EVALUATION STUDY OF THE MANHIÇA AND NAMAACHA
TELECENTRES AFTER 3 YEARS OF OPERATIONS

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Acknowledgements

Our special thanks go to the telecentre users and general public in Manhiça and Namaacha districts, for the information they provided for this study. Sincere thanks are also due to all the companies and institutions interviewed in these districts, for their readiness to give their opinions on the benefits and difficulties of the telecentres and for their suggestions.

A big thank you to the members of the Local Supervisory Committees (CALs) and the telecentre managers in Manhiça and Namaacha for their help during the data collection and for their guidance in general.

The coordinator of the Manhiça and Namaacha Pilot Telecentres Project was a source of constant support, giving useful advice during the different stages of preparation, analysis of the results and writing up.

We must also thank IDRC for its support for our twin objective of assessing the experience of three years of telecentre activities in Manhiça and Namaacha and identifying the information and services needs of the local communities, within the framework of the telecentres pilot project and the networking and services development project respectively. Thanks, too, to UNESCO for its important additional support within the framework of the community radios programme and the community open learning CD-Rom production initiative, enabling us to focus on priorities for the radio, and the information needs of women and young people in particular.
Executive summary

This report presents the results of a study carried out in the Manhiça and Namaacha telecentres and the surrounding areas in the period from 1-13 July 2002. The study's main goals were to evaluate the current state of functioning of the telecentres and use of their services, in comparison with the findings of a similar study in 2000; to evaluate the implementation of the suggestions made in the previous study and the solutions found for the problems identified; and to identify and analyse the community’s needs in terms of services and information content as a way of maximising the benefits of community access to information and communication technologies (ICTs).

The work was done by a team comprising lecturers and students from the Mathematics and Informatics Department of the Eduardo Mondlane University's Science Faculty. Information was collected through discussions with focus groups of young people, women and the Local Supervisory Committees (CALs), questionnaires administered to telecentre users and the general public, and interviews with various local companies and institutions.

The data shows that, as in the 2000 study, the main telecentre users are young males aged 17-25. The e-mail and Internet services still have relatively few users compared with other services such as telephone and photocopies. But when compared with the previous study there is measurable growth in use of IT-related services. This relative growth may be a reflection of increased dissemination of information about these technological resources, and also of improvements in the electricity supply. However, the cost of telephone connections remains high in proportion to the local communities’ ability to pay for the services.

The majority of current telecentre users and the general public considers that more attention should be given to training in computer skills and use of the associated technologies, with priority for young people.
It was evident from the interviews conducted in the two districts that in general users need the information technologies provided, in particular e-mail and Internet, but that the telephone charges are currently prohibitive. They suggest that the telecentres organise to become Internet service providers, as this would reduce the amount spent on phone calls.

The communities in the two districts are generally receptive to the services offered by the telecentres, though some aspects need improvement, such as the Manhiça telecentre’s premises.

All the questionnaire respondents and interviewees consider that the telecentres are achieving the main objective for which they were established, namely creating conditions for the most disadvantaged communities to gain access to ICTs. They all think that the telecentres are meeting a community need.
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1. Introduction

Modern societies are witnessing a trend towards integration, characterised by convergence within the economic, technological, social and scientific arenas. Accompanying this trend is the development of initiatives aimed at providing access to information and communication technologies (ICTs) for all citizens regardless of social status. One result is the emergence of telecentres.

A telecentre is a centre that provides ICT services to the communities (Izouma et al, 2000). Such services include computer use, Internet access, e-mail, telephone, fax, photocopying and library, and through them telecentre users gain access to information and communication.

The telecentre experience in Mozambique began in August 1999 with the opening by the Eduardo Mondlane University Informatics Centre (CIUEM) of two pilot telecentres in Maputo province, in the capitals of Manhiça and Namaacha districts respectively. These telecentres are supported by the Mozambican government and the International Development Research Centre (IDRC) of Canada.

Telecentres in Mozambique have the following mission:

- to contribute to providing access to information;
- to be based in the rural areas;
- to contribute to universal access to ICTs;
- to promote the exchange of information between rural areas and the world;
- to promote distance education;
- to promote formal and informal education.

The full participation of society in this process opens the way for e-community, e-education and health, e-government and e-commerce.

Local Supervisory Committees (CALs) were established as a way of involving the local communities in the telecentres. Their main role is to monitor and supervise the telecentre, working with the manager, and their members come from different sectors of the community and represent various local organisations and institutions, such as local authorities, NGOs, etc. Each committee is responsible for keeping a permanent eye on
how its telecentre is functioning. The telecentres are owned by the CIUEM, which also provides support and supervision.

In 2000 an evaluation study of the Manhiça and Namaacha pilot telecentres at the end of their first year of operation was published. It aimed to assess the telecentres through collecting data on the views of users about the services provided and identifying potential users.

The results of the study were presented and discussed at a workshop held in March 2001. Participants included the study team, the telecentre project coordinator, the telecentre managers, the head of the Science Faculty, the CIUEM, the National Informatics Policy Commission, economic agents and other interested parties.

In November and December 2001 the project coordination organised two workshops, one in each telecentre, with the aim of identifying various options to guarantee the sustainable future of the telecentres after the project ended. The project coordinators, the telecentre managers, members of the CALs, activists, local economic agents and organisational representatives and other invitees took part – around 50 people in each workshop.

Nearly two years after the first study, it is time to follow up on it and do a new evaluation.

This report has seven chapters. It begins with the introduction, followed by a chapter on the study area and basic information. Chapter three describes the study’s framework and objectives. The next chapter sets out the methodology used and the main research questions, and describes the methods and the research instruments. It also identifies the study team. The research results are presented in chapter five, grouped into three sections: the interviews and focus group discussions, and the two questionnaires. The sixth chapter discusses the results in the light of the research questions. The report ends with conclusions and recommendations. A bibliography and annexes containing the study documentation and instruments are included.
2. Study Area and Basic Information

2.1. Manhiça Telecentre

The Manhiça telecentre is in the district capital of the same name, on National Highway No.1, which connects Maputo to the centre and north of the country. Manhiça district is in Maputo province in southern Mozambique, 78 kms from Maputo City.

According to the annual population projections (INE, 1999) the district now has around 137,423 inhabitants, most of whom live in the rural areas. 22,000 people live in Manhiça town. The languages spoken in this region are Shangaan and Ronga alongside Portuguese, the official language. The majority of the population lives by farming, fishing, handicrafts and informal commerce. The most common means of transport is the private “bus”, known as *chapas* 100. Within the district people use bicycles or walk – some local residents do journeys of 5-20 kms on foot.

The district has 4 agro-industrial complexes, the most important of which is the sugar factory; 1 secondary school; 1 middle level teacher training centre (IMAP); 1 hospital; 1 health research centre; 9 state institutions; 2 banks; branches of the public telecommunications and electricity companies (TDM and EDM respectively); 10 NGOs and several political parties.

The Manhiça telecentre operates in premises that are rented from a private owner. They offer acceptable security conditions, and a guard is also employed. The telecentre occupies a single room around 75m²: all the services are provided in the same space, but they are separated organisationally. There is a toilet in an adjacent building.

In terms of equipment the telecentre has a phone, a fax, five computers (all with CD-Rom drives and one with a CD-Writer), two printers, a scanner, a photocopier, binding equipment, an external modem, a television and a video. It has various softwares – MS Office, antivirus and utilities – and a selection of books and CD-Roms in a small library. One of the computers, with multimedia facilities, was provided by UNESCO for its project to create a CD-Rom with local information and resources (the topic chosen for this first experiment was “Malaria”).
Photo 2.1 shows the interior of the Manhiça telecentre

Photo 2.1: Inside the Manhiça Telecentre

The telecentre’s daily activities are guaranteed by two fulltime workers, one male and one female, and two guards. They are supported by two volunteers, who receive a subsidy. These volunteers are members of the CAL, one working in the mornings and the other afternoons, and they assist in making photocopies, dealing with the public using the phone and fax, and generally supervising all the telecentre’s activities.

The fulltime workers have completed at least basic secondary education (10th grade), and speak the languages used in the district. They have only had computer training given by CIUEM, and no other training. It should be said that the first two staff left the telecentre for personal reasons, one in 2000 and the other in 2002, which naturally affected the telecentre’s operations.

The manager reports to the CAL and to the CIUEM. Staff salaries are paid out of revenue.

2.2. Namaacha Telecentre

The Namaacha telecentre is also in Maputo province, in the district capital of the same name. Namaacha district is in the south of Mozambique, on the border with Swaziland, and is around 75 kms away from Maputo City.
The district has around 41,131 inhabitants (INE, 1999), most of whom live in the rural areas. They speak Portuguese, the official language, and Shangaan and Ronga. Their main economic base is agriculture, handicrafts and informal commerce.

