

**Eduardo Mondlane University Informatics Centre**

**Community Information and Communication Support Centre  
CAICC**

**STUDY OF THE SOCIO-ECONOMIC SUSTAINABILITY OF THE  
COMMUNITY MULTIMEDIA CENTRES OF XINAVANE, CHÓKWÈ  
AND MASSINGA**

**EXTRACTS**

Simeão A. Nhabinde  
Germano P.E.Nhabinde

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## **Acknowledgements**

The authors would like to thank the CAICC for giving them two professional opportunities: Firstly, access to new ideas and knowledge, and thus to power as Bacon says. Although we had heard of community multimedia centres (CMCs) we had no consistent idea of the importance and power that they represent for society today, especially for rural and illiterate societies such as ours. Secondly, because by the simple fact of having had access to this information and the opportunity to read a wide range of writings in order to prepare this study - which we hope will also be read by others - we already feel like architects of a CMC.

We would also like to thank the managers of Xinavane, Chókwè and Massinga CMCs for their commitment and dedication to facilitating our work, and all our interviewees who left their daily tasks to share with us their knowledge about the CMCs.

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## **Executive Summary**

This study was carried out in the context of ongoing international debates about the sustainability or otherwise of community multimedia centres (CMCs), which are normally established in rural areas.

The study's pertinence lies in the need to evaluate economic and financial sustainability, not forgetting questions of social sustainability, in contexts where steps towards digital inclusion could be crucial in the fight against absolute poverty in the long term.

The main objective was to verify the socio-economic sustainability of CMCs in the rural and semi-urban areas of Xinavane, Chókwè and Massinga.

The fieldwork for data collection was done between 26 March and 6 April 2008, with two days of work at each centre. Methodologically, data was collected through direct observation and comparing it with written sources, interviews and questionnaires applied to various target groups.

The main findings from the fieldwork are based on a series of categories of analysis defined by the terms of reference. It was thus possible to identify common and specific features of success and constraints, based on a SWOT analysis.

Based on the findings, a sustainability plan was designed including a marketing plan, financial plan and other features applicable to the situation in the centres.

The main conclusion to be drawn from the study is that the three centres are socially sustainable to the extent that they fulfil most of the prerequisites for a CMC, to such an

extent that their respective communities will continue to depend on the CMC for a long time to come as their main base for digital inclusion and therefore as part of their daily lives. From the economic point of view we can say that although there are differences, mainly in the quantity of services provided, the three centres are financially sustainable in the short term. But in the medium and long term, considering the depreciation of their equipment, breakdowns and changes in the conditions of the market, they will continue to need important support from partners, in particular for purchasing capital goods with which to supply new, high quality services in response to the demand.

The study is structured in six chapters: introduction, general findings, specific features of each CMC, sustainability model for the CMCs, conclusions and recommendations.

## **1. Introduction**

### **1.1. Objectives**

This report is the result of a study seeking to analyse and strengthen the socio-economic sustainability of the CMCs of Xinavane, Chókwè and Massinga.

According to the terms of reference, the main goals were to study the following:

- The real socio-economic and financial situation and trends at each centre
- The internal organization of each centre – financial, planning and transparency
- Prospects for socio-economic sustainability, local opportunities, services, break even point
- Comparison of the three centres: aspects in common and differences; the main factors underlying successes and constraints
- The components of sustainability and issues to take into account in the context of telecentres, radios and CMCs in rural areas, lessons to be drawn from the study, and conclusions, recommendations and proposals

### **1.2. Background/CMC context**

The 1990s saw the emergence of digital inclusion movements, including efforts to democratize Internet access and enable people to learn to use all the ICT<sup>1</sup> instruments to develop their own capacities. That effort was concretized through the so-called CMCs, which are important instruments in reducing digital exclusion and moving towards inclusion, promoting not only access but also the use and social appropriation of the new digital technologies in order to meet the needs of the communities, promoting the formulation of public policies, the creation of knowledge, the production of appropriate content and the strengthening of human capacity, thus contributing towards the improvement of the economic, social, cultural and political conditions of the vast majority. (Degadillo, K. Gomes, R. & Stoll, K. 2003)

Seen as an initiative to use multiple digital technologies for human development, with emphasis on the social use and appropriation of technological tools to improve living standards, in Mozambique the first step towards CMCs was the installation in 1999 of pilot telecentres in Manhica and Namaacha. In 2001 new telecentre projects started up

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<sup>1</sup> Information and communication technologies – ICTs.

in Sussundenga, Manica, Gondola and Chókwè, followed by a further stage of evolution of telecentres into CMCs, led by UNESCO, incorporating community radio and the telecentre component. There are currently 20 CMCs throughout the country, in addition to telecentres and community radios.

