage and the level of benefit rural women derive from the telecentres, have been grouped into two: 1) those affecting the telecentres themselves (institutional), and 2) those affecting the users.

### **5.1. Institutional challenges**

The data showed that the telecentres in rural areas suffered from a number of challenges which affected the services they offered and the experiences they created for users and potential users.

#### **5.1.1. Financial sustainability**

One of the major challenges facing the telecentres was financial sustainability. The government provided the equipment for the centres but did not provide funding to cover operational expenses. The manager in Centane noted that the demand for the services of the telecentres was initially high but gradually declined, due to a number of factors. When the telecentres began operating in rural areas, the telecentres were the main providers of ICT services to other government departments and schools in their areas. This ensured enough business for the telecentres to sustain their operations. However, later, through various government initiatives, the other government departments in rural areas and the schools acquired their own computers:

*“Now the government has made it possible for schools around the telecentre to have computers and perform all the services that this telecentre does and this has resulted to this telecentre losing users. . . . I think the government should add more services that a telecentre can offer in order to get increased income”.*

However, since the project was government-initiated, the telecentres are not allowed to add other services to the centres over and above those approved by the government. This restricts the centre managers from adding services they would deem profitable for their centres. This restriction by the government proved particularly difficult since the government-initiated telecentres could not compete with other providers of similar services

in their areas. This was particularly noted in Centane where there was a cybercafe at the centre of the town which was a competitor for the telecentre.

The financial sustainability of the facilities is also challenging since the demand for such services is generally low in the rural areas. Other similar initiatives in the area had closed down because of low demand. The low demand could be mainly because of low levels of education of residents, resulting in lack of appreciation of how ICTs can be of benefit to them.

### **5.1.2. Staff shortages**

One of the challenges the telecentres faced was the shortage of staff in them. This meant that the clients had to wait a long time to be attended to by a staff member. This was time consuming and eroded the benefits of using the facilities for the users.

The challenge of staff shortage is to an extent related to challenges of financial sustainability. Since the telecentres fail to generate enough income, they may not be able to afford to pay more staff to serve in the centres. At the same time, the demand for assistance by the users is particularly high (higher than would it be in an urban setup), since the level of skills amongst the users is low.

### **5.1.3. Shortage of telecentre resources and limitation of infrastructure**

Another challenge affecting the telecentres is the lack of resources in the centres and poor telecommunication infrastructure affecting rural areas. Particular challenges are space in the telecentres and the number of computers. Sometimes the telecentres get full, especially during school holidays. This means the clients must wait for a while or come back later. The challenge with space sometimes arises because of short courses that are offered in the telecentres.

Rural areas generally suffer from poor quality telecommunication infrastructure. This problem also affects the telecentres. Cala is severely affected by the poor quality of network reception. This problem has been affecting the telecentre for a long time and has persisted; the management has tried to address it by upgrading the servers. There are no reliable 3G connections in the area, leading to slow speeds for the Internet. Even though South Africa is experiencing improvements in the coverage and the quality of connectivity, the rural areas are lagging behind in this regard. The poor telecommunication quality limits the availability as well as the quality of the services.

### **5.1.4. Location/accessibility/visibility**

Location of the telecentres is a challenge for both users and potential users. The location affects the visibility and accessibility of the facilities. Both telecentres are not located in the centre of town where they would be easy to see. Although the telecentre is in town, it is at the very end of the town so it is difficult for people to know about it. The centre in Centane is in a Thusong Centre at the end of the town. Although the telecentre in Cala is in the main road, it is not at the centre of the town. Therefore many people in the community are not aware of it.

Furthermore, the location is challenging due to the settlement patterns of the rural Eastern Cape. The rural Eastern Cape is scattered and, as such, there are few people who stay in and around the small towns in the province. The long distances demotivate people from attempting to use the facilities, especially since their uses are often not intensive (Mtega & Malekani, 2009). It would be costly for them to take public transport or walk a long distance for a single copy or print-out.