Namaacha town has 10,000 inhabitants. The main form of transport in the district is the private “buses”, but for distances from 5-20 kms people also use bicycles and tractors with trailers, or walk.

This district is traditionally known as a tourist spot due to its natural features and the existence of a waterfall. It is also home to a number of formal or religious educational institutions. It has 1 agro-industry company, 1 mineral water bottling company and a number of stone quarries. Other institutions include a secondary school with boarders, a basic level teacher training centre, various primary schools, a health centre, 9 state institutions, 2 banks, branches of TDM and EDM, 5 NGOs and several political parties.

The Namaacha telecentre operates in premises belonging to the secondary school. It has acceptable security conditions, and there is also a guard. The telecentre occupies a large room of around 120m² - there are no physical divisions, but the service spaces are separated by screens. The telecentre uses the school toilet, which is in a very poor state.

This telecentre has the following equipment: a phone, a fax, 8 desktop computers, each with CD-Rom drive and one with CD-Writer, 2 printers, a scanner, a photocopier, binding equipment, an external modem, a television and video. A small library contains books and CD-Roms. It has MS Office, anti-virus and utility software. The school provided four donated computers as a way of contributing to improving the telecentre’s conditions, which were added to the initial four with which the project began.

Photo 2.2 shows the outside of the Namaacha telecentre.
The telecentre’s daily activities are guaranteed by two fulltime workers, both male. They have middle level education, and speak Portuguese, the local language and English. They have had the benefit of various computer training courses given by the CIUEM. The two staff have worked at the telecentre since it opened in August 1999. One is the manager, and he reports directly to CIUEM. Unlike Manhiça, the CAL is not actively involved in telecentre management and supervision. The staff wages are paid out of telecentre revenue.

Making a comparative analysis between the time of the first study and this one, we may conclude that there has been a slight improvement in the equipment and a substantial increase in the number of people trained in the telecentres. To date 143 and 578 people have received basic computer skills courses in Manhiça and Namaacha respectively. The total number of visitors has risen from 73,928 to 153,069 in Manhiça and from
15,991 to 28,725 in Namaacha. Table 2.1. summarises the main characteristics of the two telecentres and their districts.
<table>
<thead>
<tr>
<th>Item</th>
<th>Manhiça</th>
<th>Namaacha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population in the district</td>
<td>137,423</td>
<td>41,131</td>
</tr>
<tr>
<td>Population in the town where the telecentre is located</td>
<td>22,000</td>
<td>10,000</td>
</tr>
<tr>
<td>Number of public and private institutions</td>
<td>39</td>
<td>28</td>
</tr>
<tr>
<td>Size of the telecentre space</td>
<td>75 m²</td>
<td>120 m²</td>
</tr>
<tr>
<td>Number of computers</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Number of people trained in computer skills</td>
<td>143</td>
<td>578 *</td>
</tr>
<tr>
<td>Number of visitors to the telecentre</td>
<td>153,069</td>
<td>28,725</td>
</tr>
</tbody>
</table>

*Table 2.1 Summary of the main characteristics of Manhiça and Namaacha and the telecentres*

* from April 2001, the Namaacha telecentre began to give free courses in computer use to teachers and students from the Namaacha Secondary School, which had placed 4 donated computers in the telecentre.

### 3. Scope and Objectives of the Study

The first evaluation study of the Manhiça and Namaacha Pilot Telecentres was carried out in 2000, one year after they had opened. It had the following objectives: evaluate the functioning of the two telecentres, determine the level of awareness and opinions of users as to the services provided and identify potential users. A number of aspects were covered, in particular the following:

- access to the telecentre;
- types of service and their use;
- management and ownership;
- telecentre sustainability;
- who does not use the telecentres and why not.

The results of this study were presented and discussed in a Workshop at the UEM in March 2001, with the participation of the study team, the telecentre project coordinator, the telecentre managers, the directors of the Science Faculty and the CIUEM, representatives from the National Informatics Policy Commission and other invitees.

In November and December 2001, the telecentre project coordination in partnership with UNESCO organised two workshops, one in each district, with the aim of defining options for the continuity and sustainability of the telecentres following the end of the pilot phase (December 2002). The workshops were well attended, by among others the project coordination, the telecentre managers and CALs, local economic agents, and representatives from local institutions and civil society associations. Following up on the
workshops’ proposals, a study to identify possible forms of management and legal status for each telecentre was carried out (Miguel, 2002).

Considering that the pilot project was to end in December 2002, it was decided to carry out a second telecentre evaluation study, with the following objectives:

- evaluate the current state of telecentre operations and use, taking into account the conclusions from the first study;
- evaluate the implementation of the proposals and solution of problems identified in the previous study;
- identify and analyse community needs in terms of services and information content as a way of maximising the benefits of community access to ICTs:
  - identify the information needs of women and young people of both sexes;
  - propose the most appropriate types of service and technological supports for meeting the community’s information needs;
  - identify eventual synergies and complementarities among the different resources and services (eg e-mail, Internet, community radio, local newspaper, CD-Rom, etc).

As can be seen from this list of objectives, the study seeks to go further than a simple end-of-project evaluation. These two telecentres are in constant evolution, and it is thus hoped to contribute towards improving the implementation of this type of ICT-based initiative through the inclusion of new activities and new forms of management, given that the CIUEM’s role will come to an end with the end of the project. The chosen approach is therefore one of action-oriented research, continuing in the tradition established by the first feasibility study that determined the installation of the pilot telecentres.

The study aims to respond to the differing needs of activities that are already under way, namely the development of new services that can bring added value to the life of the local communities; the establishment of a national network of telecentres; the installation of community radios in telecentres, so as to transform them into true community multimedia centres; and the CD-Rom production project.
Given that all these activities required similar or related information to be collected at base level, the project coordination decided that it would be unreasonable from the point of view of respondents and interviewees to demand their time more than once, and would be a poor use of resources to have different teams working consecutively in the same area. Hence the effort to combine all the needs in a single study.

The next chapter deals with the research methodology: the basic research questions, the definition of data collection instruments and the composition of the research team.
4. Methodology

4.1. Research questions

This study proposed the following research questions:

- What are the trends in access to ICTs and the relevance to local communities of the services provided by the telecentres, namely: who in fact uses the services and facilities, in terms of age, sex, educational level and place of residence? What is the frequency and purpose of use of the services, the level of user satisfaction, and are there barriers to access to the ICTs? How have the factors that contribute to telecentre sustainability evolved, and likewise the social, economic, political and technological environment in which the telecentres operate?

- What type of information does the community need for its personal and institutional activities, and what are the most appropriate means for disseminating it?

- What are the main needs in terms of services that should be provided by the telecentres/community radios, and how can these needs be satisfied?

- Who are the main beneficiaries of the telecentres, and how do they benefit?

- What behavioural changes in individuals, businesses or institutions can be attributed to the existence of the telecentre?

- How can locally produced community information be shared?

- What are the five most beneficial and five least beneficial results stemming from the existence of the telecentre?
These questions led to a number of others that were analysed and discussed in the course of the study.
4.2. Research methods and instruments

The study is based on fieldwork carried out at the Manhiça and Namaacha telecentres. The data collection was done in 12 working days (6 days at each telecentre), from 1-13 July 2002.

The following instruments were used:
- a questionnaire administered to telecentre users. It was applied to all users on their first visit during the study period. It was administered and filled in by members of the research team in the telecentres, in the presence of the respondent. The essential objective was to produce information enabling a characterisation of the users, the services requested and frequency of use, and the level of user satisfaction and quality of the services. This questionnaire can be found in Annex A.

- semi-structured interviews with key informants in local businesses, institutions and associations. In Manhiça district they covered 3 governmental institutions, 1 telecommunications company, 1 electricity company, 1 agro-industrial company, 1 hotel, 1 shop, 2 schools, 1 research institution, 2 banks and 3 NGOs. In Namaacha district 4 governmental institutions, 1 telecommunications company, 1 electricity company, 1 agro-industrial company, 1 religious college, 2 schools and 1 bank were interviewed. Annex B contains the interview guidelines, and Annex F provides a characterisation of the businesses and institutions interviewed in the two districts.

The aim of the interviews was to obtain information about the evolution of the telecentres’ activities, the quality of the services, the usefulness of the telecentres for the interviewees’ activities, telecentre strengths and weaknesses, information needs and suggestions. They also attempted to identify changes in individual or organisational behaviour as a result of the telecentres’ presence. The interviews were by appointment, and were carried out in the interviewees’ offices by two members of the research team, on the basis of interview guidelines. Notes were taken and later transcribed using Microsoft Word. Each interview took 30-60 minutes.