However, it is important to stress that this study is limited to Xinavane, Chókwè and Massinga CMCs, though in the hope that its findings and recommendations will be relevant and useful for other community ICT initiatives.

### **1.3. Methodology**

The question of CMC sustainability has been the subject of heated debates throughout the world, concentrating basically on two aspects: economic and financial sustainability and social sustainability.

Financial sustainability implies obtaining revenue from the CMCs' services, thus enabling the payment of Internet connectivity, electricity, personnel, etc. But social sustainability must be measured by the degree of community socio-economic development. In this sense it was methodologically necessary to group the two components: social sustainability and economic/financial sustainability.

Analysis of documentation in the centres, semi-structured interviews with coordinators, managers and partners and direct observation could a priori provide us with a clear vision of economic/financial sustainability. The same could not be done in the case of social sustainability. Thus to evaluate this component direct observation was linked with a survey directed to various population segments in the areas of study. A sample of 60 people was defined for this purpose (20 per centre). Interviewees were selected through a combined sample, namely: a sample by quotas applied to the student community, people of low academic level such as market sellers, peasants, etc; a simple random sample applied to passers by and a purposive sample applied to people who were known to use and have access to the centre.

The data collection therefore used three different surveys: one for the local communities, another for the centre's users and the third for the IT trainer. Four semi-structured interviews were used: one for the financial coordinator, another for the person in charge of the radio, a third for the Local Committee (CAL) and a fourth for partners.

All these instruments contain complementary and triangulation questions. The quantitative data collected during the field work was processed in Microsoft Excel.

For the economic sustainability analysis the variables income-expenditure, equipment age and depreciation were used.

The indicators and variables of social sustainability are endless, not only for analysing the CMCs but also for other socio-economic areas. For this study we used the following universal indicators of a CMC's social sustainability: the need and requirement to train and develop its staff and volunteers; appropriate treatment of the centre's users, who must be seen as the fundamental reason for its existence; consolidation of a social vision based on knowledge of computer use, Internet use (digital inclusion) and access to information; acceptance of criticisms and suggestions from the community; access to information through the radio; community participation in managing the centre through

the management committee, elected by the community with the aim of involving the community in the whole process of establishing and operating the centre; quality of the services provided; provision of free services, at least at certain moments.

The study's major constraints are not having tested the data collection instruments and the limited time for data collection in the field. Drawing up a sustainability plan was also difficult because the local administrations do not have full information about the demography at the various levels, and about relevant economic and social infrastructures. This meant that time would be required, for example to count the number of shops and/or kiosks in the area, within the limited period of two days.

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## **2. Findings**

### **2.1. Economic sustainability**

#### **2.1.1. Aspects in common**

- Each centre is affiliated to a partner that manages it, and to an extent supports some of its expenses and/or uses its associates/members as volunteers.
- Considering that a CMC is not profit-oriented, all the centres have financial sustainability, given that we found that:
  - They currently have income higher than their expenditure
  - They have positive bank balances<sup>2</sup>
- Scarce and depreciating equipment (computers, photocopiers, radio equipment, scanners, binders).
- Full advantage of market opportunities is not taken due to the lack or breakdown of one or another piece of equipment.
- None of the centres have public telephone services, for different reasons.
- They all evolved as CMCs and continue operational
- They do not have clear marketing strategies and plans for the communities: everything happens by chance.
- Financial organization and transparency is weak with regard to the management of revenue, in the sense that there is no mechanism for controlling revenue and the sale of services, in particular services for which it is impossible to verify the level of daily sales such as computer use and printing. The only service with a control is the photocopier.
- There is no clear segregation of functions, although all the centres have their own organigram: Who does what? Who controls who, and what is the job description of each person?
- The community's point of reference is the community radio rather than the centre as a whole.

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<sup>2</sup> This was not possible to confirm in Xinavane, where we could only obtain an estimate from the coordinator of 12,000 MT.