The dominant uses or branding of the buildings in which the telecentres are housed also affects the visibility and the perception of the telecentres by the community. The Cala Telecentre is located inside the radio station, while the Centane Telecentre is located in a Thusong Centre. In Cala, even though the majority is aware of the radio station, most non-users are not aware of the existence of the telecentre. Similarly, in Centane the some non-users are not aware of the telecentre, since the Home Affairs and Social Development Departments are the dominant services in the Thusong Centre complex. The challenges of how the public institutions which are co-hosted with telecentres affect the operation and adoption of telecentres have previously been highlighted by Chigona (2006). This study adds to the argument by Chigona (2006) by showing that the strength of the brand of other services may over-shadow the telecentre.

#### **5.1.5. Marketing strategies**

The majority of the users know about the telecentre through word of mouth; this is evident in the responses of users from both Centane and Cala. Users in Centane thought that the telecentre targeted everyone; however, most users in Cala thought that the telecentre targeted everyone, but mostly UNISA students.

In particular, the rural women lack awareness of telecentres. The study shows concerns over marketing strategies of rural telecentres. In addition, other respondents indicate that they are aware of the telecentre buildings, but do not know the aims of these establishments and how they could empower women. A respondent from Centane suggested that:

*“I think before telecentres are opened/implemented there should be like a community meeting and flyers should be given out or posted around the area in order to successfully achieve awareness campaign”.*

Community members thought that it was only a radio station since there are no posters outside that show that there is a telecentre inside.

## **5.2. Community challenges**

### **5.2.1. Perceptions of the telecentre**

The women’s perceptions of themselves and of the technology shaped how they engaged and used the technology and the telecentres. The perception among the women in the rural areas is that using a computer is complicated. Some women feel their fingers are too rigid to use the computers. Respondents noted that women believe that anything to do with complex systems such as computers is the purview of men. In addition, the women believe that men are more educated than them and they believe that telecentres are for the educated, the working members and students. This perception leads to women not using the telecentres. The perception that telecentres are for the educated individuals is perpetuated and enhanced by the fact that most of the regular users of the centres are UNISA students.

There is a limited knowledge of what telecentres are and how they can be of help to the women. While the UNISA students have a general appreciation of the technology, the women’s views of the telecentres are mainly limited to photocopying documents for use at Home Affairs or Social Development Departments. One respondent said:

*“We do not know how to use a computer and we are not interested in learning it because we are old. Younger children can learn it but not us.”*

The perception that technology is mainly for the young warrants further investigation. This

is similar to the findings of Lorini, Van Zyl and Chigona (2014) who noted that women in disadvantaged areas of Cape Town appreciated the value of technology but failed to see it as beneficial to them. This lack of appreciation of the value of technology could be attributed to low levels of education.

### **5.2.2. Operational times**

The opening hours of the telecentres also affect the accessibility and use of the telecentres. Both telecentres open only during the week and not during the weekend. Users both in Centane and Cala complain about the telecentres not opening during the weekends. The manager in Centane indicated that they had initially tried to open the facility over the weekend; however, the patronage was low because most people attend to social functions such as funerals and weddings during the weekends. Users in Cala said they would prefer the telecentre to open 24/7 as most of them are students. Some users in Centane said that the telecentre opened only during working hours and there was no place close by that they could use to use telecentre facilities other than the Thusong Service Centre.

Previous studies have noted the impact of operational times of telecentres and the impact on use (Chigona & Licker, 2008). In this paper we note that the determination of the operation hours may itself be a complex social decision. The cases in this study show that even though there is some demand for opening the centres over the weekend, the demand will not be sufficient for a telecentre which is forced to be financially sustainable.

### **5.2.3. Affordability**

In both centres users are required to pay for usage of the centres. This was stated as a challenge by users and non-users at both centres. This is particularly a challenge since most people in rural areas, especially women, are unemployed and depend on social grants. However, the UNISA students are not affected by this since they access the facilities at no cost. This finding is similar to other studies on telecentres which note that the cost of accessing telecentres may affect the adoption (Chigona & Licker, 2008). Chigona and Licker (2008) note that the fact that the usage of the Smart Cape Telecentres in Cape Town is at no charge to the users, positively affects the adoption of the technology in disadvantaged areas.