- semi-structured interviews, following prepared guidelines, with the two telecentre managers. The aim was to obtain their opinions on the current state of telecentre
activities, their perceptions of the trends in use of the services, and the constraints encountered in daily management.

- a questionnaire directed at the general public, administered to a random sample of 162 people in local gathering places (markets, bus stops, churches, shops, etc). Respondents were chosen on the basis of their agreement. The aim of this questionnaire was to define the needs of potential users in terms of information or services, the likelihood of their going to the telecentre to satisfy these needs, and their willingness to pay for the services. Annex C contains the questionnaire.

- guidelines for discussions with the Local Supervisory Committees and the telecentre managers. This discussion provided an opportunity for the participants to give their opinions on the strengths, weaknesses, opportunities and threats of their respective telecentre. Key issues were pre-defined in order to facilitate the discussions: information needed for the telecentre, priority services, suggestions for new services, prices, human resources, telecentre benefits and beneficiaries. See Annex D for the guidelines.

- guidelines for focus group discussions with women and young people of both sexes (not limited to students). The aim was to identify the specific information needs of these groups, whether for formal or non-formal education, within the family or at work. See Annex E for the guidelines.

Records of telecentre usage were also consulted, with the aim of obtaining information about user sex, age group and frequency of use of each service.

4.2.1. The study team

The research team comprised two lecturers in the Eduardo Mondlane University Mathematics and Informatics Department and 6 university students, two taking master’s courses and the remainder at undergraduate level. The master’s students and lecturers were involved in the study from beginning to end, while the other four only took part in administering the questionnaires, conducting the interviews, analysing the telecentre documentation and inputting the data into the database. The project coordinator participated at two separate moments, namely during the project design and interpretation of the results. She worked closely with the research team at these stages,
and was thus able to make her opinions on the functioning and future of telecentres in Mozambique known.

The next chapter presents the research results.
5. Research Results

The research results will be presented in three parts: firstly the contributions obtained in the interviews and focus group discussions, followed by quantitative analyses of the data collected through the two questionnaires.

5.1. Results from the interviews and focus group discussions

This section presents an analysis of the data obtained from the interviews conducted in organisations functioning within the radius of the two telecentres, the discussions with the two CALs and the discussions with groups representing women and young people in the two districts.

5.1.1 Organisational interviews

The interviews covered 26 organisations, 15 in Manhiça and 11 in Namaacha, of which only 2 and 3 respectively do not use any telecentre services at all. Annex F contains a characterisation of the organisations. In general, the most frequently used services are photocopying, binding, fax, computer skills training and e-mail.

Analysis of the interviews shows a number of positive features with regard to the presence of the telecentres in the two districts.

The interviewees were unanimous in stating that the telecentres have provided the communities with services associated with information and communication technologies (ICTs), such as e-mail and use of computers, at acceptable prices. It has also been possible to combine these with support services such as photocopies, binding, etc. The interviewees believe that there is a significant increase in the numbers of users of computers, Internet and e-mail, though they consider that the cost of Internet access is high in proportion to the financial possibilities of most users. They all understood that the prices are relatively high because of the tariffs fixed by TDM for phone calls between rural areas and the cities (given that Internet access is via the CIUEM in Maputo).

In general, the interviewees representing organisations in the two districts consider that the telecentre staff have fulfilled their managerial obligations, although there is room for
improvement in the way they attend the public. The following extract from an interview with an organisation in Manhiça illustrates this view:

The telecentre managers have fulfilled their obligations in providing services, but it seems that they could sometimes improve their manners, regarding behaviour and presentation.

A number of interviewees think that the telecentre services are not accessible to people from all social strata due to their cost. Though in general they feel that the prices are in line with the level of service offered, their concern is that most people in these rural areas do not have a family income high enough to be able to pay them.

Interviewees made a number of suggestions for improving the management and quality of telecentre services. They can be grouped into 4 categories, namely: installations and equipment; management; training; and dissemination. Table 5.1 summarises these suggestions.
<table>
<thead>
<tr>
<th>Category</th>
<th>Suggestion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installations and equipment</td>
<td>enlarge the premises of the Manhiça telecentre; identify locations and mobilise other donors, including the government, to build independent installations for the telecentres; transfer the Namaacha telecentre to somewhere outside the school, to make it more available to the community; improve the libraries; increase the number of computers; replace the photocopier, which is showing signs of age.</td>
</tr>
<tr>
<td>Management</td>
<td>the telecentres should be open all day, with no break from 12-15h; hand the management over to a private operator, so long as community interests are defended; increased involvement of the local community in monitoring telecentre management; find ways of contracting staff for the Manhiça telecentre that ensure that they will stay for a long time; recruit a woman for the Namaacha telecentre as a contribution towards gender balance in the management.</td>
</tr>
<tr>
<td>Dissemination</td>
<td>intensify awareness-raising about using the telecentre through workshops for economic agents and the community; use local languages when disseminating information; organise mobile telecentres for the remote areas; develop activities aimed at increasing the involvement of young people in using ICTs; put up publicity panels promoting the telecentre services, particularly at the entry to the town; establish a partnership with Pandora Box to obtain multimedia CDs of interest to the public.</td>
</tr>
<tr>
<td>Training</td>
<td>give post-training support to participants in computer courses so that they do not lose their skills; the telecentre managers need permanent skills upgrades; create a room exclusively for training; in addition to the interactive course on CD-Rom, introduce ordinary English classes; graduates of 12th grade who have been unable to continue their studies should be able to take the computer training course paying half price.</td>
</tr>
</tbody>
</table>

*Table 5.1: Suggestions from the interviews*

It was clear from the interviews with organisational representatives that they all recognise the important role played by the telecentres in the life of their institutions in particular and of the community in general. Table 5.2 summarises the most positive features of the existence of the telecentres, and the suggestions for new services that the interviewees would like to see.
Table 5.2: Positive consequences of the telecentre and suggestions for new services

<table>
<thead>
<tr>
<th>Positive features</th>
<th>New services</th>
</tr>
</thead>
<tbody>
<tr>
<td>enabling local access to various services, resulting in savings in travel costs</td>
<td>secretarial courses;</td>
</tr>
<tr>
<td>and time; the community is better informed thanks to the diversity of resources,</td>
<td>training in public relations;</td>
</tr>
<tr>
<td>namely the Internet and the wall newspaper; local community interest in information</td>
<td>English language courses;</td>
</tr>
<tr>
<td>and communication technologies has increased; the public submits better prepared</td>
<td>sale of music CDs and cassettes;</td>
</tr>
<tr>
<td>documents, well presented, to state, private and social institutions; communication</td>
<td>professional printing services;</td>
</tr>
<tr>
<td>has become faster, regardless of the type of information to be sent and the</td>
<td>website production;</td>
</tr>
<tr>
<td>destination.</td>
<td>hosting pages on the Internet.</td>
</tr>
</tbody>
</table>

Community radio

Another component of this study was to discuss the possibility of installing a community radio. The organisations interviewed consider that a community radio could contribute to disseminating public information, promoting products and services, promoting a culture of making savings, and improving the quality of community life through programmes on health care. It is also hoped that the radio will provide a space where the community can exchange opinions on different aspects of community life and national development. All interviewees were of the opinion that programmes should be transmitted in local languages, so as to ensure that the majority of the population has access to information and so that it is easy for local people to participate in the radio’s activities.

Table 5.3 shows the most common topics suggested for radio programming.
Topics proposed for the community radio

| health care, for example hygiene, malaria, HIV/AIDS; |
| government information; |
| local, national and international information; |
| meteorological information and disaster warnings; |
| cultural and sporting information; |
| information on agriculture; |
| civic and moral education; |
| information for young people; |
| publicising products and services; |
| environmental education (especially on land clearance by burning); |
| pedagogical issues in the teaching-learning process; |
| economic issues; |
| social issues; |
| announcements about lost children. |

**Table 5.3: Topics proposed for community radio programmes**

This list of topics can be ranked according to priority and highest level of interest in the following order, starting from the top:

- health care with particular emphasis on malaria and HIV/AIDS
- local information
- educational and schooling information
- national information
- government information
- temperature and environmental issues
- agricultural information
- information on marketing
- social and cultural events
- how to develop production

### 5.1.2 Discussions with the CALs

The fieldwork included group discussions with members of the CAL in each telecentre. 10 members participated in Manhiça and 8 in Namaacha. In Namaacha the discussions lasted 2 hours and in Manhiça 4 hours. The minutes of the two meetings can be found in Annex H1. In general the members participated actively – photo 5.1 shows the meeting
in Manhiça. They consider that the quality of telecentre services is good, as the following extracts show.