### 2.1.2. Differences

#### **Xinavane CMC**

- Income is insufficient to cover any salaries. The receptionist who is also the treasurer and some collaborators who teach computer classes receive a small subsidy now and again.
- Before the Xinavane Sugar Company provided guards, the centre had extremely serious problems of thefts. Some of the equipment recovered had suffered permanent damage.
- There is heavy dependence on the photocopier for daily income. But there is only one photocopier, and at the time of the visit it was in Maputo for repairs, meaning that during this period the local income dropped.
- In addition to the trainers of radio volunteers who were trained by UNESCO, Xinavane has trainers who have been trained locally.
- It is the only centre located in an area where there is no university.

#### **Chókwè CMC**

- Comparatively to the other centres, Chókwè has a higher volume of income, offers more services and has many users.
- It is unable to absorb the local demand, for lack of staff.
- It has higher costs than the other centres: it pays water, electricity, rent and taxes, because there is no clear associative link to its partner.
- Regarding financial organization, planning and transparency, Chókwè is well organized, and there is a certain level of planning and transparency, shown by the requirements of its partner, ORAM, for monthly financial reports and annual audits.
- Revenue is put to work through interest-earning accounts at the bank.
- It is the only centre providing Internet services.
- It is the only centre in a district which has three universities that can take advantage of its services (Internet, photocopies, etc).
- It has extremely serious problems of damp and leaks, with negative effects on the equipment.
- The manager, the technician, the administrative assistant and the guard have salaries guaranteed out of revenue.
- It is the only centre that has a technician for repairing equipment. The others have to seek local alternatives or send equipment to Maputo.
- The most striking feature is the low level of community participation in management – the committee barely exists.
- There appears to be a trend away from consolidating the social vision: health workers and teachers invited to make programmes about health education refuse to do anything without payment.
- It is the only centre that has no free services, considering that Xinavane and Massinga both have some, such as free death notices on the radio and the use of digital encyclopaedias.

#### **Massinga CMC**

- Revenue is used to cover salaries for the radio producer, the administrative assistant, the guard and subsidy for the cleaner. The wages of the manager and the coordinator are guaranteed by the Mahlale Association.
- Contrary to the other centres, in Massinga there is major involvement of volunteers, who are contributing to the centre's economic sustainability.

- It is the only CMC in a new, purpose-built building.

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## 5. Conclusions

Responding to the questions asked in the terms of reference, the study carried out in Xinavane, Chókwè and Massinga demonstrates that: considering the financial balances, the real socio-economic and financial situation and the trends in each centre are not bad, though comparatively better in Chókwè and Massinga than in Xinavane, where the financial data for 2007 was not provided. The better financial situation of Chókwè is related in part to the fact of having various diversified sources of income in relation to the other centres.

With regard to internal organization, we can say that the organigrams follow the normal structure of a CMC, though the role of the AJUCOM Administrator in the structure of Xinavane CMC needs clarifying considering that the coordinator, the manager, and apparently all the other members of the management are members of AJUCOM. We also think that job descriptions should be drawn up for each member of staff.

In the case of Chókwè, in view of the increased volume of work it would be appropriate to recruit a staff member whose job description will be explicitly reception and photocopies, and not dealing with computers.

The financial organization is bad in Xinavane, relatively better in Chókwè, and still to be organized in Massinga. The practice of transparency is best in Chókwè thanks to the regular audits of ORAM, although it needs consolidating through reviving the local committee (CAL).

All the centres have prospects for socio-economic sustainability. They are greater from the social than the economic point of view, but if all the centres were to follow minimally the marketing plan laid out here we believe that the financial plan for economic sustainability could be maximized.

The most critical points of constraint are the shortage of computer equipment and its constant depreciation, and the lack of Internet connectivity. The centres need to be supported in terms of connectivity and purchasing more new computers. A CMC cannot live by photocopies alone, or it is no longer a CMC.

The volunteer situation is chaotic in Xinavane (a lot of dropping out) and good in Massinga. But in both cases mechanisms for stimulating them should be established.

The statistics show that community involvement exists in the sense of consuming the services on offer. Proof of this is that the majority of the community knows the radios rather than the multimedia centres as such. Despite being very enthusiastic about the radio, they do not know that it forms part of a system. Information must be disseminated; the community must be invited to participate in the centres' management. It is imperative that the centres establish good links with the schools. But generally what can be concluded on the positive side is that the centres have filled an enormous vacuum within the local communities, not only in terms of computer training, photocopies, processing and printing documents, Internet, scanning, binding, graphic services, digital

photography and copying CDs, but also in terms of information, communication and exchanges of community experiences. The establishment of these centres on the multimedia model has enabled the community to be regularly and officially informed about absent family members, the community, the country in general, issues of health, education, business, religion, culture and local and national governance.