### **5.2.4. Lack of ICT skills**

Lack of ICT skills is one of the biggest challenges for the development of ICT in rural areas. This is mentioned by most of the respondents. The study specifically shows that women in the two areas lack the computer skills which would enable them to use the facilities. The majority of respondents said that:

*“As non-users of telecentres we feel left out since we do not know how to use a computer. We are willing to learn, but we cannot afford to pay for the training at the telecentres.”*

Lack of ICT skills also affect the user support and the management of the facilities. At Cala there is one person to assist clients even though there is high demand for client support. The centre struggles to recruit staff for the position because of the lack of people with ICT skills to fulfill that role. The impact of lack of skills on the use of the telecentres warrants further study since one of the objectives of the telecentres is to actually promote the ICT skills in the rural areas.

## 6. Discussion and conclusion

The main aim of telecentres is to enable those with no access to their own technology to have access to this technology. This has the potential to address the digital divide, especially in rural and underprivileged areas. Previous studies have shown that the adoption of telecentres by women lags behind that of men; this is worrying since women carry most of the economic burden, especially in rural areas. The aim of this paper is to investigate the challenges women in rural areas face in using telecentres. This understanding would help those funding and managing telecentres to address the barriers affecting women, preventing them from using and adopting the telecentres in rural areas.

The findings of the study show that telecentres indeed have potential to empower women in rural areas. All the telecentre users from Centane and some of Cala testified to knowing people who have benefited from the telecentres, either themselves or their colleagues. Further, those who have not yet benefited are still keen to learn more about the services provided by the telecentres. However, the study shows that the rural Eastern Cape faces a myriad of socio-economic challenges that lead to the majority of men migrating to big cities in search of employment. This leaves behind the population consisting mainly of women with little or no formal education and consequently high levels of unemployment, a high rate of crime and other anti-social behaviours. This is evident in Centane and Cala where most of the young women have limited formal education and depend on children's social grants. These social conditions affect how the women perceive and use technology.

The study shows that a number of institutional factors affect the way the telecentres operate and offer services to women in the area. Firstly, being in the rural areas, the quality of the telecommunication is poor. Again, the arrangement between the government and the operators of the centres means that the centres are not flexible in the services they could offer. This inflexibility means they are not competitive against their competition and can therefore not generate high levels of profit. This, in turn, means they cannot sustain adequate staff to provide assistance to the users who mostly have both low computer literacy and low computer efficacy.

The evidence also shows that women in the rural areas face wide-ranging challenges, limiting their use of and benefits from the telecentres. Challenges are the lack of awareness about the telecentres and the potential benefit of the centres. This results from both poor marketing on the part of the telecentres and low education levels on the part of the women. It is also noted that the adoption of telecentres in the rural areas is affected by the cost of using telecentres. Making telecentres a public good which could be used at no cost, at least for poor communities, would make a difference in the adoption of them.

Practical implications of our study could be:

- Telecentres could improve the marketing and awareness strategies to educate communities on the benefits of telecentres. Such approaches would be specifically designed for rural women.
- Telecentres should seek to partner with government, private and non-profit organisations to improve delivery of their services.
- Telecentre should be designed and developed to be embedded or owned by local communities and to provide those communities with, among other capabilities, the

variety of services and supports, e.g. e-health, e-government, e-business.

- Telecentre services should be designed in a way that, in the absence of these e-services, it would be costly and difficult to access these services in the communities. This would encourage rural women to make use of the telecentres.
- The telecentres e-services can be provided for a fee, e.g. e-government services.

A future study which would explore different ways of motivating rural women to use telecentres more effectively would be helpful both academically and practically. For example, an action research which involves designing and providing training for women around technology and telecentres would be useful.

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