With the improved electricity supply here in the Namaacha telecentre it is now possible to do training without constant interruptions, like there were at the beginning. This is why we have increased the number of people trained considerably over the last two years.

Here in Manhiça we currently have a group that is preparing a CD containing information about malaria. This shows that we are increasingly interested in developing activities with the support of information and communication technologies. In general we are satisfied with the quality of services that our telecentre offers.

The CAL members identified some problems that could affect the quality of telecentre services. In the case of Manhiça the main question was that of various staff changes over the last few years, while in Namaacha the difficulties with the Internet connection were raised.

The participants in the meetings said that the telecentres face some problems in daily management, with lack of transparency regarding some services such as copying CDs,
computer use, etc. For example, it is not easy to know how much revenue is coming from copying music or processing documents, because these services are not being properly recorded in either telecentre. In addition to the problem of poor record-keeping, the members of the Namaacha CAL have not participated actively in telecentre management. In Manhiça another problem raised was that of lack of transparency in the signing of cheques, given that the telecentre's bank account has seven signatories, including telecentre managers, some members of the CAL and signatories from CIUER, but any two can sign and there is no one obligatory binding signature of someone who takes full responsibility for financial reports. The following extract from the minutes of the Manhiça meeting illustrates this position.

As members of CAL we are concerned about this question of having an obligatory signature on cheques, and we suggest that the procedures should be reviewed. Some committee members have accounting and financial management skills and could give their support.

The members of both CALs think that the telecentre’s priority services should include photocopies, telephone, training in computer skills, Internet and e-mail, typing and printing documents, and promoting access to government information such as census data, reports, etc.

The Namaacha CAL thought that the telecentre’s location in the grounds of the secondary school could lead to it not being used by the community because it is in the private grounds of the student community.

 Mention was made in both Manhiça and Namaacha of the need to have longer opening hours, closing at 20h and staying open in the lunch hour, and the need for more workers, either full time or part time, or volunteers.

The CAL members in both telecentres were receptive to the community radio initiative, stressing that it will be an instrument for exchanging experiences within the community. Programme topics proposed were: publicising community activities, moral and civic education, public health and HIV/AIDS, sexual and environmental education. Broadcasting hours should be from 5-6h30 and from 15-19h.
The CAL members were unanimous in affirming that the telecentres produce benefits for the community, in particular for young people, even though they think that the prices are rather high in relation to capacity to pay. The benefits can be summarised as easy access to ICT services and other support services. Before the telecentres the communities were obliged to travel to Maputo to get these services. Both committees were open to working together to find the best solutions for the future of the telecentres.

During the fieldwork the research team had the opportunity for discussions with two specific groups - women and young people - on the types of information of specific interest to them.

5.1.3 Focus group discussions with women

Meetings were held with groups of women in the two districts. The aim was to identify their perceptions with regard to the telecentre and define the type of information they would like to obtain for their daily activities. A total of 35 women took part in the two meetings, with professions ranging from housewife to civil servant. Photo 5.2 illustrates one participant in her place of work.

Photo 5.2: A woman in her workplace
27 women took part in the meeting in Manhiça, and only 8 in the Namaacha meeting. The local language had to be used in addition to Portuguese in both meetings. In Manhiça an extra meeting had to be held to take account of the language aspect, subdividing the participants. Annex H2 contains the minutes of the meetings. Photos 5.3 and 5.4 show the two meetings.

Some of the participants in these meetings were visiting the telecentre for the first time, while others had only used the photocopy and telephone services. Only a small number of women students and teachers in Manhiça had already used the computers.

The main problem for the women was the lack of jobs, and they therefore suggested planning courses directed towards women in different areas, seeking to promote self-employment. In particular they proposed courses in computer use, sewing and dressmaking, knitting, cooking, embroidery and civic education. The Namaacha women in particular requested English courses to facilitate communications with the women in neighbouring Swaziland for mutual trading.

They also articulated the need to massify civic, moral and health education for children and young people. It would be important to involve women in this activity so long as they are trained for it, since some are already doing it but with no formal training.
The women thought that courses for them should be held in the afternoons, because they have their daily tasks to do in the mornings and at night some are studying while others have domestic obligations, not to mention that some have problems with their eyesight.

They suggested that a cultural centre should be established to occupy young women in their free time, and a gallery for selling items produced by women. Another proposal was sexual education for girls.

All the women considered that the community radio is a positive initiative that will enable the whole community in the area to have access to information. They suggested that local women should be given the opportunity to work in the radio. Their proposed broadcasting hours are from 5-7h30, before leaving home to go to the fields or other activities; and from 17-19h.

The following topics were suggested for the community radio programmes:
- dissemination of activities and/or projects under way or to be carried out in the district;
- reporting on activities in the district;
- death announcements;
- sport, education and health;
- information on farming: seasons for planting, looking after the crops, storing the harvest, etc.

It was not easy for this group to define its information needs except as directly linked to practical subsistence activities. Their priorities were therefore presented in terms of the need for support in job creation and other services that could contribute to improving their material and social quality of life.

5.1.4 Focus group discussions with young people

A meeting with young people of both sexes was held in each telecentre. 9 people participated in Manhiça, of whom only 2 were female, while of the 10 participants in Namaacha 6 were female. Photos 5.5 and 5.6 illustrate these meetings.
Everyone at the meetings said they were telecentre users, using almost all the services. For the young people, the telecentres enable access to up to date educational and cultural information through the Internet and the wall newspaper, access to computer use, communication with geographically distant people and other facilities.

In general they think that the services provided by the telecentres are of good quality, despite the fact that Internet access in Namaacha had been interrupted for quite a long time in the period just prior to the study.

The young people recommend giving priority in computer access to work rather than recreational needs. The prices for most services are higher than those in Maputo, and they should be revised. They suggested that the cost of Internet access should be reduced to 35,000MT for 45 minutes. Lessons on the correct use of computers should be given. Documents typed by users should not be saved onto hard disk, because as the computers are public confidentiality is put at risk. In Manhiça participants suggest a clear definition of the length of courses, and publication of the price list. They think it would be helpful to cut by half the prices of the services most in demand by the community, such as photocopying identity documents (BI), typing official requests to government bodies and declarations. They also recommend that the library should be expanded.

Priority services for young people are defined as being computer training, Internet, e-mail, library and telephone.
Relevant information for young people’s lives is related to culture and sport, school subjects, sexual education, health care such as HIV/AIDS/STDs prevention, counselling to help people living with HIV.

The young people think that the community radio will be an extremely important instrument for disseminating information. The most convenient broadcasting hours would be 6-7h30 and 18-19h. The radio should transmit programmes on moral and civic education, culture and sport and the prevention of HIV/AIDS/STDs.

Lack of a source of income is an obstacle to young people’s access to the telecentre services. Furthermore, the training courses are held when they are in school. They think that the use of ICTs in the community could be strengthened through publicising their importance and the aims of the telecentres, and that this work could be done by the youth. But in order to motivate and train the young activists they could be given basic computer training at nominal prices.

The main weakness singled out was the small size of the Manhiça telecentre, which makes it very uncomfortable. Other difficulties are the regular technical problems with the computers, printer and photocopier, and in the case of Manhiça the fact of having a church beside the telecentre.

The threats identified are the emergence of other places where photocopying can be done at a price 25% cheaper than that of the telecentre, and an Internet café in Namaacha less than 1 km away where Internet access costs 1000MT per minute.

In terms of opportunities, the Manhiça telecentre is the only place where computer courses, Internet and e-mail are available. In Namaacha the telecentre’s location in a school is considered an opportunity, given that students are the biggest users.

Young people could develop collaboration with the telecentre to produce and disseminate information for youth. They could organise to support the telecentre staff to process documents and produce the wall newspaper, and in exchange have access to the computers and Internet for a given amount of time to produce the youth newspaper and civic and moral educational materials for young people. Photo 5.7 shows the type of wall newspaper currently produced in the telecentres.
Photo 5.7: Wall newspaper currently produced in the telecentres

The young people suggest that they should be actively involved in the management of the telecentres, since they are the main users. They further suggest that the monitors giving courses in the telecentres should themselves have re-training and upgrading courses.

5.2. Results from the questionnaire for users

This section presents the results from data analysis of the user’s questionnaire. A total of 124 questionnaires were completed, of which 68 (55%) in Manhiça and 56 (45%) in Namaacha. Photo 5.8 shows a questionnaire being filled in with the cooperation of a telecentre user.
Photo 5.8: A user answers the questionnaire in Namaacha

Of the 134 respondents, 123 (99%) answered in Portuguese, and only one (1%) at the Namaacha telecentre used the local language, Shangaan.

