

Challenges of ICT in Rural Areas

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ABSTRACT

Rural areas in the country lag behind with regard to ICT access and in terms of economic development, such as literacy, computer skills and higher income. To understand the benefits ordinary South Africans could derive from having increased access to ICT, data from the annual South African Social Attitudes Survey (SASAS) from 2003 to 2009 was analyzed. The center is carrying out teaching, research and development with an aim to build ICT-based systems and methodologies to accelerate Indian agriculture and rural development. The faculty is involved in imparting knowledge regarding sustainable agricultural production systems and environmental issues so that students can carry out research in the area of societal development by extending development in ICTs. An analysis of selected other media showed that access to the various types of media were lower in rural areas compared to urban areas. An important factor in this respect was rural access to the electricity grid, which grew notably from approximately 51% in 2003 to 78% in 2009. From the survey it was clear that the rural population made less use of the internet than city dwellers. While the internet was mainly used for information purposes in urban areas in 2003 and 2004, interestingly, in 2005 it was mainly used for entertainment.

1. INTRODUCTION

Rural areas in the country lag behind with regard to ICT access and in terms of economic development, such as literacy, computer skills and higher income. To understand the benefits ordinary South Africans could derive from having increased access to ICT, data from the annual South African Social Attitudes Survey (SASAS) from 2003 to 2009 was analyzed. The objective was to specifically measure whether there had been an increase in access to ICT in rural South Africa compared to urban areas. The SASAS survey is a national representative survey of adults aged 16 and older, regardless of their nationality or citizenship. Respondents were asked to indicate whether they had access to a range of ICT platforms such as a landline telephone, a computer, the internet, a television, radio and cell phone.

2. OBJECTIVE

- To Access to a computer and internet use
- To know the Types of internet use
- To understand about the transforming our harnessing digital technologies

- To understand Landline telephone and cellphone access
- To understand Radio and television access

3. METHODOLOGY

It is based on secondary sources of data which include books, journals, Internet etc.

ACCESS TO A COMPUTER AND INTERNET USE

Analysing the overall access to a computer and the internet showed a steady increase from 2003 to 2006 in all provinces. As for computer access, there was a decline between 2006 and 2007, but that was followed by another steady increase up to 2009. Gauteng had the highest computer access in 2009 (approximately 48%), followed by the Western Cape (almost 43%), the Free State (about 27%) and the Northern Cape (almost 26%). KwaZulu-Natal recorded considerable levels of access (almost 24%). All other provinces reported less than 13% access to computers.

Although the general pattern was obtained for both computer and internet access, the results showed that internet access in 2006 – the latest available year of data (WC, 37%; Gauteng, 28%; Free State, 24%; and KZN, 18%) – was generally lower than access to computers.

TYPES OF INTERNET USE

From the survey it was clear that the rural population made less use of the internet than city dwellers. While the internet was mainly used for information purposes in urban areas in 2003 and 2004, interestingly, in 2005 it was mainly used for entertainment.

LANDLINE TELEPHONE AND CELIPHONE ACCESS

- In general, cellphones were more accessible than landline phones, showing a steady decline from 2003 to 2008, followed by an increase in 2009. As with the internet, the respondents in the Western Cape were the highest users of telephones, followed by those in Gauteng, KwaZulu-Natal and the Northern Cape, compared to the other provinces.
- The high increase in access to cellphones and an apparent saturation point by 2009 in all the provinces, except in the Eastern Cape. Although Gauteng and the Western Cape once again dominated cellphone access initially, the other provinces had almost caught up by 2008. It was also found that cellphone access was generally higher than computer and internet access.

RADIO AND TELEVISION ACCESS

Unsurprisingly, there were very minor disparities between rural and urban access to radio (approximately 66% rural and 76% urban access in 2009), whereas there were much larger differences in television access (almost 64% rural and 91% urban access in 2009), as demonstrated.

COMPARISON BETWEEN DIGITAL AND SELECTED OTHER MEDIA

An analysis of selected other media showed that access to the various types of media were lower in rural areas compared to urban areas. An important factor in this respect was rural access to the electricity grid, which grew notably from approximately 51% in 2003 to 78% in 2009. Access to DVD players or video cassette recorders (VCRs) increased rapidly in the rural areas from approximately 6% in 2004 to about 44% in 2009, at which point urban access stood at almost 79%. Although access to satellite/pay TV grew in rural areas during this period, the growth was marginal and the access levels remained low.

4. FINDINGS

- It indicate lower ICT access by the rural population compared to the urban population of South Africa and therefore, a possible shortfall in the implementation of the country's strategies for ICT spread to rural areas.
- A useful concept of the Knowledge Economy Model, adopted by the Department of Science and Technology, is to involve the private sector in the provision of necessary knowledge infrastructure and services.
- ICT distribution to rural areas could be enabled by such a strategy and this could in turn lead to poverty alleviation in rural areas.
- There is already good cellphone and fair radio and television access in rural areas. These cornerstone mediums can be employed immediately in rural areas for information sharing, and further developed as tools of poverty alleviation, for example, through sharing health information, e-learning at schools or enabling economic activity through cellphone banking.
- Simple solutions that are durable, adaptable and easily maintained are most likely to succeed initially. Education, skills, capital equipment and infrastructure are needed for this ICT diffusion to succeed optimally. For example, schools need computers, as well as the means to keep this equipment safe, properly maintained and connected.

5. CONCLUSION

Most developed economies have very good ICT infrastructure, suggesting that ICT platforms provide a foundation for, and contribute to, development. In some urban areas, South Africa's ICT infrastructure is good, but the opposite is true for most rural areas.

6. REFERENCES

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