In this sense we can affirm that although the centres do not have connectivity, or if it exists (eg Chókwè) it is precarious, the radio has transformed the centres into important tools for digital inclusion. In fact in a context in which illiteracy levels among the economically active population are extremely high, the inability to read and write reduces the usefulness of computers and the Internet, and makes radio, television and the telephone into the key tools for materializing the objectives of a CMC as a way of sharing the costs of digital inclusion at community level. Nonetheless, it is still important and urgent that these centres are equipped with Internet connectivity, to guarantee that the literate generations begin to emerge from digital exclusion immediately.

In terms of opportunities all the centres have a potential “market” guaranteed by the existence of upper secondary schools and should take maximum advantage of them. Opportunely, this market will grow in the light of the Eduardo Mondlane University’s recent initiative launching a distance learning bachelor’s degree in business management.

From the financial point of view the annual accounts of the CMCs studied showed some positive balances. Those balances are enough to fund some current expenditure and often pay salaries. However, at current levels they will only guarantee short and medium term financial sustainability – the marketing plans must be taken on and applied very seriously.

In practice the centres’ revenues enable them to pay for maintenance and small repairs from time to time. But in the case of constant and major breakdowns such as that of the Xinavane photocopier, the monthly income and savings for current expenditure are wiped out. Similarly, these centres also show that their financial resources are not yet sufficient for the immediate purchase of new equipment, not only to replace what is broken but to reinforce what they have in order to meet the demand and to launch new services that are useful for the community. In other words the CMCs still need some support in order to achieve a totally stable financial sustainability and independence. In view of their social importance, it would be ignoble to close them or let them deteriorate. Every effort to maintain them is extremely important for the life of those communities. But we note that they need to implement good internal organization and a good sustainability plan, always thinking for the future. Good practice of community marketing and good practice of management and financial control could be the solution. It is in this sense that we are making some recommendations that could be useful for all the centres and/or for each one individually.

## 6. Recommendations

### 6.1. Common questions for all the centres

- The gradual replacement of equipment, because a considerable amount is reaching the end of its useful life, which puts the continuity of the services at risk<sup>3</sup>.
- Training human resources in equipment maintenance and repair, to avoid paralyzing services or incurring high costs for repairs.
- Training for staff in marketing, or at least in community marketing, so that they become the main actors in encouraging the community to use the centre.
- Provide incentives for the volunteers, for example a percentage of the income they manage to produce.
- Take advantage of the support for the radio to publicise the telecentre services and make them better known to the communities. One way could be the production of a specific programme, transmitted in the local language and repeated in Portuguese, or vice-versa, which explains to the listeners in detail about the centre – what it is, its services, its advantages, etc. This would be a way of using the centre's own resources to create added value and make it increasingly sustainable, as detailed in the marketing plan.
- Establish more partnerships, which will enable many costs to be reduced, eg buildings that have space for more people and will enable more services to be provided, thus increasing revenue.
- Improve internal control mechanisms, mainly with regard to safeguarding the income through digital recording of sales, such as printing and computer and Internet use.
- Creating conditions for higher-value services through investing in equipment would be a very simple and practical way of guaranteeing increased income.
- Interaction among the CMCs is needed to maximize the services and guarantee sustainability.
- The organigrams should be reviewed and clarified, with job descriptions for each position or responsibility.
- The committees should decide on the maximum number of fulltime staff required for each centre.
- Financial organization is important, mainly with regard to the uniformity and consistency of the models used for preparing and presenting reports. Specifically, models based on daily and monthly income and expenditure should be presented, excluding repetitions of items and using standardized nomenclature, so as to facilitate data analysis.
- Electronic records should be kept of all financial reports, with back up copies, so that future studies will be better and it will be easier to draw conclusions about the state and financial trends of each centre.
- The local committees should meet at least quarterly, and those meetings should be capable of defining instructions, directives and strategies for the centres; helping to obtain and ensure continuing funding; seeking new directions and volunteers; developing policies and procedures regarding the association/members, the use and collection of data, financial administration and other operations; comply with legal requirements, monitor the marketing and financial plans.
- The centres should make links with educational institutions.

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<sup>3</sup> Mainly in Chókwè. In Massinga and Xinavane, though the equipment was purchased 2-3 years ago there are signs of damage.