All the respondents specified their place of residence. 79.8% (99 users) live in the district capital, 18.6% (23) in other parts of the district, and 1.6% (2) in neighbouring districts. In Manhiça 69.1% (47) were from the town, and in Namaacha 92.9% (52). Those living outside the district capital comprise 29.4% (20) in Manhiça and 5.4% (3) in Namaacha. One user at each telecentre was from another district – 1.5% for Manhiça and 1.7% for Namaacha. Graph 5.1 shows that most users of the two telecentres live in the district capitals.
With regard to distribution by sex, it can be seen that of the total 74.2% (92) are male and 25.8% (32) are female. Table 5.4 and Graph 5.2 illustrate the distribution by sex at each telecentre. The preponderance of males could be in part due to the fact that there are more boys than girls in school.

<table>
<thead>
<tr>
<th>Sex Telecentre</th>
<th>Female</th>
<th>Male</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>Freq.</td>
<td>%</td>
</tr>
<tr>
<td>Manhiça</td>
<td>19.1</td>
<td>13</td>
<td>80.9</td>
</tr>
<tr>
<td>Namaacha</td>
<td>33.9</td>
<td>19</td>
<td>66.1</td>
</tr>
<tr>
<td>Total</td>
<td>25.8</td>
<td>32</td>
<td>74.2</td>
</tr>
</tbody>
</table>

**Table 5.4: Respondents by sex**
With regard to age, Table 5.5 and Graph 5.3 show that most users in the two telecentres are in the 17-25 years age group – 50% in Manhiça and 62.5% in Namaacha. The higher percentage in Namaacha can be explained by the location of the telecentre in the grounds of the Namaacha Secondary School, which also has a boarding component.
Table 5.6 and Graph 5.4 illustrating distribution by educational level show that out of the total 48% of respondents are currently studying or have completed basic level education (10th grade), and 30% are studying or have completed middle level (12th grade).
### Table 5.6: Respondents by educational level and by telecentre

<table>
<thead>
<tr>
<th>Academic level Telecentre</th>
<th>None</th>
<th>Primary (1st-7th grade)</th>
<th>Basic (8th-10th grade)</th>
<th>Middle (11th-12th grade)</th>
<th>Higher (≥ Bachelor’s)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manhiça</td>
<td>16</td>
<td>54</td>
<td>25</td>
<td>3</td>
<td>54</td>
<td>100</td>
</tr>
<tr>
<td>Namaacha</td>
<td>19</td>
<td>39</td>
<td>37</td>
<td>2</td>
<td>39</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
<td>48</td>
<td>30</td>
<td>2</td>
<td>48</td>
<td>100</td>
</tr>
</tbody>
</table>

### Graph 5.4: Respondents by educational level and by telecentre

Turning to distribution by profession, Graph 5.5 shows that of the 124 respondents 5% are unemployed, 3% are housewives, 52% are students, 14% are teachers, 3% are health workers, 1% are farmers/fishermen and 22% form a group of other professions, namely carpenters, builders, market sellers, civil servants, etc.
It is obvious from Graph 5.5 that the main telecentre users are students, followed by teachers. Comparing the data on these groups shows that the percentage of students is higher in Namaacha than in Manhiça, but the opposite is true with regard to teachers. This could be explained by the fact that most of the Namaacha telecentre users are students at the secondary school where it is located. However, the service most heavily used by this group is the telephone. The reason fewer teachers use the telecentres in Namaacha than in Manhiça may be that they now have access to some computers in the school, while in Manhiça the only possibility is the telecentre.

Graph 5.5: Respondents by profession and by telecentre

Table 5.7 and Graph 5.6 below show the frequency of use of the telecentres’ services, by telecentre. It should be recalled that the questionnaire was only filled in by users on their first visit during the week under study, and not on subsequent visits. Users were asked to say how often they use the services. We can see from Table 5.7 that 59% of the 124 respondents stated that they use the computers, 75% in Manhiça and 39% in Namaacha. E-mail and Internet are the least used services, with 15% of users for each,
while the most used service, with 82%, is photocopying. The figure of 59% computer users proves the community’s interest in ICTs, and suggests that it would be easy to increase use of associated services such as Internet and e-mail.
The study included questions about the benefits deriving from the existence of the telecentres. The users were generally of the opinion that the telecentres bring benefits for the community in general and the users in particular. As can be seen in Table 5.8 and Graph 5.7, 60% of users consider that the telecentres are a way of reducing the number of journeys to distant places outside the district for the purpose of using services.
that are now offered by the telecentres. For example, one respondent said “once we had to go from Manhiça to Maputo in order to get photocopies”. Users believe that cutting down on trips to Maputo city saves some money. The users of both telecentres think that through services such as telephone, e-mail, Internet, wall newspaper and library they have access to more and more varied information about what is going on in the world and in Mozambique in particular. The students and teachers consider that the telecentres are contributing to improving school success rates through their library and Internet services, and photocopying teacher handouts, enabling access to a wide range of information and the possibility of getting copies of it. The telecentres enable communications to be maintained with relatives and friends through the e-mail.

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Telecentre</th>
<th>Reduces the number of journeys</th>
<th>Saves money</th>
<th>Better informed</th>
<th>Improves school results</th>
<th>Improves business</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Freq (%)</td>
<td>Freq (%)</td>
<td>Freq (%)</td>
<td>Freq (%)</td>
<td>Freq (%)</td>
</tr>
<tr>
<td>Manhiça</td>
<td>41</td>
<td>60</td>
<td>45</td>
<td>66</td>
<td>46</td>
<td>68</td>
</tr>
<tr>
<td>Namaacha</td>
<td>40</td>
<td>71</td>
<td>29</td>
<td>52</td>
<td>38</td>
<td>68</td>
</tr>
<tr>
<td>Total</td>
<td>81</td>
<td>65</td>
<td>74</td>
<td>60</td>
<td>84</td>
<td>68</td>
</tr>
</tbody>
</table>

*Table 5.8: Benefits of the use of telecentre services (percentage in relation to the total number of respondents)*

*Graph 5.7: Benefits from the use of telecentre services*
The question on the purposes of the use of computers, Internet, e-mail and CD-Rom are replied to in Table 5.9 and Graph 5.8, which show that 52% of the 124 respondents said that the services are useful for education and training in different areas, 38% use them for recreational purposes and 28% use them to communicate with friends and relatives.
Table 5.9: Purposes of computer, Internet, e-mail and CD-Rom use

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Freq</th>
<th>%</th>
<th>Freq</th>
<th>%</th>
<th>Freq</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication with friends and relatives</td>
<td>22</td>
<td>32</td>
<td>13</td>
<td>23</td>
<td>35</td>
<td>28</td>
</tr>
<tr>
<td>Education/Training</td>
<td>41</td>
<td>60</td>
<td>24</td>
<td>43</td>
<td>65</td>
<td>52</td>
</tr>
<tr>
<td>Health and environment</td>
<td>12</td>
<td>18</td>
<td>6</td>
<td>11</td>
<td>18</td>
<td>15</td>
</tr>
<tr>
<td>Business/Trade</td>
<td>11</td>
<td>16</td>
<td>5</td>
<td>9</td>
<td>16</td>
<td>13</td>
</tr>
<tr>
<td>Government information</td>
<td>12</td>
<td>18</td>
<td>7</td>
<td>13</td>
<td>19</td>
<td>15</td>
</tr>
<tr>
<td>News</td>
<td>17</td>
<td>25</td>
<td>12</td>
<td>21</td>
<td>29</td>
<td>23</td>
</tr>
<tr>
<td>Entertainment</td>
<td>28</td>
<td>41</td>
<td>17</td>
<td>30</td>
<td>45</td>
<td>36</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>6</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>

Graph 5.8: Purposes of computer, Internet, e-mail and CD-Rom use

The quality of the services was classified into Very Good, Good, Reasonable and Poor. Table 5.10 and Graph 5.9 below show that 50% of users consider the quality to be Good, and 31% Very Good.
Table 5.10: Quality of services provided by the telecentres

<table>
<thead>
<tr>
<th>Quality</th>
<th>Freq</th>
<th>%</th>
<th>Freq</th>
<th>%</th>
<th>Freq</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Good</td>
<td>29</td>
<td>43</td>
<td>13</td>
<td>21</td>
<td>42</td>
<td>31</td>
</tr>
<tr>
<td>Good</td>
<td>30</td>
<td>44</td>
<td>33</td>
<td>59</td>
<td>63</td>
<td>50</td>
</tr>
<tr>
<td>Reasonable</td>
<td>15</td>
<td>22</td>
<td>9</td>
<td>16</td>
<td>24</td>
<td>50</td>
</tr>
<tr>
<td>Poor</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>No opinion</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Graph 5.9: Quality of services provided by the telecentres

The questionnaire included a question on levels of user satisfaction regarding the cost-benefit relation of the services. 64% of all respondents consider that the benefit matches what they pay, 21% consider that the benefits are greater than what they pay and only 15% think that the benefits are worth less than they pay.

Table 5.11 and Graph 5.10 show the distribution of the information needs expressed by the users. Given that the respondents could indicate more than one type of information needed, overall one could say that all the categories proposed in Table 5.11 are important for the users, but with particular emphasis on health care, national and local information and education/schooling. All respondents consider the information to be extremely important for their daily lives and their professional or economic activities, and that it should be made available in the telecentres.

<table>
<thead>
<tr>
<th>Telecentre Information category</th>
<th>Manhiça</th>
<th>%</th>
<th>Namaacha</th>
<th>%</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health care</td>
<td>44</td>
<td>64</td>
<td>43</td>
<td>77</td>
<td>87</td>
<td>70</td>
</tr>
</tbody>
</table>
In response to the question about preferred broadcasting hours for the community radio, Table 5.12 and Graph 5.11 show that users prefer early morning, from 4-6h, and from 18-21h in the evening, on working days. The justification is that this is when they are at home, since from 6h onwards they are in the fields or on their way to work, while they are back home from 18h in the evening.
However, they suggest that at weekends and on public holidays the radio should broadcast from 8-12h and from 14-21h.
<table>
<thead>
<tr>
<th>Telecentre</th>
<th>Manhiça</th>
<th>Namaacha</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radio broadcasting hours</td>
<td>Freq</td>
<td>%</td>
<td>Freq</td>
</tr>
<tr>
<td><strong>Weekdays (Mon-Fri)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4-6 h</td>
<td>14</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>6-8 h</td>
<td>14</td>
<td>11</td>
<td>6</td>
</tr>
<tr>
<td>8-12 h</td>
<td>16</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>12-14 h</td>
<td>7</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td>14-18 h</td>
<td>10</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>18-21 h</td>
<td>21</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td><strong>Weekends(Sat/Sun) and holidays</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4-6 h</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>6-8 h</td>
<td>12</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>8-12 h</td>
<td>20</td>
<td>16</td>
<td>14</td>
</tr>
<tr>
<td>12-14 h</td>
<td>17</td>
<td>14</td>
<td>6</td>
</tr>
<tr>
<td>14-18 h</td>
<td>26</td>
<td>21</td>
<td>19</td>
</tr>
<tr>
<td>18-21 h</td>
<td>16</td>
<td>13</td>
<td>21</td>
</tr>
</tbody>
</table>

*Table 5.12: Telecentre users’ proposals for community radio broadcasting times*

*Graph 5.11: Proposal for community radio broadcasting times*
5.3. Results from the questionnaire for the general public

162 questionnaires were filled in by the public, 83 in Manhiça and 79 in Namaacha. Photo 5.9 shows a respondent on the main road in Namaacha answering the questions.

All the respondents answered the question about knowledge of the telecentre’s existence, and only one male respondent did not know of any telecentre. Of the other 161, 100 are male and 61 female. It should be noted that the only telecentres known are those of Manhiça and Namaacha.

Tables 5.13 and 5.14 below illustrate the profile of the respondents to this questionnaire. They show that the majority were male (62%); the predominant age group was 17-25 years (62%); 50% had schooling to basic level; and in terms of professional activity the majority were students (65%).

<table>
<thead>
<tr>
<th>SEX</th>
<th>AGE Goup</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>Female</td>
<td>0-16 yrs</td>
<td>17-25 yrs</td>
<td>26-40 yrs</td>
</tr>
</tbody>
</table>

Photo 5.9: A respondent in Namaacha replying to the questionnaire
<table>
<thead>
<tr>
<th></th>
<th>Freq</th>
<th>%</th>
<th>Freq</th>
<th>%</th>
<th>Freq</th>
<th>%</th>
<th>Freq</th>
<th>%</th>
<th>Freq</th>
<th>%</th>
<th>Freq</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manhica</td>
<td>57</td>
<td>69</td>
<td>26</td>
<td>31</td>
<td>14</td>
<td>17</td>
<td>39</td>
<td>47</td>
<td>21</td>
<td>25</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>Namaacha</td>
<td>44</td>
<td>56</td>
<td>35</td>
<td>44</td>
<td>10</td>
<td>13</td>
<td>61</td>
<td>77</td>
<td>6</td>
<td>8</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>101</td>
<td>62</td>
<td>61</td>
<td>38</td>
<td>24</td>
<td>15</td>
<td>100</td>
<td>62</td>
<td>27</td>
<td>17</td>
<td>11</td>
<td>7</td>
</tr>
</tbody>
</table>

Table 5.13: Respondents by Sex and age group of general public
ACADEMIC LEVEL

<table>
<thead>
<tr>
<th></th>
<th>None (1st-7th grade)</th>
<th>Primary (1st-7th grade)</th>
<th>Basic (8th-10th grade)</th>
<th>Middle (11th-12th grade)</th>
<th>Higher (&gt;=Bachelor’s)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freq.</td>
<td>%</td>
<td>Freq.</td>
<td>%</td>
<td>Freq.</td>
</tr>
<tr>
<td>Manhica</td>
<td>2</td>
<td>2</td>
<td>22</td>
<td>27</td>
<td>51</td>
</tr>
<tr>
<td>Namaacha</td>
<td>1</td>
<td>1</td>
<td>22</td>
<td>28</td>
<td>29</td>
</tr>
<tr>
<td>Total</td>
<td>3</td>
<td>2</td>
<td>22</td>
<td>14</td>
<td>80</td>
</tr>
</tbody>
</table>

OCCUPATION

|                | Unemployed | Domestic | Student | Teacher | Health worker | Farmer | Other | Freq. | %      | Freq. | %      | Freq. | %      | Freq. | %      | Freq. | %      | Freq. | %      | Freq. | %      | Freq. | %      |
|----------------|------------|----------|---------|---------|---------------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Manhica        | 9          | 11       | 1       | 1       | 38             | 46     | 5     | 6     | 3     | 4     | 1     | 1     | 26    | 31    |       |        |       |        |       |        |       |        |
| Namaacha       | 3          | 4        | 0       | 0       | 67             | 85     | 5     | 6     | 1     | 1     | 0     | 0     | 3     | 4     |       |        |       |        |       |        |       |        |
| Total          | 12         | 7        | 1       | 1       | 105            | 65     | 10    | 6     | 4     | 3     | 1     | 1     | 29    | 18    |       |        |       |        |       |        |       |        |

Table 5.14: Respondents by academic level and occupation

Of the 162 respondents, it was found that 91% have already used at least one service in the telecentres, around half for each telecentre. Only 9% have never used any of the telecentres’ services – see Table 5.15.

Table 5.15: Respondents who have already used at least one telecentre service, by age group

Table 5.16 and Graph 5.12 show that the public is interested in using the telecentres. They specified the services they would like to see available: 88% would like to use computers, 37% would like to use e-mail, 57% would like to use the Internet, and 27% would like to use CD-Roms. We may therefore conclude that in addition to the support services such as telephone and photocopies, the local community is beginning to be interested in using ICT-related services.
<table>
<thead>
<tr>
<th>Service</th>
<th>Telecentre</th>
<th>Manhiça</th>
<th>Namaacha</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freq</td>
<td>%</td>
<td>Freq</td>
<td>%</td>
</tr>
<tr>
<td>Computer use</td>
<td>68</td>
<td>82</td>
<td>74</td>
<td>94</td>
</tr>
<tr>
<td>E-Mail</td>
<td>26</td>
<td>31</td>
<td>34</td>
<td>43</td>
</tr>
<tr>
<td>Internet</td>
<td>39</td>
<td>47</td>
<td>54</td>
<td>68</td>
</tr>
<tr>
<td>CD ROM</td>
<td>13</td>
<td>16</td>
<td>30</td>
<td>38</td>
</tr>
<tr>
<td>Printing</td>
<td>61</td>
<td>74</td>
<td>66</td>
<td>84</td>
</tr>
<tr>
<td>Photocopies</td>
<td>78</td>
<td>94</td>
<td>69</td>
<td>87</td>
</tr>
<tr>
<td>Binding</td>
<td>30</td>
<td>36</td>
<td>67</td>
<td>85</td>
</tr>
<tr>
<td>Training</td>
<td>65</td>
<td>78</td>
<td>72</td>
<td>91</td>
</tr>
<tr>
<td>Library</td>
<td>52</td>
<td>63</td>
<td>68</td>
<td>86</td>
</tr>
<tr>
<td>Fax</td>
<td>25</td>
<td>30</td>
<td>35</td>
<td>44</td>
</tr>
<tr>
<td>Telephone</td>
<td>70</td>
<td>84</td>
<td>71</td>
<td>90</td>
</tr>
<tr>
<td>Secretarial services</td>
<td>39</td>
<td>47</td>
<td>65</td>
<td>82</td>
</tr>
<tr>
<td>TV/Video</td>
<td>44</td>
<td>53</td>
<td>42</td>
<td>53</td>
</tr>
<tr>
<td>Community radio</td>
<td>68</td>
<td>82</td>
<td>65</td>
<td>82</td>
</tr>
</tbody>
</table>

Table 5.16: Services the public considers important (percentage in relation to the total number of respondents)

In response to the question about community radio broadcasting hours, Table 5.17 and Graph 5.13 show that the majority of potential users proposes the period from 14-21h for both weekdays and weekends and holidays.
The respondents had to indicate the type or types of information they consider most important for their daily activities. As in the users’ questionnaire, Table 5.18 and Graph 5.14 show that the potential users consider all the categories proposed to be important,
and that they would like the telecentres to make it all available to the community. Also like the telecentre users, there is a clear priority given to health, education, and national and local information, though generally there is a higher level of response throughout.

<table>
<thead>
<tr>
<th>Telecentre Information category</th>
<th>Manhiça</th>
<th></th>
<th>Namaacha</th>
<th></th>
<th>Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freq</td>
<td>%</td>
<td>Freq</td>
<td>%</td>
<td>Freq</td>
<td>%</td>
</tr>
<tr>
<td>Health care</td>
<td>74</td>
<td>89</td>
<td>73</td>
<td>92</td>
<td>147</td>
<td>91</td>
</tr>
<tr>
<td>How to develop products/services</td>
<td>45</td>
<td>54</td>
<td>47</td>
<td>59</td>
<td>92</td>
<td>57</td>
</tr>
<tr>
<td>Markets for products and services</td>
<td>39</td>
<td>47</td>
<td>32</td>
<td>41</td>
<td>71</td>
<td>44</td>
</tr>
<tr>
<td>Temperature and environmental questions</td>
<td>61</td>
<td>73</td>
<td>67</td>
<td>85</td>
<td>128</td>
<td>79</td>
</tr>
<tr>
<td>Social and cultural events</td>
<td>49</td>
<td>59</td>
<td>66</td>
<td>84</td>
<td>115</td>
<td>71</td>
</tr>
<tr>
<td>Government information (taxes, laws, ...)</td>
<td>48</td>
<td>58</td>
<td>61</td>
<td>77</td>
<td>109</td>
<td>67</td>
</tr>
<tr>
<td>National information</td>
<td>66</td>
<td>80</td>
<td>71</td>
<td>90</td>
<td>137</td>
<td>85</td>
</tr>
<tr>
<td>Local information</td>
<td>74</td>
<td>89</td>
<td>70</td>
<td>89</td>
<td>144</td>
<td>89</td>
</tr>
<tr>
<td>Agricultural information</td>
<td>37</td>
<td>45</td>
<td>45</td>
<td>57</td>
<td>82</td>
<td>51</td>
</tr>
<tr>
<td>Education/Schooling</td>
<td>69</td>
<td>83</td>
<td>77</td>
<td>97</td>
<td>146</td>
<td>90</td>
</tr>
<tr>
<td>Recreation</td>
<td>43</td>
<td>52</td>
<td>52</td>
<td>66</td>
<td>95</td>
<td>59</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>3</td>
</tr>
</tbody>
</table>

*Table 5.18: Information needs*
Graph 5.14: Information needs
6. Discussion of the Results

The results will be discussed from different points of view, in the light of the research questions outlined in chapter 4 and the overall objectives of this study. On the basis of the data collected from primary sources - questionnaires, interviews and the group discussions with women, young people and the Manhiça and Namaacha CALs, and the secondary sources – reports and documentation – it can be said that the telecentres are contributing to the satisfaction of basic needs by making support services and access to ICTs available to the local communities in the two districts.

The discussion will be grouped into the following headings:
- Evaluation of the functioning of the pilot telecentres from 1999-2002
- Information needs for stimulating development and carrying out community activities
- The community radio initiative
- Telecentre sustainability

Evaluation of the functioning of the pilot telecentres from 1999-2002

This discussion will be around the access to and impact of the telecentres, the content of the services and their use.

The study’s results show that users of the telecentres in Manhiça and Namaacha belong to every age group, but that young people aged 17-25 years, with a basic level of education, comprise the majority. The majority is also male. These results are similar to those found in the study carried out in 2000 in the same telecentres (Macome & Cumbana, 2001). The finding that the main users of both telecentres are young may be related to the fact that one of the telecentres is located in the grounds of a school, and that they offer services linked to education such as the library and multimedia educational materials. It can also be said that young people are usually more attracted to using new technologies, and that they represent a large proportion of the population as a whole. Relating this data to the benefits to students of using the telecentres, improving school success is a significant consideration for the users. The fact that most users are male may be explained by the fact that they are mostly students, and in general there are fewer girls in school.
As in the previous study, due to the natural features of the region which mean that the area around the town is sparsely inhabited, the majority of telecentre users in Namaacha is from the town. This is not the case in Manhiça, where there are people who travel considerable distances to use the telecentre. Comparing the study made in 2000 and this one, we find that the main difference is that now, after three years, each telecentre has a semi-fixed core group of users, thus creating a critical mass that can contribute towards telecentre stability.

Both telecentres have users from all educational levels, ranging from illiterates to university graduates. Their professions vary from unemployed, housewives, students, teachers, health workers and civil servants to farmers, fishermen and informal market sellers. The study shows that Namaacha telecentre users now come from a wider range of professions, which was not the case in 2000. This could be a consequence of the promotional activities that have taken place.

Having profiled the users, we must look at the services they demand. The results presented in the previous chapter (Graph 5.6) show that they use various ICT-related services, such as Internet, e-mail and computers. There has been a small increase in the use of Internet and e-mail in both telecentres. In Namaacha this could be related to the fact that the quality of the electricity supply has improved considerably. E-mail, fax and telephone are used to communicate with relatives, friends, commercial partners and fellow institutions. The computers are being used for various purposes, including training, word-processing, spreadsheet and games; CD-Roms and Internet for educational purposes; obtaining information and news; and recreation. Secretarial and other services have developed since the last study, with the most frequent requests being for typing reports (mainly for public institutions) and copying CDs. One issue here is the need for confidentiality, and the telecentres must ensure that documents produced in the telecentres are not used for other purposes. As in the previous study, photocopying continues to be the most popular service, used for reproducing personal documents, school materials and paperwork for local institutions and economic agents.

Looking at the barriers that may inhibit access to the telecentres by members of the local communities, two factors stand out. Firstly, their location, particularly in Namaacha (inside the school), and secondly the ability of individual users to pay. The number of people who are unaware of the existence of the telecentres is now almost nil in both
districts. While interest in using the full range of telecentre services has been patent in both studies, it has not been easy for the communities to do so due to the economic and financial difficulties faced in daily life. This is the main reason why most users limit themselves to the photocopying and phone services.

There is now a relative increase in the number of users of computers, e-mail and Internet, although not everyone is able to pay for a computer course. It is important to recall here that users generally think that what they pay is fair for the services they receive; thus the question should not be seen as lack of desire to pay, but lack of ability to do so for lack of resources. The price of Internet access continues to be high for most users due to the high connection costs. This is why telecentre users persist with the proposal presented in the previous study, to subsidise telecommunications costs for the rural areas. E-mail use continues to be facilitated through use of the telecentre’s own e-mail address.

Turning to the content of the two telecentres, they provide all the basic services that a telecentre should have, including Internet, e-mail, computer access, training courses in MS Office, secretarial services (word-processing, designing and producing visiting cards, invitations, etc), photocopying, fax, telephone, television, video and library. During the first study it was observed that the CD-Roms were very under-used, perhaps because they were new, but this study shows an increased in the number of users of multimedia educational materials, interactive courses, games, etc. A service introduced since the first study is scanning, which is quite heavily used.

The quality of the services provided to the communities is acceptable, though some IT equipment and photocopiers need replacing. The quality of the Internet service is inadequate, due to the slow connection. The Namaacha telecentre’s problem of constant power cuts, identified in the previous study, has improved.

Telecentre users consider the telecentres to be very important for their daily activities, though alternative photocopy and phone services are emerging in the two districts. In Namaacha, in particular, an Internet café has recently been installed close to the telecentre and charges a more than competitive price, given that it belongs to the telecommunications company.
To summarise, it can be said that the presence of telecentres in Manhiça and Namaacha districts is awakening increasing interest in the uses of computers, e-mail and Internet, particularly among the young. The greatest benefits for users are training, facilitating access to information technologies, particularly computers, Internet and e-mail, and the fact that the telecentres have become places for interactions among different members of the community. The least beneficial results of the telecentres were identified as being the fact that many people cannot afford to pay for the ICT-related services, the insufficient number of computers, and the slow Internet access. It is clear that the negative aspects are directly linked to the services as such, and not to the existence of the telecentres, which confirms that they are having a positive impact on the districts, particularly with regard to education and access to information.

The telecentres are contributing to improving the quality of life by satisfying basic needs related to access to information.

**The community radio initiative in Manhiça and Namaacha districts**

One component of this study was examining the possibilities for a community radio in Manhiça and Namaacha districts. In this context the interviewees, questionnaire respondents and focus groups were asked for their views, and for their choice of programme matter. Their replies are discussed below.

The communities in Manhiça and Namaacha districts think that the community radios are a good initiative. However, many of them said that they did not have radios, or could not always afford to buy batteries; but nevertheless they think that the radio can disseminate local news and provides the possibility of sharing local information and experiences.

The communities would like to see the radio broadcasting in the early morning, from 5-7h30, and in the evening from 18-21h, on weekdays. In other words, before leaving for work and after getting home. They suggest that at weekends and on public holidays it could start broadcasting in the afternoon and continue until early evening, ie from 14-18h, because on weekend mornings people are very busy with social and religious activities.
With regard to programming, programmes should mainly be produced locally, though they could be alternated with re-broadcasts from other Mozambican radio stations. The community radio programmes should be produced and transmitted using both the local language and the official language, and the community should be involved in designing, producing and transmitting them.

The main areas of interest in terms of programming are culture, sport and recreation, health, environment and education, as well as local, national and international news.

**Information needs**

In general the communities in Manhiça and Namaacha would like to see all kinds of information made available. But they indicated the following areas as priorities for meeting their daily needs:

- educational information and curricular contents, mainly for young people;
- information on how to prevent and combat diseases, particularly malaria, STDs/HIV/AIDS;
- information on local and national activities, results, events and experiences;
- information on social and cultural events.

This information could be produced locally or obtained from the Internet. However, due to the costs of Internet complementary resources could be used, for example:

- local production and/or selection of Internet information and publishing it on the wall newspaper;
- local production and/or selection of Internet information and copying it onto CD-Rom;
- local production and/or selection of Internet information and disseminating it through the community radio.

The women stressed the need for job-related information as a priority for them as active members of the community, in addition to the general information categories. They said that it is not enough just to ask them what information they need, unless the aim is to help them through activities that will contribute directly to improving their standards of living through employment. They also drew attention to their role as mothers, considering that it is their duty to contribute to the moral and civic education of the new
generations. They feel that they do not currently have enough solid knowledge about certain issues, such as AIDS.

The combination of different means of dissemination of information will permit the cost of Internet access to be reduced, since one access to a given information will benefit different community members or groups, regardless of whether they have ICT skills themselves or not. It will also be possible to present the information in appropriate formats and languages for the target groups. The locally produced information will be collected by interested groups, such as young people, women or other organised sections of the community.

**sustainability**

The question of sustainability has recurred regularly in discussions about telecentre initiatives in rural areas (Whyte, 1999). Taking into account this project’s approach to telecentres as rural development projects, an evaluation must necessarily examine the concept of sustainability as it relates to the two telecentres. Telecentre sustainability can be seen from four different but complementary angles: financial, the technical and management capacity of telecentre workers, acceptance by the local community and quality of services.

Although there are already examples of the benefits of having telecentres, the necessary conditions for their success are not yet clearly identified; likewise the relation between the application or use of ICTs and rural development remains to be clarified. Taking the categories proposed above, the following factors may be highlighted as contributing to telecentre sustainability:

**Financial sustainability**
- introduce mechanisms for controlling all the service provision procedures, in particular those which are most difficult to register such as word-processing, secretarial services, copying CD-Roms, computer use, etc;
- keeping accounts and producing regular reports on the financial and technical situation;
- the telecentres must develop local initiatives for partnerships with donors and others. For instance, mechanisms could be found for purchasing consumables at discounted...
or sponsored prices, in exchange for publicising the sponsoring organisations in the telecentres;

- implementation of the National Informatics Policy, the Strategy for which was approved recently, could result in cost savings on communications and equipment purchase.

Sustainability of technical and management capacity
- training for the telecentre workers in the basic principles of management, administration and marketing;
- continuous on-the-job training and upgrading of the IT skills of the workers who teach courses, so that they provide quality training;
- basic training in hardware.

Sustainability through community acceptance
- commitment and support from the local government;
- intervention by the local government to ensure rational distribution to the communities of scarce technological resources, by forbidding the installation of centres that duplicate facilities in areas that already have telecentres;
- identification of ways of establishing synergies between telecentres and educational institutions, since they have the same goals.

Sustainability through quality of service
- telecentres should either own their premises or occupy them rent-free;
- increased entrepreneurial spirit and aggressivity, combined with the telecentre workers' social and community spirit;
- better reception and treatment of the user public on the part of the staff;
- increased local community involvement (via the CALs) in telecentre management;
- involvement of young volunteers in supporting telecentre activities.

Inherent to telecentre success is the guarantee of good quality technological infrastructure. The quality of the energy supply in the districts thus to a large extent dictates the quality of service. The availability of computer, Internet and e-mail access is
basic for a telecentre: thus good maintenance of the connectivity infrastructure and the IT equipment is likewise vital.

It is hoped that implementation of the National Informatics Policy will result in facilities for purchasing IT equipment, and some support for connectivity costs. The establishment of a national network of telecentres (or public access points) is planned, and this will enable resources to be distributed to the communities in such a way as to avoid concentration in some regions to the detriment of others. Actions to promote the massification of computer, e-mail and Internet use are also expected.

With the civil service reform and modernisation process now under way, involving the computerisation of some procedures, there will be new possibilities for users of public services to interact with ICTs in one way or another.

These and other factors will contribute to enabling the telecentres to fulfil the purposes for which they were created, namely to provide non-discriminatory access to ICTs to the whole community.

The telecentres will be able to contribute to sustainable local development if they are integrated into and complementary to other development projects or programmes in the same areas, and if these programmes are in their turn coordinated with others at a higher level.
7. Conclusions and Recommendations

The results of this study, based on direct contacts with the communities of Namaacha and Manhiça, enable us to conclude that the telecentres are fulfilling their principal objective of taking ICTs to the most disadvantaged communities.

This ambitious goal is not being achieved as completely as would be desirable because the family income of the target community is so low that it does not permit access to the technologies available in the telecentres. We hope that with the participation of the government, civil society and other donors the communities of Manhiça and Namaacha will be able to fulfil their aspirations to use computers, Internet and e-mail.

However, we can say that the telecentres’ services are being used in these districts. They are becoming community centres where members of the community have access to ICTs and to information, and they are in this sense contributing to local development. The young continue to take the lead in using the available technologies. The information currently most in demand is related to health, education and national and local news and events, with women giving additional priority to employment-related materials.

The communities have immediate needs, which is why the telephone and photocopying services are the most heavily used.

When comparing with the previous study, we find that the number of computer users has increased significantly. Given that computer skills are vital for using Internet and e-mail, more awareness-raising and publicity should be done about the importance to society of ICTs and the telecentres.

We recommend the promotion of awareness-raising activities to develop girls’ interest in ICTs, given that just as there are fewer girls than boys in school so fewer girls use the telecentres.

In comparison with the previous study, there has been no improvement in daily management procedures. This is partly due to the fact that all the staff recruited and trained for the Manhiça telecentre have left, and partly due to lack of further administration and management training.
We recommend the creation of a favourable environment for increased involvement of the CALs, so that they assume responsibility for leading the telecentres, since the true owners of the telecentres are the respective communities.

We recommend opening hours that are more customer-friendly. The telecentres should be open from early morning to early evening without a break, though without breaching the Labour Law that protects workers’ rights. Working hours should be coordinated so that not all the fulltime workers are present at the same time. Given that different services are demanded simultaneously, the participation of volunteers is important.

We recommend that the telecentres provide the following additional services:
- Government information services to support agriculture, dealing with such issues as planting seasons, the state of the soil, etc;
- Census data;
- An electoral and civic education role;
- Within the framework of civil service reform, a complaints and suggestions system which communicates directly with those in charge at local and national level;
- Information on the industrial and commercial sectors;
- News about jobs.

Finally, this study has confirmed the previous results showing that the telecentres are accepted within the local communities, notwithstanding the questions that must be considered if they are to make their full contribution to local development.
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Annexes